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DEPARTMENT OF LABORATORY MEDICINE AND PATHOLOGY AT THE UNIVERSITY OF WASHINGTON NEWSLETTER

A MESSAGE FROM THE CHAIR



Geoffrey Baird MD, PhD Professor and Chair Paul E. Strandjord and Kathleen J. Clayson Endowed Chair Department of Laboratory Medicine and Pathology

Dear Colleagues and Friends of the Department of Laboratory Medicine and Pathology (DLMP),

As winter weather has finally descended upon us, I'd like to share a message with the Department, and all of those who are connected to the Department, about where we have been and where we are going. My prior messages have been heavily influenced by the ongoing pandemic and while we are no longer dealing with the acute consequences of COVID, we are very much dealing with the chronic effects of the pandemic. Despite all of this, though, DLMP continues to grow in size, scope, and impact, and our future looks bright.

With COVID testing volumes at a much more manageable pace than this time last year, we will soon be looking to convert our gigantic armamentarium of automated viral diagnostic instrumentation into infrastructure that will serve the Department in future years. As I mentioned in our last newsletter, we are planning our large off-site laboratory in Renton. The site represents the future of DLMP's reference laboratory operations and architectural planning is now underway to move many of our operations in the late 2024 to 2025 timeframe.

This past summer, we hosted the 57th Academy of Clinical Laboratory Physicians and Scientists (ACLPS)

Annual Meeting in downtown Seattle, thanks to Dr. **Theresa Nester** (and back-from-retirement Dr. **Wayne Chandler**) and the DLMP administrative team that put it all together. It was a great opportunity to see our friends and colleagues again after several years of virtual meetings, to hear great science (our own Dr. **Chuck Murry** gave the Cotlove Lecture), and to provide time and space for our trainees to network. The 2023 ACLPS meeting will be in Charlottesville, VA, in June.

Highlights from our educational mission include getting ready to hire a faculty member to head a new Pathology Assistant (PA) training program. The closest PA program is near Los Angeles at Loma Linda University, so this program will be critical for meeting the regional demand for PAs in the Pacific Northwest. Our existing education programs (the Molecular Medicine and Mechanisms of Disease PhD Program, the residencies and fellowship programs, the Medical Scientist Training Program, the Medical Laboratory Science Undergraduate Program, and the Master in Laboratory Medicine Program) have all welcomed exceptional trainees this academic year, and we are right back in the middle of recruitment season for undergraduates, graduate students, and clinical residents and fellows.

Dr. Cindy Derdeyn started as the new Vice Chair of Research in July and I am grateful for her expertise, diligence, and compassion as she oversees one of the larger research operations in the entire UW School of Medicine. Our research programs continue to flourish, with both well-known projects, like the Dog Aging Project and the Biorepository and Integrated Neuropathology (BRaIN) Laboratory, and then some smaller projects. For example, Dr. Emily Glynn, hematopathologist and residency program associate director, studies corruption in the healthcare sector in low- and middle-income countries, and has recently published an outstanding review on the topic. In other areas, DLMP is growing its own research resources to accelerate our own studies. The new <u>Research Sequencing Service</u>, led by Dr. **Scott** Kennedy, is a resource developed within DLMP to allow

our own faculty and trainees take advantage of unused clinical genomic sequencing "bandwidth" for their own research projects.

These are just a few highlights from our Department and you'll read more throughout this newsletter. Through all of the challenges we have faced, I am continually in awe of the dedication of everyone at DLMP. This is a time of change for our Department, and there are still many challenges ahead, but we remain committed to the mission of improving the health of our patients through clinical service, training the next generation of faculty and staff, and biomedical research advances that create new diagnostic and therapeutic options for the future.

Thank you all for being a part of our DLMP team, for all that you do for our patients, our trainees, and our research efforts. I wish you all a happy holiday season, and a healthy and happy new year.

Sincerely, Geoff

Geoffrey Baird MD, PhD gbaird@uw.edu

SUPPORT DLMP

We are grateful for your support of the Department of Laboratory Medicine and Pathology.

Your gift, no matter the amount, truly makes a difference. Gifts to the Department support a wide range of needs not covered by state and federal funding, including research, patient care, and testing resources.

All gifts are tax-deductible. Click the button below to make your contribution today!

MAKE A GIFT



DEPT. OF LABORATORY MEDICINE AND PATHOLOGY

IN THE NEWS

Investigators from the Allen Brain Institute, UW Alzheimer's Disease Research Center, and Kaiser Permanente Washington Health Research Institute recently launched the Seattle Alzheimer's Disease Brain Cell Atlas (SEA-AD) web product (<u>SEA-AD.org</u>).

