



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

Dorothy M. Davis Heart and Lung Research Institute

Quarterly Newsletter

Winter 2023



473 West 12th Avenue
Columbus, OH 43210

www. <https://medicine.osu.edu/departments/davis-heart-lung-research-institute>

As we put 2022 in our rearview mirror and look ahead to 2023, I'd like to wish everyone a happy and healthy new year! A sincere note of thanks to our faculty, trainees and staff that propelled our research portfolio to new heights in 2022 with >440 publications and >\$50M in total extramural funding. There were countless memorable moments from the past year (too many to name here) but some highlights included hosting College of Medicine Dean Carol Bradford, MD and other campus leaders for DHLRI tours to showcase some of your exceptional work; joining our first cohort of summer high school and undergraduate research fellows for a tour of the Shoe; hosting members of the Davis Foundation board to celebrate a transformational \$5.5M gift; and getting a first view of downtown Columbus from the future home of a DHLRI research neighborhood on the 5th floor of the Interdisciplinary Research Facility (IRF). However, hands down my favorite moment of 2022 was peering out from the stage at DHLRI Research Day to view a standing room only crowd ahead of the slate of exceptional trainee talks – this experience more than any other represented a year of new beginnings as we emerged from 2+ years of sacrifice, hardship and loss inflicted by the COVID-19 pandemic. The opportunity to be together again fully in person, share ideas, and connect as a community meant a lot to me as I hope it did for each of you.

There's much to look forward to in the coming year, including the planned opening of DHLRI neighborhoods in the IRF, new initiatives around Diversity, Equity, and Inclusion, expanded grant writing and mentoring programs, and continued growth of our membership. The IRF is slated to open in June 2023 and will serve as a state-of-the-art research facility for collaborative groups, including DHLRI neighborhoods that will occupy the better part of the 5th floor with a penthouse view of the campus and downtown. DEI will be a major focus going forward starting with a 5-part monthly series in collaboration with the Office of Diversity and Inclusion. We plan to pivot quickly from this initial discussion to development of a strategic plan and concrete action to bolster DEI in



DHLRI. This conversation is especially important as we look to launch our next phase of growth through partnership with departments/divisions across the College and University. Areas that we hope to support through aggressive recruiting including foundational therapeutics & drug design, systems biology, stem cell biology, and tissue engineering. At the same time, a major goal for the next year is to expand support for our investigators to write competitive grants, especially large, collaborative grants that leverage our combined expertise. Keep an eye out for this other new programming in the year ahead!

Finally, this month's newsletter is noticeably shorter than previous. This is because we have recently released our FY 2022 DHLRI Annual Report. Please follow the link at the end of this newsletter, or visit the "Discoveries" page on the DHLRI Website to read the FY2022 Annual Report.

Sincerely,

Handwritten signature of Thomas J. Hund.

Thomas J. Hund, PhD
Professor, Departments of Internal Medicine and Bio-medical Engineering
Director and William D. and Jacquelyn L. Wells Chair,
Dorothy M. Davis Heart and Lung Research Institute

Kudos -

Bravo to all our investigators who started new extramural projects over the last quarter of 2023!

Elliott Crouser, MD [Pulmonary, Critical Care and Sleep Medicine (PCCSM)] received a new NIH NIAID R21 entitled “Role of renin-angiotensin-aldosterone system during sarcoidosis granuloma formation” on the heels of an NIH NIAID U01 with **Ian Davis, DVM, PhD** entitled “Supplemental citicoline administration for reduction of lung injury efficacy trial (SCARLET).” **Lynn Fussner, MD** (PCCSM) was awarded a two-year American Thoracic Society Foundation – Alpha-1 Foundation Partner Grant for “Role of alpha-1 antitrypsin in anti-PR3 positive vasculitis.” **Bryan Tillman, MD, PhD** (Vascular Surgery) was awarded a grant from the Morton Cure Paralysis Fund for his work on novel retrievable stent graft to achieve drug delivery to the spinal cord. **Ashley Francois** [Matt Stratton lab (Physiology and Cell Biology (PCB))] was awarded an AHA Predoctoral Fellowship for her project, “The role of Sertad4 in pathological cardiac remodeling.”

