UCLA
Molecular Biology Institute

ANNUAL REPORT

2017-2018

(310) 825-1018

mbi.ucla.edu

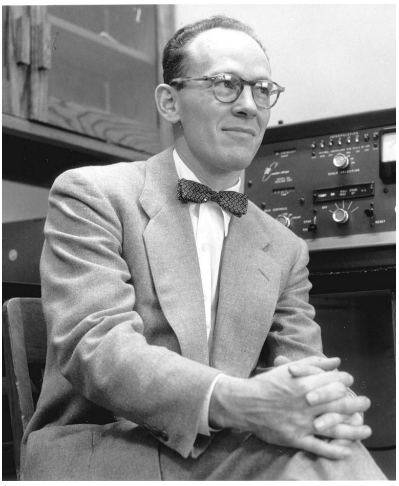
UCLA Boyer Hall

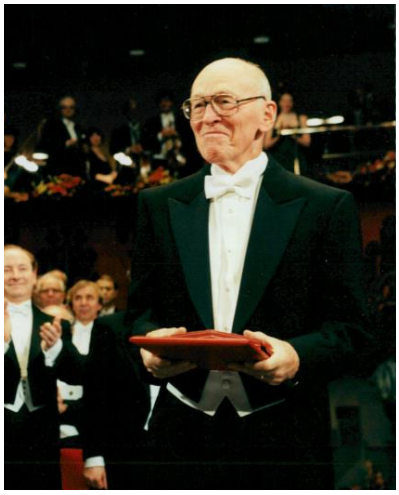
mbiasst@lifesci.ucla.edu

MOLECULAR BIOLOGY INSTITUTE

PAUL D. BOYER

1918 - 2018





REMEMBERING WITH GRATITUDE

PAUL D. BOYER

1918 - 2018

DIRECTOR'S REPORT

Dear Colleagues,

This year will be forever memorable in the history of our Institute because it marks the passing of our beloved Paul Boyer. His many scientific and academic accomplishments have been highlighted in several journals and it has been wonderful to hear so many colleagues speak about how much Dr. Boyer meant to them. We are grateful for his vision, his collegiality, his commitment to scientific excellence and his optimistic spirit, all of which became part of the culture of our institute. Thank you, Paul!

The last year was also marked by several changes in the MBIDP office and building. Two new SAOs, Stephanie Cuellar and Ashley TerHorst joined our office and have smoothly taken over the administration of the MBIDP and have quickly become familiar with our body of students and faculty. A new administrator assistant, Altagracia Alvarado is now the face behind the MBI emails, workshops, events and interactions with our body of students. Big *kudos* to Helen Houldsworth for "filling the blanks" as we completed searches and recruited this great team. We also welcome Mike Kane, our new building manager who has so efficiently adapted to UCLA and Boyer Hall and continued to take care of the Institute and Boyer Hall occupants.

Much of our attention has been placed on the renovations of Boyer 159, our premier conference room. The much needed upgrade was only possible because of the commitment and support of the Deans of Life Sciences, DGSOM and Physical Sciences as well as the Chair of Chemistry and Biochemistry. We could not have done it without you! The patio adjacent to the conference room will also be renovated by the end of November and will provide an outstanding space for events, meetings, student recruitment, informal discussions and celebrations. We are extremely excited to have this great space available for all the events, thesis defenses and scientific seminars. Thank you all for your patience and trust.

Highlights of the past year for the MBI included the Sigman Symposium honoring Professor Yigong Shi who delivered a memorable lecture entitled "Mechanism of pre-mRNA splicing by the Spliceosome". As in previous years, this was a wonderful event and I must acknowledge the MBI Sigman Lectureship Committee that includes Feng Guo, Reid Johnson and Jim Bowie (chair). Thank you for the outstanding selection and your continuous commitment to this event. Along these lines, the flagship of the institute, MBI Thursday Seminar Series has brought in fantastic talks and impressive scientists. Thank you to Margot Quinlan and Tracy Johnson and their committee for their hard, hard, hard work on this endeavor.

As can be easily noted in the Newsletter, the membership continues to thrive and the scientific caliber of our faculty is unquestionable. Here I must highlight a few honors received by our members: the election of Utpal Banerjee to the National Academy of Sciences, HHMI investigator award to Tamir Gonen, the William C. Rose Award given by the ASBMB to Steven Clarke, the Paul Sigler Prize given by Yale University to David Eisenberg and the American Heart Association Russel Ross Memorial Lectureship to Karen Reue. Congratulations!

Our graduate program is expanding, with a total of 145 students. We just welcomed our incoming class of 2018-2019 with 23 students. During this academic year, 14 students received their doctorates and combined they produced 119 scientific publications. They are our legacy and we are fully committed to constantly improve their training and research experience. I would take the opportunity to thank our home area directors: Feng Guo (BBSB), Jeff Long (CDB), Michael Carey (GREAT) and Peter Bradley (IMMP) who have placed a lot of energy into the recruitment of the incoming class and the guidance of current students. Our mission to reconnect with our large body of graduates has continued, through alumni newsletters and other options to connect with the program. During this coming year, alumni located in the LA area will be invited to attend the upcoming MBI retreat which will be in Lake Arrowhead. It

has been nice to receive feedback from some of them stating how much the institution, and the MBI in particular, meant to them at a critical time in their careers.

Through the generosity of our dear Audree Fowler, the MBI has been able to award four Audree Fowler Fellowships in Protein Science this past year. This has become a wonderful tradition and our graduate students are very appreciative for the opportunity to compete for this award. This year's awardees are: Michael Hughes (Eisenberg lab), Kanishk Jain (Clarke lab), William Barshop (Wohlschlegel lab) and Yuxi Liu (Yeates lab). The Jules Brenner Achievement Fellowship in Molecular Biology went to Aimee Flores (Lowry lab). Congratulations to all these outstanding graduate students! Finally, the 18th annual Boyer-Parvin recognition awards have continued to provide a stand-up salute to our body of post-doctoral trainees. This year, from 9 exceptional nominees, 3 were selected. The winners were Francis Mercer (Patricia Johnson's lab), Marcus Seldin (Jake Lusis' lab) and Michael Hicks (April Pyle's lab). This has been a special signature of the MBI, initiated by our founder, and we are committed to seek additional funds to continue the support of this important event.

As in previous years, the Imaging Workshop and the Biotechnology Workshops were a success with attendance to full capacity. We are preparing some slight modifications to the Imaging workshop to better support our community with more stratification in training (beginner, intermediate, advanced).

Hope to see you at our events, symposia and seminars!

Hasta pronto.

Luisa

Luisa Iruela-Arispe, Ph.D.
Director, Molecular Biology Institute

COMMITTEES

EXECUTIVE ADVISORY COMMITTEE
Amander Clark, Catherine Clarke, Alexander Hoffmann, Siavash Kurdistani, Sabeeha Merchant and Jerome Zack

MBI MEMBERSHIP
Arnold Berk (Chair), Alison Frand, Bennett Novitch, Thomas Vondriska and Megan McEvoy

THURSDAY SEMINARS
Margot Quinlan (co-Chair), Tracy Johnson (co-Chair), Douglas Black, Hilary Coller, David Eisenberg, Sri Kosuri, Michael Teitell and Tom Vallim

SIGMAN AWARD SELECTION
James Bowie, Feng Guo, Luisa Iruela-Arispe and Reid Johnson

AUDREE FOWLER FELLOWSHIP IN PROTEIN SCIENCE
Jose Rodriguez, Siavash Kurdistani, Kathrin Plath and Gregory Payne

JULES BRENNER SCHOLAR'S ACHIEVEMENT FELLOWSHIP IN MOLECULAR BIOLOGY
Jules Brenner, Amander Clark, Don Kohn and Timothy Lane

PHILIP J. WHITCOME FELLOWSHIP
Feng Guo, Jeffrey Long, Peter Bradley and Michael Carey

BOYER/PARVIN POSTDOCTORAL AWARDS
Karen Reue, Jose Rodriguez, Oliver Fregoso and Hilary Coller

MOLECULAR BIOLOGY INTERDEPARTMENTAL PH.D. PROGRAM
Luisa Iruela-Arispe, Peter Bradley, Michael Carey, Jeffrey Long and Feng Guo

2017-2018 ANNUAL RETREAT
Geoffrey Provonost (Chair), Aaron Van Loon, Brenda Molgora, Guillaume Urtecho, Samantha Edwards, Alex Sercel and Jessica Ochoa

ANNUAL RETREAT POSTER JUDGES
Peter Bradley, Michael Carey, Hilary Coller, Andrew Goldstein, Feng Guo, Luisa Iruela-Arispe, Tracy Johnson, Jeffrey Long, Margot Quinlan and Melissa Spence

ADMINISTRATIVE STAFF ACTIVITIES

ADMINISTRATIVE SERVICES
Helen Houldsworth, Boyer Hall Management Services Officer

It's a pleasure to update you on the administrative team that made the activities you read about in this report possible. I'm consistently impressed by the energy they bring to their roles, as well as their commitment to serve our Faculty and students and the teamwork they show each other.

In October we welcomed Altagracia Alvarado as our new Office Coordinator, replacing Megan Weitzel who moved on to an SAO position in north campus. Altagracia ("Gracie") is a recent graduate from UCLA and a passionate Bruin. Although new to the south campus science community and to many of the tasks she was faced with, she threw herself whole-heartedly into learning and adapting to her new role. She also brought her creative skills which have given our advertising materials, website and social media a much needed boost. She's made the position her own and become a valued member of the team.

At around the same time, we hired Stephanie Cuellar, and shortly after that Ashley TerHorst as new SAO's for the Molecular Biology IDP. (Yes, it was a busy fall quarter!). In a new organizational arrangement for us, Stephanie now takes primary responsibility for student recruitment, admissions and alumni relations and Ashley is responsible for continuing student activities and time-to-degree progress. Both Ashley and Stephanie joined us from other positions at UCLA, which helped them adapt to their new roles. Nevertheless, they worked tirelessly to become familiar with our MBI community and the nuances of an IDP, at a time when the academic quarter was already in full-swing. Their willingness to support each other and work as a team is a huge benefit to the program and gives us a greater capacity to support all aspects of our students' education.

In the absence of any MBIDP SAO's during the summer, new Bioinformatics SAO Mandy McWeeney held down the fort for both programs. We could not have survived this hectic time without her! She also generously shared her knowledge and experience with Stephanie and Ashley when they arrived, helping them get up to speed.

As a final summer challenge in the Graduate Programs office, we decided to initiate a remodel, to improve the awkward configuration and create three entirely separate and private offices for our SAOs. The work took much longer than hoped and Ashley was confined to temporary office space for several months after she started. However, I'm happy to report that all three SAOs are now in place and we have a much more functional suite!

Long-time Building Manager, Shawn Lockard, retired from UCLA at the end of 2018. Shawn had a long and successful career at UCLA and a deep knowledge of Boyer Hall, both the personnel and the infrastructure. He left big shoes to fill. After an extensive search for his replacement, we were fortunate to find Michael Kane. Mike came onboard in late January, bringing his experience in university building management from MIT and a background in construction project management which is proving to be invaluable in Boyer Hall at this time (see his first managers' report below!). Mike's attention to detail, enthusiasm to learn about Boyer Hall and his easy-going personality have all been greatly appreciated by our admin team and the Faculty. We also appreciated Oren Saig, our Facilities Coordinator who stepped in as Building Manager until Mike was hired. Oren covered for Shawn with the same level of focus and dedication he brings to his own role, making sure there was minimal impact to the researchers of Boyer. As a result we were happy to recommend him for a promotion to Assistant Building Manager, a request which was approved recently. Oren and Mike have developed a great working relationship and the occupants of Boyer are fortunate to have both of these dedicated guys in the Building Management office.

I would be remiss at this point to not mention Luz Torres, who has kept our finances on an even keel throughout the year. Luz successfully manages internal and external funds for the MBI, MBIDP, QCBio and Bioinformatics, which represents hundreds of payments, reimbursements, transfers and overall budgeting oversight. Luz also plays a leading role in training junior administrators in financial transactions and answering their questions as they become familiar with the UCLA systems. This has been a very busy year for Luz and we appreciate her calm leadership and oversight of all of our operations. Luz will be in even higher demand next year, as the MBI office moves into inter-departmental grants submissions. We believe this is a much-needed service to our members and one we are uniquely placed to provide. More on this in next year's report!

Finally, a note about QCBio, which continues to grow and evolve. BIG summer, the undergraduate program to introduce young students to bioinformatics welcomed around 40 participants this year, from across the country.

QCBio Program manager Jessica Jimenez has taken the lead in this innovative program and, due to a family move, she's now handing over the reins to Lana Martin. Lana joined us at the end of July and will take over both BIG Summer and the QCBio collaboratory postdoctoral teaching program.
QCBio administrator Marie Grossett spent a large part of her year planning and running the International Systems Biology of Human Diseases Conference, which was hosted at UCLA this year. Marie arranged all the conference logistics, meals, accommodation and guest speakers. The conference was a big success and Marie's warm, hospitable approach was commented on by many of the guests.

As you can see, we had a very full year with lots of changes! We'll look forward to seeing what the new academic year brings our way.

BUILDING MANAGEMENT
Michael Kane, Boyer Hall Building Manager

Projects
We had two projects commence during the 2017-2018 academic year in Boyer Hall. (1) Lab Renovation in Boyer 332 for Dr. Allard (ISG Dept), which was completed in June, and (2) Conference Room Renovation in Boyer 159, which will be completed by Fall Quarter 2018.
The following projects are in the design development phases, and will likely be completed in the 2018-2019 academic year:

- **Elevator Upgrades** – Both Boyer Hall elevators will have their mechanical systems replaced and both cabs will receive interior refreshes. It looks like our elevator upgrade will commence in the Fall Quarter of 2018. Stay tuned…
- **Boyer Hall Patio Refresh** – We will be sprucing up the patio now the conference room provides more access and visibility. Improvements will include new furniture and landscaping features.
- **QC Bio Wall Relocation** – We are in the design phase for this wall relocation project. This minor renovation will help open up the corridor on the 5th floor and create more of a collaborative space for the 5th floor labs.

New Faculty
We are excited to welcome Dr. Patrick Allard from The Institute for Society and Genetics. Dr. Allard just completed his move from CHS to Boyer Hall in June of 2018. Dr. Allard and his lab group now reside in Boyer Hall Room 332 where they research environmental impacts on gene expression and their relevance to health.

Building Personnel Changes
I was hired on as Building Manager late January of 2018. It has been great getting to know everyone in the building, and I look forward to serving the Boyer Hall residents. I would also like to congratulate Oren Saig on his well-deserved promotion to Assistant Building Manager. Oren has been an exemplary employee from the time I've known him and we're excited to see him grow into his new role.

Building Services
The refrigeration unit to cold room 324 was replaced, this was a $20,000 maintenance project. We are currently looking to add a – 20 to our freezer backup program located in the basement of Boyer Hall.

Building Maintenance
We are currently working with Associate Vice Chancellor, Kelly Schmader, to modernize the general use areas in Boyer Hall. We are hoping to make aesthetic improvements to general building areas (corridors, small conference rooms, and restrooms). We are also seeking deferred maintenance funds from the state to upgrade DI water and

building lab waste lines. In addition to these deferred maintenance projects, we are working to set up a preventative maintenance program for the general/shared areas of Boyer Hall. This would include activities such as regularly scheduled stripping and waxing of the corridor floors and touch up painting throughout the shared spaces of Boyer Hall.

PROGRAMS AND EVENTS

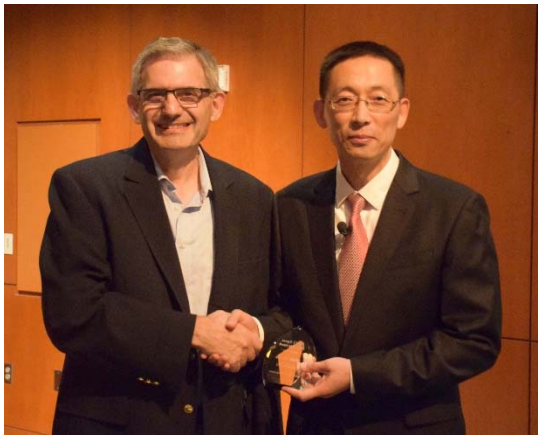
DAVID S. SIGMAN MEMORIAL LECTURE

Thursday, October 19, 2017

David S. Sigman
Professor, Biological Chemistry and Chemistry & Biochemistry

The Sigman Lectureship Award was established in 2002 to honor the memory of David Sigman, Professor in the Departments of Biological Chemistry and Chemistry & Biochemistry, and a founding member and former Associate Director of the MBI. He was a leader in the field of chemical biology at UCLA and discovered chemical nucleases in a career that illuminated the molecular mechanisms of catalysis. A permanently endowed fund was made possible by contributions from over 200 of Professor Sigman's colleagues, friends, and family, as well as corporate donors including the Amgen Foundation, Eli Lilly and Company, the Bristol-Myers Squibb Foundation, and Raytheon Systems Company.

2017 Sigman Lectureship Honoree



Honoree Yigong Shi with Sigman Chair Jim Bowie

Yigong Shi, Ph.D.
Vice President, Tsinghua University
Dean, School of Life Sciences, Tsinghua University
Co-Director, Tsinghua-Peking Joint Center for Life Sciences, Beijing

Keynote Presentation
"Mechanism of pre-mRNA Splicing by the Splicesome"

Abstract

Precursor messenger RNA (pre-mRNA) splicing, discovered 40 years ago, is an essential step in the information flow from DNA to protein in all eukaryotes. Research efforts of the past four decades have led to molecular delineation of the splicing pathway, including discovery of the nature and specifics of the splicing reaction, definition of the spliceosome and identification of its components, and biochemical analysis of the various splicing complexes and their regulation. Structural information is central to mechanistic understanding of pre-mRNA splicing by the spliceosome. X-ray crystallography of the spliceosomal components and subcomplexes is complemented by electron microscopy (EM) of the intact spliceosome. In the past two years, a burst of atomic structures on the intact spliceosome at different stages of the splicing cycle has revealed unprecedented mechanistic insights into pre-mRNA splicing, corroborating and explaining a large body of genetic and biochemical data. The spliceosome is proven to be a protein-directed metalloribozyme. In this presentation, I will summarize mechanistic revelations from recent structural advances on the yeast and human spliceosomes.

At a lunchtime event, the following trainees presented their research to Dr. Shi:

Presenter	PI/Mentor	Title of Presentation
Mimi Ho	Pascal Egea/Jasmine Zhou	"Interactions and epitope mapping in Human Cytomegalovirus gH/gL Pentamer complex"
Duyoung Min	Jim Bowie	"How CLC chloride transporter folds"
Yuxi Liu	Todd Yeates	"A Symmetric Molecular Scaffold for Protein Imaging by Cryo-Electron Microscopy"
Yi Ying	Doug Black	"Splicing activation by an Rbfox protein requires self-aggregation through its tyrosine-rich domain"
Kevin Murray	David Eisenberg	"Computational Design of Amyloid Fibril Inhibitors

AUDREE FOWLER FELLOWHIPS IN PROTEIN SCIENCE

Dr. Audree V. Fowler has been a dedicated Bruin for more than 60 years. A strong supporter of the basic sciences, the performing arts, and medicine at UCLA, she recently demonstrated her devotion to the College of Letters and Science again by establishing the Audree V. Fowler Graduate Fellowship in Protein Science, to be administered by the Molecular Biology Institute. Since 2008, 30 talented graduate students have received these fellowships.

Audree received her B.S. in chemistry from UCLA in 1956 and went on to earn a Ph.D. in biochemistry in 1963, when that field was almost exclusively male. She served as a NIH postdoctoral fellow at the Albert Einstein College of Medicine in New York and in UCLA's Department of Biological Chemistry before becoming a research biological chemist in the David Geffen School of Medicine at UCLA. She built an eminent research career which includes over 80 publications. She also built strong connections with the Molecular Biology Institute, the Department of Biological Chemistry in the David Geffen School of Medicine, the UCLA Protein Microsequencing Facility—where she served as director for 15 years—and the Jonsson Comprehensive Cancer Center. She is one of five founding members of the Association of Biomolecular Resource Facilities (ABRF), which is now an international organization of 1,100 members. She was named the first lifetime member of the organization in 2008.

Although she retired from UCLA in 1999, Fowler is determined to remain active. She is an avid Bruin, maintaining her emeriti membership in the Molecular Biology Institute and serving on the board of directors of Women & Philanthropy. She also is on the executive board of Design for Sharing and the Iris Cantor UCLA Women's Health Center, and she volunteered at the Santa Monica Pier Aquarium—formerly the UCLA Ocean Discovery Center.
She expanded her involvement by giving tours of the Palisades Park hosted by the Santa Monica conservancy and of the Marion Davies Beach House.

The Audree V. Fowler Graduate Fellowships in Protein Science serves as a fitting testament to Dr. Fowler's commitment and dedication to her research and to UCLA. The fellowships are awarded to promising Ph.D. candidates working in protein science. The crucial resources provide by the award advance the education of the Fowler Fellows by enabling them to concentrate on their innovative research.

"The sciences gave me a great life and now I want to help others to have the same opportunities I enjoyed."

2017-18 Recipients

- **Michael Hughes** (Eisenberg Lab) "Structural insights into low-complexity domains & non-membrane bound organelles"
- **Kanishk Jain** (Clarke Lab) "Understanding protein arginine methyltransferases and their biochemical mechanisms"
- **William Barshop** (Wohlschlegel Lab) "MilkyWay: A Proteome Bioinformatics Platform, and its Application in Development of Proteolytic Digestion Resistant Affinity Purification Beads"
- **Yuxi Liu** (Yeates Lab) "Characterization of Natural and Engineered Symmetric Protein Oligomers"

More information about this year's recipients and their research can be found www.mbi.ucla.edu/fowler-fellows.

Awardees (L-R) Michael Hughes, Yuxi Liu, Kanishk Jain and William Barshop, with Dr Fowler.

JULES BRENNER ACHIEVEMENT FELLOWSHIP IN MOLECULAR BIOLOGY

Past and present Brenner Fellows: Lulan Wang (2016), Courtney Young (2017) and Aimee Flores (2018) with Mr. Brenner

Jules Brenner has worked in the cinematography division of the motion picture industry from the end of his military service in 1959 to the day of his retirement in 1996, starting as a camera assistant/loader at Warner Bros up to Director of Photography (1968-1991) with such film credits as Dalton Trumbo's "Johnny Got His Gun," John Milius' "Dillinger," two early episodes of the MacGyver TV series and the cult fave, "The Return of the Living Dead." (His full credit list is available on IMDB). He is a voting member of the Academy of Motion Picture Arts & Sciences (AMPAS) and serves as a judge in their Nicholl Fellowship Screenwriting Competition.

Since retirement he has been active as a motion picture and book reviewer, accredited by the Motion Picture Association of America (MPAA) as a print and online freelance journalist. His reviews have been published in print publications such as Mystery Scene Magazine, and all around the web on such sites as filmcritic.com, Paste.com, About.com, and others in addition to his own sites, Cinema Signals and Critical Mystery Tour. His review blurbs appear on Rotten Tomato. He has lectured on Screenwriting for Columbia College of Chicago, Studio City campus. He writes code in HTML, Visual Basic and ASM and loves swimming, scuba diving, and weight training. His addictions are movies and reading and he has an intense interest, strictly as a layman, in the sciences.

Aimee receiving her award from Mr. Brenner

Mr. Brenner believes that Molecular Biology is where the future lies and has provided a gift to recognize one outstanding student that has advanced the discipline. The awardee was selected by a committee of distinguished faculty and by Mr. Brenner, who also introduced the award in a video presentation at the Annual MBI Retreat, April, 2017.

2018 Recipient

- Aimee Flores (Lowry Lab)

BOYER/PARVIN POSTDOCTORAL RESEARCH AWARDS

MBI Founding Director Paul Boyer had a deep regard for postdoctoral researchers. He appreciated the dedication, intellect and skill they bring and the impact of their research on scientific progress. It was in this spirit that Dr Boyer donated a portion of his 1997 Nobel Prize to establish the Postdoctoral Awards. Additional support from his long-time colleague James Peter, from Phyllis Parvin on behalf of the Parvin Foundation and from Amgen Inc. created an opportunity to recognize over 100 exceptional researchers in Chemistry, Biochemistry and Molecular Biology, for the past 16 years.

The Parvin Foundation has been a tireless supporter of molecular biology research since the gift of $1 million made the Molecular Biology Building (now Paul D. Boyer Hall) possible. Foundation President Phyllis Parvin continues to be an avid supporter of the postdoctoral awards. Thanks to the Parvin Foundation, Amgen Inc and individual donors who believe in the value of postdoctoral research, we are able to continue the tradition of recognizing these exceptional scientists.

(L-R) Awardees Marcus Seldin, Francis Mercer and Michael Hicks

The recipients of these three awards were:

Francis Mercer, Ph.D.
Mentor: Prof. Patricia Johnson; Microbiology, Immunology & Molecular Genetics

Marcus Seldin, Ph.D.
Mentor: Prof. A. Jake Lusis; Cardiology

Michael Hicks, Ph.D.
Mentor: Prof. April Pyle; Microbiology, Immunology & Molecular Genetics

Thanks go to the members of the Selection Committee, Karen Reue, Jose Rodriguez, Oliver Fregoso and Hilary Coller, for their extensive efforts in selecting the winners.

RESEARCH SEMINAR SERIES

This seminar series continues to be a focal point of MBI activities. The 2017-2018 schedule included national and internationally renowned speakers, invited and hosted by MBI Faculty and students from the MBIDP program.

Date	Speaker	Institution(s)	Title	Host
10/5/2017	Liana Lareau, Ph.D.	California Institute for Quantitative Biology, University of California, Berkeley	"Ribosome Dynamics Captured by Deep Sequencing and Deep Learning"	MBIDP students (GREAT Home Area)
10/12/2017	Elcin Unal, Ph.D.	University of California, Berkeley	"Meiotic Differentiation: Uncovering Unique Modes of Gene Regulation and Organelle Remodeling"	Sri Kosuri
10/19/2017	Yigong Shi, Ph.D.	Tsinghua University, Beijing	"Mechanism of pre-mRNA Splicing by the Spliceosome"	Jim Bowie/Reid Johnson
10/26/17	Raymond Deshaies, Ph.D.	Amgen and California Institute of Technology	"The Adaptive Exchange Hypothesis: Dynamic Specification of the SCF Ubiquitin Ligase Repertoire by Substrate"	Steve Young
11/2/2017	Peter Jackson, Ph.D.	Stanford University School of Medicine	"Reformulating adipogenesis: Cilary trafficking of a fatty acid GPCR activates cAMP-dependent differentiation of mesenchymal stem cells"	Jorge Torres
11/9/2017	Leonard Zon, M.D.	Children's Hospital Boston, Harvard Medical School Howard Hughes Investigator	"Pathways regulating hematopoietic stem cell self-renewal and migration"	Carla Koehler
11/16/2017	Tamir Gonen, Ph.D.	Investigator, Howard Hughes Medical Institute Department of Biological Chemistry	"MicroED opens a new era for biological structure determination"	Doug Black
11/30/2017	Raymond Stevens, Ph.D.	University of Southern California	"A new approach towards diabetes structure based drug discovery"	Ron Kaback
12/7/2017	Christopher Lima, Ph.D.	Memorial Sloan Kettering Cancer Center	"Nuclear quality control and the RNA exosome"	Tracy Johnson & Doug Black
1/11/2018	David Rawlings, M.D.	Seattle Children's Hospital University of Washington	"Engineering human lymphoid cells for novel clinical applications"	MBIDP students (IMMP Home Area)
1/18/2018	Karen Adelman, Ph.D.	Harvard Medical School	"Transcription as a Central Hallmark of Active Enhancers"	Tracy Johnson
1/25/2018	Vamsi Mootha, M.D.	Harvard Medical School,	"Genomics Approaches to Mitochondrial Bioenergetics"	Steve Young & Sabeeha Merchant
2/1/2018	Scott Keeney, Ph.D.	HHMI Memorial Sloan Kettering Cancer Center Howard Hughes Investigator	"Breaking Par: Sex Chromosome Recombination in Male Meiosis"	Tracy Johnson

2/8/2018	Michel Goedert, M.D., Ph.D.	Medical Research Council, University of Cambridge	"Synucleinopathies and Tauopathies"	David Eisenberg
2/22/2018	William A. Petri Jr., M.D., Ph.D.	University of Virginia	"Role of Human Genetics, environment and microbiome insusceptibility to amebic colitis"	Patricia Johnson
3/1/2018	Emanuela Gussoni, Ph.D.	Harvard Medical School	"Tetraspanin CD82 in Muscle Stem Cells and Muscular Dystrophy"	MBIDP students (CDB Home Area)
3/8/2018	Olga Boudker, Ph.D.	Cornell University	"Glutamate Transporter Dynamics: How Fast Can It Go?"	Jim Bowie
3/15/2018	Steven Boxer, Ph.D.	Stanford University	"Reactions, Interactions, Dynamics and Mass Spec Imagine in Model Biological Membranes: Viruses and Rafts"	Steve Young
4/12/2018	Sophie Dumont, Ph.D.	University of California, San Francisco	"Cell Division: Mechanical Integrity with Dynamic Parts"	Margot Quinlan
4/19/2018	Hana El Samad, Ph.D.	University of California, San Francisco School of Medicine	"Cellular Feedback Control - What Do All the Loops Do?"	Margot Quinlan (MBI) & Van Savage (QCB)
4/26/2018	Roy Parker, Ph.D.	University of Colorado, Boulder	"RNP Granules in Health and Disease"	Ming Guo
5/3/2018	Gregory Alushin, Ph.D.	The Rockefeller University	"Cytoskeletal structural plasticity in force generation and mechanosensation"	Hilary Coller
5/10/2018	Photini Sinnis, M.D.	Johns Hopkins Bloomberg School of Public Health	"Establishment of Malaria Infection: Parasite Bottleneck & Point for Intervention	Peter Bradley
5/17/2018	Tim Stearns, Ph.D.	Stanford University	"Centrosomes and Cilia: From Single Molecules to New Model Organisms"	Margot Quinlan
5/24/2018	Jay Keasling, Ph.D.	University of California, Berkeley	"Engineering Microorganisms for Production of Isoprenoid Natural Products and Some Not-So-Natural Products"	MBIDP students (BBSB Home Area)
5/29/2018	Angelique Bordey, Ph.D.	Yale School of Medicine	"Understanding How MTOR Hyperactivity Leads to Epilepsy and Behavioral Deficits"	Ye Zhang (MBI) & Chris Evans (BRI)

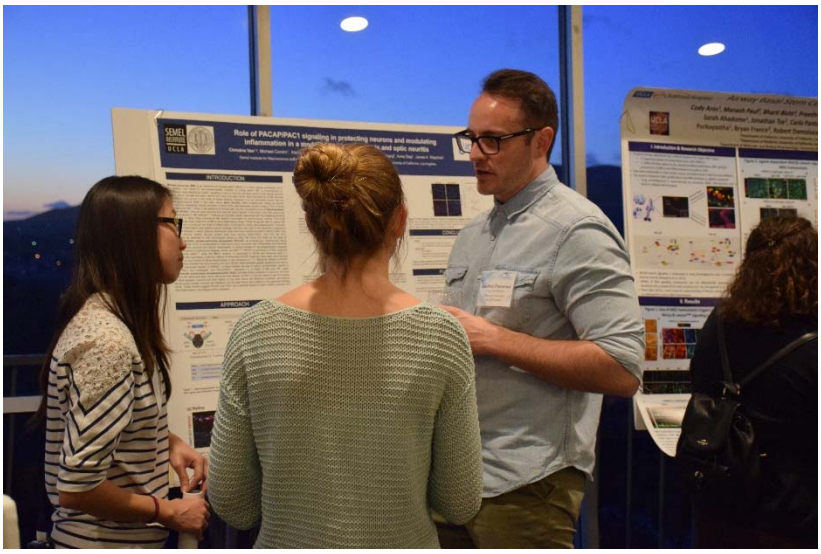
FACULTY RESEARCH SEMINAR SERIES

These informal presentations contribute to our scientific progress and enable our membership to keep up-to-date on current research developments by the MBI faculty.

Date	MBI Faculty Member	Department	Title
10/3/2017	Luisa Iruela-Arispe, Ph.D.	MCDB	"State of the MBI 2017: A growing membership, new staff, facility renovations and more..."
10/10/17	Patrick Allard, Ph.D.	Institute for Society and Genetics	"Mechanisms of transgenerational inheritance of environmental exposures in C. elegans"
10/17/17	Manish Butte, Ph.D.	Ped Allergy/ Immunology	"Pulling out the Stops in T-cells"
10/24/2017	Don Puppione, Ph.D.	Emeritus Professor	"Combining proteomics with genomics to look at the evolution of mammalian apoC-I"
10/31/2017	Gerald Lipshutz, M.D., D.D.S.	Surgery, Endocrinology, Diabetes and Hypertension, Molecular & Medical Pharmacology	"Trials and Tribulations with Arginase: Progress in Gene and Cell Therapy for its Deficiency and Defining its Possible Cell Autonomous Role in Neuronal Development"
11/7/2017	Alice Soragni, Ph.D.	Hematology-Oncology	"Protein aggregation in cancer: p53 and beyond"
11/14/2017	Matteo Pellegrini, Ph.D.	MCDB	"What can DNA methylation tell us about metabolic syndrome?"
11/28/2017	Jose Rodriguez, Ph.D.	Chemistry & Biochemistry	"Structures of Mammalian Prion"
12/05/2017	Brigette Gomperts, M.D.	Pediatrics, Hem/Onc	"Maintaining Mucociliary Clearance - the Critical Role of Airway Basal Stem Cells"
1/9/2018	Grace Aldrovandi, M.D.	Pediatrics-Infectious Diseases	"Moms, Milk and Microbes: How to Build Healthy Babies"
1/30/2018	Hong Zhou, Ph.D.	MIMG	"Structural studies of Human Herpes Viruses"
2/6/2018	Margot Quinlan, Ph.D.	Chemistry & Biochemistry	"Cytoskeletal Control of Cell Polarity in the Drosophila Oocyte and Other Actin News"
2/13/2018	Amander Clark, Ph.D.	MCDB	"Molecular Regulation of Human Germ Cell Formation"
2/20/2018	Feng Guo, Ph.D.	Biological Chemistry	"RNA Structures and microRNA Biogenesis"
2/27/2018	Lily Wu, M.D., Ph.D.	Molecular & Med Pharmacology	"Tumor heterogeneity and metastatic progression in renal cell carcinoma"
3/6/2018	Todd Yeates, Ph.D.	Chemistry & Biochemistry	"Giant Protein Assemblies in Nature and By Design"
3/13/2018	Yousang Gwack, Ph.D.	Physiology	"Calcium Signaling Components in Innate Immunity"
3/20/2018	Louis Bouchard, Ph.D.	Chemistry & Biochemistry	"Technology Development for Precise Modulation of T-Cells Fate, Tissue Engineering, Mechanosensing and Other Stories"
4/3/2018	Elissa Hallem, Ph.D.	MIMG	"Host-Seeking Behaviors of Parasitic Nematodes"
4/10/2018	Sri Kosuri, Ph.D.	Chemistry & Biochemistry	"Synthetic Approaches for Understanding Biology"
4/17/2018	Luisa Iruela-Arispe, Ph.D.	MCDB	"MBIDP Update-Report to the Faculty"
4/24/2018	Ren Sun, Ph.D.	Molecular & Med Pharmacology	"Rational Vaccine Design Enabled by High Resolution Genetic Maps of Viral Genomes"
5/1/2018	Joseph Loo, Ph.D.	Chemistry & Biochemistry	"Pushing (and Imaging) the Boundaries of Protein Mass Spectrometry Beyond Sequencing to Structural Biology"
5/8/2018	Jerome Zack, Ph.D.	Hem- Onc/MIMG	"Developing an Approach to Purge HIV Reservoirs"

5/15/2018	Peter Tontonoz, M.D., Ph,D.	Path & Lab Med	"Lipid Transport Pathways in Physiology and Disease"
5/22/2018	Michael Carey, Ph.D.	Biological Chemistry	"Gene Unit Sub-Tads: How ES Cell Enhancers Interact with Promoters within the 3D Genome"

MBI ANNUAL RETREAT & RESEARCH CONFERENCE



Retreat Committee Chair Geoff Pronovost talks to fellow students at the retreat poster session.

The MBI Retreat is organized each year by student representatives from the Molecular Biology Interdepartmental Ph.D. Program, the Cellular & Molecular Biology Training Program and the Cell-Biology Interface Training Program. The program offers the opportunity for the MBI community; students, postdocs and faculty, to gather together to celebrate the diversity of intellectual pursuits that comprise modern molecular biology at UCLA.

The 40th MBI Annual retreat was held on March 17 - 18, 2017 the Crowne Plaza Ventura Beach. 169 people attended the retreat, including 146 graduate students and 23 faculty members. 44 students presented posters and 10 students gave oral presentations. One of the highlights of this year's retreat was the presentation by our Keynote Speaker, Dr. Michael Snyder from Stanford University.

Another highlight of the retreat was the Career Panel, where professionals from academia and industry outlined their career paths and gave professional development advice to the students.

Panelists with student host Jessica Ochoa

The panelists this year were:

- Edwin Saada (Sandia National Laboratories)
- Jennifer Lovick (SAGE Publishing)
- David Leibly (ADRx)

- Emily Lowe (Kite Pharma/Gilead)

The retreat program also included time to relax and enjoy the beautiful location. The Home Area "House Cup" was extremely popular, which included a game of tug-o-war on the beach, with Gene Reg and IMMP tying to end the events.

We were grateful for the financial support of several UCLA Departments: Biological Chemistry; Chemistry and Biochemistry; MCDB; MIMG; Pathology and Laboratory Medicine, and the David Geffen School of Medicine, Broad Stem Cell Research Institute, and Jonsson Comprehensive Cancer Center, who made this retreat possible.

Also, a very special THANK YOU to our benefactors Dr. Audree Fowler, Dr. Garry Miyada and Jules Brenner, for believing that investing in graduate education is the path to a better future for all.

RETREAT SCHEDULE

Saturday, March 17, 2018

Keynote Address

Guillaume Urtecho

Introduction

1:30 – 2:30PM — Michael Snyder, Ph.D.
Stanford University
"Big Data and Health"

Session I

Chair: Manish Butte, M.D., Ph.D.

2:30 – 2:50PM — Aanand Patel (Quinlan Lab)
2:50 – 3:10PM — Adewunmi Adeleja (Hoffmann Lab)
3:10 – 3:40PM — Donald Kohn, M.D.

Career Panel

Moderator: Jessica Ochoa

4 – 5PM — Q&A with Panelists:
Emily Lowe (Kite Pharma/Gilead)
Edwin Saada (Sandia National Laboratories)
David Leibly (ADRx)
Jennifer Lovick (SAGE Publishing)

5:30 – 7PM — Dinner and Presentation of Student Awards
7 – 8:30PM — Poster Session
8:30 – 11PM — Pub Trivia

Sunday, March 18, 2018

Session II

Chair: Andrew Goldstein, Ph.D.

9:30 – 9:50AM — Guillaume Urtecho (Kosuri Lab)
9:50 – 10:10AM — Thang Nguyen (Teitell Lab)
10:10 – 10:40AM — Siavash Kurdistani, Ph.D.

Session III

Chair: Oliver Fregoso, Ph.D.

10:50 – 11:10AM — Jaspreet Sandhu (Tontonoz Lab)
11:10 – 11:40AM — Stephanie Demarco (Hill Lab)

11:40 – 12:10PM	Margot Quinlan, Ph.D.

Graduate Student Awards

1:30PM	Poster Award Presentations

Fowler Fellowship Award Presentations

Introduction	Audree Fowler
1:40 – 2PM	Michael Hughes (Eisenberg Lab)
2 – 2:20PM	Kanishk Jain (S. Clarke Lab)
2:20 – 2:40PM	William Barshop (Wohlschlegel Lab)
2:40 – 3:00PM	Yuxi Liu (Yeates Lab)
3 – 3:30PM	Kathrin Plath, Ph.D.
Closing Remarks	Director Luisa Iruela-Arispe, Ph.D.

MB-IDP House Cup

3:40 – 4:45PM	Water Balloon Toss, Tug of War, Flag Tag, Cornhole

BIOTECHNOLOGY EDGE WORKSHOP
MBI & Amgen Inc.

March 26th- 30th, 2018 the MBI collaborated with researchers at Amgen to hold the 3rd Annual "Biotechnology Edge" Workshop. The workshop provided an opportunity to learn firsthand about the biotechnology industry,

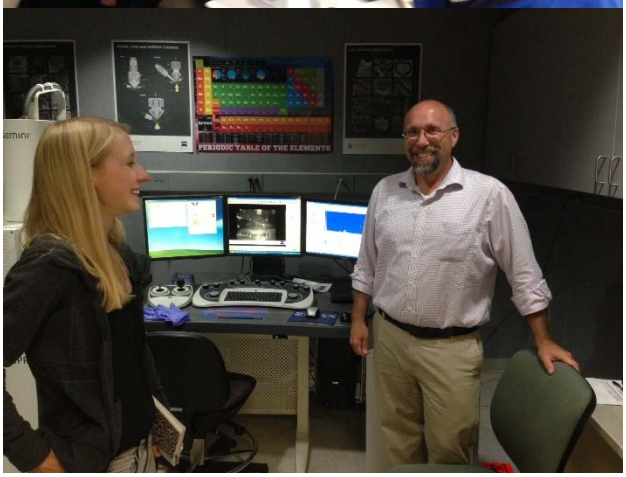
Lecture	Day	Title	Presenter
1.1	Monday March 26 9:30am to 11:00am	Introduction to Biotechnology	**Jim Johnston** Executive Director, Research Inflammation
1.2	Monday March 26 11:15am to 12:30pm	Case Study – Metabolic – Bone Biology Genomics/Genetics, Bone Biology, and Osteoporosis Therapies	**Chris Paszty** Director, Research Cardio-metabolic Disorders
2.1	Tuesday March 27 9:30am to 11:00am	Large Molecule Lead Generation	**Kevin Graham** Scientist Biologics
2.2	Tuesday March 27 11:15am to 12:30pm	Small Molecule Lead Generation and Lead Optimization The Role of Medicinal Chemistry in Drug Discovery	**Ana Minatti** Sr Scientist Medicinal Chemistry
3.1	Wednesday March 28 9:30am to 11:00am	Comparative Biology and Safety Sciences: Large and Small Molecule Drug Discovery & Development	**Graeme Moffat** Executive Director CBSS
3.2	Wednesday March 28 11:15am to 12:30pm	Pharmacokinetics in Drug Discovery & Development PK: What does a Body do to a Drug?	**Winnie Sohn** Principal Scientist Medical Sciences
4.1	Thursday March 29 9:30am to 11:00am	Case Study – Oncology – BiTE Therapeutics	**Paul Hughes** Scientific Director Oncology Research
4.2	Thursday March 29 11:15am to 12:30pm	Process Development	**Linda Narhi** & **Maria Silve Elipe** Scientific Executive Director, Principal Scientist Process Development, Process Development
ATO Campus Visit	Friday March 30 9:00am to 9:15am	Welcome – Visit Overview	**Jim Johnston /Linda Narhi**
ATO Campus Visit	Friday March 30 9:30am to 1:00pm	ATO Campus Visit & Lab Tours	

including all aspects of the drug discovery process and the ways in which trainees can prepare for a career in the private sector. During the first four days, senior Amgen scientists came to UCLA to give presentations on various aspects of drug design and testing. They also spoke to the audience about preparing for careers in biotechnology.On the last day of the workshop the trainees traveled to Thousand Oaks to tour Amgen labs to interact with directly group leaders and junior researchers and see first-hand how the latest technologies are being used to move potential therapeutics through the pipeline. The entire workshop was extremely popular and only 30 trainees could be accommodated due to space limitations on the Amgen tour.

FOCUS IN IMAGING WORKSHOP

MBI, CNSI, Carl Zeiss Microscopy & Bitplane

Held August 1st through 4th, the "Focus on Imagining" workshop, provided essential hands-on training in the basic principles of microscopy, confocal, electron microscopy and Imaris 3D/4D visualization and analysis. This was the third workshop organized in collaboration with partners at Zeiss and Bitplane, who provide equipment and expert training personnel. Each session was 2 hours long and was offered on multiple days and times to accommodate as many as possible. Bitplane Specialist Lynsey Hamilton, Ph.D, gave an introductory seminar for the IMARIS Training on the final day. 55 trainees and faculty attended.



TRAINING SESSION SCHEDULE

Tuesday – August 1st
Principles of Microscopy 1pm and 3:30pm
Confocal Microscopy 1pm and 3:30pm
Electron Microscopy 1pm and 3:30pm

Wednesday – August 2nd
Principles of Microscopy 9:30am, 1pm and 3:30pm
Confocal Microscopy 9:30am, 1pm and 3:30pm
Electron Microscopy 9:30am, 1pm and 3:30pm

Thursday – August 3rd
Principles of Microscopy 9.30am, 1pm and 3.30pm
Confocal Microscopy 9.30am, 1pm and 3.30pm
Electron Microscopy 9.30am, 1pm and 3.30pm

Friday – August 4th
Boyer Hall 130
Introductory Seminar 10am
"*Explore your 3D data with Imaris*"
Lynsey Hamilton, Ph.D. Bitplane Specialist

IMARIS Training Sessions

Introductory Sessions
Friday August 4th 1pm – 2pm: Imaris 3D rendering & animations
Friday August 4th 2pm – 3pm: Imaris Automated object detection, counting and volumetric statistics

Advanced Sessions
Friday August 4th 3.30pm – 4.30pm: Imaris Colocalization analysis techniques
Friday August 4th 4.30pm – 5.30pm: Imaris Neuron Tracing, Q&A

MOUSE GENOME INFORMATICS WORKSHOP

After a short hiatus, the MBI reconvened its popular mouse genetics and genome informatics workshop. The 2 hour workshop was held on Tuesday March 20, 2018 and lead by Dr. Meiyee Law, Outreach Coordinator at Jackson Labs. Dr. Law began by covering basic concepts of mouse genetics, data structures, page navigation in the MGI database (www.informatics.jax.org) and batch data mining/analysis. In the second half of the workshop, she lead participants through practical examples to demonstrate how the MGI database could be used to answer biological questions. Attendees also received one-on-one assistance with analyzing their own data. The workshop was extremely popular and registration reached the room capacity of 60, with a waiting list for open spots. Given the interest in this area, and with the support of Jackson Labs we hope to offer this workshop annually.

