



The issue of
**THE PROMISE OF
SAINT LOUIS
UNIVERSITY
MEDICAL RESEARCH**

GRAND ROUNDS



Saint Louis University School of Medicine

WINTER 2023

IT IS A TRANSFORMATIONAL TIME TO BE A BILLIKEN. AT THE SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE, A RENEWED FOCUS AND COMMITMENT TO RESEARCH IS OPENING DOORS FOR SCIENTISTS, CLINICIANS, AND STUDENTS.

Research is the cornerstone of scientific discovery and medical advancements. Fueled by powerful multidisciplinary collaborations and the launch of the Office of Research, the School of Medicine is fearlessly challenging the status quo and establishing SLU as a leader in scientific discovery.

As researchers explore new frontiers and push the boundaries of what's possible, their work is anchored by an unwavering

commitment to SLU's Jesuit mission: *The pursuit of truth for the greater glory of God and for the service of humanity.*

What is research if not the pursuit of truth. The act of research itself is transformational—and the insights that scientists glean today continue to build on a foundation of knowledge, leading to more profound discoveries.

RESEARCH IS THE CORNERSTONE OF SCIENTIFIC DISCOVERY

AS THE SCHOOL OF MEDICINE INVESTS IN THE QUEST FOR KNOWLEDGE, RESEARCHERS ARE PRIORITIZING VENTURES THAT PROVIDE THE GREATEST IMPACT—FOR PEOPLE IN NEED OF NEW THERAPIES TODAY, FOR THE NEXT GENERATION, AND FOR THE FUTURE OF HUMANKIND.



**SAINT LOUIS
UNIVERSITY.**
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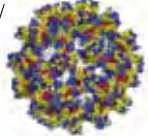
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Christine Winter
Director of Communications
School of Medicine

Jane Baum
Assistant Vice President
Medical Center Development

Christine Jacobs, M.D.
VP Medical Affairs and Dean
Saint Louis University
School of Medicine

Schwitalla Hall M268
1402 South Grand Blvd.
St. Louis, MO 63104-1028

CONTRIBUTORS:

EDITORIAL
Taylor Management Group

GRAPHIC DESIGN
Werremeyer Creative

PHOTOGRAPHER
Gregg Goldman Photography

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If you have comments or content suggestions, please email us at: christine.winter.1@health.slu.edu

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LETTER FROM THE DEAN

Last fall, we finalized our five-year strategic plan. Many thought leaders have contributed to this plan, helping to refine our goals, objectives and strategies, and identifying the resources needed to realize our vision.

Our five-year strategic plan encompasses seven key areas of focus: education; research; clinical care; diversity, equity, and inclusion; community engagement; leadership and organization; and image and reputation.

My sincere thanks to all those in the Saint Louis University School of Medicine community who contributed to our strategic plan: the leadership, faculty, staff, and members of the School of Medicine Advisory Board.

This issue of Ground Rounds focuses on research at SLU; our scientific discovery, medical advances, and exciting multidisciplinary collaborations. Here we highlight investigators and clinical researchers who are pushing the boundaries of what is possible.

Our commitment to research is expanding opportunities for scientists, clinicians, and students. Through our strategic plan, we will work to elevate the SLU School of Medicine as our home of research excellence in clinical, translational, and basic science.

I welcome you to explore with us as the School of Medicine pursues excellence in education, research, clinical care, and community engagement.



CHRISTINE JACOBS, VICE PRESIDENT FOR MEDICAL AFFAIRS AND DEAN OF THE SCHOOL OF MEDICINE

“ I ENTHUSIASTICALLY EMBRACE THE OPPORTUNITY TO ADVANCE SLU SCHOOL OF MEDICINE IN OUR JESUIT MISSION OF EDUCATION, PATIENT CARE, RESEARCH, AND COMMUNITY SERVICE. ”

—CHRISTINE JACOBS, M.D., F.A.A.F.P.

BUILDING A BRIGHT FUTURE FOR RESEARCH

AT SAINT LOUIS UNIVERSITY

RESEARCH HOLDS THE KEY TO DISCOVERY AND PAVES THE WAY FOR LIFE-SAVING MEDICAL ADVANCES—AND SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE CLINICIANS AND SCIENTISTS ARE WELL PREPARED FOR THE CHALLENGE.

Two thousand twenty-two marked the beginning of a transformational chapter in Saint Louis University School of Medicine's history—characterized by increased investment and new opportunities for basic, clinical, and translational research. With the launch of the Office of Research, the School of Medicine is providing researchers and clinicians a platform to investigate and accelerate the most pressing questions facing global health.



ADRIANA M. MONTAÑO, PH.D.

Led by Adriana M. Montaño, Ph.D., vice dean for research and professor of pediatrics, and Noah Hillman, M.D., interim associate dean of clinical research, the Office of Research is poised to advance Saint Louis University research to new heights.

A TRANSFORMATIONAL TIME

Guided by the School of Medicine's five-year strategic plan, the Office of Research is reimagining our systems to drive efficiency, exploration, collaboration, and innovation across the entire School of Medicine.

Dr. Montaño and her team are propelling the next generation of research forward. "Research is not just about the process," Montaño says. "It's about people, education, mentorship, support, and how we're changing the lives of community members."

The Office of Research has identified seven key pillars to elevate research excellence to the highest level:

- Mentoring and education
- Infrastructure and equipment
- Innovation and entrepreneurship
- Diversity and inclusion
- Basic and translational research
- Clinical and translational research
- Operations and policies

The Office of Research supports investigators in a multitude of ways—from writing and editing grants to offering statistical assistance, procuring proper equipment, and accessing the right space to conduct a project. This work supports the School of Medicine as a leader in many areas of research.

"This is a transformational time at SLU where research is our number one priority," says Montaño. "People are doing incredible work at SLU—inspired by the mission of the University. We are tackling problems in our community and making sure these ideas can become a reality."

Sandra Cornell, M.B.A., M.H.A, research planning and operations manager, is energized to see the renewed emphasis on research at SLU. "Unfortunately, the pandemic was an eye opener for so many people about how important research is," Cornell says. "Now more than ever, society at large is beginning to understand that research needs to be supported. We're excited to be at the forefront of bringing light to research activities."

In her role at the Office of Research, Cornell connects investigators with the right space for their projects—a crucial component in long-term feasibility and success. "I'm excited about the prospect of where we're headed and to be at the forefront of bringing new energy to research at SLU," she shares.



SANDRA CORNELL, M.B.A., M.H.A.

PRIORITIZING COLLABORATION

In the summer of 2022, the School of Medicine and SSM Health forged a new partnership to create the region's leading integrated healthcare model. SLU and SSM Health have collaborated for decades, and this integration provides community members with seamless access to care—and increased collaboration across the organizations.

Noah Hillman, M.D., interim associate dean of clinical research, is excited about the expansion of resources to advance clinical and translational research. Hillman oversees the Clinical Trials Office, which runs industry-sponsored trials, and the Clinical Research Units, which offer investigators the support they need to conduct clinical research. "We prioritize research based on feasibility and academic productivity—which means publications for the principal investigators," Hillman says. "Part of the reason I was asked to take on this role is because I'm a clinician scientist and researcher—but I'm also a doctor in the SSM hospital system."

“/” **RESEARCH IS NOT JUST ABOUT THE PROCESS. IT’S ABOUT PEOPLE, EDUCATION, MENTORSHIP, SUPPORT, AND HOW WE’RE CHANGING THE LIVES OF COMMUNITY MEMBERS.**

—ADRIANA M. MONTAÑO, PH.D.

Hillman sees the expansion of the relationship between the School of Medicine and SSM Health as an important step in serving the greater St. Louis community. “We consider whether the research provides our patients with access to new innovations that may only be available through research projects,” he says.

Other exciting projects in motion besides the deeper collaboration between the School of Medicine and SSM Health—include partnerships with the Advanced HEALth Data (AHEAD) Research Institute and the Taylor Geospatial Institute.

One developing collaboration is the Metabolics Institute, developed by Wing-Kin Syn, M.D., Ph.D., director of gastroenterology and hepatology and Ajay Kumar Jain, MD, DNB, MHA, associate division director, Division of Pediatric Gastroenterology, Hepatology and Nutrition. The Institute will provide clinical support for patients with diabetes, obesity, hypertension, and other diseases. “This project addresses community health challenges in St. Louis with an understanding of social determinants of health,” shares Montaña. “It will be a very personalized experience in which physicians will all gather with the patient and discuss their health needs during the visit.”