Congrats also to our members who were successful in securing competitive intramural awards. **Noah Weisleder, PhD** (PCB) was awarded a Dean’s Discovery Grants Program Grant for his project, “Neuronal Cell Membrane Repair Defect as a Novel Mechanism contributing to Alzheimer’s Disease.” **Kristin Stanford, PhD** (PCB) and collaborators **Natalia Higueta-Castro, PhD** (Biomedical Engineering [BME]), **Daniel Gallego-Perez, PhD** (BME), **Kristy Townsend, PhD** (Neurosurgery), and **Loren Wold, PhD** (Nursing) were awarded a Catalyst grant through the President’s Research Excellence program.

Anasuya Sarkar, PhD (PCCSM) was awarded the 2022 Rising Star, DOIM, College of Medicine. **William Abraham, MD** [Cardiovascular Medicine (CVM)] received the Pioneer Award from the Heart Failure Society of America. **D. Ryan King, PhD** [Przemyslaw Radwanski lab (Pharmacy)] was recognized as the 2022 Postdoctoral Scholar Mentor of the Year from the OSU Office of Postdoctoral Affairs.

Mahmood Khan, PhD (Emergency Medicine) was the keynote speaker for the 2022 John J. Kopchick Molecular and Cellular Biology/Translational Biomedical Sciences Fund Banquet and Awards Ceremony at Ohio University. **Kristin Stanford, PhD** (PCB) give an invited talk at the James T. Willerson, MD Cardiovascular Sciences Seminar at Baylor College of Medicine. **Joshua Joseph, MD** (Endocrinology, Diabetes, and Metabolism) spoke on behalf of the American Heart Association Ohio at a Columbus City Council Health & Human Services Committee meeting, discussing the dangers of flavored tobacco products. **Devaseena Ponnalagu, PhD** [Harpreet Singh Lab (PCB)] delivered an invited talk for the Cardiac Muscle Society Early Career Committee Seminar Series. DHLRI Investigators **Peter Mohler, PhD** (PCB), **Tom Hund, PhD** (Cardiovascular Medicine [CVM]), **Vadim Fedorov, PhD** (PCB), **Sara Koenig, PhD** (CVM), and **Mona El Refaey, PhD** (Cardiac Surgery) attended the Leducq Foundation FANTASY meeting hosted by OSU to discuss Sinus Node Dysfunction research. **Over 20 DHLRI Faculty, Staff, and Students** presented their research at the 2022 American Heart Association Scientific Sessions in Chicago, IL.

Transitions -

We would like to welcome Dan Maloney, Financial Analyst to the DHLRI Administrative Team.

Congratulations to **DeeAnn Willis-Berry** and **Ellen Yokoyama** who both celebrated their 25th work anniversary at OSU!



DeeAnn Willis-Berry (Fiscal Officer)



DHLRI welcomed new members **Ann McAlearney, ScD** (Family and Community Medicine), **William Grobman, MD** (Obstetrics and Gynecology), **Tamar Gur, MD PhD** (Psychiatry), **Paco Herson, PhD** (Neurological Surgery), **Deqiang Li, PhD** (Nationwide Children's Hospital), and **Isla McClelland, MD** (CVM).

Happenings -

DHLRI Research Day was a smashing success with over 130 posters and standing room only for the oral presentations and keynote from Joseph Wu, MD, PhD, President-Elect of the American Heart Association and Director of the Stanford Cardiovascular Institute. Special shoutouts to our DHLRI Distinguished Award winners: **Kymerly Gowdy, PhD** (PCCSM) – Melissa G. Piper Distinguished Mentor Award; **Roman Covarrubias, PhD** [Dr. Richard Gumina Lab (CVM)] – Distinguished Basic Research Staff Award; **Matthew Joseph** (Interventional Cardiology Cath Core) – Distinguished Administrative Staff Award; **Sarah Karow** (Clinical Trials Management Office) – Distinguished Clinical Research Staff Award;

