Seventeenth Annual Fellows Retreat Recap

The NICHD 17th Annual Meeting of Postdoctoral, Clinical, and Visiting Fellows, and Graduate Students and Postbacs took place virtually on September 29, 2022. Dr. Henry Levin, Senior Investigator in the Section on Eukaryotic Transposable Elements, opened the day with a big thank you to the NICHD Office of Education and retreat steering committee. He then commented on the pandemic and its impact on the research and mental wellness of NIH fellows before offering a celebration of recent NICHD trainee scientific accomplishments (see our 2022 Year in Review!).

Following Dr. Levin’s opening remarks, fellows were treated to a day of learning and career exploration. The day included two insightful keynotes, a review of innovative culture at NICHD, multiple career focus panels, and engaging presentations from 27 trainees (including 16 three-minute poster talks).

Please enjoy the following recap of the morning keynote, the NICHD Innovative Culture Initiative introduction, and the featured fellow presentations from the 2022 Virtual Fellows Retreat—all written by NICHD trainees.

DECODING SIGNALS, DEVELOPING THERAPIES
By Nireekshit Addanki Tirumala, PhD

Lysosomes are more than degradative compartments, said Rosa Puertollano, PhD, Senior Investigator, Laboratory of Protein Trafficking and Organelle Biology, National Heart, Lung, and Blood Institute, during her keynote presentation at the fellow’s retreat. She emphasized throughout her talk that lysosomes have an important role in cellular stress response, signaling, and disease.

Dr. Puertollano detailed how extracellular signals pass through lysosomes, combine with cytosolic signals, and form signaling cascades that can regulate transcription inside the nucleus. For example, nutrient deprivation inhibits the lysosome localized mammalian target of rapamycin complex (mTORC1) and

(continued on page 3)
Letter from the Editor

I want to begin this letter by recalling my thoughts from exactly one year ago:

"I think we all hoped that 2021 would include a post-pandemic celebration. Until the youngest in our community are eligible for vaccination, many of us will continue to experience pandemic restrictions—and sometimes pandemic fatigue. But we are getting there. One step, one study, one vaccine at a time. I said it last December, and I’ll say it again now: May next year bring continued progress and abundant hope for a better tomorrow.

We are now at the end of 2022, and I can confidently say that this past year was marked by continued progress. I saw progress in my personal life, progress in NICHD research labs, progress in NICHD fellows’ careers, and progress in science in general as NIH continues to push for equity, diversity, inclusion, and accessibility in STEM fields. I don’t think we will ever have a post-pandemic celebration, per se. The pandemic (and its aftermath) continues to affect too many people. What we can celebrate, though, is the perseverance to learn more and apply that knowledge to prepare for, prevent, and manage threats to human health and wellness when they arise.

I encourage you to take every opportunity possible over this next year to experience the career development and learning opportunities at NIH. This includes not only attending workshops and seminars, but also networking with your peers and mentors to share ideas, triumphs, and challenges. The 17th Annual Fellows Retreat Recap and the NICHD DIR & DIPHR Year in Review are great places to start learning what your colleagues are up to. You can find many more opportunities in The Rep Report and the December announcements and events.

Like this year, may next year bring continued progress and abundant hope for a better tomorrow.

Your Editor in Chief,
Shana R. Spindler, PhD

This is a newsletter for NICHD fellows, by NICHD fellows. We want to hear from you! Please send your questions, comments, and ideas to our editor at shana.spindler@nih.gov.
activates the transcription factor TFEB, upregulating multiple lysosomal and autophagy-related genes. In fact, the latest research from Dr. Puertollano's lab places TFEB and TFE3 (another transcription factor) as important cogs in the cellular response to oxidative and DNA damage, as well as defense against pathogen infection.

Dr. Puertollano also presented research into Pompe disease, a lysosomal storage disorder caused by defects in the lysosomal enzyme Acid Alpha Glucosidase (GAA). This lysosomal dysfunction ultimately leads to a buildup of aberrant mitochondria and autophagic vesicles, thereby starting a signaling cascade of cell death. Her research is tackling the disease by increasing the efficacy of enzyme replacement therapy while at the same time developing novel gene therapy methods.