FUELED BY COMMITMENT

The launch of the Office of Research and the expansion of the Clinical Trials Office will not only promote further clinical research opportunities—but also exemplify SLU’s overarching mission: *The pursuit of truth for the greater glory of God and for the service of humanity.*

Providing best-in-class clinical care often starts with research—and by making a significant investment in research and infrastructure, those in the St. Louis community and beyond will reap the benefits. “It is important to conduct research to address health issues affecting our community,” says Montaña. “And at the same time, we’re making sure that our ideas become a reality by working with new partners.”

Imagining the next five years—and the impact that the Office of Research will have on growing the research program—Montaña and Hillman are confident more researchers and clinicians at the School of Medicine will have state of the art resources to explore their interests and contribute more robustly to the field of research.

Montaña and Cornell are also working in tandem to ensure that all principal investigators at the School of Medicine have the tools they need to succeed. “When we have new recruits, we ensure they have appropriate resources and facilitate new collaborations,” says Montaña. “We want to provide the appropriate mentoring to our students or clinicians who are starting clinical trials, to our principal investigators, and to those doing basic science research.”

“Our hope is to lessen hurdles—so people who want to stay in academia and work at a medical school have the ability to do both patient care and clinical or basic science research,” explains Hillman. “Everyone is working very closely to redesign this together. It’s an exciting, transformational time because of the commitment to advance research at SLU.”

CELEBRATING OUR PAST AND LOOKING TO THE FUTURE

FOR DECADES, SOME OF THE BRIGHTEST MINDS IN CLINICAL RESEARCH HAVE CALLED THE SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE HOME—INCLUDING SHARON FREY, M.D., JEFFREY TECKMAN, M.D., AND RAYMOND TAIT, PH.D. THEIR CONTRIBUTIONS TO THE MEDICAL FIELD INCLUDE NUMEROUS LIFE-CHANGING DISCOVERIES AND HAVE ESTABLISHED A RICH LEGACY OF CLINICAL RESEARCH AT SLU THAT WILL TAKE US INTO THE FUTURE.

SAVING LIVES



SHARON FREY, M.D.

For over 30 years, Sharon Frey, M.D., clinical director of the **Center for Vaccine Development**, has been researching infectious diseases. Little did she know that 2022 would present an entirely new chapter in her career as the monkeypox outbreak surged across the globe.

In the early 2000s, Dr. Frey sought to determine whether it was possible to stretch the supply of the smallpox vaccine, Dryvax,

in case of a major emergency. Frey's research determined the smallpox vaccine could be diluted and still retain its potency – one of her most significant scientific achievements.

Frey's research on the smallpox vaccine served as a springboard for an investigation of the monkeypox vaccine MVA-BN (JYNNEOS) which is also approved for smallpox. The National Institute of Health (NIH) funded Frey's clinical research. The findings were published in 2015: One-fifth of a vaccine dose administered intradermally provided a protective antibody titer similar to a full dose of vaccine given by the subcutaneous route. "We were very fortunate to have this dose-sparing

information available when the WHO declared the monkeypox global emergency. The ability to use one fifth the dose, makes more doses available to the public while we wait for vaccine production to ramp up," Frey said.

Monkeypox, first recorded in humans in 1970, is typically confined to central and west Africa where it is known to infect African rodents and non-human primates. With the current global emergency, over 28,600 cases have been reported in the US. Vaccination, medication, and public education are believed to be instrumental in decreasing the number and severity of cases.

As the monkeypox outbreak spreads, Frey is revisiting her research and conducting a new clinical trial on the FDA-approved monkeypox vaccine. "We're looking at the standard formulation and route, the current intradermal dose, and an even smaller intradermal dose," said Frey.

The dose-sparing intradermal route can expand vaccine access and allow more individuals to be protected across the globe. As she prepares for the upcoming clinical trial, Frey reflects on what a life dedicated to vaccinology has taught her. "The provision of newer and better vaccines is a means to improve public health at the global level. The adage, the more we learn, the less we know, is very true. There's so much to be discovered. The fields of immunology and vaccinology are wide-open with millions of questions to ask and Saint Louis University is just the place to do it."

FUELING COLLABORATION



RAYMOND TAIT, PH.D.

Raymond Tait, Ph.D., professor in the Department of Psychiatry and Behavior Neuroscience, is leading initiatives regarding integration of research operations across the School of Medicine and SSM Health.

Tait is partnering with SSM leadership to develop a clinical research program that spans the two organizations. “It is a natural partnership,” says Tait. Tait hopes to capitalize on the collaborative momentum

and work toward an integrated research operation with SSM Health—with an oncology focus serving as a critical model for future clinical research. “Our goal is to build out a clinical research infrastructure across the SSM Health System, with the School of Medicine as its eventual hub,” said Tait. Current near-term projects include bringing just-in-time oncology trials to the SSM Health System, growing other clinical trial capabilities across the system, and establishing a biobank to support research at the academic campuses.

Tait’s career at SLU expands four decades, as a professor of psychiatry, pain researcher, clinician and program administrator, having a profound impact in each of these areas. In 1982, Tait founded a successful multi-disciplinary treatment program for chronic pain at SLU. Since that time, Tait’s research has focused on a range of topics related to chronic pain. Much of that work examined patient, provider, and environmental factors that systematically influence the assessment and treatment of pain in others. His pioneering work highlights racial and socioeconomic disparities in the treatment provided to people with chronic pain, as well as the outcomes of that treatment.

Over the course of his career, Tait also has studied approaches to the assessment of pain in patients with advanced dementia and ethical challenges in the conduct of research, among other topics. Tait is the author or co-author of more than 100 peer reviewed publications and has been principal or co-principal investigator of grants totaling nearly \$3 million. He received the American Pain Society’s 2019 Lifetime Achievement award for clinical pain scholarship and was inducted into the St. Louis Academy of Science in 2020.

FINDING A CURE



JEFFREY TECKMAN, M.D.

In order to propel scientific discoveries and breakthroughs, researchers must possess perseverance, determination, and grit. Jeffrey Teckman, M.D. professor of pediatrics, embodies this: He’s devoted 30 years of his life to researching Alpha-1 Antitrypsin deficiency, a liver disease that impacts one in every 3,500 Americans, and his work exemplifies the clinical and translational research process.

In the summer of 2022, Teckman received life-changing news: His team at SLU, along with pharmaceutical companies Arrowhead and Takeda, and international collaborators, developed the first effective drug for Alpha-1 Antitrypsin deficiency, a condition that formerly could only be treated with a liver transplant. “I opened the email with the study results, and I started crying,” he remembers. A few months later, his research, “Fazirsiran for Liver Disease Associated with Alpha-1 Antitrypsin Deficiency,” was published in the *New England Journal of Medicine*.

As Teckman and his team now work toward FDA approval of the drug, he acknowledges the tremendous effort and support that research requires. “Philanthropy is a key part of this work,” says Teckman. “Donations allow us to access cutting-edge equipment and facilitate this work. We couldn’t develop cures and form collaborations without it.”

COLLABORATION



THE COLLABORATIONS FUELING INNOVATION

AT SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE, COLLABORATIONS BETWEEN DEPARTMENTS AND ACROSS DISCIPLINES DRIVE NEW DISCOVERIES AND FOSTER KEY PARTNERSHIPS.

With a unique consortium of institutes and centers—from bioinformatics and place-based medicine to vaccine research and drug development—researchers at the School of Medicine leverage multidisciplinary expertise and ensure their contributions to science and medicine has an even greater impact on the world.

MAKING A DIFFERENCE THROUGH DATA

Clinical medicine and research have traditionally existed without interdisciplinary collaboration. However, the **SLU Advanced HEALth Data (AHEAD) Research Institute** seeks to change that very philosophy—and bring together clinical experts and researchers from various fields.



LESLIE HINYARD, PH.D., M.S.W.

“Our goal is to foster collaboration and respect across disparate groups that normally wouldn’t work together,” says Leslie Hinyard, Ph.D., M.S.W., executive director of the AHEAD Institute, and associate professor.

At AHEAD, Hinyard and her team serve as collaborators, helping researchers and clinicians locate the data they need, troubleshoot their projects, and move through the research process. “A lot of faculty, residents, and medical students have great ideas—but they don’t know how to take that idea all the way,” shares Hinyard. “We say, ‘Okay, you’ve got this great, clinically relevant question. How can I help you answer it?’”

One potential path is leveraging AHEAD’s Virtual Data Warehouse (VDW), which includes de-identified patient data from more than five million SSM Health and SLUCare patients. “The exciting part about this is not just that we have this data—but we also created a standardized data model, which means that all of our variables are research-ready,” says Hinyard. “This resource is the cornerstone of the AHEAD Institute.”