Read <u>"Cell by cell, scientists are building a high-</u>resolution map of brain changes in Alzheimer's Disease".

Listen to <u>"Alzheimer's researchers are looking beyond</u> <u>plaques and tangles for new treatments</u>" on NPR.

Learn more about the Dog Aging Project in <u>CNN</u>, <u>*The*</u> <u>New York Times</u>, and <u>Newsweek</u>.

Check out the <u>new funding award announcements</u> for the <u>BRAIN Initiative Cell Atlas Network</u>. The DLMP BRAIN Lab Pacific Northwest Brain Donor Network will be the primary source of brain tissue for the Allen Institute, who is leading this effort to develop a human brain cell atlas.

Read this GenomeWeb article about ultra-rapid sequencing efforts led by Dr. **Danny Miller** with Drs. **Tina Lockwood, Jillian Buchan**, and **Cate Paschal**. (Registration required to read the article.)

"Our department is doing so much cool research, and it's so satisfying working with medical trainees." Read more about our Program Operation Specialist **Brooke Emrich** in this <u>staff spotlight from The Whole U</u>, including her love of knitting, photography, and attending Emerald City Comic Con plus her efforts for the UW Combined Fund Drive!

Dr. **Sean Murphy**'s mosquito-based malaria clinical trials research was featured in a children's magazine <u>The</u> <u>Week Junior</u> and in several other media outlets like NPR, *The New York Post*, and the front page of Reddit.com.

Follow us on Twitter @uwlabmedpath for the latest news and updates!

HONORS, AWARDS, AND ACHIEVEMENTS

Congrats to **Felicia Watson** and **Caroline Duncombe** in the Murphy Laboratory who were awarded a \$50,000 CoMotion Innovation and Population Health Institute Award to develop a prototype device for intradermal sporozoite vaccination! The project, called SkinVAX, was reviewed by scientists and commercial developers and was selected as an awardee from amongst a field of competing projects in the recent pitch meeting.

Xin Ray Tee, a Laboratory Medicine and Pathology Master's student at the Risques Lab, defended her thesis "Understanding Ovarian Cancer Risk: Pathogenic TP53 mutation burden in peritoneal fluid is associated with BRCA germline mutation status" on June 2, 2022.

Molecular Medicine and Mechanisms of Disease (M3D) PhD student **Rebecca Bornstein** defended her thesis "The role of mTORin mitochondrial disease" on July 7, 2022.

M3D student **Ben Blue** defended his thesis "An automated system for high-throughput longevity and healthspan discovery in *Caenorhabditis elegans*" on July 25, 2022.

Dr. **Melissa Upton** will be on a <u>Council of Medical</u> <u>Specialty Societies Advisory Group</u> to provide guidance and oversight to the work of 21 societies on improving diversity, equity, and inclusion in medical training. In this capacity, she is representing the American Society for Clinical Pathology.

Dr. **Eleanor Chen** was awarded a Department of Defense Rare Cancer Research Program Idea Development Award.

Dr. **Rhonda Mittenzwei** was awarded a slot on the Mental Illness Research, Education, and Clinical Center (MIRECC) fellowship.

Dr. **Keith Jerome** received Notification of Award (NOA) from the board of trustees of The Foundation for AIDS Research (amfAR), for an ARCHE Grant to support the Jerome Lab's project, "Gene expression from AAV vectors in the presence of ART."

In July, the University of Washington Board of Regents

appointed Drs. **Keith R. Jerome** and **Alex Greninger** the title "Larry Corey Endowed Professorship in Virology."

Dr. Jose Mantilla received an Anderson Sarcoma Innovation Pilot grant for the project "Use of Digital Spatial Profiling in Dermatofibrosarcoma Protuberans to Identify Diagnostic and Predictive Markers of Fibrosarcomatous Transformation" (PI: Jose Mantilla). Co-investigators include Drs. Shreeram Akilesh, Kelly Smith, Ata Moshiri, Robert Ricciotti, Eleanor Chen, and Anshu Bandhlish.

Dr. **Mariya Sweetwyne** was awarded a 2022 Pilot and Feasibility (P&F) Award sponsored by the UW Diabetes Research Center (DRC). The award is to support a project in collaboration with Dr. **Monica Sanchez-Contreras**.