FACULTY RESEARCH

AND

PROFESSIONAL ACTIVITIES

NEW MBI MEMBERS

Justine C. Lee, MD, Ph.D., FACS
Associate Professor, Plastic and Reconstructive Surgery
www.uclahealth.org/JustineLee
Dr. Lee is a craniofacial surgeon-scientist. Her research program includes a basic science and clinical component focused on craniofacial reconstruction and investigating practical solutions for defects of the craniofacial skeleton. Her basic work is focused on understanding and developing materials-based calvarial bone regeneration strategies for rapid translation. Her clinical work is focused on outcomes of craniofacial surgery with a particular emphasis on pediatric congenital anomalies. She is funded by the Jean Perkins Foundation, the Bernard G. Sarnat Endowment, the Plastic Surgery Foundation, and the US Department of Veterans Affairs. Dr. Lee graduated summa cum laude from UCLA with a Bachelors of Science in Molecular, Cell, and Developmental Biology. Subsequently, she received her MD and PhD from the University of Chicago. She completed her plastic and reconstructive surgery residency at the University of Chicago and returned to UCLA for her craniofacial surgery fellowship. She is the Bernard G. Sarnat Endowed Chair for Craniofacial Biology. In addition to her work at UCLA, she is highly active in both national and international reconstructive surgery organizations. She serves as Associate Editor for Annals of Plastic Surgery, Section Editor in Craniofacial Surgery for the Cleft Palate-Craniofacial Journal, and Section Editor in Plastic and Reconstructive Surgery for the Cleft Palate-Craniofacial Journal.

Melody Li, Ph.D.
Assistant Professor, Microbiology, Immunology and Molecular Genetics
www.melodylilab.org
Dr. Li is a molecular virologist and her laboratory studies host defense strategies that control infections with arthropod-borne viruses (arboviruses), which have caused devastating outbreaks in recent years. Viral infection stimulates the production of interferon, resulting in the expression of a large and diverse repertoire of interferon-stimulated genes. However, most of these genes have not been characterized. In graduate school, Dr. Li elucidated the functional consequences of human polymorphisms in the *APOBEC3H* gene. Her work was among the first studies to establish an anti-HIV-1 role for human APOBEC3H *in vivo*. Her postdoctoral work on two interferon-induced proteins, ZAP and IRF2, advances our understanding of host mechanisms that inhibit viral translation and promote clearance in the central nervous system. Her laboratory is currently investigating the mechanism and regulation of broad-spectrum antiviral factors with the hope that they will inform development of novel therapeutics against re-emerging arboviruses. Dr. Li received her PhD in Microbiology from University of Washington, Seattle in 2011. She subsequently completed her postdoctoral work at Rockefeller University in 2017 and started her own group at UCLA in the fall of 2017.

Theodoros Kelesidis, M.D., Ph.D., M.Sc.
Assistant Professor, Medicine – Infectious Diseases
https://www.uclahealth.org/theodoros-kelesidis
Dr. Kelesidis is a translational physician-scientist focusing on immunopathogenesis of infectious diseases. His laboratory uses a variety of in vitro and in vivo models to investigate novel mechanisms of HIV-related inflammation and immune dysfunction and how they drive end organ disease such as atherosclerosis. In addition to HIV, Dr. Kelesidis' research interests include infections in immunocompromised patients and antimicrobial resistance. Dr. Kelesidis received his MD from University in Athens, Greece and his PhD from University of California Los Angeles where he also did his fellowship in infectious diseases. He has also received an M.Sc in translational research from UCLA. He is

currently an Assistant Professor of Medicine at the Department of Medicine, Division of Infectious Diseases at UCLA.

Siobhan A Braybrook, Ph.D.
Assistant Professor, Molecular, Cell, and Developmental Biology
https://www.mcdb.ucla.edu/faculty/siobhanb
Dr. Braybrook is a developmental biologist who specializes in the mechanical properties of cells and tissues as they relate to growth. She collaborates with mathematicians, computer modellers, and engineers in order to address the physical biology of growth. Her major study systems are plants and brown algae, with recent forays into immunology and cancer. The lab currently focuses on mechanisms of pH-induced growth mechanics, anisotropic cell elongation, the biomechanics of biological gels, and morphometric analysis of cell shapes. Dr. Braybrook received her Ph.D. from UC Davis. She completed a research fellowship at the University of Bern (CH) before starting a research group at The University of Cambridge (UK). In 2017, the lab moved to UCLA.

Tamir Gonen, Ph.D.
Professor, Biological Chemistry
https://cryoem.ucla.edu/
Dr. Gonen is an expert in electron crystallography and cryo EM. He determined the 1.9Å resolution structure of the water channel aquaporin-0 by electron crystallography, the highest resolution for any protein determined by cryo EM techniques at the time. Dr Gonen established his own laboratory at the University of Washington in 2005 together with the very first cryo EM laboratory in the Pacific Northwest, a resource that continues to benefit many researchers at the UW School of Medicine and beyond. More recently Dr Gonen was honored with a Career Development award from the American Diabetes Association, became a Member of the Royal Society of New Zealand, as well as being chosen one of only 50 Howard Hughes Medical Institute Early Career Scientists around the country. In 2011 Dr Gonen accepted a position as a Group Leader at the HHMI Janelia Research Campus where he began developing MicroED as a new method for structural biology. With this method Dr Gonen has pushed the boundaries of cryoEM and determined several previously unknown structures at resolutions close to 1Å. In 2017 Dr Gonen moved his laboratory to the David Geffen School of Medicine of the University of California, Los Angeles as an Investigator of the Howard Hughes Medical Institute and a Professor of Biological Chemistry and Physiology, where he continues studying membrane protein structure and function using cryoEM and MicroED. Dr Gonen authored more than 100 publications and several of his past trainees are now faculty around the world at top universities.

Tim O'Sullivan, Ph.D.
Assistant Professor, Microbiology, Immunology, and Molecular Genetics
http://www.mbi.ucla.edu/faculty/tim-osullivan/
Dr. O'Sullivan is an Assistant Professor of Microbiology, Immunology, and Molecular Genetics. He received his Bachelors of Science Degree (B.S.) from Cornell University and his Doctor of Philosophy Degree (Ph.D.) in Biomedical Science from the University of California San Diego. Dr. O'Sullivan's thesis work focused on the interactions between the innate immune system and cancer. Dr. O'Sullivan subsequently completed his American Cancer Society postdoctoral fellowship at Memorial Sloan Kettering Cancer Center where he studied the role of circulating and tissue-resident innate lymphoid cells (ILC) during viral infection and diet-induced obesity. Dr. O'Sullivan established his own laboratory at UCLA in 2017. The O'Sullivan lab is dedicated to understanding the molecular mechanisms responsible for protective or pathologic immune responses during cancer, viral infection, and obesity.

Tamer Sallam, MD Ph.D.
Assistant Professor, Medicine

Dr. Sallam is a cardiovascular physician-scientist investigating the relationship between genetic diversity and common cardiovascular problems such as dyslipidemia, obesity and heart disease. Dr. Sallam's previous work has provided fundamental insights into mechanisms controlling cholesterol levels and physiologic roles of newly recognized genes known as long non-coding RNA in cardiovascular disease. Through multiple independent grants his lab is currently investigating the contributions of long noncoding RNAs in cardiovascular risk factors and disease.Dr. Sallam completed residency and chief residency training at Yale, followed by cardiology fellowship training at UCLA. Dr. Sallam graduated from the STAR program at UCLA earning a PhD in the Lab of Peter Tontonoz. Dr. Sallam has been awarded the Lauren B. Leichtman and Arthur E. Levine investigatorship at UCLA. He is the recipient of the American College of Cardiology Presidential Career Development Award, Burroughs Wellcome Fund Career Award for Medical Scientists, and American Society for Clinical Investigation Young Investigator Award. Dr. Sallam currently serves as co-director of the UCLA center for Cholesterol Management and Assistant Director of the UCLA Specialty Training and Advanced Research (STAR) Program.

Jesse Zamudio, Ph.D.
Assistant Professor, Molecular, Cell, and Developmental Biology

Jesse Zamudio received his bachelor's degree from UCLA in Chemistry & Biochemistry. He received his Ph.D. from UCLA in the Department of Microbiology, Immunology and Molecular Genetics working in the laboratory of Dr. David Campbell and Dr. Nancy Sturm. For his thesis work, he characterized the first eukaryotic messenger RNA (mRNA) ribose cap methyltransferases. Although present in both the unique mRNA cap structure of human pathogenic Kinetoplastid protozoa and human mRNA, the proteins responsible for each had not been discovered. Based on evolutionary sequence conservation to known viral proteins, they were able to characterize a conserved eukaryotic protein family responsible for these modifications and determine their role in mRNA biogenesis and protein translation in kinetoplastids. These studies have aided the investigation of the human cap ribose methyltransferases implicated in early development. Jesse pursued his postdoctoral research in the laboratory of Dr. Phil Sharp at the MIT Cancer Center. His research focused on quantitative approaches to characterize Regulatory RNAs in embryonic and adult stem cells. He aimed to confidently assay regulation by the mammalian RNA interference (RNAi) pathway and in doing so discovered new classes of mammalian small RNAs and principles determining regulatory activity. Current research in the lab is focused on characterizing functional RNAs in the control of cell state transitions during development and cancer progression.

De-Chen Lin, Ph.D.
Assistant Professor, Cedars-Sinai Medical Center
Adjunct Assistant Professor, UCLA School of Medicine

Dr. Lin has a broad background in cancer genetics and biology, with specific training and expertise in functional genomic study as well as transcriptional regulation. The major focus of his work is identifying key genomic and epigenomic abnormalities in human malignancies and translating these findings into novel clinical managements. To facilitate this research, he has established and developed a variety of functional genomic approaches as well as computational algorithms. With these tools and comprehensive biological studies, Dr. Lin uncovered important genomic and epigenomic aberrations which promote malignant phenotypes.

MBI FACULTY HONORS & PROFESSIONAL AWARDS

Bannerjee, Utpal	Elected Member, National Academy of Sciences
Bitan, Gal	UCLA Inaugural Undergraduate Research Week Faculty Mentor Award
Bowie, James	Elected Fellow of the Biophysical Society, Academia Sinica Choh Hao Li Memorial Lecture
Clarke, Steven	William C. Rose Award of the American Society of Biochemistry and Molecular Biology
Coller, Hilary	Cancer Research Institute Clinical and Laboratory Integration Program Award Departmental Nominee for UCLA Distinguished Teacher Award Anna-Maria and Stephen Kellen Foundation-Melanoma Research Alliance Team Science Award UCLA Undergraduate Research Faculty Mentor Award
De Robertis, Edward	50th Anniversary Lecture of the Japanese Society of Developmental Biology 90th Anniversary Lecture for Instituto Clemente Estable
Eisenberg, David	Paul Sigler Prize, Yale University
Ernst, Jason	NIH/NIDA Avenir Award, Rose Hill Foundation Innovator Award
Goldstein, Andrew	American Cancer Society 2018 Giants of Science Hope Award
Gonen, Tamir	HHMI Investigator
Guo, Ming	Glenn Foundation for Medical Research Award
Hoffmann, Alexander	Keynote Speaker, International Conference on Intelligent Biology and Medicine
Iruela-Arispe, Luisa	NIH/NHLBI Outstanding Investigator Award (R35)
Johnson, Tracy	Chair, Keith and Cecilia Terasaki Endowed; Life Sciences Award for Excellence in Promoting Diversity and Inclusion Through Service, Teaching, Mentoring and Research
Kohn, Donald	Lifetime Achievement Award, the Pediatric Blood & Marrow Transplant Consortium
Kurdistani, Siavash	W.M. Keck Foundation Award
Lipshutz, Gerald	Endowed Chair
Novitch, Bennett	Ethel Scheibel Chair in Neuroscience; Ablon Scholars Award (JCCC/BSCRC)
Pyle, April	Ablon Award
Quinlan, Margot	Undergraduate Research Week Faculty Mentor Award
Reue, Karen	American Heart Association Russell Ross Memorial Lecture
Rodriguez, Jose	Pew Biomedical Scholar
Sallam, Tamer	Burroughs Wellcome Fund Career Award for Medical Scientists Fellow of American College of Cardiology
Soragni, Alice	Lynda's Fund Pilot Study Award
Spencer, Melissa	Golden Test Tube Award, UCLA Dept. of Neurology
Tarling, Elizabeth	Irvine H. Page Young Investigator Research Award Promoted to Associate Professor in Residence
Teitell, Michael	Appointed Director, UCLA Jonsson Comprehensive Cancer Center President, Jonsson Cancer Center Foundation Director, DGSOM Cancer Research Theme Lyda and Harrison Latta Endowed Chair in Pathology Jerome B. Block Memorial Lecture, LA BioMed
Torres, Jorge	2019 Ruth Kirschstein Diversity in Science Award American Society for Biochemistry and Molecular Biology

Yeaman, Michael	Spirit of Innovation Award (LA BioMed); Global Technology Community (CNS Diseases) Distinguished Primary Investigator (U.S. Department of Defense) Chair, Summit on Immune Tolerization Vatican Council on Medicine & Society

MBI FACULTY SERVICE ON UCLA COMMITTEES

Adams, John	Member and Advisor, CTSI KL2 Grant Program Chair, UCLA-UCI Alpha Stem Cell Clinic Internal Advisory Board Chair, UCLA Scientific Review Committee Member, Executive Oversight Commmittee, Clinical and Translational Science Institute Member, Operations Committee and Executive Action Committee, Clinical and Translational Science Institute, David Geffen School of Medicine at UCLA Member, UCLA Clinical and Translational Science Institute Program Area Leader Committee Member, Executive Academic Actions Committee, Orthopaedic Surgery Member, CTSI Institutional Steering Committee Member, CTSI Seminar (formerly IMED) Committee Member, Clinical Research Governance Committee DGSOM Seed Grant Review Committee DGSOM Oppenheim Grant Review Committee
Allard, Patrick	Life Science Diversity Advisory Committee UCLA Faculty Grant Program Committee
Ardehali, Reza	Co-Director of the UCLA Vascular Biology Training Grant Member, DGSOM Scholarship Selection Committee Member, UCLA Medical institutional Review Board
Berk, Arnold	Chair, MBI Membership Committee
Bitan, Gal	Judge, Undergraduate Research Poster Day Dean's Prize BBSB Ph.D. Home Area Admissions Committee Judge, Collins Day Poster Session (Neurobiology)
Black, Douglas	MIMG Vice Chair for Academic Personnel Chair, MIMG Merit Review Committee Member, Special Committee for Vice Chancellor for Research Member, MBI Seminar Committee Chair, Honors and Awards Committee of Undergraduate Council
Bowie, James	UCLA Council of Advisors; Sigman Lecture Committee
Bradley, Peter	IMMP Curriculum and Admissions Committee Intercollegiate Athletics Committee
Braun, Jonathan	UCLA Health System Executive Committee UCLA Health Sciences Data Strategy and Governance Committee
Braybrook, Siobhan	Member, MCDB Faculty Recruitment Committee (Plant Biology) Member, Life Sciences Diversity Advisory Committee
Butler, Samantha	Member, Neurobiology Academic Review Committee Reviewer, UCLA Innovation Fund (DGSOM) Member, MCDB Plant Job Search Committee
Butte, Manish	Co-Director of I3T: Immunity/Inflamation/Infection/Transplantation Co-Director of Cancer Nano Theme of the Jonsson Comprehensive Cancer Center
Chen, Irvin	Member, UCLA Dual Use Review Entity Member, Ad HOC Promotion Committee Chair
Chen, Jau-Nian	Member, UCLA Academic Senate Council on Research
Chow, Samson	Chair, Institutional Biosafety Committee Member, Embryonic Stem Cell Research Oversight Committee

Clarke, Catherine	Member, Undergraduate Study and Curriculum Committee (Chem & Biochem) Member, Diversity and Leadership Committee (Chem & Biochem) Member, Development Committee (Chem & Biochem)
Colicelli, John	UCLA SPORE in Prostate Cancer Internal Advisory Committee Faculty Advisory Committee, Minor in Biomedical Research Diversity Oversight Committee, School of Medicine DGSoM Medical Education Committee JCCC Intramural Review Committee
Coller, Hilary	Chair, Ad HOC Committee to Review Dissertation Year Fellowship in Biological Chemistry Reviewer, David Geffen Metabolism Theme Seed Funds Applications Member, MBI Seminar Committee Executive Committee Member, Dermatology T32 Reviewer, Metabolism Theme Awards Member, Faculty Search Committee (MCDB) Member, MCDB Promotion Review Member, Faculty Search Committee (Biomathematician) Member, Jonsson Comprehensive Cancer Center Internal Review Committee Member, Broad Stem Cell Center Predoctoral Fellow Review Committee Reviewer, Iris Cantor Woman's Health Center Reviewer, Jonsson Comprehensive Cancer Center Seed Grants Reviewer, UCLA Innovation Fund Grant Applications Member, MBI Boyer/Parvin Postdoctoral Fellow Award Committee
De Robertis, Edward	Chair, Honors Committee (School of Medicine)
Eisenberg, David	MBI Seminar Committee Chair, Chem & Biochemistry Postdoctoral Research Awards Development Committee, Chemistry & Biochemistry Department Distinguished Lecture Committee (Chem & Biochem) Fianni Fellows Interview Committee
Ernst, Jason	Chair, UCLA Bioinformatics Seminar Committee Member, UCLA Bioinformatics Admissions Committee Member, UCLA Bioinformatics Executive Committee Member, UCLA Bioinformatics Written Qualifying Exam Evaluation Committee Reviewer, UCLA Stem Cell Training Grants Reviewer, UCLA Innovation Fund
Faull, Kym	Departmental Representative, Legislative Assembly of the UCLA Academic Senate Member, Board of Governors, UCLA Faculty Center Member, Personnel Sub-Committee, Board of Governors, UCLA Faculty Center UCLA Representative, Legislative Assembly of the UC Academic Senate Member, Department of Psychiatry and Biobehavioral Sciences Appointments and Advancements Committee
Fregoso, Oliver	Member, Life Sciences Diversity Advisory Committee Member, MARC Committee; Boyer/Parvin Postdoctoral Awards Committee
Gelbart, William	UCLA Glenn T. Seaborg Medalist and Symposium Honoree
Gonen, Tamir	Executive Committee, Department of Physiology UCLA
Guo, Ming	Member, Switzer Prize Selection Committee Chair, Academic Advisory Council, Sound Body Sound Mind Co-Chair, Women in Science & Doctors of Medicine Member, Advancement & Promotion Committee in the Department of Neurology Search Committee, Faculty Appointment, Neuroscience
Hallem, Elissa	Member, Life Sciences Diversity Advisory Committee Member, IMMP Admissions Committee Member, Committee for UCLA Neuroscience
Hartenstein, Volker	Member, Neuroscience IDP Parent Committee Member, MCDB Masters Program Committee

Hevener, Andrea	MEDCAP; Chair, Academic Senate Committee on Development Endocrinology Chief, Search Committee
Hirsch, Ann	Ad HOC Member, Biosafety Committee
Hoffmann, Alexander	Member, Task force on Computational Biology, Genomics and Medicine
Iruela-Arispe, Luisa	Member, UCLA Search Committee for Academic Personnel Vice-Chancellor Member, UCLA Undergraduate Research Scholar Program Review
Jacobsen, Steven	Director, Broad Stem Cell Research Center Sequencing Facility MCDB Prize and Award Committee UCLA Ben Gurion Committee (Leshin Fund) Personnel Action Committees
Johnson, Tracy	UCLA Center for the Study of Women Advisory Committee UCLA Moreno Implementation Committee Chair, Life Sciences Diversity Advisory Committee CMB Training Grant Advisory Committee; Dean, Undergraduate Education Review Committee UCLA Human Pluripotent Stem Cell Research Oversight
Kaufman, Daniel	Department of Molecular & Medical Pharmacology Merit Review Committee
Koehler, Carla	Chair, IAC Committee Co-Director, CMB Training Grant Member, CBI Advisory Committee Member, Student Athlete Admissions Committee
Kohn, Donald	Member, JCCC Data Safety Monitoring Committee Chair, Data Safety Monitoring Board for "Gene Correction of Autologous Hematopoietic Stem Cells in Artemis Deficient SCID UCLA-UCI Alpha Stem Cell Clinic Internal Advisory Committee
Lazazzera, Beth	Chair, Academic Senate Undergraduate Council Member, Academic Senate Executive Board
Lee, Justine	Member, UCLA Honors, Awards and Prizes Committee Member, UCLA Children's Surgical Group Co-Director, UCLA Multi-Disciplinary Vascular Birthmark Clinic
Li, Melody	Member, UCLA Graduate Programs in Bioscience Admissions Committee for the IMMP Home Area Member, I3T Communications Committee
Lipshutz, Gerald	Member, CASPP
Loo, Joseph	Member, UCLA/DOE Laboratory for Genomics and Proteomics Member, UCLA Molecular Biology Institute Member, Dept. Chemistry and Biochemistry Instrumentation Committee Member, Dept. Chemistry and Biochemistry Development Committee Member, Advisory Committee, UCLA Molecular Instrumentation Center Member, Graduate Studies Committee, Department of Chemistry and Biochemistry Graduate Adviser, Analytical Chemistry/Measurement Science Ph.D. Specialization, Department of Chemistry and Biochemistry Member, UCLA Academic Senate Committee on Development Member, UCLA Academic Senate Graduate Council
McEvoy, Megan	Member, Faculty Search Committee (MIMG) Member, Amgen Faculty Review Committee Member, MBI Membership Review Committee Mentor, Regents Scholar Society
Morrison, Sherie	Member, UCLA College Campaign Committee
Nakano, Austin	Legislative Assembly, Cardiovascular Theme Research Committee

Novitch, Bennett	Member, Broad Center for Regenerative Medicine and Stem Cell Research Steering Committee Member, UCLA Neuroscience Interdepartmental Graduate Program Membership Committee Member, UCLA Molecular Biology Institute Membership Committee Member, UCLA Animal Program for Neural Repair Member, UCLA Clinical and Translational Sciences Institute Scientific Review Committee Member, David Geffen School of Medicine at UCLA Neurosurgery Chair Search Committee
O'Sullivan, Timothy	Member, I3T Communications Committee Member, IMMP Admissions Committee; Member, I3T Seminar Series Committee
Pellegrini, Matteo	Member, Committee to Evaluate Computational Biology (Genomics & Medicine Landscape UCLA)
Plath, Kathrin	Chair, Switzer Prize Committee Member, DGSOM-CTSI Recruitment Committee
Pyle, April	Chair, Life Sciences Excellence in Research Awards Committee Member, UCLA Assistant Professor Mentorship Program Life Sciences Mentorship Faculty Search Committee Member, Life Sciences Diversity Advisory Committee
Quinlan, Margot	Co-Chair, UCLA MBI Seminar Committee
Reddy, Srinvasa	Member, Committee on Teaching Member, Legislative Assembly
Reue, Karen	Medical Scientists Training Program Admissions Committee MBI Post-doctoral Award Selection Committee Boyer-Parvin Postdoctoral Award Committee
Sallam, Tamer	Member, Cardiovascular Theme Communications and Development Committee Member, STAR Program Selection Committee
Schweizer, Felix	Interim Director, Brain Research Institute Chair, Graduate Neuroscience Interdepartmental Program
Spencer, Melissa	Member, ESCRO Committee Member, Advancements and Promotions Committee (Neurology) Neuromuscular Program Director Co-Director, Center for Duchenne Muscular Dystrophy
Sun, Ren	Co-Director, UCLA Fogarty AITRP program on AIDS-associated Cancers Co-Director, Co-Infection and Malignancies Program, UCLA AIDS Institute Director, Medical Pharmacology Track of the Molecular and Medical Pharmacology Pharmacology Graduate Training Committee UCLA Optimize Career Service Provision for Graduate and Postdoctoral Students Committee UCLA Postdoctoral Scholars Advisory Committee Chair, UCLA Cross-Disciplinary Training Committee Steering Committee of UCLA China Initiatives Advisory Committee of UCLA International Institute Advisory Committee of UCLA Confucius Institute UCLA CTSI Education Committee
Teitell, Michael	Co-Director, NIH T32 Tumor Immunology Training Program Associate Director, UCLA-Caltech Medical Scientist Training Program (MSTP) Selection Committee, MBI Seminar Series Admissions Committee, Intercollegiate Student-Athletes Training Grant Committee, CSUN-CIRM Bridges to Stem Cell Biology NCAA Faculty Athletics Representative; UCLA Intercollegiate Student-Athletes Academic Senate Intercollegiate Athletics Committee (IAC)
Tontonoz, Peter	UCLA Representative to the UC System-wide Academic Senate
Torres, Jorge	Chair, Committee on Continuing and Community Education Member, Graduate Council/Graduate Division, Mentoring and Evaluation of Graduate Academic Progress Workgroup Member, Undergraduate Council's Honors, Awards & Prizes Committee Member, Diversity Committee for the Division of Physical Sciences

Wang, Yibin	DGSOM Executive Research Committee
Weiss, Shimon	UCLA Chemistry Department Development Committee UCLA Chemistry Department Instrumentation Committee UCLA CNSI Molecular Screening Shared Resource Advisory Board
Witte, Owen	UCLA SPORE in Prostate Cancer Executive Committee UCLA Clinical and Translational Science Institute Advisory Committee UCLA Dept. Chairs, Major Centers & Directors Committee DGSOM JCCC Director's Search Committee Geffen Scholarship Selection Committee; Chair, Belzer Chair Search
Xiao, Xinshu (Grace)	Faculty Mentor, Regents Scholar Society at UCLA Faculty Search Committee for Mathematical Biology, Life Sciences, UCLA Personnel Committee, Department of Integrative Biology and Physiology, UCLA Advisory Committee, Institute for Quantitative and Computational Biology, UCLA Advisory Committee, Bioinformatics IDP, UCLA Advisory Committee, Computational and Systems Biology IDP, UCLA
Yang, X. William	Member, UCLA MSTP Admissions Committee Member, Faculty Advisory Committee to the UCLA Accelerator
Yeaman, Michael	Member, Executive Committee UCLA I3T Program
Zack, Jerome	Chair, High Containment Lab Oversight Committee Chair, Dual Use Research Committee
Zhang, Ye	Member, NSIDP Admissions Committee
Zheng, Jie	Member, UCLA Academic Senate Committee on Faculty Welfare

MBI FACULTY SERVICE ON EXTERNAL COMMITTEES

Adams, John	Member and Former Chair, External Advisory Panel for the Mayo Clinic NIA PPG "Gonadal Steroids and Bone" Member, External Advisory Committee for the Mayo Medical Center T32 "Musculoskeletal Research Training Program" Member, Data Safety Monitoring Board, NIDDK-sponsored "Vitamin D and Type 2 Diabetes (D2d)" study Charter Member, Arthritis, Musculoskeletal and Skin (AMS) Study Section, NIAMS NIH Member and Chair, External Advisory Board, Johns Hopkins Orthopaedic Surgery NIH T32 Member, External Advisory Board, Mayo Clinic Orthopaedic Surgery NIH T32 Member, External Advisory Board, Washington University, Musculoskeletal NIHT32 Member, External Advisory Board, Washington University, Musculoskeletal NIH P50 Chair, External Advisory Panel for the Harbor-UCLA NIDDK T32 "Training in Endocrinology and Metabolism" Chair, Los Angeles BioMed Scientific Advisory Board Member, CIRM-Alpha Stem Cell Clinic Network Director's Steering Committee
Allard, Patrick	NIH SIEE Study Section NIH IRAP Study Section California's Developmental and Reproductive Toxicant Identification Committee
Bitan, Gal	Editorial Board Member, Journal of Biological Chemistry Editorial Board Member, Scientific Reports Ad HOC Member, NIH Special Emphasis Panel/Scientific Review Group ZRG1 MDCN-E(52), MDCN-E(56), MDCN-E(57), MDCN-P(52)
Black, Douglas	Member, NIGMS Study Section for Junior MIRA Awards
Bowie, James	Stockholm University Search Committee Biophysical Society Awards Committee Chair of Gordon Conference on Membrane Protein Folding
Braun, Jonathan	Chair, Exploratory Studies for Delineating Microbiome (ZDK1 GRB-6 M2)

	Member, SEP/SRG 2017/01 ZCA1 SRB-J (J4) R Meeting Chair, SAB, Milieu Interieur Consortium - Institut Pasteur, Paris
Braybrook, Siobhan	Academic Editor, Plant Direct Member, ASPB Digital Futures Committee
Butte, Manish	NIH Study Section (NIAID CMIA) NIH Study Section (NIAID 2017/10 ZAI1 NVM-I(S1))
Carey, Michael	JBC and MCB Editorial Boards, Ad Hoc, NIH MGB Study Section
Chen, Jau-Nian	Member, CDD NIH Study Section Member, ZRG1 F10A NIH Study Section Member, Cardiovascular Development AHA Study Section
Chow, Samson	Member, AMCB NIH Study Section
Clubb, Robert	Member, MSFC NIH Study Section
Colicelli, John	Cancer Research Coordinating Committee
Coller, Hilary	Reviewer, R35 Maximizing Investigators' Research Award for Early Stage Investigators Reviewer, Austrian Science Fund Reviewer, National Science Foundation Career Program Reviewer, Arthritis Research UK Reviewer, National Cancer Institute Provocative Questions Reviewer, Medical Research Council Reviewer, James and Esther King Biomedical Research Program Peer Review Reviewer, National Cancer Institute P01 Reviewer, Israeli National Science Foundation Reviewer, French National Research Agency Reviewer, Marsden Fund Reviewer, NCI Provocative Questions
De Robertis, Edward	Board Member, Latin American Society of Developmental Biologists Scientific Advisory Board, Pew Charitable Latin American Fellows Program Scientific Council, Avademic de Ciencias de America Latina
Eisenberg, David	HARC Center Scientific Advisory Board Visiting Committee, Caltech Beckman Institute Chair, Scientific Advisory Board (ADRx)
Ernst, Jason	Temporary Member, GCAT NIH Study Section Editorial Board, Genome Research Co-organizer, ISMB-RegSys Community of Special Interest Group Meeting Member, Program Committee ICML/IJCAI Workshop in Computational Biology Member, Program Committee RECOMB Genetics Member, Program Committee ISMB Member, Program Commitee RECOMB/ISCB Regulatory and Systems Genomics Conference with DREAM Challenges Member, Program Committee NIPS Workshop in Computational Biology
Faull, Kym	Member, Advisory Board of the International Journal of Medical Biochemistry Member, Editorial Board of the Siriraj Medical Journal
Fregoso, Oliver	Co-Organizer, Palm Springs Meeting on HIV/AIDS
Gelbart, William	Chair, Chemistry Graduate Studies Committee
Gera, Joseph	Member, Bench Testing Therapeutic/Indication Pairing Strategies (UG3/UH3), NCATS, NIH Study Section
Goldstein, Andrew	Member, 2018 Prostate Cancer Foundation Challenge Award
Gonen, Tamir	Member, BBM NIH Study Section
Guo, Ming	Hong Kong Research Grant Council (RGC), Monitoring and Assessment Panel Committee Member Assessor Panel Member, Biology & Medical Subgroup Scientific Selection Committee Member, McKnight Neuroscience Foundation Scientific Advisory Committee Member, A.P. Gianni Medical Foundation Chan-Zuckerberg Initative Think Tank, Workshop on Neurodegeneration
Gwack, Yousang	Ad HOC Member, CMIB and Special Emphasis Panel, NIH Study Section
Hallem, Elissa	Ad HOC Panelist, NIH Chemosensory Systems Study Section

Hartenstein, Volker	Member, NIH NIMH Brain Initiative Study Panel Section Editor, Cell and Tissue Research Section Editor, Developmental Neurobiology Section Editor, Arthropod Structure and Development
Hevener, Andrea	American Diabetes Association Scientific Sessions Organizing Committee NIH Special Emphasis Panels
Hill, Kent	Scientific Advisory Council of the Arnold and Mabel Beckman Foundation
Hirsch, Ann	Member, ASPB Fellows Award Nominating Committee Reviewer, European Research Commission Associate Editor, Plant Signaling & Behavior Communicating Editor, Molecular Genetics and Genomics
Hoffmann, Alexander	Editorial Board, Cell Research, Molecular Systems Biology, MBC Systems Biology
Houk, Kendall	Editorial Advisory Board, Journal of Organich Chemistry, Organic Letters, Accounts of Chemical Research Journal of Chemical Theory and Computation
Iruela-Arispe, Luisa	Associate Editor, Atherosclerosis, Thrombosis and Vascular Biology Journal Editorial Board Member, Angiogenesis Journal Editorial Board Member, Cancer Biology and Therapy Journal Editorial Board Member, Cell Biology Journal Editorial Board Member, Atherosclerosis, Thrombosis and Vascular Biology Editorial Board Member, Cardiovascular Pathology Editorial Board Member, Cancer Research Editorial Board Member, Journal of Experimental Medicine Reviewer, Italian Association for Cancer Research (AIRC) Member, NIH/NCI - Board of Scientific Counselors for Basic Sciences Member, NHLBI Advisory Council Board
Jacobsen, Steven	Editorial Board Member, Current Biology Editorial Board Member, Epigenomics Editorial Board Member, Genetics and Epigenetics Editorial Board Member, Epigenetics and Chromatin Editorial Board Member, Epigenomes Advisory Board Member, EPIC Editorial Board Member, Non-Genetic Inheritance National Academy of Sciences Section Liason
Johnson, Reid	NIH Special Emphasis Review Panel
Johnson, Tracy	National Cancer Institute, Board of Scientific Counselors for Basic Research
Kaback, H. Ronald	NHLBI Board of Scientific Site Visit Review
Kaufman, Daniel	Ad HOC Reviewer, Juvenile Diabetes Research Foundation Ad HOC Reviewer, Geneva University Hospitals & Faculty of Medicine Research Foundation Ad HOC Reviewer, NIH RFA-DK-003 Ad HOC Reviewer, Cystic Fibrosis Foundation Editorial Board, J. Clinical & Cellular Immunology Scientific Advisory Board, Diamyd Medical
Kelesidis, Theodoros	Ad HOC Reviewer, NIH NeuroAIDS and other End-organ Diseases Study Section Ad HOC Reviewer, NIH AIDS Clinical Studies and Epidemiology Study Section Ad HOC Reviewer, NIH AIDS Special Emphasis Study Section
Koehler, Carla	Member, NOMD NIH Study Section Member, AHA Grant Reviewer Panel Scientific and Advisory Board of United Mitochondrial Disease Foundation Scientific Advisory Board of Oxalosis and Hyperoxaluria Foundation
Kohn, Donald	Member, External Advisory Board, SCID-NET Member, Immuno-and Gene Therapy Committee Member, 2018 Annual Meeting Organizing Committee Member, Review Panel for the Doris Duke Charitable Foundation's Clinical Scientist Development Award Member, Clinical Advisory Panel

Kurdistani, Siavash	Ad HOC Member, Special Emphasis Panel, NIH Ad HOC Member, Fellowship: Genes, Genomes, and Genetics (ZRG1 F08) Study Section, NIH Ad HOC Member, Cancer Molcular Pathobiology (CAMP) Study Section Ad HOC Member, Grant Review Panel, Cancer Research
Lazazzera, Beth	Member, NIH TWD-B Study Section; Member, NSF Gene Expression Panel
Lee, Justine	Associate Editor, Annals of Plastic Surgery Section Editor, Cleft Palate Craniofacial Journal (Plastic and Reconstructive Surgery Section) Section Editor, Cleft Palate Craniofacial Journal (Craniofacial Surgery Section) Annual Meeting Program and Instructional Course Committee ASPS/PSF Researcher Education Committee ASPS/PSF Research Development Committee ASPS/PSF Women Plastic Surgeons Steering Committee ASPS/PSF Curriculum Committee Member, Plastic Surgery Research Council PSRC Mentorship Committee Member
Li, Melody	Speaker, Women in STEM Globally Panel Discussion, American Association of University Women
Lipshutz, Gerald	GDD NIH Study Section Reviewer
Loo, Joseph	Editor-in-Chief, Journal of the American Society for Mass Spectrometry Editorial Board, Mass Spectrometry Reviews Editorial Board, Clinical Proteomics Editorial Board, International Journal of Mass Spectrometry Member, US HUPO Board of Directors Member, Board of Directors, Consortium for Top-Down Proteomics Member, Founding Executive Board, Los Angeles Metropolitan Mass Spectrometry Discussion Group Co-Organizer, 14th Uppsala Conference on Electron Capture and Transfer Dissociation
Lusis, Jake	NIH Study Sections Ad HOC Reviewer, American Heart Association Grants Committee on Research, American Heart Association External Advisory Committee, NIH SABRe Cardiovascular Disease Initiative Burroughs-Wellcome Training Program in Metabolic Diseases Advisory Board Member, Board of Scientific Counselors (NIH) Board of Directors, Kern Lipid Conference Review Editor, Frontiers in Genetics of Complex Traits Wellcome Trust Centre for Human Genetics, International Scientific Advisory Board Scientific Advisory Board Meeting Steering Committee, Pharmacogenetics Research Network Editorial Board, Arterisclerosis, Thrombosis and Vascular Biology Associate Editor, Journal of Lipid Research Editorial Board, Current Cardiology Reviews Editorial Board, Open Access Bioinformatics Review Editor, Frontiers in Genetics of Complex Traits Associate Editor, Journal of Sex Differences Editorial Board, Mammalian Genome; Editorial Board, Diabesity Associate Editor, Systems Biology and Medicine
McEvoy, Megan	Member, TWD-D NIH Study Section
Morrison, Sherie	Member, CII NIH Study Section
Nakano, Austin	CDD Study Section; PPG Study Section
Novitch, Bennett	Ad HOC Member, NIH Neurogenesis and Cell Fate Study Section Ad HOC Member, NIH Molecular, Cellular, and Developmental Neuroscience Integrated Review Group Ad HOC Member, Missouri Spinal Cord Injury/Disease Research Program
Payne, Gregory	Research Grants Council Areas of Excellence Monitoring and Assessment Panel
Plath, Kathrin	Board of Reviewing Editors, Science Chair, Publications Committee, ISSCR Member, International Committee, ISSCR

Pyle, April	Ad HOC, MDA Study Section Ad HOC, SMEP NIH Study Section
Quinlan, Margot	Member, NCSD NIH Study Section
Reddy, Srinvasa	NIH Special Emphasis Panel, Vascular Hematology
Reue, Karen	NHLBI Institutional Training Mechanism Review Committee NHLBI R03 Grant Study Section
Schweizer, Felix	Life-Trustee, The Grass Foundation
Smale, Steven	Member, NIH CMIA Study Section Member, Blavatnik Awards for Young Scientists National Jury
Soragni, Alice	BiOverlay Associate Editor, BiorXiv Affiliate Member NPIS Advisory Board
Spencer, Melissa	Chair, Scientific Advisory Board, Coalition to Cure Calpain 3 Ad hoc, Skeletal Muscle, Exercise Physiology Study Section Member, Scientific Advisory Committee Muscular Dystrophy Association Member, Scientific Advisory Board, Parent Project Muscular Dystrophy Reviewer, Jesse Journey Foundation; Organizer, FASEB Summer Conference on Calpains in Health and Disease
Sun, Ren	Board of Scientific Counselors, National Cancer Institute
Tamanoi, Fuyuhiko	Series Editor, The Enzymes, Academic Press/Elsevier
Tang, Yi	DOE BER Review Panel, Editorial Board of Metabolic Engineering
Tarling, Elizabeth	Member, VCMB and R03 SEP NIH/NHLBI Study Sections Member, AHA Fellowships Lipids & Thrombosis Peer Review Committee, Deuel Conference Board Member, ATVB Women's Leadership Committee
Teitell, Michael	NIH, Cancer Center Support Grant Review Team, NCI Office of Cancer Centers International Scientific Council, Israel Cancer Research Foundation Scientific Advisory Board, The Methodist Research Institute Chair, Mountain Pacific Sports Federation Administrative Committee Chair, Pac-12 Conference Diversity Leadership Committee Chair, Pac-12 Conference Woman of the Year Nominating Committee Chair, Pac-12 Conference Nominating Committee Chair, Pac-12 Conference Legislative Committee
Tetradis, Sotirios	Ad HOC Member, ODCS Study Section, NIH
Tontonoz, Peter	Editor-In-Chief, Molecular and Cellular Biology
Torres, Jorge	Ad HOC, NIH-NIGMS Cell Biology and Regulatory Systems Study Section
Wang, Yibin	Editorial Board Member, JBC, Circulation Research, Journal of Molecular and Cellular Cardiology Member, Scientific Advisory Board of Keystone Symposium Member, Scientific Advisory Board of Academica Sinica
Weiss, Shimon	Scientific Advisory Board, Max Planck Institute for Medical Research, Heidelberg, Germany
Whitelegge, Julain	Member, EBIT NIH Study Section
Williams, David	Beckman-Argyros Award Executive Committee Grant Reviewer, Fight for Sight, UK Foundation for Fighting Blindness Study Section Guest Editor, Proceedings of the National Academy of Sciences
Witte, Owen	2018 Louis-Jeantet Foundation Review Committee President's Cancer Panel Children's Research Institute, UT Southwestern Medical Center, External Advisory Board Anderson Moon Shots Review Committee AACR Nominating Committee National Academy of Sciences Temp. Nominating Group, Class IV Cancer Cell Editorial Board Prostate Editorial Board Proceedings of the National Academy of Sciences USA Editorial Board
Wong, David	Chartered Member, Cancer Biomarker Study Section, NIH Center of Scientific Review
Xiao, Xinshu (Grace)	NIH NCI 2018/08 Immuno-Oncology Translation Network Study Section, ZCA1 SRB-C (A1) R Ad HOC, NIH CSR Special Emphasis Panel Ad HOC, Israel Science Foundation; Member, NIH Biodata Management and Analysis Study Section

Yang, X. William	Chartered Member, NIH Cellular and Molecular Biology of Neurodegeneration Study Section Scientific Advisory Board Member, Hereditary Disease Foundation Editorial Board Member, Molecular Neurodegeneration Editorial Member, Journal of Huntington's Disease
Yeaman, Michael	NIH Study Section Service: NIH ZRG1 Editorial Board Service: PLoS Pathogens Journal Reviewer Service: Infection and Immunity, Journal of Infectious Diseases, Antimicrobial Agents & Chemotherapy, New England Journal of Medicine, Nature, Journal of Leukocyte Biology, Nature [Immunology], Eukaryotic Cell, Journal of Bacteriology, Nature [Microbiology], PNAS
Zheng, Jie	Scientific Reviewer, Technology/Therapeutic Development Award Application Review Committee Vision Research Program Member, Professional Development and Education Committee, Association for Research in Vision and Ophthalmology Editorial Board, Cell Communication & Signaling
Zhou, Hong	Ad HOC, NSF and NIH Review Committee

PATENTS ISSUED 2017-2018

Member	Patent Name	Patent Number	Inventors
Clubb, Robert	Methods and compositions to increase the rate of litigation reactions catalyzed by a sortaste	15164	R. Clubb, B. Amer
Eisenberg, David	Structure-based Peptide Inhibitors of P53 Aggregation as a New Approach to Cancer Therapeutics	9,873,718	A. Soragni, L. Jiang
Gelbart, William	In Vitro Reconstituted Plant Virus Capsids for Delivering RNA Genes to Mammalian Cells	183635	W. Gelbart, et al.
Kaufman, Daniel	Gaba Antagonists in the Treatment of Disorders Associated with Metabolic Syndrome and Gaba Combinations in Treatment or Prophylaxis of Type I Diabetes	9,820,955	D. Kaufman, J. Tian
Morrison, Sherie	CD138-Targeted interferon demonstrated potent apoptotic and anti-tumor activities.	9,803,021	S. Morrison
Nakano, Austin	Metabolic interventions for prevention of congenital heart disease		A. Nakano, H. Nakano
Pyle, April	Methods for generating and enriching skeletal muscle progenitor cells	62/443, 499	Hicks, A. Pyle
Soragni, Alice	Structure-based Peptide Inhibitors of P53 Aggregation as a New Approach to Cancer Therapeutics	9,873, 718	D. Eisenberg, A. Soragni, L. Jiang
Spencer, Melissa	CRISPR/CAS9 Mediated Genome; Drugs That Increase Muscle Mass; Nanoparticle Delivery CRISPR; Polyrtaxane Nanoparticles; Stem Cell Delivery		Spencer, Melissa
Tang, Yi	Weed Control	62/474,528	S. Jacobsen, Y. Tang, Y. Yan, Y. Liu
Teitell, Michael	Use of Live Cell Interferometry to Determine Changes in Mass of Mammalian Cells	9,810,683	J. Gimzewski, J. Reed, M. Teitell
Weiss, Shimon	Electronic displays using optically pumped luminescent semiconductor nanocrystals; Semiconductor nanocrystal probes for biological applications and process for making and using such probes	9,063,363; 9,182,621; 9,671,536; 9,530,928	S. Weiss, Schlamp, M.C., Alivisatos, A.P.; S. Weiss, M. Bruchez, Jr., P. Alivisatos
Yang, X. William	A Cell-Based Seeding Assay for Huntington Aggregation	62/571,433	X. W. Yang
Yeaman, Michael	Peptides and methods for inducing cell death	9,562,083	M. Yeaman, N.Y. Yount, E.P. Brass
	Anti-infective hydroxy-phenyl benzoates and methods of use	9,585,897	M. Yeaman, A.S. Bayer

Zack, Jerome	Engineering anti-viral T cell immunity through stem cells and chimeric antigen receptors	9951118	S. Kitchen, J. Zack, O.O. Yang, I. Chen, M. Kamata

VISITING FACULTY & SCHOLARS

Host	Visitor	Home Institution	Dates at UCLA
Bitan, Gal	Huda Alalami	Cornell University	6/19/17 to 9/8/2017
	Ziziheng Li	University of Tokyo	12/1/17 to present
Black, Douglas	Hidehito Kuroyanagi, PhD	Tokyo Medical and Dental University	9/17 to 6/18
	Manuel Ares, Ph.D.	University of California, Santa Cruz	1/18 to 2/18
	Melissa Jurica, Ph.D.	University of California, Santa Cruz	2/18 to 3/18
Chen, Irvin	Lan Wang, Ph.D.	Peking Union Medical College	7/1/17 to present
Clarke, Catherine	Lucia Fernandez del Rio, Ph.D.	University of Cordoba	10/1/2017 to 6/30/2018
De Robertis, Edward	Lauren Albrecht, Ph.D.	Northwestern University	7/15 to present
	Gabriele Colozza, Ph.D.	University of Siena	6/2012 to present
	Yi Ding, Ph.D.	Tsingua University	1/2014 to present
	Yuki Moriyama, Ph.D.	Shizuoka University	6/2013 to 8/2018
	Nydia Tejeda, Ph.D.	National Autonomous University of Mexico	9/1/2016 to present
Faull, Kym	Haiqiang Wu, Ph.D.	Shenzhen University	12/17 to 8/18
Gunsalus, Robert	Anzou Ma, Ph.D.	Chinese Academy of Sciences	10/1/16 to 10/17
	Usman Ahmad, M.S.	GC University (Pakistan)	5/1/17 to 2/1/18
Houk, Kendall	Eric Block, Ph.D.	Albany University	1/1/18 to 6/30/18
	Xiao-Song Xue, Ph.D.	Nankai University	10/1/17 to 6/30/18
	Yilei Zhao, Ph.D.	Shanghai Jiao-Tong University	7/1/18 to 6/30/19
Jacobsen, Steven	Maria Nohales, Ph.D.	University of Southern California	7/1/17 to 4/30/18
Johnson, Reid	Kiyoto Kamagata, Ph.D.	Tohoku University	8/1/17 to 3/31/18
Johnson, Tracy	Manuel Ares, Ph.D.	University of California, Santa Cruz	1/2018 to 3/2018
	Marat Pavliukov, Ph.D.	University of Alabama at Birmingham	3/2018 to 5/ 2018
Kelesidis, Theodoros	Anthanasios Kossyvakis, Ph.D.	Institut Pasteur International Network - Hellenic Pasteur Institute	07/01/17 to 06/30/18
Lin, Chentao	Xu Wang, Ph.D.	Fujain Agriculture University	12/1/17 to 1/31/18
Loo, Joseph	Xinhua Guo, Ph.D.	Jilin University	3/2018 to present
Nakano, Austin	Ayako Shigenta, MD, Ph.D.	Chiba University	1/1/2017 to 12/31/2017
Pellegrini, Matteo	Davide Varnevali, Ph.D.	University of Parma	
Reddy, Srinvasa	Xinying Yang, Ph.D.	Chinese Academy of Sciences	06/2016 to 09/2017
Reue, Karen	Yunlan Li, Ph.D.	Shanxi Medical University	9/1/2017 to 8/31/2018
Rodriguez, Jose	Gustavo Helguera, Ph.D.	CONICET	11/30/2017 to 02/01/2018

Yang, X. William	Christian Neri, Ph.D.	Institute of Biology Paris-Seine	07/2017 to 08/2017
Yeaman, Michael	Liana Chan, Ph.D.	University of California, Berkeley	2014 to present
	Wpulie Narawatne, M.D.	Pediatrics, Harbor-UCLA	2016 to present
Zhou, Hong	Kaituo Wang, Ph.D.	University of Copenhagen	8/1/2016 to 1/31/2018
	Xue Yang, Ph.D.	Nankai University	12/15/2016 to 12/14/2017

PARTNERS
IN
BOYER HALL

Institute for Quantitative & Computational Biosciences (QCBio)

Alexander Hoffmann, Director

QCBio is housed on the 5th floor of Boyer Hall and encompasses a range of quantitative and computational biosciences research, research training and educational program. QCBio Laboratories develop cutting edge quantitative and computational tools, ranging from statistical analysis and modeling approaches to physics-based algorithms and mechanistic modeling. QCBio functions as the sponsor to the QCBio Collaboratory and the Interdepartmental Graduate Program in Bioinformatics to provide research training, and provides coordination among other quantitative and computational biosciences graduate programs. QCBio Faculty also direct and support the Interdepartmental Undergraduate Programs in Computational & Systems Biology (the CaSB major) and in Bioinformatics (a minor), as well as the freshman mathematics for Life Sciences pre-majors. QCBio organizes the Bruins-in-Genomics (B.I.G.) Summer Undergraduate Research Program. QCBio sponsors the Bioinformatics Seminar series, a weekly Research Lunch, Scientific Workshops and Conferences, Symposia and an Annual Retreat. These activities are supported by Boyer Hall staff.