In the coming years, Hinyard is excited to see how cross-collaborations can strengthen SLU as a leader in research. “AHEAD allows us to create great partnerships and work together to improve these problems in an interdisciplinary capacity,” she says.

EXPANDING A NEW FIELD

With the launch of the **SLU Taylor Geospatial Institute (TGI)** in April 2022, SLU is poised to become a national leader in geospatial science and technology. Housed at SLU and comprised of eight independent research institutes, TGI connects faculty and students from various disciplines to accelerate research and innovation in the emerging field of geospatial science.

For Sarah Gebauer, M.D., M.S.P.H., assistant professor of family and community medicine, the impact of “place or location” on a person’s health has been a focus throughout



SARAH GEBAUER, M.D., M.S.P.H.

her career—and she’s now leveraging the TGI to support her newest research project.

In April 2022, Dr. Gebauer received a K23 grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases to bring geospatial information science and administrative electronic medical record data together. The five-year grant will provide Gebauer with the resources to explore how knee osteoarthritis and barriers to low-cost interventions impact patients. “I’m interested in neighborhoods and how they affect people’s health,” Gebauer says.

“Millions of Americans have knee osteoarthritis, and unfortunately, the prevalence of it is increasing,” shares Gebauer. “Because walking and exercise are the best things you can do, how can I help someone leverage their neighborhood and the resources they have to control their symptoms?”

Although the project is still in its infancy, Gebauer is anticipating the insights and expertise she can access through the TGI, particularly Geospatial Information Science (GISc). Eventually, Gebauer hopes her research can spark transformational change—from a policy, public health, and urban design perspective—while also creating new ways to support individuals with knee osteoarthritis.

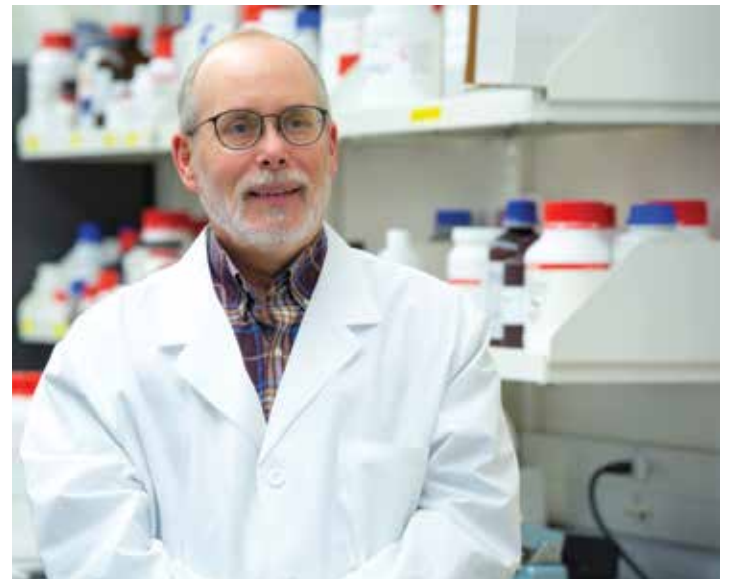
“You don’t often get physicians talking with urban planners,” Gebauer says. “With the Taylor Geospatial Institute, you get this amazing chance to collaborate with other fields that really have not been in the same place at the same time before.”

DISCOVERING LIFE-SAVING DRUGS

At the **SLU Institute for Drug and Biotherapeutic Innovation (SLU-IDBI)**, multidisciplinary collaboration guides researchers in developing life-changing medications and biomedical devices. Launched in the spring of 2021, the SLU-IDBI brings together investigators in disciplines of medicine, biology, engineering, and computational and applied chemistry.

As director of the SLU-IDBI, John Tavis, Ph.D., professor of molecular microbiology and immunology, is passionate about the Institute’s role in helping scientists learn about translational research—a skill not often taught in school. “We provide training on how to do drug discovery,” says Dr. Tavis. “It is a very different type of science than mechanism-based science, so we give guidance on their experiments.”

With approximately 140 members in the SLU-IDBI, the potential impact on public health is extensive. Members have launched startups and companies, obtained patents, and secured more than \$37 million in drug-discovery grant funding. Current research at the SLU-IDBI includes the



JOHN TAVIS, PH.D.

discovery and development of therapies for cancer, chronic pain, central nervous system disorders, liver disease, hepatitis B, tuberculosis, and a variety of genetic diseases.

“To have the opportunity to materially impact the life of someone who is suffering from an illness is transformational,” says Tavis. “There’s been an enormous amount of enthusiasm among the faculty. People are excited about adding a new dimension to their research.”

Tavis himself has nearly three decades of experience in virology and a deep understanding of how medicine has evolved: “If you take a step back and look at the overall progression of medical care in the United States since World War II, it is a story of fusion—of cutting-edge science and gifted insight that can be applied toward medicine,” says Tavis.

Tavis sees the SLU-IDBI as a step towards exemplifying SLU’s mission of pursuing truth and serving humanity—while propelling discovery and providing hope to those who are suffering. “This shared mission across the entire biomedical spectrum is something I find very important,” Tavis says. “That synergy is advancing the field and we will continue to see a big impact—not only today but also throughout the next decade.”

BRINGING METABOLIC & NUTRITION INNOVATION TO THE MIDWEST

Wing-Kin Syn, M.D., Ph.D., director of the Division of Gastroenterology and Hepatology, and co-director of the SLU Liver Center, is striving toward a new milestone. Together with Ajay Kumar Jain, MD, DNB, MHA, associate division director, Division of Pediatric Gastroenterology, Hepatology and Nutrition, Dr. Syn is leading the development of a new **Metabolic & Nutrition Institute in the School of Medicine** — an Institute that aims to bring together researchers, educationists, policy, and community leaders, as well as health care providers. The goal of the institute is to better understand and identify factors associated with the development and progression of metabolic conditions such as type 2 diabetes mellitus, heart and vascular disease, hypertension, fatty liver disease, obstructive sleep apnea, nutrition, and weight disorders, and to address health disparities and food insecurity common among these conditions.



WING-KIN SYN, M.D., PH.D.

“The Metabolic and Nutrition Institute will be the first in the Midwest to focus on these conditions,” says Syn. To make the institute a reality, collaboration is key — there will be involvement of stakeholders from the Center of Health Law, College of Public Health & Social Justice, College of Health Sciences, College of Arts & Sciences, SLU Taylor Geospatial Institute, as well as various Departments from the School of Medicine. The Metabolic & Nutrition Institute will also work collaboratively with the SSM – SLU Metabolic, Liver & Weight Loss Program / Center that provides a cost effective ‘one-stop shop’ multidisciplinary care to patients with multiple metabolic health conditions.

This new initiative will deepen SLU’s impact on public health and society at large and will create transformative advancements to health care.

THE FUTURE OF VACCINE RESEARCH

For decades, the School of Medicine has been at the forefront of vaccine development. SLU researchers have extensive experience developing vaccines and treatments for infectious diseases and have been on the forefront of protecting the public from bioterrorism and other emergent threats, including pandemic influenza, smallpox, tularemia, anthrax, tuberculosis and plague.

“/” **WE HAVE INCREDIBLE POTENTIAL TO REVOLUTIONIZE MANY FIELDS OF MEDICINE.**

—DANIEL HOFT, M.D., PH.D.

Recognized as a leader in this field, SLU is one of only 10 **Vaccine and Treatment Evaluations Units (VTEUs)** around the county and has been for the past 33 years. Daniel Hoft, M.D., Ph.D., director of SLU’s Center for Vaccine Development, director of the Division of Infectious Disease, Allergy and Immunology, is also the principal investigator of SLU’s VTEU. “SLU’s Center for Vaccine Development is internationally recognized as a leader in the development of vaccines—from the bench to clinic,” Dr. Hoft says. “We have incredible potential to revolutionize many fields of medicine.”

A New Frontier

For Hoft, the idea of creating an interdisciplinary institute focused on vaccine development and deployment has always intrigued him. But it wasn’t until 2020 that this vision became a reality, thanks to a donation from



DANIEL HOFT, M.D., PH.D.

Stephen C. Peiper, M.D. and Zi-Xuan “Zoe” Wang, Ph.D. **The Stephen C. Peiper and Zi-Xuan Wang Institute for Vaccine Science and Policy (Peiper-Wang Institute)**, is exploring new frontiers as the region’s center of excellence for vaccine development and evaluation.

By unifying researchers from different departments across the university, the Peiper-Wang Institute bolsters the possibilities of new breakthroughs. “Bringing these groups together has been fascinating (a dream come true),” says Hoft. “This collaboration makes it possible for us to put our strengths together and work on things that we couldn’t do alone.”