Summarizing her career, Dr. Puertollano emphasized that planning early for the postdoctoral to principal investigator transition is critical, and she encouraged fellows to identify nascent fields where many fundamental discoveries can be made. Her keynote address showcased how fundamental research in cell and molecular biology can provide insights that lead to better therapies and cures for diseases. It was an inspiring story that set the tone for the rest of the retreat.

CULTIVATING AN INNOVATIVE CULTURE AT NICHD
By So-Young Kim, PhD

The NICHD Innovative Culture Initiative (3.1.2) was conceived as a result of the Management and Accountability focus area of the NICHD Strategic Plan 2020. The core team proposed several definitions for innovation based on benchmarking and best practices. After polling senior leaders at NICHD, the Institute now defines innovation as “translating NICHD’s evolving needs and opportunities into new or improved services, processes, systems, or social interactions that promote an enhanced workforce, infrastructure, efficiency, and a culture that encourages continuous improvement through creativity and idea exploration.”

THE 2022 RETREAT STEERING COMMITTEE
Chair: Anna SantaMaria, PhD (postdoc, Rouault Lab)
• Hyo Won Ahn, PhD (postdoc, Levin Lab)
• Avik Dutta, PhD (postdoc, Love Lab)
• Henry Lessen, PhD (former postdoc, Sodt Lab)
• Amrita Mandal, PhD (postdoc, Balla Lab)
• Thien Nguyen, PhD (postdoc, Gandjbakhche Lab)
• Jeremie Oliver (graduate student, D'Souza Lab)
• Tusharkumar Patel, PhD (postdoc, Yanovski Lab)
• Christina Porras, PhD (postdoc, Rouault Lab)
• Megha Rajendran, PhD (postdoc, Bezrukov Lab)
• Bo-Mi Song, PhD (postdoc, Stopfer Lab)
• Sanjana Sundararajan, PhD (postdoc, Dasso Lab)
• Abhinav Sur, PhD (postdoc, Farrell Lab)
Seventeenth Annual Fellows Retreat Recap

(continued from page 3)

Benchmarking results and interviews from peer organizations suggest that focusing on four main elements—people, behavior/values, governance, and sustainability—may support successful development of an innovative culture. The two main aims of the initiative are (1) to reinforce a culture where staff feels empowered to propose solutions and communicate new ideas that will encourage continuous improvement and stimulate change, and (2) to develop processes and strategies for promoting innovative best practices that can be incorporated into the NICHD working environment.

In October of this year, the 2022 NICHD Innovative Culture Survey was distributed to all NICHD full-time staff and fellows to evaluate the extent to which the Institute’s current culture supports innovation. Building on the survey, focus groups will further clarify insights and feedback. Please reach out to NICHDInnovativeCulture@mail.nih.gov if you would like to volunteer to be part of a focus group! Participation is very welcomed!

FEATURED FELLOW TALKS

MILD TRAUMATIC BRAIN INJURY INDUCES MULTIPLE RESPONSE PATHWAYS IN CORTICAL NEURONS

By Ashley Pratt

Mild Traumatic Brain Injury has widespread effects on the brain, from blood vessel damage to the induction of glial responses, but it is unclear how these injuries affect the health of individual neurons. Mor Alkaslasi, a graduate student in the Le Pichon laboratory (Unit on the Development of Neurodegeneration), studies how neurons respond to this type of injury at the cellular level.

Using a mouse model with fluorescently tagged neurons that activate Activated Transcription Factor 3 (Atf3), a transcription factor expressed in injured neurons, Ms. Alkaslasi observed the morphology of sensory and motor cortex neurons following mild traumatic brain injury. While most Atf3-expressing neurons were undergoing apoptosis, the change in the number of Atf3-expressing neurons following mild traumatic brain injury differed across cortical layers and neuron type. Ms. Alkaslasi also conducted single-nucleus RNA sequencing and found differences in genetic expression that may be predictive of whether the neurons would die. Future work aims to elucidate the different pathways that are employed by neuron types in response to mild traumatic brain injury.

(continued on page 5)
CHARACTERIZATION AND CATEGORIZATION OF TRANSCRIPTIONAL TRAJECTORIES DURING ZEBRAFISH DEVELOPMENT
By Ashley Pratt

With the vast number of cell types that generate during animal development, biological systems must coordinate this differentiation through programmed genetic expression. Abhinav Sur, PhD, a postdoctoral fellow in the Farrell laboratory (Unit on Cell Specification and Differentiation), seeks to characterize such gene expression programs through his work using single-cell transcriptomics and bioinformatic analyses.