More information on the QCBio can be found at: http://qcb.ucla.edu.

The QCBio Collaboratory

Matteo Pellegrini, Collaboratory Director

The mission of the QCBio Collaboratory is to provide computational research support to projects initiated by experimentalists. This mission is pursued at three levels: (i) collaborative support or consulting work; (ii) workshops to convey commonly used bioinformatics skills for the analysis of Next Gen Sequencing data; (iii) maintaining software platforms (e.g. Galaxy) that enable multiple types of analyses of next generation sequencing data. These activities are supported by the QCBio Collaboratory postdoctoral fellows, who are selected from a broad applicant pool for renewable annual appointments. QCB Collaboratory workshops also form the basis for graduate courses available to MBI-IDP and other graduate students.

More information on The Collaboratory can be found at: http://qcb.ucla.edu/collaboratory.

UCLA-DOE Institute

Sabeeha Merchant, Director

The UCLA-DOE Institute is a team of research laboratories working on fundamental research and technology developments in broad DOE mission areas ranging from microbes, to biofuels and green chemistry, to the design of new biomaterials. Boyer Hall houses four of the six UCLA-DOE Core Technology Centers:

• ***Bioinformatics and Computational Core Technology Center*** - Todd Yeates, Director/Duilio Cascio, Manager
Provides computer hardware and software installation and maintenance for a wide range of office and scientific applications; maintains WWW service for software and database dissemination.

• ***Macromolecular Crystallization Core Technology Center*** - James Bowie, Director/Michael Collazo, Manager
The Macromolecular Crystallization Core provides state-of-the-art, high-throughput, and crystallization services to all institutions.

• ***Protein Expression Technology Center (PETC)*** - James Bowie, Director/Mark Arbing, Manager
The PETC provides support in all aspects of protein expression from cloning through expression optimization and protein purification.

• ***X-ray Crystallography Core Technology Center*** - Todd Yeates, Director/ Duilio Cascio, Manager
The X-ray Crystallography Core provides state-of-the-art resources, enabling the detailed 3-D analysis of biological macromolecules that play essential roles in human health.

More information on the DOE and its Cores can be found at: www.doe-mbi.ucla.edu

Fermentation Core Facility

James Bowie, Director / Mark Arbing, Manager

The Fermentation Core Facility is housed on the 1st floor of Boyer Hall. It consists of three Bio Engineering fermenters which allow the large-scale growth of bacteria or yeast using controlled regulation of cell growth, and also has the ability to introduce additional nutrients and/or supplemental oxygen that allow microbial growth to high cell densities.

More information on the Fermentation Core can be found at: www.mbi.ucla.edu/fermentation-core-facility

GRADUATE PROGRAM

MOLECULAR BIOLOGY INTERDEPARTMENTAL PH.D PROGRAM (MBIDP)

Ashley TerHorst and Stephanie Cuellar (SAO)

Since the program's initiation in 1966-67, a total of 457 individuals have earned their Ph.D. degree in Molecular Biology. During the 2017-18 academic year, there were 130 students in the MBIDP, including 36 admissions, and 11 completing their degree requirements.

The 2017-2018 faculty mentors in the Molecular Biology IDP have primary appointments in the departments of: Anesthesiology; Biological Chemistry; Cardiology; Chemical & Biomolecular Engineering; Chemistry & Biochemistry; Dentistry-Oral Biology; Digestive Diseases; Human Genetics; Microbiology, Immunology & Molecular Genetics; Molecular & Medical Pharmacology; Molecular, Cell & Developmental Biology; Molecular, Cell & Integrative Physiology; Neurobiology; Neurology; Pathology & Laboratory Medicine; Pediatric Genetics; Pediatrics; Psychiatry & Behavioral Science; Radiation Oncology; Surgery and Urology.

Home Areas promote in-depth educational programs while maintaining flexibility for students to explore beyond a single home area and faculty to contribute to multiple home areas according to their research interests. The Molecular Biology IDP consists of four home areas: Cell & Developmental Biology (CDB); Biochemistry, Biophysics, & Structure Biology (BBSB); Gene Regulation, Epigenomics and Transcriptomics (GREAT); and Immunity, Microbes, & Molecular Pathogenesis (IMMP). Each home area has a director that acts as the Graduate Adviser for that area's students.

MBIDP STUDENTS 2017-18

Student Name	Mentor	2017-2018 Support
ADELAJA, ADEWUNMI (MSTP)	Hoffmann, Alexander	Vascular Biology Training Grant/Graduate Student Researcher
AFASIZHEVA, ANNA (MSTP)	Plath, Kathrin	Graduate Student Researcher
ALVAREZ, SANDY	Butler, Samantha	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
ARAGON, RAQUEL	Iruela-Arispe, Luisa	Teaching Assistantship/HHMI Gilliam Graduate Fellowship
AROS, CODY (MSTP)	Gomperts, Brigitte	UCLA Eli & Edythe Broad Stem Cell Research Center Training Grant Recipient/Graduate Student Researcher
BACK, SUNG MIN (PETER)	Bradley, Peter	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
BOWLER, JEANNETTE	Eisenberg, David	Graduate Student Researcher
BROWN, TAYLOR	Hallem, Elissa	Cota Robles/HHMI Gilliam Graduate Fellowship
CAMPOS, OSCAR	Kurdistani Siavash	Graduate Student Researcher
CASTELLON, JOSE	Backus, Keriann	Teaching Assistantship/National Science Foundation Graduate Research Fellowship Program
CHAI, MIN	Huang, Jing	Graduate Student Researcher
CHANG, PATRICK	Crooks, Gay	Whitcome/Graduate Student Researcher
CHAU, ANTHONY	Plath, Kathrin	Whitcome/Graduate Student Researcher
CHEN, YI-PEI	Johnson, Patricia	Graduate Student Researcher
CHENG, QUEN (STAR)	Hoffmann, Alexander	Dept of Medicine/Graduate Student Researcher
CHI, FANGTAO	Banerjee, Utpal	Teaching Assistantship/Broad Stem Cell Research Center Training Grant
CHIEN, PEGGIE	Pyle, April	GPB/Teaching Assistantship/Graduate Student Researcher
CHITIASHVILI, TSOTNE	Plath, Kathrin/Clark, Amander	NRST/Boehringer Ingelheim PhD Fellowship/Graduate Student Researcher
CHOI, CHARLES PAUL	Bradley, Peter	Graduate Student Researcher
CORVALAN, ADRIANA	Coller, Hilary	Graduate Student Researcher

CROWELL, PRESTON	Goldstein, Andrew	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
DALY, ALLISON	Smale, Stephen	GPB/Teaching Assistantship/Graduate Student Researcher
DAMODAREN, NIVEDITA	Plath, Kathrin/Black, Douglas	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
DEMARCO, STEPHANIE	Hill, Kent	Dissertation Year Fellowship/Graduate Student Researcher
DENG, WILLIAM (WEIXIAN)	Plath, Kathrin/Wohlschlegel, James	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
DIALA FITZGERALD (MSTP)	Johnson, Patricia	Graduate Student Researcher
DIMAPASOC, MELANIE	Zack, Jerome	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
DO, TRAN (MSTP)	Modlin, Robert	Dermatology Scientist Training Grant/Graduate Student Researcher
EDWARDS, SAMANTHA	Johnson, Tracy	Whitcome/Graduate Student Researcher
ELAHI, LUBAYNA	Kornblum, Harley	GPB/Teaching Assistantship/Graduate Student Researcher
EMAMI, MICHAEL	Spencer, Melissa	Teaching Assistantship/National Science Foundation Graduate Research Fellowship Program/Cellular and Molecular Biology (CMB) Training Grant
EVANS, DECLAN	Houk, Ken	Teaching Assistantship/Chemistry-Biology Interface (CBI) Training Grant/Graduate Student Researcher
FAN, XIAORUI	Wohlschlegel, James	Whitcome/Graduate Student Researcher
FENG, AN-CHIEH (ANGELA)	Smale, Stephen	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
FERRER, DAVID	Bradley, Peter	Cota Robles/Graduate Student Researcher
FLORES, AIMEE ALYSSA	Lowry, William	Graduate Student Researcher
GANG, SPENCER	Hallem, Elissa	Graduate Student Researcher
GIBBS, DEVIN	Pyle, April/Crosbie-Watson, Rachelle	GPB/Teaching Assistantship/Graduate Student Researcher
GLADYS, DEVIN	(1st year rotations)	NRST/Teaching Assistantship/Gates Millennium Scholar
GOLDEN, LISA	Voskuhl, Rhonda	Whitcome/Graduate Student Researcher
GOMEZ, ADAM	Jones, Leanne	National Science Foundation Graduate Research Fellowship Program/Graduate Student Researcher
GRAY, DAVID	Kohn, Donald	Whitcome/Graduate Student Researcher
HANCOCK, GRACE	Clark, Amander	UCLA Eli & Edythe Broad Stem Cell Research Center Training Grant Recipient/Graduate Student Researcher
HERNANDEZ, GLORIA	Iruela-Arispe, Luisa	Teaching Assistantship/Vascular Biology Training Grant/Graduate Student Researcher
HILDRETH, ANDREW	O' Sullivan, Tim	GPB/Teaching Assistantship/Graduate Student Researcher
HO, CHI-MIN	Egea, Pascal/Zhou, Hong	Teaching Assistantship/Microbial Pathogenesis Training Grant/Graduate Student Researcher
HODGE, RACHEL	Jones, Leanne	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
HSU, EMILY	Berk, Arnold	Virology and Gene Therapy Training Grant/Graduate Student Researcher
HU, XUCHEN (MSTP)	Young, Stephen	Vascular Biology Training Grant/Graduate Student Researcher
ICHINO, LUCIA	Jacobsen, Steven	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
JONES, ERIC	Kosuri, Sriram	Graduate Student Researcher

KIM, ELLIOT	Robert Modlin	Graduate Student Researcher
KO, ARTHUR	Pajukanta, Paivi	Graduate Student Researcher
KORSAKOVA, ELENA	Lowry, William	Teaching Assistantship/Broad Stem Cell Research Center Training Grant
KRONENBERG, MICHAEL	Carey, Michael	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
KRYZA, JORDAN	Jones, Leanne	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
LANIADO, JOSHUA	Yeates, Todd	Graduate Student Researcher
LEE, DEREK	(1st year rotations)	GPB/Teaching Assistantship/Graduate Student Researcher
LEE, HA NEUL (SKOTT)	Coller, Hilary	Dissertation Year Fellowship/Graduate Student Researcher
LEE, JOSH ZIXI	Wang, Yibin	Graduate Student Researcher
LEUNG, CALVIN	Johnson, Tracy	Dissertation Year Fellowship/Graduate Student Researcher
LEWIS, SOPHIA	Jones, Leanne	Graduate Student Researcher
LI, YAN	Guo, Feng	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
LI, YANRUIDE (CHARLIE)	Yang, Lili	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
LIM, HAN YOUNG	Black, Douglas	Graduate Student Researcher
LIN, TASHA (STAR)	Chen, Yvonne	STAR, Division of Hematology-Oncology, T32 Hematology Training Grant, T32 Immunology Training Grant
LIN, YING	Zipursky, Larry	Whitcome/Graduate Student Researcher
LIU, HUACHUN	Lin, Chentao	Whitcome/Graduate Student Researcher
LIU, WANLU	Jacobsen, Steve	Graduate Student Researcher
LO, HUNG-HAO	Smale, Stephen	Graduate Student Researcher
LOPEZ, ANDREW	Fregoso, Oliver	Microbial Pathogenesis Training Grant/Graduate Student Researcher
LOWE, MATTHEW	Clark, Amander	Teaching Assistantship/Cellular and Molecular Biology (CMB) Training Grant/Graduate Student Researcher
MA, FEIYANG	Pellegrini, Matteo	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
MASIUK, KATELYN (MSTP)	Kohn, Donald	Graduate Student Researcher
MILLER, JARRETT	Plath, Kathrin	Graduate Student Researcher
MILLER, JUSTIN	Yeates, Todd	NIH UCLA Biotechnology Training Grant/Graduate Student Researcher
MILLER, MATTHEW	Butte, Manish	GPB/Teaching Assistantship/Graduate Student Researcher
MIRANDA, MATILDE	Lowry, William	National Science Foundation Graduate Research Fellowship Program/Graduate Student Researcher
MOLGORA, BRENDA MARIA	Johnson, Patricia	Cota Robles/Graduate Student Researcher
MURRAY, KEVIN (MSTP)	Eisenberg, David	Chemistry-Biology Interface (CBI) Training Grant/Graduate Student Researcher
NAVARRO, HECTOR	Goldstein, Andrew	GPB/Teaching Assistantship/Graduate Student Researcher
NESTERENKO, PAVLO	Witte, Owen	GPB/Teaching Assistantship/Graduate Student Researcher
NEVES, LAUREN TAYLOR	Johnson, Tracy	Graduate Student Researcher
NITZAHN, MATTHEW	Lipshutz, Gerald	Graduate Student Researcher

OCHOA, JESSICA	Yeates, Todd	Teaching Assistantship/HHMI Gilliam Graduate Fellowship
OKONKWO, SHAWNTEL	Johnson, Tracy	National Science Foundation Graduate Research Fellowship Program/Graduate Student Researcher
ONG, JESSICA (MSTP)	Reue, Karen	Graduate Student Researcher
PATEL, AANAND (MSTP)	Quinlan, Margot	Graduate Student Researcher
PERRONE, IAN	Fregoso, Oliver	Graduate Student Researcher
POHL, KATHERINE	Yang, Xianjie	GPB/Teaching Assistantship/Graduate Student Researcher
PRONOVOST, GEOFFREY	Hsiao, Elaine	Molecular Pathogenesis Training Grant/Graduate Student Researcher
QIAN, KEVIN (MSTP)	Tontonoz, Peter	Geffen Scholarship
READ, GRAHAM	(1st year rotations)	GPB/Teaching Assistantship/Graduate Student Researcher
RIGGAN, LUKE	O' Sullivan, Tim	GPB/Teaching Assistantship/Graduate Student Researcher
SAHAKYAN, ANNA	Plath, Kathrin	Graduate Student Researcher
SALISBURY, DAVID ALEX	Sallam, Tamer/Tontonoz, Peter	Teaching Assistantship/Vascular Biology Training Grant/Graduate Student Researcher
SANCHEZ, LUIS	Quinlan, Margot	Teaching Assistant/Graduate Student Researcher
SANDHU, JASPREET SINGH (MSTP)	Tontonoz, Peter	Graduate Student Researcher
SANDOVAL, CARINA	Fregoso, Oliver	GPB/Teaching Assistantship/Graduate Student Researcher
SERCEL, ALEXANDER	Teitell, Michael	UCLA Tumor Immunology Training Grant/Graduate Student Researcher
SHIA, DAVID (MSTP)	Gomperts, Brigitte	Graduate Student Researcher
SHIMADA, ERIKO CHRISTINE	Teitell, Michael	Michael Teitell Laboratory
SHU, CYNTHIA	Crosbie-Watson, Rachelle	Muscle Cell Biology, Pathogenesis, and Therapeutics Grant/Eureka Scholarship
SUN, VICTORIA (MSTP)	Crooks, Gay	Graduate Student Researcher
TAN, YING XUAN SHAWN	Plath, Kathrin	Graduate Student Researcher
TAO, YANG	Martin, Kelsey	Dissertation Year Fellowship/Graduate student Researcher
TESSEMA, KALEAB (MSTP)	Kornblum, Harley	Graduate Student Researcher
THIND, AMARA	Bradley, Peter	GPB/Teaching Assistantship/Graduate Student Researcher
THURLOW, LAUREN	Johnson, Tracy	Teaching Assistantship/National Science Foundation Graduate Research Fellowship Program/ Cellular and Molecular Biology (CMB) Training Grant
TISNADO, JERRELL RAY	Gelbart, William	National Science Foundation Graduate Research Fellowship/Graduate Student Researcher
URTECHO, GUILLAUME	Kosuri, Sriram	Cota Robles/Graduate Student Researcher
VALLIERE, MEAGHAN	Bowie, James	Teaching Assistantship/Graduate Student Researcher
VAN LOON, AARON	Sagasti, Alvaro	Graduate Student Researcher
VAN, CHRISTINA	Waschek, James	Graduate Student Researcher
VAVILINA, ANASTASIA	Mikkola, Hanna	Teaching Assistantship/Vascular Biology Training Grant/Graduate Student Researcher
VUONG, CELINE KIM	Black, Douglas	Douglas Black Laboratory
WANG, LULAN	Cheng, Genhong	Graduate Student Researcher
WATERS, LYNNEA RAE	Teitell, Michael	Graduate Student Researcher
WEISS, DAVID (MSTP)	Modlin, Robert	Graduate Student Researcher
YANG, EMILY	Li, Melody	GPB/Teaching Assistantship/Graduate Student Researcher

YOUNG, BRIAN DANIEL (MSTP)	Wohlschlegel, James	James Wohlschlegel Laboratory
YOUNG, COURTNEY	Spencer, Melissa	Melissa Spencer Laboratory
YU, JIAJI	Yang, Lili	NRST/Teaching Assistantship/Broad Stem Cell Research Center Training Grant/Graduate Student Researcher
ZEMKE, NATHAN ROBERT	Berk, Arnold	Graduate Student Researcher
ZENG, SAMUEL (MSTP)	Yang, Lili	Graduate Student Researcher
ZHAN, LINGYU	Sul, Jae Hoon	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
ZHANG, JIAYAN	Zhou, Hong	NRST/GPB/Teaching Assistantship/Graduate Student Researcher
ZHANG, TIANHAO	Sun, Ren	Graduate Student Researcher
ZHANG, YURUN	Chute, John	Graduate Student Researcher

STUDENTS WHO ADVANCED-TO-CANDIDACY 2017-2018

Student Name	Mentor
Adelaja, Adewunmi (MSTP)	Hoffmann, Alexander
Aros, Cody	Gomperts, Brigitte
Brown, Taylor	Hallem, Elissa
Chang, Patrick	Crooks, Gay
Chau, Anthony	Plath, Kathrin
Cheng, Quen	Hoffmann, Alexander
Diala, Fitz Gerald	Johnson, Patricia
Fan, Xiaorui	Wohlschlegel, James
Hancock, Grace	Clark, Amander
Hsu, Emily	Berk, Arnold
Hu, Xuchen (MSTP)	Young, Stephen
Lim, Han Young	Black, Douglas
Lin, Ying	Zipursky, Larry
Lopez, Andrew	Fregoso, Oliver
Nitzahn, Matthew	Lipshutz, Gerald
Ochoa, Jessica	Yeates, Todd
Ong, Jessica	Reue, Karen
Patel, Aanand (MSTP)	Quinlan, Margot
Sercel, Alexander	Teitell, Michael
Weiss, David	Modlin, Robert
Zhang, Jiayan	Zhou, Hong
Zhang, Tianhao	Sun, Ren

STUDENTS AWARDED PH.Ds 2017-2018

Student Name	Mentor	Dissertation Title
Aschemeyer, Sharraya Lynn	Ganz, Tomas	The mechanism of action and regulation of hepcidin.
Campos, Oscar	Kurdistani, Siavash	The eukaryotic nucleosome regulates copper homeostasis via copper and reduction.
Flores, Aimee	Lowry, Bill	Investing the Role of Metabolism in Tissue Homeostasis and Tumor Initiation by Hair Follicle Stem Cells.

Li, Yanjing	Wu, Lily	Targeting CXCR2+ Neuroendocrine-like Cells for the Treatment of Castration-resistant Prostate Cancer.
Liu, Wanlu	Jacobsen, Steve	Mechanisms of DNA methylation control and epigenome engineering.
Neves, Lauren Taylor	Johnson, Tracy	Histone variant H2A.Z coordinates the processes of transcription and pre-mRNA splicing.
Sahakyan, Anna	Plath, Kathrin	Mechanisms of X-chromosome Regulation During Mammalian Development.
Shimada, Eriko Christine	Teitell, Michael	Many Facets of PNPase - Uncovering the Role of PNPase in the Mitochondria.
Vuong, Celine Kim	Black, Douglas	Regulation of Neuronal Excitability by the RNA-Binding Protein Rbfox1.
Young, Brian	Wohlschlegel, James	Identification of a multisubunit E3 ubiquitin ligase require d for heterotrimeric G-protein beta-subunit ubiquitination and cAMP signaling.
Young, Courtney	Spencer, Melissa	Development of a Therapeutic CRISPR/Cas9 Platform for Duchenne Muscular Dystrophy.

EXTRAMURAL FELLOWSHIPS & AWARDS

Ruth L. Kirschstein National Research Service Awards

- Demarco, Stephanie
- Emami, Michael
- Gang, Spencer
- Molgora, Brenda
- Loon, Aaron Van

National Science Foundation Graduate Research Fellowships

- Aragon, Raquel
- Castellon, Jose
- Emami, Michael
- Gomez, Adam
- Hernandez, Gloria
- Miranda, Matilde
- Okonkwo, Shawntel
- Thurlow, Lauren
- Tisnado, Jerrell

GRADUATE DIVISION AWARDS

Eugene V. Cota-Robles Fellowships

- Ochoa, Jessica
- Urtecho, Guillaume

Graduate Division Dissertation Year Fellowship Awards

- Tao, Yang
- Waters, Lynnea
- Young, Courtney
- Demarco, Stephanie

- Lee, Ha Neul (Skott)
- Leung, Calvin

MBIDP GRADUATE STUDENT SEMINARS

Modeled after the MBI Interdisciplinary Faculty Seminars, these talks are presented by our graduate students in their third and fifth year within the program. Faculty are not present for the talks, which provides our students with an opportunity to present their research in a relaxed, collegial atmosphere over lunch, and allows for constructive discussion and critique. Some students use this forum as practice for their oral qualifying exam and/or dissertation defense. The seminar series has proven to be a great success due to the format and the enthusiasm of our graduate students.

The seminar presentations during the 2017-2018 Academic Year were:

Date	1st Speaker	2nd Speaker
Wednesday, October 4th	**Aimee Flores** *"Investigating the Role of Metabolism in Tissue Homeostasis and Tumor Initiation by Hair Follicle Stem Cells"*	**Adewunmi Adelaja** *"Context-specific Regulation of NFκB Signaling in Primary Macrophages"*
Wednesday, October 18th	**Calvin Leung** *"A histone modification regulates RNA splicing by unexpected mechanisms"*	**David Weiss** *"The Role of Th17 Cells in Host Defense"*
Wednesday, November 1st	**Lulan Wang** *"Studying the evolution of emerging viruses using genome wide analysis"*	**Aanand Patel** *"FHOD family formins nucleate actin for cell motility and contractility"*
Wednesday, November 15th	**Taylor Brown** *"Deciphering the interactions between skin-penetrating parasitic nematodes and bacteria"*	**Wanlu Liu** *"Mechanisms of DNA methylation control and epigenome engineering"*
Wednesday, November 29th	**Jessica Ong** *"Diet1 and intestinal homeostasis"*	
Wednesday, December 13th	**Fitz Gerald Diala** *"Identification and characterization of the protein targets of metronidazole in Trichomonas vaginalis"*	**Tian-Hao Zhang** *"Effects of Mutations on Replicative Fitness and MHC-I Binding Affinity Are Among the Determinants Underlying Cytotoxic-T-Lymphocyte Escape of HIV-1 Gag Epitopes"*
Wednesday, January 10th	**Christina Van** *"Role of PACAP/PAC1 in protecting neurons and modulating inflammation in a model of multiple sclerosis and optic neuritis"*	**Matt Nitzahn** *"Gene and Cell Therapy Approaches for the Urea Cycle Disorder CPS1 Deficiency"*
Wednesday, January 24th	**Ying Lin** *"The development of synaptic specificity in drosophila visual system"*	**Yi-Pei Chen** *"A Trichomonas vaginalis cadherin-like protein mediates adherence to and killing of host cells"*
Wednesday, February 7th	**Stephanie DeMarco** *"Regulation of social motility in the protozoan parasite Trypanosoma brucei"*	**Charles Choi** *"A photocrosslinkable unnatural amino acid system to study the Toxoplasma gondii inner membrane complex"*
Wednesday, February 21st	**Courtney Young** *"Development of a CRISPR/Cas9 gene editing platform for Duchenne muscular dystrophy"*	**Patrick Chang** *"Engineering stem cell-derived T cells for immunotherapy"*
Wednesday, March 7th	**Jessica Ochoa** *"Exploiting Microcompartment Shell Proteins to Explore Mechanisms of Subcellular Organization and to Create Novel Materials"*	**Emily Hsu** *"Transcriptional activation of early viral genes by adenovirus large E1A via interactions with p300"*

Wednesday, March 21st	**Han Young Lim** *"Chromatin Retention of Pre-mRNA as a Mechanism for mRNA Quality Control"*	**Xiaorui Fan** *"Molecular mechanism of iron-sulfur protein maturation mediated by cytosolic Fe/S cluster assembly pathway"*
Wednesday, April 4th	**Eric Jones** *"A Scalable, Multiplexed Assay for Decoding Receptor-Ligand Interactions"*	**Yang Tao** *"How does aging alter hippocampal chromatin accessibility and gene expression pattern"*
Wednesday, April 18th	**Skott Lee** *"Defining the mechanistic basis for the effect of RECK alternative polyadenylation on cell migration and invasion"*	**Cody Aros** *"Wnt/Beta-catenin signaling regulates airway basal stem cell homeostasis"*
Wednesday, May 2nd	**Andrew Lopez** *"How does HIV activate the DNA damage response?"*	**Quen Cheng** *"Conditioning with Type I or II interferon alters human macrophage responses in a gene- and stimulus-specific manner"*
Wednesday, May 16th	**Adriana Corvalan** *"Understanding the role of H4K20me3 and Suv4-20h2 in cellular quiescence"*	**Anthony Chau** *"Investigating the Role of the C Repeat in Xist Function"*
Wednesday, May 30th	**Alex Sercel** *"Using mitochondrial transfer and tissue engineering to model and engineer therapies for mitochondrial disorders of the central nervous system"*	**Grace Hancock** *"Transcription factors for naïve pluripotency in primordial germ cell development"*

CONFERENCE PARTICIPATION

Adelaja, Adewunmi

- MD-PhD National Student Conference; Keystone, CO. July 2017.
- Southern California Biomedical Sciences Graduate Symposium; Los Angeles, CA. October 2017.
- APSA West Regional Meeting; Irvine, CA. December 2017.
- AAP/ASCI/APSA Joint Conference; Chicago, IL. April 2018.
- Systems Biology of Human Disease; Los Angeles, CA. June 2018.
- Immunology LA; Los Angeles, CA. June 2018.

Aros, Cody

- Gordon Research Conference on Wnt Signaling; Stowe, VT. August 6-11, 2017.
- UCLA Eli & Edythe Broad Stem Cell Research Symposium; UCLA. February 2, 2018.

Bowler, Jeannette

- FASEB Science Research Conference; Steamboat Springs, CO. June 11-16, 2017.

Brown, Taylor

- WWAMI meeting, Caltech.

Chai, Min

- Keystone Symposia Mitochondrial Biology & Selective Autophagy; Kyoto, Japan. April 22-26, 2018.

Chang, Patrick

- La Jolla Immunology; San Diego, CA. October 17-19, 2017.
- Broad Stem Cell Center Symposium; UCLA. February 5, 2018.
- David Baltimore Symposium; Caltech, Pasadena, CA. March 23, 2018.
- Engineering Immunity; Lake Arrowhead, CA. May 7-8, 2018.
- I3T Retreat; UCLA, Los Angeles, CA. June 12, 2018.
- UCLA Biomedical/Life Science Innovation Day; UCLA, Los Angeles, CA. June 13, 2018.

Chen, Yi-Pei

- Molecular Parasitology Meeting; Woods Hole, MA. September 2017.
- American Society for Tropical Medicine Hygiene; Baltimore, MD. November 2017.
- Southern California Eukaryotic Pathogen Symposium; Riverside, CA. December 2017.
- Microbial Pathogenesis Training Grant Trainee Seminars; Los Angeles, CA. May 2018.

Cheng, Quen

- Keystone Conference on Myeloid Cells; Breckenridge, CO. April 2018.

Chi, Fangtao

- Cold Springs Harbor Asia - Cancer & Metabolism; Suzhou, China. March 2018.

Crowell, Preston

- Keystone Tumor Metabolism Conference; Snowbird Ski Resort, UT. January 21-25, 2018.

Demarco, Stephanie

- Southern California Eukaryotic Pathogens Symposium; UC Riverside, CA. December 6, 2017.

Deng, William (Weixian)

- American Society of Mass Spectrometry Annual Conference; San Diego, CA; June 2-5, 2018.

Diala, Fitz Gerald (MSTP)

- American Physician Scientists Association West Regional Conference; Irvine, CA. December 2, 2017.
- 2018 Student National Medical Association (SNMA) Annual Medical Education Conference (AMEC); San Francisco, CA. March 29-April 1, 2018.
- 2018 American Society for Microbiology (ASM) Microbe Conference; Atlanta, GA. June 7-10, 2018.

Do, Tran (MSTP)

- American Academy of Dermatologist Annual Meeting; San Diego, CA. February 16-20, 2018.
- International Investigative Dermatology Conference; Orlando, FL. May 16-19, 2018.

Edwards, Samantha

- RNA Society Meeting; Berkeley, CA. May 29-June 3, 2018.

Emami, Michael

- Annual Biomedical Conference for Minority Students (ABRMCS); Phoenix, AZ. November 1-4, 2017.
- American Society of Gene and Cell Therapy; May 16-19, 2018.
- New Directions of Biology and Disease in Skeletal Muscle Conference; New Orleans, LA. June 25, 2018.

Fan, Xiaorui

- American Society for Mass Spectrometry Annual Conference; San Diego, CA.

Feng, An-Chieh (Angela)

- AAI Immunology Advanced Training Course 2018; Boston, MA. July 22-27, 2018.

Gang, Spencer

- FASEB Molecular Pathogenesis: Mechanisms of Infectious Disease; Snowmass, CO. July 9-14, 2017.

Golden, Lisa

- ACTRIMS; San Diego, CA. February 1-3, 2018.

Gray, David
- Annual Meeting of the American Society for Gene and Cell Therapy; Chicago, IL.
- Genome Engineering: The CRISPR-Cas Revolution; Cold Springs Harbor Laboratory, Long Island, NY.

Hancock, Grace
- From Stem Cells to Human Development; Surrey, UK. September 23-26, 2018.

Ho, Chi-Min
- Three Dimensional Electron Microscopy GRC; Les Diablerets, Switzerland; June 11-16, 2017.
- 28th Annual Molecular Parasitology Meeting; Woods Hole, Massachusett. September 10-14, 2017. Biology of Host-Parasite Interactions GRC; Newport, RI. June 10-15, 2018.

Hsu, Emily
- DNA Tumor Virus Meeting; Birmingham, UK. July 17-22, 2017.

Hu, Xuchen (MSTP)
- Deuel Conference on Lipids; March 2018.

Jones, Eric
- GPCR Workshop; Kona, HI. December 5-9, 2017.
- Protein Society Annual Meeting; Boston, MA. July 9-12, 2018

Kronenberg, Michael
- Mechanisms of Eukaryotic Transcription 2017; Cold Spring, NY. August 29-September 2, 2017.

Lee, Ha Neul (Skott)
- MBIDP Retreat; Ventura, CA. April 2018.
- ASCB Conference; Philadelphia, PA. December 2017.

Lee, Josh Zixi
- Cold Spring Harbor Asia: Stem Cell Crossroads; Suzhou, China. May 7-10.

Leung, Calvin
- 2018 RNA Meeting; Berkeley, CA. 2017.
- ASBMB Annual Meeting; Chicago.

Liu, Wanlu
- HHMI Science meeting; Chevy Chase, Maryland. March 2018.

Lo, Hung-Hao
- I3T Retreat; Los Angeles, CA. June 12, 2018.

Lopez, Andrew
- American Society for Virology (ASV); College Park, Maryland. July 14-18, 2018.

Lowe, Matthew
- Stem Cell Symposium; UCLA. February 2, 2018.
- MWRI; Pittsburgh, PA. April 3-4, 2018.

Masiuk, Katelyn (MSTP)
- American Society of Hematology; San Diego, CA. December 2017
- Emerging Cellular Therapies: T Cells and Beyond; Keystone, CO. February 2018.

- American Society of Gene and Cell Therapy; Washington DC. May 2018.

Molgora, Brenda
- Southern California Eukaryotic Pathogen Symposium; Riverside, CA. December 6, 2017
- American Society for Microbiology (ASM) Microbe Conference; Atlanta, GA. June 7-11, 2018.

Murray, Kevin (MSTP)
- RosettaCon; Seattle, WA. July 2017.

Nitzahn, Matthew
- American Society of Gene and Cell Therapy 21st Annual Conference; May 15-19, 2018.

Patel, Aanand (MSTP)
- Gordon Research Seminar & Conference on Motile & Contractile Systems; New London, NH. July 29-August 4, 2017.
- Biophysical Society Annual Meeting; San Francisco, CA. February 17-21, 2018.
- American Society for Cell Biology Annual Meeting; Philadelphia, PA. December 2-6, 2017.

Salisbury, David (Alex)
- Keystone Symposia on Noncoding RNAs: Form, Function, Physiology; Keystone, CO. February 25-March 1, 2018.

Sercel, Alexander
- Cell Symposia Multifaceted Mitochondria; Paradise Point, San Diego, CA. June 4-6, 2018.

Shu, Cynthia
- New Directions in Biology and Disease of Skeletal Muscle Conference; New Orleans, LA. June 25-28, 2018.

Tan, Yin Xuan (Shawn)
- 14th Annual Stem Cell Conference (UCLA)

Thurlow, Lauren
- 2017 SACNAS National Conference; Salt Lake City, UT. October 18-21, 2017.
- UCLA Molecular, Cell and Developmental Biology Research Conference; Lake Arrowhead, CA. December 1-3, 2017.
- 23rd Annual Meeting of the RNA Society; Berkeley, CA. May 29-June 3, 2018.

Urtecho, Guillaume
- Marine Biological Laboratory Advanced Research Course - Microbial Diversity; Woods Hole, MA. July 7-August 23.

Valliere, Meaghan
- BASF Research Forum at the end of August

Van Loon, Aaron
- GRC: Motile and Contractile Systems; Colby-Sawyer College, New London, NH. July 30-August 4, 2017.
- International Zebrafish Conference; University of Wisconsin, Madison, WI. June 20-24, 2018.

Van, Christina
- Moving Targets Symposium; USC, Los Angeles, CA. August 17, 2017.
- 13th International Symposium on PACAP, VIP, and Related Peptides; Hong Kong, China. December 5, 2017.
- CURE: Digestive Diseases Research Center Annual Meeting; UCLA, Los Angeles, CA. March 23, 2018.

- Inaugural I3T Scientific Retreat; UCLA, Los Angeles, CA. June 12, 2018.

Wang, Lulan
- Immunology LA; Skirball Center. June 15, 2018.

Waters, Lynnea
- La Jolla Immunology Conference; La Jolla, CA. October 2017.

Young, Courtney
- American Society for Gene and Cell Therapy (ASGCT) Annual Meeting; Chicago, IL. May 16-19, 2018.
- World Muscle Society; St. Malo, France. Oct 3-7, 2017.
- PPMD Connect Conference; Chicago, IL. June 29-July 1, 2017.

Yu, Jiaji
- Immunology LA; Los Angeles, CA.
- 14th Annual Stem Cell Symposium; UCLA.

Zemke, Nathan
- DNA Tumor Virus Meeting; University of Birmingham, UK. July 17-22, 2017.

Zhan, Lingyu
- Symposium of Frontiers and Careers in cryoEM; CNSI, UCLA. April 27-28, 2018.
- Southern California Society for Microscopy and Microanalysis (SCSMM spring meeting); Michelson Center for Convergent Bioscience at USC. April 13, 2018.

Zhang, Tianhao
- Palm Spring HIV/AIDS annual symposium; Palm Springs, CA. March 2018.

STUDENT PUBLICATIONS

Aragon, Raquel
- Mack, J.J., Mosqueiro, T.S., Archer, B.J., Jones, W.M., Sunshine, H., Faas, G.C., Briot, A., **Aragon, R.**, Su, Y.T., Romay, M.C., McDonald, A.I., Kuo, C., Lizama, C.O., Lane, T.F., Zovein, A.C., Fang, Y., Tarling, E.J., de Aguiar Vallim, T.Q., Navab, M., Fogelman, A.M., Bouchard, L.S., Iruela-Arispe, M.L. 2017. NOTCH1 is a mechanosensor in adult arteries. Nature Communications. 8(1), 1620.

Brown, Taylor
- Mercer, Frances, Ng, Shek Hang, **Brown, Taylor M.**, Boatman, Grace, Johnson, P J. Neutrophils Kill the Parasite Trichomonas vaginalis using Trogocytosis. PLoS Biol. (2017); 16(2): e2003885.

Chen, Yi-Pei
- Janssen, BD, **Chen, YP**, Molgora, B, Wang, SE, Simoes-Barbosa, A, and Johnson, PJ (2018) CRISPR/Cas9-mediated gene modification and gene knock out in the human-infective parasite *Trichomonas vaginalis*. *Sci. Rep.* 8 (1):270.
- **Chen, YP**, Twu, O, and Johnson, PJ (2018) *Trichomonas vaginalis* macrophage migration inhibitory factor mediates parasite survival during nutrient stress. mBio 9:e0910-18.

Chi, Fangtao
- Nagaraj R, Sharpley M S, **Chi F**, et al. Nuclear Localization of Mitochondrial TCA Cycle Enzymes as a critical Step in Mammalian Zygotic Genome Activation [J]. Cell, 2017, 168(1): 210-223. e11.

- **Chi F**, Beniwal A S, Liu H. The apical domain defines the trophectoderm differentiation in early mammalian embryo by regulating Y AP nuclear translocation[J]. AME Medical Journal, 2017, 2(10).

Chitiashvili, Tsotne

- TRIM28-Regulated Transposon Repression Is Required for Human Germline Competency and Not Primed or Naïve Human Pluripotency – Yu Tao, Ming-Ren Yen, **Tsotne Chitiashvili**, Haruko Nakano, Rachel Kim, Linzi Hosohama, Yao Chang Tan, Atsushi Nakano, Pao-Yang Chen & Amander T. Clark. *Stem Cell Reports 2017* doi: 10.1016/j.stemcr.2017.11.020

Feng, An-Chieh

- Rajbhandari P, Thomas BJ, **Feng AC**, Hong C, Wang J, Vergnes L, Sallam T, Wang B, Sandhu J, Seldin MM, Lusis AJ, Fong LG, Katz M, Lee R, Young SG, Reue K, Smale ST, Tontonoz P. IL-10 Signaling Remodels Adipose Chromatin Architecture to Limit Thermogenesis and Energy Expenditure. Cell. 2018;172(1-2): 218-233.e17.
- Shiu TY, Shih YL, **Feng AC**, Lin HH, Huang SM, Huang TY, Hsieh CB, Chang WK, Hsieh TY. HCV core inhibits hepatocellular carcinoma replicative senescence through downregulating microRNA-138 expression. J Mol Med (Berl). 2017;95(6):629-639.

Gang, Spencer

- Bryant AS, Ruiz F, **Gang SS**, Castelletto ML, Lopez JB, Hallem EA. A critical role for thermosensation in host seeking by skin-penetrating nematodes. *Curr Biol.* (2018).
- Ruiz F, Castelletto ML, **Gang SS**, Hallem EA. Experience-dependent olfactory behavior of the parasitic nematode *Heligmosomides polygyrus*. *PLoS Pathog*. (2017) 13(11): e1006709.
- Gang SS, Castelletto ML, Bryant AS, Yang E, Mancuso N, Lopez JB, Pellegrini M, Hallem EA. Targeted mutagenesis in a human-parasitic nematode. *PLoS Pathog*. (2017) 13(10): e1006675.
-

Gomez, Adam

- Resende, Luis Pedro F., et al. "Intestinal stem cell ablation reveals differential requirements for survival in response to chemical challenge." *Developmental Biology* (2017).

Gray, David

- Morgan RA, **Gray D**, Lomova A, and Kohn DB. Hematopoietic Stem Cell Gene Therapy: Progress and Lessons Learned. 2017; 21:574-590. Doi: 10.1016/j.stem.2017.10.010. PMID: 29100011.

Hancock, Grace

- Chen D, et al. Germline competency of human embryonic stem cells depends on EOMESODERMIN. Biol Reprod. 6, 850-861 (2017).

Hernandez, Gloria

- Ziyad S, Riordan JD, Cavanaugh AM, Su T, **Hernandez GE**, Hilfenhaus G, Morselli M, Hyunh K, Wang K, Chen JN, Dupuy AJ, Iruela-Arispe ML. A forward genetic screen targeting the endothelium reveals a regulatory role for the lipid kinase Pi4ka in myelo- and erythropoiesis. *Cell Reports* 22(5): 1211-1224. PMCID: PMC58280303.

Hu, Xuchen

- **Hu, X.**, M. W. Sleeman, K. Miyashita, M. F. Linton, C. M. Allan, C. He, M. Larsson, Y. Tu, N. P. Sandoval, R. S. Jung, A. Mapar, T. Machida, M. Murakami, K. Nakajima, M. Ploug, L. G. Fong, S. G. Young, and A. P. Beigneux. 2017. Monoclonal antibodies that bind to the Ly6 domain of GPIHBP1 abolish the binding of LPL. *J Lipid Res* 58: 208-2015.
- Beigneux, A. P., K. Miyashita, M. Ploug, D. J. Blom, M. Ai, M. F. Linton, W. Khovidhunkit, R. Dufour, A. Garg, M. A. McMahon, C. R. Pullinger, N. P. Sandoval, **X. Hu**, C. M. Allan, M. Larsson, T. Machida, M. Murakami, K. Reue,

P. Tontonoz, I. J. Goldberg, P. Moulin, S. Charriere, L. G. Fong, K. Nakajima, and S. G. Young. 2017. Autoantibodies Against GPIHBP1 as a Cause of Hypertriglyceridemia. *N Engl J Med* 376: 1647-1658.

- **Hu, X.**, G. M. Dallinga-Thie, G. K. Hovingh, S. Y. Chang, N. P. Sandoval, T. L. P. Dang, I. Fukamachi, K. Miyashita, K. Nakajima, M. Murakami, L. G. Fong, M. Ploug, S. G. Young, and A. P. Beigneux. 2017. GPIHBP1 autoantibodies in a patient with unexplained chylomicronemia. *J Clin Lipidol* 11: 964-971.
- He, C., **X. Hu**, R. S. Jung, M. Larsson, Y. Tu, S. Duarte-Vogel, P. Kim, N. P. Sandoval, T. R. Price, C. M. Allan, B. Raney, H. Jiang, A. Bensadoun, R. L. Walzem, R. I. Kuo, A. P. Beigneux, L. G. Fong, and S. G. Young. 2017. Lipoprotein lipase reaches the capillary lumen in chickens despite an apparent absence of GPIHBP1. *JCI Insight* 2.
- He, C., **X. Hu**, R. S. Jung, T. A. Weston, N. P. Sandoval, P. Tontonoz, M. R. Kilburn, L. G. Fong, S. G. Young, and H. Jiang. 2017. High-resolution imaging and quantification of plasma membrane cholesterol by NanoSIMS. *Proc Natl Acad Sci U S A* 1.14: 2000-2005.
- He, C., T. A. Weston, R. S. Jung, P. Heizer, M. Larsson, **X. Hu**, C. M. Allan, P. Tontonoz, K. Reue, A. P. Beigneux, M. Ploug, A. Holme, M. R. Kilburn, P. Guagliardo, D. A. Ford, L. G. Fong, S. G. Young, and H Jiang. 2018. NanoSIMS analyses of lipoprotein processing in capillaries and lipid movement into cardiomyocytes. *Cell Metab* 27:1055-1066.

