

#### Vol 2 Issue 8 Aug 2023

Educational Events	The Research Advisory	2023-2024 Speaker	2023 – 2024 Microgrant
	Committee (RAC)	Nominations	Applications
Grant Writing Program	ORI Website Launch	DU Lab Tours	2023 – 2024 Travel Awards

### **ORI Educational Events – August 2023**

Dr. Thomas Weichhart Associate Professor of Immunology/Medical Genetics

Medical University of
Vienna
Center for
Pathobiochemistry and
Genetics
Vienna, Austria

**Accomplished Scientist** 

Pathogenesis of Sarcoidosis: The Role of the Macrophage Dr. Weichhart spoke July 10th, 2023 at NJH

View his presentation at <a href="https://youtu.be/4lL9FX00vb4">https://youtu.be/4lL9FX00vb4</a>



#### Announcement - ORI Website Launch - Brian Day, PhD



I would like to update the research faculty about <u>our new web page for the Office of Research Innovation</u> that is now live on the NJHealth.org website. To get to the website, click on the Clinical Trials & Research Tab and then the Office of Research Innovation link. I would like to thank Adam Dormuth, Aaron Hoy, and Bob Schell with their help in this process. This webpage provides general information about the Office of Research Innovation and will store past seminars, newsletters, and current research press releases. The webpage will also provide information on microgrants, workshops, symposiums, and research retreats.

I would also extend an invitation to our researchers who currently do not have a laboratory webpage and need help in building them. You can use Dr. Chu's <u>lab page</u> as a reference. If you would like help building or updating an existing lab page, please contact LeAnn Donahue for assistance.

#### ORI 2023-2024 Speakers, Microgrant Applications and Travel Awards - Hong Wei Chu, PhD



We are excited to start the ORI Research Programs for FY 2023 – 2024. We will focus on the following 3 areas, but are open to facilitate efforts to enhance research in other areas as well.

Accomplished Scientists and Workshop Speakers - The goal of the Accomplished Scientists and Workshop Speakers program is to enable any NJH faculty to invite and host speakers to promote our basic, translational and clinical research using cutting-edge technologies and clinical procedures. This year, speakers from local institutions (e.g., CU, DU, CSU) and NJH Partners (e.g., Thomas Jefferson University, Icahn School of Medicine at Mount-Sinai and Intermountain/SCL Health) will also be invited to further enhance our research collaborations and leverage the resources in these institutions.

<u>Microgrant Applications</u> – Microgrants are available to provide funding to cover the costs for generating preliminary data to support a grant application or patient care. NJH faculty at the Instructor, Assistant Professor and Associate Professor level are eligible to apply by **Friday**, **September 1**<sup>st</sup>, **2023.** A total of 3 microgrants (\$10,000/each) will be awarded. Please send your microgrant application to **LeAnn Donahue** donahuel@NJHealth.org

<u>Travel Awards</u> – ORI is pleased to invite NJH faculty and Postdocs to apply for the 2023 – 2024 ORI Travel Awards. These awards promote learning new research technologies, methods and clinical procedures outside of Colorado in order to enhance research projects, grant applications and patient care. NJH faculty at Instructor to Assistant Professor level, postdoctoral research fellows and associates (Ph.D., M.D.) and graduate students are eligible to apply by **Friday**, **September 1**<sup>st</sup>, **2023**. A total of 4 travel awards (\$2,200/each) are available. Please send your travel award application to **LeAnn Donahue** donahuel@NJHealth.org

#### Lab Tours for 2023-2024 - Hong Wei Chu, PhD



The Office of Research Innovation is planning lab tours between DU and National Jewish Health (NJH) to promote collaborative research between our two institutions. Our first tour will be to DU's Advanced Light Microscopy Core Facility. This is a perfect place for NJH faculty and trainees to visit and learn about the imaging technologies. This tour will take place sometime in September or October. It will be a 2-hr trip in the afternoon (e.g., 3 to 5 pm) to minimize the impact of the lab tour on DU's teaching schedule.

We will also organize lab tours for DU faculty and trainees to visit our NJH facilities, such as Small Animal Physiology and Imaging Core, Mouse Genetics Core Facility, Clinical Research Unit and the Center for Genes, Environment and Health.

**FREE Parking Permits** for Anschutz Medical Campus are available! Each permit is valid for one-day only and only for 4 hours. If you plan to visit the AMC for a research trip, conference, meeting or lab experiment, please see LeAnn Donahue in A438 to pick up a permit.

#### The Research Advisory Committee (RAC) - Elizabeth Redente, PhD



This month the RAC would like to congratulate the investigators who received the first round of ORI microgrant funding provided by the "Medical Science Concepts Incubator Fund." Drs. Evgeny Berdyshev and Michael Wechsler are awarded funding for a study entitled "Skin Tape Stripping: A Minimally-Invasive Approach to Evaluate Asthma Endotypes" and Evgeny Berdyshev, PhD Michael Wechsler, MD





Drs. Michael Strong and Cristina Penaranda are awarded funding for a study entitled "Discovery of Pseudomonas Prophasge and Prophage Enzymes with Therapeutic Potential".

Michael Strong, PhD Cristina Penaranda, PhD





Additionally, the committee granted a Post-Doctoral award from the "Medical Science Concepts Incubator Fund" to Dr. Isik Can who is a member of Dr. Lee Reinhard's laboratory. Her project is investigating the type-2 immune response of ILC2s and T helper cells perspectives after parasitic worm infection and to determine the origin of the iILC2 population during disease. Throughout her training, she has shown a dedication to advancing her scientific interests with an ultimate goal of improving patient care.

Dr. Isik Can



**SAVE THE DATE** for a RAC sponsored **Research Town Hall with Bob Schell, Director of Research IST**. This will be held **Monday, August 7**<sup>th</sup> **at Noon in Heitler Hall**. Attend to hear about upcoming roadmaps for research computing needs.



