



Hennepin**Healthcare**

Department of Medicine
ANNUAL REPORT

2021



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OUR MISSION The mission of the Department of Medicine is to deliver outstanding and compassionate clinical services to all populations, especially the underserved, provide superior education for providers in training, and advance medical knowledge through research.

OUR VISION We are a thriving department of fulfilled, compassionate, and diverse caregivers committed to patient care, teaching, discovery, and each other. We are unwavering in our dedication to empowering our diverse community to achieve wellness throughout the continuum of care while serving as national leaders in exploring innovative and outstanding models of healthcare.

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Introduction & Overview

Resilience

“Resilience” is this year’s theme as our department clearly showed and demonstrated significant and notable resilience throughout 2021. Despite the continued impact and direct effect of the COVID-19 pandemic on our patients, our medical staff, our trainees, and our staff, the feeling of hope on being on the other side was apparent.

We continued to make changes and adjustments to the everyday management of our ambulatory clinics, our inpatient practices, and our staffing. Many restrictions were lessened from the previous year and the department learned new ways to work around with the continuation of social distancing, ongoing wearing of protective personal equipment, and adjusting to meetings, discussions, and appointments in remote environments. This became the “new normal.”

The staff demonstrated true resilience in meeting the continued challenges to maintain the Department of Medicine’s viability in providing excellent patient care, supporting our medical students, residents, and fellows in training, and all areas of research.

In 2021, the Department of Medicine continued to address Hennepin Healthcare’s Health Equity and Social Justice initiatives with the development of the Department’s Office of Equity and Social Justice. This Office supports the department in its goal where all people are valued, respected, and supported regardless of race, ethnicity, gender, religion, sexual orientation, age, language, disability, socioeconomic status, or any other difference. The Office is staffed by

Dr. Allyson Hart from the Nephrology Division, and Drs. Brian Muthyala and Matthew Young from the Hospital Medicine Division. Throughout 2021, this team worked on development and implementation of strategies to enhance and promote a diverse and inclusive community, bringing an equity and social justice lens throughout all the mission areas of the Department of Medicine. They developed systems and processes of care to improve our patient outcomes for historically excluded communities in collaboration with the Department’s medical staff, staff, patients, trainees and with HHS leaders and other departments. The Office of Equity and Social Justice serves as an excellent resource to address concerns and advancing ideas and initiatives.

Throughout 2021 our providers continued to receive local, national, and international recognition and awards in various specialties for excellence in clinical care, teaching, and research. These impressive recognitions and awards are reported in the Honors and Recognition section of the report. Included in this section are 15 of our physicians from the *Mpls.StPaul Magazine* list of Top Doctors, 20 physicians in our *Mpls.StPaul Magazine* Top Doctors Rising Stars, and 34 *Minnesota Monthly* magazine Top Doctors.

A notable recognition in our quest to deal with the COVID-19 pandemic was the Letter of Appreciation Dr. Jason Baker received this year from the National Institutes of Health (NIH). Specifically, from Dr. Francis Collins, Director of the NIH and Dr. Anthony Fauci, Director of the National Institutes of Health, Allergy and Infectious Diseases and the Chief Medical Advisor to the President of the United States. They recognized Dr. Baker for his contributions to the NIH “Coronavirus Disease 2019 (COVID-19) Treatment Guidelines.”

The efforts and support of many led to the successful academic promotion in the Department of Medicine at the University of Minnesota Medical School of Dr. Fouad Bachour, Cardiology Division, to Professor of Medicine in the Clinician Track, Dr. Allyson Hart, Nephrology Division, to Associate Professor of Medicine in the Academic Track, Dr. Lawrence Kerzner, Geriatric and Palliative Medicine Division, to Professor of Medicine in the Clinician Track, Dr. Saugar Maripuri, Nephrology Division, to Associate Professor of Medicine in the Clinician Track, and Dr. Roberta Meyers, Geriatric and Palliative Medicine Division, to Associate

Professor of Medicine in the Clinician Track.

Throughout 2021, the Department continued with virtual Medicine Grand Rounds and Education and Scholarly Forums on Thursdays. By offering the virtual format option, this provided an opportunity to invite a wider scope of speakers to present timely topics including those focusing on health disparities and health equity.

Resilience of our staff continued in year two of COVID-19 restrictions and did not hinder our faculty from obtaining substantial grant and contract funding, presenting virtually at national and international meetings, and publishing over 300 peer-reviewed articles all of which are reported in the Research and Scholarly section of the report.

Our department-wide work continued with the Innovative Seed Grant Program supporting junior faculty with limited research experience pursuing scholarly activity. The program awarded two faculty members with grants.



Arti Prasad, M.D.

Chair and Scott F. Davies
Endowed Chair

Photo by Tracy Walsh



Mark Linzer, M.D.

M. Thomas Stillman
Endowed Chair and
Vice Chair of Education,
Mentorship, and
Scholarship



**Roberta Meyers, M.D.,
M.P.H.**

Vice Chair of Clinical
Affairs



Ronald Schut, M.D.

Vice Chair of Fiscal
Affairs

The year was also the culmination of Hennepin Healthcare System's (HHS) participation in a federally funded project through the Agency for Healthcare Research and Quality and Project ECHO from the University of New Mexico. The nationwide project was designed to present standardized curriculum developed by the Institute of Healthcare Improvement to staff from Minnesota nursing homes using ECHO methodology and virtual learning sessions. The project covered topics related to the COVID-19 pandemic including infection prevention, surveillance for, and management of, COVID-19, and addressed nursing home staff burn-out and workforce shortages. At HHS, the team presented 100 interactive weekly sessions November 2020 through August 2021. The HHS team included Dr. Roberta Meyers, Greg Leierwood, RN, CNP, and Deanna Bauer, our Project Coordinator.

Throughout 2021, the Department continued to focus on successful recruitment and hiring of dedicated physicians and advanced practice providers to join many of the specialty divisions, as reported in the Faculty section of the report. The Faculty section



Martin J. Stillman, M.D., J.D.

Vice Chair of Department and Faculty Development



Rosemary Quirk, M.D., D.T.M.H.

Vice Chair of GME

includes the retirement of Dr. Ronald Molony from the Rheumatology Division following 13 years of service at Hennepin. We thank Dr. Molony for his long-standing dedication and contributions and wish him the best in his retirement.

The Department of Medicine is fortunate to have a group of 83 outstanding advanced practice providers providing care in each of our 14 specialty divisions. These providers, which include seven Leads, continue to be essential to providing ambulatory and inpatient clinical care and are instrumental to our health care teams. Our advanced practice providers are listed on page 29.

Clinical

In 2021, the clinics and inpatient services started to rebound from the COVID pandemic. Clinics were getting into a new routine of both in-person and virtual visits while inpatient continued to stay busy but with less COVID cases and back to “traditional” medical care.

Overall, the Department of Medicine campus-based provider ambulatory encounter volumes increased 3.20%. Specialty outreach provider encounters in community clinic settings saw an increase in of 8.8%, compared to prior year. (Aggregate ambulatory encounters increased by 4.5% when compared to prior year, as shown in Figure 1.) Inpatient encounters increased by 1.84% (as shown in Figure 1). Average length of stay continued to stay high at 5.17 from 5.13 in 2020 (3.80 in 2019 and prior). Total gross billings from the Department increased by 24.7%, going from \$87,221,459 in 2020 to \$108,769,014 in 2021. This increase is driven by the rebound from the COVID pandemic with the increase in clinic visits and inpatient hospital census along with the significant RVU changes in the E&M Visits. In addition, actual aggregate collections saw an increase of the same percentage increase in the percentage points as the gross billings in 2021 (as shown in Figure 2).

FIG. 1. Provider-Patient Encounters

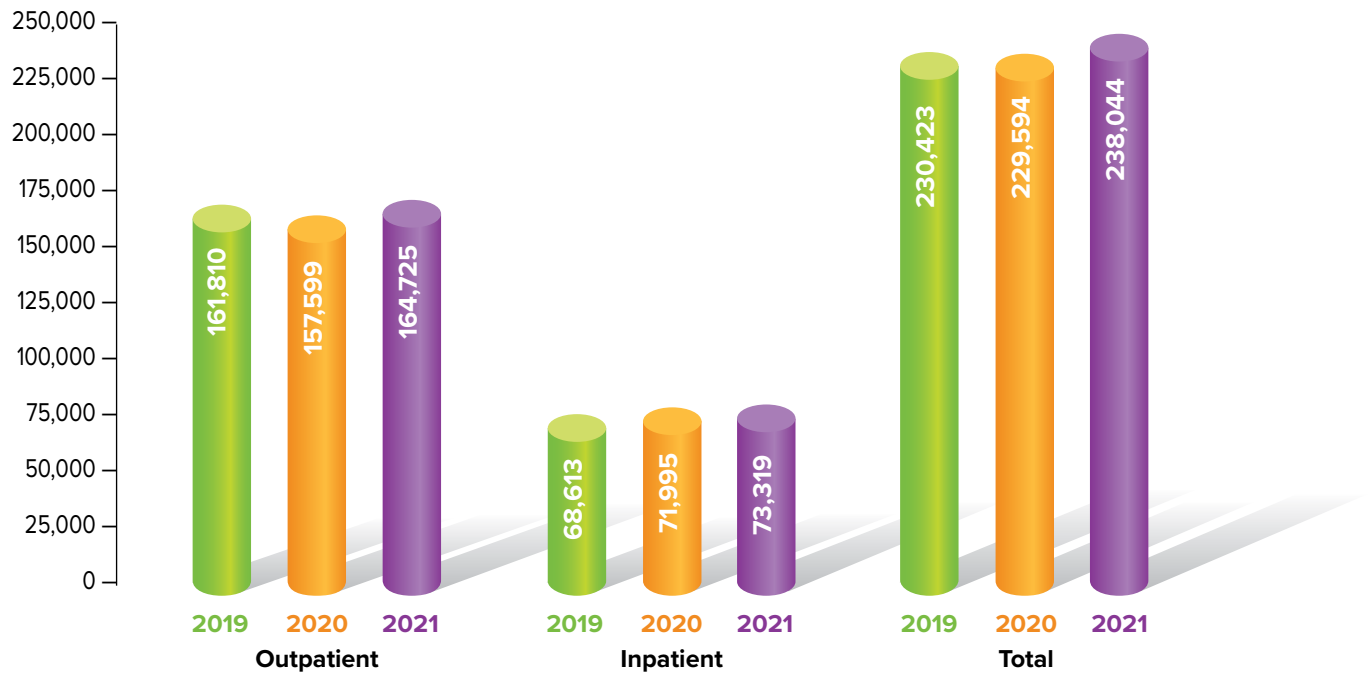
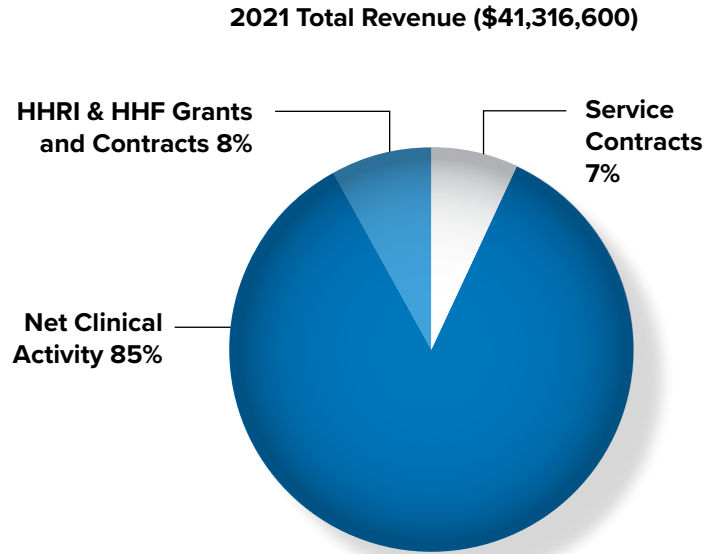


FIG. 2. Trends in Key Funding Sources



FIG. 3 Funding Profile



In 2021, 85% of the Department’s cash revenues came from clinical activities, 7% from service contracts, and 8% from research grants and contracts (as shown in Figure 3). Total costs awarded for Department of Medicine Research Grants and Contracts was \$37,215,497 which is a 26% increase over prior year, primarily due to material increases in governmental and industry funded awards in Infectious Diseases, Geriatric Medicine and Clinical Pharmacology, partially offset by a decrease in governmental and industry funded awards in Nephrology.

The Department’s peer-reviewed publications were at record number at 280 and 2 book chapters. The Research and Scholarship section listing the publications begins on page 37 of this report.

Under the continued directorship of Dr. Rosemary Quirk, the Medical Education Program remains strong and resilient. Our residency and fellowship programs continue to be in high demand. For details of 2021, please refer to the program update and summary starting on page 60.

2021 was truly a year of triumph and resilience.

I trust that you will find that this annual report shows a department that continues to be strong with incredible commitment to our mission of clinical care, education and research following an unforgettable year of COVID-19.

Arti Prasad, M.D., F.A.C.P.

Department Chair and Scott F. Davies Endowed Chair
Department of Medicine
Hennepin Healthcare System
Professor and Vice Chair of Medicine
University of Minnesota Medical School

Department of Medicine

ADMINISTRATIVE OFFICERS

Chair

Arti Prasad, M.D.

Vice Chair of Clinical Affairs

Roberta M. Meyers, M.D., M.P.H.

Vice Chair of Department and Faculty Affairs

Martin J. Stillman, M.D., J.D.

Vice Chair of Education, Mentorship, and Scholarship

Mark Linzer, M.D.

Vice Chair of Fiscal Affairs

Ronald L. Schut, M.D.

Vice Chair of Graduate Medical Education

Rosemary A. Quirk, M.D., D.T.M.H.

Administrative Operations Manager

Belinda J. Rogers

Practice Managers

Chad W. Hood

Jill E. Kennedy

Director of Graduate Medical Education

Rosemary A. Quirk, M.D., D.T.M.H.

Director of Undergraduate Medical Education

Samuel T. Ives, M.D.

Associate Program Directors

Michael J. Lawson, M.D.

Rawad Nasr, M.D. (January-November)

Jessica L. Oswald, D.O.

Charles P. Reznikoff, M.D.

Brian Yablon, M.D.

Faculty Development for Medical Education Director

Anne L. Becker, M.D.

DIVISION DIRECTORS

Addiction Medicine

Gavin B. Bart, M.D., Ph.D.

Cardiology

Gautam R. Shroff, M.D.

Clinical Pharmacology

Mark G. LeSage, Ph.D.

Endocrinology, Metabolism, and Diabetes

Lisa H. Fish, M.D.