Dr. **Huu-Hien Huynh**, a post-doctoral fellow in the Hoofnagle laboratory, was awarded a fellowship from the Partnership for Clean Competition.

Dr. **Vera Paulson** <u>covered several sessions</u> at American Association for Clinical Chemistry (AACC), including the session Dr. **Eric Konnick** moderated.

Najafian Lab has received a mentor-based fellowship grant from Sanofi. This fellowship is intended for promoting training and research in the field of Lysosomal Storage Disease (LSD). Eligible candidates are recent graduates from MD, PhD, PharmD, or Genetic counseling programs. The research project in Najafian Lab will be focused on Fabry disease and the start date is July 1, 2023. For more information and application, visit Najafian Lab website.

Dr. **Haodong Xu** is the principal investigator for National Institutes of Health (NIH)'s R56 Award "Role of the ATPdependent chromatin-remodeling enzyme Brg1 in the regulation of cardiac Na+ channel." Dr. **Robb MacLellan** is the co-investigator and Research Scientist **Yan Lu** is the lab participant.

Dr. **Rosana Risques** is co-investigator in a new U54 NIH grant in collaboration with researchers at the Hutch and the University of Wisconsin-Madison entitled "Understanding Adenoma Progression: Interplay Among Tissue Microenvironment, Clonal Architecture, and Gut Microbiome."

Dr. **Monica Sanchez-Contreras** is the principal investigator for the National Institute on Aging (NIA)'s K01 Award "Contribution of somatic mitochondrial DNA mutation to the transition from normal aging to Alzheimer's disease." Dr. Annie Garcia received an Accountable Care Organization Award for the project "Use of RNA in-situ hybridization (RNA-ish) assay to detect c-MYC mRNA in challenging radiation associated vascular lesions." Drs. Shreeram Akilesh, Robert Ricciotti, Eleanor Chen, Jose Mantilla, Maria Tretiakova, and Anshu Bandhlish are the faculty mentors.

Dr. **Liang Lu** received an Accountable Care Organization Award for the project "G3 Neuroendocrine Tumor in the Lung." Dr. **Haodong Xu** is the faculty mentor.

Dr. **Meagan Chambers** was honored as a <u>2022 Society</u> of '67 Kinney Scholar at the Association of Pathology Chairs 2022 Annual Meeting.

The Murphy Laboratory presented 11 posters and talks at the 2022 American Society of Tropical Medicine and Hygiene Annual Meeting in Seattle. The Malaria Molecular Diagnostic Laboratory's data was featured in numerous clinical trials reported at the meeting including in the first report from the successful CIS43LS monoclonal antibody study conducted in Mali by the NIH.

Drs. Joshua Lieberman and Stephen Salipante were awarded a three-year contract from the Centers for Disease Control & Prevention for their project "Development of inexpensive point-of-care testing strategies for the detection of Treponema pallidum."

Dr. **Ari Pape** won the Gordon F. Vawter Award at the 2022 Society for Pediatric Pathology Fall Meeting for the platform presentation, "FOXF1 Mutations in Three Fetuses with Patchy Distribution of Intrapulmonary Shunt Vessels: Insight into Progression of Alveolar Capillary Dysplasia with Misalignment of the Pulmonary Veins (ACDMPV)." The Gordon F. Vawter Award is given at each of the Society's biannual meetings to recognize the work of a pathologist in training.

M3D PhD student **Alex Goldstein** was awarded a Wellstone Muscular Dystrophy Specialized Research Center Fellowship, which comes with full support for a year, and is currently using engineered heart tissues to study the fibrotic remodeling that occurs in patients with Duchenne muscular dystrophy. Alex is co-advised by Drs. **Nate Sniadecki** and **David Mack**.

Dr. **Charles Alpers** received the <u>2023 Roscoe R.</u> <u>Robinson Award</u> from the International Society of Nephrology.

Dr. **Danny Miller** received an <u>NIH Early Independence</u> <u>Award</u>. <u>Read more in The Huddle</u>.