Beyond our Community

In time, Hoft hopes the Peiper-Wang Institute will become a national and international resource for scientists and researchers developing vaccines. “We are trying to bring the vaccines forward from the pre-clinical space into the clinical trial space,” Hoft says. “We haven’t done that from scratch to end yet, but we’ve had several vaccine projects transition from the pre-clinical to clinical research space.”

As the collaboration among Hoft, the Center for Vaccine Development, and the Peiper-Wang Institute forge ahead with vaccine development, Hoft understands staying agile and proactive is the only way to save lives. “Just making vaccines that work for one pandemic doesn’t mean we’re done,” he says. “We have to keep doing this work and stay ahead of nature. We feel privileged to be here, making a profound contribution during this unparalleled time.”



SLU SCHOOL OF MEDICINE AND OFFICE OF RESEARCH HOST ANNUAL SCIENCE DAY

LAST FEBRUARY, THE SCHOOL OF MEDICINE AND THE OFFICE OF RESEARCH CO-HOSTED THE INAUGURAL SCHOOL OF MEDICINE SCIENCE DAY. IT CELEBRATED THE SCHOOL OF MEDICINE FACULTY, RESIDENT, AND STUDENT RESEARCHERS—SHOWCASING OUR HISTORY AND ACHIEVEMENTS IN RESEARCH AND SPONSORING DISCUSSION WITH COLLEAGUES IN SCIENCE.

A VIR Biotechnology Presentation entitled *A World Without Infectious Disease* kicked off the 2022 Science Day. This interactive discussion was led by several VIR experts including Lisa Purcell, Ph.D., vice president of microbiology and virology, Saint Louis Site head, Annie Zumsteg, Ph.D., director of microbiology, and Seungmin “Sam” Hwang, Ph.D., vice president of genetics and host-directed therapies.

The VIR session preceded a presentation by collaborators at the Institute of Clinical and Translational Sciences (ICTS) about accelerating clinical and translational research to improve health outcomes and the well-being of our communities. Dr. Fred Pestello, president of Saint Louis University and Dr. Christine Jacobs, dean and vice president of the School of Medicine addressed faculty members and honored guests at the Faculty Investigator Appreciation Lunch. Dr. William S. Sly, professor emeritus and former chair of the Biochemistry and Molecular Biology Department delivered the keynote address. Dr. Sly spoke about the legacy of Dr. Edward A. Doisy, Ph.D., SLU researcher and 1943 Nobel Prize winner, and about advancing the legacy of innovation in SLU research for future generations.

Highlights of the day were presentations from School of Medicine faculty and student researchers, covering topics ranging from immunotherapy, reproductive wellness for men and women with substance use disorders, therapeutic strategies for frontotemporal dementia as well as exploring therapeutic potentials for human disease.

We look forward to our upcoming School of Medicine Science Day on March 1, 2023.



**ADVANCING RESEARCH
IN THE DEPARTMENT OF
ORTHOPAEDIC SURGERY**

EACH DAY, FACULTY OF THE SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE WORK TO ADVANCE THE UNIVERSITY'S RESEARCH INITIATIVES AND CONTRIBUTE TO THE GREATER SCIENTIFIC COMMUNITY. FOR HOWARD M. PLACE, M.D., PROFESSOR AND CHAIRMAN OF ORTHOPAEDIC SURGERY, STRENGTHENING SLU'S ORTHOPAEDIC RESEARCH HAS BEEN CRITICAL TO THE SUCCESS OF THE DEPARTMENT.



A graduate of the the School of Medicine Class of 1983, Dr. Place served in the U.S. Army for twelve years before returning to SLU in 1997 and joining the department of orthopaedic surgery. “At the time, there wasn’t a lot of research being done by senior residents and faculty,” recalls Place. “We did a lot of retrospective research and projects that could be completed within a year.”

Over the past few decades, the orthopaedic department has mirrored SLU’s commitment to furthering the depth and breadth of its research initiatives—all in the pursuit of furthering scientific advancement and advancing public health.

CREATING NEW PATIENT OUTCOMES

Dr. Place and his colleagues have been instrumental in paving the path for increased research activity in the department of orthopaedics—and thanks to his commitment, exciting new projects are underway.

One recent transformation shift in the department of orthopaedics is the implementation of patient-reported outcomes, an initiative led by Scott Kaar, M.D., professor of orthopaedic surgery. “Dr. Kaar has always wanted to use patient-reported outcomes to help

us figure out not just how a treatment looks—but how patients are doing after their treatment,” says Place.

The program officially launched in August 2022 and provides the orthopaedic department an opportunity to assess the entire person after surgery. “Now, every person who comes into orthopaedics fills out a patient-reported outcome survey,” says Place. “It allows us to ask, ‘How are you really doing?’”

ORTHOPAEDIC RESEARCH AT WORK

In addition to the implementation of patient-reported outcomes, Place is collaborating with his colleagues to facilitate new research developments—including Vikas Dhawan, M.D., Gary Bledsoe, Ph.D., and Ashley Ali, M.D.

Dr. Dhawan, associate professor in the department of orthopaedic surgery, is studying how to prevent the formation of neuroma after a nerve has been cut. This research will be critical for those who have had a traumatic amputation—and particularly relevant for military doctors.

Dr. Bledsoe, director of the School of Engineering and professor of biomedical engineering, has partnered with Place and his colleagues, combining artificial intelligence (AI) and spinal health. “We’re using AI

to identify spinal implants—so that it makes the next surgical procedure easier to perform,” says Place.

Dr. Ali, assistant professor of orthopaedic surgery, is currently delving into two projects: “One is a basic science project with biomedical engineering and the second is a project with physical therapy,” says Place.

ESTABLISHING LEGACY

As Dr. Place’s new research program continues to take root, the orthopaedic department is expanding SLU’s footprint in the field. “I have two residents who just won recognition for their presentations and papers at the Orthopaedic Trauma Association (OTA) and the Orthopaedic Research and Education Foundation (OREF) at Washington University,” says Place.

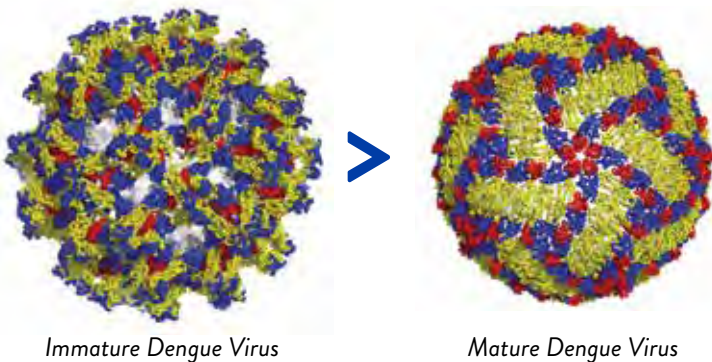
Building this infrastructure for the research program is Place’s top priority. Achieving his goals requires financial investment—made possible by the generous support of donors.

“Research in SLU Orthopedics has a renewed energy at the present time. We’re seeing more projects blossoming and we have a commitment of manpower,” Place says. “We have great faculty members with great ideas. I’m really fortunate.”

BASIC SCIENCE:

THE BUILDING BLOCKS OF POWERFUL DISCOVERIES

TRUTH IS UNCOVERED IN MANY WAYS—AND BASIC SCIENCE RESEARCH IS ONE OF THE MOST EFFECTIVE METHODS OF REVEALING NEW TRUTHS. AT THE SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE, A TEAM OF RESEARCHERS ARE OPENING DOORWAYS TO MEDICAL BREAKTHROUGHS BY STUDYING THE UNDERLYING SCIENCE IN INTRICATE DETAIL.



A FOCUS ON VIROLOGY

Long Ping Victor “Vic” Tse, Ph.D. assistant professor of molecular microbiology and immunology, has studied virology and gene therapy his entire career. Since joining SLU in August 2022, Dr. Tse’s lab has focused its research on coronavirus, dengue virus, and influenza virus.

“I am interested in studying viruses, trying to make them less pathogenic, and then using the virus in medical applications (such as attenuated vaccines and gene therapies),” says Tse. Tse hopes to translate his research findings into a potential cure—particularly for dengue virus, an illness that is rapidly becoming more widespread due to climate change and the proliferation of mosquitos in previously unaffected countries.