Kaitlyn Vitek (CoM Office of Research) – DHLRI Director's Award; **Dahlia Kenawy, MD** (Surgery) – Distinguished Clinical Fellow Award; Paula **Agudelo Garcia, PhD** [Ana Mora Lab (PCCSM)] – Post-Doctoral Scholar of the Year Award; **Heather Struckman** [Rengasayee Veeraraghavan Lab (BME)] – Graduate Student of the Year Award. Thank you to **Jenifer Bennett, Penny Jones, Shyam Bansal, PhD** and the **DHLRI Education Committee** for making the event such a success. We are already starting on planning for next year's event!

Research in Progress continued in DHLRI 170 with a host of great talks including from distinguished external scholars including **John A. Schneider, MD, MPH** (University of Chicago), **Martin E. Young, PhD** (University of Alabama at Birmingham), and **Anthony Ferrante, MD, PhD** (Columbia University), **Michelle Parvatiyar, PhD** (Florida State University), and **Frankie Heyward, PhD** (Harvard Medical School). DHLRI Research in Progress takes place in DHLRI 170 every Friday from 12-1pm.

Finally, DHLRI participated in a number of impactful outreach events over the last quarter. We co-hosted an LGBTQ+ SafeZone Training in a partnership with Women in Medicine and Sciences (WIMS) and The Women’s place for LGBTQ+ in STEM Day. This training was a sexuality, gender, and LGBTQ+ education session that provides powerful and effective awareness to LGBTQ+ issues for allies. DHLRI will kick off a Diversity, Equity, and Inclusion workshop series facilitated by the OSU Office of Diversity and Inclusion this spring. We also celebrated Healthy Lung Month in October with a Twitter frenzy, faculty and staff honors and a recognition wall, “What gives you a breath of fresh air?” DHLRI investigators and trainees showed up in force to at the AHA Annual Ignite Research Reception. Along with several poster presentations, Stacia Naquin (WSYX6) moderated a panel comprised of **Tom Hund, PhD** (CVM), **Vidu Garg, MD** (NCH) and **Louisa Mezache** [Veeraraghavan Lab (BME)]. OSU Men’s Soccer hosted DHLRI during their game against Northern Kentucky to honor Connor Senn’s memory. DHLRI participated in the OSU v Michigan Blood Battle resulting in a win over “that team up North” – a first in 5 years.

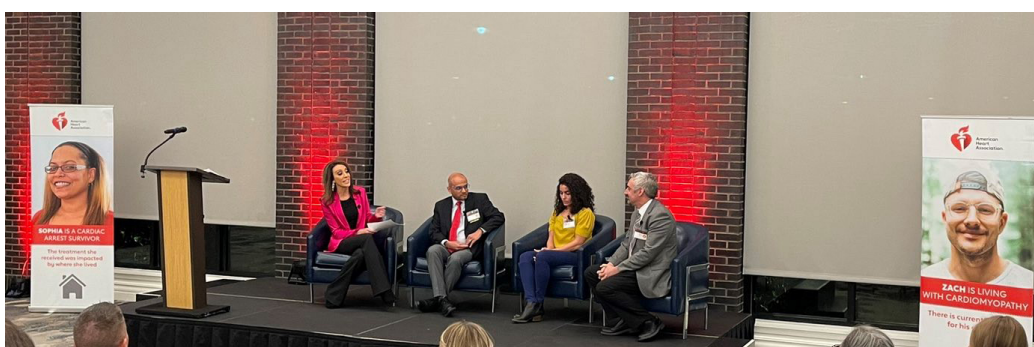
To view the DHLRI FY22 Annual Report, please visit <https://medicine.osu.edu/departments/davis-heart-lung-research-institute/our-people/message-from-the-director>.

Here you can find information on DHLRI publications, funding, programs, and departmental updates, as well as current projects and future goals.