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FACULTY ARRIVALS

We welcomed the following faculty to our department between July-December 2022:

Dr. **Cynthia (Cindy) Derdeyn**, Professor and the Vice Chair of Research

Dr. **Kareem Hosny,** Assistant Professor and the Head of AP Informatics

Dr. **Regina Kwon**, Acting Instructor-Provision in the Division of Informatics

Dr. **Danny Miller**, Assistant Professor (joint) in the Department of Pediatrics, Division of Genetic Medicine, and Department of Laboratory Medicine and Pathology

Dr. **Daniel Reiter**, Acting Instructor in the Breast and Gynecological Surgical Pathology subspecialties

Dr. **Troy Hutchens**, Assistant Professor in the Head, Neck and Lung Pathology service

Dr. **Thao Truong**, Assistant Professor in the Division of Microbiology

Dr. **Rebecca (Becky) Yoda**, Acting Assistant Professor in the Cytopathology, Neuropathology, and Autopsy services

Dr. **Maryam Asif**, Assistant Professor in the Division of Hematology/Coagulation

Dr. **Joseph Rank**, Clinical Associate Professor in the Gastrointestinal (GI), Hepatic and Pancreatic Pathology subspecialty

Dr. **Lianqun Qiu**, Assistant Professor in the Division of Hematopathology

Dr. **Yongjun Liu**, Associate Professor in the Gastrointestinal (GI), Hepatic and Pancreatic Pathology subspecialty

FACULTY APPOINTMENTS

Dr. **Monica Sanchez Contreras**, Acting Assistant Professor

Check out our faculty directory for bios and publications!

PUBLICATIONS AND OTHER SCIENTIFIC NEWS

<u>"Profiling PI3K-AKT-MTOR variants in focal brain</u> malformations reveals new insights for diagnostic care." **Pirozzi, F.**, et. al with DLMP authors **Ghayda Mirzaa**, **Raj Kapur, Colin Pritchard**, and **Christina Lockwood**. *Brain*. 2022, Volume 145, Issue 3, Pages 925–938.

"The utility of cerebrospinal fluid-derived cell-free DNA in molecular diagnostics for the PIK3CA-related megalencephaly-capillary malformation (MCAP) syndrome: a case report." Chen, W., et. al with DLMP authors Ghayda Mirzaa, Christina Lockwood, Colin Pritchard, Brian Shirts. Cold Spring Harbor Molecular Case Studies. 2022.

<u>"Pulmonary Vein Stenosis Associated with Germline PIK3CA Mutation."</u> Yung, D. et. al with DLMP author Ghayda Mirzaa. *Children* 2022, *9*(5), 671.

"Antiprogestins reduce epigenetic field cancerization in breast tissue of young healthy women." **Bartlett, T.** et. al with DLMP author **Rosana Risques**. *Genome Med*. 2022, 14, 64.

<u>"Evaluation of a Selective Chemical Probe Validates That</u>
<u>CK2 Mediates Neuroinflammation in a Human Induced</u>
<u>Pluripotent Stem Cell-Derived Mircroglial Model.</u>"
Mishra, S., et. al with DLMP authors Swati Mishra,
Chizuru Kinoshita, Jessica E. Young. Frontiers in Mol.
Neurosci. 2022, Sec. Brain Disease Mechanisms.

"Prophylactic tranexamic acid in patients with hematologic malignancy: a placebo controlled, randomized clinical trial." Gernsheimer, T., et. al with DLMP authors Terry Gernsheimer and Monica Pagano. *Blood*. 2022. This randomized controlled trial evaluating the use of tranexamic acid on patients with thrombocytopenia and hematologic malignancies demonstrated no benefit on decreasing the risk of bleeding. This study was a collaboration between Transfusion Services and Hematology Division.

<u>"Current advances in transfusion medicine 2021: A</u> <u>critical review of selected topics by the AABB Clinical</u> <u>Transfusion Medicine Committee</u>" **Metcalf, R.**, et. al with DLMP author **Monica Pagano**. *Transfusion*. 2022, 62(7):1435-1445.

"Blood extracellular vesicles carrying synaptic functionand brain-related proteins as potential biomarkers for Alzheimer's disease." Tian, C., et. al with DLMP authors Chen Tian, Tessandra Stewart, Zhen Hong, Patrick Aro, David Soltys, Catherine Pan, and Min Shi. Alzheimers Dement. 2022.

"Targeted long-read sequencing identifies a retrotransposon insertion as a cause of altered GNAS exon A/B methylation in a family with autosomal dominant pseudohypoparathyroidism type 1b (PHP1B)." **Miller D.**, et. al with DLMP author Danny E. Miller. *Journal of Bone and Mineral Research*. 2022.

"Multi-step screening and composition optimization of lipid nanoparticles for prolonged liver-targeted DNA delivery." Zhu Y., et. al with DLMP authors Rebekah Reynolds, Melanie Shears, and Sean Murphy. *Nature Communications*. 2022, 13:4282.