#### Grant Writing Program - Anthony Gerber, MD, PhD



The Grant Writing Program continues to be available to review grant applications from all NJH faculty in advance of submission to NIH or other fundraising agencies.

Over the past year, this program, with volunteer assistance from many faculty including Scott Alper, Evgeny Berdyshev, Russ Bowler, Jim Bridges, Evans Fernandez Perez, Fabienne Gally, Arnav Gupta, Katie Hisert, Li Li, Pippa Marrach, Lisa Maier, Ken Malcolm, Alli McCubbrey, Irina Petrache, Dave Riches, Lee Reinhardt, Cristins Penaranda and Karina Serban, conducted over 20 workshops for multiple faculty members.

Several grants reviewed through this program ended up receiving funding from the NIH. If You are interested in participating as a reviewer or to have a grant reviewed, please Contact Erin Browne at <a href="mailto:brownee@njhealth.org">brownee@njhealth.org</a> For grant reviews, we ask for a minimum 6 weeks before the grant is due for the first session, and we recommend scheduling 3 – 4 sessions. We also plan to restart in=person workshops with food for the Fall.



Volume 2 Issue 9 September 2023

Research Happy Hour	RAC Committee Update	Town Hall – Research IST	Lab Tour
Kauvar Symposium	Grant Writing Workshops	Workshop Speaker	Abstracts for Kauvar Symposium

#### **ORI Educational Events**

Research Happy Hour	NJH Postdoc Presentations	Friday, Sept. 8 3pm – 5pm J104/J105 Molly Blank  Or via zoom: https://njhealth- org.zoom.us/j/83718453227?pwd=Qk5nVVlvSFRwempjZmVHK0xzcjExZz09	Join us for refreshments!
Workshop with Dr. Andreas Hoenger, PhD  Department of Molecular, Cellular and Developmental Biology  University of Colorado at Boulder	3-D Cryo- Electron Microscopy as a Tool to Study Intracellular Structures	Wednesday, September 27, 2023  12pm – 1pm Heitler Hall  or via zoom https://njhealth- org.zoom.us/j/84488157978?pwd=OHhoaFhTWXJYUzITODhM VTBXVkdJZz09	

#### Research Action Committee (RAC) Update - Elizabeth Redente, PhD



This month the RAC hosted a Town Hall with Director of Research IST Bob Schell. Bob discussed his vision, mission and roadmap and the steps he has already taken to improve transparency and partnership with the research faculty.

His primary focus for the coming year is to strengthen and expand core research computing foundational components including compute and storage infrastructure and services, data management practices and capabilities, and collaboration tools. His roadmap for doing so include the following objectives: 1) Enhancing Research IST governance and policy framework; 2) Improve support structure and culture; 3) Enhance infrastructure & services; 4) Grow service awareness and capabilities; 5) Explore new technologies and services. If you were unable to attend you can view the recording here: https://youtu.be/xU2763uQEqM

#### 2024 Accomplished Scientist Seminars, Workshops, Research Happy Hours - Hong Wei Chu PhD



The FY2024 Accomplished Scientist Seminars, Workshops and Research Happy Hours begin in September. ORI will host or co-host the following events this month:

Research Happy Hour, Friday, September 8, 3pm-5pm, J104/J105 (Molly Blank)

Co-hosted by: The NJH Postdoc Association, a group run by Postdocs, and the Office of Research Innovation

This Research Happy Hour will feature presentations of excellent work done by two of our postdoctoral fellows:

Hamidreza Nouri, PhD, Tollip regulates lung IL-33 signaling and allergic inflammation during viral infection



**Rafael Sobrano Fais, PhD,** will present: *NLRP3 activation and calcium-dependent contractile function in rat right* ventricle cardiomyocytes are sexually dimorphic and controlled by  $17\beta$ -estraidol-via estrogen receptor



Jodi Corely, PhD, will serve as session chair.



Science Workshop, Wednesday, September 27, 12pm – 1pm, Heitler Hall

Hosted by: The Office of Research Innovation



Join us as **Professor Andreas Hoenger**, **PhD**, from the Department of Molecular, Cellular and Developmental Biology at the University of Colorado at Boulder, teaches us about 3-D Cryo-Electron Microscopy as a Tool to Study Intracellular Structures.

#### Lab Tour to DU's Knoebel Institute for Healthy Aging - Hong Wei Chu, PhD



The Office of Research Innovation has planned its' first lab tour between DU and National Jewish Health (NJH) for Friday, September 22<sup>nd</sup>, 3pm – 5pm. This is a perfect place for NJH faculty and trainees to visit and learn about the imaging technologies.

We will also organize lab tours in the future for DU faculty and trainees to visit our NJH facilities such as Small Animal Physiology and Imaging Core, Mouse Genetics Core, Facility and Clinical Research Unit and the Center for Genes, Environment and Health.

#### Kauvar Symposium on the Impact of Climate on Respiratory Health and Immunity – Lisa Maier, MD, MSHP



Climate change is increasingly impacting health and disease in individuals and communities across Colorado, the nation and the globe, especially in those with respiratory and other underlying diseases and/or health disparities.

As a result, National Jewish Health and its Center for Environment, Climate and Health is hosting the Kauvar Symposium on the Impact of Climate on Respiratory Health and Immunity, Friday, October 27<sup>th</sup>, 2023, 8am – 3pm, to discuss research on climate change and health in order to promote conversations, collaboration and research in this area among investigators and colleagues across Colorado. Please see the agenda below including experts on the respiratory health effects of climate change.