Korsakova, Elena

- Ohashi M., **Korsakova, E.**, Lee P., Allen D., Fu K., Vargas B., Cinkornpumin J., Salas C., Park J., Germanguz I., Chronis K., Kuoy E., Tran S., Xiao G., Pellegrini M., Plath K., Lowry W. (2018). Loss of MECP2 leads to activation of p53 and neuronal senescence. Stem Cell Reports, 10, 1453-1463.

Lee, Han Neul (Skott)

- **HN Lee**, M Mitra, O Bosompra, DC Corney, EL Johnson, N Rashed, LD Ho and HA Coller: RECK isoforms produced via alternative polyadenylation have opposing effects on cell migration. *Mol Biol Cell*. 2018 Jun 6:mbcE17120708. Doi: 10.1091/mbc.E17-12-0708.
- M Mitra, **HN Lee** and HA Coller: Determining genomewide transcript decay rates in proliferating and quiescent human fibroblasts. *J Vis Exp*. 2018 Jan 2;(131). Doi: 10.3791/56423.**Liu, Wanlu**
- **Wanlu Liu**, Sascha H. Duttke, Jonathan Hetzel, Martin Groth, Suhua Feng, Javier Gallego-Bartolome, Zhenhui Zhong, Hsuan Yu Kuo, Zonghua Wang, Jixian Zhai, Joanne Chory & Steven E. Jacobsen. (2018) RNA-directed DNA methylation involves co-transcriptional small-RNA-guided slicing of polymerase V transcripts in Arabidopsis. *Nature Plants*, 4, 181-188.
- Yu Zhang, C. Jake Harris, Qikun Liu, **Wanlu Liu**, Israel Ausin, Yanping Long, Lidan Xiao, Li Feng, Xu Chen, Yubin Xie, Xinyuan Chen, Lingyu Zhan, Suhua Feng, Jingyi Jessica Li, Haifeng Wang, Jixian Zhai, and Steven E. Jacoben. (2018) Large-scale comparative epigenomics reveals hierarchical regulation of non-CG methylation in Arabidopsis. *Proc. Nat. Acad. Sci U. S. A.*, doi: 10.1073/pnas.1716300115.
- Pastor, William A., **Wanlu Liu**, Di Chen, Jamie Ho, Rachel Kim, Timothy J. Hunt, Anastasia Lukianchikov et al. TFAP2C regulates transcription in human naïve pluripotency by opening enhancers. Nature cell biology 20, no. 5 (2018): 553-564.
- Gallego-Bartolome, Javier, Jason Gardiner, **Wanlu Liu**, Ashot Papikian, Basudev Ghoshal, Hsuan Yu Kuo, Jenny Miao-Chi Zhao, David J. Segal, and Steven E. Jacobsen. Targeted DNa demethyltion of the Arabidopsis genome using the human TET1 catalytic domain. *Proceedings of the National Academy of Sciences* 115, no. 9 (2018): E2125-E2134.
- Clark, Amander T., Sofia Gkountela, Di Chen, **Wanlu Liu**, Enrique Sosa, Meena Sukhwani, Jon D. Hennebold, and Kyle E. Orwig. "Primate primordial germ cells acquire transplantation potential by Carnegie stage 23." *Stem cell reports* 9, no. 1 (2017): 329-341.
- Chen, Di, **Wanlu Liu**, Anastasia Lukianchikov, Grace V. Hancock, Jill Zimmerman, Matthew G. Lowe, Rachel Kim et al. "Germline competency of human embryonic stem cells depends on eomesodermin." *Biology of reproduction* 97, no. 6 (2017): 850-861.

Lo, Hung-Hao (Jerry)

- Shu-Han Su, Chun-Hsien Wu, Ya-Lin Chiu, Shing-Jyh Chang, **Hung-Hao Lo**, Ko-Hsun Liao, Cheng-Fong Tsai, Tsung-Neng Tsai, Chi-Hung Lin, Shu-Meng Cheng, Cheng-Chung Cheng, Hsei-Wei Wang. Dysregulation of Vascular Endothelial Growth Factor Receptor-2 by Multiple miRNAs in Endothelial Colony-Forming Cells of Coronary Artery Disease. Journal of Vascular Research, 2017, 54:22-32.

Lowe Matthew

- **Lowe M**, Lage J, Paatela E, Munson D, Hostager R, Yuan C, Katoku-Kikyo N, Ruiz-Estevez M, Asakura Y, Staats J, Qahar M, Lohman M, Asakura A, Kikyo N. Cry2 Is Critical for Circadian Regulation of Myogenic Differentiation by Bclaf1-Mediated mRNA Stabilization of Cyclin D1 and Tmem176b. *Cell Reports*. 2018 Feb 20;22(8):2118-2132. PMID: 29466738.
- Chen D, Liu W, Lukianchikov A, Hancock GV, Zimmerman J, **Lowe MG**, Kim R, Galic Z, Irie N, Surani MA, Jacobsen SE, Clark AT. Germline competency of human embryonic stem cells depends on eomesodermin. *Biol Reprod*. 2017 Dec 1; 97(6): 850-861. PMID: 29091993

Masiuk, Katelyn

- **Masiuk** et al. Improving Gene Therapy Efficiency through the Enrichment of Human Hematopoietic Stem Cells. *Mol Ther*. 2017 Jun 26. Pii: S1525-0016(17)30259-9.

Miranda, Matilde

- **Miranda MM**, Christofk H, Jones DL, Lowry WE. Tropical inhibition of the electron transport chain can stimulate the hair cycle. *Journal of Investigative Dermatology* (2017).

Molgora, Brenda

- Janssen, BD, Chen, Y, **Molgora BM**, Wang, SE, Simoes-Barbosa, A, Johnson, PJ (2018). CRISPR/Cas9-mediated gene modification and gene knock out in the human-inefective parasite Trichomonas vaginalis. *Scientific Reports*, 8:270: doi: 10.1038/s41598-017-18442-3.

Murray, Kevin

- Atomic structures of corkscrew-forming segments of SOD1 reveal varied oligomer conformations. Sangwan S, Sawaya MR, **Murray KA**, Hughes MP, Eisenberg DS. *Protein Sci*. 2018
- Common fibrillary spines of amyloid-β and human islet amyloid polypeptide revealed by microelectron diffraction and structure-based inhibitors. Krotee P, Griner SL, Sawaya MR, Cascio D, Rodriguez JA, Shi D, Philipp S, **Murray K**, Saelices L, Lee J, Seidler P, Glabe CG, Jiang L, Gonen T, Eisenberg DS. *J Biol Chem*. 2018.
- Structure-based inhibitors of tau aggregation. Seidler PM, Boyer DR, Rodriguez JA, Sawaya MR, Cascio D, **Murray K**, Gonen T, Eisenberg DS. Nat Chem. Feb 2018. 10(2): 170-176.

Nitzahn, Matthew

- Khoja S, **Nitzahn M**, Hermann K, Truong B, Borzone R, Willis B, Rudd M, Palmer DJ, Ng P, Brunetti-Pierri N, Lipshutz GS. Conditional disruption of hepatic carbamoyl phosphate synthetase 1 in mice results in hyperammonemia without orotic aciduria and can be corrected by liver-directed gene therapy. *Mol Genet Metab*. 2018 Apr 12.
- Angarita SAK, Truong B, Khoja S, **Nitzahn M**, Rajbhandari AK, Zhuravka I, Duarte S, Lin MG, Lam AK, Cederbaum SD, Lipshutz GS. Human depatocyte transplantation corrects the inherited metabolic liver disorder arginase deficiency in mice. *Mol Genet Metab*. 2018 Apr 21.

Ong, Jessica

- Lee, JM*, **Ong JR***, Vergnes, L, de Aguiar Vallim, TQ, Nolan, J, Cantor, RM, Walters, JRF, and Reue, K. Diet1, bile acid diarrhea, and FGF15/19: mouse model and human genetic variants. J. Lipid Res. 59(3):429-438, 2018.

Patel, Aanand

- **Patel AA**, Oztug Durer ZA, van Loon AP, Bremer KV, and Quinlan ME. Drosophila and human FHOD family formin proteins nucleate actin filaments. *J Biol. Chem.* (2018) 292(2) 532-540.

Pronovost, Geoffrey

- **Pronovost, G.N.**, and Hsiao, E.Y. (2017) Microbes REV up Host Metabolism around the Clock. Immunity 47, 618-620.

Salisbury, David (Alex)

- Sallam, T., Jones, M., Thomas, B.J., Wu, X., Gilliland, T., Qian, K., Eskin, A., Casero, D., Zhang, Z., Sandhu, J., **Salisbury, D.**, Rajbhandari, P., Civelek, M., Hong, C., Ito, A., Liu, X., Daniel, B., Lusis, J., Whiteledge, J., Nagy, L., Castrillo, A., Smale, S., and Tontonoz, P. 2018. Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by a long noncoding RNA. *Nature medicine*, 24(3), p. 304.
- Tontonoz, P., Wu, X., Jones, M., Zhang, Z., **Salisbury, D.**, and Sallam, T. 2017. Long Noncoding RNA Facilitated Gene Therapy Reduces Atherosclerosis in a Murine Model of Familial Hypercholesterolemia. Circulation, 136(8), pp. 776-779.

Sandhu, Jaspreet

- Sallam T, Jones M, Thomas BJ, Wu X, Gilliland T, Qian K, Eskin A, Casero D, Zhang Z, **Sandhu J**, Salisbury D, Rajbhandari P, Civelek M, Hong C, Ito A, Liu X, Daiel B, Lusis AJ, Whitelegge J, Nagy L, Castrillo A, Smale S, Tontonoz P. Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by a long noncoding RNA. *Nat Med.* 2018;24(3):304-12. Epub 2018/02/13. Doi: 10.1038/nm.4479. PubMed PMID: PMC5839972
- Rajbhandari P, Thomas BJ, Feng AC, Hong C, Wang J, Vergnes L, Sallam T, Wang B, **Sandhu J**, Seldin MM, Lusis AJ, Fong LG, Katz M, Lee R, Young SG, Reue K, Smale ST, Tontonoz P. IL-10 Signaling Remodels Adipose Chromatin Architecture to Limit Thermogenesis and Energy Expenditure. *Cell*. 2018;172(1-2):218-33 e17. Epub 2017/12/19. Doi: 10.1016/j.cell.2017.11.019. PubMed PMID: 29249357; PMCID: PMC5766418.
- Sallam T, **Sandhu J**, Tontonoz P. Long Noncoding RNA Discovery in Cardiovascular Disease: Decoding Form to Function. *Circ Res*. 2018;122(1); 155-66. Epub 2018/01/06. Doi: 10.1161.CIRCRESAHA.117.311802.PubMed PMID: 29301847; PMCID: PMC5902384.
- Zhang L, Rajbhandari P, Priest C, **Sandhu J**, Wu X, Temel R, Castrillo A, de Aguiar Vallim TQ, Sallam T, Tontonoz P. Inhibition of cholesterol biosynthesis through RNF145-dependent ubiquitination of SCAP. *Elife.* 2017;6. Epub 2017/10/27. Doi: 10.7554/eLife.28766. PubMed PMID: 29068315; PMCID: PMC56566429.

Sercel, Alexander

- Patananan, A.N., **Sercel, A.J.**, and Teitell, M.A. (2018). More than a powerplant: the influence of mitochondrial transfer on the epigenome. *Curr Opin Physiol* 3, 16-24.

Thurlow, Lauren

- **Thurlow, L.A.**, et al. "G-quartet Formation from N9-Benzylguanine Derivatives." Letters in Organic Chemistry (2018). DOI: 10.2174/1570178615666180329161419

van Loon, Aaron

- Patel aA, Oztug Durer ZA, **van Loon AP**, Bremer KV, Quinlan ME. *Drosophila and human FHOD family formin proteins nucleate actin filaments. J Biol Chem.* 2018 Jan 12;293(2)532-540.

Young, Courtney

- Hicks M, Hiserodt J, Paras K, Fujiwara W, Eskin A, Jan M, Xi H, **Young CS**, Evseenko D, Nelson S, Spencer MJ, Van Handel B, Pyle AD (2018). "ERBB3 and NGFR mark a distinct skeletal muscle progenitor cell in human development and hPSCs." *Nature Cell Biology.* 20:45-57. PMID: 29255171.

Zemke, Nathan

- **Zemke NR**, Berk AJ. The Adenovirus E1A C Terminus Suppresses a Delayed Antiviral Response and Modulates RAS Signaling. *Cell Host Microbe.* 2017 Dec 13;22(6):789-800.e5. doi: 10.1016/j.chom.2017.11.008. PubMed PMID: 29241042; PubMed Central PMCID: PMC5736016.

Zhang, Jiayan

- Monomeric ephrinB2 binding induces allosteric changes in Nipah virus G that precede its full activation JJW Wong, TA Young, **J Zhang**, S Liu, GP Leser, EA Komives, RA Lamb; Nature Communications 8(1), 781.

Zhang, Tian-Hao

- Gorin, A.M., Du, Y., Liu, F. Y., **Zhang, T.-H.**, Ng, H.L., Hofmann, C., Cumberland, W.G., Sun, R., Yang, O.O., Hiv-1 epitopes presented by mhc class I types associated with superior immune containment of viremia have highly constrained fitness landscapes. *PLoS pathogens* 13(8), 1006541 (2017).
- Gong, D., **Zhang, T.-H.**, Zhao, D., Du, Y., Chapa, T.J., Shi, Y., Wang, L., Contreras, D., Zeng, G., Shi, P.-Y., et al.: High-throughput fitness profiling of zika virus e protein reveals different roles for glycosylation during infection of mammalian and mosquito cells. *iScience* 1, 97-111 (2018).
- Du, Y., **Zhang, T.-H.**, Dai, L., Zheng, X., Gorin, A.M., Oishi, J., Wu, T.-T., Yishizawa, J.M., Li, X., Yang, O.O., et a.,: Effects of mutations on replicative fitness and major histocompatibility complex class i binding affinity are among the determinants underlying cytotoxic-t-lymphocyte escape of hiv-1 gag epitopes. *mBio* 8(6). 01050-17 (2017).
- Du, Y., Chi, X., Wang, C., Jiang, J., Kong, F., Wang, X., Li, J., Wu, N.C., Dai, L., **Zhang, T.-H.**, et al.: Quantifying perinatal transmission of hepatitis b viral quasispecies by tag linkage deep sequencing. Scientific Reports 7(1), 10168 (2017).
- Dai, L., **Zhang, T.**, Barton, J., Chakraborty, A., Lloyd-Smith, J., Sun, R.: Predominance of positive epistasis among resistance-associated mutations in hiv-1 protease. Bulletin of the American Physical Society (2018).
- Du, Y., Shi, Y., **Zhang, T.-H.**, Wu, N.C., Dai, L., Gong, D., Brar, G., Shu, S., Luo, J., et al.: Genome-wide identification of interferon-sensitive mutations enavles influenza vaccine design. *Science* 359 (6373), 290-296 (2018).
- Fulcher, J.A., Du, Y., **Zhang, T.-H.**, Sun, R., Landovitz, R.J.: Emergence of integrase resistance mutations during initial therapy containing dolutegravir. *Clinical Infectious Diseases*, 228 (2018).

Zhang, Yurun

- Sasine, J.P., Himburg, H.A., Termini, C.., Roos, M., Tran, E., Zhao, L., Kan, J., Li, M., **Zhang, Y.**, de Barros, S.C. and Rao, D.S., 2018. Wild-type Kras expands and exhausts hematopoietic stem cells. *JCI insight*, 3(11).

WHITCOME PRE-DOCTORAL TRAINING PROGRAM

The Whitcome Pre-doctoral Training Program supports students with a MB-IDP mentor in their 3rd, 4th or 5th year of graduate school. Trainees are eligible for one year of support with possibility for competitive renewal. There are no citizenship restrictions for this program; international students are welcome to apply. The program is competitive and merit based.

Congratulations to the following graduate students, who were selected for the Whitcome Training Program this year:

Name	Graduate Program	Mentor
Natalie Chen	Molecular, Cellular & Integrative Physiology	Stephen Young
Charles Choi	MBIDP (Immunity, Microbes and Molecular Pathogenesis)	Peter Bradley
Ha Neul Lee	MBIDP (Cell and Developmental Biology)	Hilary Coller
Han Young Lim	MBIDP (Biochemistry, Biophysics, and Structural Biology)	Douglas Black
Calvin Leung	MBIDP (Biochemistry, Biophysics, and Structural Biology)	Tracy Johnson
Wanlu Liu	MBIDP (Cell and Developmental Biology)	Steve Jacobsen
Jerry Lo	MBIDP (Immunity, Microbes and Molecular Pathogenesis)	Stephen Smale

Katelyn Masiuk (MSTP)	MBIDP (Immunity, Microbes and Molecular Pathogenesis)	Donald Kohn
Thang Nguyen	Bioengineering	Michael Teitell
Jessica Ong (MSTP)	MBIDP (Cell and Developmental Biology)	Karen Reue
Jaspreet Sandhu (MSTP)	MBIDP (Gene Regulation, Epigenomics and Transcriptomics)	Peter Tontonoz
Hannah Sunshine	Molecular, Cellular & Integrative Physiology	Luisa Iruela-Arispe

MEMBER PUBLICATIONS

Adams, J.

- Zhou R, Park J, Chun R, Lisse T, Garcia A, Zavala K, Sea J, Lu Z, Xu J, Xing Y, Adams J, Hewison M., "Concerted effects of heterogeneous nuclear ribonucleoprotein C1/C2 to control vitamin D-directed gene transcription and RNA splicing in human bone cells." Nucleic Acids Res. 2017.

- Shieh A, Ma C, Chun RF, Witzel S, Rafison B, Contreras HTM, Wittwer-Schegg J, Swinkels L, Huijs T, Hewison M, Adams JS., "Effects of Cholecalciferol vs Calcifediol on Total and Free 25-Hydroxyvitamin D and Parathyroid Hormone." J Clin Endocrinol Metab. 102:1133-1140. 2017.

- Hegde V, Dworsky EM, Stavrakis AI, Loftin AH, Zoller SD, Park HY, Richman S, Johansen D, Hu Y, Taylor JA, Hamad CD, Chun RF, Xi W, Adams JS, Bernthal NM., "Single-Dose, Preoperative Vitamin-D Supplementation Decreases Infection in a Mouse Model of Periprosthetic Joint Infection." J Bone Joint Surg Am. 99:1737-1744. 2017.

- Hegde V, Arshi A, Wang C, Buser Z, Wang JC, Jensen AR, Adams JS, Zeegen EN, Bernthal NM., "Preoperative Vitamin D Deficiency is Associated with Higher Postoperative Complication Rates in Total Knee Arthroplasty. Orthopedics.1-7. 2018.

- Jamieson, CHM, Millan MT, Creasey AA, Lomax G, Donohoe ME, Walters MC, Abedi M, Bota DA, Zaia JA, Adams JS., "CIRM Alpha Stem Cell Clinics: Addressing Regenerative Medicine Challenges." Cell Press. 801-805. 2018.

- Shieh A, Ma C, Chun RF, Wittwer-Schegg J, Swinkels L, Huijs T, Wang J, Donagelo I, Hewison M, Adams JS., "Associations between change in total and free 25-hydroxyvitamin D with 24,25-dihydroxyvitamin D and parathyroid hormone." J Clin Endocrinol Metab. 2018.

- Zavala K, Gottlieb C, Teles R, Adams JS, Hewison M, Modlin RL, Liu PT., "Intrinsic activation of the vitamin D antimicrobial pathway by M. leprae infection is inhibited by type I IFN." PLOS Neglected Tropical Diseases. 2018.

Allard, P.

- Shashi V, Schoch K, Spillmann R, Cope H, Tan QK, Walley N, Pena L, McConkie-Rosell A, Jiang YH, Stong N, Need AC, Goldstein DB. "A comprehensive iterative approach is highly effective in diagnosing individuals who are exome negative." Undiagnosed Diseases Network. Genet Med. 2018.

- Weinhouse C, Truong L, Meyer J, Allard P., "Caenorhabditis elegans as an emerging model system in environmental epigenetics." Environmental and Molecular Mutagenesis.

- Camacho J, Truong L, Kurt Z, Morselli M, Gutierrez G, Pellegrini M, Yang Xia, Allard P, "The memory of environmental chemical exposure in C. elegans is dependent on the Jumonji demethylases jmjd-2 and jmjd-3/utx-1." Cell Reports. 2018.

- Angrish M, Allard P, McCullough S, Chadwick LH, Hines E, Chorley BN., "Epigenetic Applications in Adverse Outcome Pathways and Chemical Risk Evaluation." Environmental Health Perspectives.

- Oláhová M, Yoon WH, Thompson K, Jangam S, Fernandez L, Davidson JM, Kyle JE, Grove ME, Fisk DG, Kohler JN, Holmes M, Dries AM, Huang Y, Zhao C, Contrepois K, Zappala Z, Frésard L, Waggott D, Zink EM, Kim YM, Heyman HM, Stratton KG, Webb-Robertson BM
- Undiagnosed Diseases Network, Snyder M, et al. "Biallelic Mutations in ATP5F1D, which Encodes a Subunit of ATP Synthase, Cause a Metabolic Disorder." Am J Hum Genet. 2018.

- Chen HF, Wu CE, Yu CW, Chang KW, Chou WH, Lu CY, Ghelfi E, Wu FC, Jan PS, Huang MC, Allard P, Lin SP, Ho HN., "Comparative global immune-related gene profiling of somatic cells, human pluripotent stem cells and their derivatives: implication for human lymphocyte proliferation. Experimental & Molecular Medicine." Exp Mol Med. 2017.

- Zaunbrecher V, Beryt E, Parodi D, Telesca D, Doherty J, Malloy T, Allard P., "Has Toxicity Testing moved into the 21st Century? A Survey and Analysis of Perceptions in the Field of Toxicology." Environmental Health Perspectives.

Ardehali, R.

- Patel S, Bonora G, Sahakyan A, Kim R, Chronis C, Langerman J, Fitz-Gibbon S, Rubbi L, Skelton RJ, Ardehali R, Pellegrini M, Lowry WE, Clark AT, Plath K., "Human Embryonic Stem Cells Do Not Change Their X Inactivation Status during Differentiation." Cell reports. 2017.

- Ranjbarvaziri S, Park S, Nguyen NB, Gilmore WB, Zhao P, Ardehali R., "Generation of Nkx2-5/CreER transgenic mice for inducible Cre expression in developing hearts." Genesis. 2017.

- Hill JA, Ardehali R, Clarke KT, Del Zoppo GJ, Eckhardt LL, Griendling KK, Libby P, Roden DM, Sadek HA, Seidman CE, Vaughan DE; American Heart Association Council on Basic Cardiovascular Sciences; Council on Clinical Cardiology; Council on Epidemiology and Prevention; Council on Functional Genomics and Translational Biology; and Stroke Council. "Fundamental Cardiovascular Research: Returns on Societal Investment: A Scientific Statement from the American Heart Association." Circ Res. 2017.

- Kelton RJ, Kamp TJ, Elliott DA, Ardehali R., "Biomarkers of human pluripotent stem cell-derived cardiac lineages." Trends Mol Med. 2017.

- Garg V, Tan W, Ardehali R, Shah J, Huynh T, Aksoy O., "Giant cell myocarditis masquerading as orbital myositis with rapid, fulminant course necessitating mechanical support and heart transplantation." ESC Heart Fail. 2017.

- Banankhah P, Fishbein GA, Dota A, Ardehali R., "Cardiac manifestations of PRKAG2 mutation." BMC Med Genet. 2018.

- Sereti KI, Nguyen NB, Kamran P, Zhao P, Ranjbarvaziri S, Park S, Engel J, Sung K, Kulkami RP, Ding Y, Hsiai TK, Mikkola H, Sahoo D, Iruela-Arispe L, Ardehali R., "Clonal analysis of cardiomyocyte generation during development and injury." Nature Commun. 2017.

- Engel J, Ardehali R., "Direct Cardiac Reprogramming: Progress and Promise." Stem Cells Int. 2018.

- Ding Y, Lee J, Hsu JJ, Chang CC, Baek KI, Ranjbarvaziri S, Ardehali R, Packard RRS, Hsiai TK. Curr Cardiol Rep. 2018.

- Park S, Ranjbarvazirj S, Lay FD, Zhao P, Miller MJ, Dhaliwal JS, Huertas-Vazquez A, Wu X, Qiao R, Soffer JM, Mikkola HKA, Lusis AJ, Ardehali R., "Genetic regulation of fibroblast activation and proliferation in cardiac fibrosis." Circulation. 2018.

Banerjee, U.

- Cho B, Spratford CM, Yoon S, Cha N, Banerjee U, Shim J., "Systemic control of immune cell development by integrated carbon dioxide and hypoxia chemosensation in Drosophila." Nat Commun. 2018.

Berk, A.

- Zemke NR, Berk AJ., "The Adenovirus E1A C-terminus Suppresses a Delayed Antiviral Response and Modulates RAS Signaling." Cell Host Microbe. 2017.

Bitan, G.

- N Xu, G Bitan, T Schrader, F-G Klärner, H Osinska, and J Robbins., "Inhibition of mutant αB Crystallin-Induced Protein Aggregation by a Molecular Tweezer." J. Am .Heart Assoc. 2017.

- F Richter, I Magen, P Lee, S Subramaniam, J Hayes, A Attar, C Zhu, N Franich, N Bove, K De La Rosa, J Kwong, F-G Klärner, T Schrader, M- F Chesselet, and G Bitan., "A molecular tweezer ameliorates motor deficits in mice overexpressing α-synuclein." Neurotherapeutics, 14: 1107-1119. 2017.

- RR Walsh, F Krismer, WR Galpern, GK Wenning, PA Low, G Halliday, WJ Koroshetz, J Holton, NP Quinn, O Rascol, LM Shaw, D Eidelberg, P Bower, JL Cummings, V Abler, J Biedenharn, G Bitan, DJ Brooks, P Brundin, H Fernandez, P Fortier, R Freeman, T Gasser, A Hewitt, GU Höglinger, MJ Huentelman, PH Jensen, A Jeromin, UJ Kang, H Kaufmann, L Kellerman, V Khurana, T Klockgether, WScott Kim, C Langer, P LeWitt, E Masliah, W Meissner, R Melki, S Ostrowitzki, S Piantadosi, W Poewe, D Robertson, C Roemer, D Schenk, M Schlossmacher, JD Schmahmann, K Seppi, L Shih, A Siderowf, GT Stebbins, N Stefanova, S Tsuji, S Sutton and J Zhang., "Recommendations of the Global Multiple System Atrophy Research Roadmap Meeting." Neurology, 90: 74-82. 2018.

- AE Röcker, JA.Müller, E Dietzel, M Harms, F Krüger, C Heid, A Sowisolk, C Frich-Riber, A Kupke, S Lippold, J von Einem, J Beer, B Knöll, S Becker, J Schmidt-Chanasit, M Otto, O Vapalahti, AN Zelikin, G Bitan, T Schrader and J Münch., "The molecular tweezer CLR01 inhibits Ebola and Zika Virus infection." Antiviral. Res., 152: 26-35. 2018.

- R Malik, J Di, G Nair, A Attar, K Taylor, E Teng, F-G Klärner, T Schrader, and G Bitan., "Using molecular tweezers to remodel abnormal protein self-assembly and inhibit the toxicity of amyloidogenic proteins." Methods Mol. Biol., 1777: 369-386. 2018.

- EY Hayden, JL Conovaloff, A Mason, G Bitan, and DB Teplow, "Preparation of pure populations of amyloid b-protein oligomers of defined size." Methods Mol. Biol., 1779: 3-12. 2018.

Black, D.

- Vuong CK, Wei W, Lee JA, Lin CH, Damianov A, de la Torre-Ubieta L, Halabi R, Otis KO, Martin KC, O'Dell TJ, Black DL., "Rbfox1 Regulates Synaptic Transmission through the Inhibitory Neuron-Specific vSNARE Vamp1." Neuron. 2018.

- Ying Y, Wang XJ, Vuong CK, Lin CH, Damianov A, Black DL., "Splicing Activation by Rbfox Requires Self-Aggregation through Its Tyrosine-Rich Domain." Cell. 2017.

Bowie, J.

- Min D, Jefferson RE, Qi Y, Wang JY, Arbing MA, Im W, Bowie JU., "Unfolding of ClC chloride transporter retains memory of its evolutionary history", Nature Chem. Biol, 14(5):489-496. 2018.

- Lu P, Min D, DiMaio F, Wei KY, Vahey MD, Boyken SE, Chen Z, Fallas JA, Ueda G, Sheffler W, Mulligan VK, Xu W, Bowie JU, Baker D., "Accurate computational design of multipass transmembrane proteins" Science, 59:1042-1046. 2018.

- Rothé B, Leettola CN, Leal-Esteban L, Cascio D, Fortier S, Isenschmid M, Bowie JU, Constam DB., "Crystal Structure of Bicc1 SAM Polymer and Mapping of Interactions between the Ciliopathy-Associated Proteins Bicc1, ANKS3, and ANKS6, Structure" 26(2):209-224. 2018.

- Jefferson RE, Min D, Corin K, Wang JY, Bowie JU., "Applications of single molecule methods to membrane protein folding studies" J. Mol. Biol. 430(4):424-437. 2018.

- Opgenorth PH, Korman TP, and Bowie JU., "A molecular rheostat design that maintains ATP levels needed to drive cell-free synthetic biochemistry systems" Nature Chem. Biol. 13(9):938-942. 2017.

- Korman TP, Opgenorth PH, Bowie JU., "A synthetic biochemistry platform for cell free production of monoterpenes from glucose" Nature Comm. 8:15526. 2017.

- Cao Z, Hutchinson JM, Sanders CR, Bowie JU., "Backbone hydrogen bond strengths can vary widely in transmem-brane helices" J. Am. Chem. Soc. 139(31):10742-10749. 2017.

- Woodall NB, Hadley S, Yin Y, Bowie JU., "Complete Topology Inversion can be Part of Normal Membrane Protein Biogenesis" Protein Sci. 4:824-833. 2017.

Braun, J.

- Kasahara N, Yang I, Prins RM, Braun J, Gordon LK, Wadehra M., "Epithelial Membrane Protein-2 (EMP2) Promotes Angiogenesis in Glioblastoma Multiforme." J Neurooncol.134 (1):29-40. 2017.

- Casero D, Gill K. Sridharan V, Koturbash I, Nelson G, Jensen MH, Boerma J, Braun J, Cheema AK., "Functional perturbations of the mouse gut microenvironment after exposure to high LET radiation." Microbiome. 5:105.

- Wadehra M, Kiyohara MH, Dillard C, Tsui J, Kim SR, Lu J, Sachdev D, Goodglick L, Tao M, Torous V, Wang W, Gordon LK, Braun J, McDermott S, Wicha M, Aryasomayajula C, Najafzadeh P, Tsui J., "EMP2 is a novel therapeutic target for endometrial cancer stem cells." Oncogene. 36(42):5793-5807. 2017.

- Ni J, Ting-Chin, DS, Chen Ez, Bailey A, Roggiani M, Sirota-Madi A, Friedman ES, Wang L, Lin A, Nissim I, Albenberg LA, Baldassano RN, Braun J, Xavier RJ, Clish CB, Yudkoff M, Li Hongzhe, Goullian M, Bushman FD, Lewis JD, Wu GD., "The Role of Urease in Crohn's Disease Gut Microbiota Dysbiosis." Science Transl Med. 2017.

- Schirmer M, Franzosa EA, Lloyd-Price J, McIver LJ, Schwager R, Poon T, Andrews E, Barron G, Lake K, Prasad M, Sauk J, Stevens B, Sturgeon HC, Wilson RG, Braun J, Denson LA, Kugathasan S, McGovern DPB, Vlamakis H, Xavier RJ, Huttenhower C., "Dynamics of metatranscription in the inflammatory bowel disease gut microbiome." Nature Microbiol, 3(3):337-346. 2018.
- Friese AC, Zettlitz KA, Salazar FB, Tavare R, Tsai WK, Chatziioannou AF, Rozengurt N, Braun J, Wu A., "Imaging CD4+ T cells in a murine model of colitis." J Nucl Med, 59(6):980-985. 2018.

- Chang YL, Rossetti M, Vlamakis H, Casero D, Sunga G, Harre N, Miller S, Humphries R, Stappenbeck T, Simpson K, Sartor RB, Wu GD, Lewis J, Bushman F, McGovern DPB, Salzman N, Borneman J, Xavier R, Huttenhower C, Braun J., "A screen of Crohn's disease-associated microbial metabolites identifies ascorbate as a novel metabolic inhibitor of activated human T cells." Mucosal Immunol. 2018.

- Jacob N, Jacobs JP, Kumagai K, Ha CWY, Kanazawa Y, Lagishetty V, Altmayer K, Hamill AM, Von Arx A, Sartor RB, Devkota S, Braun J, Michelsen KS, Targan SR, Shih DQ., "Inflammation-independent TL1A-mediated intestinal fibrosis is dependent on the gut microbiome." Mucosal Immunol. 2018.

Braybrook, S.

- A Bucksch, A Atta-Boateng, A F Azihou, D Battogtokh, A Baumgartner, B M Binder, S Braybrook, C Chang, V Coneva, T DeWitt, A Fletcher, M Gehan, D H Diaz Martinez, L Hong, A Iyer-Pascuzzi, LL Klein, S A Leiboff, M Li, J Lynch, A Maizel, J N Maloof, RJ C Markelz, C Martinez, L A Miller, W Mio, W Palubicki, H Poorter, C Pradal, C Price, E Puttonen, J Reese, R Rellán-Álvarez, E P Spalding, E E. Sparks, C N Topp, J H Williams, D H Chitwood., "Morphological plant modeling: Unleashing geometric and topological potential within the plant sciences." Frontiers in Plant Science. 2017.

- R Carter, H Woolfenden, A Baillie, S Amsbury, S Carroll, E Healicon, S Sovatzoglou, S Braybrook, JE Gray, J Hobbs, Richard J. Morris, AJ Fleming., "Stomatal Opening Involves Polar, Not Radial, Stiffening Of Guard Cells." Current Biology. (19) 2974-2983. 2017.

- TA Torode, RE O'Neill, SE Marcus, V Cornuault, S Pose-Albacete, RP Lauder, SK Kracun, MG Rydahl, MCF Andersen, WGT Willats, SA Braybrook, BJTownsend, MH Clausen, JP Knox., "Branched pectic galactan in phloem-sieve-element cell walls: implications for cell mechanics." Plant Physiology. 176 (2) pp: 1547-1558.

- M Linardic and S Braybrook., "Towards an Understanding of Spiral Patterning in the Sargassum muticum Shoot Apex." Scientific Reports. 7:13887. 2017.

- Robinson, M Huflejt, P Barbier de Reuille, S A Braybrook, M Schorderet, DReinhardt, C Kuhlemeier., "An automated confocal micro-extensometer enables in vivo quantification of mechanical properties with cellular resolution." The Plant Cell. 29 (12) pp: 2959-2973. 2017.

- G Arsuffi and S A Braybrook., "Acid growth: an ongoing trip." Journal of Experimental Botany. 69(2):137-146. 2018.

- T Torode, M Linardic, JL Kaplan, SA Braybrook., "Atomic force microscopy based analysis of cell-wall elasticity in macroalgae." In: Protocols for Macroalgae Research, eds. B Charrier and T Wicher. CRC Press. Pg. 335-347. 2018.

- R Vofely, J Gallagher, G Pisano, M Bartlett, SA Braybrook., "Of puzzles and pavement: exploring diversity in leaf epidermal cell shape." Accepted at New Phytologist. 2018.

- F Bou Daher, Y Chen, B Bozorg, J Clough, H Jonsson, SA Braybrook., "Anisotropic growth is achieved through the additive mechanical effect of material anisotropy and elastic asymmetry." 2018.

Butler, S.

- Varadarajan, S.G. and S.J. Butler, "Netrin1 establishes multiple boundaries for axon growth in the developing spinal cord" Developmental Biology.430: 177-187. 2017.

- Andrews, M.G., del Castillo, L.M., Ochoa-Bolton, E., Yamauchi, K., Smogorzewski, J. and S.J. Butler., "BMPs direct sensory interneuron identity in the developing spinal cord using signal-specific not morphogenic activities" 2017.

- Gupta. S., Sivalingam, D., Hain, S., Makkar, C., Sosa, E., Clark. A. and S.J. Butler, "Deriving dorsal spinal interneurons from human pluripotent stem cells" Stem Cell Reports. 10: 1-16. 2017.

Butte, M.

- Nyberg KD, Hu KH, Kleinman S, Khismatullin DB, Butte MJ, Rowat AC., "Quantitative Deformability Cytometry: Rapid, Calibrated Measurements of Cell Mechanical Properties." Biophysical Journal. 113(7):1574-1584. 2017.

- Nagy N, de la Zerda A, Kaber G, Johnson PY, Hu KH, Kratochvil MJ, Yadava K, Zhao W, Cui Y, Navarro G, Annes JP, Wight TN, Heilshorn SC, Bollyky PL, Butte MJ., "Hyaluronan content governs tissue stiffness in pancreatic islet inflammation." The Journal of Biological Chemistry (JBC). 293.2: 567-578. 2018.

- Majedi FS, Hasani-Sadrabadi MM, Kidani Y, Thauland TJ, Moshaverinia A, Butte MJ, Bensinger SJ, Bouchard LS., "Cytokine Secreting Microparticles Engineer the Fate and the Effector Functions of T-Cells." Advanced Materials. 2018.

- Shashi V, Schoch K, Spillmann R, Cope H, Tan QK, Walley N, Pena L, McConkie-Rosell A, Jiang YH, Stong N, Need AC, Goldstein DB., "Undiagnosed Diseases Network. A comprehensive iterative approach is highly effective in diagnosing individuals who are exome negative." Genet Med. 2018.

- Lawless, D., Butte MJ., Savic S., "Prevalence and clinical challenges among adults with primary immunodeficiency and recombination-activating gene deficiency." 2018.

Carey, M.

- Xue Y, Pradhan SK, Sun F, Chronis C, Tran N, Su T, Van C, Vashisht A, Wohlschlegel J, Peterson CL, Timmers HTM, Kurdistani SK, Carey MF., "Mot1, Ino80C, and NC2 Function Coordinately to Regulate Pervasive Transcription in Yeast and Mammals" Mol Cell. 67(4):594-607. 2017.

Chen, J.

- Shimizu H, Langenbacher AD, Huang J, Wang K, Otto G, Geisler R, Wang Y, Chen JN., "The Calcineurin-FoxO-MuRF1 signaling pathway regulates myofibril integrity in cardiomyocytes." Elife. 2017.

- Ziyad S, Riordan JD, Cavanaugh AM, Su T, Hernandez GE, Hilfenhaus G, Morselli M, Huynh K, Wang K, Chen JN, Dupuy AJ and Iruela-Arispe ML., "A forward genetic screen targeting the endothelium reveals a regulatory role for the lipid kinase Pi4ka in myelo-and erythropoiesis." Cell Rep. 22: 1211-1224. 2018.

Chen, I.

- Khamaikawin W, Shimizu S, Kamata M, Cortado R, Jung Y, Lam J, Wen J, Kim P, Xie Y, Kim S, Arokium H, Presson AP, Chen ISY, An DS., "Modeling anti-HIV-1 HSPC based gene therapy in humanized mice previously infected with HIV-1" Molecular Therapy - Methods & Clinical Development, 9: 23-32. Dec 1 2017.

- Zhen A, Peterson C, Carrilo M, Reddy S, Youn C, Lam B, Chang N, Martin H, Rick J, Kim J, Neel N, Rezek V, Kamata M, Chen ISY, Zack JA, Kiem HP, Kitchen S., "Long-term persistence and function of hematopoietic stem cell-derived chimeric antigen receptor T cells in a nonhuman primate model of HIV/AIDS" PLoS Pathogens, 13(12): e1006753. Dec 28, 2017.

- Kamata M, Chen ISY., "Purging exhausted virus-specific CD8 T-cell phenotypes by somatic cell reprogramming" AIDS Research and Human Retroviruses, 33(S1): S59-S69. 2017.

Chow, S.

- Song, L., Ding, S., Ge, Z., Zhu, X., Qiu, C., Wang, Y., Lai, E., Yang, W., Sun, Y., Chow, S.A. and Yu, L., "Nucleoside/nucleotide reverse transcriptase inhibitors attenuate angiogenesis and lymphangiogenesis by impairing receptor tyrosine kinases signalling in endothelial cells." Br. J. Pharmacol. 10.1111/bph.14036, 2017.

Clarke, S.

- Jain, K. Jin, C., Clarke, S.G., "Epigenetic Control via Allosteric Regulation of Mammalian Protein Arginine Methyltransferases" Proc. Natl. Acad. Sci. U.S.A. 114, 10101-10106, 2017.

- Roher, A.E., Kokjohn, T.A., Clarke, S.G., Sierks, M.R., Maarouf, C.L., Serrano, G.E., Sabbagh, M.S., Beach, T.G., "APP/Aβ Structural Diversity and Alzheimer's Disease Pathogenesis" Neurochemistry International, 110, 1-13, 2017.

- Clarke, S. "The Ribosome: A Hot Spot for the Identification of New Types of Protein Methyltransfers" J Biol. Chem. 293, 2018.

- Yang, M.L., Doyle, H., Clarke, S.G., Herold, K., Mamula, M. "Oxidative Modifications in Tissue Pathology and Autoimmune Disease" Antioxidants Redox Signaling, 2018.

Clarke, C.

- Awad, A. M., Venkataramanan, S., Nag, A., Galivanche, A. R., Bradley, M. C., Neves, L., Douglass, S., Clarke, C. F., Johnson T. L., "Chromatin-remodeling SWI/SNF complex regulates coenzyme Q6 synthesis and a metabolic shift to respiration in yeast." J Biol Chem 292, 14851-14866. 2017.

- Clarke, C. F. "Insights into an ancient atypical kinase essential for biosynthesis of coenzyme Q." Cell Chemical Biology 25, 123-124. 2018.

- Awad, A. M., Bradley, M. C., Fernández-del-Rio, L., Nag, A., Tsui, H., Clarke, C. F., "Coenzyme Q10 deficiencies: Pathways in yeast and humans." Essays in Biochemistry EBC20170106, 1-16. 2018.

Clubb, R.

- Chan, AH, Yi SW, Weiner EM, Amer BR, Sue CK, Wereszczynski J, Torres J, McCammon JA, Miller LS, Jung ME, and Clubb RT., "NMR structure-based optimization of pyridazinone class Staphylococcus aureus Sortase A inhibitors." Chemical Biology and Drug Design. 90; 327-344. 2017.

- Jacobitz AW, Kattke MD, Wereszczynski J. and Clubb RT., "Sortase transpeptidases: structural biology and catalytic mechanism." Advances in Protein Chemistry and Structural Biology. 109; 223-264. 2017.

- Sjodt M, Macdonald R, Marshall JD, Clayton J, Olson JS, Phillips M, Gell DA, Wereszczynski J and Clubb RT., "Energetics underlying hemin extraction from human hemoglobin by Staphylococcus aureus." Journal of Biological Chemistry. 293; 6942-6957. 2018.

- Huang GL, Gosschalk JE, Kim YS and Clubb RT., "Stabilizing displayed proteins on vegetative Bacillus subtilis cells." Applied Microbiology and Biotechnology 102; 6547-6565. 2018.

- Chang C, Amer BR, Osipiuk J, McConnell SA, Huang I-H, Hsieh V, Fu J, Nguyen HH, Muroski J, Flores E, Loo RO, Loo JA, Putkey JA, Joachimiak A, Das A, Clubb RT and Ton-That H., "In vitro reconstitution of sortase-

catalyzed pilus polymerization reveals structural elements involved in pilin crosslinking." Proceedings of the National Academy of Sciences (USA). 115. 2018.

- McConnell SA, Amer BR, Muroski J, Fu J, Loo RO, Loo JA, Osipiuk J, Ton-That J and Clubb RT., "Protein labeling via a specific lysine-isopeptide bond using the pilin polymerizing sortase from Corynebacterium diphtheria." Journal of the American Chemical Society.140; 8420-8423. 2018.

Coller, H.

- Hiu, A.M., Mitra, M., Boymoushakian, L., and Coller, H.A., "Integrative analysis of the inter-tumoral heterogeneity of triple-negative breast cancer" Scientific Reports. 2018.

- Lee, H.N., Mitra, M., Bosompra, O., Corney, D.C., Johnson, E.L., Rashed, N., Ho, L.D., and Coller, H.A., "RECK isoforms produced via alternative polyadenylation have opposing effects on cell migration" Molecular Biology of the Cell. 2018.

- Mitra, M., Johnson, E.L., Corney, D.C., Swamy, V.S., Nersesian, L., Robinson, D.G., Taylor, D., Ambrus, A.M., Jelinek, D., Wang, W., Batista, S.L., and Coller, H.A., "Alternative polyadenylation links cell cycle to migration" Genome Biology.

- Jelinek D., Flores, A., Uebelhoer, M., Pasque, V., Plath, K., Iruela-Arispe, L., Christofk, H.R., Lowry, W.E, and Coller, H.A., "Mapping metabolism: Monitoring lactate dehydrogenase activity directly in tissue" J. Vis. 2018.

- Coller, H.A., "MYC sets a tumour-stroma metabolic loop" Nat. Cell Biol. 20 (5): 506-507. 2018.

- Coller, HA, "DNA replication licensing in stem cells: Gatekeeping the commitment to proliferation" J. Cell Biol. 2018.

- Mitra, M., Lee, H.N. and Coller, H.A., "Determining genome-wide transcript decay rates in proliferating and quiescent human fibroblasts" J. Vis. 2018.

- Mitra, M., Ho, L.D., Coller, H.A., "In vitro model of cellular quiescence" Methods Mol Biol. 1686:27-47. 2018.

- Coller, H.A., "Symposium on single cell analysis and genomic approaches" Physiological Genomics. 49(9): 491-495. 2017.

- lores, A., Schell, J., Krall, A.S., Jelinek, D., Miranda, M., Grigorian, M., Braas, D., White, A.C., Zhou, J.L., Graham, N.A., Graeber, T., Seth, P., Evseenko, D., Coller, H.A., Rutter, J., Christofk, H., and and Lowry, W.E., "Lactate dehydrogenase activity drives hair follicle stem cell activation" Nature Cell Biology. 19, 1017-1026. 2017.