"Clinical and Pathologic Characterization of 94 Radiation-Associated Sarcomas: Our Institutional Experience." Kao, E., et. al with DLMP authors Abbye McEwen, Robert Ricciotti, and Jose Mantilla. Int J Surg Pathol. 2022, Jun 12:10668969221105626.

"Vitamin K antagonist reversal strategies: Systematic review and network meta-analysis from the AABB." **Pagano, M.**, et al. with DLMP author Monica Pagano. *Transfusion*. 2022 Aug;62(8):1652-1661.

"The 5th edition of the World Health Organization Classification of Haematolymphoid Tumours: Myeloid and Histiocytic/Dendritic Neoplasms." Khoury JD, et. al with DLMP authors Xueyan Chen, Keith Loeb, Kikkeri Naresh, and Cecilia Yeung. Leukemia. 2022 Jul;36(7):1703-1719. <u>"The 5th edition of the World Health Organization</u> <u>Classification of Haematolymphoid Tumours: Lymphoid</u> <u>Neoplasms.</u>" **Alaggio R.**, et. al with DLMP author **Kikkeri Naresh**. *Leukemia*. 2022 Jul;36(7):1720-1748.

"A Targeted Liquid Chromatography–Tandem Mass Spectrometry Method for Simultaneous Quantification of Peptides from the Carboxyl-terminal Region of Type III Procollagen, Biomarkers of Collagen Turnover." Huynh, H., et. al with DLMP authors Huu-Hien Huynh, Katrina Forrest, Jessica Becker, Michelle Emrick, Peter Byers, and Andrew Hoofnagle. *Clin Chem.* 2022 Jul 30:hvac119.

"Tandem Mass Spectrometry–Based Amyloid Typing Using Manual Microdissection and Open-Source Data Processing." **Phipps, W.**, et. al with DLMP authors William Phipps, **Kelly Smith**, **Michelle Emrick**, and **Andrew Hoofnagle**. *Am J Clin Pathol*. 2022 May 4;157(5):748-757.

"Multiplexed quantification of insulin and C-peptide by LC-MS/MS without the use of antibodies." Foulon N., et. al with DLMP authors Elisha Goonatilleke, Michelle Emrick, and Andrew Hoofnagle. J Mass Spectrom Adv Clin Lab. 2022 Jun 10;25:19-26.

<u>"Selective Inhibitory Circuit Dysfunction after Chronic</u> <u>Frontal Lobe Contusion</u>" **Nolan, A.**, et. al with DLMP author Amber Nolan. *Journal of Neuroscience*. 2022, 42 (27) 5361-5372.

<u>"ANKLE2-related microcephaly: A variable microcephaly</u> syndrome resembling Zika infection" **Thomas, A.**, et al with DLMP author **Ghayda Mirzaa**. *Ann Clin Transl Neurol*. 2022 Jul 24.

<u>"Brain Abnormalities in PIK3CA-Related Overgrowth</u> Spectrum: Physician, Patient, and Caregiver Experiences" **Dexheimer, J.** and DLMP author **Ghayda Mirzaa**. *Adv Ther*. 2022 Jul 20;1-10.

"Clinical Practice Guidelines From the Association for the Advancement of Blood and Biotherapies (AABB): COVID-19 Convalescent Plasma", **Estcourt, LJ**, et. al, with DLMP author **Monica Pagano**. Ann Intern Med. 2022.

<u>"Modeling human HSV infection via a vascularized</u> <u>immune-competent skin-on-chip platform</u>", **Sun, S.**, et. al, with DLMP authors Sijie Sun and **Jia Zhu**. *Nature Communications*. 13, Article number: 5481, 2022.

"The impact of histological grade on outcomes in follicular lymphoma: An analysis of patients in the SEER database in the context of evolving disease classification and treatment" **Naik, A.**, et. al, with DLMP authors

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Keith Loeb, **Lorinda Soma**, and **Kikkeri Naresh**. *British Journal of Haematology*. 2022.

"Longitudinal expression profiling identifies a poor risk subset of patients with ABC-type Diffuse Large B Cell Lymphoma" **Bewick-Copley**, **F.**, et. al, with DLMP author **Kikkeri Naresh**. *Blood Advances*. 2022.

<u>"Editorial: Real World Outcomes of Lymphoma From</u> India" Kumar, L., et. al, with DLMP author Kikkeri Naresh. *Frontiers in Oncology*. 2022.