#### Agenda:

Featured Speaker

Chris Carlsten, MD, MPH

Professor of Medicine
Head of UBC, Vancouver Respiratory Medicine
Director of the <u>Air Pollution Exposure Laboratory</u>
Legacy for Airway Health

Session 1: Magda Gorska, MD, "Air Pollution Maternal-Child Asthma Risk"

Session 2: Jennifer Peel, PhD, "Indoor Air Pollution"

Session 3: Kevin Josey, PhD, "Climate and Health Disparities"

Session 4: Panel Discussion, "Next Steps in Climate Health Research"

Moderator: Jon Samet MD, MS

Panelists: Colleen Reid PhD

Sheryl Magzamen PhD, MPH

Tony Gerber MD, PhD

The live symposium will be held at National Jewish Health (Molly Blank) with a virtual component for those unable to attend in person. For those attending in person, lunch will be provided.

Register NOW!

<u>Abstract submissions</u> are being requested. Six oral presentations will be chosen from the abstract submissions to highlight research being conducted by junior investigators and trainees.



Volume 2 Issue 10 October 2023

Workshop: 3-D Cryo-Electron Microscopy as a Tool to Study Intracellular Structures	Accomplished Scientist Speaker	DU Lab Tour – Knoebel Institute on Health Aging	Microgrants
Research Advisory Committee	DOM Research Town Hall	Travel Awards	Kauvar Symposium on the Impact of Climate on Respiratory Health and Immunity

#### **ORI Educational Events**

#### **Accomplished Scientist**

Dr. Ann Harris, PhD

Leonard C. Hanna Professor Ohio Eminent Scholar in Stem Cell Genomics

Vice Chair for Research Department of Genetics and Genome Sciences Case Western Reserve University Epithelial cell identity and the cellular origins of cystic fibrosis3-D

Wednesday, October 25th, 2023

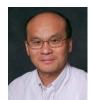
12pm – 1pm Heitler Hall

or via zoom:

https://njhealth-org.zoom.us/i/84485322237?pwd=S2VBNjFGcUo0ZkZFZXpRNXIJVndDQT09



#### ORI FY24 Travel Awards and FY24 Microgrants - Hong Wei Chu, PhD



The Office of Research Innovation announced its' FY24 **Travel Awards** on Friday, September 29<sup>th</sup>. **Congratulations to awardees**: Simon Bousseau, Cori Fratelli, Karina Mora Massad and Lingbo Li!

The Research Advisory Committee will meet on Friday, October 6<sup>th</sup>, to score applications submitted for the FY24 **Microgrants.** The **awards** will be **announced on Monday, October 16<sup>th</sup>** 

#### Lab Tour to DU's Knoebel Institute for Healthy Aging - Hong Wei Chu, PhD

On Sept. 22<sup>nd</sup>, a group of NJH trainees, research staff and faculty toured the labs at DU's Knoebel Institute for Healthy Aging. Their research areas in small molecule detection, synthetic protein mimetics and lysosome biology would be of interest to NJH researchers who not only study aging but also other topics. We will provide a tour summary with contact information for DU faculty in our next newsletter.

The Office of Research Innovation will organize a reciprocal lab tour at NJH for DU researchers. Please let us know if you'd like your lab to be considered for the tour.

#### The Research Advisory Committee (RAC) - Elizabeth Redente, PhD

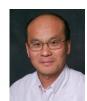


The RAC would like to invite investigators to submit requests of interest for the NIH Development of a Shared Instrumentation Grant (SIG) Program (instruments between \$50,000 and \$600,000) and the High-End Instrumentation (HEI) Program (instruments over \$600,001). **Applications are due June 1, 2024**, but we would like to provide investigators sufficient time to prepare projects with interested faculty and demo instrumentation if necessary.

Please provide a brief 1-page summary of interest to <u>LeAnn Donahue</u> by **Oct 31, 2023** that includes: **1**) Which program (SIG, HEI), **2**) PI, **3**) Instrument and ~cost **4**) Statement of need and **5**) A preliminary list of R01 funded faculty users.

The RAC will review requests and notify investigators of approval to move forward by mid-Dec.

#### ORI Workshop - Hong Wei Chu, PhD



On Sept. 27<sup>th</sup>. ORI hosted Professor Andreas Hoenger from CU Boulder for a workshop entitled "3-D Cryo-Electron Microscopy as a Tool to Study Intracellular Structures". Dr. Hoenger taught us about the procedures and applications of Cryo-EM.

After his talk, a group of interested trainees and faculty met with Dr. Hoenger over lunch to discuss the use of this cutting-edge research approach. He shared that there is no cost for using Cryo-EM in your NIH-funded projects if your 2-page application is approved by the National Network for Cryo- Electron Tomography.

These links allow you to apply for the use of Cryo-EM or to learn more about the technology:

- Applications
- CU Boulder Unit
- Full Cryo-EM Consortium

#### **Department of Medicine Research Town Hall** – Evi Zillmer

The Department of Medicine, the Office of Research Innovation and the Research Administration Council invite all Department of Medicine researchers, lab managers and lab staff to join the DOM Research Town Hall, on Thursday, October 12<sup>th</sup>, 12pm – 1pm, in Heitler Hall or via Zoom.

The agenda will cover the vision of the DOM research operations, current pain points in labs, action items, a roadmap and a short Cayuse update by Michael Dickman, Executive Director of Research Administration. Questions can be sent to in advance to Evi Zillmer at <a href="mailto:zillmere@njhealth.org">zillmere@njhealth.org</a> or via Zoom chat during the Town Hall.