- Coller, H.A. and Desai, A., "Cell cycle, cell division and cell death" Molecular Biology of the Cell. 28(6):693-694. 2017.

- Johnson, E, L., Robinson, D.G., and Coller, H.A., "Widespread changes in mRNA stability contribute to quiescence-specific gene expression patterns in a fibroblast model of quiescence" BMC Genomics. 18(1):123. 2017.

De Robertis, E.

- Ding, Y., Ploper, D., Sosa, E.A., Colozza, G., Moriyama, Y., Benitez, M.D.J., Zhang, K., Merkurjev, D. and De Robertis, E.M., "Spemann organizer transcriptome induction by early b-Catenin, Wnt, Nodal and Siamois signals in Xenopus laevis." Proc. Natl. Acad. Sci. USA 114, E3081-E3090. 2017.

- De Robertis, E.M., Moriyama, Y. and Colozza, G., "Generation of animal form by the Chordin/Tolloid/BMP gradient: 100 years after D'Arcy Thompson." Dev. Growth Differ. 59, 580-592. 2017.

- Kirsch, N., Chang, L.S., Koch, S., Glinka, A., Dolde, C., Colozza, G., Benitez, M.D.J., De Robertis, E.M. and Niehrs, C., "Angiopoietin-like 4 is a Wnt signaling antagonist that promotes LRP6 turnover." Dev. Cell 43, 71-82. 2017.

- Moriyama, Y. and De Robertis, E.M., "Embryonic regeneration by relocalization of the Spemann organizer during twinning in Xenopus." Proc. Natl. Acad. Sci. USA, 115, E4815-E4822. 2018.

- Albrecht, L., Ploper, D., Tejeda-Munoz, N and De Robertis, E.M., "Arginine methylation is required for canonical Wnt signaling and endolysosomal trafficking." Proc. Natl. Acad. Sci. USA, 115, E5317-E5325. 2018.

Eisenberg, D.

- David S. Eisenberg & Michael R. Sawaya, "Taming tangled tau." Nature, 547, 170-171. 2017.

- Smriti Sangwan, Anni Zhao, Katrina L. Adams, Christina K. Jayson, Michale R. Sawaya, Elizabeth L. Guenther, Albert C. Pan, Jennifer Ngo, Destaye M. Moore, Angela B Soriaga, TD Do, Lukasz Goldschmitdt, Rebecca Nelson, MT Bowers, Carla M Koehler, DE Shaw, BG Novitch, David Eisenberg, "Atomic structure of a toxic, oligomeric segment of SOD1 linked to amyotrophic lateral sclerosis (ALS)" PNAS. 114, 8770-8775. 2017.

- Timothy D. Kurt, Patricia Aguilar-Calvo, Lin Jiang Jose A. Rodriguez, Nazilla Alderson, David S. Eisenberg and Christina Sigurdson., "Asparagine and glutamine ladders promote cross-species prion conversion" J Biol Chem, 292, 19076-19086. 2017.

- Pascal Krotee, Sarah L. Griner, Michael R. Sawaya, Duilio Cascio, Jose A. Rodriguez, Dan Shi, Stephan Philipp, Kevin Murray, Lorena Saelices Gomez, Ji Lee, Paul Seidler, Charles G. Glabe, Lin Jiang, Tamir Gonen, David S. Eisenberg., "Common fibrillar spines of amyloid-β and human islet amyloid polypeptide revealed by microelectron diffraction and structure-based inhibitors" J Biol Chem. 293, 2888–2902. 2018.

- Hanczyc, Piotr; Mikhailovsky, Alexander; Boyer, David; Sawaya, Michael; Heeger, Alan; Eisenberg, David., "Ultrafast Time-Resolved Studies on Fluorescein for Recognition Strands Architecture in Amyloid Fibrils" J Phys Chem B. 122(1):8-18. 2018.

- Gallagher-Jones M, Glynn C, Boyer DR, Martynowycz MW, Hernandez E, MiaoJ, Zee CT, Novikova IV, Goldschmidt L, McFarlane HT, Helguera GF, Evans JE, Sawaya MR, Cascio D, Eisenberg DS, Gonen T, Rodrigeuz JA., "Sub-ångström cryo-EM structure of a prion protofibril reveals a polar clasp" Nature Structural & Molecular Biology.131-134. 2018.

- Michael P. Hughes, Michael R. Sawaya, David R. Boyer, Lukasz Goldschmidt, Jose A. Rodriguez, Duilio Cascio, Lisa Chong, Tamir Gonen, and David S. Eisenberg, "Atomic structures of low-complexity protein segments reveal kinked β sheets that assemble networks" Science, 359:698-701. 2018.

- Seidler PM, Boyer DR, Rodriguez JA, Sawaya MR, Cascio D, Murray K, Gonen T, Eisenberg DS., "Structure-based inhibitors of tau aggregation" Nature Chem, 10:170-176. 2018.

- Do TD, Sangwan S, de Almeida NEC, Llitchev Al, Giammona M, Sawaya MR, Buratto SK, Eisenberg DS, Bowers MT., "Distal amyloid β-protein fragments template amyloid assembly" Protein Science.

- Smriti Sangwan, Michael R. Sawaya, Kevin A. Murray, Michael P. Hughes and David S. Eisenberg, "Atomic structures of corkscrew-forming segments of SOD1 reveal varied oligomer conformations" Protein Science. 2018.

- Guenther EL, Ge P, Trinh H, Sawaya MR, Cascio D, Boyer DR, Gonen T, Zhou ZH, Eisenberg D, "Atomic-level evidence for packing and positional amyloid polymorphism by segment from TDP-43 RRM2" NSMB 25:311-319. 2018.

- Lorena Saelices, Stuart A. Sievers, Michael R. Sawaya, David S. Eisenberg, "Crystal structures of amyloidogenic segments of human transthyretin" Protein Science. 2018.
- Elizabeth L. Guenther, Qin Cao, Hamilton Trinh, Jiahui Lu, Michael R. Sawaya, Duilio Cascio, David R. Boyer, Jose A. Rodriguez, Michael P. Hughes, and David S. Eisenberg, "Atomic structures of TDP-43 LCD segments and insights into reversible or pathogenic aggregation" NSMB, 25: 463-471. 2018.
- L. Saelices, K. Chung, J. H. Lee, M. D. Benson, J. Bijzet, W. Cohn, J. P. Whitelegge, D. S. Eisenberg, "Amyloid seeding of transthyretin by ex vivo cardiac fibrils: inhibition and implications" in press, PNAS.

- David S. Eisenberg and Michael R. Sawaya, "Structural Studies of Amyloid Proteins at the Molecular Level" *Rev. Biochem*. 86: 3.1 - 3.27. 2017.

- Goedert, Crowther and Eisenberg, "Propagation of Tau Aggregates and Neurodegeneration" *Annual Review of Neuroscience*, 40:189-210. 2017.

- Jose Rodriguez, David Eisenberg, and Tamir Gonen, "Taking the measure of MicroED" *Curr. Opin. Struct. Biol.* 46, 79–86. 2017.

- David Eisenberg, "How Hard It Is Seeing What Is In Front of Our Eyes" *Cell*, *174*. 2018.

- Peter B. Moore, David Eisenberg, & Jason Kahn, "Biographical Memoir of Donald M. Crothers," Biographical Memoirs, *National Academy of Sciences*. 2018.

Ernst, J.

- Sereti, K.I., Nguyen, N.B., Kamran, P., Zhao, P., Ranjbarvaziri, S., Park, S., Sabri, S., Engel, J.L., Sung, K., Kulkarni, R.P., Ding, Y., Hsiai, T.K., Plath, K., Ernst, J., Sahoo, D., Mikkola, H.K.A., Iruela-Arispe, M.L., Ardehali, R., "Analysis of cardiomyocyte clonal expansion during mouse heart development and injury." Nat Commun. 9, 754. 2018.

- Ernst, J., Kellis, M., "Chromatin-state discovery and genome annotation with ChromHMM" Nat Protoc. 12, 2478-2492, 2017.

- Liu, Y., Sarkar, A., Kheradpour, P., Ernst, J., Kellis, M. "Evidence of reduced recombination rate in human regulatory domains" Genome Biol. 18, 193, 2017.

Faull, K.

- Mohler, Kyle, Rebecca Mann, Tammy Bullwinkle, Kyle Hopkins, Lin Hwang, Noah Reynolds, Brandon Gassaway, Hans-Rudolph Aerni, Jesse Rinehart, Michael Polymenis, Kym Faull, Michael Ibba., "Editing of misaminoacylated tRNA controls the sensitivity of amino acid stress responses in Saccharomyces cerevisiae." Nucleic Acids Research. 2017.

- Mitchell, Anthony, Christina Tam, Derek Elli, Thomas Charlton, Patrick Osei-Owusu, Farbod Fazlollahl, Kym F. Faull, Olaf Schneewind., "Glutathionylation of Yersinia pestis LcrV and its effects on plague pathogenesis." mBio. 2017.

- Le, Thuc, Soumya Poddar, Joseph Capri, Evan Abt, Woosuk Kim, Liu Wei, Nhu Uong, Chloe Cheng, Daniel Brass, Mina Nikanjam, Peter Rix, Daria Merkurjev, Jesse Zaretsky, Harley Kornblum, Antoni Ribas, Harvey Herschman, Julian Whitelegge, Kym Faull, Timothy Donahue, Johannes Czernin, and Caius Radu., "ATR inhibition facilitates targeting of leukemia dependence on convergent nucleotide biosynthetic pathways." Nature Communications. 2017.

- Waldron, Richard T., Hsin-Yuan Su, Joseph Capri, Whitaker Cohn, Julian P. Whitelegge, Kym F. Faull, Sugunadevi Sakkiah, Ravinder Abrol, Wei Yang, Bo Zhou, Michael Freeman, Stephen J. Pandol and Aurelia Lugea., "XBP1 Protects Against Protein Folding Disorders Caused by Ethanol in the Endoplasmic Reticulum of the Pancreatic Acinar Cell. Cellular and Molecular Gastroenterology and Hepatology." Editorial comment: Grey, M.J., "Proteomic Study Defines How Alcohol Alters ER Structure and Redox Proteome to Trigger ER Stress and Acinar Cell Pathology in Pancreatitis." Cellular and Molecular Gastroenterology and Heptology, 324. 2018.

- Wang, Jiani, Sally Ghali, Chunlan Xu, Caroline C. Mussatto, Christina Ortiz, Elaine C. Lee, Diana H. Tran, Jonathan P. Jacobs, Venu Lagishetty, Kym F. Faull, Travis Moller, Maura Rossetti, Xinhua Chen, Ciaran P. Kelly, and Hon Wai Koon., "Ceragenin CSA13 ameliorates C. difficile-associated colitis in mice via modulation of the intestinal microbiome and metabolites." Gastroenterology. 2018.

- Lee, Percy, William H. McBride, Mike W. Xie, Josephine A. Ratikan, Care Felix1; Ewa D. Micewicz, Lin Hwang, Kym F. Faull, James W. Sayre,Sara Hurvitz, John A. Glaspy, Begonýa Comin-Anduix, Sandra Demaria, Silvia C. Formenti, and Dörthe Schaue., "The Immune Landscape In Metastatic Breast Cancer Patients Following Focal Irradiation And Systemic TGFb Blockade." Clinical Cancer Research

- Tanphaichitr, Nongnuj, Kessiri Kongmanas, Kym F Faull, Julian Whitelegge, Federica Compostella, Naoko Goto-Inoue, James-Jules Linton, Brendon Doyle, Richard Oko, Hongbin Xu, Luigi Panza, Arpornrad Saewu., "Properties, metabolisms and roles of sulfogalactosylglycerolipid in male reproduction." Progress in Lipid Research.

Gelbart, W.

- C. Beren, L. L. Dreesens, K. N. Liu, C. M. Knobler, and W. M. Gelbart, "The Effect of RNA Secondary Structure on the Self-Assembly of Viral Capsids," Biophys. J. 113, 339-47. 2017.

- R. F. Garmann, C. M. Knobler, and W. M. Gelbart, "Protocol for the efficient cell-free synthesis of cowpea chlorotic mottle virus-like particles containing heterologous RNAs," in Virus-Derived Nanoparticles for Advanced Technologies: Methods and Protocols, edited by C. Wege and G. Lomonossoff, Methods in Molecular Biology, vol. 1776, Springer Nature. 2018.

- Yi-Ju Chen, D. Wu, W. M. Gelbart, C. M. Knobler, R. Phillips, and W. Kegel, "Two-stage Dynamics of In Vivo Bacteriophage Genome Ejection," Phys. Rev. X 8, 021029/1-8. 2018.

- C. Beren, K. N Liu, L. L. Dreesens, C. M. Knobler, and W. M. Gelbart, "PolyU synthesis and fractionation," Bio-protocol. 2018.

- Biddlecome, H. H. Habte, K. M. McGrath, S. Sambanthamoorthy, M. Wurm, C. M. Knobler, I. Lorenz, J. B. Leppard, M. Lasaro, K. Elbers, and W. M. Gelbart, "Delivery of Self-Amplifying RNA Vaccines in In Vitro Reconstituted Virus-Like Particles," under review by ACS Nano. 2018.

- S. Chung, E. Lerner, Y. Jin, S. Kim, Y. Alhadid, L. W. Grimaud, I. X. Zhang, C. M. Knobler,W. M. Gelbart and S. Weiss, "The effect of macromolecular crowding on single-round transcription by E. coli RNA polymerase," under review by Nature Communications. 2018.

Gera, J.

- Lee J, Shi Y, Vega M, Yang Y, Gera J, Jung ME, Lichtenstein A., "Structure-activity relationship study of small molecule inhibitors of the DEPTOR-mTOR interaction." Bioorg Med Chem Lett. 27(20):4714-4724. 2017.

- Holmes B, Benavides-Serrato A, Freeman RS, Landon KA, Bashir T, Nishimura RN, Gera J., "mTORC2/AKT/HSF1/HuR constitute a feed-forward loop regulating Rictor expression and tumor growth in glioblastoma." Oncogene. 37(6):732-743. 2018.

Goldstein, A.

- Navarro HI, Goldstein AS., "HoxB13 mediates AR-V7 activity in prostate cancer" PNAS USA, 115:6528-9. 2018.

Gonen, T.

- Purdy M., Shi D., Hattne J., Chrustowicz J., Gonen T* and Yeagar M*, "MicroED structures of HIV-1 Gag CTD-SP1 reveal binding interactions with the maturation inhibitor bevirimat." bioRxiv. 2018.

- a J., Lei H and Gonen T*., "A conformational change in the N-terminus of SLC38A9 signals mTORC1 activation." 2018.

- Ma J., Lei H., Reyes FE., Sanchez-Martinez S., Sarhan M. and Gonen T*. "Stereoselectivity for D- and L- amino acids in the sodium/alanine symporter AgcS." boiRxiv. 2018.

- Lei HT, Ma J, Sanchez Martinez S. and Gonen T*., "Crystal structure of arginine-bound lysosomal transporter SLC38A9 in the cytosol-open state." Nature Structural and Molecular Biology. 25(6): 522 - 527. 2018.

- Liu S. and Gonen T*, "Na+ partition into the selectivity filter of a tetrameric ion channel". Communications Biology 1: 38. 2018.

- Hattne J, Shi D, Glynn C, Zee CT, Gallagher-Jones M, Martynowycz MW, Rodriguez JA and Gonen T*, "Analysis of global and site-specific radiation damage in cryo-EM" Structure. 26(5): 759 - 766. 2018.

- Seidler PM, Boyer DR, Rodriguez JA, Sawaya MR, Cascio D, Murray K, Gonen T and Eisenberg DS., "Structure-based inhibitors of tau aggregation." Nature Chemistry 10 (2): 170 - 176. 2018.

- Guenther EL, Ge P, Trihn H, Sawaya MR, Cascio D, Boyer DR, Gonen T, Zhou ZH, Eisenberg DS., "Atomic level evidence for packing and positional amyloid polymorphism by segment from TDP-43 RRM2." Nature Structural and Molecular Biology 25(4): 311 - 319. 2018.

- Gallagher-Jones G., Glynn C., Hernandez E., Miao J., Boyer D., Zee C., Martynowycz MW., McFarlane HT., Helguera GF., Sawaya MR., Cascio D., Eisenberg D., Gonen T. and Rodriguez JA., "Sub-Ångstrom cryoEM structure of a prion protofibril from nano-scale crystals" Nature Structural and Molecular Biology 25:131 – 134. 2018.

- Liu Y., Gonen S., Gonen T. and Yeates TO., "Near-atomic cryo-EM imaging of a small protein displayed on a designed scaffolding system." Proceedings of the National Academy of Sciences 115(13): 3362 – 3367. 2018.

- Hughes MP., Sawaya MR., Goldschmidt L., Rodriguez JA., Cascio D., Gonen T and Eisenberg DS., "Atomic structures of low-complexity protein segments reveal kinked beta sheets that assemble networks." Science 359: 698 – 701. 2018.

- Krotee P, Griner SL, Sawaya MR, Cascio D, Rodriguez JA, Shi D, Philipp S, Murray K, Saelices L, Lee J, Seidler P, Glabe CG, Jiang L, Gonen T, Eisenberg DS., "Common fibrillary spines of amyloid-beta and human islet amyloid polypeptide revealed by microelectron diffraction and structure-based inhibitors." Journal of Biological Chemistry 293 (8):2888 – 2902. 2018.

- Cruz MJ., Martynowycz MW., Hattne J., Shi D. and Gonen T* A method to minimize condenser lens- induced hysteresis effects in a JEOL JEM-3200FSC microscope to enable stable cryoEM low-dose operations. BioRxiv. 2018.

- Martynowycz M. and Gonen T*. "From electron crystallography of 2D crystals to MicroED of 3D crystals." Current Opinion in Colloid & Interface Science. 34:9 – 16. 2018.

- Nannenga B and Gonen T*. "MicroED: A versatile cryoEM method for structure determination." Emerging Topics in life Sciences. 2018.

Gunsalus, R.

- Briege, A., C.M. Oikonomou, Y-W Chang, Kjaer,A., A.N. Huang, K.W. Kim, D. Ghosal, D. Kenney, R.O.O. Loo, R.P. Gunsalus, and Grant J. Jensen., "Morphology of the archaellar motor and associated cytoplasmic cone in Thermococcus kodakaraensis." EMBO Rep. 2017.

- Sieber, J.R., M.J. McInerney, N.Muler, B. Schink, R.P. Gunsalus and C.M. Plugge., "Methanogenesis: syntrophic metabolism." In: K. N. Timmis, V. de Lorenzo, T. McGenity, and J. R. van der Meer (eds.): Handbook of Hydrocarbon and Lipid Microbiology. Hydrocarbons, Oils, Lipids: Diversity, Properites, and Formation, Springer-Verlag GmbH. Heidelberg, Germany. Chapter 21, pp. 322-335. 2018.

- Hoehler, T.M., N.A. Losey, R.P. Gunsalus and M.J. McInerney., "Environmental constrains that limit methanogenesis." In: K. N. Timmis, V. de Lorenzo, T. McGenity, and J. R. van der Meer (eds.): Handbook of Hydrocarbon and Lipid Microbiology. Hydrocarbons, Oils, Lipids: Diversity, Properites, and Formation, Springer-Verlag GmbH, Heidelberg, Germany. Chapter 21, pp. 322-335. 2018.

- Lauren E. Cook, L.E., S. Gang, A. Ihlan, M. Maune, R.S. Tanner, M.J. McInerney, G. Weinstock, E.A. Lobos and R.P. Gunsalus., "Genome sequence of Acetomicrobium hydrogeniformans OS1." J.Bacteriol. 2018.

Guo, F.

- Lal, S., Comer, J.M., Konduri, P.C., Shah, A., Wang, T., Lewis, A., Shoffner, G., Guo, F., and Zhang, L., "Heme promotes transcriptional and demethylase activities of Gis1, a member of the histone demethylase JMJD2/KDM4 family", Nucleic Acids Res. 46:215-228. 2017.

- Shoffer, G.M., Wang, R., Podell, E., Cech, T.R., and Guo, F., "In crystallo selection to establish new RNA crystal contacts", Structure DOI:10.1016/j.str.2018.05.005. 2018.

Guo, M.

- Kandul, N. Guo, M. and Hay, B., "A positive readout single transcript reporter for site specific mRNA cleavage" PeerJ, July 20. 2017.

- Hay BA, Li J, Guo M., "Vectored gene delivery for lifetime animal contraception: overview and hurdles to implementation." Theriogenology. 112:63-74. 2018.

Gwack, Y.

- Woo JS, Srikanth S, Kim KD, Leung J, Elsaesser H, Lu J, Pellegrini M, Brooks DG, Sun Z, Gwack Y. "CRACR2A-mediated T cell receptor signaling promotes local effector Th1 and Th17 responses." Journal of Immunology. In press.

Hallem, E.

- Ruiz, F., Castelletto, M.L., Gang, S.S., and Hallem, E.A., "Experience-dependent olfactory behaviors of the parasitic nematode Heligmosomoides polygyrus" PLoS Pathog. 2017.

- Gang, S.S., Castelletto, M.L., Bryant, A.S., Yang, E., Mancuso, N., Lopez, J.B., Pellegrini, M., and Hallem, E.A., "Targeted mutagenesis in a human-parasitic nematode" PLoS Pathog. 2017.

- Guillermin, M.L., Carrillo, M.A., and Hallem, E.A., "A single set of interneurons drives opposite behaviors in C. elegans" Curr Biol 27, 2630-2639. 2017.

Harran, P.

- Curtin, B., Manoni, F., Park, J., Sisto, L., Lam, Y., Gravel, M., Roulston, A., Harran, P., "Assembly of Complex Macrocycles by Incrementally Analgamating Unprotected Peptides with a Designed Four-Armed Insert." J. Org. Chem., 83(6): 3090-3108. 2018.

- Manoni, F., Rumo, C., Li, L., Harran, P., "Unconventional fragment usage enables a concise total synthesis of (-)-callyspongiolide." J. Am. Chem. Soc., 140(4): 1280-1284. 2018.

Hartenstein, V.

- Ngo KT, Andrade I, Hartenstein V., "Spatio-temporal pattern of neuronal differentiation in the Drosophila visual system: A user's guide to the dynamic morphology of the developing optic lobe" Dev Biol 428, 1-24.2017.

- Lovick JK, Omoto JJ, Ngo KT, Hartenstein V., "Development of the anterior visual input pathway to the Drosophila central complex" J Comp Neurol 525, 3458-3475. 2017.

- Hartenstein V, Omoto JJ, Ngo KT, Wong D, Kuert PA, Reichert H, Lovick JK, Younossi-Hartenstein A., "Structure and development of the subesophageal zone of the Drosophila brain. I. Segmental architecture, compartmentalization, and lineage anatomy" J Comp Neurol 526, 6-32. 2018.

- Hartenstein V, Takashima S, Hartenstein P, Asanad S, Asanad K., "bHLH proneural genes as cell fate determinants of entero-endocrine cells, an evolutionarily conserved lineage sharing a common root with sensory neurons" Dev Biol 431, 36-47. 2017.

- Boyan G, Liu Y, Khalsa SK, Hartenstein V., "A conserved plan for wiring up the fan-shaped body in the grasshopper and Drosophila" Dev Genes Evol 227, 253-269. 2017.

- Kendroud S, Bohra AA, Kuert PA, Nguyen B, Guillermin O, Sprecher SG, Reichert H, VijayRaghavan K, Hartenstein V., "Structure and development of the subesophageal zone of the Drosophila brain. II. Sensory compartments" J Comp Neurol 526, 33-58. 2018.

- Donlea JM, Pimentel D, Talbot CB, Kempf A, Omoto JJ, Hartenstein V, Miesenböck G., "Recurrent Circuitry for Balancing Sleep Need and Sleep" Neuron 97, 378-389. 2018.

- Hartenstein, V, Giangrande A., "Connecting the nervous and the immune systems in evolution" Comm Biology 1, Article number: 64. 2018.

- Del Mar De Miguel-Bonet M, Ahad S, Hartenstein V., "Role of neoblasts in the patterned postembryonic growth of the platyhelminth Macrostomum lignano" Neurogenesis Pages e1469944-1 e1469944-9 posted online: 30 Apr 2018, Published online: 19 Jul 2018.

- Hartenstein V., "Development of the Nervous System of Invertebrates" In: (Byrne JH, ed.) The Oxford Handbook of Invertebrate Neurobiology. Published online: June 2018.

Hevener, A.

- Herbst A, Widjaja K, Nguy B, Lushaj EB, Moore TM, Hevener AL, McKenzie D, Aiken JM, Wanagat J., "Digital PCR Quantitation of Muscle Mitochondrial DNA: Age, Fiber Type, and Mutation-Induced Changes" J Gerontol 2(10):1327-1333. 2017.

- Song Y, Cho M, Brennan K, Chen BH, Song Y, Manson, JE, Hevener AL, You N-C, Butch AW, and S Liu.,"Relationships of sex hormone levels with leukocyte telomere length in Black, Hispanic, and Asian/Pacific Islander postmenopausal women" J of Diabetes Aug 25, (6):502-511. 2017.

- Zhou Z, Ribas V, Rajbhandari P, Drew BG, Moore TM, Fluitt AH, Reddish BR, Whitney KA, Georgia S, Vergnes L, Reue K, Liesa M, Shirihai O, van der Bliek AM, Chi NW, Mahata SK, Tiano JP, Hewitt SC, Tontonoz P, Korach KS, Mauvais-Jarvis F, and AL Hevener., "Estrogen receptor alpha protects pancreatic β-cells from apoptosis by preserving mitochondrial function and suppressing endoplasmic reticulum stress" J of Biol Chem. Mar 30;293(13):4735-4751. 2018.

- Norheim F, Bjellaas T, Hui ST, Chella Krishnan K, Lee J, Gupta S, Pan C, Hasin-Brumshtein Y, Parks BW, Li D, Bui H, Mosier M, Wu Y, Huertas-Vazquez A, Hazen SW, Gundersen TE, Mehrabian M, Tang W, Hevener AL, Drevon CA, Lusis AJ., "Genetic, dietary, and sex-specific regulation of hepatic ceramides and relationship between hepatic ceramides and insulin resistance" J Lipid Res. Epub ahead of print. 2018.

- Zhong, Z, Liang S, Sanchez-Lopez E, He, Feng, Shalapour S, Lin X, Wong J, Ding S, Seki E, Schnabl B, Hevener AL, Greenberg HB, Kisseleva T, and M Karin., "New mitochondrial DNA synthesis enables NLRP3 inflammasome activation" Nature. Epub ahead of print. 2018.

Hill, K.

- Shimogawa, M.S., Ray, S., Kisalu, N., Zhang, Y., Geng, Q., Ozcan, A., Hill, K.L. "Parasite motility is critical for virulence of African trypanosomes" Sci Rep. 9122, 2018.

- Imhof, S., Hill, K.L., "Dynein-based motility of pathogenic protozoa" Mechanics, Dysfunction and Disease, V2, 418-435, 2018.

Hirsch, A.

- Martínez-Hidalgo P, Hirsch AM., "The nodule microbiome: N2-fixing rhizobia do not live alone" Phytobiomes; 1-52. 2017.

- Veliz EA, Martínez-Hidalgo P, Hirsch AM., "Chitinase-producing organisms and their role in biocontrol" AIMS Microbiol. 3(3): 689-705. 2017.

- Benito P, Alonso-Vega P, Aguado C, Luján R, Anzai Y, Hirsch AM, Trujillo MR., "Monitoring the colonization and infection of legume nodules by Micromonospora in co-inoculation experiments with rhizobia" Scientific REPoRTs|7: 11051. 2017.

- Khan N, Maymon M, Hirsch AM., "Combating Fusarium infection using Bacillus-based antimicrobials" Microorganisms. 5, 75. 2017.

- Vonshak A, Menachem S, Hirsch AM, Gillor O., "The impact of perennials and slope face on bacterial diversity in arid soil" Soil Research. 2017.

- Rojas-Rojas FU, Yanet Tapia-García E, Maymon M, Humm E, Huntemann M, Clum A, Pillay M, Palaniappan K, Varghese N, Mikhailova N, Stamatis D, Reddy TBK, Markowitz V, Ivanova N, Kyrpides K, Woyke T, Shapiro N, Hirsch AM, Estrada-de los Santos P., "Draft genome of Paraburkholderia caballeronis TNe-841T, a free-living, nitrogen-fixing, tomato plant-associated bacterium" Stand. Genom. Sci. 2:80. 2017.

- Garcia DE, Lopez BR, de-Bashan LE, Hirsch AM, Maymon M, Bashan Y., "Functional metabolic diversity of the bacterial community in undisturbed resource island soils under mesquite trees in the southern Sonoran Desert" Land Degrad. Dev., 2018.

- Galaviz C, Lopez BR, de-Bashan LE, Hirsch AM, Maymon M, Bashan Y., "Root growth improvement of mesquite seedlings and bacterial rhizosphere and soil community changes are induced by inoculation with plant growth-promoting bacteria and promote restoration of eroded desert soil" Land Degrad. Dev. 2018.

- Rojas-Rojas FU, Yanet Tapia Garcia E, Herrera IA, Maymon M, Humm E, Huntemann M, Clum A, Manoj Pillay M, Palaniappan K, Varghese N, Mikhailova N, Stamatis S, Reddy TBK, Ivanova N, Kyrpides N, Woyke T, Shapiro N, Hirsch AM, Ibarra JA, Estrada de los Santos P., "Improved, high-quality permanent draft genome of Burkholderia cenocepacia TAtl-371, a strain from the Burkholderia cepacia complex with a broad antagonistic spectrum" Stand. Genom. Sci. 2017.

- Rojas-Rojas FU, Salazar Gomez A, Vargas Díaz ME, Vásquez Murrieta MS, Hirsch AM, De Mot R, Ghequire MGK, Ibarra JA, Estrada de los Santos P., "Broad-spectrum antimicrobial activity by Burkholderia cenocepacia TAtl-371, a strain isolated from the tomato rhizosphere." Microbiology. 2018.

Hoffmann, A.

- Mognol, G.P., Spreafico, R., Wong, V., Scott-Browne, J., Togher, S., Hoffmann, A., Hogan, P., Rao, A., Trifari S., "Exhaustion-associated regulatory regions in CD8+ tumor-infiltrating T cells." Proc. Natl. Acad. Sci. USA, 114 (13), E2776-E2785. 2017.

- Roy, K., Shokhirev, M.N., Mitchell, S., Hoffmann, A., "Deriving Quantitative Cell Biological Information from Dye-Dilution Lymphocye Proliferation Experiments." Methods Mol Biol. 1707:81-94.

- Mitchell, S., Roy, K., Zangle, T.A., Hoffmann, A., "Nongenetic origins of cell-to-cell variability in B lymphocyte proliferation." Proc. Natl. Acad. Sci. USA, 115(12): E2888-E2897. 2018.

Houk, K.

- Adam Simon, Yu-hong Lam, and K. N. Houk: "Origins of Stereoselectivity of Enamine-Iminium-Activated Nazarov Cyclozations by Vicinal Diamines," J. Org. Chem., 82, 8186-8190. 2017.

- Lizhen Fang, Tyler G. Saint-Denis, Buck L. H. Taylor, Seth Ahlquist, Kai Hong, SaiSai Liu, LiLi Han, K. N. Houk, and Jin-Quan Yu: "Experimental and Computational Development of a Conformationally Flexible Template for the meta-C-H Functionalization of Benzoic Acid," J. Am. Chem. Soc., 139, 10702-10714. 2017.

- Brian J. Levandowski, Trevor A. Hamlin, F. Matthias Bickelhaupt, and K. N. Houk: "Role of Orbital Interactions and Activation Strain (Distortion Energies) on Reactivities in the Normal and Inverse Electron-Demand Cycloadditions of Strained and Unstrained Cycloalkenes," J. Org. Chem., 82, 8668-8675. 2017.

- Cyndi Qixin He, Adam Simon, Yu-hong Lam, Andrew P. J. Brunskill, Nobuyoshi Yasuda, Jiajing Tan, Alan M. Hyde, Edward C. Sherer, and K. N. Houk: "Model for the Enantioselectivity of Asymmetric Intramolecular Alkylations by Bis-Quaternized Cinchona Alkaloid-Derived Catalysts," J. Org. Chem., 82, 8654-8650. 2017.

- Chen-Chen Zhou, M. Frederick Hawthorne, K. N. Houk, and Gonzalo Jimenez-Oses: "Multiple Mechanisms for the Thermal Decomposition of Metallaisoxazolin-5-ones from Computational Investigations," J. Org. Chem., 82, 8438-8443. 2017.

- Yao Li, Guo-Hui Yang, Cyndi Qixin He, Xin Li, K. N. Houk, and Jin-Pei Cheng: "Chirality Sensing of a-Hydroxyphosphonates by N-tert-Butyl Sulfinyl Squaramide," Org. Lett., 19, 4191-4194. 2017.

- Amy E. Fraley, Marc Garcia-Borras, Ashootosh Tripathi, Dheeraj Khare, Eduardo V. Mercado-Marin, Hong Tran, Qingyun Dan, Gabrielle P. Webb, Katherine R. Watts, Phillip Crews, Richmond Sarpong, Robert M. Williams, Janet L. Smith, K. N. Houk, and David H. Sherman: "Function and Structure of MalA/MalA', Iterative Halogenases for Late-Stage C-H Functionalization of Indole Alkaloids," J. Am. Chem. Soc., 139, 12060-12068. 2017.

- Jiyong Park, Sunny Chun, Thomas A. Bobik, Kendall N. Houk, and Todd O. Yeates: "Molecular Dynamics Simulations of Selective Metabolite Transport across the Propanediol Bacterial Microcompartment Shell," J. Phys. Chem. B, 121, 8149-8154. 2017.

- Jason S. Fell, Steven A. Lopez, Cody J. Higginson, M. G. Finn, and K. N. Houk: "Theoretical Analysis of the Retro-Diels-Alder Reactivity of Oxanorbornadiene Thiol and Amine Adducts," Org. Lett., 19, 4504-4507. 2017.

- Fang Liu, Yong Liang, and K. N. Houk: "Bioorthogonal Cycloadditions: Computational Analysis with the Distortion/Interaction Model and Prediction of Reactivities," Acc. Chem. Res., 50, 2297-2308. 2017.

- Yuan Gao, K. N. Houk, Chun-Yu Ho, and Xin Hong: "The Mechanism and Regioselectivities of (NHC)nickel(II)hydride-catalyzed Cycloisomerization of Dienes: A Computational Study," Org. Biomol. Chem., 15, 7131-7139. 2017.

- Isaac Chogli, Pradipta Das, Jason S. Fell, Kevin A. Scott, Mark N. Crawford, K. N. Houk, and Jon T. Njardarson: "New Class of Anion-Accelerated Amino-Cope Rearrangements as Gateway to Diverse Chiral Structures," J. Am. Chem. Soc., 139, 13141-13146. 2017.

- Shuo-Qing Zhang, Buck L. H. Taylor, Chong-Lei Ji, Yuan Gao, Michael R. Harris, Luke E. Hanna, Elizabeth R. Jarvo, K. N. Houk, and Xin Hong: "Mechanism and Origins of Ligand-Controlled Stereoselectivity of Ni-Catalyzed Suzuki-Miyaura Coupling with Benzylic Esters: A Computational Study," J. Am. Chem. Soc., 139, 12994-13005. 2017.

- Katharina Marie Wenz, Peng Liu, and K. N. Houk: "Intramolecular C-H Activation Reactions of Ru(NHC) Complexes Combined with H2 Transfer to Alkenes: A Theoretical Elucidation of Mechanisms and Effects of Ligands on Reactivities," Organometallics, 36, 3613-3623. 2017.

- Aaron A. Koch, Douglas A. Hansen, Vikram V. Shende, Lawrence R. Furan, K. N. Houk, Gonzalo Jimenez-Oses, and David H. Sherman: "A Single Active Site Mutation in the Pikromycin Thioesterase Generates a More Effective Macrocyclization Catalyst," J. Am. Chem. Soc., 139, 13456-13465. 2017.

- Masao Ohashi, Fang Liu, Yang Hai, Mengbin Chen, Man-cheng Tang, Zhongyue Yang, Michio Sato, Kenji Watanabe, K. N. Houk, and Yi Tang: "SAM-dependent Enzyme-Catalysed Pericyclic Reactions in Natural Product Biosynthesis," Nature, 549, 502-506. 2017.

- Rajat Maj, Pier Alexandre Champagne, K. N. Houk, and Steven E. Wheeler: "Activation Mode and Origin of Selectivity in Chiral Phosphoric Acid-Catalyzed Oxacycle Formation by Intramolecular Oxetane Desymmetrizations," ACS Catal., 7, 7332-7339. 2017.

- Jessica M. Grandner, Huiling Shao, Robert H. Grubbs, Peng Liu, and K. N. Houk: "Origins of the Stereoretentive Mechanism of Olefin Metathesis with Ru-Dithiolate Catalysts," J. Org. Chem., 82, 10595-10600. 2017.

- Maruthi Kumar Narayanam, Gaoyuan Ma, Pier Alexandre Champagne, Kendall N. Houk, and Jennifer M. Murphy: "Synthesis of [18F]Fluoroarenes by Nucleophilic Radiofluorination of N-Arylsydnones," Angew. Chem. Int. Ed., 56, 13006-13010. 2017.

- Pier Alexandre Champagne and K. N. Houk: "Influence of Endo- and Exocyclic Heteroatoms on Stabilities and 1,3-Dipolar Cycloadditions Reactivities of Mesoionic Azomethine Ylides and Imines," J. Org. Chem., 82, 10980-10988. 2017.

- Cyndi Qixin He, Peiyuan Yu, Yu-hong Lam, and K. N. Houk: "Origins of Stereoselectivity in Chiral Aminoalcohol Catalysis of Oxyallyl Cation-Indole Reactions," Org. Lett., 19, 5685-5688. 2017.

- Patrick Montgomery, Jessica M. Grandner, K. N. Houk, and Robert H. Grubbs: "Synthesis and Evalution of Sterically Demanding Ruthenium Dithiolate Catalysts for Stereoretentive Olefin Metathesis," Organometallics, 36, 3940-3953. 2017.

- Bryan J. Simmons, Marie Hoffmann, Pier Alexandre Champagne, Elias Picao, Katsuya Yamakawa, Lucas A. Morrill, K. N. Houk, and Neil K. Garg: "Understanding and Interrupting the Fischer Azaindolization Reaction," J. Am. Chem. Soc., 139, 14833-14836. 2017.

- Janice B. Lin, Yu Jin, Steven A. Lopez, Nathaniel Druckerman, Steven E. Wheeler, and K. N. Houk: "Torsional Barriers to Rotation and Planarization in Heterocyclic Oligomers of Value in Organic Electronics," J. Chem. Theory Comput., 13, 5624-5638. 2017.

- Robert S. Jordan, Yolanda L. Li, Cheng-Wei Lin, Ryan D. McCurdy, Janice B. Lin, Jonathan L. Brosmer, Kristofer L. Marsh, Saeed L. Khan, K. N. Houk, Richard B. Kaner, and Yves Rubin: "Synthesis of N = 8 Armchair Graphene Nanoribbons from Four Distinct Polydiacetylenes," J. Am. Chem. Soc., 139, 15878-15890. 2017.

- Chao Zhou, Juan Liang, Shangli Cheng, Ting Shi, K. N. Houk, Dong-Qing Wei, and Yi-Lei Zhao: "Ab initio Molecular Metadynamics Simulation for S-nitroxylation by Nitric Oxide: S-nitroxide as they Key Intermediate," Molecular Simulation, 43, 1134-1141. 2017.

- Marc Garcia-Borras, Kendall N. Houk, and Gonzalo Jimenez-Oses: "Computational Design of Protein Function," in Computational Tools for Chemical Biology, Chemical Biology No. 3, 87-107, Sonsoles Martin-Santamaria, ed., Royal Society of Chemsistry: London, UK. 2018.

- Yun-Fang Yang, Xin Hong, Jin-Quan Yu, and K. N. Houk: "Experimental-Computational Synergy for Selective Pd(II)-Catalyzed C-H Activation of Aryl and Alkyl Groups," Acc. Chem. Res., 50, 2853-2860. 2017.

- Fengjiao Liu, Zhongyue Yang, Yanmin Yu, Ye Mei, and K. N. Houk: "Bimodal Evans-Polanyi Relationships in Dioxirane Oxidations of sp3 C-H: Non-Perfect Synchronization in Generation of Delocalized Radical Intermediates," J. Am. Chem. Soc., 139, 16650-16656. 2017.

- Stefanie A. Baril, Amber L. Koenig, Mackenzie W. Krone, Katherine I. Albanese, Cyndi Qixin He, Ga Young Lee, Kendall N. Houk, Marcey L. Waters, and Eric M. Brustad: "Investigation of Trimethyllysine Binding by the HP1 Chromodomain via Unnatural Amino Acid Mutagenesis," J. Am. Chem. Soc., 139, 17253-17256. 2017.

- Shuming Chen, Xiaoqiang Huang, Eric Meggers, and K. N. Houk: "Origins of Enantioselectivity in Asymmetric Radical Additions to Octahedral Chiral-at-Rhodium Enolates: A Computational Study," J. Am. Chem. Soc., 139, 17902-17907. 2017.

- Yun-Fang Yang, Peiyuan Yu, and K. N. Houk: "Computational Exploration of Concerted and Zwitterionic Mechanisms of Diels-Alder Reactions between 1,2,3-Triazines and Enamines and Acceleration by Hydrogen-Bonding Solvents," J. Am. Chem. Soc., 139, 18213-18221. 2017.

- Cortnie S. Vogelsberg, Fernando J. Uribe-Romo, Andrew S. Lipton, Song Yang, K. N. Houk, Stuart Brown, and Miguel A. Garcia-Garibay: "Ultrafast Rotation in an Amphidynamic Crystalline Metal Organic Framework," Proc. Natl. Acad. Sci. USA, 114, 13613-13618. 2017.

- Michael M. Gilbert, Matthew D. DeMars, Song Yang, Jessica M. Grandner, Shoulei Wang, Hengbin Wang, Alison R. H. Narayan, David H. Sherman, K. N. Houk, and John Montgomery: "Synthesis of Diverse 11- and 12-Membered Macrolactones from a Common Linear Substrate Using a Single Biocatalyst," ACS Cent. Sci., 3, 1304-1310. 2017.

- David E. Hill, Katherine L. Bay, Yun-Fang Yang, R. Erik Plata, Ryosuke Takise, K. N. Houk, Jin-Quan Yi, and Donna G. Blackmond: "Dynamic Ligand Exchange as a Mechanistic Probe in Pd-Catalyzed Enantioselective C-H Functionalization Reactions Using Monoprotected Amino Acid Ligands," J. Am Chem. Soc., 139, 18500-18503. 2017.

- Nicolas Kerisit, Przemyslaw Gawel, Brian Levandowski, Yun-Fang Yang, Victor Garcia-Lopez, Nils Trapp, Laurent Ruhlmann, Corinne Boudon, Kendall N. Houk, and Francois Diederich: "A Four-Step Synthesis of Substituted 5,11-Dicyano-6,12-diaryltetracenes with Enhanced Stability and High Fluorescence Emission," Chem. Eur. J., 24, 159-168. 2018.

- Kui Zhang, Lingchao Cai. Zhongyou Yang, K. N. Houk, and Ohyun Kwon: "Bridged [2.2.1] Bicyclic Phosphine Oxide Facilitates Catalytic gamma-Umpolung Addition-Wittig Olefination," Chem. Sci., 9, 1867-1872. 2018.

- Brian J. Levandowski, Dinushka Herath, Nathan M. Gallup, and K. N. Houk: "Origin of pi-Facial Stereoselectivity in Thiophene 1-Oxide Cycloadditions," J. Org. Chem., 83, 2611-2616. 2018.

- Zhongyue Yang, Xiaofei Dong, Yanmin Yu, Peiyuan Yu, Yingzi Li, Cooper Jamieson, and K. N. Houk: "Relationships between Product Ratios in Ambimodal Pericyclic Reactions and Bond Lengths in Transition Structures," J. Am. Chem. Soc., 140, 3061-3067. 2018.

- Zhongyue Yang, Song Yang, Peiyuan Yu, Yanwei Li, Charles Doubleday, Jiyong Park, Ashay Patel, Byung-sun Jeon, William K. Russell, Hung-wen Liu, David H. Russell, and K. N. Houk: "Influence of Water and Enzyme SpnF on the Dynamics and Energetics of the Ambimodal [6+4]/[4+2] Cycloaddition," Proc. Natl. Acad. Sci. USA, 115, E848-855. 2018.

- Jianxin Guan, Chuancheng Jia, Yanwei Li, Zitong Liu, Jinying Wang, Zhongyue Yang, Chunhui Gu, Dingkai Su, Kendall N. Houk, Deqing Zhang, and Xuefeng Guo: "Direct Single-Molecule Dynamic Detection of Chemical Reactions," Sci. 2018.

- Zhongyue Yang and K. N. Houk: "The Dynamics of Chemical Reactions: Atomistic Visualizations of Organic Reactions, and Homage to van 't Hoff," Chem. Eur. J., 24, 3916-3924. 2018.

- Brian J. Levandowski, Trevor A. Hamlin, Roger C. Helgeson, F. Matthias Bickelhaupt, and K. N. Houk: "Origins of the Endo and Exo Selectivities in Cyclopropenone, Iminocyclopropene, and Triafulvene Diels-Alder Cycloadditions," J. Org. Chem., 83, 3164-3170. 2018.

- Shuming Chen and K. N. Houk: "Origins of Stereoselectivity in Mannich Reactions Catalyzed by Chiral Vicinal Diamines," J. Org. Chem., 83, 3171-3176. 2018.

- Sean A. Newminster, Shasha Li, Marc Garcia-Borras, Jacob N. Sanders, Song Yang, Andrew N. Lowell, Fengan Yu, Janet L. Smith, Robert M. Williams, K. N. Houk, and David H. Sherman: "Structural Basis of the Cope Rearrangement and Cyclization in Hapalindole Biogenesis," Nature Chem. Biol., 14, 345-351. 2018.

- Jack T. Ly, Steven A. Lopez, Janice B. Lin, Jae Joon Kim, Hyunbok Lee, Edmund K. Burnett, Lei Zhang, Alan Aspuru-Guzik, K. N. Houk, and Alejandro L. Briseno: "Oxidation of Rubrene, and Implications for Devide Stability," J. Mat. Chem. C, 6, 3757-3761. 2018.

- Morgan M. Walker, Shuming Chen, Brandon Q. Mercado, K. N. Houk, and Jonathan A. Ellman: "Formation of Aminocyclopentadienes from Silyldihydropyridines: Ring Contraditions Driven by Anion Stabilization," Angew. Chem. Int. Ed., 57, 6605-6609. 2018.