Dr. Sur and his colleagues have created a high-resolution single-cell gene expression atlas of zebrafish development encompassing the first five days of embryogenesis. Using this atlas, they explored whether gene expression programs are shared across distinct tissues, and have shed light on poorly understood cell types. Specifically, the team found a poorly understood cell type in the zebrafish intestine called best4+/otop2+ cells that were only recently discovered (in 2019) in the human intestine. These cells share several genes expressed in human counterparts. Dr. Sur has characterized the sequence of transcriptional changes underlying the development of many cell types including best4+/otop2+ cells. The team is currently developing an online resource, called Daniocell, to openly share this atlas with other researchers across the world.

A MEDLEY OF METALS AND PROTEINS IN IRON SENSING
By Nireekshit Addanki Tirumala, PhD

The production of red blood cells relies on a dance between regulatory proteins and iron. While iron is an element essential for many functions in the body including red blood cell production and oxygen transport, a high level of free iron causes toxicity and cell death. Anna SantaMaria, PhD, postdoctoral fellow in the Rouault lab (Section on Human Iron Metabolism), wants to understand how intracellular iron levels are sensed and controlled.

In cells, most iron atoms are stored in a large iron-storing protein called ferritin. When intracellular iron levels are high, a protein called Nuclear Receptor Coactivator 4 (NCOA4) prevents ferritin from being engulfed by autophagosomes, the cellular degradation system, and iron stays safely locked up. However, under

(continued on page 6)
Seventeenth Annual Fellows Retreat Recap

(continued from page 5)

Iron starvation, NCOA4 promotes the degradation of ferritin-iron complexes allowing for the release of iron from storage. Dr. SantaMaria’s preliminary research suggests that NCOA4 may be binding iron-sulfur cluster(s) when iron levels are sufficient, thus allowing it to sense and react to iron levels. In the future, she plans to use spectroscopic techniques to detect the signatures of iron-sulfur clusters bound to NCOA4. Additionally, she aims to determine biological function of the putative iron-sulfur cluster by mutagenizing the iron-sulfur cluster binding residues in NCOA4 and observing the effect on iron metabolism and red blood cell production.

HOW RADIOPHARMACEUTICALS ARE USED TO DETECT PHEOCHROMOCYTOMA

By Megan Schupp

Abhishek Jha, MD, research fellow in the Pacak laboratory (Section on Medical Neuroendocrinology), studies the diagnostic performances of various radiopharmaceuticals in the detection of pheochromocytoma and paraganglioma. Pheochromocytomas (PHEOs) are rare neuroendocrine tumors originating from chromaffin cells of the adrenal gland, and paragangliomas are those that arise extra-adrenally. Normally found in adrenals or in groups of nerve cells called ganglia, chromaffin cells are responsible for producing neurotransmitters, such as adrenaline (epinephrine) and noradrenaline (norepinephrine), and releasing them into the blood stream. However, an overabundance of neurotransmitters from PHEOs can prove catastrophic for patients.

To determine the most sensitive diagnostic functional imaging modality in patients with PHEOs caused due to mutation in rearranged during transfection (RET), Dr. Jha compared positron emission tomography/computed tomography (PET/CT) scans using several radiopharmaceuticals (\(^{18}\text{F}-\text{FDOPA}, \^{68}\text{Ga-DOTATATE}, \^{18}\text{F}-\text{FDG}, \^{18}\text{F}-\text{FDA}\)) in 19 patients. Dr. Jha found that \(^{18}\text{F}-\text{FDOPA}\) had the highest detection rate, but due to the small number of patients, he emphasized that a larger multicentric study is warranted.

(continued on page 7)
Seventeenth Annual Fellows Retreat Recap
(continued from page 6)

HOW ZEBRAFISH REPAIR BLOOD VESSELS
By Megan Schupp

Leah Greenspan, PhD, postdoctoral fellow in the Weinstein laboratory (Section on Vertebrate Organogenesis), investigates the cellular behaviors and molecular mechanisms driving blood and lymphatic vessel repair after injury. Her latest work suggests that signaling mechanisms differ between initial vessel patterning versus vessel healing.