Gastroenterology

Robert J. Matlock, M.D. (January-August)

Scott F. Davies, M.D. (September-December)

General Internal Medicine

Paul E. Johnson, M.D. (January)

Teresa I. Barrera-Anderson, M.D. (February-October)

Tyler N.A. Winkelman, M.D. (November-December)

Geriatric and Palliative Medicine

Thomas J. Klemond, M.D.

Hematology and Medical Oncology

Douglas J. Rausch, M.D. (January)

Satya Bommakanti, M.D. (February-December)

Hospital Medicine

Michael T. Rhodes, M.D.

Infectious Diseases

Jason V. Baker, M.D., M.S.

Integrative Health and Wellness

Richard Printon, D.C.

Nephrology

Kirsten L. Johansen, M.D.

Pulmonary, Allergy and Critical Care

Mark D. Sprenkle, M.D.

Rheumatology

Rawad Nasr, M.D. (January-November)



Faculty

2021 Faculty Listing

Transitions & New Faculty

Honors & Recognitions

Faculty 2021

Office of the Chair

Mark Linzer, M.D. *Professor*
Roberta M. Meyers, M.D., M.P.H. *Associate Professor*
Arti Prasad, M.D. *Professor*
Rosemary A. Quirk, M.D., D.T.M.H. *Assistant Professor*
Ronald L. Schut, M.D. *Assistant Professor*
Martin J. Stillman, M.D., J.D. *Associate Professor*

Addiction Medicine

Gavin B. Bart, M.D., Ph.D. *Professor*
Brian J. H. Graham, M.D., Ph.D. *Assistant Professor*
Kathleen Heaney, M.D. *Assistant Professor*
JoAn R. Laes, M.D. *Assistant Professor*
Charles P. Reznikoff, M.D. *Associate Professor*

Cardiology

Woubeshet Ayenew, M.D. *Assistant Professor*
Fouad A. Bachour, M.D. *Professor*
Michelle D. Carlson, M.D. *Assistant Professor*
David G. Fine, M.D. *Assistant Professor*
Steven R. Goldsmith, M.D. *Professor*
Charles A. Herzog, M.D. *Professor*
Omer J. Iqbal, M.D. *Assistant Professor*
Rehan M. Karim, M.D. *Assistant Professor*
Louis P. Kohl, M.D. *Assistant Professor*
Appesh N. Mohandas, M.D. *Assistant Professor*
Gautam R. Shroff, M.D. *Associate Professor*
Mengistu A. Simegn, M.D. *Assistant Professor*

Clinical Pharmacology

Andrew M. Busch, Ph.D., L.P. *Associate Professor*
Andrew C. Harris, Ph.D. *Associate Professor*
Sandra Japuntich, Ph.D., L.P. *Associate Professor*
Mark G. LeSage, Ph.D. *Professor*
Paul R. Pentel, M.D. *Professor*

Endocrinology, Metabolism, and Diabetes

Sarah Bou Malham, M.D. *Assistant Professor*
Allison J. Estrada, M.D. *Assistant Professor*
Lisa H. Fish, M.D. *Assistant Professor*

Sarah E. Kempainen, M.D. *Assistant Professor*
Laura T. LaFave, M.D. *Assistant Professor*

Gastroenterology

Aaron F. Brosam, M.D. *Assistant Professor**
Khalil Farah, M.D. *Assistant Professor*
Hernando Gonzalez, M.D. *Assistant Professor*
Ahmad H. Malli, M.D. *Assistant Professor*
Robert J. Matlock, M.D. *Assistant Professor*
Maria E. Moscandrew, M.D. *Assistant Professor*

General Internal Medicine

Teresa I. Barrera-Anderson, M.D. *Assistant Professor*
Heather W. Baxter, M.D. *Assistant Professor*
Sara Champlin, M.D. *Assistant Professor*
Ellen M. Coffey, M.D. *Assistant Professor*
Carmen N. Divertie, M.D. *Assistant Professor*
Mary E. Erickson, M.D. *Assistant Professor*
Isha A. Galloway-Gilliam, M.D. *Assistant Professor*
Elizabeth C. Goelz, M.D. *Assistant Professor**
Haeshik S. Gorr, M.D. *Assistant Professor*
A. Katherine Hust, M.D., M.P.H. *Assistant Professor*
Samuel T. Ives, M.D. *Assistant Professor*
Paul E. Johnson, M.D. *Assistant Professor*
Spencer Kinzie, M.D. *Assistant Professor*
Joshua Lackner, M.D. *Assistant Professor*
Kacia M. Lee, M.D. *Assistant Professor*
Hannah S. Lichtsinn, M.D. *Assistant Professor*
Mark Linzer, M.D. *Professor*
Manji Osifeso, M.D. *Assistant Professor*
Deepti Pandita, M.D. *Assistant Professor*
Maarya Pasha, M.D. *Assistant Professor*
Douglas J. Pryce, M.D. *Associate Professor*
Danielle C. Robertshaw, M.D. *Assistant Professor*
Aaron D. Rutzick, M.D. *Assistant Professor*
Carla M. Schultz, M.D. *Assistant Professor*
Katherine G. Shafto, M.D. *Assistant Professor*
Rachel Sandler Silva, M.D., M.P.H. *Assistant Professor*
William Sinnett, M.D. *Assistant Professor*
Martin J. Stillman, M.D., J.D. *Associate Professor*

Faculty 2021

General Internal Medicine (Cont.)

Haylee Veazey, M.D. *Assistant Professor*
Katherine D. Vickery, M.D., M.Sc. *Assistant Professor*
Meghan M. Walsh, M.D., M.P.H. *Associate Professor*
Isaac Weeks, M.D. *Assistant Professor*
Erica J. Weiss, M.D. *Assistant Professor*
Allison S. Wert, M.D. *Assistant Professor*
Tyler NA Winkelman, M.D., M.Sc. *Assistant Professor*

Geriatric and Palliative Medicine

Mariam Anwar, M.D. *Assistant Professor*
Emily D. Escue, M.D. *Assistant Professor*
David Flemig, M.D. *Assistant Professor*
Ryan Jozwiak, M.D. *Appointment pending**
Lawrence J. Kerzner, M.D. *Professor*
Thomas J. Klemond, M.D. *Assistant Professor*
Samuel Maiser, M.D. *Assistant Professor*
Martha L. McCusker, M.D. *Assistant Professor*
Roberta M. Meyers, M.D., M.P.H. *Associate Professor*
Anne M. Murray, M.D., M.Sc. *Professor*
Anne G. Pereira, M.D., M.P.H. *Professor*
Kerry M. Sheets, M.D. *Assistant Professor*

Hematology and Medical Oncology

Satya V. Bommakanti, M.D. *Assistant Professor*
Nicole Jacobi, M.D. *Assistant Professor*
Rachel Koreth, M.D. *Assistant Professor*
Richard J. Lee, M.D. *Assistant Professor*
Vicki A. Morrison, M.D. *Professor*
Daniel F. Pease, M.D. *Assistant Professor**
Natarajan V. Raman, M.B.B.S., M.D. *Assistant Professor*
Douglas J. Rausch, M.D. *Assistant Professor*
Karim R. Saab, M.D. *Assistant Professor*

Hospital Medicine

Bariituu Adam, M.D. *Assistant Professor*
William S. Allen, M.D. *Assistant Professor*
Anne L. Becker, M.D. *Assistant Professor*
Anushree Bora, M.D. *Assistant Professor*
Max Fraden, M.D. *Assistant Professor*

Selome G. Gezahegn, M.D. *Assistant Professor*
Eric J. Hazen, M.D. *Assistant Professor*
David R. Hilden, M.D., M.P.H. *Associate Professor*
Awil W. Hirsi, M.D. *Assistant Professor*
Daniel G. Hoody, M.D. *Assistant Professor*
Ann Isaksen, M.D. *Assistant Professor*
Ryan Jelinek, D.O. *Assistant Professor*
Matthew Kalina, M.D. *Appointment pending*
Matthew D. Klein, M.D. *Assistant Professor**
Adam G. Kolb, M.D. *Assistant Professor*
Michael J. Lawson, M.D. *Assistant Professor*
Matthew S. Lehnert, M.D. *Assistant Professor*
Joshua Liu, M.D. *Assistant Professor*
Melanie W. Lo, M.D. *Assistant Professor**
Kayla Lundeen, D.O. *Assistant Professor*
Abdirahman Madar, M.D. *Assistant Professor*
David Melling, M.D. *Assistant Professor*
Robert K. Mittet, M.D. *Assistant Professor*
Brian K. Muthyala, M.D., M.P.H. *Assistant Professor*
Bishara A. Nassir, M.D. *Assistant Professor*
Patrick O'Connor, M.D. *Assistant Professor*
Vignesh Williams Palaniappan, M.D. *Assistant Professor*
Justine M. Pidcock, M.D. *Assistant Professor*
Rosemary A. Quirk, M.D., D.T.M.H. *Assistant Professor*
Michael T. Rhodes, M.D. *Assistant Professor*
Steven Richmond, D.O. *Assistant Professor*
Aaron D. Rutzick, M.D. *Assistant Professor*
Christine Schwab, M.D. *Assistant Professor*
Wendy A. Stansbury-O'Donnell, M.D. *Assistant Professor*
David B. Van Schyndel, M.D. *Assistant Professor*
Gregory Wieland, M.D. *Assistant Professor*
Shirlee X. Xie, M.D. *Assistant Professor*
Brian Yablon, M.D. *Assistant Professor*
Matthew Young, M.D. *Assistant Professor*
Maja Zioncheck, M.D. *Assistant Professor*

Infectious Diseases

Jason V. Baker, M.D., M.S. *Associate Professor*
Kristina Burrack, Ph.D. *Assistant Professor*
Caitlin Eccles-Radtke, M.D. *Assistant Professor*

* Left Division in 2021.

Faculty 2021

Infectious Diseases (Cont.)

Anne E.P. Frosch, M.D., M.P.H. *Assistant Professor*
W. Keith Henry, M.D. *Professor and Clinical Assistant Professor, School of Public Health*
Amanda J. Noska, M.D., M.P.H. *Assistant Professor*
Jessica Oswald, D.O. *Assistant Professor*
Ronald L. Schut, M.D. *Assistant Professor*
Megan K. Shaughnessy, M.D. *Assistant Professor*
Nicholas S. Vogenthaler, M.D. *Assistant Professor*
Rebecca J. Zadroga, M.D., M.P.H. *Assistant Professor*

Integrated Health and Wellness

Shawn Olson, M.D., M.P.H. *Appointment pending**

Nephrology

David C. Dahl, M.D. *Assistant Professor*
Casey Dorr, Ph.D. *Assistant Professor*
Keith E. Eidman, D.O. *Assistant Professor*
David T. Gilbertson, Ph.D. *Associate Professor*
Allyson Hart, M.D., M.S. *Associate Professor*
Danielle G. Haselby, D.O. *Assistant Professor*
Ajay K. Israni, M.D., M.S. *Professor*
Kirsten L. Johansen, M.D. *Professor*
Bertram L. Kasiske, M.D. *Professor*
Saugar Maripuri, M.D., M.P.H. *Associate Professor*
Warren McKinney, Ph.D. *Assistant Professor*
Eileen A. O'Shaughnessy, M.D. *Assistant Professor*
Meena Sahadevan, M.D. *Assistant Professor*
Cory R. Schaffhausen, Ph.D. *Assistant Professor*
John R. Silkens, M.D. *Assistant Professor*
Connie Wang, M.D. *Associate Professor*
Jeffrey H. Wang, M.D. *Assistant Professor*
James B. Wetmore, M.D., M.S. *Professor*
Jennifer F. Wu, D.O. *Assistant Professor*

Pulmonary, Allergy and Critical Care

Scott F. Davies, M.D. *Professor*
Kenneth W. Dodd, M.D. *Assistant Professor*
Joshua M. Dorn, M.D. *Assistant Professor*
Heidi L. Erickson, M.D. *Assistant Professor*
Robert Kempainen, M.D. *Associate Professor*

James W. Leatherman, M.D. *Professor*
Michele M. LeClaire, M.D. *Assistant Professor*
William A. Marinelli, M.D. *Associate Professor*
Matthew E. Prekker, M.D., M.P.H. *Associate Professor*
Robert S. Shapiro, M.D. *Assistant Professor*
Mark D. Sprenkle, M.D. *Assistant Professor*
John B. Sweet, M.D. *Assistant Professor*

Rheumatology

Ronald R. Molony, M.D. *Assistant Professor**
Rawad Nasr, M.D. *Assistant Professor**
Linh Ngo, D.O. *Assistant Professor**
Peter A. Schlesinger, M.D. *Assistant Professor*
Zaki Abou Zahr, M.D. *Assistant Professor**

Medical Education Program

Anne L. Becker, M.D. *Assistant Professor*
Hospital Medicine
Samuel T. Ives, M.D. *Assistant Professor*
General Internal Medicine
Michael J. Lawson, M.D. *Assistant Professor*
Hospital Medicine
Rawad Nasr, M.D. *Assistant Professor**
Rheumatology
Jessica L. Oswald, D.O. *Assistant Professor*
Infectious Diseases
Rosemary A. Quirk, M.D., D.T.M.H. *Assistant Professor*
Hospital Medicine
Charles P. Reznikoff, M.D. *Associate Professor*
Addiction Medicine
Brian Yablon, M.D. *Assistant Professor*
Hospital Medicine

Medicine Chief Residents (2020-2021)

Jeffrey Larson, M.D. *Instructor**
Joseph Steffens, M.D. *Instructor**
Kathleen Wilcox, M.D. *Instructor**

Medicine Chief Residents (2021-2022)

Peter Bache-Wiig, M.D. *Instructor*
Max Fuller, M.D. *Instructor*
Rebecca Kummer, M.D. *Instructor*

FACULTY TRANSITIONS 2021

DIVISION	NAME	FORMER ACADEMIC POSITION	CURRENT POSITION <i>Departure Date</i>
Gastroenterology	Aaron Brosam, M.D.	Assistant Professor	Gastroenterologist Park Nicollet Clinic St. Louis Park, Minnesota <i>November 2021</i>
General Internal Medicine	Elizabeth C. Goelz, M.D.	Assistant Professor	In Transition <i>June 2021</i>
Geriatric and Palliative Medicine	Ryan Jozwiak, M.D.	Appointment pending	Palliative Medicine Physician Northwestern Medical Regional Group Geneva, Illinois <i>June 2021</i>
Hematology/ Medical Oncology	Daniel F. Pease, M.D.	Assistant Professor	Hematology Oncologist North Memorial Health Robbinsdale, Minnesota <i>April 2021</i>
Hospital Medicine	Matthew D. Klein, M.D.	Assistant Professor	Internal Medicine/Hospitalist Mayo Clinic Rochester, Minnesota <i>January 2021</i>
	Melanie W. Lo, M.D.	Assistant Professor	General Medicine Physician Auckland City Hospital Auckland, New Zealand <i>July 2021</i>
Integrative Health and Wellness	Shawn Olson, M.D.	Appointment pending	In Transition <i>December 2021</i>
Rheumatology	Ronald R. Molony, M.D.	Assistant Professor	Retirement <i>July 2021</i>
	Rawad Nasr, M.D.	Assistant Professor	Rheumatologist Park Nicollet Clinic St. Louis Park, Minnesota <i>December 2021</i>
	Linh Ngo, D.O.	Assistant Professor	Rheumatologist Park Nicollet Clinic St. Louis Park, Minnesota <i>June 2021</i>
	Zaki Abou Zahr, M.D.	Assistant Professor	In Transition <i>September 2021</i>

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FACULTY TRANSITIONS 2021 (CONT.)