#### Kauvar Symposium on the Impact of Climate on Respiratory Health and Immunity – Lisa Maier, MD, MSHP



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Professor of Medicine
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Director Legacy for Airway Health

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Session 2: Jennifer Peel, PhD, "Indoor Air Pollution"

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Session 4: Panel Discussion, "Next Steps in Climate Health Research"

Moderator: Jon Samet, MD, MS Panelists: Collen Reid, PhD

Sheryl Magzamen, PhD, MPH Tony Gerber, MD, PhD

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Volume 2 Issue 11 November 2023

Workshop: Versatile Synthetic Protein Mimetics	Visiting Scholar Speaker	NJH Hosted Lab Tour – for DU Faculty	Microgrant Awardees
Research Advisory Committee	DOM Research Operations	Grant Writing Workshops	Clinical Trial of the Month

ORI Educational Events	8		
Basic Science Workshop  Dr. Sunil Kumar, PhD  Associate Professor  DU Knoebel Institute for Healthy Aging	Versatile Synthetic Protein Mimetics to Target Pathologies Associated with Aberrant Protein	Wednesday, November 15th, 2023  12pm – 1pm Heitler Hall  or via zoom: https://njhealth-org.zoom.us/j/87827575531	
Visiting Scholar Speaker  Dr. Guillermo Carlos Bazan, PhD  Provost Professor Departments of Chemistry, Chemical & Biomolecular Engineering and Pharmacology  National University of Singapore, Singapore	Conjugated Oligoelectrolytes: A Versatile Platform for Membrane Modifications	Thursday, November 16 <sup>th</sup> , 2023  12pm – 1pm Heitler Hall  Or via zoom: <a href="https://nihealth-org.zoom.us/j/82912516448">https://nihealth-org.zoom.us/j/82912516448</a>	
Office of Research Innovation	2024 NJH Research Retreat	Fri, Feb 16 1:30 – 4:30 pm Molly Blank Conference Center	Presentations from all Departments Abstract and Poster Prizes

### **Department of Medicine Research Operations** – Evi Zillmer

DOM Research Operations is advancing its actions after the initial Town Hall held October 12<sup>th</sup>. Principal Investigators and their lab managers/supervisors are invited to join the **newly created DOM Research Operations Monthly Meeting**.

The inaugural meeting will be held on **December 6<sup>th</sup> at 1pm in Smith A531**. This meeting will focus on fostering cross-lab communications and collaborations. Please continue to reach out to Evi Zillmer with any questions.

#### **Grant Writing Workshops** – Tony Gerber, MD

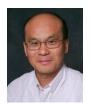


Apply for NIH, and other, grant opportunities with the support of our award-winning Grant Writing Workshops program. Contact Coordinator Erin Brown, for details. The workshops are designed to provide critical guidance and feedback for any level investigator. They are interactive, and feature hands-on practical reviews, to help investigators attain a thorough understanding of the grant writing and review process.

During October, the following workshops were held:

October 9 <sup>th</sup>	Fabienne Gally	Title: Role of FABP5 in COPD exacerbations
October 12 <sup>th</sup>	Nadkarni/Shah/Parekh/ Suarez-Farinas	Title: Use of Al/ML enabled Transformers for Generating Predictive Analytics based on Multimodal Sleep Data
October 18 <sup>th</sup>	Fabienne Gally	Title: Role of FABP5 in COPD exacerbations
October 23rd	Joseph Cooley	Title: Bcl-2 dependent fibroblast resistance to apoptosis occurs through IL-6 signaling

#### ORI FY24 Microgrant Awardees – Hong Wei Chu, PhD



The Research Advisory Committee scored the FY 24 Microgrant Applications on Friday, October 6<sup>th</sup>, and the awardees were announced Monday, October 16<sup>th</sup>. Congratulations to:

**Drs. Reinhardt and Epperson** for their application entitled "Harnessing the Therapeutic Potential of Early Life Helminth Infection for the Prevention of Type 1 Diabetes."; **Drs. George and Kim** for their application entitled "Ketone Supplementation to Improve RV Function in Severe PAH."; and, **Drs. Numata-Nakamuri and Chu** for their application entitled "Effect of pulmonary surfactant phospholipids on human rhinovirus-C infection in human distal lung.".

#### Lab Tours - University of Denver Knoebel Institute for Aging and National Jewish Health - Hong Wei Chu, PhD

A group of NJH trainees, research staff and faculty toured the labs at DU's Knoebel Institute for Healthy Aging, directed by Dr. Briony Catlow, on Sept. 22nd. You can <u>learn more about DU faculty and their excellent work in aging-related research and experimental approaches</u> involving small molecule detection, synthetic protein mimetics, lysosome biology and others. Dr. Sunil Kumar from DU will present a workshop, *Synthetic Protein Mimetics*, at NJH on Wednesday, Nov. 15<sup>th</sup>, 12pm – 1pm.

The Office of Research Innovation is arranging a lab tour for DU faculty to visit NJH labs on Monday, November 20<sup>th</sup>, 10am – 2pm. If you'd like to offer a tour of your lab, please contact <u>LeAnn Donahue</u>. We look forward to more research collaborations and grant submissions with DU faculty in the near future.

#### **Clinical Trial of the Month**

The Center for Deployment-Related Lung Disease – Funded by the Department of Defense



Researchers at National Jewish Health, the University of Colorado and the Rocky Mountain Regional VA Medical Center are investigating whether L-citrulline supplementation in veterans with **deployment-related asthma** improves asthma control and lung function. If you have a patient who developed new onset or worsening asthma following military deployment to the Middle East or Afghanistan, they may be eligible to participate in this placebo-controlled crossover clinical trial.

All study procedures, including blood and breathing tests, are done at no cost. Compensation is

provided. Duration of participation: up to 20 weeks.

Please contact <a href="DeploymentLungRes@njhealth.org">DeploymentLungRes@njhealth.org</a> if interested.

Principal Investigators: Dr. Cecile Rose (NJH), Dr. Silpa Krefft (RMRVAMC and NJH) and Dr. Fernando Holguin (UCD).