Using transgenic adult fish, Dr. Greenspan delivered skin-deep cuts and visualized blood and lymphatic vessel regrowth through high-resolution confocal microscopy. While the injury completely healed after ten days, vessel patterning didn't return to its preinjury state. To examine how endothelial cells move during injury, Dr. Greenspan induced cell death in a small subset of vessels in larval zebrafish. While most blood vessels reconnected normally due to endothelial cell migration, some vessels adopted a new identity, demonstrating the plasticity of vessels after injury. As a next step, Dr. Greenspan plans to analyze gene expression changes during damage and recovery.

ON OUR WAY TO A NEW PRECLINICAL MODEL FOR JUVENILE ALS?
By So-Young Kim, PhD

Amyotrophic lateral sclerosis (ALS) is a fatal neurodegenerative disease, typically appearing around 40 to 50 years of age. Juvenile ALS onset, however, is before the age of 25. Juvenile ALS has been associated with mutations in an enzyme that initiates and regulates biosynthesis of sphingolipids, important membrane lipids with roles in development and cell function. These mutations are predicted to increase canonical sphingolipid levels. Zoe Piccus, a graduate student in the Le Pichon laboratory (Unit on the Development of Neurodegeneration), studies the connection between sphingolipid levels and disease pathology in a preclinical animal model of juvenile ALS.

Ms. Piccus generated a mouse model containing the juvenile-associated ALS mutation and assessed the mice for elevated sphingolipid levels and ALS-like neurodegeneration. Piccus found that circulating sphingolipids in serum harvested from mutant mice exhibited increased levels of canonical sphingolipids. The mutant mice also demonstrated a neurodegenerative phenotype characterized by age dependent increases in serum neural filaments, changes in nerve ultrastructure, signs of degenerating axons, decreases in nerve to muscle connectivity, and mislocalization of certain proteins—supporting its use as an animal model of juvenile ALS.

(continued on page 8)
A NOVEL PLAYER IN ARTERIAL DEVELOPMENT
By Kiersten Campbell

Epigenetic modifications trigger large-scale, programmatic changes during development. Postdoctoral fellow Miranda Marvel, PhD, in the Weinstein laboratory (Section on Vertebrate Organogenesis) recently identified kdm4ab as a novel epigenetic regulator of arterial development in zebrafish.

Zebrafish development serves as a foundation for understanding human development, thus understanding epigenetic regulators of the circulatory system has direct implications on human health. Dr. Marvel used EpiTag transgenic zebrafish, which differentially express fluorescent proteins in response to changes in DNA or histone methylation, to link abnormal epigenetic patterns with defects in arterial vessel development. Looking for fish with abnormal arterial vessels, she zeroed in on a gene called kdm4ab. The kdm4ab mutant zebrafish exhibited downregulated arterial gene markers and upregulated venous marker genes, according to RNA-seq experiments. Dr. Marvel plans to further examine the association between downregulated arterial marker genes and altered histone methylation patterns to better assess kdm4ab's epigenetic role.

THE BEAUTY OF (A)SYMMETRY
By Kiersten Campbell

Structural asymmetries are essential across all stages of development. For example, asymmetries help orient cells along the plane of a tissue. Tyler Bruno, a postbaccalaureate fellow working in the Sackett laboratory (Cytoskeletal Dynamics Group), previously studied (with Dr. Becky Burdine at Princeton University) the role of a protein called Kurly in establishing these asymmetries during embryonic development. The role of Kurly in establishing developmental asymmetries in ciliated tissues has been extensively detailed, but Bruno wants to uncover Kurly's role in development in nonciliated tissue contexts.

Bruno first explored the impacts of Kurly mutations on early zebrafish development. At early stages, Kurly mutants divided into disorganized clumps of cells—in contrast with the well-structured wild-type—but the mutant morphology normalized by the 256-cell stage. Bruno also characterized the downstream impacts of Kurly's role in cellular asymmetry by measuring cellular shape and structure at both early and later developmental time stages. In all, Bruno hypothesized that Kurly serves as a scaffolding protein, recruiting other proteins that help initialize polarized cellular processes.

(continued on page 9)
JUST KEEP BREATHING: ZEBRAFISH GILLS AS A MODEL OF LUNG ENDOTHELIUM
By Maisie Ahern

The animal models currently available to study gas-exchange functions in vertebrates are limited. Jong Park, PhD, a postdoctoral fellow in the Weinstein laboratory (Section on Vertebrate Organogenesis), presented the zebrafish gill as a new model for studying gas exchange in the vascular endothelium.