DIVISION	NAME	FORMER ACADEMIC POSITION	CURRENT POSITION <i>Departure Date</i>
Medical Education Program	Jeffrey J. Larson, M.D.	Instructor	Pulmonary/Critical Care Fellow University of Minnesota Minneapolis, Minnesota <i>June 2021</i>
Medicine Chief Residents	Joseph D. Steffens, M.D.	Instructor	Cardiovascular Diseases Fellow Hennepin Healthcare Minneapolis, Minnesota <i>June 2021</i>
	Kathleen A. Wilcox, M.D.	Instructor	Primary Care Physician Legacy Emanuel Medical Center Portland, Oregon <i>June 2021</i>

NEW FACULTY 2021

DIVISION	NAME	FORMER POSITION	CURRENT ACADEMIC POSITION <i>Hire Date</i>
Geriatric and Palliative Medicine	Emily Escue, M.D.	Palliative Care Physician M Health Fairview Minneapolis, Minnesota	Assistant Professor <i>November 2021</i>
	David Flemig, M.D.	Palliative Care Physician Mount Sinai Hospital New York, New York	Assistant Professor <i>September 2021</i>
	Anne G. Pereira, M.D., M.P.H.	Hospice and Palliative Medicine Fellow Department of Family Medicine University of Minnesota Minneapolis, Minnesota	Professor <i>September 2021</i>
Hospital Medicine	Bariituu Adam, M.D.	COVID Hospitalist Johns Hopkins University School of Medicine Baltimore, Maryland	Assistant Professor <i>September 2021</i>
	Ryan Jelinek, D.O.	Clinical Informatic Fellowship Hennepin Healthcare Minneapolis, Minnesota	Assistant Professor <i>July 2021</i>
	Joshua Liu, M.D.	Internal Medicine Resident Stanford University School of Medicine Hospitalist, Vituity Healthcare O'Connor Hospital San Jose, California	Assistant Professor <i>August 2021</i>
	Brian K. Muthyala, M.D., M.P.H.	Internal Medicine and Pediatrics Hospitalist University of Minnesota Minneapolis, Minnesota	Assistant Professor <i>September 2021</i>
	Gregory Wieland, M.D.	Internal Medicine Resident Hennepin Healthcare Minneapolis, Minnesota	Assistant Professor <i>September 2021</i>
Infectious Diseases	Amanda J. Noska, M.D., M.P.H.	Section Chief, Infectious Diseases Essentia Health St. Mary's Medical Center and Duluth Clinic Duluth, Minnesota	Assistant Professor <i>September 2021</i>

Continued next page

NEW FACULTY 2021 (CONT.)

DIVISION	NAME	FORMER POSITION	CURRENT ACADEMIC POSITION <i>Hire Date</i>
Integrative Health and Wellness	Shawn M. Olson, M.D., M.P.H.	Lifestyle Medicine Director Dome Ranch Lifestyle Medicine Collaborative Elmwood, Wisconsin	Appointment Pending <i>August 2021</i>
Medical Education Program: Medicine Chief Residents	Peter Bache-Wiig, M.D.	Internal Medicine Resident Hennepin Healthcare Minneapolis, Minnesota	Instructor <i>July 2021</i>
	Max Fuller, M.D.	Internal Medicine Resident Hennepin Healthcare Minneapolis, Minnesota	Instructor <i>July 2021</i>
	Rebecca Kummer, M.D.	Internal Medicine Resident Hennepin Healthcare Minneapolis, Minnesota	Instructor <i>July 2021</i>

2021 Honors and Recognition of Faculty

OFFICE OF THE CHAIR

Arti Prasad, M.D.

Department Chair

Advisory Committee, FORESIGHT, The Rippel Foundation

Board of Directors, Pathways

Consortium of Academic Health Centers for Integrative Medicine:

- Clinical Working Work Member
- Steering Committee

Founding Board of Directors, American Board of Integrative Medicine

TRUST Award, Women's Health Leadership

Mark Linzer, M.D., M.A.C.P.

Vice Chair of Education, Mentorship, and Scholarship

Wellness Infrastructure Committee, American College of Physicians

Roberta M. Meyers, M.D., M.P.H.

Vice Chair of Clinical Affairs

Agency for Healthcare Research and Quality, ECHO National Nursing Home COVID-19 Action Network, Project Lead for the Hennepin Healthcare System Training Center

Minnesota Association of Geriatrics Inspired Clinicians:

- Board of Directors
- Editor, *TOPICS e-newsletter*

Minnesota Gerontological Society:

- Board of Directors
- Education Committee
- President-Elect

Top Doctors Award, *Minnesota Monthly Magazine*

Rosemary Quirk, M.D.

Vice Chair of Graduate Medical Education

Clinical Teaching Award, EM-IM Residency, Hennepin Healthcare

Ronald L. Schut, M.D.

Vice Chair of Fiscal Affairs

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Martin J. Stillman, M.D., J.D.

Vice Chair of Department and Faculty Affairs

Advisory Board, Health Law Institute, Hamline University School of Law

Advisory Committee, *Minnesota Medicine*

Council Member, American Arbitration Association, Health Care Dispute Resolution Advisory Council

Minnesota COVID-19 Ethics Collaborative Committee, Minnesota Department of Health, State Health Care Coordination Center, Minnesota Hospital Association, and the University of Minnesota

ADDICTION MEDICINE

Gavin B. Bart, M.D., Ph.D.

Advisory Board, US Substance Abuse and Mental Health Services Administration, South East Asia HIV Addiction Technology Transfer Center

National Institute on Drug Abuse, Center for the Clinical Trials Network:

- Research Development Committee
- Review Committee, Development of Medications to Prevent and Treat Opioid Use Disorders and Overdose Vice Chair, Steering Committee

Planning Committee, National Academies of Sciences, Engineering, and Medicine Methadone Treatment for Opioid Use Disorder: Examining Federal Regulations and Laws: A Workshop

Region VI Director, American Society of Addiction Medicine

Scientific Advisory Board, DRIVE (Drug use and blood-borne infections in Vietnam)

Top Doctors Award, *Minnesota Monthly Magazine*

Associate Editor, *Addiction Science and Clinical Practice*

2021 Honors and Recognition of Faculty

ADDICTION MEDICINE (CONT.)

Brian J. H. Grahan, M.D., Ph.D.

Medication Assisted Treatment Work Group, Institute for Clinical Systems Improvement

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Kathleen Heaney, M.D.

Best Teacher Award, G2 Residency Class, Hennepin-Regions Psychiatry Program

JoAn R. Laes, M.D.

American College of Medical Toxicology:

- Co-Chair, Addiction Medicine Specialty Interest Section
- Education Committee
- Leader, Practice Management Sub-section
- Practice Development Specialty Interest Section

American Society of Addiction Medicine:

- Chair, Medical Toxicology Workgroup

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Charles P. Reznikoff, M.D.

American College of Physicians:

- Council
- Quality Improvement Champion, Inpatient Opioid Prescribing
- Scientific Planning Committee

Charter Member, Minnesota Society of Addiction Medicine

Governor's Task Force for Medical Cannabis

Medical Advisory Committee, Steven Rummeler Memorial Foundation

Minnesota Health Collaborative, Institute for Clinical Systems Improvement:

- Leader, Opioid Oversight Working Group
- Quality Improvement Steering Committee, Opioid Prescribing Improvement Program
- Representative to the Minnesota Health Collaborative

Pain Care Task Force, American Medical Association

Top Doctors Award, *Minnesota Monthly Magazine*

CARDIOLOGY

Woubeshet Ayenew, M.D.

Board of Directors, American Heart Association

Founder and Chairman, Ethiopian Community Health Board

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Michelle D. Carlson, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Steven R. Goldsmith, M.D.

Director, Minnesota Heart Failure Consortium

2021 Honors and Recognition of Faculty

CARDIOLOGY (CONT.)

Charles A. Herzog, M.D.

American Heart Association:

- Scientific Statement Work Group, Home Therapies
- Scientific Statement Work Group, Management of Kidney and Liver Transplant Candidates

Cardio-Renal Steering Group, International Society of Nephrology Collaboration

Chair, Critical Event Committee, Canadian-Australasian Randomized Trial of Screening Kidney Transplant Candidates for Coronary Artery Disease (CARSK)

Co-Chair, Kidney Health Initiative Workgroup, Understanding and Overcoming the Exclusion of Patients with Kidney Disease from Cardiovascular Trials

Data Monitoring Committee, MK2060 Phase 2 Study

Data Monitoring Committee, The Study of Heart and Kidney Protection with Empagliflozin (EMPA-KIDNEY) Trial

Executive Committee, DIALIZE-OUTCOMES Trial (Effect of Sodium Zirconium Cyclosilicate on Arrhythmia-related Cardiovascular Outcomes in Participants on Chronic Hemodialysis with Recurrent Hyperkalemia)

Planning Committee and Session Moderator, eSPACE CRM International Symposium

Steering Committee, Canadian-Australasian Randomized Trial of Screening Kidney Transplant Candidates for Coronary Artery Disease (CARSK)

Steering Committee, Cardiovascular and Renal Protection with SGLT2 Inhibition in Kidney Transplant Recipients (Renaissance) Trial

Editorial Board, *American Heart Journal*

Rehan M. Karim, M.D.

Audit Committee, Heart Rhythm Society

Top Doctors Award, *Minnesota Monthly Magazine*

Gautam R. Shroff, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Mengistu A. Simegn, M.D.

Adjudication Member, Clinical End Point Committee for the CARSK (Canadian-Australian Randomized Trial of Screening Kidney Transplant Candidates for Coronary Artery Disease)

Medical Staff Honors Award for Outstanding Contributions in Academics, Hennepin Healthcare

Top Doctors Award, *Minnesota Monthly Magazine*

CLINICAL PHARMACOLOGY

Andrew M. Busch, Ph.D., L.P.

Chair, Data Safety Monitoring Board, Implementation of Cessation Treatment in Community Based Mental Health Centers

Lung Mind Alliance Statewide Policy Strategy Design Team, Tobacco Cessation Services

Society for Behavioral Medicine:

- Chair, Cardiovascular Disease Special Interest Group
- Chair, Topic Area, Cardiovascular Disease

Editorial Board, *Clinical Psychology Review*

Andrew C. Harris, Ph.D.

Special Emphasis Panel ZRG 1 IFCN-E (56), Tobacco Regulatory Science: Understanding Tobacco Product Toxicology and Abuse Liability, National Institutes of Health, Food and Drug Administration

Sandra Japuntich, Ph.D., L.P.

Lung Cancer Screening Conference Planning Committee, A Breath of Hope Lung Foundation

Lung Mind Alliance, American Lung Association

Mark G. LeSage, Ph.D.

Consultant, Center for Tobacco Products, Food and Drug Administration

Paul R. Pentel, M.D.

Board of Directors, Association for Non-Smokers

Commercial Tobacco Cessation Advisory Committee, Minnesota Department of Health

2021 Honors and Recognition of Faculty

ENDOCRINOLOGY, METABOLISM AND DIABETES

Sarah Bou Malham, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Allison Estrada, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Lisa H. Fish, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Sarah E. Kempainen, M.D.

Advisory Board, YMCA Diabetes Prevention

Laura T. LaFave, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

GASTROENTEROLOGY

Khalil Farah, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Hernando Gonzalez, M.D.

American Society for Gastrointestinal Endoscopy:

- Chair, Special Interest Group, Latin America
- International Committee
- Vice Chair, Latin America International Committee

Director of Publications, Inter-American Society of Digestive Endoscopy

Top Doctors Award, *Minnesota Monthly Magazine*

Robert J. Matlock, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

GENERAL INTERNAL MEDICINE

Heather W. Baxter, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Ellen M. Coffey, M.D.

Planning Committee, Chronic Kidney Disease Update for Primary Care, National Kidney Foundation, Minnesota Chapter

Professional Advisory Board, Minnesota Visiting Nursing Agency

Best Staff Teacher Award, Department of Medicine, Hennepin Healthcare

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Iesha Galloway-Gilliam, M.D.

Clinical Excellence Award, Department of Medicine, Hennepin Healthcare

A. Katherine Hust, M.D., M.P.H.

Hennepin Health Clinical Strategy Committee, Hennepin Health Plan

Measurement & Reporting Committee, Minnesota Community Measurement

Samuel T. Ives, M.D.

Inducted into the Alpha Omega Alpha Honor Society

Paul E. Johnson, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

2021 Honors and Recognition of Faculty

GENERAL INTERNAL MEDICINE (CONT.)

Hannah S. Lichtsinn, M.D.

American Academy of Pediatrics:

- Board Member, Minnesota Chapter
- Co-Chair, Health Policy

Chair, Executive Board, Our Stories. Our Health

Co-Founder, Minnesota Immigrant Health Alliance

Right 2 Health Action:

- Core Team
- Policy Team

Medical Staff Honors, Community Engagement Award, Hennepin Healthcare

Top Doctors Award, *Minnesota Monthly Magazine*

Mark Linzer, M.D., M.A.C.P.

See *Office of the Chair*

Deepti Pandita, M.D.

American Medical Informatics Association:

- Board of Directors, Physicians in Informatics
- National Member, Clinical Decision Support Work Group
- Primary Work Group
- Women in Informatics Task Force

Board of Directors, Minnesota Doctors for Health Equity

Future Vision Work Group, Agency for Healthcare Research and Quality (AHRQ), AHRQ Evidence-Based Care Transformation Support

Minnesota American College of Physicians:

- Chair, Health Information Technology Committee
- Public Policy and Advocacy Committee

National American College of Physicians:

- Digital Health Committee
- Minnesota Health Information Technology Committee
- Telehealth Committee
- Vice Chair, Medical Informatics Committee

Inspiration Award, American Medical Association

Laureate Award, Minnesota American College of Physicians

Douglas J. Pryce, M.D.

Chair, Board of Directors, East African Project

Danielle C. Robertshaw, M.D.

National Health Care for the Homeless Council:

- Board of Directors
- Clinicians' Network
- Policy Committee
- Respite Care Provider's Network

Co-Recipient, America's Essential Hospitals Gage Award, first place in Quality for Reducing 30 Day Readmissions in a Population Experiencing Homelessness

Carla M. Schultz, M.D.