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Research Happy Hour	NJH Hosted Lab Tour – for DU Faculty	DOM Research Operations	NJH 2024 Research Retreat
Research Advisory Committee	Orbital Working Group	Grant Writing Workshops	Lab Manager Leadership Summit

#### **ORI Events**

Research Happy Hour  Drug Discovery	Friday, December 8 <sup>th</sup> 3:00 pm – 5:00 pm	J104/J105 (Molly Blank Conference Center)	Zoom option: https://njhealth- org.zoom.us/i/8365855 5592  Passcode: 711756
Office of Research Innovation	2024 NJH Research Retreat	Friday, February 16th 1:30 – 4:30 pm Molly Blank Conference Center	Presentations from all Departments Abstract and Poster Prizes

#### NJH 2024 Research Retreat - Brian Day



Academic Affairs through the Office of Research Innovation is pleased to announce our annual Abstract Competition for the 2024 NJH Research Retreat, **Friday, February 16, 2024** (save the date)! Two abstract submissions will be selected by The Research Advisory Committee for oral presentation at the retreat. Abstract applications will be sent via email the first week of December with submissions due Monday, January 8, 2024. The two winners will be announced on Monday, February 5, 2024. Please contact <u>LeAnn Donahue</u> with any questions.

#### Research Happy Hour - Hong Wei Chu



The Office of Research Innovation is hosting a **Research Happy Hour**, "**Drug Discovery**" on Friday, **December 8**<sup>th</sup>, **3:00pm – 5:00 pm** in Room J104/J105 (Molly Blank Conference Center).

There will be four presentations including: Brian Day, PhD, Professor, Session Chair, VP of Research, Director of Office of Research Innovation, "The Long and Winding Road of Drug Discovery"; Daniel LaBarbera, PhD, Professor, Director of The Center for Drug Discovery, "The CU Anschutz Center for Drug Discovery and its' High-Thruput Drug Discovery Infrastructure"; Mari Nuri-Nakamura, MD, PhD, Associate Professor, "Bench to Bedside: Pulmonary Surfactant Phospholipids as Novel Antivirals and Anti-Inflammatory Medicine"; and Rohit Katial, MD, Professor, "Drug Development: Industry and Academic Collaboration".

Please join us for refreshments! Zoom option: https://njhealth-org.zoom.us/i/83658555592 Passcode: 711756

#### **Department of Medicine Research Operations** – Evi Zillmer

Dear PI's: There is a great opportunity coming to Denver that will support your lab managers and supervisors in their learning and development as leaders. The Lab Manager Leadership Summit will be held April 29th – May 1<sup>st</sup>, at the Hilton Denver City Center, and offers actionable advice on management, business, safety and staff challenges. Topics range from dealing with burnout, incorporating automation in the lab, lab operations and more. Early-bird registration is \$550 (register by Janaury 31<sup>st</sup>) for all 3-days and you receive an additional discount if you refer others. Find more information here.

DOM Research Operations is available to support your lab operations. Connect with Evi Zillmer to recruit, hire, onboard and develop your staff while navigating policies and resources and fulfilling institutional processes. Questions, concerns and ideas are always welcome. Join the inaugural DOM Research Operations Monthly Meeting scheduled for December 6<sup>th</sup> at 1pm in Smith A531 and learn about upcoming initiatives. Email ZillmerE@NJHealth.org or call extension 8632.

#### NJH Hosts DU Faculty for Lab Tour - Brian Day



The Office of Research Innovation hosted DU faculty members for an NJH Lab tour on Monday, November 20th. Thank you to the NJH labs that participated: Biobank (John Yang), Clinical Research Services (Alicia Drew), the Flow Cytometry Core (Lee Reinhardt), the Center for Genes, Environment and Health (Jamie Everman) and the Mouse Genetics Core Facility (Jen Matsuda). There was great interest by the DU faculty members in obtaining access to our core services and potential collaborations with our researchers. We are in the process of following this up with another joint activity to stimulate research collaborations between our institutions.

#### Orbital Workgroup Group Updates – Emmanuel Hilaire and Lindsay Markham



It has been more than a handful of moon phases since the last Orbital Working Group update and there is lots of exciting space-related news to share!

Dr. Lee Reinhardt was one of 29 investigators selected <u>worldwide</u> for the <u>NASA Spaceflight Technology</u>, <u>Applications and Research</u> (STAR), a virtual NASA program for space biosciences training. Congrats Lee!

A SOD dismutase mimetic, originally developed from research done at NJH and Duke, was tested aboard the International Space Station (ISS) for its ability to counteract the oxidative stress induced by the microgravity environment. This drug is currently in clinical trial. Two 2023 publications, (<a href="https://pubmed.ncbi.nlm.nih.gov/37686374/">https://pubmed.ncbi.nlm.nih.gov/37686374/</a> and <a href="https://pubmed.ncbi.nlm.nih.gov/37108526/">https://pubmed.ncbi.nlm.nih.gov/37686374/</a> and <a href="https://pubmed.ncbi.nlm.nih.gov/37108526/">https://pubmed.ncbi.nlm.nih.gov/37108526/</a>), resulted from this space study with Dr. James Crapo and collaborators at Loma Linda University Health. Stellar!

At the last ATS conference, NASA was present with a booth in the exhibit hall and also made several presentations to express their interest in collaborating with research scientists at academic institutions and in using space research assets like satellite data for respiratory health applications.

Last month UC Berkeley publicly released its plan to create the <u>Berkeley Space Center</u> in collaboration with NASA and industry partners, a 36-acre innovation center and hub, centered on the space exploration theme and associated fields with various research clusters such as space biology. This could be a great opportunity for future collaborations!