Dr. Park showed that the externally located zebrafish gills provide a unique model for studying gas exchange because they are optically clear and experimentally accessible, unlike mammalian lungs. Using single-cell RNA sequencing of dissected adult zebrafish gills, Dr. Park found that many specialized lung cell types are conserved in gills, and he identified a novel vascular endothelial cell subtype. In situ hybridization revealed that these novel cells are localized to the highly vascularized distal tips of the gill filaments where oxygen exchange takes place, suggesting an important role for these cells. As Dr. Park continues to characterize these novel endothelial cells using transgenic lines, he hopes to uncover their role in zebrafish models of lung diseases, such as acute respiratory distress syndrome, chronic obstructive pulmonary disease, or even COVID-19.

NEW ANIMAL MODELS COULD AID INTELLECTUAL DISABILITY RESEARCH
By Leah Pappalardo

Mutations in a gene called THAP domain containing 7 (THAP7) could be responsible for some forms of intellectual disability (ID), according to DNA analysis conducted by Rachel Cosby, PhD, a postdoctoral fellow in the Macfarlan laboratory (Section on Mammalian Epigenome Reprogramming). Dr. Cosby utilized this insight from human patients to develop animal models of ID.

ID affects about two percent of individuals worldwide and is characterized by an IQ of less than 70, in addition to major skill impairments. The THAP7 gene is conserved across vertebrates, which enabled Dr. Cosby to observe mutant THAP7 phenotypes in a zebrafish model. Loss of THAP7 function led to reduced longevity in zebrafish, confirming the significance of THAP7 for organism health. Dr. Cosby also created a THAP7 knock-out mouse and will characterize the phenotypes of the mouse to evaluate its potential as a model for ID. Dr. Cosby plans to elucidate the unexplored functions of THAP7 to further uncover the pathology of ID induced by this mutation.

(continued on page 10)
Seventeenth Annual Fellows Retreat Recap
(continued from page 9)

DEMYSTIFYING RIBOSOMAL DNA REPEATS
By Leah Pappalardo

Tandem repeats are an important, yet mysterious characteristic of ribosomal DNA (rDNA), the DNA that encodes the RNA strands critical for ribosomal function. Across species, some rDNA sequences are highly conserved while others are variable. Paul Atkins, PhD, a postdoctoral fellow in the Levin laboratory (Section on Eukaryotic Transposable Elements), is developing *S. pombe* (a type of fission yeast) as a model organism in which to study rDNA tandem repeats.

Dr. Atkins designed a pipeline to compare yeast genome datasets and created a novel method for assembling rDNA repeats from long DNA sequences. He compared 95 strains of *S. pombe* and *S. kambucha* and found a five-fold range of variation in rDNA repeat numbers. To explore the underlying mechanism of the variation, he performed a genome-wide association study and identified differences in genes that are involved in DNA maintenance, replication, and homologous recombination. Dr. Atkins plans to further investigate the role of these newly identified genes in regulating rDNA repeat number.
The Rep Report
By Hyo Won Ahn, PhD

As the current NICHD Basic Sciences Institutes and Centers (IC) Representative, I represent NICHD postdoctoral fellows at the NIH Fellows Committee (FelCom) meeting every month and share the latest news with you here. Do you have a concern or question that you want brought up at the next meeting? Contact me, Dr. Hyo Won Ahn, at hyowon.ahn@nih.gov.

News from the Office of Intramural Training and Education (OITE):
» OITE is planning an in-person “hot chocolate/coffee get together” in December—stay tuned!
» Policy reminder: the US federal government does not allow trainees to work remotely when abroad. Additional remote work is available at the following OITE webpage: NIH Trainee Telework

The Office of Intramural Research (OIR) welcomes Dr. Nina Schor as Deputy Director of Intramural Research (no longer acting). Read more here.

FelCom has two open liaison positions! If you are interested in running for one of the positions, please submit a statement of interest to both FelCom Co-Chairs: Vasty Osei Amponsa (vasty.oseiamponsa@nih.gov) and Marja Brolinson (marja.brolinson@nih.gov).
» NIH Child Care Board FelCom Co-Liaison (One position)
  • For more information, please contact Sila Ataca (sila.ataca@nih.gov).
» Recreation and Welfare Committee & Health and Wellness Council Liaison (One position)
  • For more information, please contact Manami Bhattacharya (manami.bhattacharya@nih.gov).