- Shermin S. Goh, Pier Alexandre Champagne, Sureshbabu Guduguntla, Takashi Kikuchi, Makoto Fujita, K. N. Houk, and Ben L. Feringa: "Stereospecific Ring Contraction of Bromocycloheptenes through Dyotropic Rearrangements via Nonclassical Carbocation-Anion Pairs," J. Am. Chem. Soc., 140, 4986-4990. 2018.

- Shuming Chen, Yu Zheng, Tianjiao Cui, Eric Meggers, and K. N. Houk: "Arylketone pi-Conjugation Controls Enantioselectivity in Asymmetric Alkynylations Catalyzed by Centrochiral Ruthenium Complexes," J. Am. Chem. Soc., 140, 5146-5152. 2018.

- Xiaoming Wang, Yingzi Li, Tobias Knecht, Constantin Daniliuc, K. N. Houk, and Frank Glorius: "Unprecedented Dearomatized Spirocyclopropane in a Sequential Rhodium(III)-Catalyzed C-H Activation and Rearrangement Reaction," Angew. Chem. Int. Ed., 57, 5520-5524. 2018.

- Raspudin Saleem-Batcha, Frederick Stull, Jacob N. Sanders, Bradley S. Moore, Bruce A. Palfrey, K. N. Houk, and Robin Teufel: "Enzymatic Control of Dioxygen Binding and Functionalization of the Flavin Cofactor," Proc. Natl. Acad. Sci. USA, 115, 4909-4914. 2018.

- Huimin Tao, Fang Liu, Ruxin Zeng, Zhuzhou Shao, Lufeng Zou, Yang Cao, Jennifer M. Murphy, K. N. Houk, and Yong Liang: "Origins of Halogen Effects in Bioorthogonal Sydnone Cycloadditions," Chem. Commun., 54, 5082-5085. 2018.

- Katie Scholl, John Dillashaw, Evan Timpy, Yu-hong Lam, Lindsey DeRatt, Tyler R. Benton, Jacqueline P. Powell, K. N. Houk, and Jeremy B. Morgan: "Quinine-Promoted, Enantioselective Boron-Tethered Diels-Alder Reaction by Anomeric Control of Transition-State Conformation," J. Org. Chem., 83, 5756-5765. 2018.

- Katherine L. Bay, Yun-Fang Yang, and K. N. Houk: "Multiple Roles of Silver Salts in Palladium-Catalyzed C-H Activations," J. Organomet. Chem., 864, 19-25. 2018.

- Maruthi Kumar Narayanam, Gaoyuan Ma, Pier Alexandre Champagne, Kendall N. Houk, and Jennifer M. Murphy: "Nucleophilic 18F-Fluorination of Anilines via N-Arylsydnone Intermediates," Synlett, 29, 1131-1135. 2018.

Iruela, L.

- Mintet, E., Lavigne, J., Paget, V., Tarlet, G., Buard, V., Guipaud, O., Sabourin, J.C., Iruela-Arispe, M.L., Milliat F, Francois A., "Endothelial Hey2 deletion reduces endothelial-to-mesenchymal transition and mitigates radiation proctitis in mice" Scientific Reports. 2017.

- Sunshine, H., Iruela-Arispe, M.L., "Membrane lipids and cell signaling" Curr Opin Lipidol. 28(5): 408-413. 2017.

- Mack, J.J., Mosqueiro, T.S., Archer, B.J., Jones, W.M., Sunshine, H., Faas, G.C., Briot, A., Aragón, R., Su, Y.T., Romay, M.C., McDonald, A.I., Kuo, C., Lizama, C.O., Lane, T.F., Zovein, A.C., Fang, Y., Tarling, E.J., de Aguiar Vallim, T.Q., Navab, M., Fogelman, A.M., Bouchard, L.S., Iruela-Arispe, M.L., "NOTCH1 is a mechanosensor in adult arteries." Nature. 2017.

- Mack, J.J., Mosqueiro, T.S., Archer, B.J., Jones, W.M., Sunshine, H., Faas, G.C., Briot, A., Aragón, R., Su, Y.T., Romay, M.C., McDonald, A.I., Kuo, C., Lizama, C.O., Lane, T.F., Zovein, A.C., Fang, Y., Tarling, E.J., de Aguiar Vallim, T.Q., Navab, M., Fogelman, A.M., Bouchard, L.S., Iruela-Arispe, M.L., "NOTCH1 is a mechanosensor in adult arteries" Nature. 2017.

- Mundi, S., Massaro, M., Scoditti, E., Carluccio, M.A., van Hunsbergh, V.W.M., Iruela-Arispe, M.L., De Caterina, R., "Endothelial permeability, LDL deposition, and cardiovascular risk factors-a review" Cardiovasc. Res. 114(1): 35-52. 2018.

- Toullec, A., Valerie, B., Rannou, E., Tarlet, G., Guipaud, O., Robine, S., Iruela-Arispe, M.L., Francois, A., Milliat, F. 2017.

- HIF-1α deletion in the endothelium, but not in the epithelium, protects from radiation-induced enteritis. Cellular and Molecular Gastroenterology and Hepatology. 5(1):15-30. 2017.

- Duran, I., Tenney, J., Warren, C.M., Sarukhanov, A., Csukasi, F., Skalansky, M., Iruela-Arispe, M.L., Krakow, D., "NRP1 haploinsufficiency predisposes to the development of Tetralogy of Fallot." Am J Med Genet A. 176(3): 649-656. 2018.

- Ziyad, S., Riordan, J.D., Cavanaugh, A.C., Su, T., Hernandez, G.E., Hilfenhaus, G., Morselli, M., Huynh, K., Wang, K., Chen, J.N., Dupuy, A.J., Iruela-Arispe, M.L., "A forward genetic screen targeting the endothelium reveals a regulatory role for the lipid kinase Pi4Ka in myelo- and erythropoiesis" Cell Reports. 22(5):1211-1224. 2018.

- Sereti, K.I., Nguyen, N.B., Kamran, P., Zhao, P., Ranjbarvaziri, S., Park, S., Sabri, S., Engel, J.L., Sung, K., Kulkarni, R.P., Ding, Y., Hsiai, T.K., Plath, K., Ernst, J., Sahoo, D., Mikkola, H.K.A., Iruela-Arispe, M.L., Ardehali, R., "Analysis of cardiomyocyte clonal expansion during mouse heart development and injury." Nat Commun. 9(1): 754. 2018.

- Mack, J.J., Iruela-Arispe, M.L. "NOTCH regulation of the endothelial cell phenotype" Curr. Opin Hematol. 25(3): 212-218. 2018.

- Li, L., Zeng, Q., Bhutkar, A., Galván, J., Karamitopoulou, E., Necsulea, A., Noordermeer, D., Piersigilli, A., Peng, M., Perren, A., Ziobec, I., Robinson, H., Iruela-Arispe, M.L., Hanahan, D., "GKAP acts as a genetic modulator of NMDAR signaling to govern invasive tumor growth" Cancer Cell. 33(4)736-751. 2018.

- Shirali, A.S., Romay, M.C., McDonald, A.I., Su, T., Steel, M.E., Iruela-Arispe, M.L., "A multi-step transcriptional cascade underlies vascular regeneration in vivo" Scientific Reports. 8(1):5430. 2018.

- Freitas, V.M., Hilfenhaus, G., Iruela-Arispe, M.L., "Metastasis of Circulating Tumor Cells: Speed Matters" Dev Cell. 45(1):3-5.2018.

- Nowak-Sliwinska, P., Alitalo, K., Allen, A., Anisimov, A., Aplin, A.C., Auerbach, R., Augustin, A.G., Bates, D.O., van Beijnum, J.T., Bender, R.H.,F., Bergers,G., Bikfalvi, A., Bischoff, J., Böck, B.C., Brooks, P.C., Bussolino, F., Cakir, B., Carmeliet, P., Castranova, D., Cimpean, A.M., Cleaver, O., Coukos, G., Davis, G.E., De Palma, M., Dimberg, A., Dings, R.P.M., Djonov, V., Dudley, A.C., Dufton, N.P., Fendt, S.M., Ferrara, N., Fruttiger, M., Fukumura, D., Ghesuière, B., Gong, Y., Griffin, R.J., Harris, A.L., Hughes, C.C.W., Hultgren, N.W., Iruela-Arispe, M.L., Irving, M., Jain, R.K., Kalluri, R., Kalucka, J., Kerbel, R.S., Kitajewski, J., Klaassen, I., Kleinmann, H.K., Koolwijk, P., Kuczynski, E., Kwak, B.R., K. Marien, J. M. Melero-Martin, L. L. Munn, R. F. Nicosia, A. Noel, J. Nurro, A.-K. Olsson, T. V. Petrova, Pietras, K., Pili, R., Pollard, J.W., Post, M.J., Quax, P.H.A., Rabinovich, G.A., Raica, M., Randi, A.M., Ribatti, D., Ruegg, C., Schlingemann, R.O., Schulte-Merker, S., Smith, L.E.H., Song, J.W., Stacker, S.A., Stalin, J., Stratman, A.N., Van de Velde, M., van Hinsbergh, V.W.M., Vermeulen, P.B., Waltenberger, J., Weinstein, B.M., Xin, H., Yetkin-Arik, B., Yla-Herttuala, S., Yoder, M.C., Griffioen, A.W., "Consensus guidelines for the use and interpretation of angiogenesis assays" Angiogenesis. 2018.
- Hilfenhaus, G., Nguyen, D., Freshman, J., Prajapati, D., Ma, F., Song, D., Ziyad, S., Cuadrado, M., Pellegrini, M., Bustelo, X.R., Iruela-Arispe, M.L., "VAV3-induced Cytoskeletal Dynamics Contribute to Heterotypic Properties of Endothelial Barriers" J Cell Biol. 2018.

- Chattopadhyay, A., Yang, X., Mukherjee, P., Sulaiman, D., Fogelman, H.R., Grijalva, V., Dubinett, S., Wasler, T.C., Paul, M.K., Salehi-Rad, R., Mack, J.J., Iruela-Arispe, M.L., Navab, M., Fogelman, A.M., Reddy, S.T., "Treating the Intestine with Oral ApoA-I Mimetic Tg6F Reduces Tumor Burden in Mouse Models of Metastatic Lung Cancer" Sci Rep. 8(1): 9032. 2018.

- Jelinek, D., Flores, A., Uebelhoer, M., Pasque, V., Plath, K., Iruela-Arispe, M.L., Christofk, H.R., Lowry, W.E., Coller, H.A., "Mapping Metabolism: Monitoring Lactate Dehydrogenase Activity Directly in Tissue" J Vis Exp. 2018.

- Iruela-Arispe, M.L. "VEGF. Chapter in: Encyclopedia of Signaling Molecules, 2nd Edition" Springer. Sangdun Choi, Editor-in-Chief. Pp 5915-5920. 2018.

Jacobsen, S.

- Wanlu Liu, Sascha H. Duttke, Jonathan Hetzel, Martin Groth, Suhua Feng, Javier Gallego-Bartolome, Zhenhui Zhong, Hsuan Yu Kuo, Zonghua Wang, Jixian Zhai, Joanne Chory & Steven E. Jacobsen., "RNA-directed DNA methylation involves co-transcriptional small-RNA-guided slicing of polymerase V transcripts in Arabidopsis." Nature Plants, 4, 181-188. 2018.

- Yu Zhang, C. Jake Harris, Qikun Liu, Wanlu Liu, Israel Ausin, Yanping Long, Lidan Xiao, Li Feng, Xu Chen, Yubin Xie, Xinyuan Chen, Lingyu Zhan, Suhua Feng, Jingyi Jessica Li, Haifeng Wang, Jixian Zhai, and Steven E. Jacobsen., "Large-scale comparative epigenomics reveals hierarchical regulation of non-CG methylation in Arabidopsis." Proc. Nat. Acad. Sci. U. S. A. 2018.

Johnson, R.

- Mandali, S., Gupta, K. Dawson, A.R., Van Duyne, G.C., and Johnson, R.C., "Control of recombination directionality by the Listeria phage A118 protein Gp44 and the coiled-coil motif of its serine integrase." J. Bacteriol. 199(11). 2017.

- Kamar, R.L., Banigan, E.J., Erbas, A, Giuntoli, R.D., Olvera de la Cruz, M., Johnson, R.C, and Marko, J.F., "Facilitated dissociation of transcription factors from single DNA binding sites." Proc. Natl. Acad. Sci. USA 114(16): E3251-E3257. 2017.

- Kamagata, K., Mano, E., Ouchi, K., Kanbayashi, S., and Johnson, R.C., "High free-energy barrier of 1D diffusion along DNA by architectural DNA-binding proteins." J. Mol. Biol. 430: 655-667 2018.

Johnson, T.

- Davis-Turak, J. Johnson, T., and A. Hoffmann., "Mathematical Modeling identifies potential gene structure determinants of co-transcriptional control of alternative pre-mRNA splicing." Nucleic Acids Res. Accepted. 2018.

- Awad, A.*, Venkataraman, S.* Nag, A., Galivanche, A.R, Bradley, M, Neves, L.T. Douglass, S. Clarke, C.F. and T.L. Johnson., "Chromatin remodeling SWI/SNF complex regulates Coenzyme Q6 synthesis and a metabolic shift to respiration in S. cerevisiae via regulation of splicing." J. Biol. Chem. 292(36):14851-14866. 2017.

- Venkataramanan, S., Douglass, S., Galivanche, A.R., and T.L. Johnson. "The chromatin remodeling complex SWI/SNF regulates splicing of meiotic transcripts in S. cerevisiae." Nucleic Acids Res. 45(13):7708-7721. 2017.

Kaback, H.R.

- Grytsyk, N., Sugihara, J., Kaback, H.R., Hellwig, P., "pKa of Glu325 in LacY." Proc Natl Acad Sci 114(7):1530-5. 2017.

- Chaptal, V., Delolme, F., Kilburg, A., Magnard, S., Montigny,C., Picard, M., Frier, M., Pier, C., Monticelli, L., Bonert, O., Agez, M., Ravaud, S., Orelle, C., Wagner, R. Jawhari, A., Broutin, I., Pebay-Peyroula, E., Jault, J.-M., Kaback, H.R., le Maire, M., Falson, P., "Quantification of Detergents Complexed with Membrane Proteins." Sci Rep 7:41751-63. 2017.

- Smirnova, I., Kasho, V., Jiang, X., Chen, H.-M., Withers, S.G., Kaback, H.R., "Oversized galactosides as a probe for conformational dynamics in LacY." Proc Natl Acad Sci 115(16):4146-51. 2018.

Kaufman, D.

- Tian, J., Dang, H., Middleton, B., and Kaufman D.L., "Clinically applicable GABA receptor positive allosteric modulators promote ß-cell replication." Sci. Rep. 7, article 374. 2017.

- Tian, J., Dang, H., Hu, A., Xu, W., and Kaufman D.L., "Repurposing lesogaberan to promote human islet-cell survival and ß-cell replication." J. Diab. Res. 2017.

Kohn, D.

- Kohn, DB and Kuo, CY., "New frontiers in the therapy of primary immunodeficiency: from gene addition to gene editing." J Allergy Clin Immunol. 139(3):726-732. 2017.

- Kohn DB and Gaspar HB., "How we manage adenosine deaminase-deficient severe combined immune deficiency (ADA SCID)." J Clin Immunol. 37(4):351-356. 2017.

- Shaw KL, Garabedian E, Mishra S, Barman P, Davila D, Carbonaro D, Shupien S, Silvin C, Geiger S, Nowicki B, Smogorzewska EM, Brown B, Wang X, de Oliveira, Choi C, Ikeda A, Terrazas D, Fu PY, Yu A, Campo B, Cooper A, Engel B, Podsakoff G, Balamurugan A, Anderson S, Muul L, Jagadeesh J, Kapoor N, Tse J, Moore TB, Purdy K, Rishi R, Mohan K, Skoda-Smith S, Buchbinder D, Abraham R, Scharenberg A, Yang OO, Cornetta K, Gjertson D, Hershfield M, Sokolic R, Candotti F and Kohn DB., "Clinical efficacy of gene-modified stem cells in adenosine deaminase-deficient immunodeficiency." J Clin Invest. 127(5):1689-1699, 2017.

- Cooper, AR, Lill, GR, Shaw, K, Carbonaro, D, Davila, A, Sokolic, R, Candotti, F, Pellegrini, M, and Kohn, DB., "Cytoreductive conditioning intensity predicts clonal diversity in ADA-SCID retroviral gene therapy patients." Blood 129(19):2624-2635, 2017.

- Seet CS, He C, Bethune MT, Li S, Chick B, Gschweng EH, Zhu Y, Kim K, Kohn DB, Baltimore D, Crooks GM, Montel-Hagen A., "Generation of mature T cells from human hematopoietic stem and progenitor cells in artificial thymic organoids." Nat Methods. 2017.

- Masiuk KE, Brown D, Laborada J, Hollis RP, Urbinati F, and Kohn DB., "Improving gene therapy efficiency through the enrichment of human hematopoietic stem cells." Mol Ther. 25:2163-2175. 2017.

- Urbinati F, Wherley J, Geiger S, Campo-Fernandez B, Kaufman ML, Cooper A, Romero Z, Marchioni F, Reeves L, Read E, Nowicki B, Grassman E, Viswanathan S, Wang X, Hollis RP and Kohn DB., "Pre-clinical studies for a phase I clinical trial of autologous hematopoietic stem cell gene therapy for sickle cell disease." Cytotherapy.19:1096-1112. 2017.

- Hazim RA, Karumbayaram S, Dimashkiee A, Jianga M, Lopesa VS, Burgessa BL, Vijayarajd P, Alva-Ornelash JA, Zack JA, Kohn DB, Gomperts BN, Pyle AD, Lowry WE, and Williams DS., "Differentiation of RPE cells from integration-free iPS cells and their cell biological characterization." Stem Cell Research & Therapy. 8:217. 2017.

- Heimall J, Logan B, Cowan MJ, Notarangelo L, Griffith LM, Puck JM, Kohn DB, Pulsipher MA, Parikh S, Martinez C, Kapoor N, O'Reilly R, Boyer M, Pai SY, Goldman F, Burroughs L, Chandra S, Kletzel M, Thakar M, Connelly J, Cuvelier G, Davila B, Shereck E, Knutsen A, Sullivan KE, DeSantes K, Gillio A, Haddad E, Petrovic A, Quigg T, Smith AR, Stenger E, Yin Z, Shearer WT, Fleisher T, Buckley RH, and Dvorak CC., "Immune Reconstitution and Survival of 100 SCID Patients Post Hematopoietic Cell Transplant: A PIDTC Prospective Study." Blood. 2017.

- Morgan RA, Gray, D, Lomova A, and Kohn DB., "Hematopoietic stem cell gene therapy – progress made and lessons learned." (Perspective). Cell Stem Cell. 21(5):574-590. 2017.

- Long J, Hoban MD, Kuo C, Campo B, Cooper AR, Lumaquin D, Hollis RP, Kohn DB, and Romero Z., "Characterization of Chromosomal Alterations Using a Zinc-Finger Nuclease Targeting the Beta-Globin Gene Locus in Hematopoietic Stem/Progenitor Cells." Mol Ther. 26(2):468-479. 2018.

- Almarza Novoa, E, Kasbekar, S, Thrasher AJ, Kohn DB, Sevilla J, Schwartz JD, and Bueren JA., "Leukocyte Adhesion Deficiency-I: A comprehensive review of all published cases." JACI In Practice; unbar CE, High KA, Joung JK, Kohn DB, Ozawa K, and Sadelain M., "Gene Therapy Comes Of Age." Science. 359:175. 2018.

- Kuo CY, Long JD, Campo-Fernandez B, de Oliviera S, Cooper AR, Romero Z, Hoban MD, Joglekar AV, Lill G, Kaufman ML, Fitz-Gibbon S, Wang X, Hollis RP, and Kohn DB., "Targeted Gene Insertion for the Treatment of X-Linked Hyper-IgM Syndrome." Cell Reports. 23(9):2606-2616. 2018.

- Miggelbrink A, Logan BR, Buckley RH, Parrott RE, Dvorak CC, Kapoor N,Abdel-Azim H, Prockop SE, Shyr D, Decaluwe H, Hanson IC, Gillio A, Dávila Saldaña BJ, Eibel H, Hopkins G, Walter JE, Whangbo JS, Kohn DB, Puck JM, Cowan MJ,Griffith LM, Haddad E, O'Reilly RJ, Notarangelo LD, and Pai SY., "B cell differentiation and IL-21 response in IL2RG/JAK3 SCID patients after hematopoietic stem cell transplantation." Blood. 131:2967-2977. 2018.

Kurdistani, S.

- Xue Y, Pradhan SK, Sun F, Chronis C, Tran N, Su T, Van C, Vashisht A, Wohlschlegel J, Peterson CL, Timmers HTM, Kurdistani SK, Carey MF., "Mot1, Ino80C, and NC2 Function Coordinately to Regulate Pervasive Transcription in Yeast and Mammals." Mol Cell. 67(4):594-607. 2017.

- Nakano H, Minami I, Braas D, Pappoe H, Wu X, Sagadevan A, Vergnes L, Fu K, Morselli M, Dunham C, Ding X, Stieg AZ, Gimzewski JK, Pellegrini M, Clark PM, Reue K, Lusis AJ, Ribalet B, Kurdistani SK, Christofk H, Nakatsuji N, Nakano A., "Glucose inhibits cardiac muscle maturation through nucleotide biosynthesis." Elife. 6. 2017.

- Xue Y, Schmollinger S, Attar N, Campos OA, Vogelauer M, Carey MF, Merchant SS, Kurdistani SK., "Endoplasmic reticulum-mitochondria junction is required for iron homeostasis." J Biol Chem. 292(32):13197-13204. 2017.

- Huang C, Su T, Xue Y, Cheng C, Lay FD, McKee RA, Li M, Vashisht A, Wohlschlegel J, Novitch BG, Plath K, Kurdistani SK, Carey M., "Cbx3 maintains lineage specificity during neural differentiation." Genes Dev. (3):241-246. 2017.

Li, M.

- X. Wu, V. L. Dao Thi, Y. Huang, E. Billerbeck, D. Saha, H. H. Hoffmann, Y. Wang, L. Vale-Silva, S. Sarbanes, T. Sun, L. Andrus, Y. Yu, C. Quirk, M. M. Li, M. R. MacDonald, W. M. Schneider, X. An, B. R. Rosenberg, and C. M. Rice., "Intrinsic immunity shapes viral resistance of stem cells." Cell. 172:423-438.e25. 2018.

Lin, C.

- Yang L., Mo, W., Yu, X., Yao, N., Zhou, Z., Fan, X., Zhang, L., Piao, M., Li, S., Yang, D., Lin, C., and Zuo, Z., "Reconstituting Arabidopsis CRY2 Signaling Pathway in Mammalian Cells Reveals Regulation of Transcription by Direct Binding of CRY2 to DNA." Cell Reports 24, 585-593.e584. 2018.

- Wang, Q., Liu, Q., Wang, X., Zuo, Z., Oka, Y., and Lin, C., "Beyond the photocycle – how cryptochromes regulate photoresponses in plants?" Current Opinion in Plant Biology 45:120–126. 2018.

- Wang, Q., Liu, Q., Wang, X., Zuo, Z., Oka, Y., and Lin, C., "New insights into the mechanisms of phytochrome–cryptochrome coaction." New Phytologist 217, 547-551. 2018.

- Wang X, Wang Q, Han Y-J, Liu Q, Gu L, Yang Z, Su J, Liu B, Zuo Z, He W, Wang, J, Liu, B, Matsui, M, Kim, J, Oka, Y, and Lin, C., "A CRY-BIC negative feedback circuitry regulating blue light sensitivity." The Plant Journal 92: 426-436. 2017.

- Wang, W., Gu L., Ye S., Zhang H., Cai C., Xiang M., Gao Y., Wang Q., Lin C., and Zhu Q., "Genome-wide analysis and transcriptomic profiling of the auxin biosynthesis, transport and signaling family genes in moso bamboo (Phyllostachys heterocycla)." BMC Genomics 18:870. 2017.

- Yang Z., Liu B, Su J, Liao J, Lin C, Oka Y., "Cryptochromes Orchestrate Transcription Regulation of Diverse Blue Light Responses in Plants." Photochemistry and Photobiology 93(1): 112-127. 2017.

- Wang T, Wang H, Cai D, Gao Y, Zhang H, Wang Y, Lin C, Ma L, Gu L., "Comprehensive profiling of rhizome-associated alternative splicing and alternative polyadenylation in moso bamboo (Phyllostachys edulis)." The Plant Journal 91: 684-699. 2017.

- He, R., Li, X., Zhong, M., Yan, J., Ji, R., Li, X., Wang, Q., Wu, D., Sun, M., Tang, D., and Lin, C., "A photo-responsive F-box protein FOF2 regulates floral initiation by promoting FLC expression in Arabidopsis." The Plant Journal 91:788-801. 2017.

- Su, J., Liu, B., Liao, J., Yang, Z., Lin, C., and Oka, Y., "Coordination of Cryptochrome and Phytochrome Signals in the Regulation of Plant Light Responses." Agronomy 7:25. 2017.

- Liu, Q., Wang, Q., Deng, W., Wang, X., Piao, M., Cai, D., Li, Y., Barshop, W. D., Yu, X., Liu, B., Oka, Y., Wohlschlegel, J., Zuo, Z., and Lin, C., "Molecular basis for blue light-dependent phosphorylation of Arabidopsis cryptochrome 2." Nature Communications 8: 15234. 2017.

Lipshutz, G.

- Koo M, Lipshutz GS, Cederbaum SD, Lassman C., "Biopsy-proven Hepatocellular Carcinoma in a 53-year-old Woman With Arginase Deficiency" Pediatr Dev Pathol. 20(6):517-521. 2017.

- Salas JR, Chen BY, Wong A, Duarte S, Angarita SAK, Lipshutz GS, Witte ON, Clark PM., "Non-invasive imaging of drug-induced liver injury with 18F-DFA PET" J Nucl Med. 2018.

- Angarita SAK, Truong B, Khoja S, Nitzahn M, Rajbhandari AK, Zhuravka I, Duarte S, Lin MG, Lam AK, Cederbaum SD, Lipshutz GS., "Human hepatocyte transplantation corrects the inherited metabolic liver disorder arginase deficiency in mice" Mol Genet Metab. 2018.

- Khoja S, Nitzahn M, Hermann K, Truong B, Borzone R, Willis B, Rudd M, Palmer DJ, Ng P, Brunetti-Pierri N, Lipshutz GS., "Conditional disruption of hepatic carbamoyl phosphate synthetase 1 in mice results in hyperammonemia without orotic aciduria and can be corrected by liver-directed gene therapy" Mol Genet Metab. 2018.

Loo, J.

- Halford J, Shen S, Itamura K, Levine J, Chong AC, Czerwieniec G, Glenn TC, Hovda DA, Vespa P, Bullock R, Dietrich DW, Mondello S, Loo JA and Wanner I-B. "New Astroglial Injury Defined Biomarkers for Neurotrauma Assessment." J Cerebral Blood Flow Metab. 37: 3278–3299. 2017.

- Takemori N, Takemori A, Wongkongkathep P, Nshanian M, Ogorzalek Loo RR, Lermyte F, and Loo JA. "Top-down/bottom-up mass spectrometry workflow using dissolvable polyacrylamide gels." Anal Chem. 89: 8244-8250. 2017.

- Zhang J, Ogorzalek Loo RR, and Loo JA. "Structural Characterization of a Thrombin-Aptamer Complex by High Resolution Native Top-Down Mass Spectrometry." J Am Soc Mass Spectrom. 28: 1815-1822. 2017.

- Nshanian M, Lakshmanan R, Chen H, Ogorzalek Loo RR, and Loo JA. "Enhancing Sensitivity of Liquid Chromatography/Mass Spectrometry of Peptides and Proteins Using Supercharging Agents." Int J Mass Spectrom. 427: 157-164.

- Susa AC, Lippens JL, Xia Z, Loo JA, Campuzano IDG, and Williams ER. "Submicrometer Emitter ESI Tips for Native Mass Spectrometry of Membrane Proteins in Ionic and Non-ionic Detergents." J Am Soc Mass Spectrom. 29: 203-206.

- Lippens JL, Nshanian M, Spahr C, Egea PF, Loo JA, and Campuzano IDG. "Fourier Transform-Ion Cyclotron Resonance Mass Spectrometry as a Platform for Characterizing Multimeric Membrane Protein Complexes." J Am Soc Mass Spectrom. 29: 18 3-193.2018.

- Lermyte F, Valkenborg D, Loo JA, and Sobott F. "Radical solutions: Principles and application of electron-based dissociation in mass spectrometry-based analysis of protein structure." Mass Spectrom; Campuzano IDG, Netirojjanakul C, Nshanian M, Lippens JL, Kilgour D, Van Orden S and Loo JA. "Native-MS Analysis of Monoclonal Antibody Conjugates by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry." Anal Chem. 90: 745−751. 2018.

- Aebersold R, Agar JN, Amster IJ, Baker MS, Bertozzi CR, Boja ES, Costello CC, Cravatt BF, Fenselau C, Garcia BA, Ge Y, Gunawardena J, Hendrickson RC, Hergenrother PJ, Huber CG, Ivanov AR, Jensen ON, Jewett MC, Kelleher NL, Kiessling LL, Krogan NJ, Larsen MR, Loo JA, Ogorzalek Loo RR, Lundberg E, MacCoss MJ, Mallick P, Mootha VK, Mrksich M, Muir TW, Patrie SM, Pesavento JJ, Pitteri SJ, Rodriguez H, Saghatelian A, Sandoval W, Schluter H, Sechi S, Slavoff SA, Smith LM, Snyder MP, Thomas PM, Uhlen M, Van Eyk JE, Vidal M, Walt DR, White FM, Williams ER, Wohlschlager T, Wysocki VH, Yates NA, Young NL, and Zhang B. "How many human proteoforms are there?" Nature Chem Bio.14: 206-214. 2018.

- Le Duc RD, Schwammle V, Shortreed MR, Cesnik AJ, Solntsev SK, Shaw JB, Martin MJ, Vizcaino JA, Alpi E, Danis P, Kelleher NL, Smith LM, Ge Y, Agar JN, Chamot-Rooke J, Loo JA, Pasa-Tolic L, and Tsybin YO. "ProForma: A Standard Proteoform Notation." J Proteome Res. 17: 1321−1325. 2018.

- Chang C, Amer BR, Osipiuk J, McConnell SA, Huang I-H, Hsieh V, Fu J, Nguyen HH, Muroski J, Flores E, Ogorzalek Loo RR, Loo JA, Putkey JA, Joachimiak A, Das A, Clubb RT, and Ton-That H. "In vitro reconstitution of sortase-catalyzed pilus polymerization reveals structural elements involved in pilin cross-linking." Proc Natl Acad Sci USA. 115: E5477–E5486. 2018.

- McConnell SA, Amer BR, Muroski J, Fu J, Chang C, Ogorzalek Loo RR, Loo JA, Osipiuk J, Ton-That H, and Clubb RT. "Protein Labeling via a Specific Lysine-Isopeptide Bond Using the Pilin Polymerizing Sortase from Corynebacterium diphtheria." J Am Chem Soc. 140: 8420–8423. 2018.

- Wongkongkathep P, Han JY, Choi TS, Yin S, Kim HI, and Loo JA. "Native Top-Down Mass Spectrometry and Ion Mobility MS for Characterizing the Cobalt and Manganese Metal Binding of α-Synuclein Protein." J Am Soc Mass Spectrom, in press; Loo JA and Klassen JS. "Editorial: Editor's forward." Special Issue: New developments and applications of mass spectrometry methods for studying non-covalent interactions. Int J Mass Spectrom. 420: 1. 2017.

- Loo JA and Neff JL. "Editorial: Outstanding JASMS Manuscript Reviewers, 2016-2017." J Am Soc Mass Spectrom, in press; Loo JA. "Editorial: Focus on Application of Photons and Radicals for Mass Spectrometry, Honoring Dr. Ryan Julian, Recipient of the 2017 ASMS Biemann Medal." J Am Soc Mass Spectrom, in press.

Lusis, A.J.

- Schugar RC, Shih DM, Warrier M, Helsley RN, Burrows A, Ferguson D, Brown AL, Gromovsky AD, Heine M, Chatterjee A, Li L, Li XS, Wang Z, Willard B, Meng Y, Kim H, Che N, Pan C, Lee RG, Crooke RM, Graham MJ,

Morton RE, Langefeld CD, Das SK, Rudel LL, Zein N, McCullough AJ, Dasarathy S, Tang WHW, Erokwu BO, Flask CA, Laakso M, Civelek M, Naga Prasad SV, Heeren J, Lusis AJ, Hazen SL, Brown JM., "The TMAO-Producing Enzyme Flavin-Containing Monooxygenase 3 Regulates Obesity and the Beiging of White Adipose Tissue." Cell Rep. 19:2451-2461. 2017.

- Daugherty A, Tall AR, Daemen MJAP, Falk E, Fisher EA, García-Cardeña G, Lusis AJ, Owens AP 3rd, Rosenfeld ME, Virmani R; American Heart Association Council on Arteriosclerosis, Thrombosis and Vascular Biology; and Council on Basic Cardiovascular Sciences. "Recommendation on Design, Execution, and Reporting of Animal Atherosclerosis Studies: A Scientific Statement from the American Heart Association." Circ Res. 121:e53-e79. Review. 2017.

- Daugherty A, Tall AR, Daemen MJAP, Falk E, Fisher EA, García-Cardeña G, Lusis AJ, Owens AP 3rd, Rosenfeld ME, Virmani R; American Heart Association Council on Arteriosclerosis, Thrombosis and Vascular Biology; and Council on Basic Cardiovascular Sciences. "Recommendation on Design, Execution, and Reporting of Animal Atherosclerosis Studies: A Scientific Statement from the American Heart Association." Arterioscler Thromb Vasc Biol. 37:e131-e157. Review. 2017.

- Buscher K, Ehinger E, Gupta P, Pramod AB, Wolf D, Tweet G, Pan C, Mills CD, Lusis AJ, Ley K., "Natural variation of macrophage activation as disease-relevant phenotype predictive of inflammation and cancer survival." Nat Commun. 8:16041. 2017.

- Cannon ME, Duan Q, Wu Y, Zeynalzadeh M, Xu Z, Kangas AJ, Soininen P, Ala-Korpela M, Civelek M, Lusis AJ, Kuusisto J, Collins FS, Boehnke M, Tang H, Laakso M, Li Y, Mohlke K., "Trans-ancestry Fine Mapping and Molecular Assays Identify Regulatory Variants at the ANGPTL8 HDL-C GWAS Locus." G3 (Bethesda). 7:3217-3227. 2017.

- Patterson M, Barske L, Van Handel B, Rau CD, Gan P, Sharma A, Parikh S, Denholtz M, Huang Y, Yamaguchi Y, Shen H, Allayee H, Crump JG, Force TI, Lien CL, Makita T, Lusis AJ, Kumar SR, Sucov HM., "Frequency of mononuclear diploid cardiomyocytes underlies natural variation in heart regeneration." Nat Genet. 49:1346-1353. 2017.

- Kim S, Yang L, Kim S, Lee RG, Graham MJ, Berliner JA, Lusis AJ, Cai L, Temel RE, Rateri DL, Lee S., "Targeting hepatic heparin-binding EGF-like growth factor (HB-EGF) induces anti-hyperlipidemia leading to reduction of angiotensin II-induced aneurysm development." PLoS One. 12:e0182566. 2017.

- McLachlan S, Page KE, Lee SM, Loguinov A, Valore E, Hui ST, Jung G, Zhou J, Lusis AJ, Fuqua B, Ganz T, Nemeth E, Vulpe CD., "Hamp1 mRNA and plasma hepcidin levels are influenced by sex and strain but don't predict tissue iron levels in inbred mice." Am J Physiol Gastrointest Liver Physiol. 313:G511-G523. 2017.

- Shu L, Chan KHK, Zhang G, Huan T, Kurt Z, Zhao Y, Codoni V, Trégouët DA; Cardiogenics Consortium, Yang J, Wilson JG, Luo X, Levy D, Lusis AJ, Liu S, Yang X., "Shared genetic regulatory networks for cardiovascular disease and type 2 diabetes in multiple populations of diverse ethnicities in the United States." PLoS Genet. 2017; Barrington WT, Lusis AJ., "Atherosclerosis: Association between the gut microbiome and atherosclerosis." Nat Rev Cardiol. 14:699-700. 2017.

- Nakano H, Minami I, Braas D, Pappoe H, Wu X, Sagadevan A, Vergnes L, Fu K, Morselli M, Dunham C, Ding X, Stieg AZ, Gimzewski JK, Pellegrini M, Clark PM, Reue K, Lusis AJ, Ribalet B, Kurdistani SK, Christofk H, Nakatsuji N, Nakano A., "Glucose inhibits cardiac muscle maturation through nucleotide biosynthesis." Elife. Dec 12; 6. 2017.

- Rajbhandari P, Thomas BJ, Feng AC, Hong C, Wang J, Vergnes L, Sallam T, Wang B, Sandhu J, Seldin MM, Lusis AJ, Fong LG, Katz M, Lee R, Young SG, Reue K, Smale ST, Tontonoz P., "IL-10 signaling remodels adipose chromatin architecture to limit thermogenesis and energy expenditure." Cell 172:218-233. 2018.

- Barrington WT, Salvador AC, Hartiala JA, De Caterina R, Kohlmeier M, Martinez JA, Kreutzer CB, Heber D, Lusis AJ, Li Z, Allayee H., "Proceedings of the 11th Congress of the International Society of Nutrigenetics and Nutrigenomics." J Nutrigenet Nutrigenomics. 10:155-162. 2017.

- Chella Krishnan K, Kurt Z, Barrere-Cain R, Sabir S, Das A, Floyd R, Vergnes L, Zhao Y, Che N, Charugundla S, Qi H, Zhou Z, Meng Y, Pan C, Seldin MM, Norheim F, Hui S, Reue K, Lusis AJ, Yang X., "Integration of Multi-omics Data from Mouse Diversity Panel Highlights Mitochondrial Dysfunction in Non-alcoholic Fatty Liver Disease." Cell Syst. 6:103-115. 2018.

- Sallam T, Jones M, Thomas BJ, Wu X, Gilliland T, Qian K, Eskin A, Casero D, Zhang Z, Sandhu J, Salisbury D, Rajbhandari P, Civelek M, Hong C, Ito A, Liu X, Daniel B, Lusis AJ, Whitelegge J, Nagy L, Castrillo A, Smale S, Tontonoz P., "Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by a long noncoding RNA." Nat Med. 24:304-312. 2018.

- Santolini M, Romay MC, Yukhtman CL, Rau CD, Ren S, Saucerman JJ, Wang JJ, Weiss JN, Wang Y, Lusis AJ, Karma A., "A personalized, multiomics approach identifies genes involved in cardiac hypertrophy and heart failure. NPJ Syst Biol Appl. 4:12. 2018.
- Orozco LD, Farrell C, Hale C, Rubbi L, Rinaldi A, Civelek M, Pan C, Lam L, Montoya D, Edillor C, Seldin M, Boehnke M, Mohlke KL, Jacobsen S, Kuusisto J, Laakso M, Lusis AJ, Pellegrini M., "Epigenome-wide association in adipose tissue from the METSIM cohort." Hum Mol Genet. 27:1830-1846. 2018.

- mall KS, Todorčević M, Civelek M, El-Sayed Moustafa JS, Wang X, Simon MM, Fernandez-Tajes J, Mahajan A, Horikoshi M, Hugill A, Glastonbury CA, Quaye L, Neville MJ, Sethi S, Yon M, Pan C, Che N, Viñuela A, Tsai PC, Nag A, Buil A, Thorleifsson G, Raghavan A, Ding Q, Morris AP, Bell JT, Thorsteinsdottir U, Stefansson K, Laakso M, Dahlman I, Arner P, Gloyn AL, Musunuru K, Lusis AJ, Cox RD, Karpe F, McCarthy MI., "Regulatory variants at KLF14 influence type 2 diabetes risk via a female-specific effect on adipocyte size and body composition." Nat Genet. 50:572-580. 2018.

- Hiyari S, Green E, Pan C, Lari S, Davar M, Davis R, Camargo PM, Tetradis S, Lusis AJ, Pirih FQ., "Genome-wide association study identifies Cxcl family members as partial mediators of LPS-induced periodontitis." J Bone Miner Res. 2018.

- Pan DZ, Garske KM, Alvarez M, Bhagat YV, Boocock J, Nikkola E, Miao Z, Raulerson CK, Cantor RM, Civelek M, Glastonbury CA, Small KS, Boehnke M, Lusis AJ, Sinsheimer JS, Mohlke KL, Laakso M, Pajukanta P, Ko A., "Integration of human adipocyte chromosomal interactions with adipose gene expression prioritizes obesity-related genes from GWAS." Nat Commun. 9:1512. 2018.

- Yu J, Seldin MM, Fu K, Li S, Lam L, Wang P, Wang Y, Huang D, Nguyen TL, Wei B, Kulkarni RP, Di Carlo D, Teitell M, Pellegrini M, Lusis AJ, Deb A., "Topological arrangement of cardiac fibroblasts regulates cellular plasticity." Circ Res. 2018.

- Seldin MM, Koplev S, Rajbhandari P, Vergnes L, Rosenberg GM, Meng Y, Pan C, Phuong TMN, Gharakhanian R, Che N, Mäkinen S, Shih DM, Civelek M, Parks BW, Kim ED, Norheim F, Chella Krishnan K, Hasin-Brumshtein Y, Mehrabian M, Laakso M, Drevon CA, Koistinen HA, Tontonoz P, Reue K, Cantor RM, Björkegren JLM, Lusis AJ., "A strategy for discovery of endocrine interactions with application to whole-body metabolism." Cell Metab. 27:1138-1155. 2018.

- Norheim F, Bjellaas T, Hui ST, Chella Krishnan K, Lee J, Gupta S, Pan C, Hasin-Brumshtein Y, Parks BW, Li D, Bui H, Mosier M, Wu Y, Huertas-Vazquez A, Hazen SW, Gundersen TE, Mehrabian M, Tang W, Hevener AL, Drevon CA, Lusis AJ., "Genetic, dietary, and sex-specific regulation of hepatic ceramides and relationship between hepatic ceramides and insulin resistance." J Lipid Res. 2018.

- Wang J, Kurilshikov A, Radjabzadeh D, Turpin W, Croitoru K, Bonder MJ, Jackson MA, Medina-Gomez C, Frost F, Homuth G, Rühlemann M, Hughes D, Kim HN; MiBioGen Consortium Initiative, Spector TD, Bell JT, Steves CJ, Timpson N, Franke A, Wijmenga C, Meyer K, Kacprowski T, Franke L, Paterson AD, Raes J, Kraaij R, Zhernakova A., "Meta-analysis of human genome-microbiome association studies: the MiBioGen consortium initiative." Microbiome. 6:101. 2018.

- Orozco LD, Farrell C, Hale C, Rubbi L, Rinaldi A, Civelek M, Pan C, Lam L, Montoya D, Edillor C, Seldin M, Boehnke M, Mohlke KL, Jacobsen S, Kuusisto J, Laakso M, Lusis AJ, Pellegrini M., "Epigenome-wide association in adipose tissue from the METSIM cohort." Hum Mol Genet. 2018.

- Hitzel J, Lee E, Zhang Y, Bibli SI, Li X, Zukunft S, Pflüger B, Hu J, Schürmann C, Vasconez AE, Oo JA, Kratzer A, Kumar S, Rezende F, Josipovic I, Thomas D, Giral H, Schreiber Y, Geisslinger G, Fork C, Yang X, Sigala F, Romanoski CE, Kroll J, Jo H, Landmesser U, Lusis AJ, Namgaladze D, Fleming I, Leisegang MS, Zhu J, Brandes RP., "Oxidized phospholipids regulate amino acid metabolism through MTHFD2 to facilitate nucleotide release in endothelial cells." Nat Commun. 9:2292. 2018.

- Hui ST, Kurt Z, Tuominen I, Norheim F, Davis RC, Pan C, Dirks DL, Magyar CE, French SW, Chella Krishnan K, Sabir S, Campos-Pérez F, Méndez-Sánchez N, Macías-Kauffer L, León-Mimila P, Canizales-Quinteros S, Yang X, Beaven SW, Huertas-Vazquez A, Lusis AJ., "The genetic architecture of diet-induced hepatic fibrosis in mice." Hepatology. 2018.

- Park S, Ranjbarvazirj S, Lay FD, Zhao P, Miller MJ, Dhaliwal JS, Huertas-Vazquez A, Wu X, Qiao R, Soffer JM, Mikkola HKA, Lusis AJ, Ardehali R., "Genetic Regulation of Fibroblast Activation and Proliferation in Cardiac Fibrosis." Circulation. 2018.

Morrison, S.

- Pushkarsky, I. , Tseng, P, Black, D., France, B., Warfe, L, Koziol-White, C. J., Jester, W. F. Jr., Trinh, R. K., Lin, J., Scumpia, P. O., Morrison, S. L., Panettieri, R. A., Damoiseaux, R., Di Carlo, D., "Elastomeric sensor surfaces for high-throughput single-cell force cytometry." Nature Biomedical Engineering. 2:124-137, 2018.

- Trinh, K.R., Vasuthasawat, A., King, R. Y., Timmerman, J. M., Morrison, S. L., "Synergistic Inhibition of Multiple Myeloma Growth by Anti-CD138-Interferon –alpha 14 Fusion Protein and Lenalidomide." J. Mol. Immunol, 2018.

- Young, P.A., Yamada, R. E., Trinh, K.R., Vasuthasawat, A., De Oliveira, S., Yamada, D. H., Morrison, S. L., Timmerman, J. M., "Activity of Anti-CD19 Chimeric Antigen Receptor T Cells Against B Cell Lymphoma Is Enhanced by Antibody-Targeted Interferon-Alpha." J. Interferon & Cytokine Research. 38:239, 2018.

Nakano, A.

- Han AY, Gupta S, Novitch BG., "Molecular specification of facial branchial motor neurons in vertebrates." Dev Biol. 436(1):5-13. 2018.

- Sagner A, Gaber ZB, Delile J, Kong JH, Rousso DL, Pearson CA, Weicksel SE, Melchionda M, Mousavy Gharavy SN, Briscoe J, Novitch BG., "Olig2 and Hes regulatory dynamics during motor neuron differentiation revealed by single cell transcriptomics." PLoS Biol. 2018.

- Watanabe M, Buth JE, Vishlaghi N, de la Torre-Ubieta L, Taxidis J, Khakh BS, Coppola G, Pearson CA, Yamauchi K, Gong D, Dai X, Damoiseaux R, Aliyari R, Liebscher S, Schenke-Layland K, Caneda C, Huang EJ, Zhang Y, Cheng G, Geschwind DH, Golshani P, Sun R, Novitch BG., "Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection." Cell Rep. 21(2):517-532. 2017.