<u>"Targeted long-read sequencing identifies</u> <u>a retrotransposon insertion as a cause of</u> <u>altered methylation in a familial case of</u> <u>pseudohypoparathyroidism type 1b (PHP1B)</u>" **Miller, DE**, et. al. With DLMP author Danny Miller. *Journal of Bone and Mineral Research*. 2022, Vol 37, p.1711-1719.

The <u>"What's new in kidney tumor pathology 2022: WHO</u> <u>5th edition updates"</u> newsletter describes the most important updates in kidney tumor pathology from the new WHO 2022 blue book where Dr. **Maria Tretiakova** co-authored several topics.

"Prevalence and Detection of Actionable BRAF V600 and NRAS Q61 Mutations in Malignant Peripheral Nerve Sheath Tumor by Droplet Digital PCR" Kao EY, et. al, with DLMP authors Yu Wu, Eleanor Chen, Robert Ricciotti, Yajuan Liu, and Jose Mantilla. *Hum Pathol*. 2022, Sep 3:S0046-8177(22)00223-4.

"Genomic analysis of early spread of monkeypox virus in Washington State" Roychoudhury, P., et. al, with DLMP authors Pavitra Roychoudhury, Jaydee Sereewit, Hong Xie, Ethan Nunley, Nicole A.P. Lieberman, Alex Greninger. Preprint.

"<u>Molecular mechanisms and therapeutic targets for</u> <u>diabetic kidney disease.</u>" **Tuttle KR**, et. al, with DLMP author **Charles Alpers**. Kidney Int. 2022;102:248-260.

"Approach to Kidney Biopsy: Core Curriculum 2022." Najafian B., et. al, with DLMP authors Behzad Najafian and Charles Alpers. *Am J Kidney Dis*. 2022; 80:119-131.

"Lupus nephritis transcriptomics across space and time." Jackson SW with DLMP author Charles Alpers. *Kidney Int.* 2022;102:694-696.

<u>"Transfusion-associated hyperkalemia in</u> pediatric population: Analyses for risk factors and recommendations." Chisa Yamada, et. al, with DLMP author Nabiha Huq Saifee. *Transfusion*. 2022. <u>"Six new cases of CRB2-related syndrome and a review</u> of clinical findings in 28 reported patients." Adutwum M., et. al, with DLMP author Ghayda Mirzaa. *Clin Genet*. 2022.

"Regulation of Liprin-α phase separation by CASK is disrupted by a mutation in its CaM kinase domain." **Tibbe D.**, et al., with DLMP author **Ghayda Mirzaa**. *Life Sci Alliance*. 2022 Sep 22;5(10):e202201512.

"Clinical, neuroimaging and molecular characteristics of PPP2R5D-related neurodevelopmental disorders: an expanded series with functional characterisation and genotype-phenotype analysis." **Oyama N.**, et al., with DLMP author **Ghayda Mirzaa**. J Med Genet. 2022.

"Needle-free, spirulina-produced Plasmodium falciparum circumsporozoite vaccination provides sterile protection against pre-erythrocytic malaria in mice." Saveria T., et. al with DLMP authors Chaitra Parthiban, Annette M. Seilie, Brad C. Stone, and Sean Murphy. *npj Vaccines*. 2022, 7:113.

"Mass spectrometry identification of biomarkers in extracellular vesicles from Plasmodium vivax hypnozoite infections." Gualdrón-López, M., et. al with DLMP authors Zachary Billman, Tayla Olsen, and Sean Murphy. *Mol Cell Proteomics*. 2022 Oct;21(10):100406.

"Rethinking detection of pre-existing and intervening Plasmodium infections in malaria clinical trials." Owalla TJ, et. al with DLMP authors Dianna Hergott, Annette Seilie, Weston Staubus, Chris Chavtur, Ming Chang, and Sean Murphy. Front Immunol. 2022 Sep 20;13:1003452.

"Predictors of risk of relapse in classic Hodgkin lymphoma." Fromm JR, et. al with DLMP authors Jonathan Fromm, Claire Tang, and Kikkeri Naresh. J Clin Pathol. 2022 Oct 14;jcp-2022-208552.

"Combinations of host- and virus-targeting antiviral drugs confer synergistic suppression of SARS-CoV-2." J Wagoner, et. al, with DLMP authors Jessica Wagoner, Shawn Herring, and Steve Polyak. *Microbiology* Spectrum. 2022 Oct 26;10(5):e0333122.

"Discovery of host-directed modulators of virus infection by probing the SARS-CoV-2-host protein-protein interaction network." **Ravindran V.**, et. al with DLMP authors **Jessica Wagoner**, **Andreas Den Hartigh**, **Julia Sidorova**, **Susan Fink**, and **Steve Polyak**. *Brief Bioinform*. 2022 Nov 19;23(6):bbac456.