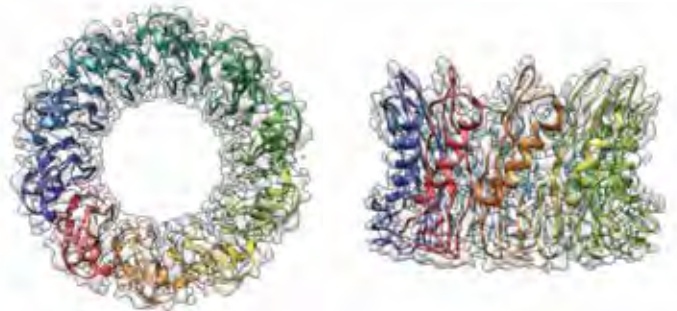
“We cannot be short-sighted,” says Tse. “I put quite a lot of my focus on developing a dengue virus vaccine—because as a young scientist, I want to be a part of the solution before another catastrophic event happens.”

As Tse expands his lab at SLU, he is prioritizing collaborations with other young researchers. “Science needs diverse perspectives with many voices contributing to advance research forward and make progress,” says Tse.

SUPPORTING THE NEXT GENERATION

Edwin Antony, Ph.D., professor of biochemistry and molecular biology, focuses his research on how enzymes function in DNA repair.

“Your cells have billions of base pairs of DNA, and every time they replicate, an accurate copy must be generated,” says Dr. Antony. “However, if the base pairs of DNA are not replicated correctly, you end up with all sorts of cancers and associated genomic instability syndromes.”



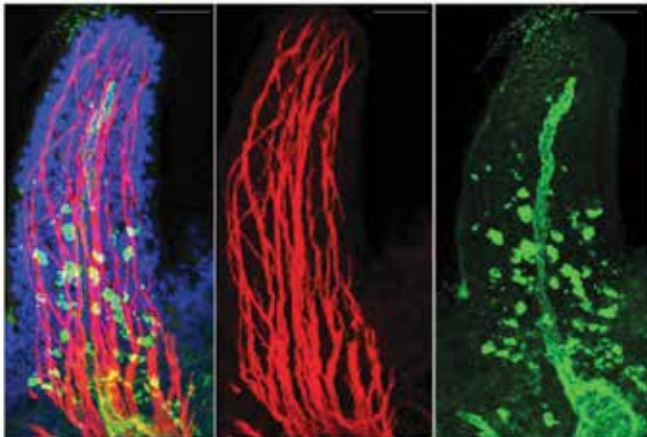
Rad52 structure, top

Rad52 structure, side 2

Images are cryo-electron microscopy structures of Rad52 which is a mediator protein and a functional homolog of BRCA2. Rad52 catalyzes a DNA repair process called Homologous Recombination. Mutations and defects in genes that code for proteins such as BRCA2 and Rad52 are associated with a plethora of cancers.

Antony's investigation of how enzymes function in DNA repair process could potentially lead to new insights into the underlying pathologies of cancer, particularly with chemotherapy—a process that intentionally damages the DNA in order to trigger cell death.

Antony is committed to furthering education at SLU by including a diverse mix of researchers in his lab. "We have one or two high school students in the lab each summer," says Antony. "I believe it is extremely important—they're learning what research is and what they can accomplish."



Staining of gut lymphatic capillaries (lacteals) obtained in murine whole-mount intestine.

METABOLISM AND OBESITY RESEARCH

Vincenza Cifarelli, Ph.D., assistant professor in the Department of Pharmacology and Physiology, joined the School of Medicine in February 2022 to investigate how the vascular and lymphatic endothelium contribute to metabolic health and tissue inflammation.

"I'm interested in understanding how lipid metabolism regulates vascular and lymphatic endothelial cell biology and whether changes in the metabolic milieu impairs function of these cells contributing to endothelial dysfunction, inflammation and tissue damage," says Dr. Cifarelli.

As a young investigator, Cifarelli is grateful to the School of Medicine for the opportunity to open her own laboratory and establish her research program. As she studies how the endothelium affects health, she leverages a combination of approaches in both basic and translational research: cell lines, genetics model of disease, and individuals who are obese.

"Having the support from SLU is rewarding," Cifarelli says. "I've seen a lot of focus on supporting junior faculty and providing resources and mentorship that can really make a difference in our careers."

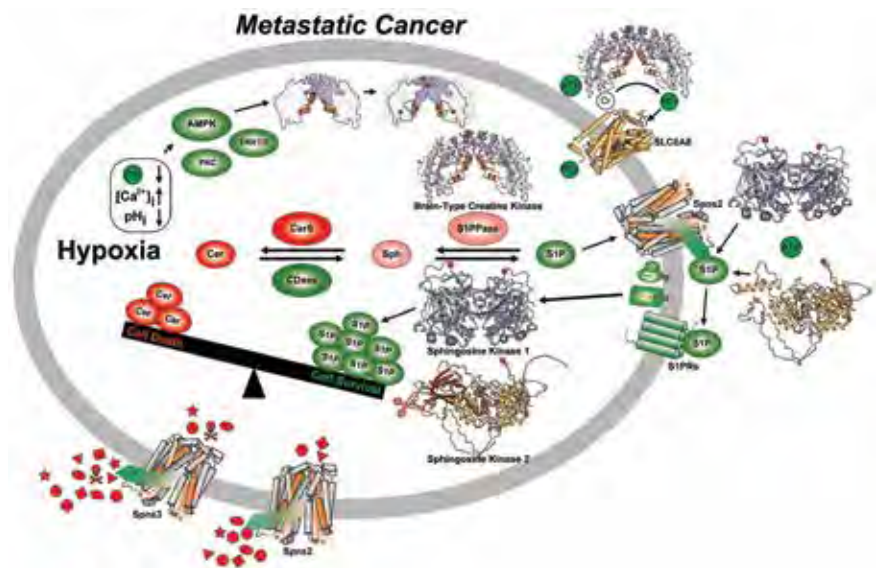
INVESTIGATING CANCER CELLS

Reza Dastvan, Ph.D., assistant professor of biochemistry and molecular biology, concentrates on the molecular mechanism of metastatic cancer cell survival—a path of inquiry that could have wide-reaching implications for the future of chemotherapy and cancer treatments.

To propel this research forward, Dr. Dastvan was awarded an R37 MERIT Award from the National Cancer Institute, which will fund his work for the next seven years. "By understanding these survival mechanisms under low oxygen conditions and the regulation of the proteins involved, we can design inhibitors to reverse these processes and help find a cure," Dastvan explains.

The ultimate goal is to bridge these basic research studies that elucidate mechanism with translational research by testing the key conclusions in model organisms.

As a member of the the School of Medicine since December 2019, Dastvan is proud to be part of the community. "SLU is a wonderful place to work," he says. "If you aim high, you can achieve high. I'm lucky to be here."



Hypoxia or non-physiological level of oxygen instigates a multifaceted pro-survival mechanism in metastatic cancer, involving the secretion of enzymes and upregulation of membrane transport proteins.

RESIDENTS & FELLOWS

SHOWCASING JUST A FEW OF THE MANY NEW GENERATION OF SLU'S CLINICAL SCIENTISTS



YANG "SUNNY" LI, M.D., 3RD YEAR DERMATOLOGY RESIDENT AND MICHAEL KREMER, M.D., 2ND YEAR DERMATOLOGY RESIDENT

"Scalp skin cancers can take time to be detected due to their discreet location—however, hairstylists are uniquely positioned to educate and aid their clients in detecting skin and scalp cancer.

"Our study aimed to assess hairstylists' basic understanding of skin cancer, ability to recognize skin cancer, and confidence in detecting skin cancer before and after an educational intervention. At the end of the investigation, our results showed that hair stylists' knowledge of skin cancer significantly improved and increased their confidence in recognizing suspicious lesions."

Li, Y., and Kremer, M. (2022).
2023 Maui Dermatology Conference



JOSHUA SMITH, M.D., 2ND YEAR OTOLARYNGOLOGY RESIDENT

"My early research investigated symptomatology and toxicity profiles in head and neck cancer patients with radiation therapy, chemotherapy, and/or surgery, seeking to maximize cancer survivorship and patient quality of life.

"Prior to starting residency, I completed a clinical research fellowship in Otolaryngology at the University of Kansas Medical Center. My research interests during my time at KU were broad, but focused primarily on optimizing healthcare delivery, increasing patient engagement, and applications of artificial intelligence and machine learning in otolaryngology."

Publication: Smith JB et al (2022).
Otolaryngology-Head and Neck Surgery



DENCEL GARCIA VELEZ, M.D., 5TH YEAR ORTHOPAEDIC SURGERY RESIDENT

"The idea behind our study originates from the elderly patient population we treat at our hospital. We suspected some patients with bicondylar tibial plateau fractures, decreased bone density, and poor protoplasm would do better with a less invasive approach than dual plating.