The White House released its <u>National Low Earth Orbit R&D Strategy</u> which calls for transformational R&D with inter-agency support from NASA, HHS, DOD, NSF, and DOE to name a few. Related to that, NSF with NASA/CASIS released a <u>call for proposal</u> for tissue engineering and mechanobiology aboard the ISS. Cell and tissue models are of particular interests (organoids, airway models, skin models, etc.). Keep your eyes on the stars as more research funding and opportunities are coming!

KPMG released a very interesting report titled:

"A galaxy of opportunities. Healthcare and life sciences in the new space economy." Check it out!

NJH hosted the US Space Force this past September at the Morgridge Academy to build and shoot rockets in the courtyard. Here's a peek at the fun day! NJH faculty are gearing up with Morgridge Academy to collaborate on the Genes in Space competition opening up in 2024.

Questions or comments? Please contact Emmanuel Hilaire and Lindsay Markham.

### **Grant Writing Workshops** – Tony Gerber



Apply for NIH, and other, grant opportunities with the support of our award-winning Grant Writing Workshops program. Contact Coordinator Erin Browne, for details. The workshops are designed to provide critical guidance and feedback for any level investigator. They are interactive, and feature hands-on practical reviews, to help investigators attain a thorough understanding of the grant writing and review process.

During November, the following workshops were held:

November 21st	Nadkarni/Shah/Parekh/Suarez- Farinas	Title: Use of AI/ML enabled Transformers for Generating Predictive Analytics based on Multimodal Sleep Data Part 2
November 29 <sup>th</sup>	Jim Bridges	Title: Role of the SFTA2/GPR116 signaling axis in pulmonary surfactant homeostasis and acute lung injury



Volume 3 Issue 1 January 2024

NJH 2024 Research Retreat

– Call for Abstracts

Accomplished Scientist – Dr. Crotty-Alexander

Research Happy Hour – NJH Postdocs

Cayuse Sponsored Programs (SP) – Live!

#### **ORI Educational Events**

NJH 2024 Research Retreat Friday, Feb. 16 <sup>th</sup> Molly Blank Conference Center	Call for Abstracts	Abstract Application Deadline – Monday, January 8 <sup>th</sup>	For an abstract application or questions, please contact <u>LeAnn</u> <u>Donahue</u>
Accomplished Scientist Dr. Laura Crotty- Alexander, MD  Associate Professor, UCSD  Section Chief of Pulmonary Critical Care, VA San Diego Healthcare System	Impact of E- cigarette Use Across the Body	Wednesday, January 17,  2024 12pm – 1pm Heitler Hall  Or via zoom: <a href="https://njhealth-org.zoom.us/j/86908774593">https://njhealth-org.zoom.us/j/86908774593</a>	
Research Happy Hour With NJH Postdocs	NJH Postdoc Presentations	Thursday, January 25 <sup>th</sup> 3pm – 5pm J104/J105 Molly Blank  Or via zoom: https://njhealth- org.zoom.us/j/82831519969	Co-hosted by: The NJH Postdoc Association, a group run by Postdocs, and the Office of Research Innovation

### NJH Research Retreat - Brian Day, PhD



The Office of Research Innovation is pleased to announce our annual Abstract Writing Competition for the **2024 NJH Research Retreat**, **Friday**, **Feb. 16**, **2024** (save the date)! The Retreat will include a research poster competition and catered reception. It will kick-off with each NJH Department Chair presenting the research vision for their department. Then, two Abstract Competition winners will share 15-minute presentations. All other applicants will share their presentations during the poster competition portion of the retreat. Research team members from all departments (e.g., faculty, postdoctoral fellows, students) are eligible to apply. The call for abstracts was released December 11th (check your email inbox). **Abstract applications are due Monday**, **January 8!** Winners will be announced Monday, February 5<sup>th</sup>. Please contact

#### January Research Happy Hour - Hong Wei Chu, PhD



The NJH Postdoc Association and the Office of Research Innovation will host a Research Happy Hour on Thursday, January 25<sup>th</sup>, 3pm -5pm, J104/J105 (Molly Blank). Please plan to attend these presentations of excellent work by our postdoctoral fellows. Refreshments will be provided! If unable to attend in-person, please join via zoom: <a href="https://njhealth-org.zoom.us/j/82831519969">https://njhealth-org.zoom.us/j/82831519969</a>

#### NEW - COPD Discovery Accelerator Program - Brian Day, PhD

The Office of Research Innovation has received a major donation from the Mah Jongg League Foundation to support a new **COPD Discovery Accelerator Program** The program will help determine the causes of COPD, discover biomarkers and new therapies, understand the role of new emerging risk factors and disseminate new knowledge to patients and the community. We thank the donor and the NJH Development Team for their work in securing this donation to keep us among the world's leaders in COPD research.

#### Cayuse Sponsored Programs (SP) - Live! - Michael Dickman

We are excited to announce that we are live with Cayuse Sponsored Programs (SP)! As previewed in recent faculty meetings, Cayuse SP will be our new research administration management system that will provide high level access into your sponsored research activities. Highlights include:

- Σ Electronic approval process (replacing paper IRR)
- Portfolio level view of research activities
- Centralized location for grant administration related information and documents

You can actually log into Cayuse SP today! But data is limited up to 6/30/2023. We have a process for data catch up and anticipate we should be up to date in the next three months.

We will start using Cayuse as the institutional routing and approval mechanism, replacing the IRR, effective for deadlines on or after January 25<sup>th</sup>.

Training on Cayuse has already begun. Thanks to all the faculty and administrators who attended the sessions in December. We will provide another training via zoom on January 10th and quarterly moving forward as-needed. We highly recommend attending a training session if you plan on submitting a grant within the next 3-6 months. We will also offer weekly in-person open sessions in the training room on third floor BB (M334) where you can log into Cayuse and receive support and ask questions specific to your portfolio.