Medical Staff Honors Award for Outstanding Contributions in Clinical Care, Hennepin Healthcare

Rachel Sandler Silva, M.D., M.P.H.

Employee Excellence Award, Jail Health Services, Hennepin Healthcare

Martin J. Stillman, M.D., J.D.

See *Office of the Chair*

Katherine D. Vickery, M.D., M.Sc.

Co-Director, Homelessness Special Interest Group, North American Primary Care Research Group

Invited Scholar, Institute for Implementation Science Scholars (IS-2), Washington University, St. Louis, Missouri

National Health Care for the Homeless Council:

- Board Member
- Chair, Research Committee

Technical Expert Panel, National Quality Forum, Best Practices for Developing and Testing Risk Adjustment Models

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

2021 Honors and Recognition of Faculty

GENERAL INTERNAL MEDICINE (CONT.)

Meghan M. Walsh, M.D., M.P.H.

Parker J. Palmer Courage to Lead Award for
Extraordinary Accomplishments in Graduate Medical
Education, Accreditation Council for Graduate
Medical Education

Top Doctors Award, *Mpls.St.Paul Magazine*

Tyler N.A. Winkelman, M.D., M.Sc.

Board of Directors, Academic Consortium on Criminal
Justice Health

Board of Directors, Twin Cities Medical Society

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

GERIATRIC AND PALLIATIVE MEDICINE

Mariam Anwar, M.D.

Clinical Practice Alliance Committee:

- Task Force, COVID-19 Monoclonal Antibodies treatment guidelines. Considerations for use of Monoclonal Antibody Therapy for the Treatment of COVID-19 in Congregate Living Settings
- Task Force, Provider Treatment Considerations of COVID-19 Management in Congregate Living Setting

David Flemig, M.D.

Palliative Care Educator of the Year, Brookdale
Department of Geriatrics and Palliative Care, Mount
Sinai School of Medicine in New York

Lawrence J. Kerzner, M.D.

Consultant, State of Minnesota Attorney General's
Office for Criminal Elder Mistreatment

Minnesota Elder Justice Center:

- Board of Directors
- Policy Committee

Top Doctors Award, *Minnesota Monthly Magazine*

Thomas J. Klemond, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Samuel Maiser, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Roberta M. Meyers, M.D. M.P.H.

See *Office of the Chair*

Anne M. Murray, M.D., M.Sc.

Review Panel Member, Data Safety and Monitoring
Board NIA FIT- AD

Top Doctors Award, *Minnesota Monthly Magazine*

Kerry M. Sheets, M.D.

Editorial Board, *Journal of the American Geriatrics
Society*

HEMATOLOGY AND MEDICAL ONCOLOGY

Nicole Jacobi, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Rachel Koreth, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Vicki A. Morrison, M.D.

Advisory Committee on Immunization Practices, Herpes
Zoster Working Group, Centers for Disease Control

Alliance for Clinical Trials in Oncology:

- Cancer in the Older Adult Committee
- Lymphoma Core Committee

American Society of Clinical Oncology:

- Dose Optimization Task Force
- Appropriate Chemotherapy Dosing for Obese Adult Patients with Cancer, Clinical Practice Guideline Update
- Daily News Writing/Podcast Sources Committee
- In-Training Exam Task Force

International Society of Geriatric Oncology:

- Membership and National Representative Committee, Midwest Region

Scientific Committee on Lymphoid Neoplasia, American
Society of Hematology

Editorial Board, *Journal of Geriatric Oncology*

2021 Honors and Recognition of Faculty

HEMATOLOGY AND MEDICAL ONCOLOGY (CONT.)

Daniel F. Pease, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Douglas J. Rausch, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Karim R. Saab, M.D.

American Society of Clinical Oncology:

- Board of Directors
- Item Writing Committee

HOSPITAL MEDICINE

Anne Becker, M.D.

Wellness Champion, Minnesota Chapter of American College of Physicians

David R. Hilden, M.D., M.P.H.

American College of Physicians:

- Health and Public Policy Committee
- Vice Chair

Governor, Minnesota Chapter of the American College of Physicians

Minnesota's 100 Most Influential Health Care Leaders, *Minnesota Physician*

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Daniel G. Hoody, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Ann Isaksen, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Ryan Jelinek, D.O.

Advisory Board Member, Great Plains Telehealth Resource and Assistance Center

Executive Board Member, AMIA College of Informatics Fellows

Executive Board Member, Minnesota Doctors for Health Equity

Matthew D. Klein, M.D.

Minnesota State:

- Capital Investment
- Health and Human Services Finance and Policy
- Health Services Reform Finance and Policy
- Senator

Abdirahman Madar, M.D.

Board Member, Somali Medical Association of North America

Board of Directors, Horn Development Center

Founder and President, Board of Directors, Somalilander, American Health Association

David Melling, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Robert K. Mittet, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Brian K. Muthyala, M.D., M.P.H.

Gold Humanism Honor Society 2021 Champion of Humanistic Care

The John Song Distinguished Mentoring Award – University of Minnesota Medical School

Rosemary Quirk, M.D.

See Office of the Chair

Steven Richmond, D.O.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

2021 Honors and Recognition of Faculty

HOSPITAL MEDICINE (CONT.)

Shirlee X. Xie, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Brian Yablon, M.D.

Minnesota Steering Committee, Physicians for a National Health Program

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

INFECTIOUS DISEASES

Jason V. Baker, M.D., M.S., F.I.D.S.A.

Letter of Recognition for work on COVID-19 treatment protocols from Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases

Protocol Development Team, NIH ACTIV-3 Trial (Accelerating COVID-19 Therapeutic Interventions and Vaccines): A multicenter, adaptive, randomized blinded controlled trial of the safety and efficacy of investigational therapeutics for hospitalized patients with COVID-19

Protocol Team, Strategic Timing of Anti-Retroviral Treatment (START) Trial

Scientific Steering Committee, International Network for Strategic Initiatives in Global HIV Trials

Trial Steering Committee, MAVMET Trial: A multicenter, a multicenter, 48week randomized controlled factorial trial of adding Maraviroc and/or Metformin for hepatic steatosis in HIV-1-infected adults on combination antiretroviral therapy

United States National Institutes of Health Panel on Coronavirus Disease 2019 (COVID-19) Treatment Guidelines

Top Doctors Award, *Minnesota Monthly Magazine*

Editorial Panel, *HIV Medicine*

Caitlin Eccles-Radtke, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

W. Keith Henry, M.D.

Executive Committee, Study to Understand the Natural History of HIV/AIDS in the Era of Effective Therapy (SUN Study), Center for Disease Control

Planning Council, Minnesota Ryan White

Editorial Boards:

- *AIDS Clinical Care*
- *Journal of AIDS*

Amanda J. Noska, M.D., M.P.H.

Four Star Clinical Excellence Award, Essentia Health

Jessica L. Oswald, D.O.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Ronald L. Schut, M.D.

See Office of the Chair

Megan K. Shaughnessy, M.D.

Medical Monitor, National Institute of Allergy and Infectious Diseases (NIAID), Inpatient Treatment with anti-Coronavirus Immunoglobulin (ITAC), University of Minnesota

Top Doctors Award, *Minnesota Monthly Magazine*

Nicholas S. Vogenthaler, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Rebecca J. Zadroga, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

2021 Honors and Recognition of Faculty

NEPHROLOGY

Keith E. Eidman, D.O.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

David T. Gilbertson, Ph.D.

External Expert Panel for the Chronic Renal Insufficiency Cohort (CRIC) Studies, National Institute of Diabetes and Digestive and Kidney Disease, National Institutes of Health

Allyson Hart, M.D., M.S.

Event Adjudication Committee, Canadian-Australasian Randomised Trial of Screening Kidney Transplant Recipients for Coronary Artery Disease (CARSK Trial)

Safety Officer, Data and Safety Monitoring Board: Mindful Movement for Physical Activity and Wellbeing in Older Adults: A Community Based Randomized Hybrid Effectiveness-Implementation Study

Top Doctors Award, *Minnesota Monthly Magazine*

Danielle G. Haselby, D.O.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Ajay K. Israni, M.D., M.S.

Kidney Precision Medicine Project COVID-19 Data Safety Monitoring Board, NIDDK, NIH

Scientific Registry of Transplant Recipients:

- Deputy Project Director
- Medical Director

Kirsten L. Johansen, M.D.

External Expert Panel Member, Chronic Renal Insufficiency Cohort, National Institute of Diabetes and Digestive and Kidney Diseases

Observational Study Monitoring Board, Study of Physical Resilience and Aging, National Institute of Aging

Steering Committee, Glaxo Smith Kline Anaemia Studies in Chronic Kidney Disease: Erythropoiesis via a Novel PHI Daprodustat (ASCEND) Study

United States Renal Data System, Director

Lazarus Distinguished Award, National Kidney Foundation

Associate Editor, *Journal of the American Society of Nephrology*

Editorial Board:

- *American Journal of Kidney Diseases*
- *Clinical Journal of the American Society of Nephrology*
- *Journal of the American Society of Nephrology*
- *Journal of Renal Nutrition*
- *Kidney International*

Theme Editor, Hemodialysis, *Nephrology, Dialysis, Transplantation*

Bertram L. Kasiske, M.D.

Board of Trustees, CADASIL Association

Medical Director for Living Donation, Scientific Registry of Transplant Recipients, Health Resources and Services Administration

Methods Committee, Kidney Disease: Improving Global Outcomes

Saugar Maripuri, M.D., M.P.H.

Bertram Kasiske Nephrology Teaching Award, Nephrology Fellowship, Hennepin Healthcare

Top Doctors Award, *Minnesota Monthly Magazine*

2021 Honors and Recognition of Faculty

NEPHROLOGY (CONT.)

Eileen A. O'Shaughnessy, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Jon J. Snyder, Ph.D., M.S.

Board of Directors, Organ Donation and Transplantation Alliance

Clinical Policy Board, LifeSource

Secretary, Board of Directors, Donate Life America

Associate Editor, *Transplantation*

Statistical Editor, *American Journal of Transplantation*

James B. Wetmore, M.D., M.S.

Event Adjudication Committee, Canadian-Australasian Randomised Trial of Screening Kidney Transplant Recipients for Coronary Artery Disease (CARSK Trial)

United States Renal Data System, Deputy Director

Editorial Board, *Clinical Journal of the American Society of Nephrology*

Jennifer F. Wu, D.O.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

PULMONARY, ALLERGY AND CRITICAL CARE

Scott F. Davies, M.D.

Top Doctors Award, *Mpls.St.Paul Magazine*

Kenneth W. Dodd, M.D.

Institutional Award for Research and Academics, Advocate Christ Medical Center

Joshua Dorn, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Heidi L. Erickson, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

Robert Kempainen, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

James W. Leatherman, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Michele M. LeClaire, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

William A. Marinelli, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Matthew E. Prekker, M.D., M.P.H.

Co-Founder and Member, Organizing Committee, Twin Cities ECMO Consortium

Education Committee, American Thoracic Society

Top Doctors Award, *Minnesota Monthly Magazine*

Section Editor, Critical Care, *Western Journal of Emergency Medicine*

Robert S. Shapiro, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

Mark D. Sprenkle, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

Top Doctors Award, *Mpls.St.Paul Magazine*

John B. Sweet, M.D.

Top Doctors Award, *Minnesota Monthly Magazine*

2021 Honors and Recognition of Faculty

RHEUMATOLOGY

Rawad Nasr, M.D.

Board of Directors, Minnesota Chapter, Arthritis Foundation

Top Doctors Award, *Minnesota Monthly Magazine*

Linh Ngo, D.O.

Top Doctors Award, *Minnesota Monthly Magazine*

Peter A. Schlesinger, M.D.

Top Doctors Award, *Mpls.St.Paul Magazine*

Zaki Abou Zahr, M.D.

Top Doctors: Rising Star, *Mpls.St.Paul Magazine*

MEDICAL EDUCATION PROGRAM

Anne L. Becker, M.D.

See Hospital Medicine

Samuel T. Ives, M.D.

See General Internal Medicine

Michael J. Lawson, M.D.

See Hospital Medicine

Rawad Nasr, M.D.

See Rheumatology

Jessica L. Oswald, D.O.

See Infectious Diseases

Rosemary A. Quirk, M.D., D.T.M.H.

See Office of the Chair

Charles P. Reznikoff, M.D.

See Addiction Medicine

Brian Yablon, M.D.

See Hospital Medicine

Advanced Practice Providers 2021

Addiction Medicine

Brenda R. Bauch, N.P.
Catherine C. Earl-Torniainen, P.A.
Amy L. Skroch, N.P.

Cardiology

Vivian M. Igwacho, N.P.
Jill Jordan, P.A.
Michael N. Konstantinides, P.A.
Melissa M. LaBrosse, P.A.
Kay L. Tyberg, N.P.

Endocrinology, Metabolism, and Diabetes

Megan McGovern, N.P.
Cathy O'Brien, N.P.

Gastroenterology

Brittany Bjornstad, P.A.*
Jesse Powell, P.A.
Chelsea R. Ruda, P.A.
Sydney Ungar, P.A.

General Internal Medicine

Bethany Allen, N.P.
Kelsie Byrd, N.P.
Sareedo A. Hashi, N.P.
Kathryn Hoffman, N.P.
Brian H. Imdieke, N.P.
Kaylin Kolb, N.P.
Sarah J. Lexcen, P.A.
Ashley Lundberg, N.P.
Emily J. Mercil, N.P.
Judy Nelson, N.P.*
Debora Nugent, N.P.
Samuel Obeng-Amoako, N.P.
Xin Piao, N.P.
Lindsey L. Pogemiller, N.P.
Elspeth K. Ronnander, N.P.
Lewis Simpler, N.P.
Gay M. Varecka, N.P.

Nicole M. Weaver, N.P.
Elsie Woodward, N.P.
Padla Yang, N.P.

Geriatric and Palliative Medicine

Michelle Aldrich-Goldstein, N.P.
Koleena J. Harrison, N.P.
Kathleen S. Holets, N.P.
Sheila A. Howes, N.P.
Felicia C. Ikebude, N.P.
Gregory J. Leierwood, N.P.
Sharon J. Momanyi, N.P.
Edward Newton, N.P.
James Orton, P.A.
Elizabeth Purdy, N.P.
Maria I. Santos, N.P.
Comfort T. Seibure, N.P.
Shakilah M. Shalita, N.P.

Hematology/Medical Oncology

Louann Bosmans, N.P.
Jennifer A. Draskowski, N.P.*
Mary E. Johnston, N.P.
Mary Katharine Johnson, N.P.
Syndal Ortman, N.P.
Anne Remington, N.P.