- Sangwan S, Zhao A, Adams KL, Jayson CK, Sawaya MR, Guenther EL, Pan AC, Ngo J, Moore DM, Soriaga AB, Do TD, Goldschmidt L, Nelson R, Bowers MT, Koehler CM, Shaw DE, Novitch BG, Eisenberg DS., "Atomic structure of a toxic, oligomeric segment of SOD1 linked to amyotrophic lateral sclerosis (ALS)." Proc Natl Acad Sci U S A. 114(33):8770-8775.

Novitch, B.

- Han AY, Gupta S, Novitch BG., "Molecular specification of facial branchial motor neurons in vertebrates" Dev Biol. 436(1):5-13. 2018.

- Sagner A, Gaber ZB, Delile J, Kong JH, Rousso DL, Pearson CA, Weicksel SE, Melchionda M, Mousavy Gharavy SN, Briscoe J, Novitch BG., "Olig2 and Hes regulatory dynamics during motor neuron differentiation revealed by single cell transcriptomics" PLoS Biol. 16(2):e2003127. 2018.

- Watanabe M, Buth JE, Vishlaghi N, de la Torre-Ubieta L, Taxidis J, Khakh BS, Coppola G, Pearson CA, Yamauchi K, Gong D, Dai X, Damoiseaux R, Aliyari R, Liebscher S, Schenke-Layland K, Caneda C, Huang EJ, Zhang Y, Cheng G, Geschwind DH, Golshani P, Sun R, Novitch BG., "Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection" Cell Rep. 21(2):517-532. 2017.

- Sangwan S, Zhao A, Adams KL, Jayson CK, Sawaya MR, Guenther EL, Pan AC, Ngo J, Moore DM, Soriaga AB, Do TD, Goldschmidt L, Nelson R, Bowers MT, Koehler CM, Shaw DE, Novitch BG, Eisenberg DS., "Atomic structure of a toxic, oligomeric segment of SOD1 linked to amyotrophic lateral sclerosis (ALS)" Proc Natl Acad Sci U S A.114 (33):8770-8775. 2017.

O'Sullivan, T.

- Rapp, M., Lau, C.M., Adamns, N.M., Weizman, O.E., O'Sullivan, T.E., Geary, C.D., Sun, J.C., "Core-binding factor β and Runx transcription factors promote adaptive natural killer cell responses" Cell. 2017.

Pellegrini, M.

- Merkurjev D, Hong WT, Iida K, Oomoto I, Goldie BJ, Yamaguti H, Ohara T, Kawaguchi SY, Hirano T, Martin KC, Pellegrini M, Wang DO., "Synaptic N(6)-methyladenosine (m(6)A) epitranscriptome reveals functional partitioning of localized transcripts." Nat Neurosci. 2018.

- Orozco LD, Farrell C, Hale C, Rubbi L, Rinaldi A, Civelek M, Pan C, Lam L, Montoya D, Edillor C, Seldin M, Boehnke M, Mohlke KL, Jacobsen S, Kuusisto J, Laakso M, Lusis AJ, Pellegrini M., "Epigenome-wide association in adipose tissue from the METSIM cohort." Hum Mol Genet. 2018.

- Borgognone A, Castanera R, Morselli M, López-Varas L, Rubbi L, Pisabarro AG, Pellegrini M, Ramírez L., "Transposon-associated epigenetic silencing during Pleurotus ostreatus life cycle." DNA Res. 2018.

- Hilfenhaus G, Nguyen DP, Freshman J, Prajapati D, Ma F, Song D, Ziyad S, Cuadrado M, Pellegrini M, Bustelo XR, Iruela-Arispe ML., "Vav3-induced cytoskeletal dynamics contribute to heterotypic properties of endothelial barriers." J Cell Biol. 2018.

- Camacho J, Truong L, Kurt Z, Chen YW, Morselli M, Gutierrez G, Pellegrini M, Yang X, Allard P., "The Memory of Environmental Chemical Exposure in C. elegans Is Dependent on the Jumonji Demethylases jmjd-2 and jmjd-3/utx-1." Cell Rep. 23(8):2392-2404. 2018.

- Ohashi M, Korsakova E, Allen D, Lee P, Fu K, Vargas BS, Cinkornpumin J, Salas C, Park JC, Germanguz I, Langerman J, Chronis C, Kuoy E, Tran S, Xiao X, Pellegrini M, Plath K, Lowry WE., "Loss of MECP2 Leads to Activation of P53 and Neuronal Senescence." Stem Cell Reports. (5):1453-1463. 2018.

- Yu J, Seldin MM, Fu K, Li S, Lam L, Wang P, Wang Y, Huang D, Nguyen TL, Wei B, Kulkarni RP, Di Carlo D, Teitell M, Pellegrini M, Lusis AJ, Deb A., "Topological Arrangement of Cardiac Fibroblasts Regulates Cellular Plasticity." Circ Res. 123(1):73-85. 2018.

- Keegan C, Krutzik S, Schenk M, Scumpia PO, Lu J, Pang YLJ, Russell BS, Lim KS, Shell S, Prestwich E, Su D, Elashoff D, Hershberg RM, Bloom BR, Belisle JT, Fortune S, Dedon PC, Pellegrini M, Modlin RL., "Mycobacterium tuberculosis Transfer RNA Induces IL-12p70 via Synergistic Activation of Pattern Recognition Receptors within a Cell Network." J Immunol. 200(9):3244-3258. 2018.

- Orozco LD, Farrell C, Hale C, Rubbi L, Rinaldi A, Civelek M, Pan C, Lam L, Montoya D, Edillor C, Seldin M, Boehnke M, Mohlke KL, Jacobsen S, Kuusisto J, Laakso M, Lusis AJ, Pellegrini M., "Epigenome-wide association in adipose tissue from the METSIM cohort." Hum Mol Genet. 27(10):1830-1846. 2018.

- Grasso CS, Giannakis M, Wells DK, Hamada T, Mu XJ, Quist M, Nowak JA, Nishihara R, Qian ZR, Inamura K, Morikawa T, Nosho K, Abril-Rodriguez G, Connolly C, Escuin-Ordinas H, Geybels MS, Grady WM, Hsu L, Hu-Lieskovan S, Huyghe JR, Kim YJ, Krystofinski P, Leiserson MDM, Montoya DJ, Nadel BB, Pellegrini M, Pritchard CC, Puig-Saus C, Quist EH, Raphael BJ, Salipante SJ, Shin DS, Shinbrot E, Shirts B, Shukla S, Stanford JL, Sun W, Tsoi J, Upfill-Brown A, Wheeler DA, Wu CJ, Yu M, Zaidi SH, Zaretsky JM, Gabriel SB, Lander ES, Garraway LA, Hudson TJ, Fuchs CS, Ribas A, Ogino S, Peters U., "Genetic Mechanisms of Immune Evasion in Colorectal Cancer." Cancer Discov. 8(6):730-749. 2018.

- Cheng L, Marinelli LJ, Grosset N, Fitz-Gibbon ST, Bowman CA, Dang BQ, Russell DA, Jacobs-Sera D, Shi B, Pellegrini M, Miller JF, Gautier M, Hatfull GF, Modlin RL., "Complete genomic sequences of Propionibacterium freudenreichii phages from Swiss cheese reveal greater diversity than Cutibacterium (formerly Propionibacterium) acnes phages." BMC Microbiol. 18(1):19. 2018.

- Nakano H, Minami I, Braas D, Pappoe H, Wu X, Sagadevan A, Vergnes L, Fu K, Morselli M, Dunham C, Ding X, Stieg AZ, Gimzewski JK, Pellegrini M, Clark PM, Reue K, Lusis AJ, Ribalet B, Kurdistani SK, Christofk H, Nakatsuji N, Nakano A., "Glucose inhibits cardiac muscle maturation through nucleotide biosynthesis." Elife. 2017.

- Gallaher SD, Fitz-Gibbon ST, Strenkert D, Purvine SO, Pellegrini M, Merchant SS., "High-throughput sequencing of the chloroplast and mitochondrion of Chlamydomonas reinhardtii to generate improved de novo assemblies, analyze expression patterns and transcript speciation, and evaluate diversity among laboratory strains and wild isolates." Plant J. 93(3):545-565. 2018.

- Fiala M, Restrepo L, Pellegrini M., "Immunotherapy of Mild Cognitive Impairment by ω-3 Supplementation: Why Are Amyloid-β Antibodies and ω-3 Not Working in Clinical Trials?" J Alzheimers Dis. 62(3):1013-1022. 2018.

- Lopez D, Montoya D, Ambrose M, Lam L, Briscoe L, Adams C, Modlin RL, Pellegrini M., "SaVanT: a web-based tool for the sample-level visualization of molecular signatures in gene expression profiles." BMC Genomics. 18(1):824. 2017.

- Lin JY, Le BH, Chen M, Henry KF, Hur J, Hsieh TF, Chen PY, Pelletier JM, Pellegrini M, Fischer RL, Harada JJ, Goldberg RB., "Similarity between soybean and Arabidopsis seed methylomes and loss of non-CG methylation does not affect seed development." Proc Natl Acad Sci U S A. 114(45):E9730-E9739. 2017.

- Gang SS, Castelletto ML, Bryant AS, Yang E, Mancuso N, Lopez JB, Pellegrini M, Hallem EA., "Targeted mutagenesis in a human-parasitic nematode." PLoS Pathog. 13(10):e1006675. 2017.

- Guo W, Zhu P, Pellegrini M, Zhang MQ, Wang X, Ni Z., "CGmapTools improves the precision of heterozygous SNV calls and supports allele-specific methylation detection and visualization in bisulfite-sequencing data." Bioinformatics. 34(3):381-387. 2018.

- Jung SH, Brownlow ML, Pellegrini M, Jankord R., "Divergence in Morris Water Maze-Based Cognitive Performance under Chronic Stress Is Associated with the Hippocampal Whole Transcriptomic Modification in Mice." Front Mol Neurosci. 10:275. 2017.

- Morselli M, Pastor WA, Montanini B, Nee K, Ferrari R, Fu K, Bonora G, Rubbi L, Clark AT, Ottonello S, Jacobsen SE, Pellegrini M., "Correction: In vivo targeting of de novo DNA methylation by histone modifications in yeast and mouse." Elife. 2017.

- Rosa-Garrido M, Chapski DJ, Schmitt AD, Kimball TH, Karbassi E, Monte E, Balderas E, Pellegrini M, Shih TT, Soehalim E, Liem D, Ping P, Galjart NJ, Ren S, Wang Y, Ren B, Vondriska TM., "High-Resolution Mapping of Chromatin Conformation in Cardiac Myocytes Reveals Structural Remodeling of the Epigenome in Heart Failure." Circulation. 136(17):1613-1625. 2017.

- Mangul S, Martin LS, Hoffmann A, Pellegrini M, Eskin E., "Addressing the Digital Divide in Contemporary Biology: Lessons from Teaching UNIX." Trends Biotechnol. 35(10):901-903. 2017.

- Chen PY, Chu A, Liao WW, Rubbi L, Janzen C, Hsu FM, Thamotharan S, Ganguly A, Lam L, Montoya D, Pellegrini M, Devaskar SU., "Prenatal Growth Patterns and Birthweight Are Associated With Differential DNA Methylation and Gene Expression of Cardiometabolic Risk Genes in Human Placentas: A Discovery-Based Approach." Reprod Sci. 25(4):523-539. 2018.

- Olivera-Perez HM, Lam L, Dang J, Jiang W, Rodriguez F, Rigali E, Weitzman S, Porter V, Rubbi L, Morselli M, Pellegrini M, Fiala M., "Omega-3 fatty acids increase the unfolded protein response and improve amyloid-β phagocytosis by macrophages of patients with mild cognitive impairment." FASEB J. 31(10):4359-4369. 2017.

- Prado K, Zhang KX, Pellegrini M, Chin AI., "Sequencing of cancer cell subpopulations identifies micrometastases in a bladder cancer patient." Oncotarget. 8(28):45619-45625. 2017.

Plath, K.

- Sahakyan A, Yang Y, Plath K., "The Role of Xist in X-Chromosome Dosage Compensation." Trends Cell Biol.S0962-8924(18)30100-4.2018.

- Allison TF, Smith AJH, Anastassiadis K, Sloane-Stanley J, Biga V, Stavish D, Hackland J, Sabri S, Langerman J, Jones M, Plath K, Coca D, Barbaric I, Gokhale P, Andrews PW. "Identification and Single-Cell Functional Characterization of an Endodermally Biased Pluripotent Substate in Human Embryonic Stem Cells." Stem Cell Reports.10 (6):1895-1907. 2018.

- Ohashi M, Korsakova E, Allen D, Lee P, Fu K, Vargas BS, Cinkornpumin J, Salas C, Park JC, Germanguz I, Langerman J, Chronis C, Kuoy E, Tran S, Xiao X, Pellegrini M, Plath K, Lowry WE. "Loss of MECP2 Leads to Activation of P53 and Neuronal Senescence." Stem Cell Reports. 10(5):1453-1463. 2018.

- Keegan A, Plath K, Damoiseaux R., "High-Throughput Screening of a Luciferase Reporter of Gene Silencing on the Inactive X chromosome." Methods Mol Biol. 1755:75-87. 2018.

- Sereti KI, Nguyen NB, Kamran P, Zhao P, Ranjbarvaziri S, Park S, Sabri S, Engel JL, Sung K, Kulkarni RP, Ding Y, Hsiai TK, Plath K, Ernst J, Sahoo D, Mikkola HKA, Iruela-Arispe ML, Ardehali R., "Analysis of cardiomyocyte clonal expansion during mouse heart development and injury." Nat Commun. 9(1):754. 2018.

- Sahakyan A, Plath K, Rougeulle C., "Regulation of X-chromosome dosage compensation in human: mechanisms and model systems." Philos Trans R Soc Lond B Biol Sci. 5;372(1733). 2017.

- Guo G, von Meyenn F, Rostovskaya M, Clarke J, Dietmann S, Baker D, Sahakyan A, Myers S, Bertone P, Reik W, Plath K, Smith A., "Epigenetic resetting of human pluripotency." Development. 144(15):2748-2763. 2018.

Pyle, A.

- Hicks M, Hiserodt J, Paras K, Fujiwara W, Eskin A, Jan M, Xi H, Young C, Evseenko D, Nelson S, Spencer M, Van Handel B, Pyle AD., "ERBB3 and NGFR mark a distinct skeletal muscle progenitor cell in human development and hPSCs" Nature Cell Biology. 2018.

Quinlan, M.

- Silkworth WT, Kunes KL, Nickel GC, Phillips ML, Quinlan ME*, Vizcarra CL*. "The neuron specific formin Delphilin nucleates non-muscle actin but does not enhance elongation." Mol Biol Cell. 2017.

- Patel AA, Oztug-Durer ZA, van Loon AP, Quinlan ME., and "The Drosophila Formin Fhod Nucleates Actin Filaments." J Biol Chem. 293(2):532-540. 2018.

Reddy, S.

- Chattopadhyay A, Yang X, Mukherjee P, Sulaiman D, Fogelman HR, Grijalva V, Dubinett S, Wasler TC, Paul MK, Salehi-Rad R, Mack JJ, Iruela-Arispe ML, Navab M, Fogelman AM, Reddy ST., "Treating the Intestine with Oral ApoA-I Mimetic Tg6F Reduces Tumor Burden in Mouse Models of Metastatic Lung Cancer." Sci Rep. 8(1):9032. 2018.

- Charles-Schoeman C, Gugiu GB, Ge H, Shahbazian A, Lee YY, Wang X, Furst DE, Ranganath VK, Maldonado M, Lee T, Reddy ST., "Remodeling of the HDL proteome with treatment response to abatacept or adalimumab in the AMPLE trial of patients with rheumatoid arthritis." Atherosclerosis. 275:107-114. 2018.

- Li W, Kennedy D, Shao Z, Wang X, Kamdar AK, Weber M, Mislick K, Kiefer K, Morales R, Agatisa-Boyle B, Shih DM, Reddy ST, Moravec CS, Tang WHW., "Paraoxonase 2 prevents the development of heart failure." Free Radic Biol Med. 121:117-126. 2018.

- Morgantini C, Trifirò S, Tricò D, Meriwether D, Baldi S, Mengozzi A, Reddy ST, Natali A., "A short-term increase in dietary cholesterol and fat intake affects high-density lipoprotein composition in healthy subjects." Nutr Metab Cardiovasc Dis. (6):575-581. 2018.

- Singh R, Pervin S, Lee SJ, Kuo A, Grijalva V, David J, Vergnes L, Reddy ST., "Metabolic profiling of follistatin overexpression: a novel therapeutic strategy for metabolic diseases." Diabetes Metab Syndr Obes. 11:65-84. 2018.

- Devarajan A, Su F, Grijalva V, Yalamanchi M, Yalamanchi A, Gao F, Trost H, Nwokedi J, Farias-Eisner G, Farias-Eisner R, Fogelman AM, Reddy ST., "Paraoxonase 2 overexpression inhibits tumor development in a mouse model of ovarian cancer." Cell Death Dis. 9(3):392. 2018.

- Charles-Schoeman C, Meriwether D, Lee YY, Shahbazian A, Reddy ST., "High levels of oxidized fatty acids in HDL are associated with impaired HDL function in patients with active rheumatoid arthritis." Clin Rheumatol. 615-622. 2018.

- Dodani S, Kaeley GS, Arora S, Reddy ST., "Coronary artery disease in high risk South Asian immigrants: Role of dysfunctional HDL in risk prediction." Indian Heart J. 69(5):658-659. 2017.

- Guirgis FW, Leeuwenburgh C, Grijalva V, Bowman J, Kalynych C, Moldawer L, Moore FA, Reddy ST., "HDL Cholesterol Efflux is Impaired in Older Patients with Early Sepsis: A Subanalysis of a Prospective Pilot Study." Shock. 50(1):66-70. 2018.

- Fogelman AM, Reddy ST., "Making sense of a seemingly odd connection." Eur Heart J. 38(48):3588-3589. 2017.

- Mukherjee P, Hough G, Chattopadhyay A, Navab M, Fogelman HR, Meriwether D, Williams K, Bensinger S, Moller T, Faull KF, Lusis AJ, Iruela-Arispe ML, Bostrom KI, Tontonoz P, Reddy ST, Fogelman AM., "Transgenic tomatoes expressing the 6F peptide and ezetimibe prevent diet-induced increases of IFN-β and cholesterol 25-hydroxylase in jejunum." J Lipid Res. 58(8):1636-1647. 2017.

- Guirgis FW, Dodani S, Moldawer L, Leeuwenburgh C, Bowman J, Kalynych C, Jones AE, Reddy ST, Moore FA., "Exploring the Predictive Ability of Dysfunctional High-Density Lipoprotein for Adverse Outcomes in Emergency Department Patients with Sepsis: A Preliminary Investigation." Shock. 48(5):539-544. 2017.

Reisler, E.

- Grintsevich EE, Ge P, Sawaya MR, Yesilyurt HG, Terman JR, Zhou ZH, Reisler E., "Catastrophic disassembly of actin filaments via Mical-mediated oxidation." Nat Commun. 8(1):2183. 2017.

Reue, K.

- Link JC, Reue K., "Genetic basis for sex differences in obesity and lipid metabolism." Annu Rev Nutr 37:225-245. 2017.

- Wang H, Airola MV, Reue K., "How lipid dropelts "TAG" along: Glycerolipid synthetic enzymes and lipid storage." Biochim Biophys Acta 1862:1131-1145. 2017.

- Nakano H, Minami I, Braas D, Pappoe H, Wu X, Sagadevan A, Vergnes L, Fu K, Morselli M, Dunham C, Ding X, Stieg AZ, Gimzewski JK, Pellegrini M, Clark PM, Reue K, Lusis AJ, Ribalet B, Kurdistani SK, Christofk H, Nakatsuji N, Nakano A., "Glucose inhibits cardiac muscle maturation through nucleotide biosynthesis." Elife 6. 2017.

- Hodeib M, Ogrodzinski MP, Vergnes L, Reue K, Karlan BY, Lunt SY, Aspuria PP., "Metformin induces distinct bioenergetic and metabolic profiles in sensitive versus resistant high grade serous ovarian cancer and normal fallopian tube secretory epithelial cells." Oncotarget 9:4044–4060. 2017.

- Rajbhandari P, Thomas BJ, Feng AC, Hong C, Wang J, Vergnes L, Sallam T, Wang B, Sandhu J, Seldin MM, Lusis AJ, Fong LG, Katz M, Lee R, Young SG, Reue K, Smale ST, Tontonoz P., "IL-10 signaling remodels adipose chromatin architecture to limit thermogenesis and energy expenditure." Cell 172:218–233. 2018.

- Chella Krishnan K, Kurt Z, Barrere-Cain R, Sabir S, Das A, Floyd R, Vergnes L, Zhao Y, Che N, Charugundla S, Qi H, Zhou Z, Meng Y, Pan C, Seldin MM, Norheim F, Hui S, Reue K, Lusis AJ, Yang X., "Integration of multi-omics data from mouse diversity panel highlights mitochondrial dysfunction in non-alcoholic fatty liver disease." Cell Syst 6: 103–115.e7. 2018.

- Zhou Z, Ribas V, Rajbhandari P, Drew BG, Moore TM, Fluitt AH, Reddish BR, Whitney KA, Georgia S, Vergnes L, Reue K, Liesa M, Shirihai O, van der Bliek AM, Chi NW, Mahata SK, Tiano JP, Hewitt SC, Tontonoz P, Korach KS, Mauvais-Jarvis F, Hevener AL., "Estrogen receptor alpha protects pancreatic beta cells from apoptosis by preserving mitochondrial function and suppressing endolasmic reticulum stress." J Biol Chem. 293: 4735–4751. 2018.

- Lee JM, Ong JR, Vergnes L, de Aguiar Vallim TQ, Nolan J, Cantor RM, Walters JRF, Reue K., "Diet1, bile acid diarrhea, and FGF15/19: mouse model and human genetic variants." J Lipid Res 59:429–438. 2018.

- Zore T, Palafox M, Reue K., "Sex differences in obesity, lipid metabolism, and inflammation—a role for the sex chromosomes?" Mol Metab 15:35–44. 2018.

- He C, Weston TA, Jung RS, Heizer P, Larsson M, Hu X, Allan CM, Tontonoz P, Reue K, Beigneux AP, Ploug M, Holme A, Kilburn M, Guagliardo P, Ford DA, Fong LG, Young SG, Jiang H., "NanoSIMS analysis of intravascular lipolysis and lipid movement across capillaries and into cardiomyocytes." Cell Metab 27:1055–1066.e3. 2018.

- Seldin MM, Koplev S, Rajbhandari P, Vergnes L, Rosenberg GM, Meng Y, Pan C, Phuong TMN, Gharakhanian R, Che N, Mäkinen S, Shih DM, Civelek M, Parks BW, Kim ED, Norheim F, Chella Krishnan K, Hasin-Brumshtein Y, Mehrabian M, Laakso M, Drevon CA, Koistinen HA, Tontonoz P, Reue K, Cantor RM, Björkegren JLM, Lusis AJ., "A strategy for discovery of endocrine interactions with application to whole-body metabolism." Cell Metab. 27: 1138–1155.e6. 2018.

- Li TY, Song L, Sun Y, Li J, Yi C, Lam SM, Xu D, Zhou L, Li X, Yang Y, Zhang CS, Xie C, Huang X, Shui G, Lin SY, Reue K, Lin SC., "Tip60–mediated lipin 1 acetylation and ER translocation determine triacylglycerol synthesis rate." Nat Commun 9:1916. 2018.

- Cheng Y, Yuan Q, Vergnes L, Rong X, Youn JY, Li J, Yu Y, Liu W, Cai H, Lin JD, Tontonoz P, Hong C, Reue K, Wang CY., "KDM4B protects against obesity and metabolic dysfunction." Proc Natl Acad Sci USA 115:E5566-E5575. 2018.

- Goldberg IJ, Reue K, Abumrad NA, Bickel PE, Cohen S, Fisher EA, Galis ZS, Granneman JG, Lewandowski ED, Murphy R, Olive M, Schaffer JE, Schwartz-Longacre L, Shulman GI, Walther TC, Chen J., "Deciphering the Role of Lipid Droplets in Cardiovascular Disease: A Report From the 2017 National Heart, Lung, and Blood Institute Workshop." Circulation. 138(3):305-315. 2018.

Rodriguez, J.

- Hattne, J., Shi, D., Glynn, C., Zee, C., Gallagher-Jones, M., Martynowycz, M.W., Rodriguez, J.A. and Gonen, T., "Analysis of global and site-specific radiation damage in cryo-EM. Structure." 26(5) 759-766. 2018.

- Pryor, A.J., Rana, A., Xu, R., Rodriguez, J.A., Yang, Y., Gallagher-Jones, M., Jiang, H., Park, J., Kim, S., Kim, S., Nam, D., Yue, Y., Fan, J, Sun, Z., Zhang, B., Gardner, D.F., Dias, C.S., Joti, Y., Hatsui, T., Kameshima, T., Inubushi, Y., Tono, K., Lee, J.Y., Yabashi, M., Song, C., Ishikawa, T., Kapteyn, H.C., Murnane, M.M., Miao, J., "Single-Shot 3D Diffractive Imaging of Core-Shell Nanoparticles with Elemental Specificity." Scientific Reports. 2018.

- Jung, D., Saleh, L.M.A., Berkson, Z.J., El-Kady, M.F., Hwang, J.Y., Mohamed, N., Wixtrom, A.I., Titarenko, E., Shao, Y., McCarthy, K., Guo, J., Martini, I.B., Kraemer, S., Wegener, E.C., Saint-Cricq, P., Ruehle, B., Langeslay, R.R., Delferro, M., Brosmer, J.L., Hendon, C.H., Gallagher-Jones, M., Rodriguez, J., Chapman, K.W., Miller, J.T., Duan, X., Kaner, R.B., Zink, J.I., Chmelka, B.F. and Spokoyny, A.M., "A molecular cross-linking approach for hybrid metal oxides." Nat. Materials. (17) 341-348. 2018.

- Hughes, M.P., Sawaya, M.R., Boyer, D.R., Goldschmidt, L., Rodriguez, J.A., Cascio, D., Chong, L., Gonen, T., Eisenberg, D.S., "Atomic structures of low-complexity protein segments reveal kinked β sheets that assemble networks." Science. 359(6376), 698-701. 2018.

- Gallagher-Jones, M., Glynn, C., Boyer, D.R., Martynowycz, M.W., Hernandez, E., Miao, J., Zee, C., Novikova, I.V., Goldschmidt, L., McFarlane, H.T., Helguera, G.F., Evans, J.E., Sawaya, M.R., Cascio, D., Eisenberg, D.S., Gonen, T. and Rodriguez, J.A., "Sub-ångström cryo-EM structure of a prion protofibril reveals a polar clasp." Nat. Structural and Molecular Biology. 25, 131-134. 2018.

- Pryor, A.J., Yang, Y., Rana, A., Gallagher-Jones, M., Zhou, J., Lo, Y.H., Melinte, G., Chiu, W., Rodriguez, J.A., Miao, J., "GENFIRE: A generalized Fourier iterative reconstruction algorithm for high-resolution 3D imaging." Microscopy & Microanalysis. 23, 128-129. 2017.

Sallam, T.

- Sallam, T, Jones M, Thomas B, Wu X, Gilliland T, Qian K, Eskin A, Casero D, Hong C, Ito A, Daniel B, Whitelegge J, Nagy L, Castrillo A, Smale S and Tontonoz P., "Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by the noncoding RNA MeXis." Nature Medicine. 2018.

Schopf, J.W.

- Garcia, A.K., Schopf, J.W., Yokobori, S-I., Akanuma, S., Yamagish, A., "Reconstructed ancestral enzymes suggest long-term cooling of Earth's photic zone since the Archean" Proceedings of the National Academy of Sciences, USA. 14 (18) 4619-4624. 2017.

- Morais, L., Fairchild, T.R., Lahr, J.G., Rudnitzki, I.D., Schopf, J.W., Garcia, A.K., Kudryavtsev, A.B., Romero, G.R., "Carbonaceous and siliceous Neoproterozoic vase-shaped microfossils (Urucum Formation, Brazil) and the question of the early protistan biomineralization" Journal of Paleontology 91: 393-406; 2017.

- Schopf, J.W. Kudryavtsev, A.B., Osterhout, J.T., Williford, K.H., Kitajima, K., Valley, J.W., Sugitani, K., "An anaerobic ~3400 Ma shallow-water microbial consortium: presumptive evidence of Earth's Paleoarchean anoxic atmosphere" Precambrian Research 299: 309-318. 2017.

- Schopf, J.W., Kitajima, K., Spicuzza, M.J., Kurdyatsev, A.B., Valley, J.W., "SIMS analyses of the oldest known assemblage of microfossils dcument their taxon-correlated carbon isotope compositions" Proceedings of the National Academy of Sciences, USA. 115:53-58. 2018.

- Schopf, J.W. In Press. Life in Deep Time, A Personal Account of Paradigm-Changing Science. CRC-Taylor & Francis.

Schweizer, F.

- Sultemeier DR, Choy KR, Schweizer FE, Hoffman LF., "Spaceflight-induced synaptic modifications within hair cells of the mammalian utricle" J Neurophysiol. 117(6):2163-2178. 2017.

Smale, S.

- Scumpia, P.O., G.A. Botten, J.S. Norman, K.M. Kelly-Scumpia, R. Spreafico, A.R. Ruccia, P.K. Purbey, B.J. Thomas, R.L. Modlin, and S.T. Smale., "Opposing roles of Toll-like receptor and cytosolic DNA-STING signaling pathways for Staphylococcus aureus cutaneous host defense." PLoS Pathog. 2017.

- Madigan, C.A., C.J. Cambier, K.M. Kelly-Scumpia, P.O. Scumpia, T.Y. Cheng, J. Zailaa, B.R. Bloom, D.B., Moody, S.T. Smale, A. Sagasti, R.L. Modlin, and L. Ramakrishnan., "A macrophage response to Mycobacterium leprae phenolic glycolipid initiates nerve damage in leprosy." Cell. 2017.

- Purbey, P.K., P.O. Scumpia, P.J. Kim, A.J. Tong, K.S. Iwamoto, W.H. McBride, and S.T. Smale., "Defined sensing mechanisms and signaling pathways contribute to the global inflammatory gene expression output elicited by ionizing radiation." Immunity. 2017.

- Rajbhandari, P., B.J. Thomas, A.C. Feng, C. Hong, J. Wang, L. Vergnes, T. Sallam, B. Wang, J. Sandhu, M.M. Seldin, J.A. Lusis, L.G. Fong, R. Lee, S.G. Young, K. Reue, S.T. Smale, and P. Tontonoz., "IL10 signaling remodels adipose chromatin architecture to limit thermogenesis and energy expenditure." Cell. 2018.

Soragni, A.

- P. Avasthi*, A. Soragni*, J.N. Bembenek*, "Journal Clubs in the time of preprints." eLife, 7:e38532. 2018.

Spencer, M.

- Young, C.S., Mokhonova, E.,Quinonez, M.,Pyle,A, Spencer, M.J., "Creation of a novel humanized dystrophic mouse model of Duchenne muscular dystrophy and application of a CRISPR/Cas9 gene editing therapy." J Neuromuscul Dis. 4(2):139-145. 2017.

- Yao,J Guihard, P, Wu, X, Blazquez-Medela, A, Spencer,MJ, Jumabay, M, Tontonoz, P, Fogelman,A Bostrom,K and Yao,Y., "Vascular Endothelium Plays a Key Role in Directing Pulmonary Epithelial Cell Differentiation." J Cell Biol. 216(10):3369-3385. 2017.

- Quattrocelli M, Capote J, Ohiri JC, Warner JL, Vo AH, Earley JU, Hadhazy M, Demonbreun AR, Spencer MJ, McNally EM., "Genetic modifiers of muscular dystrophy act on sarcolemmal resealing and recovery from injury." PLoS Genet. 2017.

- Wang, D.W., Mokhonova, E.I., Kendall, G.C., Becerra, D. Naeini, Y.B. Cantor, R.M. Spencer, M.J., Nelson, S.F. and Miceli, M.C., "Repurposing Dantrolene for Long-term Combination Therapy to Potentiate Antisense-Mediated DMD Exon-Skipping in the mdx mouse." Molecular Therapy Nucleic Acids. 11:180-191. 2018.

- Hicks MR, Hiserodt J, Paras K, Fujiwara W, Eskin A, Jan M, Xi H, Young CS, Evseenko D, Nelson SF, Spencer MJ, Handel BV, Pyle AD., "ERBB3 and NGFR mark a distinct skeletal muscle progenitor cell in human development and hPSCs." Nat Cell Biol. 20(1):46-57. 2018.

- Kramerova, I., Torres, JA, Eskin, A., Nelson, SF, Spencer, M.J., "Calpain 3 and CaMKIIβ signaling are required to induce HSP70 necessary for adaptive muscle growth after atrophy." Hum Mol Gen. 2018.

Sun, R.

- Dai X, Gong D, Lim H, Jih J, Wu TT, Sun R, Zhou ZH., "Structure and mutagenesis reveal essential capsid protein interactions for KSHV replication.Nature." 553(7689):521-525. 2018.

- Du Y, Xin L, Shi Y, Zhang TH, Wu NC, Dai L, Gong D, Brar G, Shu S, Luo J, Reiley W, Tseng YW, Bai H, Wu TT, Wang J, Shu Y, Sun R., "Genome-wide identification of interferon-sensitive mutations enables influenza vaccine design." Science (New York, N.Y.). 359(6373):290-296. 2018.

- Du Y, Zhang TH, Dai L, Zheng X, Gorin AM, Oishi J, Wu TT, Yoshizawa JM, Li X, Yang OO, Martinez-Maza O, Detels R, Sun R., "Structural basis of TRPV5 channel inhibition by econazole revealed by cryo-EM. Effects of Mutations on Replicative Fitness and Major Histocompatibility Complex Class I Binding Affinity Are Among the Determinants Underlying Cytotoxic-T-Lymphocyte Escape of HIV-1 Gag Epitopes." mBio. 8(6).29184023. 2017.

- Watanabe M, Buth JE, Vishlaghi N, de la Torre-Ubieta L, Taxidis J, Khakh BS, Coppola G, Pearson CA, Yamauchi K, Gong D, Dai X, Damoiseaux R, Aliyari R, Liebscher S, Schenke-Layland K, Caneda C, Huang EJ, Zhang Y, Cheng G, Geschwind DH, Golshani P, Sun R, Novitch BG., "Self-Organized Cerebral Organoids with Human-Specific Features Predict Effective Drugs to Combat Zika Virus Infection." Cell reports. 21(2):517-532. 2017.

- Dai X, Wu L, Sun R, Zhou ZH. "Atomic Structures of Minor Proteins VI and VII in the Human Adenovirus." Journal of virology. 2017.

- Du Y, Chi X, Wang C, Jiang J, Kong F, Yan H, Wang X, Li J, Wu NC, Dai L, Zhang TH, Shu S, Zhou J, Yoshizawa JM, Li X, Bhattacharya D, Wu TT, Niu J, Sun R., "Quantifying perinatal transmission of Hepatitis B viral quasispecies by tag linkage deep sequencing." Scientific reports. 7(1):10168. 2017.

- Gorin AM, Du Y, Liu FY, Zhang TH, Ng HL, Hofmann C, Cumberland WG, Sun R, Yang OO., "HIV-1 epitopes presented by MHC class I types associated with superior immune containment of viremia have highly constrained fitness landscapes." PLoS pathogens. 2017.

- Gong D, Dai X, Xiao Y, Du Y, Chapa TJ, Johnson JR, Li X, Krogan NJ, Deng H, Wu TT, Sun R.Virus-Like Vesicles of Kaposi's Sarcoma-Associated Herpesvirus Activate Lytic Replication by Triggering Differentiation Signaling. Journal of virology. 91(15). 2017.

Tamanoi, F.

- Tanaka A, Radwan MO, Hamasaki A, Ejima A, Obata E, Koga R, Tateishi H, Okamoto Y, Fujita M, Nakao M, Umezawa K, Tamanoi F, Otuska M., "A novel inhibitor of farnesyltransferase with a zinc site recognition moiety and a farnesyl group." Bioorg Med Chem Lett 27, 3862-3866. 2017.

- Hayashi JY and Tamanoi, F., "Exploiting enzyme alterations in cancer for drug ativtion, drug delivery and nanotherapy." The Enzymes 42, 153-172. 2017.

- Heard, J.J., Phung I, Potes MI and Tamanoi F., "An oncogenic mutant of RHB, RHEB Y35N, exhibits an altered interaction with BRAF resulting in cancer transformation." BMC Cancer 18, 69. 2018.

- Faridi N, Bathaie SZ, Abroun S, Farzaneh P, Karbasian H,, Tamanoi F and Mohaghedhi MA., "Isolation and characterization of the primary epithelial breast cancer cells and the adjacent normal epithelial cells from Iranian women's breast cancer tumors." Cytotechnology 70, 625-639. 2018.
- Shahin SA, Wang R, Simargi SI, Contreras A, Parra Echavarria L, Qu L, Wen W, Dellinger T, Unternaehrer, J, Tamanoi F, Zink, JI and Glackin CA., "Hyaluronic acid conjugated nanoparticle delivery of siRNA against

TWIST reduces tumor burden and enhances sensitivity to cisplatin in ovarian cancer." Nanomedicine 14, 1381-1394. 2018.

- Doura T, Tamanoi F and Nakamura M., "Miniaturization of thiol-organosilica nanoparticles induced by an anionic surfactant." J. Colloid Interface Sci. 526, 51-62. 2018.

- Vu BT, Shahin SA, Croissant J, Fatieiev Y, Matsumoto K, Doan, T, Yik T, Siargi S, Contreras A, Ratliff L, Jimenez CM, Raehm,L, Khashab N, Durand JO, Glackin C and Tamanoi F., "Chick chorioallantoic membrane assay as an in vivo model to study the effect of nanoparticle-based anticancer drugs in ovarian cancer." Sci Rep 8, 8524. 2018.

Tang, Y.

- Yan, Y, Liu, Q., Zang, X., Yuan, S., Bat-Erdene, U., Nguyen, C. Gan, J., Zhou, J. †, Jacobsen, S. E.†, Tang, Y.†.,"Resistance-Gene Directed Discovery of a Natural Product Herbicide with a New Mode of Action." Nature. 2018.

- Ippoliti, F. M. Barber, J. S., Tang, Y. Garg, N. K†, "Synthesis of 8-Hydroxygeraniol." J. Org. Chem., 2018.

- Kishimoto, S., Hara, K., Hashimoto, H., Hirayama, Y., Champagne, A., Houk, K. N., Tang, Y., Watanabe, K.† "Enzymatic One-step Ring Contraction for Quinolone Biosynthesis." Nature Communications. 2018.

- Tang, M-C., Zou, Y., Yee, D. A., Tang, Y.†, "Identification of the Pyranonigrin A Biosynthetic Gene Cluster by Genome Mining in Penicillium thymicola IBT5891." AICHE J. 2018.

- Gao, S-S., Zhang, T., Garcia-Borras, M., Hung, Y-S., Billingsley, J. M., Houk, K. N.†, Hu, Y.†, Tang, Y.† "Biosynthesis of Heptacyclic Duclauxins Requires Extensive Redox Modifications of the Phenalenone Aromatic Polyketide" J. Am. Chem. Soc. 6991-6997. 2018.

- Li, L.#, Tang, M-C.#, Tang, S., Gao, S., Soliman, S., Hang, L., Xu, W., Ye, T., Watanabe, K., Tang, Y.†, "Genome Mining and Assembly-Line Biosynthesis of the UCS1025A Pyrrolizidinone Family of Fungal Alkaloids." J. Am. Chem. Soc. 140, 2067-2071. 2018.

- Harvey, C.#, Tang, M-C.#, (Stanford/UCLA U01 Team), Tang, Y., Hillenmeyer, M. E. † "HEx: a heterologous expression platform for the discovery of fungal natural products." bioRxiv, Science advances, 2018; Hai, Y., Tang, Y. †, "Biosynthesis of long-chain N-acyl amide by a truncated PKS-NRPS hybrid megasynthase in fungi." J. Am. Chem. Soc. 140, 1271–1274. 2018.

- Bai, J., Mu, R., Dou, M., Yan, D., Liu, B., Wei, Q., Wan, J., Tang, Y., Hu, Y. † "Epigenetic modification in histone deacetylase deletion strain of Calcarisporium arbuscula leads to diverse diterpenoids." Acta Pharmaceutica Sinica B. 2018.

- Walsh, C. T.†, Tang, Y.† "Recent Advances in Enzymatic Complexity Generation: Cyclization Reactions." Accepted for publication at Biochemistry. 2018.

- Walsh, C. T.†, Tu, B. P.†, Tang, Y.† "Eight Kinetically Stable but Thermodynamically Activated Molecules that Power Cell Metabolism." Accepted for publication at Chem. Rev. 2018.

- Ohashi, M., Liu, F., Hai, Y., Chen, M., Tang, M-C., Yang, Z., Sato, M., Watanabe, K.†, Houk, K. N.†, Tang, Y.†, "SAM-Dependent Enzyme-Catalysed Pericyclic Reactions in Natural Product Biosynthesis." Nature. 549, 502-506. 2017.

- Billingsley, J. M., DeNicola, A. B., Barber, J. S., Tang, M-C., Horecka, J., Chu, A., Garg, N. K., Tang, Y.†, "Engineering the Biocatalytic Selectivity of Iridoid Production in Saccharomyces cerevisiae." Metab. Eng. 44, 117-125.2017.

- Tang, M-C., Cui, X., He, X., Ding, Z., Zhu, T., Tang, Y.†, Li, D.† "Late-Stage Terpene Cyclization by an Integral Membrane Cyclase in the Biosynthesis of Isoprenoid Epoxycyclohexenone Natural Products." Org. Lett. 19, 5376-5379. 2017.

- Zhang, Y., Zou, Y., Brock, N. L., Huang, T., Lan, Y., Wang, X., Deng, Z., Tang, Y., Lin, S.† "Characterization of 2-Oxindole Forming Heme Enzyme MarE, Expanding the Functional Diversity of the Tryptophan Dioxygenase Superfamily." J. Am. Chem. Soc. 139, 11887-11894. 2017.

- Hang, L., Tang, M-C., Harvey, C. J. B., Page, C. G., Li, J., Hung, Y., Liu, N., Hillenmeyer, M. E., Tang, Y.†, "Reversible Product Release and Recapture by a Fungal Polyketide Synthase Using a Carnitine Acyltransferase Domain." Angew. Chem. Intl. Ed. 56, 9556-9660. 2017.

Tarling, E.

- Tarling et al., "RNA-binding protein ZFP35L1 maintains posttranscriptional regulation of bile acid metabolism" J Clin Invest. 127(10):3741-3754. 2017.

- Mack et al., "NOTCH1 is a mechanosensor in adult arteries" Nat Commun. 8(1):1620. 2017.

- Tumurkhuu et al., "Chlamydia pneumonia Hijacks a Host Autoregulatory IL-1β Loop to Drive Foam Cell Formation and Accelerate Atherosclerosis" Cell Metab. 2018.

Teitell, M.

- Kim, D.N.H., Kim, K.T., Kim, C., Teitell, M.A., and Zangle, T.A., "Soft Lithography Fabrication of Index-Matched Microfluidic Devices for Reducing Artifacts in Fluorescence and Quantitative Phase Imaging." Microfluidics and Nanofluidics. 2018.

- Huang, D., Leslie, K.A., Guest, D., Yeshcheulova, O., Roy, I.J., Piva, M., Moriceau, G., Zangle, T.A., Lo, R.S., Teitell, M.A.*, and Reed, J.*, "Quantifying Melanoma Drug Resistance and Tumor Heterogeneity by Live Cell Interferometry." Analytical Chemistry. 90(5): 3299-3306, 2018.

- Yu, J., Seldin, M., Fu, K., Li, S., Lam, L., Wang, P., Huang, D., Nguyen, T.L., Wei, B., Kulkarni, R., Teitell, M., Pellegrini, M., Lusis, A.J., and Deb, A., "Topological Arrangement of Cardiac Fibroblasts Regulates Cellular Plasticity." Circulation Research. 2018.

- Dhir, A., Dhir, S., Lukasz, B.S., Jimenez, L., Teitell, M., Rötig, A., Crow, Y.J., Rice, G.I., Duffy, D., Tamby, C., Nojima, T., Munnich, A., Schiff, M., de Almeida, C.R., Rehwinkel, J., Dziembowski, A., Szczesny, R.J., and Proudfoot, N.J., "Mitochondrial Double Stranded RNA Triggers Antiviral Signalling in Humans." Nature. 2018.

- Waters, L.R., Ahsan, F.M., Wolf, D.M., Shirihai, O., and Teitell, M.A., "Initial B Cell Activation Induces Metabolic Reprogramming and Mitochondrial Remodeling." iScience. 2018.

- Shimada, E., Ahsan, F.M., Nili, M., Huang, D., TeSlaa, T., Case, D., Atamdede, S., Yu, X., Gregory, B.D., Perrin, B.J., Koehler, C.M., and Teitell, M.A., "PNPase Knockout Results in mtDNA Loss and an Altered Metabolic Gene Expression Program." PLoS One, 2018.

- Man, T., Zhu, X., Chow, Y.-T., Liu, T., Wen, X., Teitell, M.A., and Chiou, P.-Y. "Photothermal Intracellular Delivery with Self-Aligned Cell Seeding." International Conference on Optical MEMS and Nanophotonics (OMN2017). 2017.

- Zhu, X., Man, T., Nguyen, T., Haw, M.T.X., Liu, T., Wen, X., Teitell, M.A., and Chiou, P.-Y., "Parallel Nanomechanical Indentation Platform Using Quantitative Phase Imaging." International Conference on Optical MEMS and Nanophotonics (OMN2018). 2018.

- Patananan, A.N., Sercel, A.J., and Teitell, M.A., "More Than a Powerplant: The Influence of Mitochondrial Transfer on the Epigenome." Current Opinion in Physiology 3:16-24, 2018.

- Zhang, J., Zhao, J., Dahan, P., Lu, V., Zhang, C., Li, H., and Teitell, M.A., "Metabolism in Pluripotent Stem Cells and Early Mammalian Development." Cell Metabolism, 27(2): 332-338, 2018.

- Dahan, P., Vu, L., Nguyen, R.M.T., Kennedy, S.A.L., and Teitell, M.A., "Metabolism in Pluripotency: Both Driver and Passenger?" Special Edition, Journal of Biological Chemistry. 2018.

Tetradis, S.