Faculty Cayuse Training (zoom info below)	Cayuse Open Sessions (M334)
January 10, 12:00-1:00PM (Wed)	January 11, 12:00-1:30PM (Thurs) Every Tuesday, 12-1PM (starting January 16)
	Livery ruesuay, 12-11-ivi (starting January 10)

#### **1/10 Zoom Info**

Join Zoom Meeting

https://njhealth-org.zoom.us/j/87580560518?pwd=SzhpVzc0NHRxbUNRNDJqUzBUK2NaZz09

Meeting ID: 875 8056 0518

Passcode: 865508 One tap mobile

- +17209289299,,87580560518# US (Denver)
- +12133388477,,87580560518# US (Los Angeles)

Dial by your location

- +1 720 928 9299 US (Denver)
- +1 213 338 8477 US (Los Angeles)
- +1 646 558 8656 US (New York)



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NJH 2024 Research Retreat – New Date!	Accomplished Scientist – Dr. Darragh Heaslip	Research Happy Hour – DOD Funded Research at NJH and UCD	Department of Medicine – Research Operations
Accomplished Scientist –	Industry Research & Collaborartion Committee	Joint Research Symposium -	Electronic Lab Notebooks
Dr. Jonathan Kropski		NJH/Mount Sinai/Jefferson	(ELNs)

Vanderbilt University Medical Center

<b>ORI Educational Even</b>	ts		
NJH 2024 Research Retreat New Date!! Friday, March 8 <sup>th</sup>	Molly Blank Conference Center 1:30pm – 4:30pm	Winning Abstracts to be Announced –  Monday, February 26th	For questions, please contact <u>LeAnn</u> <u>Donahue</u>
Research Happy Hour	DOD Funded Research at NJH and UCD	Friday, Feb. 9, 2024  3pm – 5pm  J104/J105 Molly Blank  Or via zoom:  https://njhealthorg.zoom.us/i/8508349  4686	Featured Speakers: Drs. Bebarta, Downey, Rose, Day and Chu
Accomplished Scientist  Dr. Darragh Heaslip, PhD  Director, CSU's Biopharmaceutical Manufacturing and Academic Resource Center (BioMARC)	Introduction to CSU's Biopharmaceutical Manufacturing and Academic Resource Center	Wednesday, Feb. 14, 2024  12pm – 1pm Heitler Hall  Or via zoom:  https://njhealth-org.zoom.us/j/83024037197	
Accomplished Scientist  Dr. Jonathan Kropski, MD  Associate Professor of Medicine and Cell/Developmental Biology	Molecular origins of pulmonary fibrosis	Wednesday, Feb. 28, 2024  12pm – 1pm Heitler Hall  Or via zoom: https://njhealth- org.zoom.us/88964071461	

#### NJH Research Retreat - Brian Day, PhD



Due to scheduling conflicts, The Office of Research Innovation has rescheduled the **2024 NJH Research Retreat**, for Friday, March **8**, **2024**. It'll take place in the Molly Blank Conference Center from 1:30pm – 4:30pm. The **two winning abstracts will be announced Monday**, **February 26**<sup>th</sup>.

#### February Research Happy Hour – Hong Wei Chu, PhD



The Office of Research Innovation will host a Research Happy Hour titled "DOD Funded Research at NJH and UCD" on Friday, February 9<sup>th</sup>, 3pm -5pm, J104/J105 (Molly Blank). Dr. Vik Bebarta, Director of the CU Anshutz Center for Combat Medicine and Battlefield (COMBAT) Research will present along with NJH Faculty: Drs. Downey, Rose, Day and Chu. Refreshments will be provided! If unable to attend inperson, please join via zoom: <a href="https://njhealth-org.zoom.us/j/85083494686">https://njhealth-org.zoom.us/j/85083494686</a>

#### **NEW - Industry Research & Collaboration Committee** - Brian Day, PhD

The Office of Research Innovation is pleased to announce the Industry Research & Collaboration Committee will be rolling out an Intake Form required for all new industry collaboration/research projects excluding traditional industry sponsored clinical trials. The Intake Form will be available on SpyderWeb by February 7<sup>th</sup> to assist NJH Faculty in streamlining these projects in order to make the process faster and easier. Further details will be provided at each department's February faculty meeting.

#### NJH/ Mount Sinai /Jefferson Joint Research Symposium – Anthony Gerber, MD



On Wednesday, April  $3^{rd}$ , 2024, from 10am - 2pm (MST),National Jewish, Mount Sinai and Jefferson will host a virtual Joint Research Symposium. Room J102 on the NJH campus is reserved for the symposium and faculty are encouraged to attend. Lunch and coffee will be provided. More details to follow soon!

#### Electronic Lab Notesbooks (ELNs) – Bob Schell, Director, Research Informatics and Computing



Electronic Lab Notebooks (ELNs) are digital platforms for researchers to record, organize, manage and collaborate on research activities and data, replacing traditional paper lab notebooks. They offer improved organization and searchability, collaboration and sharing capabilities, data integrity and security features, and workflow automation. ELNs assist research in complying with the NJH Data Management and Sharing Policy (DMSP), promoting transparency, accessibility and reproducibility of research findings while fostering collaboration and advancing scientific knowledge. Join our upcoming Research Town Hall (date and location to be announced soon) to learn more about available ELNs and best practices for their use!

### **Department of Medicine Research Operations** – *Evi Zillmer*

Exciting news from the Department of Medicine! The DOM will launch a research-focused New Hire Orientation in February! Supplemental to the KEY Orientation provided by HR and the lab-specific onboarding, we'll take a deeper dive into research operations in the DOM, introduce NJH resources and learn institutional processes hands-on. To name a few topics, new employees will be equipped with general knowledge on time-keeping, purchasing, time & effort and IST requests, ready to learn your lab specific processes. Orientation is slated for Tuesday morning. Please reach out to Evi Zillmer with any new hires starting in your lab.