The Women Scientist Advisors Committee (WSA) shared key points from a recent meeting: When WSA was founded 30 years ago, only 19% of IRP tenured scientists were women. Now, 27% of tenured scientists are women, still a relatively low number. However, 44% of tenure-track investigators are women. The 2022 Intramural Program Personnel Demographics can be found here.

The Health & Recreation Subcommittee is planning activities for the upcoming year and wants fellows to fill out a survey to mark the social events of your choice!

National Postdoctoral Associations (NPA)
» All NIH postdocs/fellows get NPA affiliate individual memberships for FREE! Join now!
» There are 28,500 jobs on the NPA Career Center. Upload your resume/CV for FREE!
» Introducing NPA SmartSkills: SmartSkills is a free, virtual course for postdocs who are members of the NPA. Monthly classes are taught by experts and focus on building skills critical to career and personal success.
» Upcoming event hosted by the NPA: The 2023 NPA annual conference is scheduled for in-person (April 21–23, 2023) and virtual (May 11 & 12, 2023). Find more information here.
THE FELLOWS’ ANNUAL MEETING

The NICHD Office of Education hosted a fully VIRTUAL 17th Annual Meeting for Postdoctoral, Clinical & Visiting Fellows, Graduate Students & Postbacs on September 29, 2022. The day included:

» A keynote lecture on the role of lysosomes in disease by Senior Investigator Dr. Rosa Puertollano (National Heart, Lung and Blood Institute)
» A career keynote by industry consultant Ms. Lauren Celano (Propel Careers)
» Three career-focused Q&A breakout panels
» An NICHD Strategic Plan presentation
» 11 featured scientific talks by NICHD fellows
» And 16 three-minute poster talks!

Check out the full recap of the fellow presentations in this issue and the career panel Q&As here.

NIH-WIDE RECOGNITION

Congratulations to the 16 NICHD fellows who received a 2023 Fellows Award for Research Excellence (FARE), an NIH-wide competition that recognizes the important research of intramural fellows. NICHD had the 4th highest number of applicants and awardees! See a complete list of NICHD winners here.

Priyanka Singh, PhD (Hinnebusch) and Zoe E. Piccus (Le Pichon) were the Scientific Interest Group Awardees for the RNA Club and Woman Scientist Advisor groups, respectively.

Congratulations to the 9 NICHD postbacs who received an Outstanding Poster Award for scoring within the top 20% of all posters at the 2022 Virtual Postbac Poster Day, held April 26–28, 2022. See a complete list of NICHD winners here.

Mor Alkaslasi (Le Pichon) received a Graduate Student Research Award in the Neuroscience, Behavioral Sciences, and Psychology category at the 18th Annual NIH Graduate Student Research Symposium, held February 16–17, 2022.

(continued on page 13)
NICHD AWARD PROGRAMS
Laura Pillay, PhD (Weinstein lab) and Edwina Yeung, PhD (Epidemiology Branch) received the 2022 Mentor of the Year Awards for Fellow and Investigator, respectively.

Layla Ahmadi (Love lab), Diana Augustin (Gilman lab), and Samra Beyene (Petros lab) joined NICHD as Developing Talent Scholars awardees.

Diana Elizondo, PhD (Yanovski lab) joined NICHD as a Fellows Recruitment Incentive Award (FRIA) awardee.

Jeremie Oliver (D’Souza lab) won the internal NICHD Three-minute Talks (TmT) competition this summer and was selected to join the NIH-wide TmT competition on June 30th.

Congratulations to the 2022 and 2023 Intramural Research Fellowship awardees:

2022 Recipients
» Paul Atkins, PhD (Levin lab)
» Stephanie Lehman, PhD (Machner lab)
» Jennifer Panlilio, PhD (Burgess lab)
» Joyce Thompson, PhD (Rocha lab)
...And get their grant writing wisdom here.