- Hiyari S, Green E, Pan C, Lari S, Davar M, Davis R, Camargo PM, Tetradis S, Lusis AJ, and Pirih FQ, "Genome-Wide Association Study Identifies Cxcl Family Members as Partial Mediators of LPS-induced Periodontitis." J Bone Miner Res epub. 2018.

- Hsu JJ, Lu J, Umar S, Lee JT, Kulkarni R, Ding Y, Chang CC, Hsiai TK, Hokugo A, Gkouveris I, Tetradis S, Nishimura I, Demer LL, and Tintut Y., "Effects of teriparatide on morphology of aortic calcification in aged hyperlipidemic mice." Am J Physiol Heart Circ Physiol epub. 2018.

- Wong RL, Hiyari S, Yaghsezian A, Davar M, Casarin M, Lin YL, Tetradis S, Camargo PM, and Pirih FQ., "Early intervention of peri-implantitis and periodontitis utilizing a mouse model." J Periodontol epub. 2018.

- Shimamoto H, Grogan TR, Tsujimoto T, Kakimoto N, Murakami S, Elashoff D, Aghaloo TL, and Tetradis S., "Does CBCT alter the diagnostic thinking efficacy, management and prognosis of patients with suspected Stage 0 medication-related osteonecrosis of the jaws?" Dentomaxillofac Radiol 47, 20170290 epub. 2018.

- Soundia A, Hadaya D, Esfandi N, Gkouveris I, Christensen R, Dry SM, Bezouglaia O, Pirih F, Nikitakis N, Aghaloo T, and Tetradis S., "Zoledronate Impairs Socket Healing after Extraction of Teeth with Experimental Periodontitis." J Dent Res 97: 312-320. 2018.

- Mallya S M, and Tetradis S., "Imaging of Radiation- and Medication-Related Osteonecrosis." Radiol Clin North Am 56, 77-89. 2018; Hiyari S, Wong R L, Yaghsezian A, Naghibi A, Tetradis S, Camargo PM, and Pirih FQ., "Ligature-induced peri-implantitis and periodontitis in mice." J Clin Periodontol 45, 89-99. 2018.

- Hiyari S, Naghibi A, Wong R, Sadreshkevary R, Yi-Ling L, Tetradis S, Camargo P M, and Pirih FQ., "Susceptibility of different mouse strains to peri-implantitis." J Periodontal Res 53, 107-116. 2018.

- Hong C, Quach A, Lin L, Olson J, Kwon T, Bezouglaia O, Tran J, Hoang M, Bui K, Kim RH, and Tetradis S., "Local vs. systemic administration of bisphosphonates in rat cleft bone graft: A comparative study." PLoS One 13, epub. 2018.

- Wong RL, Hiyari S, Yaghsezian A, Davar M, Lin YL, Galvan M, Tetradis S, Camargo P M, and Pirih FQ., "Comparing the Healing Potential of Late-Stage Periodontitis and Peri-Implantitis." J Oral Implantol 43, 437-445. 2017.

- Rowan, S, Newness EJ, Tetradis S, Prasad JL, Ko CC, and Sanchez A., "Should Student Evaluation of Teaching Play a Significant Role in the Formal Assessment of Dental Faculty? Two Viewpoints: Viewpoint 1: Formal Faculty Assessment Should Include Student Evaluation of Teaching and Viewpoint 2: Student Evaluation of Teaching Should Not Be Part of Formal Faculty Assessment." J Dent Educ 81, 1362-1372. 2017.

- Cheng N, Park J, Olson J, Kwon T, Lee D, Lim R, Ha S, Kim R, Zhang X, Ting K, Tetradis S, and Hong C., "Effects of Bisphosphonate Administration on Cleft Bone Graft in a Rat Model." Cleft Palate Craniofac J 54, 687-698. 2017.

Tontonoz, P.

- Zhang, L., Rajbhandari, P. Priest, C., Wu, X., Vallim. T., Temel, R., Sallam, T., and Tontonoz, P., "Inhibition of cholesterol biosynthesis through RNF145-dependent ubiquitination of SCAP." eLife. e28766. 2017.

- Sallam, T., Sandhu, J., and Tontonoz, P., "Long Noncoding RNA Discovery in Cardiovascular Disease: Decoding Form to Function." Circ Res. 122:155-166. 2018.

- Seldin, M.M., Koplev, S., Rajbhandari, P., Vergnes, L., Rosenberg, G.M., Meng, Y., Phuong, T., Gharakhanian, R., Che, N., Pan, C., Mäkinen, S., Shih, D.M., Civelek, M., Parks, B.W., Kim, E.D., Norheim, F., Krishnan, K.C., Hasin-Brumshtein, Y., Mehrabian, M., Laakso, M., Drevon, C., Koistinen, H.A., Tontonoz, P., Reue, K., Cantor, R.M., Björkegren, J.L.M., and Lusis, A.J., "A strategy for discovery of endocrine interactions with application to whole-body metabolism." Cell Metabolism. 27:1138-1155. 2018.

- Rajbhandari, P., Thomas, B.J., Feng, A-C, Hong, C., Wang, J., Vergnes, L., Sallam, T., Wang, B., Sandhu, J., Seldin, M., Lusis, A.J., Fong, L.G., Katz, M., Lee, R., Young, S.G., Reue, K., Smale, S.T., and Tontonoz, P., "IL-10 signaling remodels adipose chromatin architecture to limit thermogenesis and energy expenditure." Cell. 172:218-233. 2018.

- Zhou, Z., Ribas, V., Rajbhandari, P., Drew, B.G., Moore, T.M., Fluitt, A.H., Reddish, B.R., Whitney, K.A., Georgia, S., Vergnes, L., Reue, K., Liesa, M., Shirihai, O., van der Bliek, A.M., Chi, N.W., Mahata, S.K., Tiano, J.P., Hewitt, S.C., Tontonoz, P., Korach, K.S., Mauvais-Jarvis, F., Hevener, A.L., "Estrogen receptor alpha protects pancreatic beta cells from apoptosis by preserving mitochondrial function and suppressing endoplasmic reticulum stress." J Biol Chem. 293:4735-4751. 2018.

- Beceiro, S., Pap, A., Czimmerer, Z., Sallam, T., Guillén, J.A., Gallardo, G., Hong, C., A-Gonzalez, N., Tabraue, C., Diaz, M., Lopez, F., Matalonga, J., Valledor, A.F., Dominguez, P., Ardavin, C., Delgado-Martin, C., Partida-Sanchez, S., Rodriguez-Fernandez, J-L., Nagy, L., Tontonoz, P., and Castrillo, A., "LXR nuclear receptors are transcriptional regulators of dendritic cell chemotaxis." Mol Cell Biol. 2018.

- Wang, B., Rong, X., Palladino, E.N., Ford, D., and Tontonoz, P., "Phospholipid remodeling and cholesterol availability regulate intestinal stemness and tumorigenesis." Cell Stem Cell. 22:206-220. 2018.

- He, C, Weston, T.A., Jung, R.S., Heizer, P., Larsson, M., Hu, X., Allan, C.M., Tontonoz, P., Reue, K., Beigneux, A.P., Holme, A., Kilburn, M., Guagliardo, P., Fong, L.G., Young, S.G., and Jiang, H., "NanoSIMS analysis of intravascular lipolysis and lipid movement across capillaries and into parenchymal cells." Cell Metabolism. 27:1055-1066.2018.

- Sallam, T., Jones, M., Thomas, B.J., Wu, X., Gilliland, T., Qian, K., Eskin, A., Casero, D., Hong, C., Ito, A., Daniel, B., Whitelegge, J., Nagy, L., Castrillo, A., Smale, S., and Tontonoz, P., "Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by a long-noncoding RNA." Nature Medicine. 24:304-312.2018.

- Cheng, Y., Yuan, Q., Vergnes, L., Rong, X., Youn, J.Y., Li, J., Yu, Y., Liu, W., Cai, H., Lin, J.D., Tontonoz, P., Hong, C., Reue, K., Wang, C.Y., "KDM4B protects against obesity and metabolic dysfunction." Proc. Nat. Acad. Sci. USA. 2018.

- Wang, B. and Tontonoz, P., "Liver X receptors in lipid signalling and membrane homeostasis." Nature Reviews Endocrinology. 2018.

Torres, J.

- Y.C., Senese S., France B., Gholkar A.A., Damoiseaux R., and Torres J.Z. "Computational Cell Cycle Profiling of Cancer Cells for Prioritizing FDA-Approved Drugs with Repurposing Potential", Scientific Reports. 7(1):11261. 2017.

- Senese S., Lo Y.C., Gholkar A.A., Li C.M., Huang Y., Mottahedeh J., Kornblum H.I., Damoiseaux R., and Torres J.Z. "Microtubins: a Novel Class of Small Synthetic Microtubule Targeting Drugs that Inhibit Cancer Cell Proliferation", Oncotarget. 8(61):104007-104021. 2017.

- Lacks D.R., Oses-Prieto J.A., Alvarado A.G., Nakashima J., Chand S., Azzam D.B., Gholkar A.A., Sperry J., Ludwig K., Condro M.C., Nazarian S., Cardenas A., Shih M.Y.S., Damoiseaux R., France B., Orozco N., Visnyei K., Crisman T. J., Gao F., Torres J.Z., Coppola G., Burlingame A.L., and Kornblum H.I., "A Molecular Cascade Modulates MAP1B and Confers Resistance to mTOR Inhibition in Human Glioblastoma" Neuro Oncology. 2017.

- Ünal E. and Torres J.Z. "Ensuring Fidelity of Chromosome Segregation", Molecular Biology of the Cell. 29(6):687. 2018.

Wang, Y.

- Gao C, Howard-Quijano K, Rau C, Takamiya T, Song Y, Shivkumar K, Wang Y, Mahajan A., "Inflammatory and apoptotic remodeling in autonomic nervous system following myocardial infarction." PloS one. 12(5). 2017.

- Gao C, Wang Y., "Untangle a broken heart via janus kinase 1." Circulation research. 121(6):589-90. 2017.

- Liu Y, Dong W, Shao J, Wang Y, Zhou M, Sun H., "Branched-chain amino acid negatively regulates klf15 expression via pi3k-akt pathway." Frontiers in physiology. 8:853. 2017.

- Pillai ICL, Li S, Romay M, Lam L, Lu Y, Huang J, Dillard N, Zemanova M, Rubbi L, Wang Y, Lee J, Xia M, Liang O, Xie YH, Pellegrini M, Lusis AJ, Deb A., "Cardiac fibroblasts adopt osteogenic fates and can be targeted to attenuate pathological heart calcification." Cell Stem Cell. 20(2):218-32 e5. 2017.

- Rau CD, Romay MC, Tuteryan M, Wang JJ, Santolini M, Ren S, Karma A, Weiss JN, Wang Y, Lusis AJ., "Systems genetics approach identifies gene pathways and adamts2 as drivers of isoproterenol-induced cardiac hypertrophy and cardiomyopathy in mice." Cell systems. 4(1):121-8 e4. 2017.

- Rosa-Garrido M, Chapski DJ, Schmitt AD, Kimball TH, Karbassi E, Monte E, Balderas E, Pellegrini M, Shih TT, Soehalim E, Liem D, Ping P, Galjart NJ, Ren S, Wang Y, Ren B, Vondriska TM., "High-resolution mapping of chromatin conformation in cardiac myocytes reveals structural remodeling of the epigenome in heart failure." Circulation. 136(17):1613-25. 2017.

- Rose BA, Yokota T, Chintalgattu V, Ren S, Iruela-Arispe L, Khakoo AY, Minamisawa S, Wang Y., "Cardiac myocyte p38alpha kinase regulates angiogenesis via myocyte-endothelial cell cross-talk during stress-induced remodeling in the heart." The Journal of biological chemistry. 292(31):12787-800. 2017.

- Seldin MM, Kim ED, Romay MC, Li S, Rau CD, Wang JJ, Krishnan KC, Wang Y, Deb A, Lusis AJ., "A systems genetics approach identifies trp53inp2 as a link between cardiomyocyte glucose utilization and hypertrophic response." American journal of physiology Heart and circulatory physiology. 312(4):H728-H41. 2017.

- Shimizu H, Langenbacher AD, Huang J, Wang K, Otto G, Geisler R, Wang Y, Chen JN., "The calcineurin-foxo-murf1 signaling pathway regulates myofibril integrity in cardiomyocytes." eLife. 2017.

- Touma M, Kang X, Gao F, Zhao Y, Cass AA, Biniwale R, Xiao X, Eghbali M, Coppola G, Reemtsen B, Wang Y., "Wnt11 regulates cardiac chamber development and disease during perinatal maturation." JCI insight. 2(17). 2017.

- Touma M, Reemtsen B, Halnon N, Alejos J, Finn JP, Nelson SF, Wang Y., "A path to implement precision child health cardiovascular medicine." Frontiers in cardiovascular medicine. 4:36. 2017.

- Santolini M, Romay MC, Yukhtman CL, Rau CD, Ren S, Saucerman JJ, Wang JJ, Weiss JN, Wang Y, Lusis AJ, Karma A., "A personalized, multiomics approach identifies genes involved in cardiac hypertrophy and heart failure." NPJ systems biology and applications. 4:12. 2018.

- Lue Y, Gao C, Swerdloff RS, Hoang J, Avetisyan R, Jia Y, Rao M, Ren S, Atienza V, Yu J, Zhang Y, Chen M, Song Y, Wang Y, Wang C., "Humanin analogue (hng) enhances the protective effect of dexrazoxane against doxorubicin-induced cardiotoxicity." American journal of physiology Heart and circulatory physiology. 2018.

- Steiger D, Yokota T, Li J, Ren S, Minamisawa S, Wang Y., "The serine/threonine-protein kinase/endoribonuclease ire1alpha protects the heart against pressure overload-induced heart failure." The Journal of biological chemistry. 2018.

Weiss, S.

- Park, K., Weiss, S., "Performance Predictions and Design Rules for Membrane-Embedded Semiconducting Voltage-Sensing Nanoparticles". Biophysical Journal. 12, 703–13. 2017.

- Alhadid, Y.; Chung S.; Lerner, E.; Taatjes, D.J.; Borukhov, S.; Weiss, S., "Studying transcription initiation by Escherichia coli RNA polymerase with diffusion-based single molecule fluorescence". Protein Science. 26, 1278–1290. 2017.

- Lerner, E.; Ingargiola, A.; Lee, J.J.; Borukhov, S.; Michalet, X.; Weiss, S., "Different types of pausing modes during transcription initiation". Transcription. 0, 1–12. 2017.

- Ingargiola, A.; Lerner, E.; Chung, S.; Panzeri, F.; Gulinatti, A.; Rech, I.; Ghioni, M.; Weiss, S.; Michalet, X., "Multispot single-molecule FRET: towards high-throughput analysis of freely diffusing molecules". PLOS ONE. 2017.

- Feng, Z.; Suzy Nam, S.; Hamouri, F.; Ducos, B.; Vriz, S.; Volovitch, M. Jullien, L.; Lin, S.; Weiss, S.; Bensimon, D., "Optical control of tumor induction in the zebrafish". Scientific Reports. 7: 9195, 1-12. 2017.

- Chio, U.; Chung, S.; Weiss, S.; Shan, S., "A protean clamp guides membrane targeting of tail-anchored proteins". PNAS. 2017.

- Ingargiola, A.; Segal, M.; Gulinatti, A.; Rech, I.; Labanca, I.; Maccagnani, P.; Ghioni, M.; Weiss, S.; Michalet, X., "48-spot single-molecule FRET setup with periodic acceptor excitation". Journal of Chemical Physics. 148, 123304-1-15. 2018.

- Lerner, E.; Weiss, S., "Characterizing highly dynamic conformational states: the transcription bubble in RNAP-promoter open complex as an example". Journal of Chemical Physics. 148, 123315-1-9. 2018.

- Park, K.; Kuo, Y.; Shvadchak, V.; Ingargiola, A.; Dai, X.; Hsiung, L.; Kim, W.; Zhou, Z.H.; Zou, P.; Levine, A.J.; Li, J.J.; Weiss, S., "Membrane insertion of- and membrane potential sensing by-semiconductor voltage nanosensors: feasibility demonstration". Science Advances. 1-10. 2018.

- Lerner, E.; Cordes, T.; Ingargiola, A.; Alhadid, Y.; Chung, S.; Michalet, X.; Weiss, S., "Towards dynamic structural biology: "Two decades of single-molecule Förster resonance energy transfer". Science. 359, 288 1-12. 2018.

- Zhang, W.; Hamouri, F.; Feng, Z.; Aujard, I.; Ducos, B.; Ye, S.; Weiss, S.; Volovitch, M.; Vriz, S.; Jullien, L.; Bensimon, D.; "Control of protein activity and gene expression by cyclofen-OH uncaging", ChemBioChem. 2018.

- Lee, J.H.; Chandrasekar, S.; Chung, S.Y.; Fu, Y.H.; Liu, D.; Weiss, S.; Shan, S.O., "Sequential activation of human signal recognition particle by the ribosome and signal sequence drives efficient protein targeting". PNAS. 2018.

Whitelegge, J.

- Chai H, Diaz-Castro B, Shigetomi E, Monte E, Octeau JC, Yu X, Cohn W, Rajendran PS, Vondriska TM, Whitelegge JP, Coppola G, Khakh BS., "Neural Circuit-Specialized Astrocytes: Transcriptomic, Proteomic, Morphological, and Functional Evidence." Neuron 95(3): 531-549. 2017.

- Micewicz ED, Kim K, Iwamoto KS, Ratikan JA, Cheng G, Boxx GM, Damoiseaux RD, Whitelegge JP, Ruchala P, Nguyen C, Purbey P, Loo J, Deng G, Jung ME, Sayre JW, Norris AJ, Schaue D, McBride WH., "4-(Nitrophenylsulfonyl)piperazines mitigate radiation damage to multiple tissues." PLoS One 12(7):e0181577. 2017.

- Le TM, Poddar S, Capri JR, Abt ER, Kim W, Wei L, Uong NT, Cheng CM, Braas D, Nikanjam M, Rix P, Merkurjev D, Zaretsky J, Kornblum HI, Ribas A, Herschman HR, Whitelegge J, Faull KF, Donahue TR, Czernin J, Radu CG., "ATR inhibition facilitates targeting of leukemia dependence on convergent nucleotide biosynthetic pathways." Nat Commun. 8(1): 241. 2017.

- Rao NM, Capri J, Cohn W, Abdaljaleel M, Restrepo L, Gornbein JA, Yong WH, Liebeskind DS, Whitelegge JP., "Peptide Composition of Stroke Causing Emboli Correlate with Serum Markers of Atherosclerosis and Inflammation." Front Neurol. 8:427. 2017.

- Biczo G, Vegh ET, Shalbueva N, Mareninova OA, Elperin J, Lotshaw E, Gretler S, Lugea A, Malla SR, Dawson D, Ruchala P, Whitelegge J, French SW, Wen L, Husain SZ, Gorelick FS, Hegyi P, Rakonczay Z Jr, Gukovsky I, Gukovskaya AS, "Mitochondrial dysfunction, through impaired autophagy, leads to endoplasmic reticulum stress, deregulated lipid metabolism, and pancreatitis in animal models." Gastroenterology 154(3): 689-703. 2017.

- Maggi M, Mittelman SD, Parmentier JH, Colombo G, Meli M, Whitmire JM, Merrell DS, Whitelegge J, Scotti C., "A protease-resistant Escherichia coli asparaginase with outstanding stability and enhanced anti-leukaemic activity in vitro." Sci Rep. 7(1): 14479. 2017.

- Sallam T, Jones M, Thomas BJ, Wu X, Gilliland T, Qian K, Eskin A, Casero D, Zhang Z, Sandhu J, Salisbury D, Rajbhandari P, Civelek M, Hong C, Ito A, Liu X, Daniel B, Lusis AJ, Whitelegge J, Nagy L, Castrillo A, Smale S,

Tontonoz P., "Transcriptional regulation of macrophage cholesterol efflux and atherogenesis by a long noncoding RNA." Nat Med. 24(3): 304-312. 2018.

- Agarwal R, Whitelegge JP, Saini S, Shrivastav AP., "The S-layer biogenesis system of Synechocystis 6803: Role of Sll1180 and Sll1181 (E. coli HlyB and HlyD analogs) as type-I secretion components for Sll1951 export." Biochim Biophys Acta. 1860(7): 1436-1446. 2018.

- Bömer M, O'Brien JA, Pérez-Salamó I, Krasauskas J, Finch P, Briones A, Daudi A, Souda P, Tsui TL, Whitelegge JP, Paul Bolwell G, Devoto A., "COI1-dependent jasmonate signalling affects growth, metabolite production and cell wall protein composition in arabidopsis." Ann Bot. Jun 19. doi: 10.1093/aob/mcy109. 2018.

- Waldron RT, Su HY, Piplani H, Capri J, Cohn W, Whitelegge JP, Faull KF, Sakkiah S, Abrol R, Yang W, Zhou B, Freeman MR, Pandol SJ, Lugea A., "Ethanol Induced Disordering of Pancreatic Acinar Cell Endoplasmic Reticulum: An ER Stress/Defective Unfolded Protein Response Model." Cell Mol Gastroenterol Hepatol. 5(4): 479-497. 2018.

- Saelices L, Chung K, Lee JH, Cohn W, Whitelegge JP, Benson MD, Eisenberg DS., "Amyloid seeding of transthyretin by ex vivo cardiac fibrils and its inhibition." Proc Natl Acad Sci U S A. Jun 28. pii: 201805131. doi: 10.1073/pnas.1805131115. 2018.

Williams, D.

- Galloway CA, Dalvi S, Hung SSC, MacDonald LA, Latchney LR, Wong RCB, Guymer RH, Mackey DA, Williams DS, Chung MM, Gamm DM, Pebay A, Hewitt AW, Singh R., "Drusen in patient-derived hiPSC-RPE models of macular dystrophies" Proceedings of the National Academy of Sciences, 114:E8214-E8223, 2017.

- Hazim RA, Karumbayaram S, Jiang M, Dimashkie A, Lopes VS, Li D, Burgess BL, Vijayaraj P, Alva-Ornelas JA, Zack JA, Kohn DB, Gomperts BN, Pyle AD, Lowry WE, Williams DS., "Differentiation of RPE cells from integration-free iPS cells and their cell biological characterization" Stem Cell Research & Therapy, 8:217, 2017.

- Esteve-Rudd J, Hazim RA, Diemer T, Paniagua AE, Volland S, Umapathy A, Williams DS., "Defective phagosome motility and degradation in cell non-autonomous RPE pathogenesis of a dominant macular degeneration" Proceedings of the National Academy of Sciences, 115:5468-5473. 2018.

- Hazim RA, Williams DS., "Cell culture analysis of the phagocytosis of photoreceptor outer segments by primary mouse RPE cells" In: Tanimoto N. (eds) Mouse Retinal Phenotyping. Methods in Molecular Biology, 1753:63-71. Humana Press, New York, NY, 2018.

Witte, O.

- Salas JR,Chen BY, Wong A, Duarte S, Angarita SAK, Lipshutz GS, Witte ON, Clark PM., "Non-invasive imaging of drug-induced liver injury with 18F-DFA PET" J Nucl Med. 2018.

- Lee JK, Bangayan NJ, Chai T, Smith BA, Pariva TE, Yun S, Vashisht A, Zhang Q, Park JW, Corey E, Huang J, Graeber TG, Wohlschlegel J, Witte ON., "Systemic surfaceome profiling identifies target antigens for immune-based therapy in subtypes of advanced prostate cancer" Proc Natl Acad Sci U S A. 115(19):E4473-E4482. 2018.

- Salas JR, Chen BY, Wong A, Cheng D, Van Arnam JS, Witte ON, Clark PM., "18F-FAC PET selectively images hepatic infiltrating CD4 and CD8 T cells in mouse model of autoimmune hepatitis" J Nucl Med. 2018.

Wong, D.

- Kaczor-Urbanowicz KE, Kim Y, Li F, Galeev T, Kitchen RR, Koyano K, Jeong SH, Wang X, Elashoff D, Kang SY, Kim SM, Kim K, Kim S, Chia D, Xiao X, Rozowsky J, Wong DTW., "Novel approaches for bioinformatic analysis of salivary RNA Sequencing data in the biomarker development process." Bioinformatics. 2017; Nonaka T, Wong DTW., "Liquid Biopsy in Head and Neck Cancer: Promises and Challenges." Journal of Dental Research. 22034518762071. 2018.

- Kaczor-Urbanowicz KE, Trivedi HM, Lima PO, Camargo PM, Giannobile WV, Grogan TR, Gleber-Netto FO, Whiteman Y, Li F, Lee HJ, Dharia K, Aro K, Carerras-Presas CM, Amuthan S, Vartak M, Akin D, Al-Adbullah H, Bembey K, Klokkevold PR, Elashoff D, Barnes VM, Richter R, DeVizio W, Masters JG, Wong D. "Salivary exRNA biomarkers to detect gingivitis and monitor disease regression". J Clin Periodontol. 2018.

- Li F, Kaczor-Urbanowicz KE, Sun J, Majem B, Lo HC, Kim Y, Koyano K, Liu Rao S, Young Kang S, Mi Kim S, Kim KM, Kim S, Chia D, Elashoff D, Grogan TR, Xiao X, Wong DTW. "Characterization of Human Salivary Extracellular RNA by Next-generation Sequencing." Clin Chem. 2018.

- He X, Li F, Bor B, Koyano K, Cen L, Xiao X, Shi W, Wong DTW. "Human tRNA-Derived Small RNAs Modulate Host-Oral Microbial Interactions." Journal of Dental Research. 2018.

Xiao, X.

- Harvey SE, Xu Y, Lin X, Gao XD, Qiu Y, Ahn J, Xiao X, Cheng C., "Co-regulation of alternative splicing by hnRNPM and ESRP1 during EMT." In Press, RNA; Ohashi M, Korsakova E, Allen D, Lee P, Fu K, Vargas BS, Cinkornpumin J, Salas C, Park JC, Germanguz I, Langerman J, Chronis C, Kuoy E, Tran S, Xiao X, Pellegrini M, Plath K, Lowry WE., "Loss of MECP2 leads to activation of p53 and neuronal senescence." Stem Cell Reports, 10(5):1453-1463, 2018.

- Hsiao YHE, Bahn JH, Yang Y, Yang YW, Tran S, Lin X, Quinones-Valdez G, Xiao X., "RNA editing in nascent RNA affects pre-mRNA splicing." Genome Research, 28(6):812-823, 2018.

- Li F, Elzbieta-Urbanowicz K, Sun J, Majem B, Lo HC, Kim Y, Koyano K, Kang SY, Kim SM, Kim KM, Kim S, Chia D, Elashoff D, Grogan TR, Xiao X, Wong DTW., "Characterization of human salivary extracellular RNA (exRNA) by next-generation sequencing." Clinical Chemistry. 2018.

- He X, Li F, Bor B, Koyano K, Xiao X, Shi W, Wong D., "tRNA-derived small RNAs, a novel class of mobile molecules for modulating host-bacteria interactions." In press, Journal of Dental Research; Arefeen A, Liu J, Xiao X, Jiang T., "TAPAS: Tool for Alternative Polyadenylation Site Analysis." In press, Bioinformatics; Burkett ZD, Day NF, Hilliard AT, Aamodt CM, Kimball TH, Heston JB, Xiao X, White SA., "FoxP2 isoforms induce unique spatiotemporal transcriptional networks for vocal learning in the zebra finch." eLife. 2018.

- Brümmer A, Yang Y, Chan TW, Xiao X., "Structure-mediated modulation of mRNA abundance by A-to-I editing." Nature Communications. 8(1):1255, 2017.

- Kaczor-Urbanowicz K, Kim Y, Li F, Galeev T, Kitchen RR, Koyano K, Elashoff D, Xiao X, Rozowsky J, Wong DTW. "Novel approaches for bioinformatic analysis of salivary RNA Sequencing data in the biomarker development process." Bioinformatics, 34(1):1-8, 2018.

- Touma M, Kang X, Gao F, Zhao Y, Cass AA, Biniwale R, Xiao X, Eghbali M, Coppola G, Reemtsen B, Wang Y., "Wnt11 signaling regulates chamber-specific cardiomyocyte proliferation in neonatal heart maturation and disease." JCI Insight, 2(17). 2017.

Yang, X.

- Lee, C.Y., Daggett, A., Gu,, X., Jiang, L.L., Langfelder, P., Li, X., Wang, N., Zhao, Y., Park, C.S., Cooper, Y., Ferando, I., Mody, I., Coppola, G., Xu, H., Yang, X.W., "Elevated TREM2 gene dosage reprograms microglia responsivity and ameliorates pathological phenotypes in Alzheimer's disease models" Neuron 97:1032-48. 2018.

- Victor, M.B., Richner, M., Olsen, H.E., Lee, S.W., Monteys ,A.M., Ma, C., Huh, C.J., Zhang, B., Davidson, B.L., Yang, X.W., Yoo, A.S., "Striatal neurons directly converted from Huntington's disease patient fibroblasts recapitulate age-associated disease phenotypes" Nat Neurosci. 21:341-352. 2018.

- Langfelder, P., Gao, F., Wang, N., Howland, D., Kwak, S., Vogt, T.F., Aaronson, J.S., Rosinski ,J., Coppola, G., Horvath, S., Yang, X.W., "MicroRNA signatures of endogenous Huntingtin CAG repeat expansion in mice" PLoS One 13:e0190550. 2018.

- Veldman, M., Yang, X.W., "Molecular insights into synaptic miscommunications in Huntington's disease" Current Opinion in Neurobiology 48:79-89. 2017.

- Yau, R.G., Doerner, K., Castellanos, E.R., Haakonsen, D., Werner, A., Wang, N., Yang, X.W., Matsumoto, M.L., Vishva M. Dixit, V.M., Rape, M., "Assembly and function of heterotypic ubiquitin chains in cell cycle and protein quality control." Cell 171:918-933. 2017.

Yeaman, M.

- Chan, L.C., S. Chaili, S.G. Filler, N. Solis, H. Wang, C. Johnson, H.K. Lee, L.F. Diaz, L.S. Miller and M.R. Yeaman., "Innate memory contributes to host defense against recurrent skin and skin structure infections caused by methicillin-resistant Staphylococcus aureus." Infect & Immun 85(2):e00876-16. 2017.

- Dillen, C.A., B.L. Pinsker, A.I. Marusina, A.A. Merleev, O.N. Farber, H. Liu, N.K. Archer, D.B. Lee, Y. Wang, R.V. Ortines, S.K. Lee, M.C. Marchitto, S.S. Cai1, A.G. Ashbaugh, L.S. May, S.M. Holland, A.F. Freeman, L. Miller, M.R. Yeaman, S.I. Simon, J.D. Milner, E. Maverakis, and L.S. Miller., "Clonally expanded γδ T cells protect against Staphylococcus aureus skin reinfection." J Clin Invest 128:1026-1042. 2018.

- Edwards, J.E. Jr., M. Schwartz, C. Schmidt, E. Zacher, M. Lizakowski, E.A. DeMontingy, J. Hoeg, T. Holmberg, M.T. Cooke, A. Ibrahim, S. Filler, M.R. Yeaman, J. Sobel, L. Edwards, M. Jacobs, M. Augenbraun, P. Nyirjesy, S. Sussman, R. Reagan, M. Drusano, K. Hoover, and J.P. Hennessey, Jr., "A fungal vaccine (NDV-3A) for treatment of recurrent candidiasis: randomized, double-blind and placebo-controlled clinical trial." Clin Infect Dis. 2018.

- Uppuluri, P., L. Lin, G. Luo, A. Alqarihi, S. Alkhazraji, M. Swidergall, N.Y. Yount, M.R. Yeaman, S.G. Filler and A.S. Ibrahim., "The Hyr1 protein from the fungus Candida albicans is a cross kingdom immunotherapeutic target for Acinetobacter bacterial infection." PLoS Pathogens 10; 14(5):e1007056. 2018.

- Uppuluri, P., A. Alqarihi, S. Singh, C.S. Schmidt, J.P. Hennessey, Jr., M.R. Yeaman, S.G. Filler, J.E. Edwards, Jr. and A.S. Ibrahim., "Human Als3p antibodies are surrogate biomarkers of NDV-3A vaccine efficacy vs. recurrent vulvovaginal candidiasis." Front Immunol 9:1349. 2018.

- Li, L. A. Wessam, N.P. Donegan, K. Seidl, A.L. Cheung, Y.F. Zhou, M.R. Yeaman, A.S. Bayer, and Y.Q. Xiong., "Role of purine biosynthesis in persistent methicillin-resistant Staphylococcus aureus infection." J Infect Dis. 2018.

- Yeaman, M.R. and J.P. Hennessey, Jr., "Innovative approaches to improve anti-infective vaccine efficacy." Ann Rev Pharm Tox 57:189-222. 2017.

- Yeaman, M.R., S. Buettner and K. Thevissen., “Regulated cell death as a therapeutic target for novel antifungal peptides and biologics.” Oxid Med Cell Long. 2018.

- Van Dijck, P., Sjollema, B.P.A. Cammue, K. Lagrou, J. Berman, C. d’Enfert, D.R. Andes, M.C. Arendrup, A.A. Brakhage, R. Calderone, E. Cantón, T. Coenye, P. Cos, L.E. Cowen, M. Edgerton, A. Espinel-Ingroff, S.G. Filler, M. Ghannoum, N.A.R. Gow, H. Haas, M. Jabra-Rizk, E.M. Johnson, S.R. Lockhart, J.L. Lopez-Ribot, J. Maertens, C.A. Munro, J.E. Nett, C.J. Nobile, M.A. Pfaller, G. Ramage, D. Sanglard, M. Sanguinetti, I. Spriet, P. Verweij, A. Warris, J. Wauters, M.R. Yeaman, S.A.J. Zaat and K. Thevissen., “Methodologies for in vitro and in vivo evaluation of efficacy of antifungal and antibiofilm agents and surface coatings against fungal biofilms.” Microb Cell 5:300-326. 2018.

Zack, J.

- Marsden MD, Loy BA, Wu X, Ramirez CM, Schrier AJ, Murray D, Shimizu A, Ryckbosch SM, Katherine E, Near KE, Chun T-W, Wender PA, Zack JA., “In vivo activation of latent HIV with a synthetic bryostatin analog effects both latent cell "kick" and “kill" in strategy for virus eradication.” PLoS Pathogens. 2017.

- Hazim RA, Karumbayaram S, Dimashkie A, Jiang M, Lopez VS, Li D, Burgess BL, Vijayaraj P, Alva-Ornelas JA, Zack JA, Kohn DB, Gomperts BN, Pyle AD, Lowry WE, Williams DS., “Differentiation of RPE cells from integration-free iPS cells and their cell biological characterization.” Stem Cell Res Ther. 2017.

- Zhen A, Peterson CW, Carillo MA, Reddy SS, Youn CS, Lam BB, Chang NY, Martin HA, Rick JW, Kim J, Neel NC, Rezek VK, Kamata M, Chen ISY, Zack JA, Kiem H-P, Kitchen SG., “Long-term persistence and function of hematopoietic stem cell-derived chimeric antigen receptor T cells in a nonhuman primate model of HIV/AIDS.” PLoS Pathogens. 2017.

- Marsden MD, Wu X, Mottahedan S, Loy BA, Schrier AJ, DeChristopher BA, Shimizu AJ, Hardman CT, Ho S, Ramirez CM, Wender PA, Zack JA., “Characterization of designed, synthetically accessable bryostatin analog HIV latency reversing agents.” Virology. 2018.

Zhang, Y.

- Darmanis S, Sloan SA, Croote D, Mignardi M, Chernikova S, Samghababi P, Zhang Y, Neff N, Kowarsky M, Caneda C, Li G, Chang SD, Connolly ID, Li Y, Barres BA, Gephart MH, Quake SR., “Single-cell RNA-seq analysis of infiltrating neoplastic cells at the migrating front of human glioblastoma.” Cell Report. 21(5) 1399-1410. 2017.

- Watanabe M, Buth JE, Vishlaghi N, de la Torre-Ubieta L, Taxidis J, Khakh BS, Coppola G, Pearson CA, Yamauchi K, Gong D, Dai X, Damoiseaux R, Aliyari R, Liebscher S, Schenke-Layland K, Caneda C, Huang EJ, Zhang Y, Cheng G, Geschwind DH, Golshani P, Sun R, Novitch BG., “Self-organized cerebral organoids with human-specific features predict effective drugs to combat Zika virus infection.” Cell Report. 2017.

Zheng, J.

- Diouf B, Lin W, Goktug A, Grace CRR, Waddell MB, Bao J, Shao Y, Heath RJ, Zheng JJ, Shelat AA, Relling MV, Chen T, Evans WE., “Alteration of RNA Splicing by Small-Molecule Inhibitors of the Interaction between NHP2L1 and U4.” SLAS Discov. 23(2):164-173. 2018.

- Zhang C, Miller DJ, Guibao CD, Donato DM, Hanks SK, Zheng JJ., “Structural and functional insights into the interaction between the Cas family scaffolding protein p130Cas and the focal adhesion-associated protein paxillin.” J Biol Chem. 292(44):18281-18289. 2017.

- Yang J, Milasta S, Hu D, AlTahan AM, Interiano RB, Zhou J, Davidson J, Low J, Lin W, Bao J, Goh P, Nathwani AC, Wang R, Wang Y, Ong SS, Boyd VA, Young B, Das S, Shelat A, Wu Y, Li Z, Zheng JJ, Mishra A, Cheng Y, Qu C, Peng J, Green DR, White S, Guy RK, Chen T, Davidoff AM., "Targeting Histone Demethylases in MYC-Driven Neuroblastomas with Ciclopirox." Cancer Res. 77(17):4626-4638. 2017.

- Ahadome SD, Zhang C, Tannous E, Shen J, Zheng JJ., "Small-molecule inhibition of Wnt signaling abrogates dexamethasone-induced phenotype of primary human trabecular meshwork cells." Exp Cell Res. 357(1):116-123. 2017.

Zhou, H.

- Dai, X, Li, X, Lai, M, Shu, S, Du, Y, Zhou, ZH* and Sun, R., "In situ structures of the genome and genome-delivery apparatus in an ssRNA virus." Nature. 541(7635):112-116. 2017.

- Mayle KM, Dern KR, Wong VK, Sung S, Ding K, Rodriguez AR, Taylor Z, Zhou ZH, Grundfest WS, Deming TJ, Kamei DT., "Polypeptide-Based Gold Nanoshells for Photothermal Therapy" SLAS Technol. 22(1):18-25. 2017.

- Yu, X, Jih, J, Jiang, J and Zhou, ZH., "Atomic structure of the human cytomegalovirus capsid with its securing tegument layer of pp150" Science, 356. 1 350. 2017.

- Li J, He Q, Liu Y, Liu S, Tang S, Li C, Sun D, Li X, Zhou M, Zhu P, Bi G, Zhou Z, Zheng JS, Tian C., "Chemical Synthesis of K34-Ubiquitylated H2B for Nucleosome Reconstitution and Single-Particle Cryo-Electron Microscopy Structural Analysis" Chembiochem. 18(2):176-180. 2017.

- Li X, Liu S, Jiang J, Zhang L, Espinosa S, Hill RC, Hansen KC, Zhou ZH*, Zhao R., "CryoEM structure of Saccharomyces cerevisiae U1 snRNP offers insight into alternative splicing" Nat Commun. 8(1):1035. 2017.

- Xu L, Zheng Q, Li S, He M, Wu Y, Li Y, Zhu R, Yu H, Hong Q, Jiang J, Li Z, Li S, Zhao H, Yang L, Hou W, Wang W, Ye X, Zhang J, Baker TS, Cheng T, Zhou ZH, Yan X, Xia N., "Atomic structures of Coxsackievirus A6 and its complex with a neutralizing antibody" Nat Commun. 8(1):505. 2017.

- Liu YT, Jiang J, Bohannon KP, Dai X, Gant Luxton GW, Hui WH, Bi GQ, Smith GA, Zhou Z.H., "A pUL25 dimer interfaces the pseudorabies virus capsid and tegument" J Gen Virol. 2017.

- Dai X, Wu L, Sun R, Zhou ZH. "Atomic Structures of Minor Proteins VI and VII in the Human Adenovirus" J. Virol.2017.

- Alewijnse, B., Ashton, A. W., Chambers, M. G., Chen, S., Cheng, A., Ebrahim, M., Eng, E., J H Hagen, W., Koster, A. J., Lopez, C. S., Lukoyanova, N., Ortega, J., Renault, L., Reyntjens, S., Rice, W. J., Scapin, G., Schrijver, R., Siebert, A., Stagg, S. M., Grum-Tokars, V., Wright, E. R., Wu, S., Yu, Z., Zhou, Z.H., Carragher, B., and S Potter, C., "Best practices for managing large CryoEM facilities" J Struct Biol 199(3): 225 - 236. 2017.

- Sun Y, Wollenberg AL, O'Shea TM, Cui Y, Zhou ZH, Sofroniew MV, Deming TJ., "Conformation-Directed Formation of Self-Healing Diblock Copolypeptide Hydrogels via Polyion Complexation" J Am Chem Soc. 139(42):15114-15121. 2017.

- Mayle KM, Dern KR, Wong VK, Chen KY, Sung S, Ding K, Rodriguez AR, Knowles S, Taylor Z, Zhou ZH, Grundfest WS, Wu AM, Deming TJ, Kamei DT., "Engineering A11 Minibody-Conjugated, Polypeptide-Based Gold Nanoshells for Prostate Stem Cell Antigen (PSCA)-Targeted Photothermal Therapy" SLAS Technol. 22(1):26-35. 2017.

- Wong JJW, Young TA, Zhang J, Liu S, Leser GP, Komives EA, Lamb RA, Zhou ZH, Salafsky J, Jardetzky TS., "Monomeric ephrinB2 binding induces allosteric changes in Nipah virus G that precede its full activation" Nat Commun. 8(1):781. 2017.

- Sathiyamoorthy K, Jiang J, Möhl BS, Chen J, Zhou ZH, Longnecker R, Jardetzky TS., "Inhibition of EBV-mediated membrane fusion by anti-gHgL antibodies" Proc Natl Acad Sci U S A. 114(41):E8703-E8710. 2017.

- Huynh KW, Jiang J, Abuladze N, Tsirulnikov K, Kao L, Shao X, Newman D, Azimov R, Pushkin A, Zhou ZH*, Kurtz I., "CryoEM structure of the human sodium-coupled acid-base transporter NBCe1" Nature Communication. 9(1):900. 2018.
- Grintsevich, EE, Ge, P, Sawaya, MR, Yesilyurt, HG, Terman, HR*, Zhou, ZH*, Reisler, E., "Catastrophic depolymerization of actin filaments via Mical-mediated oxidation" Nature Communication, 8:2183. 2017.

- Hughes TET, Lodowski DT, Huynh KW, Yazici A, Samanta A, Basak S, Zhou ZH, Rohacs T, Han S, Moiseenkova-Bell VY., "Structural basis of the TRPV5 channel inhibition revealed by cryo-EM" Nat Struct Mol. Biol. 25(1):53-60. 2018.

- Liu S, Li X, Zhang L, Jiang J, Hill RC, Cui, Y, Hansen KC, Zhou ZH*, Zhao R*., "Structure of the yeast spliceosomal postcatalytic P complex" Science. 2017.

- Guenther EL, Ge P, Trinh H, Sawaya MR, Cascio D, Boyer DR, Gonen T, Zhou ZH, Eisenberg DS., "Atomic-level evidence for packing and positional amyloid polymorphism by segment from TDP-43 RRM2" Nat Struct Mol Biol. 25(4):311-319. 2018.

- Dai X., Gong D., Lim H., Jih J., Wu T.T., Sun R.*, & Zhou Z.H.* Structure and mutagenesis reveal capsid protein interactions essential to KSHV replication. Nature. 553:521-525. [Featured the "research highlights" section of Nature Chemical Biology, Vol. 14. 2018.

- Ding, K, Zhang, X, Mrazek, J, Kickhoefer, VA, Lai, M, Ng, HL, Yang, OY, Rome, LH and Zhou, ZH., "Solution structures of engineered vault particles" Structure. 26(4):619-626.e3. 2018.

- Dai X. & Zhou Z.H., "Atomic model of the herpes simplex virus-1 capsid with associated tegument protein complexes" Science. 360, 48, eaao7298. 2018.

- Park K, Kuo Y, Shvadchak V, Ingargiola A, Dai X, Hsiung L, Kim W, Zhou ZH, Zou P, Levine AJ, Li J, Weiss S., "Membrane insertion of-and membrane potential sensing by-semiconductor voltage nanosensors: Feasibility demonstration" Sci Adv. 4(1):e1601453. 2017.

- Tao CL, Liu YT, Sun R, Zhang B, Qi L, Shivakoti S, Tian CL, Zhang P, Lau PM, Zhou ZH*, Bi GQ., "Differentiation and Characterization of Excitatory and Inhibitory Synapses by Cryo-electron Tomography and Correlative Microscopy" J Neurosci. 38(6):1493-1510. 2018.

- Su Z, Wu C, Shi L, Luthra P, Pintilie GD, Johnson B, Porter JR, Ge P, Chen M, Liu G, Frederick TE, Binning JM, Bowman GR, Zhou ZH, Basler CF, Gross ML, Leung DW, Chiu W*, Amarasinghe GK., "Electron Cryo-microscopy Structure of Ebola Virus Nucleoprotein Reveals a Mechanism for Nucleocapsid-like Assembly" Cell. 172(5):966-978.e12. 2018.

- Tian T, Li X, Liu Y, Wang C, Liu X, Bi G, Zhang X*, Yao X*, Zhou ZH*, Zang J., "Molecular basis for CENP-N recognition of CENP-A nucleosome on the human kinetochore" Cell Res. (3):374-378. 2018.

- Kim MS, Chuenchor W, Chen X, Cui Y, Zhang X, Zhou ZH, Gellert M, Yang W., "Cracking the DNA Code for V(D)J Recombination" Mol Cell. S1097-2765(18)30189-8. 2018.

- Jiang, J., Wang, Y., Susac, L., Chan, H., Basu, R., Zhou, Z.H.* and Feigon, J., "Structure of telomerase with telomeric DNA" Cell. 173:1179-1190.e13. 2018.

- Jiang J, Baiesc FL, Hiromasa Y, Yu X, Hui WH, Dai X, Roche TE, Zhou, ZH, "Atomic Structure of the E2 Inner Core of Human Pyruvate Dehydrogenase Complex" Biochemistry, 57(16):2325-2334. 2018.

- Ho, C, Beck, JR, Lai, ML, Cui, Y, Goldberg, DE, Egea, PF*, Zhou, ZH., "Malaria Parasite Translocon Structure and Mechanism of Effector Export" Nature, in press. 2018.

- Tao CL, Liu YT, Zhou ZH, Lau PM,Bi GQ., "Accumulation of dense core vesicles in hippocampal synapses following chronic inactivity" Frontiers in Neuroanatomy. 2018.