Hospital Medicine

Erica DeVries, P.A.
Bray E. Johnson, N.P.
Haley L. Johnson, P.A.
Erica Monroe, P.A.*
Michelle L. Oeding, P.A.
Casey L. Stessman, P.A.
Joseph Strangfeld, P.A.

Infectious Diseases

Brian Goodroad, N.P.
Kristin M. Grage, N.P.
Kathleen M. Kuempel, N.P.

Integrative Health and Wellness

Benjamin E. Backus, D.C.
Ulrich F. Beyendorff, LAc
Jessica Brown, LAc
Jack P. Carver, LAc
Angela B. Clifford, LAc
Robert Crane, LAc
Natalie M. Giacomini, D.C.
Heidi Kimmer, LAc
Lindsay Policano, D.C.
Richard Printon, D.C.
John H. Sampson, D.C.
Jamie Schafer, LAc
Tara Schug, D.C.
Jess Siers, LAc
Ghazala P. Usman, D.C.
Nicole Zaret, LAc

Nephrology

Rougui Bah, N.P.
Rachel A. Sumo, N.P.

Pulmonary, Allergy and Critical Care

Lisa R. Ocker, N.P.*
Elizabeth Roth, N.P.

Rheumatology

Corinna Werner, N.P.*

* Left Division in 2021.



Research & Scholarly Activities

Summary of
Grants & Contracts

Summary of Funding Sources

PUBLICATIONS

Clinical Pharmacology Division

The Clinical Pharmacology Division includes six principal investigators; Mark LeSage, Ph.D. (Director), Andrew Busch, Ph.D. (Clinical Liaison), Andrew Harris, Ph.D., Sandra Japuntich, Ph.D., Paul Pentel, M.D., and John Smethells, Ph.D.; along with 13 staff and trainees. The division's research is broadly focused on the development, delivery, efficacy, and implementation of pharmacological and behavioral interventions for drug addiction and other health-related behaviors. A common interest of all investigators is the etiology and treatment of tobacco addiction. Other areas of interest include individual differences in vulnerability to and treatment of opioid addiction, the comorbidity of drug addiction and psychiatric disorders, and the intersection of mental health, physical health, and other health behaviors. The Division has national and international collaborations with numerous investigators within and outside Hennepin Healthcare in fields that span medicinal chemistry, in vitro pharmacology and neuroscience, in vivo pharmacology and behavior, human laboratory studies, clinical trials, and epidemiology.

Our faculty grew this year with the promotion of Dr. Smethells to an Investigator 1 position at Hennepin Healthcare Research Institute (HHRI). Dr. Smethells was formerly a postdoctoral scientist working in the LeSage/Harris Lab and is forging an independent research program with receipt of his first R01 grant from NIH to study the pharmacology and behavioral effects of compounds in electronic cigarettes.

Over the past year, the preclinical research program continued its NIH/FDA-funded regulatory research to inform tobacco control policies being considered by the Food and Drug Administration (FDA) Center for Tobacco Products.

Tobacco use remains the leading preventable cause of death and disease world-wide. In the United States, nearly 40 million adults still smoke cigarettes, and over 3 million adolescents use at least one tobacco product, including e-cigarettes. With the passage of the Family Smoking Prevention and Tobacco Control Act in 2009, the FDA was given the authority to regulate tobacco products for the protection of public health.

One policy currently being considered is reducing the nicotine content in cigarettes to make them less addictive. Preclinical studies in our division have been characterizing individual differences in the lowest (i.e., threshold) nicotine dose that can engender and maintain nicotine self-administration in adolescent models of comorbid depression or Attention Deficit



Left to right: Preclinical Investigators Andy Harris, Ph.D., Jack Smethells, Ph.D., and Mark LeSage, Ph.D. (Division Director) and Clinical Investigators Drew Busch, Ph.D. and Sandra Japuntich, Ph.D.

Hyperactivity Disorder (ADHD). Studies have shown that the threshold reinforcing nicotine dose in these models is similar to control groups without these comorbidities. These findings suggest that a nicotine standard for tobacco products based on research in the general population may also be effective in reducing tobacco use in vulnerable subpopulations like those with depression or ADHD.

In addition to nicotine, the FDA is concerned about other Harmful or Potentially Harmful Constituents (HPHCs) that may contribute to the addictiveness or toxicity of tobacco products. Other NIH/FDA-funded preclinical research in the Division is showing that non-nicotine constituents may contribute to the addictiveness of combusted tobacco products (e.g., cigarettes) and non-combusted products like electronic cigarettes. For example, one notable constituent, beta-nicotyrine, is an abundant minor alkaloid in electronic cigarettes. Studies under a new

R01 grant funded in 2021 (Dr. Smethells, PI) suggests that beta-nicotyrine reduces nicotine metabolism (i.e., slows nicotine elimination from the body), activates the same receptors in the brain that are responsible for the addictiveness of nicotine, and increases sensitivity to the subjective effects of nicotine. These findings suggest that beta-nicotyrine could contribute significantly to the addictiveness of electronic cigarettes through one or more these mechanisms. As such, addition of this constituent to the FDA's list of HPHCs should be considered.

Another major focus of the preclinical research division is on individual differences in vulnerability to opioid addiction. The opioid epidemic is a public health crisis that led to over 80,000 overdose deaths in the U.S.A in 2021. However, while many people experiment with opioids, only some of these individuals become addicted.

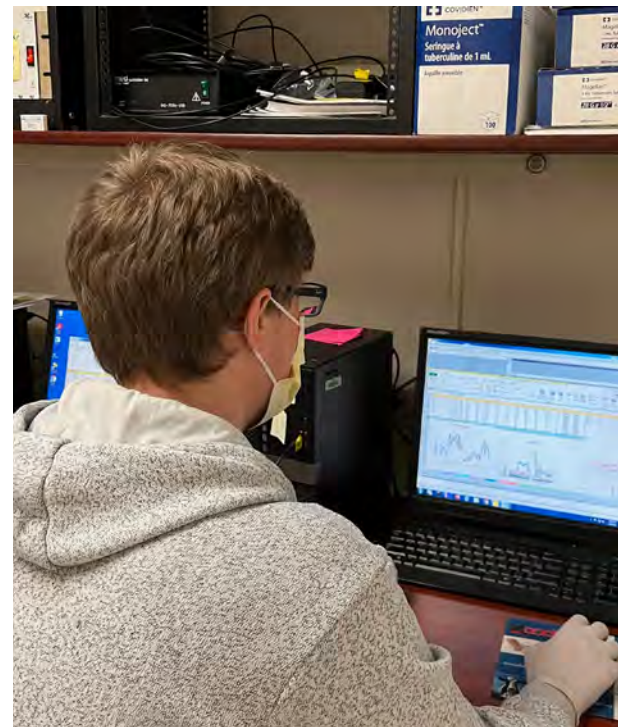
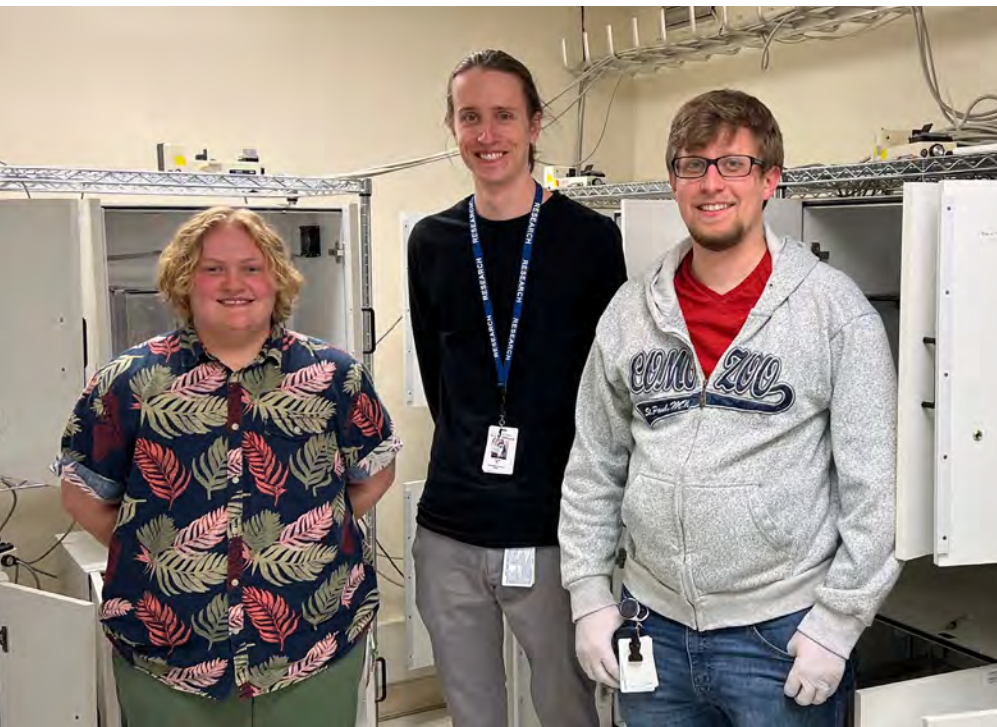
In collaboration with investigators at the University of Minnesota, Arizona State University, and the Icahn School of Medicine at Mt. Sinai, the preclinical research group is part of a U01 consortium examining genetic factors contributing to individual differences in vulnerability to different stages of opioid addiction (for example, acquisition, relapse). The results of this research may help develop more effective preventions and treatments for opioid addiction that are tailored to the individual.

Preclinical research on the development of vaccines to reduce opioid addiction and overdose continued in 2021. Anti-opioid vaccines activate the immune system to produce antibodies that bind to target opioids, sequester them in blood, and reduce their distribution to brain. As a result, the central nervous system effects of opioids that mediate their addictive reinforcing effects are significantly reduced.

Over the years, studies in our Division have shown that vaccines against oxycodone, heroin, and fentanyl can significantly reduce the reinforcing effects of those drugs. This work supported an ongoing clinical trial of an oxycodone vaccine to help people quit using this prescription opioid. In 2021, we tested a next-generation fentanyl vaccine formulation that includes a novel Toll-like Receptor (TLR) agonist. This compound acts as an adjuvant to boost the immune response to the vaccine. We found that, in addition to boosting immunogenicity, this formulation significantly enhanced efficacy of the vaccine at reducing self-administration of fentanyl. These findings, in addition to studies by collaborators at the Universities of Minnesota and Montana, suggest that this vaccine could help reduce fentanyl addiction and overdose. This work is supporting the submission of an Investigational New Drug (IND) application to begin Phase 1 clinical trials with this vaccine.



Behavioral Health Equity Research Group virtual meeting, left to right (top): Melissa Adkins-Hempel, Andrew Busch, Ph.D., L.P., Sandra Japuntich, Ph.D., L.P., Carina Lundtvedt, (bottom) Pearl Fang, Nathalia Gutierrez Sacasa, Atefeh Alavi Fili, Oscar Oranday Perez, and Lynn Andreae, Ph.D.



Preclinical Research Staff, above left (left to right): Sarah Wilde, Peter Muelken, Sam Howard. Above right, Sam Howard analyzing data.

For the clinical research program, the past year has been one of growth and resilience. After adapting to the COVID-19 pandemic, clinical research hit its stride with hybrid work for staff and remote data collection. Over the past year, the lab staff has expanded and now includes four research assistants/coordinators, two counselors, and a project manager. While many research teams across the country have struggled with staffing, this team has stayed strong and found new ways to connect including Slack (the messaging app), weekly lab meetings, professional development meetings with all staff, and lab social events. Ongoing grants and in-process grant submissions have fostered partnerships with new collaborators.

With ongoing and new grants from NIH, funding for clinical research in our Division was strong in 2021. Dr. Japuntich's work included several projects focused on increasing access to smoking cessation treatment and cancer screening in healthcare settings (including mental health clinics, dental clinics, primary care, and inpatient hospital floors).

For example, Free Samples for Health (FreSH) is a study conducted in the National Dental Practice Based Research Network. The primary aim of FreSH is to test whether providing free samples of nicotine replacement therapy during routine dental care will produce long term abstinence from cigarettes, quit attempts, or nicotine replacement therapy use compared to those who receive another gift unrelated to smoking cessation. The Proactive Outreach for Smoking Treatment (POST) is an implementation strategy development study. The goal of the study is to develop and test the feasibility, acceptability, and

preliminary effectiveness of implementing proactive outreach for smoking cessation and the 5 As for tobacco cessation (Ask about tobacco use, Advise to quit, Assess interest in quitting, Assist with cessation, and Arrange for follow-up) in community mental health centers. The Access to Better Cancer Screening (ABCS) study assessed the availability and uptake of lung cancer screening with low dose CT across two healthcare systems (Hennepin Healthcare and Lifespan). The study is surveying and interviewing patients and providers in Minnesota and Rhode Island to determine rates of screening, barriers and facilitators of screening, real world experiences with screening, and whether there are disparities in screening by race.

Dr. Japuntich is also particularly interested in promoting health equity through identifying and treating tobacco use and tobacco related disease among vulnerable populations. The Smoking Cessation Outreach for Research Equity (SCORE) project is part of the center C2DREAM (Chronic Disease Reduction and Equity Promotion Across Minnesota) aimed at mitigating the effect of racism on cardiovascular disease. The study tests the effect of adding care coordination for tobacco cessation treatment to usual care for Black Indigenous People of Color (BIPOC) patients who smoke cigarettes. This study is enrolling 2000 BIPOC patients across two healthcare systems: Hennepin Healthcare and Mayo Clinic Health System. The primary outcome is long term abstinence from combustible tobacco products.

Dr. Busch's current work includes 1) efforts to understand physical health disparities among those with mental illness, 2) developing interventions that target improvement in both mental and physical health, and 3) developing counseling interventions to improve physical health among our most underserved communities (e.g., individuals who are experiencing homelessness, incarceration, or are immigrants).

Two clinical trials are ongoing. The Post-Acute Cardiac Event Smoking (PACES) study is a randomized control trial that aims to help people who have just experienced a cardiac event to quit smoking and keep their mood up. The COMPARE study is a four site noninferiority trial of tele-delivered Hatha Yoga vs. tele-delivered evidence-based psychotherapy (Behavioral Activation) for depression. Dr. Busch is leading the Minnesota recruitment site and the development and implementation of the Behavioral Activation treatment. In light of the significance of Dr. Busch's work, he received the 2021 Department of Medicine Research Excellence Award.

Moving forward, preclinical investigators are seeking funding to examine the adverse effects of maternal e-cigarette and opioid use on neurobehavioral development and its genomic mechanisms in offspring, will continue to isolate the role that non-nicotine constituents play in the addictiveness of tobacco products, and will begin development of next-generation vaccines to treat heroin addiction. Clinical investigators continue seeking funding to test behavioral treatment and intervention strategies at the intersection of mental and physical health to promote health equity.