2023 Recipients
» Zhenyu Zuo, PhD (Rocha lab)
» Adriana Golding, PhD (Bonifacino lab)
» Miranda Marvel, PhD (Weinstein lab)
» Avik Dutta, PhD (Love lab)
» Jong Park, PhD (Weinstein lab)

Congratulations to the 2022 NICHD Early Career Award Recipients:
Philip Adams, PhD (Independent Research Scholar Investigator)
Paul Atkins, PhD (Levin lab)
Melania Bruno, PhD (Macfarlan lab)
Yuen Yan Chang, PhD (Machner lab)
An Dang Do, MD, PhD (Porter lab)
Diana Elizondo, PhD (Yanovski lab)
Leah Greenspan, PhD (Weinstein lab)
Zubeyir Gun, MD (Jee lab)
Jing Yu, PhD (Gilman lab)
Milena Jovanovic, PhD (Marini lab)
Huang Lin, PhD (Peddada lab)

Miranda Marvel, PhD (Weinstein lab)
Tusharkumar Patel, PhD (Yanovski lab)
Julia Porth, PhD (Cheon lab)
Bo-Mi Song, PhD (Stopfer lab)
Kiyohito Taimatsu, PhD (Weinstein lab)
Yuta Tanizaki, PhD (Shi lab)
Joyce Thompson, PhD (Rocha lab)
Narumon Thongdee, PhD (Storz lab)
Arya Vindu, PhD (Dever lab)
Rilee Zeinert, PhD (Storz lab)
Aoshu Zhong, PhD (Storz lab)

VOLUME 13 • ISSUE 151 • DECEMBER 2022

NICHD DIR & DIPHR Year in Review 2022
(continued from page 12)
PROGRAM SPECIFIC AWARDS

Abhinav Sur, PhD (Farrell lab) was awarded the best poster award for his poster “Shared and tissue-specific molecular states during zebrafish development” at the International Zebrafish Society (IZFS) annual conference in June 2022, held in Montreal, Quebec, Canada. Dr. Sur also gave a talk at the Society for Developmental Biology (SDB) conference held in Vancouver, British Columbia, Canada in July 2022—a significant achievement!

Daniel Tetreault (Adams lab) received a Microbiology Society Award for Excellent Poster at the 6th Meeting on Regulating with RNA in Bacteria and Archaea held January 3–6, 2022.

A big THANK YOU to our 2022 newsletter contributors (truly, this cannot be done without you):

Nireekshit Addanki Tirumala, Maisie Ahern, Hyo Won Ahn, Paul Atkins, Aisha Burton, Kiersten Campbell, Monica Chairamonte, Calvin Fang, Francis Fernando, Triesta Fowler, Una Grewal, Suna Gulay, Hannah Haley, Linda Huynh, Sanjay Jumani, So-Young Kim, Stephanie Lehman, Richa Lomash, Cole Malloy, Mayumi Miller, Elliot Murphy, Jennifer Panlilio, Leah Pappalardo, Ashley Pratt, Mariano Russo, Megan Schupp, Elena Schwartz, Parmit Singh, Shana Spindler, Nichole Swan, Vivian Szymczuk, Joyce Thompson, Lauren Walling, Erin Walsh, Jason Wester, and Yvette Yien.

Please submit your accomplishments for publication in the newsletter throughout the year to shana.spindler@nih.gov.
December Announcements

NEW LEARNING OPPORTUNITY: COURSERA LICENSES AVAILABLE THROUGH OITE
Have you been wanting to learn a new topic, earn a certification, or just brush up on a topic you haven't studied in a while?!? Coursera is an online learning platform offering courses on a large variety of topics. The Office of Intramural Training and Education (OITE) has purchased a large number of Coursera Course Licenses, providing access to courses in data science, informatics, biomedical sciences, scientific writing, and more. These licenses include access to almost the entire Coursera catalog at: https://www.coursera.org/browse.

Complete the online application to indicate your interest in participating in the NIH Learning Program @Coursera and please indicate your trainee level (postbac, student, postdoc/fellow) under the section titled “career status.” There are a limited number of licenses available. If a license is not available, you will be placed on the waitlist and receive contact when a license becomes available. Accounts that are inactive will be reassigned to the next person on the waitlist.

For questions about the licenses, please contact Dr. Phil Ryan at ryanp@mail.nih.gov.

INTERESTED IN TAKING AN FAES COURSE FOR YOUR PROFESSIONAL DEVELOPMENT?
The Office of Education will sponsor several NICHD fellows and graduate students to enroll in a career/professional development course or workshop through the Foundation for Advanced Education in the Sciences (FAES) for the spring 2023 semester. Course information can be found in the FAES 2022–2023 course catalog.