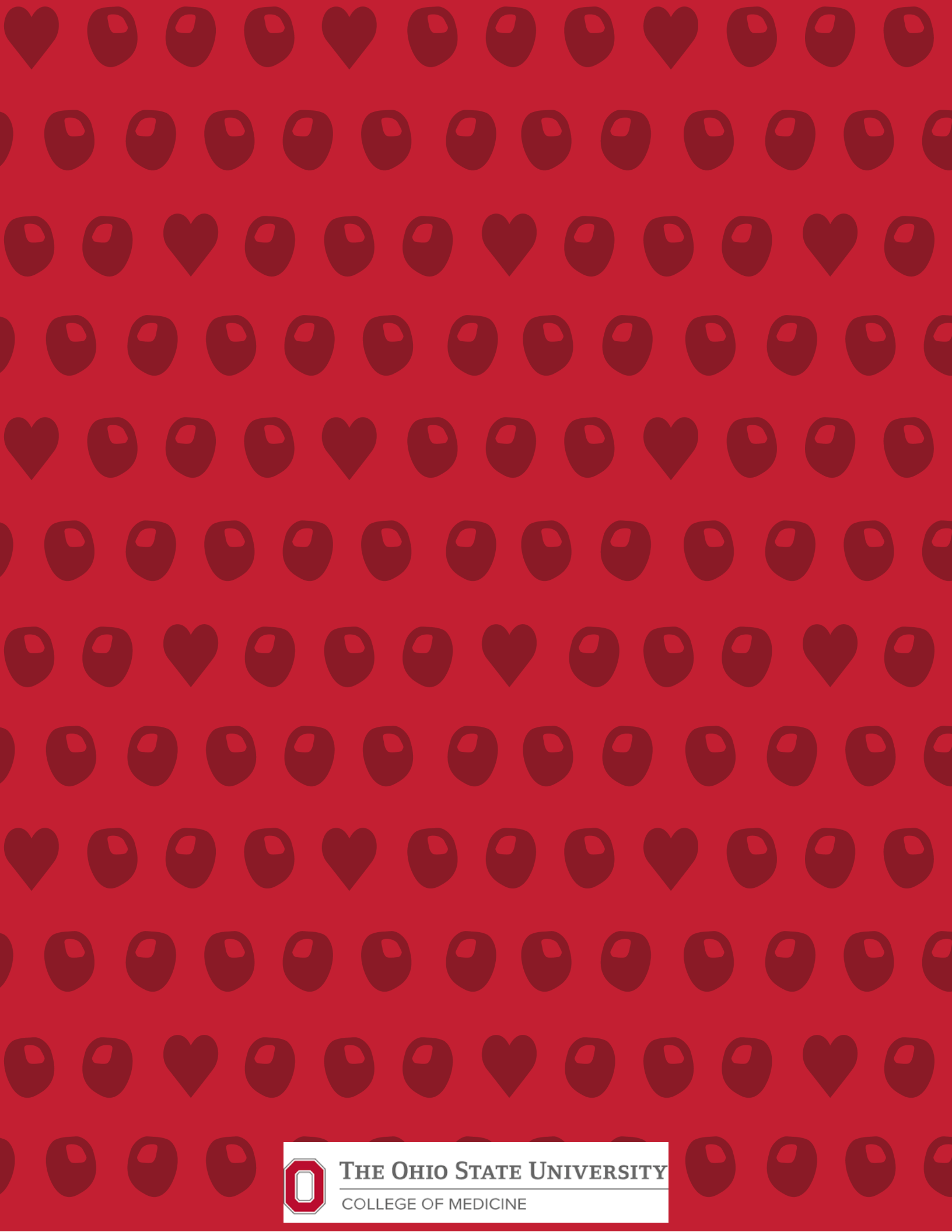
The DHLRI

The DHLRI website has also been updated for the quarter, including a new featured story, featured publications, a new events & outreach schedule, and administrative staff updates.

Please reach out to Izabelle (Izabelle.Colvin@osumc.edu) with any submissions for next quarter’s newsletter.



Vidu Garg, MD (NCH), Louisa Mezache (BME), and Tom Hund, PhD (CVM) at the AHA Annual Ignite Research Reception



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