Mark G. LeSage, Ph.D.

Director, Clinical Pharmacology Division

2021 SUMMARY OF DEPARTMENT OF MEDICINE GRANTS AND CONTRACTS

DIVISION	ANNUAL DIRECT COSTS AWARDED	ANNUAL INDIRECT COSTS AWARDED	ANNUAL TOTAL COSTS AWARDED
Addiction Medicine	\$ 8,316,721	\$ 435,196	\$ 8,751,917
Clinical Pharmacology	3,486,614	949,176	4,435,790
General Internal Medicine	2,231,433	294,014	2,525,457
Geriatric and Palliative Medicine	11,717,446	758,581	12,476,027
Hematology/Medical Oncology	24,083	–	24,083
Infectious Diseases	3,326,830	680,070	4,006,900
Nephrology	3,262,357	651,427	3,913,784
Pulmonary, Allergy, and Critical Care	850,380	73,958	924,338
Vice Chair of Medicine	137,647	19,554	157,201
Totals	\$33,353,521	\$ 3,861,976	\$37,215,497

2021 SUWMMARY OF FUNDING SOURCES

FUNDING SOURCES	ANNUAL DIRECT COSTS AWARDED	ANNUAL INDIRECT COSTS AWARDED	ANNUAL TOTAL COSTS AWARDED
Foundation	\$ 43,150	\$ 1,907	\$ 45,057
Government	27,785,604	2,839,494	30,625,098
Industry	1,714,255	521,156	2,235,411
Internal	3,810,512	499,419	4,309,931
	\$ 33,353,521	\$ 3,861,976	\$ 37,215,497

Department of Medicine Faculty Publications 2021

The following list of publications includes all articles, editorials, book chapters, and books that were published in 2021. Letters to the editor have not been included.

ADDICTION MEDICINE

Activ-Tico Ly- CoV555 Study Group, Lundgren JD, Grund B, Barkauskas CE, Holland TL, Gottlieb RL, Sandkovsky U, Brown SM, Knowlton KU, Self WH, Files DC, Jain MK, Benfield T, Bowdish ME, Leshnowar BG, **Baker JV**, et al. A neutralizing monoclonal antibody for hospitalized patients with COVID-19. *N Engl J Med.* 2021;384(10):905-914.

Bagley SM, Chavez L, Braciszewski JM, Akolsile M, Boudreau DM, Lapham G, Campbell CI, **Bart G**, Yarborough BJH, Samet JH, Saxon AJ, Rossom RC, Binswanger IA, Murphy MT, Glass JE, Bradley KA, Proud Collaborative. Receipt of medications for opioid use disorder among youth engaged in primary care: Data from 6 health systems. *Addict Sci Clin Pract.* 2021;16(1):46.

Bart G, Giang LM, Yen H, Hodges JS, Brundage RC. Effect of HIV, antiretrovirals, and genetics on methadone pharmacokinetics: Results from the methadone antiretroviral pharmacokinetics study. *Drug Alcohol Depend.* 2021;227:109025.

Campbell CI, Saxon AJ, Boudreau DM, Wartko PD, Bobb JF, Lee AK, Matthews AG, McCormack J, Liu DS, Addis M, Altschuler A, Samet JH, LaBelle CT, Arnsten J, Caldeiro RM, Borst DT, Stotts AL, Braciszewski JM, Szapocznik J, **Bart G**, et al. Primary care Opioid Use Disorders treatment (PROUD) trial protocol: A pragmatic, cluster-randomized implementation trial in primary care for opioid use disorder treatment. *Addict Sci Clin Pract.* 2021;16(1):9.

Edsall A, Dinh TTT, Mai PP, Hoffman K, Nguyen HT, Khuyen TT, Trang NT, **Bart G**, Giang LM, Korthis PT. Provider perspectives on integration of substance use disorder and HIV care in Vietnam: A qualitative study. *J Behav Health Serv Res.* 2021;48(2):274-286.

Ford BR, **Bart G**, **Grahan B**, Shearer RD, **Winkelman TNA**. Associations between polysubstance use patterns and receipt of medications for opioid use disorder among adults in treatment for opioid use disorder. *J Addict Med.* 2021;15(2):159-162. (Also listed in *General Internal Medicine*)

Hodgkin D, Horgan C, **Bart G**. Financial sustainability of payment models for office-based opioid treatment in outpatient clinics. *Addict Sci Clin Pract.* 2021;16(1):45.

Howell BA, **Bart G**, Wang EA, **Winkelman TNA**. Service involvement across multiple sectors among people who use opioids, methamphetamine, or both, United States-2015-2018. *Med Care.* 2021;59(3):238-244. (Also listed in *General Internal Medicine*)

Joudrey PJ, **Bart G**, Brooner RK, Brown L, Dickson-Gomez J, Gordon A, Kawasaki SS, Liebschutz JM, Nunes E, McCarty D, Schwartz RP, Szapocznik J, Trivedi M, Tsui JI, Williams A, Wu LT, Fiellin DA. Research priorities for expanding access to methadone treatment for opioid use disorder in the United States: A national institute on drug abuse center for clinical trials network task force report. *Subst Abuse.* 2021;42(3):245-254.

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ADDICTION MEDICINE (CONT.)

Korthuis PT, King C, Cook RR, Khuyen TT, Kunkel LE, **Bart G**, Nguyen T, Thuy DT, Bielavitz S, Nguyen DB, Tam NTM, Giang LM. HIV clinic-based buprenorphine plus naloxone versus referral for methadone maintenance therapy for treatment of opioid use disorder in HIV clinics in Vietnam (BRAVO): An open-label, randomised, non-inferiority trial. *Lancet HIV*. 2021;8(2):e67-e76.

Rossom RC, Sperl-Hillen JM, O'Connor PJ, Crain AL, Nightingale L, Pylkas A, Huntley KV, **Bart G**. A pilot study of the functionality and clinician acceptance of a clinical decision support tool to improve primary care of opioid use disorder. *Addict Sci Clin Pract*. 2021;16(1):1-11.

Trivedi MH, Walker R, Ling W, Dela Cruz A, Sharma G, Carmody T, Ghitza UE, Wahle A, Kim M, Shores-Wilson K, Sparenborg S, Coffin P, Schmitz J, Wiest K, **Bart G**, Sonne SC, Wakhlu S, Rush AJ, Nunes EV, Shoptaw S. Bupropion and naltrexone in methamphetamine use disorder. *N Engl J Med*. 2021;384(2):140-153.

Tsui JI, Akosile MA, Lapham GT, Boudreau DM, Johnson EA, Bobb JF, Binswanger IA, Yarborough BJH, Glass JE, Rossom RC, Murphy MT, Cunningham CO, Arnsten JH, Thakral M, Saxon AJ, Merrill JO, Samet JH, **Bart GB**, et al. Prevalence and medication treatment of opioid use disorder among primary care patients with hepatitis C and HIV. *J Gen Intern Med*. 2021;36(4):930-937.

CARDIOLOGY

Banerjee D, Rosano G, **Herzog CA**. Management of heart failure patient with CKD. *Clin J Am Soc Nephrol*. 2021;16(7):1131-1139.

Bian J, **Herzog CA**, Rangaswami J, Wald R, Stratman JA, Asif A, Sidhu MS, Bangalore S, Mathew RO. Lung sestamibi uptake on myocardial perfusion imaging and outcomes in chronic kidney disease. *Cardiorenal Med*. 2021;11(1):67-76.

Buda KG, Megaly MS, Jensen J, **Aynew W**, Miedema M, Thompson PD, Gopal D. Safety and efficacy of bempedoic acid in statin-intolerant patients: A systematic review and meta-analysis. *World Heart J*. 2021;13(3):449-458. (Also listed in *Medicine Education*)

Buda KG, **Urbach J**, Rivard M, Knoper RC, **Carlson MD**, **Kohl L**. A pericardial pin: Embolization of an inferior vena cava filter strut presenting as acute pericarditis. *JACC: Case Reports*. 2021;3(2):304-308. (Also listed in *Medicine Education*)

Choi Y, Steffen LM, Chu H, Duprez DA, Gallaher DD, Shikany JM, Schreiner PJ, **Shroff GR**, Jacobs DR. A plant-centered diet and markers of early chronic kidney disease during young to middle adulthood: Findings from the Coronary Artery Risk Development in Young Adults (CARDIA) cohort. *J Nutr*. 2021;151(9):2721-2730.

Dilsizian V, Gewirtz H, Marwick TH, Kwong RY, Raggi P, Al-Mallah MH, **Herzog CA**. Cardiac imaging for coronary heart disease risk stratification in chronic kidney disease. *JACC Cardiovasc Imaging*. 2021;14(3):669-682.

Dodd KW, Zvosec DL, Hart MA, Glass G 3rd, Bannister LE, Body RM, Boggust BA, Brady WJ, Chang AM, Cullen L, Gómez-Vicente R, Huis In 't Veld MA, **Karim RM**, Meyers HP 3rd, Miranda DF, Mitchell GJ, Reynard C, Rice C, Salverda BJ, Stellpflug SJ, Tolia VM, Walsh BM, White JL, Smith SW; PERFECT study investigators. Electrocardiographic Diagnosis of Acute Coronary Occlusion Myocardial Infarction in Ventricular Paced Rhythm Using the Modified Sgarbossa Criteria. *Ann Emerg Med*. 2021;78(4):517-529. (Also listed in *Pulmonary, Allergy, and Critical Care*)

Fuller M, **Buda KG**, **Urbach J**, **Carlson MD**, **Herzog CA**. Identification of an intracardiac shunt in a patient with recurrent cryptogenic strokes: Are dextrose solutions more sensitive? *CASE*. 2021;5(2):123-125. (Also listed in *Medicine Education*)

Garcia S, Cubeddu RJ, Hahn RT, Ternacle J, Kapadia SR, Kodali SK, Thourani VH, Jaber WA, Asher CR, Elmariah S, Makkar R, Webb JG, Herrmann HC, Lu M, Devireddy CM, Malaisrie SC, Smith CR, Mack MJ, Sorajja P, Cavalcante JL, Goessl M, **Shroff GR**, Leon MB, Pibarot P. 5-year outcomes comparing surgical versus transcatheter aortic valve replacement in patients with chronic kidney disease. *JACC Cardiovasc Interv*. 2021;14(18):1995-2005.

Department of Medicine Faculty Publications 2021

CARDIOLOGY (CONT.)

Goldsmith SR, Burkhoff D, Gustafsson F, Voors A, Zannad F, Kolkhof P, Staedtler G, Colorado P, Dinh W, Udelson JE. Dual vasopressin receptor antagonism to improve congestion in patients with acute heart failure: Design of the AVANTI trial. *J Card Fail.* 2021;27(2):233-241.

Herzog CA, **Simegn MA**, Xu Y, Costa SP, Mathew RO, El-Hajjar MC, Gulati S, Maldonado RA, Daugas E, Madero M, Fleg JL, Anthopolos R, Stone GW, Sidhu MS, Maron DJ, Hochman JS, Bangalore S. Kidney transplant list status and outcomes in the ISCHEMIA-CKD trial. *J Am Coll Cardiol.* 2021;78(4):348-361.

Ishida JH, Chauhan C, Gillespie B, Gruchalla K, McCullough PA, Quella S, Romero A, Rossignol P, Wheeler DC, Malley MA, West M, **Herzog CA**. Understanding and overcoming the challenges related to cardiovascular trials involving patients with kidney disease. *Clin J Am Soc Nephrol.* 2021;16(9):1435-1444.

Johansen KL, Chertow GM, Foley RN, **Gilbertson DT**, **Herzog CA**, Ishani A, **Israni AK**, Ku E, Kurella Tamura M, **Li S**, Li S, **Liu J**, Obrador GT, O'Hare AM, Peng Y, Powe NR, Roetker NS, St Peter WL, Abbott KC, Chan KE, Schulman IH, **Snyder J**, Solid C, Weinhandl ED, Winkelmayer WC, **Wetmore JB**. US renal data system 2020 annual data report: Epidemiology of kidney disease in the United States. *American journal of kidney diseases: the official journal of the National Kidney Foundation.* 2021;77(4 Suppl 1):A7-A8. (Also listed in *Nephrology*)

Johansen KL, Garimella PS, Hicks CW, Kalra PA, Kelly DM, Martens S, Matsushita K, Sarafidis P, Sood MM, **Herzog CA**, Cheung M, Jadoul M, Winkelmayer WC, Reinecke H, Conference Participants. Central and peripheral arterial diseases in chronic kidney disease: Conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) controversies conference. *Kidney Int.* 2021;100(1):35-48. (Also listed in *Nephrology*)

Kelly DM, Ademi Z, Doehner W, Lip GYH, Mark P, Toyoda K, Wong CX, Sarnak M, Cheung M, **Herzog CA**, **Johansen KL**, Reinecke H, Sood MM. Chronic kidney disease and cerebrovascular disease: Consensus and guidance from a KDIGO controversies conference. *Stroke.* 2021;52(7):e328–e346. DOI:10.1161/STROKEAHA.120.029680. (Also listed in *Nephrology*)

Mathew RO, Lo KB, Tipparaju P, Phelps E, Sidhu MS, Bangalore S, **Herzog C**, Vaduganathan M, Tang WHW, Rangaswami J. Patterns of use and clinical outcomes with angiotensin-converting enzyme inhibitors and angiotensin receptor blockers in acute heart failure and changes in kidney function: An analysis of the veterans' health administrative database. *Cardiorenal Med.* 2021;11(5-6):226-236.

Meyers HP, Bracey A, Lee D, Lichtenheld A, Li WJ, Singer DD, Kane JA, **Dodd KW**, Meyers KE, Thode HC, **Shroff GR**, Singer AJ, Smith SW. Comparison of the ST-elevation myocardial infarction (STEMI) vs. NSTEMI and occlusion MI (OMI) vs. NOMI paradigms of acute MI. *J Emerg Med.* 2021;60(3):273-284. (Also listed in *Pulmonary, Allergy, and Critical Care*)

Meyers HP, Bracey A, Lee D, Lichtenheld A, Li WJ, Singer DD, Rollins Z, Kane JA, **Dodd KW**, Meyers KE, **Shroff GR**, Singer AJ, Smith SW. Ischemic ST-Segment depression maximal in v1-v4 (versus v5-v6) of any amplitude is specific for occlusion myocardial infarction (versus nonocclusive ischemia). *J Am Heart Assoc.* 2021;10(23):e022866. (Also listed in *Pulmonary, Allergy, and Critical Care*)

Ngendahimana DK, Deo SV, Sundaram V, Lentine KL, **Herzog CA**, Al Dahabreh L, Srinivas TR, Chavin KD, Sarabu N. Outcomes of surgical mitral and aortic valve replacements among kidney transplant candidates: Implications for valve selection. *J Am Heart Assoc.* 2021;10(5):e018971.