If you are interested, please contact Ms. Katherine Lamb (katherine.lamb@nih.gov) at least four weeks before class begins. It is important that you discuss this with your mentor and that he/she is supportive of your participation.

(continued on page 16)
December Announcements
(continued from page 15)

AAAS MASS MEDIA SCIENCE & ENGINEERING SUMMER FELLOWSHIP
Applications due January 2!

From the AAAS Mass Media Fellowship website:
“This highly competitive program strengthens the connections between scientists and journalists by placing advanced undergraduate, graduate, and post-graduate level scientists, engineers, and mathematicians at media organizations nationwide. Fellows work as journalists at media organizations such as National Public Radio, Los Angeles Times, WIRED, Milwaukee Journal Sentinel, and NOVA...

...For 10 weeks during the summer, the AAAS Mass Media Science & Engineering Fellows collaborate with media professionals at radio and television stations, newspapers, and magazines. As part of their job, the scientists and their journalist-hosts strive to make science news easy for the public to understand.”

For additional information about the program visit aaas.org/mmfellowship.

SAVE THE DATE: BUILDING A POSITIVE ONLINE PERSONAL BRAND USING LINKEDIN
Wednesday, January 11, 1–2 p.m.

For those of you interested in creating or improving your LinkedIn page, this webinar will provide guidance on leveraging this platform for developing your professional online brand. You will dive deep into which parts of a profile to focus on and how to customize your profile to your career area(s) of interest. Ms. Lauren Celano will discuss:
» Strategies for highlighting your background and experiences as a compliment to your resume
» How organizations use LinkedIn to identify talent for open positions and which sections are most important
» How to use the job preference features to inform internal and external recruiters about what you’re looking for

To register, please email Ms. Katherine Lamb (katherine.lamb@nih.gov). The Zoom link will be circulated a few days prior to the event.

NIH UNITE: ENDING STRUCTURAL RACISM (ESR) ACTIVITIES
The NIH UNITE initiative was established to identify and address structural racism within the NIH-supported and the greater scientific community.

The ESR Intranet includes various resources like the Toolkit, Newsletter, FAQs, and other information.

UNITE Milestones and Progress and the Co-Chairs Corner (public ESR webpages) are other avenues to stay informed on UNITE efforts.
December Events

WEDNESDAY, DECEMBER 7, 1–2 PM
How to Evaluate, Build, and Highlight Transferrable and Career Relevant Skills
Led by Lauren Celano, CEO and co-founder of Propel Careers

Lauren Celano will provide insight on how to evaluate the transferable skills that are valued in various scientific careers, highlighting the essential non-scientific skills you can build while performing research, and demonstrating ways to apply these skills in your desired career to achieve your goals. Advice will be provided for various career paths, including research and non-research roles. Lauren will also provide guidance on how to package scientific and non-scientific skills on resumes, cover letters, and during interviews.

THURSDAY, DECEMBER 8, 1–4 PM
NICHD DIR Tenure-Track Investigator Virtual Symposia Series
“Impact of social disadvantage on children’s diet and eating behavior”
Hosted by Bobby Cheon, PhD

This series provides tenure-track investigators within NICHD the opportunity to organize a virtual mini-symposium to showcase their area of science to the NICHD DIR and larger NIH intramural community. These symposia are open to all faculty, trainees, and staff at the NIH.


(continued on page 18)
December Events
(continued from page 17)

WEDNESDAY, DECEMBER 14, 1–3 PM
Chalk Talks with Scott Morgan

Chalk Talks are an increasingly important component of science communication. Once reserved for academic interviews, they are now common in industry and for tenure-track positions, such as the NIH Earl Stadtman Investigators program. This workshop will focus on the components that make an effective chalk talk and provide a safe place to practice new skills.

Topics include:
» Connection to job talks
» Relevance to faculty
» What to draw on the white/blackboard
» Levels of detail
» Question anticipation
» Tone and delivery

If you would like to attend, please contact Ms. Katherine Lamb (katherine.lamb@nih.gov).

ONGOING EVENTS AROUND CAMPUS
NIH-Wide Office of Intramural Training and Education Events
For more information and registration, please visit Upcoming OITE Events.

NIH Library Training and Events
For more information and registration, please visit the NIH Library Calendar.