Additionally, please join the monthly DOM Research Operations Monthly Meeting scheduled the first Wednesday of each month at 1pm in Smith A531 to learn about upcoming initiatives. Questions, concerns and ideas are always welcome. Email <u>Evi Zillmer</u> or call extension 8632.

#### **Clinical Trial of the Month**

The Center for Deployment-Related Lung Disease – Funded by the Department of Defense



Researchers at National Jewish Health, the University of Colorado and the Rocky Mountain Regional VA Medical Center are investigating whether L-citrulline supplementation in veterans with **deployment-related asthma** improves asthma control and lung function. If you have a patient who developed new onset or worsening asthma following military deployment to the Middle East or Afghanistan, they may be eligible to participate in this placebo-controlled crossover clinical trial.

All study procedures, including blood and breathing tests, are done at no cost. Compensation is provided. Duration of participation: up to 20 weeks.

Please contact <u>DeploymentLungRes@njhealth.org</u> if interested. Principal Investigators: Dr. Cecile Rose (NJH), Dr. Silpa Krefft (RMRVAMC and NJH) and Dr. Fernando Holguin (UCD).



March 2024

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NJH 2024 Research Retreat – March 8th	CCTSI NJH Town Hall	RAC - Research Town Hall	NEW Grant Opportunity

Accomplished Scientist -Industry Research & Collaborative Frontiers: Uniting Research Town Hall -Dr. Stella Hines Collaborartion Committee Mount Sinai Hospital, National Electronic Lab Notebooks Jewish Health and Jefferson Clinical (ELNs) and New Intake Research Institute for Research Form

Excellence

**ORI Educational Events** 

Volume 3 Issue 3

NJH 2024 Research Retreat Friday, March 8 <sup>th</sup>	Molly Blank Conference Center 1:30pm – 4:30pm	Congratulations to this year's Abstract Winners! Caleb Gammon (Dr. Seibold's Lab) and Dr. Alexandra McCubbrey	For questions, please contact <u>LeAnn</u> <u>Donahue</u>
Town Hall –  Colorado Clinical Sciences & Translational Sciences Insittue (CCTSI)	Please plan to attend this informative Town Hall highlighting research resources available to NJH Faculty	Tuesday, Mar 19, 2024  Heitler Hall  or via zoom:  https://njhealth- org.zoom.us/j/885495854  31	Presented by:  Ron Sokol, Director and Multiple Principal Investigator – CCTSI  Janine Higgins, Director of Operations and Multiple Principal Investigator – CCTSI
Accomplished Scientist	Overdeed and the deep	W- 1 M 00 0004	

Dr. Stella Hines, MD, **MSPH** 

Associate Professor University of Maryland School of Medicne

Overlooked and Under Appreciated: Reusable Respirators in Healthcare & the User Experience

Wed., Mar 20, 2024 12pm - 1pm Heitler Hall

Or via zoom:

https://njhealth-org.zoom.us/j/85238423194



RAC Research Town Hall	NJH Cores and Centers: Flow Cytometry, Microscopy/Imaging and Mass Spec.	Wed., Mar 27, 2024  12pm – 1pm Heitler Hall  Or via zoom: https://njhealth- org.zoom.us/j/81972656288	Featured Speakers: Drs. Berdyshev, Radoshevich and Reinhardt
Research Town Hall	Electronic Lab Notebooks (ELN's) and Industry Intake Form	Friday, April 5, 2024  12pm – 1pm Heitler Hall  Or via zoom: https://njhealth- org.zoom.us/j/859916836  73	Presented by:  Bob Schell, Director, Research Computing & Informatics  Dr. Brian Day, Vice President of Research Office of Research Innovation

#### NJH 2024 Research Retreat – Brian Day, PhD



Please join us for the **2024 NJH Research Retreat**, **Friday**, **March 8**, **2024**. It'll take place in the Molly Blank Conference Center from 1:30pm – 4:30pm. The two winning abstracts will be presented along with each Department Chair highlighting current research in their areas. Congratulations to this year's abstract winners - Caleb Gammon (Peds) and Dr. Alexandra McCubbrey (DOM)! We're looking forward to your presentations!

#### New Grant Opportunity through the RAC and ORI - Elizabeth Redente, PhD



We are pleased to announce an internal funding opportunity made possible by a generous donation to National Jewish Health through Windsweep Farm. The Research Advisory Committee (RAC) through the Office of Research Innovationwill be **sponsoring a 1-year investigator-initiated research grant for \$45,000.** 

The intent of the award is to study **The Role of T and Innate Lymphoid Cells in Oral Mucosal Immunity.** This is an initiative to engage investigators to enter the field of mucosal immunity research.

For this opportunity, applicants should be a postdoctoral fellow, graduate Student or laboratory Scientist working on this topic. **Applications arte due to LeAnn Donahue** by March 11, 2024. Awards will be announced at the end of March with funding to begin April 1.

Please contact <u>LeAnn Donahue</u> for the application requirements and further award details. Please direct questions to Elizabeth Redente.

We look forward to reviewing each application and seeing the fantastic science and innovative ideas from our research community.

### Collaborative Frontiers: Uniting Mount Sianai Hospital, National Jewish Health and Jefferson Clinical Research Institute for Research Excellence—Anthony Gerber, MD, PhD



On Tuesday, April 2nd, 2024, from 9am – 12pm (MST), National Jewish, Mount Sinai Hospital and the Jefferson Clinical Research Instittue for Research Excellence will host a virtual research symposium. Room J104 on the NJH campus is reserved for the symposium and faculty are encouraged to attend. The agenda and further details available soon.