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Department of Medicine Faculty Publications 2021

CARDIOLOGY (CONT.)

Ogugua F, Herzog CA, Sahadevan M, Davies S, Shroff GR. An indolent cause of high-output heart failure in end-stage kidney disease-application of the Nicoladoni-Israel-Branham test: A case report. *Echocardiography.* 2021;38(10):1817-1820. (Also listed in *Medicine Education, Nephrology, and Pulmonary, Allergy and Critical Care*)

Ogugua F, Ternacle J, Rodin H, Pibarot P, **Shroff GR.** Impact of arteriovenous fistula and non-physiological flow states in the evaluation of aortic stenosis among end-stage kidney disease patients on dialysis. *Circulation.* 2021;144 (Suppl_1), A9915. (Also listed in *Medicine Education*)

Reynolds MR, Gong T, Li S, **Herzog CA,** Charytan DM. Cost-effectiveness of coronary artery bypass grafting and percutaneous coronary intervention in patients with chronic kidney disease and acute coronary syndromes in the US Medicare program. *J Am Heart Assoc.* 2021;10(7):e019391.

Shroff GR, Bangalore S, Bhavne NM, Chang TI, Garcia S, Mathew RO, Rangaswami J, Ternacle J, Thourani VH, Pibarot P. Evaluation and management of aortic stenosis in chronic kidney disease: A scientific statement from the American Heart Association. *Circulation.* 2021;143(25):e1088-e1114.

Shroff GR, Carlson MD, Mathew RO. Coronary artery disease in chronic kidney disease: Need for a heart-kidney team-based approach. *Eur Cardiol.* 2021;16:e48. doi: 10.15420/ecr.2021.30.

Shroff GR, Henry TD. Percutaneous coronary intervention in end-stage kidney disease: Trapped between a rock and a hard place. *Catheter Cardiovasc Interv.* 2021;98(2):215-216.

Urbach J, **Goldsmith SR.** Vasopressin antagonism in heart failure: A review of the hemodynamic studies and major clinical trials. *Ther Adv Cardiovasc Dis.* 2021;15:1753944720977741.

Wetmore JB, Yan H, **Herzog CA,** Weinhandl E, **Reyes JL,** Roetker NS. CKD progression in Medicare beneficiaries with nonvalvular atrial fibrillation treated with apixaban versus warfarin. *Am J Kidney Dis.* 2021;78(2):180-189. (Also listed in *Nephrology and Medicine Education*)

Wetmore JB, Yan H, Peng Y, **Gilbertson DT, Herzog CA.** Development and outcomes of hyperkalemia in hospitalized patients: Potential implications for care. *Am Heart J.* 2021;241:59-67. (Also listed in *Nephrology*)

Book Chapter

Simegn M, Herzog CA. Cardiac consultative approach to hemodialysis patients and cardiovascular evaluation and management of potential kidney transplant recipients. In: McCullough PA, Ronco C, eds. *Textbook of Cardiorenal Medicine.* Springer; 2021.

CLINICAL PHARMACOLOGY

Allen S, Thomas J, Harrison K, Emery RL, Petersen A, Winickoff JP, **Japuntich S.** Bupropion for postpartum smoking relapse: A remote protocol for a two-arm, double-blind, placebo-controlled randomized clinical trial. *Contemp Clin Trials.* 2021;106352. doi: 10.1016/j.cct.2021.106352.

Busch AM, Conroy D, Pagoto SL. Reaching intermittent tobacco users with technology: New Evidence. *Am J Public Health.* 2021;111(9):1567-1569.

Busch AM, Nederhoff DM, Dunsiger SI, **Japuntich SJ,** Chrastek M, Adkins-Hempel M, Rinehart LM, Lando H. Chronic care treatment for smoking cessation in patients with serious mental illness: A pilot randomized trial. *BMC Psychiatry.* 2021;21(1):104.

Garey L, Scott-Sheldon LAJ, Olofsson H, Nelson KM, **Japuntich SJ.** Electronic cigarette cessation among adolescents and young adults. *Substance Use and Misuse.* 2021;44:488-498.

Hammett PJ, **Japuntich SJ,** Sherman SE, Rogers ES, Danan ER, Noorbaloochi S, El-Shahawy O, Burgess DJ, Fu SS. Proactive tobacco treatment for veterans with posttraumatic stress disorder. *Psychol Trauma.* 2021;13(1):114-122.

Department of Medicine Faculty Publications 2021

CLINICAL PHARMACOLOGY (CONT.)

Harris AC. Further pharmacological characterization of a preclinical model of the early development of nicotine withdrawal. *Drug Alcohol Depend.* 2021;226:108870.

Harris AC. Magnitude of open-field thigmotaxis during mecamylamine-precipitated nicotine withdrawal in rats is influenced by mecamylamine dose, duration of nicotine infusion, number of withdrawal episodes, and age. *Pharmacol Biochem Beh.* 2021;205:173185.

Liu S, Gades M, Swain Y, **Harris AC**, Tran P, Gewirtz JC. Repeated morphine exposure activates synaptogenesis and other neuroplasticity-related gene networks in the dorsomedial prefrontal cortex of male and female rats. *Drug Alcohol Depend.* 2021;221:108598.

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Educational Activities

House Officers
(Current & Departing)

RESIDENT AWARDS

Fellows

PRESENTATIONS

Medical Education Program

The 2021–2022 academic year was one of challenge and change for the Internal Medicine and Emergency Medicine-Internal Medicine residencies and Department of Medicine. It was also a year of extraordinary service to patients, families, and communities all across Minnesota.

During the fall and winter Omicron surge, residents doubled nighttime coverage in the ICU and provided extra cross-cover support on wards. The Department of Defense sent physicians, nurses, and respiratory therapists to Hennepin to help manage unprecedented volumes; residents worked shoulder-to-shoulder with these providers and alongside hospitalists and ICU faculty to manage the influx of high-acuity patients and critical illnesses. Resident contributions were tremendous during this very difficult time.

Subspecialists Dr. Charles Reznikoff (Addiction Medicine) and Dr. Jessica Oswald (Infectious Diseases) became Associate Program Directors for the Internal Medicine residency in 2022. Dr. Reznikoff is an American College of Physicians Laureate Awardee with decades of experience in addiction and inpatient medicine, public policy, political advocacy and medical education. Dr. Oswald did residency and Chief Residency at Cook County Hospital in Chicago and runs the Infectious Disease course for second-year medical students at the University of Minnesota. She is a popular teacher with expertise in curriculum development, education best practices, HIV and viral hepatitis. She is passionate about social justice and

safety net health care and excited to work more closely with residents.

Diversity, equity, and inclusion remained a true north, with many examples.

A new partnership was created with the University of North Dakota's Indians into Medicine (INMED) program to bring Native American medical students to Hennepin for rotations. The first three INMED rotators arrived in the spring of 2022 and had a wonderful experience. Department of Medicine hospitalists and general internists also began traveling to the Rosebud Reservation in South Dakota to provide inpatient and

outpatient care. Residents have been invited to join this growing pool of faculty to experience Rosebud’s clinical environment and cultural richness. Native Americans are profoundly underrepresented in internal medicine programs and fellowships even as Native communities suffer extreme health disparities; the hope is that building clinical and educational connections with tribes and Native medical students will improve these outcomes. Finally, the first annual Eid al-Fitr celebration was held in April for residents, faculty, and newly matched interns. Our learning community came together to share a meal and hear personal stories and wonderful memories about Eid al-Fitr from Muslim residents.

The Internal Medicine residency continued to champion preventative care and earned two more Minnesota Department of Health primary care expansion grants for incoming interns—Dr. Nahdiya Ali from Somalia and Dr. Joseph Akambase from Ghana.

Since 2017 the Internal Medicine program has earned nearly \$3 million to train ten extra residents; graduates have entered outpatient practices all across Minnesota,

including in rural communities. Planning of annual clinic immersion blocks passed from Dr. Rawad Nasr to internist Dr. Heather Baxter, with continued exceptional logistical coordination by program administrator Nina Setala. Research opportunities in outpatient medicine and healthcare delivery are also accelerating; the Health Homelessness and Criminal Justice Lab, Justice Community Opioid Innovation Network (JCOIN) and Diabetes Homelessness Medication Support project were created by Dr. Tyler Winkelman, Dr. Katherine Vickery and other General Internal Medicine faculty to bring unsolved healthcare challenges into a new public health and social determinants focus.

The Internal Medicine and Emergency Medicine-Internal Medicine graduating classes of 2022 were celebrated at a banquet in June. Thirteen graduates, including three Chief Residents, went on to fellowships in Cardiology, Preventive Cardiology, Critical Care, Pulmonary-Critical Care, Nephrology, Geriatric Medicine and Infectious Diseases. Two Emergency Medicine-Internal Medicine graduates took combined hospitalist/emergency medicine positions at Hennepin;



**Rosemary Quirk, M.D.,
D.T.M.H.**

Internal Medicine
Residency Program
Director



Anne Becker, M.D.

Director, Faculty
Development for
Medicine Education



Samuel T. Ives, M.D.

Director, Undergraduate
Medical Education
Associate Program
Director, Internal
Medicine Residency



Michael J. Lawson, M.D.

Associate Program
Director, Internal
Medicine Residency

seven Internal Medicine graduates took jobs in hospital medicine and primary care in Minneapolis, Chicago, San Diego, Iowa, and rural Arizona. Over 50% of the 2022 graduating class published manuscripts or abstracts in training. Dr. Ka Bao Vang and Dr. Shrikar Rajagopal were co-honored with the Dr. Nick Briese Spirit of the Residency Award in recognition of their exceptional patient care, kindness, compassion and unfailing support of peers and colleagues.

Among the most joyful moments in 2022 was the arrival of the 2022-23 Internal Medicine and

Emergency Medicine-Internal Medicine interns, 23 incredible physicians from all over the world who are full of energy, clinical know-how and passion for internal medicine and social justice. In the aftermath of the pandemic, with complex organizational and departmental staffing shortages and personnel changes, it was a gift to welcome these amazing and talented people into our community

Rosemary Quirk, M.D., D.T.M.H.

Program Director, Internal Medicine



From left: Arianna Lofrano, M.D., Amber Lindsay, M.D., and Shrikar Rajagopal, M.D.

Chief Residents



Jessica L. Oswald, D.O.

Associate Program Director, Internal Medicine Residency



Charles P. Reznikoff, M.D.

Associate Program Director, Internal Medicine Residency



Brian Yablon, M.D.

Associate Program Director, Internal Medicine Residency

HOUSE OFFICERS 2021–2022

PGY I

Momen Alsayed	University of Minnesota Medical School
Karly Boll	University of Minnesota Medical School
William Dennehy	University of Minnesota Medical School
Spencer Goble	University of Minnesota Medical School
Kelly Hallowell	University of Minnesota Medical School
Abubakar Hassan	Sheikh University of Science and Technology College of Medical Sciences
Abel Hooker	Escuela Autónoma de Ciencias Médicas de Centro América
Garad Ibrahim	University of Minnesota Medical School
(Jack) John Inglis	Escuela Autónoma de Ciencias Médicas de Centro América
Ahmad Khalaf	A.T. Still Kirksville School of Osteopathic Medicine
Mohammed Khalid	Kansas City University College of Osteopathic Medicine
Stephanie Kuhlman	University of Minnesota Medical School
Rebecca Martinez	Kansas City University College of Osteopathic Medicine
Alesandra Mendoza	University of Minnesota Medical School
Philippe Nyembo	Des Moines University College of Osteopathic Medicine
Marissa Paulson	University of Minnesota Medical School
Sumar Quint	Medical College of Wisconsin
Alison Raffman (EM/IM)	University of Colorado School of Medicine
Nikolaus Rasmus	University of Minnesota Medical School
Kristin Rouse (EM/IM)	University of Minnesota Medical School
Lizbeth Rondon Rueda	Escuela Autónoma de Ciencias Médicas de Centro América
Abdulsabur Sanni	University of Minnesota Medical School
Lucas Zellmer	University of Minnesota Medical School

HOUSE OFFICERS 2021–2022

PGY II

Mohamed Artan	University of Minnesota Medical School
Katherine Blomquist	Des Moines University College of Osteopathic Medicine
Megan Conlon	University of Minnesota Medical School
Peter Dock	A.T. Still Kirksville School of Osteopathic Medicine
Roberto Fu	Escuela Autónoma de Ciencias Médicas de Centro América
Jeffrey Hall	University of New England College of Osteopathic Medicine
Abubakar Hassan	Sheikh University of Science and Technology College of Medical Sciences
Greta Kreider Carlson (EM/IM)	University of Colorado School of Medicine
Amelia Krug (EM/IM)	University of Minnesota Medical School
Marcela Kuijpers	Escuela Autónoma de Ciencias Médicas de Centro América
Michael Larson	A.T. Still Kirksville School of Osteopathic Medicine
Kirsten Lasley	Kansas City University College of Osteopathic Medicine
Evan Lister	University of Minnesota Medical School
Brooke McDonald	Kansas City University College of Osteopathic Medicine
Nathan Nelson	University of Minnesota Medical School
Nicole Pagel	Des Moines University College of Osteopathic Medicine
Beau Rigstad	Medical College of Wisconsin
Rachel Salz	University of Minnesota Medical School
Benjamin Swart	University of Minnesota Medical School
Gregory Thompson	University of Minnesota Medical School
Colton Thoreson	University of Minnesota Medical School
Nhat Vo	University of Minnesota Medical School
Elizabeth Wendt	Medical College of Wisconsin

HOUSE OFFICERS 2021–2022

PGY III

Mary Bernton	Louisiana State University School of Medicine
Kevin Buda	University of New England College of Osteopathic Medicine
Lea Buda	University of New England College of Osteopathic Medicine
Monazza Chaudhry	Aga Khan Medical College
Constantine Chima	University of Debrecen Medical School
Zachary Davidson (EM/IM)	Icahn School of Medicine at Mount Sinai
Adulrahman Gamam	University of Minnesota Medical School
Yasmin Haji-Kusow	Almaarefa Medical College
Rachel Husmann	University of Minnesota Medical School
Seth LaPorte	Kansas City University College of Osteopathic Medicine
Amber Lindsay	Lewis Katz University School of Medicine
Arianna Lofrano	Des Moines University College of Osteopathic Medicine
Muhammad Arslan Maan	Aga Khan Medical College
Michelle Nguyen (EM/IM)	University of California, Davis
Fredrick Ogugua	Gulf Medical University
Jessica Padniewski	A.T. Still University Kirksville College of Osteopathic Medicine
Acadia Pechauer	University of Minnesota Medical School
Shrikar Rajagopal	University of Minnesota Medical School
Carly Rosenberg	Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel
Michael Smith	Frank H. Netter MD School of Medicine at Quinnipiac University
Ka Bao Vang	University of Minnesota Medical School