"To test our hypothesis, we designed a biomechanical study with 20 DEXA-proven osteoporotic leg specimens. We divided these into four groups of five to assess different fixation strategies: dual plating with and without medial bone removed vs. lateral-only plate with and without medial bone removed. All the specimens were axially loaded to 5,000 cycles and then to failure. The data revealed no statistically significant difference across all four groups in displacement, failure force, and change in proximal tibial angle."

Publication: Garcia Velez DA et al (2022). *Injury*.



SAMANTHA BECKER, M.D., NEONATAL PERINATAL MEDICINE FELLOW

"The administration of surfactant to extremely low birth weight infants is common—and many of these infants go on to develop bronchopulmonary dysplasia (BPD). As inflammation is a contributor to the development of BPD, anti-inflammatory medications have been used to decrease the rates of BPD—however, unlike in older children and adults, budesonide can be detected systemically shortly after administration. This brings a risk of causing adrenal suppression.

"We evaluated a 4-year cohort of extremely low birth weight infants, and compared physical and biochemical signs of adrenal insufficiency between infants who received surfactant with budesonide and a historical cohort who received surfactant alone. In conclusion, the use of surfactant and budesonide does not alter the rate of hydrocortisone use, an adrenal suppression indicator. However, it does delay the timing of treatment initiation and decreases the use of vasoactive medications, also indicators of adrenal suppression."

Publication: Becker SA et al (2022). *Neonatology*.

RESEARCH MEDICAL STUDENTS

FIVE MENTORS PROUDLY SHARE THE SUCCESS STORIES OF THEIR STUDENTS



Taylor Hallcox, 4th year medical student, recipient of 2023 Distinction in Research Award

Taylor Hallcox came to me as a first year medical student asking about research opportunities. Over her first three years of medical school, she demonstrated the keys to success in research: An innate curiosity about the complexities of human biology and disease, a sharp intellect, strong work ethic, and excellent communication skills. Students like Taylor make me optimistic about the future.

— Brent Tetri, M.D., professor of internal medicine



Vruta Kansara, 4th year medical student, recipient of 2023 Distinction in Research Award

Vruta Kansara helped recruit and conduct surveys with pain patients starting a new period of opioid use. She demonstrated an ability to rapidly understand the purpose of this NIH-funded study which was to determine the mental and psychosocial consequences of long-term prescription opioid use. Vruta's passion for research led to her presenting preliminary analyses of the association between types of depression and daily vs. non-daily opioid use. She was a major contributor to the field work and a valued asset to the research team.

— Jeffrey Scherrer, Ph.D., professor, department of family and community medicine, research director of the SLU Center for Health Outcomes Research



Valerio Rasi, M.D./Ph.D. student; completed Ph.D. in 2022, 3rd year medical student

Dr. Valerio Rasi is a very talented M.D./Ph.D. student at SLU. He completed his Ph.D. in my lab focused on determining the mechanism for how Granzyme A can inhibit intracellular mycobacteria, the type of organisms that cause Tuberculosis, one of the most infectious killers in the world. He worked very hard, became passionate about his scientific work, and learned to become an independent scientist—one who could formulate his own experiments and overall research plans. He was awarded a highly competitive F30 NIH trainee award which recognized his promising scientific career.

— Daniel Hoft, M.D., Ph.D., professor of internal medicine



Kathryn Braden-McInerney, Ph.D., completed Ph.D. in 2022

Kathryn Braden-McInerney joined my lab in 2017. The objectives of her work were to understand the molecular mechanisms engaged by oxysterols in the spinal cord in the development of central sensitization associated with chronic neuropathic pain states and the development of non-opioid based therapies. Her seminal work led to several publications in prestigious journals in our field and several awards, including the Saint Louis University Graduate Student Association Brennan Summer Fellowship. Kathryn's enthusiasm for science is contagious—and her dedication to our work aimed at alleviating human suffering through the discovery of better pain medicine is unparalleled.

— Daniela Salvemini, Ph.D., professor of pharmacological and physiological science



Emily Cybulla, M.D./Ph.D. student; completed Ph.D. in 2022, 3rd year medical student

Emily Cybulla has been among the very best Ph.D. students I've had in my lab. Emily came to my lab with drive and determination to study the mechanisms of replication stress response and genome integrity, as well as the connection between these mechanisms and human disease. Her long-term goal is to integrate academic research in the fields of DNA replication and repair, genome stability, and cancer biology into clinical practice as an oncologist. I have been extremely lucky to have Emily in the lab and witness her growth as a research scientist. She is passionate and dedicated, not afraid of new challenges, and has an admirable work ethic.

— Alessandro Vindigni, Ph.D., former professor of biochemistry and molecular biology at Saint Louis University School of Medicine

LIVING OUR JESUIT VALUES: SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE IN THE COMMUNITY

ENGAGING THE NEXT GENERATION OF HEALTH CARE PROFESSIONALS TO CARE FOR THE ST. LOUIS COMMUNITY

The Saint Louis University Health Resource Center (HRC) was founded in 1994 by a group of medical students in the spirit of our Jesuit mission to care for the “mind, body, and spirit.” The mission of the HRC is to improve the health and wellbeing of underserved members of the St. Louis community through the provision of and connection to quality health care, counseling, education, support, and advocacy.

For the past 28 years, Saint Louis University School of Medicine volunteer students and faculty and colleagues in the School of Nursing and Allied Health have provided free health care to uninsured and underinsured community members. The HRC has engaged the next generation of health care professionals in caring for our St. Louis community and neighbors. Many students have cited the HRC as instrumental in a career choice that includes caring for underserved populations.



Employee of Metro East Vet Center

HONORING OUR VETERANS

There are many veteran faculty and staff at SLU, and that number is significantly magnified within our greater St. Louis community. In October, the Saint Louis University School of Medicine Office of Diversity, Equity, and Inclusion hosted Operation Health Vets, a family-friendly community event for all veterans, at the Learning Resource Center on the School of Medicine campus.

“Operation Healthy Vets, as well as other veteran-focused events, offers us the opportunity to connect with veterans and bring resources to them,” said Esmeralda Aharon, program director and Air Force veteran in the Department of Diversity, Equity, and Inclusion. “In our community, I have noticed that services are underutilized because people are unaware they exist, so events like this help to connect veterans to a variety of free resources.”

Operation Healthy Vets was a collaborative effort with other agencies including Heart for the Unhoused at Washington University, ImpactLife Blood Center, U.S. Department of Veterans Affairs.



Co-hosts of the podcast ‘We Live Here Auténtico!’, Gabriela Ramirez-Arellano and Alejandro Santiago with Esmeralda Aharon, Program Director Staff & Community Engagement Office of Diversity, Equity, and Inclusion, Saint Louis University School of Medicine (center).



COMMUNITY OUTREACH: SCHOOL OF MEDICINE STUDENTS TOOK TO THE HYDE PARK NEIGHBORHOOD FOR IMPACTFUL SERVICE PROJECTS

Last fall, students from the School of Medicine participated in a variety of projects to engage with neighbors and community partners beyond the classroom setting.

The School of Medicine students supported the Hyde Park community by hosting a cleanup day and a Community Resource Fair at the former Clay Elementary School. The fair showcased family-friendly activities including a bounce house, art & music activities and games, as well as health screening and information booths from a variety of participating community partners including SSM Cardinal Glennon Children's Hospital, The Willie Davis Foundation, Marian Middle School, InPower Institute, Navigate STL Schools, and The SPOT, among others.

The Community Health Fair allowed School of Medicine students the opportunity to interact with our neighbors

and community partners in Hyde Park area to find innovative ways to collaborate and better serve the neighborhood. In preparation for the fair, students rolled up their sleeves and got to work cleaning the event space at the former Clay Elementary School and surrounding area. At the health fair, students focused on community awareness of vital health screening services. They opened a dialogue about the needs of the neighborhood to inform strategic planning for the School of Medicine's work in the area including the Health Resource Center. By organizing a health fair inclusive of the neighborhood and community-based families, partners, and organization, students increased their understanding of innovative community engagement.

This activity not only helped beautify the neighborhood, but also increased students' understanding of the historical landscape of oppression and the impact of environmental racism and red lining on the population, which contributed to the decline within the Hyde Park neighborhood.

WHITE COAT CEREMONY

One of the most exciting ceremonies held at Saint Louis University is the School of Medicine's White Coat Ceremony, the official start of the first-year students' journey, and welcome into the medical profession.

The School of Medicine welcomed the incoming class of 2026 at its annual White Coat Ceremony on July 31, 2022. The ceremony took place at St. Francis Xavier College Church. During the ceremony, students were cloaked in their first

white coat as a symbol of the trust being bestowed upon them to carry on on the honorable tradition of doctoring.