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The Association for the Advancement of Blood and Biotherapies (AABB) Annual Meeting was scheduled to take place October 1-4 in Orlando, Florida. Due to the Hurricane Ian, the meeting was cancelled. This was the work done and accepted for presentation by UW TM faculty, staff and trainees:

- "A Model for DAT Interpretation in Active Consultation with Transfusion Medicine Services" Poster Presentation, Dr. Rida Hasan, Anel Quiroz, Nina Sen, Dr. Hamilton Tsang, Dr. John Hess, and Dr. Monica Pagano;
- "Daratumumab Interference in the Transfusion Lab: To Genotype or Not to Genotype?" Poster Presentation, Drs. Austin Green, Patrick Mathias, and Monica Pagano;
- "Neonatal Alloimmunization in Two Patients with Hemophagocytic Lymphohistiocytosis Receiving Anti-Interferon Therapy" Poster Presentation, Drs.
 Ashely Hein, Nabiha Huq Saifee, Scott Koepsell, Aleh Bobr, and Shelly Williams;
- "Using Twitter Space to Advance Piping Hot Transfusion News" Poster Presentation, Drs. Daniela Hermelin, Monica Pagano, Aaron Tobian;
- "Evaluation of the Bio-Rad IH-500 Vs. Immucor Echo Lumena for Routine Transfusion Medicine Testing" Poster Presentation, Nathan Heu, BS1, Mark Destree, MLS, MBA2, Jackie Degler, MT(ASCP)3, Belinda Wang, MT (ASCP)1 and Dr. Theresa Nester;
- "Survey of Transfusion Service Practice and Experience with Anti-M in Pregnancy" Poster Presentation, Dr. Theresa Nester, et al;
- "Transfusion Adverse Events" Curated Poster Session, Chair, Dr. Monica Pagano;
- "Leveraging Your Data Through Replication and Warehousing to Meet Your Blood Bank and Transfusion Service Needs" Chair, Dr. Hamilton Tsang;
- "Platelets and Novel Therapeutics" Oral Abstract Session, Chair Dr. Larry Luchsinger, Dr. Moritz Stolla;
- "Blood Shortage Triage Team: Engaging Hospital Leaders" Chair, Dr. Nabiha Huq Saifee;
- Co-Author: "In Vivo Comparison of Recovery and Survival Methods with Pathogen Reduced Apheresis

Platelet Components" Oral abstract, Dr. Moritz Stolla;

- "Clinical Efficacy of Mirasol-Treated Apheresis Platelets in Patients with Hypoproliferative Thrombocytopenia (MIPLATE) Trial" Plenary Oral Abstract. Co-Author: Dr. Moritz Stolla;
- "Critical Limits of In Vitro Testing of Stored Platelets: Improved Function with a Fresh Extracellular Environment and In Vivo Rejuvenation" Poster Presentation. Senior-Author: Dr. Moritz Stolla;
- Award for Innovative Research: "Updates on platelet temperature response before and after transfusion" NBF Symposium for Research in Transfusion Medicine Speaker Dr. Moritz Stolla.

ACADEMIC PROGRAMS

We are committed to the academic mission of the University of Washington and UW Medicine by providing comprehensive and innovative educational opportunities to developing medical practitioners and bioclinical researchers.

> Learn more about our Academic programs!

JUSTICE, DIVERSITY, EQUITY, AND INCLUSION (JEDI)

The JEDI Committee is proud to announce the launch of the Caregiver in Conferences (CIC) Support Award in January 2023. This new initiative will support the attendance of DLMP trainees and early junior faculty members with familial caregiver responsibilities to national conferences and professional training programs. The CIC Award will provide funds to cover family care costs (up to \$500 per applicant) related to the trip. This award highlights the DLMP commitment and ongoing efforts to lower barriers to advancing professional development for all trainees and junior faculty.

Dr. Suzanne Dintzis presented "Teaching Communication Skills Including Bystander Response to Racial Microaggression: Evaluation of a Novel Technology for Physicians" for Laboratory Medicine Grand Rounds on November 16, 2022. Dr. Dintzis has pioneered the use of a smartphone videobased communication assessment tool to teach communication skills to physicians and residents. Last year, her team was awarded a DLMP Diversity and Equity Grant to implement this new technological approach to train bystander response to racial microaggression. Dr. Dintzis' seminar highlighted the value of this approach as a teaching tool that elicits behavioral change and presented exciting progress towards its application in the context of response to racial microaggressions. Thank you to Dr. Dintzis and her team for this important DEI work.