The class of 2026 is made up of 102 women and 78 men. Eleven of the students are first-generation college graduates, nine have master's degrees, and one has a doctorate. These students come to the School of Medicine from 82 undergraduate institutions.





FOURTH-YEAR SCHOOL OF MEDICINE STUDENTS LEARN WHERE THEY WILL SPEND THEIR RESIDENCY AT ANNUAL MATCH DAY



Students from Saint Louis University’s School of Medicine participated in the National Residency Match Program (NRMP), which annually matches students with the programs where they will complete their residency training.



Prior to Match Day, students apply and interview at residency programs in their specialty of their choice and rank their preferences. The residency programs also rank their preferences of students. The rank lists are then matched through NRMP.

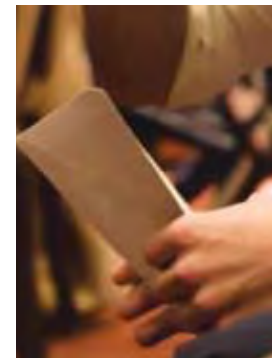


In March 2022, the SLU School of Medicine Class of 2022, gathered at the Four Seasons Hotel in St. Louis to find out their match — a return to the in-person match day after the event was virtual last year. Students learned of their match upon opening a sealed-envelope addressed directly to them.

“I was hoping to match into psychiatry,” said student Nader Nael Hashweh. Like other School of Medicine students, his wish came true and matched with the University

of Chicago Medical Center for Psychiatry. Hashweh discovered his love for this field during the psychiatry clerkship. “Dr. Catalina Belean was my attending psychiatrist on the inpatient psychiatry when I was going through my rotations as a third year, and I just wanted to be like her,” says Hashweh. “She was incredible at connecting with her patients and she cared so much. I wanted to learn how to communicate with my patients the way she does and use myself as a vessel of therapy.”

This year’s class matched into residency programs across the United States including UCLA Medical Center, CA; Johns Hopkins Hospital, MD; Mayo Clinic School of Graduate Medical Education, MN; University of Chicago Medical Center, IL; Case Western/University Hospital; Cleveland Medical Center, OH; Boston University Medical Center, MA; Emory University School of Medicine; UC San Diego Medical Center, CA; and Cincinnati Children’s Hospital Medical Center, OH.



WHITE COAT SOCIETY

THE WHITE COAT SOCIETY CELEBRATES ROBUST PARTNERSHIPS BETWEEN THE SCHOOL OF MEDICINE AND ITS ALUMNI AND SUPPORTERS. MEMBERSHIP IS GRANTED TO THOSE WHO SUPPORT SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE WITH LEADERSHIP GIFTS OF \$2,500 OR MORE EACH YEAR. THE SCHOOL OF MEDICINE IS GRATEFUL FOR ALL ITS GENEROUS DONORS WHO MAKE OUR EDUCATIONAL, RESEARCH, AND CLINICAL GOALS POSSIBLE.

List of White Coat Society donors who contributed from July 1, 2021—September 30, 2022. Donations made after this date that are not reflected here are appreciated. For a full list of donors to SLU, please visit giving.slu.edu/honorroll.

Doreen* (Nurs '62) & Eugene (A&S '60, Med '64) Adelman	Doug (CSB '66) & Ann Brown	Bruce Czarnik (Med '00) & Cynthia Whittaker (A&S '93)	Eugene (Med '68) & Helen Galvin
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Theodore (A&S '73, Med '77) & Cindy Barton	Robert (Med '59) & Doreen Christopher	Anne Marie Dunne-Chernik & Norman* (Med '65) Chernik	John (Med '61) & Diana* Herbst
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Joseph* (Med '59) & Janet Brakovec		William (Med '60) & Joanne Fogarty	

* denotes the individual is deceased.

Maria Hurley & John Prater	Charline & Red McCombs	Georgia (Nurs '69) & John (A&S '65, Med '69) Purcell	Patricia & Jack* Shelby
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Andrew (Med '75) & Pamela Kulesza	Kenneth (Med '78) & Cheryl* Nadeau	Elaine & Kenneth* (Med '70) Rongey	Thomas (Med '79) & Molly Tami
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Jill Laorr	Edward (Med '67) & Colette O'Brien	Garry (Med '68) & Kathleen Rupp	Jay Tureen (Med '78)
Peggy (Grad A&S '03) & Dave (Med '99) Lee	Martin (A&S '66, Med '70) & Barbara O'Brien	Kathleen Ryan & James* Drake	Barbara Umbdenstock (Nurs '70, Grad Nurs '74)
Sanjeev & Priti Lele	Charlotte (A&S '70) & Philip (Med '71) O'Connor	Setsuko* & Dan Sakamoto	Kirubahara Vaheesan
Wayne (Med '76) & Barbara Leong	Stephen Peiper (Med '77) & Zi-Xuan Wang	Subbu Sarma (Med '99) & Sarah Grady	Karen Hoelzer (Med '80)
Emily & Patrick Lo	Charles (A&S '62, Med '66) & Therese Peter	Nathan (Med '05) & Ali Saucier	Thomas Vimont (Med '72)
Rosemary & James* (Med '58) Mackey	Ross (Med '72) & Donna Pettit	Eric Schenk (Med '80)	Carole Vogler
Elaine Pritchard (Med '82) & Timothy Mahood (A&S '78, Med '82)	Stephen (Med '73) & Patricia Pezzella	James (Med '85) & Diane Schneider	Leonard (A&S '50, Med '54) & Ann Walts
Lester* (Med '62) & Leota Mann	Alexandra Phocas	Thomas (Med '58) & Joyce Schneider	Michael (Med '65) & Joyce Wechsler
Deborah Manne (Nurs '91, Grad Nurs '98)	Ralph (A&S '79, Med '84) & Jacoba Piening	Eugene* (CSB '57) & Elaine Schorb	Michael Willing (A&S '93, Med '97)
Sharon (Nurs '64) & Nick (Med '63) Mansour	Paul (Med '59) & Nicole Pitlyk	Erin (Med '01) & Martin* (Med '01) Schutte	Susan Willman (A&S '78, Med '82) & Patrick O'Brien
William & Anne Marietta	Raphael Pollock (Med '77)	Daniel (Med '86) & Laurie Schwarze	Steven (Med '56) & Carol Witlin
Shaden Marzouk (Med '98)		Francesco Sciarrone (Med '56)	Susan & William* Wold
Guy Massry		James Sear (Med '83)	Bruce Wolfe (Med '67)
		Nancy (Med '92) & Steven Serrot	Rosemary Yanik
			Jinsong Zhang & Chun Guo



Class of 1957



Class of 1970—Celebrating 50th reunion (off a year)

2022 MEDICAL SCHOOL REUNION

LAST FALL, SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE WELCOMED TO CAMPUS MORE THAN 197 ALUMNI AND FRIENDS, FROM ALL OVER THE COUNTRY.

This was the first School of Medicine Reunion since the campus closed in 2019 due to Covid. Class years in attendance included our 50th Anniversary year – 1972, accompanied by 1966, 1970, 1971, and 1981, as well as members of our White Coat Society. Alumni enjoyed a weekend filled with activities including student-led tours of the School of Medicine Campus, a tour and demonstration of new, cutting edge technology at the Practical Anatomy and Surgical Education and Simulation Center, the dedication of the new LRC 360 Classroom, Surgery Wall Dedication and Ceremony, a Meet the Dean Lunch, and catching up with former classmates.

Weekend Highlights



LO FAMILY 360 CLASSROOM DEDICATION

Supported by the generosity of the Lo Family, a new collaborative workspace was created and dedicated to the family in a special ceremony. “In keeping up with advances in medical education, we decided to dedicate resources from the Lo family to renovate the space as a 360 classroom, the first of its kind at SLU, but hopefully not the last,” said Dr. Christine Jacobs, dean of the School of Medicine and vice president for Medical Affairs. Patrick Lo is

a member of Saint Louis University Board of Trustees and is a generous supporter of the University and the School of Medicine. Lo’s daughter graduated from the School of Medicine in 2011.

During the ceremony, Dr. Jacobs welcomed all those in attendance - alumni, faculty, students, and friends. Dr. Chad Miller, senior associate dean for Undergraduate Medical Education shared the vision for the future of medical education and transforming how students learn, study, and practice. School of Medicine student, Erika Schmidt, spoke about the meaning of this new classroom and her positive educational experience at the School of Medicine.