The JEDI Committee thanks all the DLMP members that participated in outreach activities in the spring and summer of 2022. These activities provide exposure to research and medicine to underserved high school and college students. Multiple labs, staff, and faculty contributed to different UW-organized outreach summer programs including Summer Science (Drs. Xinxian Deng, Sean Murphy, Chetan Seshadri, and Mariya Sweetwyne), Dare to Dream (Max Louzon and Dr. Martin Darvas), Summer Health Professions Education Program (Drs. Rida Hasan, Nicole Jackson, Bill Mahoney, and Monica Pagano), Stipends for Training Aspiring Researchers program (Drs. Susan Fink and Rebecca Treger), Making Connections (Dr. Mariya Sweetwyne), UDOC (Max Louzon, Miriam Kim, and Drs. Emily Glynn, Nicole Jackson, Desiree Marshall, Libby

Parker, and Monica Pagano), and a visit from Highline School District to the Medical Laboratory Science student lab (**Jess Ray**, Miriam Kim, **Jiro Ronas**, and **Patty Callahan**).

The Husky Science Communication Initiative (HuSCI), funded by the JEDI Committee, executed their first outreach event at Denny International Middle School in November. The event occurred over one school day where over 250 7th graders in 12 science classrooms were guided through a logical engagement puzzle with UW researchers. The purpose of the program is to build scientific curiosity and confidence in young students from diverse backgrounds by developing a supportive connection with scientists. 25 UW volunteering researchers paired up with groups of Denny students to apply logical reasoning with their regular curriculum material and to support their interest in STEM subjects. HuSCI will return to Denny in the Spring to visit the 8th grade classes.

The Master of Science in Laboratory Medicine Program is developing a partnership with the Summer Science/ Rainier Scholars Programs for graduate student teaching and mentoring experiences for summer 2023. DLMP faculty and staff will receive information on numerous opportunities to contribute to outreach programming in early 2023.

> We are committed to fostering a diverse community that is encouraging, inclusive, and welcoming to all.

Learn more about our JEDI mission, priority areas, and goals on our website.

UPCOMING EVENTS

<u>Check the DLMP events calendar</u> for the latest information about our education seminars (grand rounds and research seminars). Click "Subscribe" to sign up for a weekly reminder email and/or click on an individual event to download the information to your calendar.

The Medical Laboratory Science (MLS) Undergraduate Program has upcoming virtual information sessions on Jan 3, and Feb 7 at 4pm PT. The sessions will include details about the application process, major, and career options. <u>Registration required; sign up for a session</u> <u>today.</u> The deadline to apply to the MLS Undergraduate Program is February 15.

The Master of Science (MS) in Laboratory Medicine Program has upcoming virtual information sessions on Dec 20, Jan 17, and Feb 21 at 4pm PT. <u>Registration</u> <u>required</u>; sign up for a session today. The deadline to apply is March 15.

WORK WITH US

There are clinical, research, and administration job opportunities available in DLMP! Find a list of open positions within our department at <u>dlmp.uw.edu/jobs</u>. You can filter the listing by area of interest, location, schedule, FTE, etc., to narrow down your search. To apply for a position, click on the "View Details" link in the job posting, which will take you to the UWHires job requisition page with the full job description and "Apply for this job" button.

Looking for academic positions? <u>Find the most updated</u> <u>list on UW's Academic Jobs page.</u>

FOLLOW DLMP ON SOCIAL MEDIA!



The DLMP Newsletter is an in-house newsletter published on a semi-annual basis to highlight the activities of the University of Washington School of Medicine Department of Laboratory Medicine and Pathology. It is distributed to the Department and friends of the Department.

Background photos: University of Washington Profile photo: UW Medicine

ABOUT DLMP

On July 1, 2020, the Departments of Laboratory Medicine and Pathology merged to form the Department of Laboratory Medicine and Pathology. A regional resource for clinical laboratory services required for innovative patient care, research and educational programs, we combine the sophisticated testing and informatics capabilities of fully accredited laboratories with the resources of an academic institution in its delivery of clinical and anatomical pathology services. Recognized for excellence in clinical training, world-class research initiatives, and a commitment to community service, we serve the five-state WWAMI region: WA, WY, AK, MT, and ID.



Learn more about DLMP at dlmp.uw.edu

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