MEET THE DEAN LUNCH

Dr. Jacobs provided an update of all the exciting initiatives happening in the School of Medicine to approximately the 90 alumni attending the Meet the Dean lunch. Jacobs shared her vision and future goals for the School of Medicine, and acknowledged the 105 alumni donors to date, who have collectively donated \$74,757 to the School of Medicine to make this vision a reality.



Class of 1971



Class of 1997



Class of 2012

WEEKEND



From left to right: Sameer Siddiqui, M.D.; Susan Willman M.D., family, and friends; and William Gruber, M.D.

SURGERY WALL DEDICATION AND RECEPTION

Much has evolved in surgical practice since the founding of Saint Louis University School of Medicine and the first professor of surgery in 1837. To honor the rich history of the Department of Surgery, a special dedication and reception took place to unveil the new Surgery Wall at SLUCare Academic Pavilion, reflecting of SLU's pioneering moments.

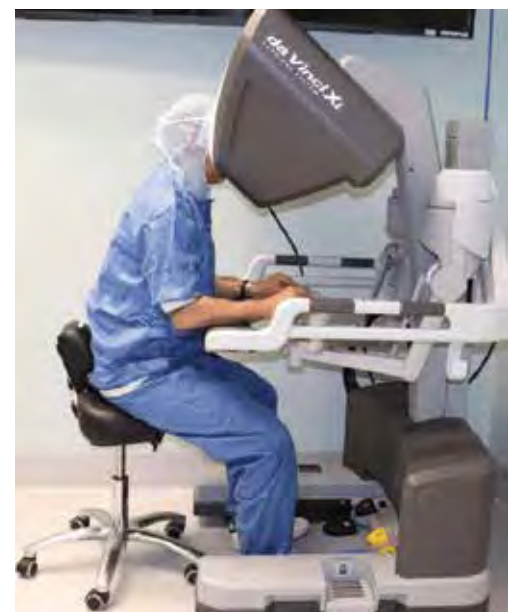
The idea for the Surgery Wall originated with Dr. Sameer Siddiqui, chair of the Department of Surgery and the C. Rollins Hanlon Endowed Chair of Surgery. "When I took over as chair in 2018, I became very interested in learning more about the history of this department," said Siddiqui.

"Our documents, pictures, and news clippings were scattered in boxes, various homes and offices, and spread all over the country. Due to retirements and illness, we were losing key stories and the oral history of the department from our senior alumni."

The Surgery Wall serves as a permanent, lasting showcase to celebrate all the educators, researchers, innovators, and thinkers who have shaped the department. Special thanks to Dr. Susan Willman, School of Medicine graduate from the class of 1982, and a generous supporter of SLU, student mental health and well-being initiatives, and the Department of Surgery. Dr. Willman's contributions helped make this commemoration of the department's history come to fruition.

PRACTICAL ANATOMY AND SURGICAL EDUCATION AND SIMULATION CENTER

Dr. Siddiqui, Dr. John Martin, and Dr. Christopher Behr showcased the new simulation center, the Practical Anatomy and Surgical Education Simulation Center (PASE), highlighting the latest surgical training tools in a variety of specialties, including neurosurgery, otolaryngology, head and neck, spinal, and vascular, to name a few.



CLASS NOTES

MICHAEL BORTS, M.D., CLASS OF 1983

Recognized, Best Doctors, Allergy & Immunology, St. Louis Magazine (2022). Recognized at the Asthma and Allergy Foundation's 20th annual Orchid Ball with the establishment of an endowment fund in his honor (Ladue News, 04/02/2010)

MARY CASE, M.D., CLASS OF 1969

Dr. Mary Case received the George Gantner award for her work in Forensic Pathology. Dr. Case is chief medical examiner in four Missouri counties and Professor Emerita of pathology at Saint Louis University. Dr. Case is a forensic expert on crimes against children. Combining her subspecialties in anatomic, forensic, and neuropathology, Dr. Case is an expert on shaken baby syndrome — brain and body injuries resulting from an

abuser's violent shaking of a child — and is frequently called upon to give her analysis of the evidence in criminal cases regarding the deaths of children. Dr. Case is a Biliken through and through finishing her medical degree here in 1969, teaching as an instructor in pathology starting in 1973, and was appointed a full professor in 1999.

CAMILLE COWLEY NEWTON, M.D., CLASS OF 1993

Dr. Camille (Williams) Newton founded PureWick Inc. PureWick is a female external catheter now used in hospitals across America and now in Japan, Europe, Canada and South America. PureWick lessens catheter use by days, thereby preventing catheter associated urinary tract infections as well as prevents diaper associated dermatitis. PureWick is now thought to save more than 1000 lives per

year. PureWick, Inc. was acquired by Becton Dickinson in 2017.

MARTIN SCHMIDT, M.D., CLASS OF 1986

In August 2022, Dr. Schmidt was featured in "Behind The Mystery: Fibrodysplasia Ossificans Progressiva (FOP)" that aired on Lifetime through their daytime talk show The Balancing Act.



We would love to hear from you!

IN MEMORIAM

Dr. Stratton Easter, Class of 1949

Dr. Jose Jimenez Velez,
Class of 1950

Dr. Paul Webb Jr., Class of 1952

Dr. Richard Cappelletti,
Class of 1955

Dr. Joyce Devine-Woolsey,
Class of 1955

Dr. Randall McNally, Class of 1955

Dr. Vincent Chiu, Class of 1956

Dr. Raymond Buganski,
Class of 1957

Dr. Harrison Jerrold, Class of 1958

Dr. James Mackey, Class of 1958

Dr. Joseph Brakovec, Class of 1959

Dr. Edward Dewein Jr.,
Class of 1959

Dr. Peter Vogelsang, Class of 1960

Dr. Dennis Diederich, Class of 1961

Dr. Gerald Geisler, Class of 1961

Dr. Samuel Nigro, Class of 1961

Dr. George Rourke, Class of 1961

Dr. Lester Mann, Class of 1962

Dr. Susan Chung, Class of 1964

Dr. Norman Chernik, Class of 1965

Dr. Walter Davisson Jr.,
Class of 1965

Dr. Donald Van Damia,
Class of 1965

Dr. Steve Schwartz, Class of 1966

Dr. Neil Hart, Class of 1968

Dr. Kenneth Rongey, Class 1970

Dr. Richard Shaw, Class of 1970

Dr. Barbara Zlotnick-Sanders,
Class of 1971

Dr. Lynn Robbins, Class of 1972

Dr. Stephen Noller, Class of 1975

Dr. Laretta Roberts, Class of 1975

Dr. Devinder Bhrany, Class of 1976

Dr. Kenneth Kreski, Class of 1980

Dr. Joseph Curley, Class of 1982

Dr. Patrice Kirchoff, Class of 1986

Dr. Martin Schutte, Class of 2001

GET ENGAGED WITH THE SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE

JOIN US

We hope to see you soon at an upcoming event—please visit slu.edu/medicine for the latest School of Medicine event calendar.

GIVE

The future of medical education is shifting, and the School of Medicine is elevating the student experience to include forward thinking, fostering clinical connections while embodying the Jesuit values. Please make a gift to the School of Medicine Dean's Education and Research Fund (10003), White Coat Society Scholarship Fund (20016) or the School of Medicine Annual Fund (10438).

SUPPORT

Supporting technology upgrades, scholarships, and the annual fund are a few ways to enhance the highest level of education in the School of Medicine. Email Patrick Dolan at patrick.dolan@slu.edu or call 314-977-8831 to learn more or visit giving.slu.edu/grandrounds to make a gift.

STAY IN TOUCH

We are interested in our graduates' news and accomplishments, both personal and professional. We encourage you to update your contact information so we may keep you informed about reunions, events in your area, and news from the School of Medicine. If you have news to share or wish to update your address, please email us at som-deansoffice@health.slu.edu.

VISIT THE SLU SCHOOL OF MEDICINE ONLINE

There's a lot more to learn about your School of Medicine online at www.slu.edu/medicine, including:

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How can we better serve you? Contact christine.winter.1@health.slu.edu with your comments and recommendations.



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THE WHITE COAT SOCIETY

SAINT LOUIS
UNIVERSITY

WHITE
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The white coat has long stood as a symbol of the integrity and respect accorded to the medical profession, signifying the achievements of physicians and scientists working to help others by advancing health care.

By joining the White Coat Society, you help the Saint Louis University School of Medicine provide an excellent learning environment and engage in meaningful research. The White Coat Society celebrates the robust partnerships between the School of Medicine and its alumni and supporters. Membership is granted to those who support SLU's School of Medicine with any gift of \$2500 or more each year.



WE INVITE YOU TO JOIN US TODAY.

For more information or to become a member of the White Coat Society, contact Adam Hutton at 314-977-2355 or email adam.hutton@slu.edu.