HOUSE OFFICERS 2021–2022

PGY IV

Peter Bache-Wiig	University of Minnesota Medical School
Daniel Bernstein (EM/IM)	University of Minnesota Medical School
Max Fuller	University of South Dakota, Sanford School of Medicine
Rebecca Kummer	University of Minnesota Medical School
Elisabeth McHale (EM/IM)	University of Minnesota Medical School

PGY V

Rebecca Nahum (EM/IM)	University of Minnesota Medical School
Daniel Parsons-Moss (EM/IM)	University of Illinois College of Medicine

RESIDENT AWARDS

Nicholas Briese Spirit of the Residency Award

Shrikar Rajagopal	University of Minnesota Medical School
Ka Bao Vang	University of Minnesota Medical School

Craig Garrett Excellence in the Practice of Primary Care Medicine Awards

Acadia Pechauer	University of Minnesota Medical School
Ka Bao Vang	University of Minnesota Medical School

Excellence in the Practice of Primary Care Medicine Awards

Zachary Davidson (EM/IM)	Icahn School of Medicine at Mount Sinai
Marissa Paulson	University of Minnesota Medical School

Morris Davidman Teaching Award

Daniel Parsons-Moss (EM/IM)	University of Illinois College of Medicine
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Resident Research Award

Kevin Buda	University of New England College of Osteopathic Medicine
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DEPARTING HOUSE OFFICERS 2021–2022

NAME	CURRENT POSITION
Mary Bernton	Hospitalist, Locum Tenans, Traveling
Kevin Buda	Cardiovascular Disease Fellowship, Hennepin Healthcare
Lea Buda	Geriatric Medicine Fellowship, Hennepin Healthcare
Monazza Chaudhry	Pulmonary/Critical Care Fellowship, University of Vermont
Constantine Chima	Nephrology Fellowship, Baylor College of Medicine
Adulrahman Gamam	Preventive Cardiology Fellowship, Abbott Northwestern
Yasmin Haji-Kusow	Nephrology Fellowship, Hennepin Healthcare
Rachel Husmann	Infectious Diseases Fellowship, University of Minnesota
Seth LaPorte	Hospitalist, University of Minnesota
Amber Lindsay	Chief Resident, Hennepin Healthcare
Arianna Lofrano	Chief Resident, Hennepin Healthcare
Muhammad Arslan Maan	Hospitalist, Unity Point Health/St. Luke's, Cedar Rapids
Rebecca Nahum	Internal Medicine and Emergency Department, Hennepin Healthcare
Fredrick Ogugua	Cardiovascular Disease Fellowship, University of Illinois
Jessica Padniewski	Dermatology Residency, University of Minnesota
Daniel Parsons-Moss	Ultrasound Fellowship, Hennepin Healthcare
Marissa Paulson	Med/Peds Residency, University of Minnesota
Acadia Pechauer	Primary Care, El Rio Health, Tucson
Shrikar Rajagopal	Chief Resident, Hennepin Healthcare
Carly Rosenberg	Hospitalist, Loretto Hospital and West Suburban Medical Center, Chicago
Michael Smith	Infectious Diseases Fellowship, Tufts University
Ka Bao Vang	Hospitalist, Trinity Hospital, Chicago

DEPARTING HOUSE OFFICERS 2021–2022



Pictured left to right: Drs. Arti Prasad (Chair of Medicine), Carly Rosenberg, Arianna Lofrano, Fredrick Ogugua, Rachel Husmann, Seth LaPorte, Jessica Padniewski, Michael Smith, Yasmin Haji-Kusow, Acadia Pechauer, Constantine Chima, Kevin Buda, Monazza Chaudhry, Amber Lindsay, Lea Buda, Ka Bao Vang, and Rosemary Quirk, (Program Director).

FELLOWS 2021–2022

SPECIALTY	NAME	MEDICAL SCHOOL	RESIDENCY
Cardiovascular Medicine	Tareq Al Saadi (F1)	University of Damascus Syrian Arab Republic	University of Illinois at Chicago/ Advocate Christ Medical Center Oak Lawn, Illinois
	Joseph Steffens (F1)	University of Washington School of Medicine Seattle, Washington	Hennepin Healthcare Minneapolis, Minnesota
	Maen Assali (F2)	Jordan University of Science Ar-Ramtha, Jordan	Kent Hospital/Brown University Warwick, Rhode Island
	Joseph Jensen (F2)	University of Minnesota Minneapolis, Minnesota	Abbott Northwestern Hospital Minneapolis, Minnesota
	Jared Routh (F3)	Creighton University Omaha, Nebraska	University of Iowa Iowa City, Iowa
	Iulia Tulai (F3)	Universitatea de Medicina Si Farmacie, Romania	Danbury Hospital Danbury, Connecticut
	Jonathan Urbach (F3)	Boston University Boston, Massachusetts	Beth Israel Deaconess Medical Center Boston, Massachusetts Abbott Northwestern Hospital, Minneapolis, Minnesota
Critical Care Medicine	Danika Evans (F1)	Rocky Vista University College of Osteopathic Medicine Parker, Colorado	Hennepin Healthcare Emergency Medicine Minneapolis, Minnesota
	Sydney Hansen (F1)	Medical College of Wisconsin Milwaukee, Wisconsin	Hennepin Healthcare Emergency Medicine Minneapolis, Minnesota
	John Leo Maurer (F1)	University of Missouri Columbia, Missouri	Hennepin Healthcare Internal Medicine Minneapolis, Minnesota
	Chelsea Laber (F2)	Philadelphia College of Osteopathy Philadelphia, Pennsylvania	Kent Hospital/Brown University Warwick, Rhode Island
	Alexandra Schick (F2)	University of Minnesota Minneapolis, Minnesota	Brown University Providence, Rhode Island
Geriatric Medicine	Saida Yassin (F1)	Dokuz Eylul University Izmir, Turkey	Hennepin Healthcare Internal Medicine Minneapolis, Minnesota

Continued next page

FELLOWS 2021–2022 (CONT.)

SPECIALTY	NAME	MEDICAL SCHOOL	RESIDENCY
Interventional Cardiology	Ahmad Tarek Chami (F1)	University of Aleppo Syrian Arab Republic	Case Western Reserve Cardiology Fellowship Cleveland, Ohio
	Madelyn Mahowald (F1)	Warren Alpert Medical School Providence, Rhode Island	Mayo Clinic Cardiology Fellowship Rochester, Minnesota
Nephrology	Eimad Ahmmad (F1)	University of Khartoum Khartoum, Sudan	Howard University Internal Medicine Washington, D.C.
	Juliet Gatiba (F2)	University of Missouri Kansas City, Missouri	Loma Linda University Internal Medicine Loma Linda, California
	Yasmin Haji-Kusow (F1)	Almaarefa Medical College Riyadh, Saudi Arabia	Hennepin Healthcare Internal Medicine Minneapolis, Minnesota
	Samuel Katz (F2)	Des Moines University College of Osteopathic Medicine Des Moines, Iowa	Hennepin Healthcare Internal Medicine Minneapolis, Minnesota
Sleep Medicine	Nataliia Baker (F1)	Kharkov National Medical University	St Mary-Corwin Medical Center Family Medicine Pueblo, Colorado
	Rekha Kallamadi (F1)	Kurnool Medical College Kurnool, India	University of North Dakota Internal Medicine Fargo, North Dakota
	Kelash Kumar (F1)	Liaquat University of Medical & Health Sciences Jamshoro, Pakistan	St Joseph Mercy-Oakland Internal Medicine Pontiac, Michigan

2021–2022 Presentations

AMERICAN COLLEGE OF CARDIOLOGY (ACC)

71ST ANNUAL SCIENTIFIC SESSION

April 2-4, 2022, Washington, DC

Abel Hooker

Coronary Hassle

Philippe Nyembo

Rapidly Progressive Calciphylaxis in a Patient with End-Stage Kidney Disease with Mechanical Prosthetic Valves on Warfarin: An Anti-coagulation Dilemma

AMERICAN COLLEGE OF PHYSICIANS (ACP) 2021 MINNESOTA CHAPTER MEETING

October 29, 2021, Minneapolis, Minnesota

Momen Alsayed

I Broke my Heart in Connecticut; A Case of Lyme Carditis with High Degree AV Block

Kelly Hallowell

Hematuria as an Unusual Presentation of Bladder Paraganglioma

Abel Hooker

Prolonged QT: A Case of Cardiac Arrest in a Young Woman

Jack Inglis, Mary Bernton

The Sound of Heartbreak

Ahmad Khalaf

Presentation of Chest Pain with a Challenging Diagnosis

Mohammed Khalid

Hidden in Plain Sight: A Case of Amiodarone Pulmonary Toxicity (APT)

Stephanie Kuhlman

Severe Methemoglobinemia after Sodium Nitrite Ingestion

Marcela Kuijpers

Where it Leads, Bacteria will Follow: A Case of Lead-Associated Bacterial Endocarditis

Alesandra Mendoza

When Opportunity Arises: A Complicated Diagnosis of AIDS-Defining Illness

Nathan Nelson, Monazza Chaudhry

A Case Where the Type of Testing Makes the Difference for Legionella

Philippe Nyembo, Joseph Steffens

An Ignored Cause of Presyncope and Syncope: A Case of “Tri-Fascicular Block”

Jessica Padniewski

Nettling Nodules; A Case of Kaposi’s Sarcoma-Associated Immune Reconstitution Inflammatory Syndrome (KS-IRIS)

Marissa Paulson, Abdulsabur Sanni

Initial Concern for One in a Million Vaccine Side Effect leads to Diagnosis of Acute Promyelocytic Anemia

Sumar Quint

Hold Your P: Renal Phosphorous Wasting, a Rare Side Effect of IV Iron Infusion

Beau Rigstad

Chest Compressions During CPR as a Cause of Chylothorax

Ben Swart, Brooke McDonald

Hickam’s Purpura? Multiple Vasculitides Presenting in a 67-Year-Old Man

Elizabeth Wendt

Two Uncommon Etiologies of Hypercalcemia - Adrenal Insufficiency and Hemosiderosis

Lucas Zellmer

No Obstruction, Still a Problem: A Myocardial Infarction with Clean Coronary Arteries

**ANNUAL PUBLIC HEALTH ASSOCIATION (APHA)
2021 ANNUAL MEETING & EXPO**

October 21, 2021, Virtual

Lucas Zellmer

*Lessons from the Field: One CHW Program's
Incorporation into Health, Social, and Community
Systems*

AMERICAN THORACIC SOCIETY MEETING 2022

May 16, 2022, San Francisco, California

Megan Conlon

*Tracheal Intubation and Mechanical Ventilation for
Critically Ill Patients with Salicylate Poisoning: A Case
Series*

Brooke McDonald

*COVID-Related Mechanical Ventilation and other
Management Strategies*

NATIONAL LIPID ASSOCIATION MEETING

September 25, 2021, Orlando, Florida

Kevin Buda

*Safety and Efficacy of PCSK9 Inhibitors in Homozygous
Familial Hypercholesterolemia: A Systematic Review
and Meta-Analysis*

*Safety and Efficacy of Bempedoic Acid in Statin-
Intolerant Patients*

**WPHA-WALHDAB ANNUAL PUBLIC HEALTH
CONFERENCE 2022**

October 21, 2021, Virtual

Lucas Zellmer

*Management of Type 2 Diabetes in a Free Clinic
Population: Initial Findings of a Quality Improvement
Intervention*



Alvin L. Schultz Education
& Research Fund

**VISITING PROFESSORS &
DISTINGUISHED RESIDENT ALUMNUS**

Fund Donors

The Alvin L. Schultz Education and Research Fund was established in 2001 for the purpose of enhancing the education and research activities within the Department of Medicine.



The Alvin L. Schultz Education and Research Funds are used to: bring in well-known visiting professors for Medicine Grand Rounds and other special events including the Alvin L. Schultz Visiting Professorship and the

Department of Medicine Distinguished Alumnus of the Year; support residents who present their research at regional and national scientific meetings; provide support for residents' research projects; and provide funding to enable residents to have an off-campus experience either in the U.S. or at designated international sites.

Since 2009, the Alvin L. Schultz Education and Research Fund has not received corporation grants and has depended solely on donations from the Department of Medicine faculty and alumni members to sustain this fund.

To contribute to this fund, our organizational partner, the Hennepin Health Foundation (HHF), supports and oversees philanthropic activities on the HCMC campus. You can support the Alvin L. Schultz Education and Research Fund administered by the Hennepin Healthcare Research Institute (HHRI), by making a charitable donation through the HHF website donation portal at www.hcmc.org/hhf/, or submit a check to the HHRI Account #4987, Office of Development, 914 South 8th St, Minneapolis, Minnesota 55404.

HHRI is a 501(c)3 non-profit and your charitable gift is tax deductible as allowed by the IRS.

Alvin L. Schultz Education and Research Fund 2020

In academic year 2021-2022, the Alvin L. Schultz fund supported two internal medicine residents, Dr. Philippe Nyembo (registration only) and Dr. Abel Hooker, who presented posters and/or gave oral presentations at the American Heart Association and the American College of Cardiology meetings. In addition, the Alvin L. Schultz fund supported international travel for Dr. Daniel Parsons-Moss to travel as part of the Global Health Pathway.

Thank you to everyone who made donations or continue to donate, making these educational opportunities possible. These experiences make it possible for our residents to continue to develop academically, making them competitive for fellowships and job opportunities. Your support is greatly appreciated.

THE FUND WILL SUPPORT THE FOLLOWING DEPARTMENT OF MEDICINE VISITING PROFESSORS:

29th Annual Alvin L. Schultz, M.D. Visiting Professor in Medicine

**THURSDAY
MARCH 18, 2021**

**Donald Warne,
M.D., M.P.H.**

Director, Indians Into Medicine
(INMED) & Public Health Programs

Associate Dean, Diversity,
Equity and Inclusion

School of Medicine
and Health Sciences

University of North Dakota
Grand Forks, North Dakota

Presentation:

*“Unresolved Trauma and American
Indian Health Equity”*

Distinguished Resident Alumnus of the Year

**THURSDAY
APRIL 15, 2021**

**Kevin Larsen,
M.D., F.A.C.P.**

Senior Vice President

Clinical Innovation
and Translation

Optum Labs
Washington, DC

Presentation:

*“The Role of Government
and Large Corporations in
the Move to Value Based
Health Care”*

30th Annual Alvin L. Schultz, M.D. Visiting Professor in Medicine

**THURSDAY
MARCH 24, 2022**

**Valerie Romero-Leggott,
M.D.**

Vice President and Executive
Diversity & Inclusion Officer

University of New Mexico
HSC Endowed Professorship
for Equity in Health

Professor, Department of Family
& Community Medicine

Executive Director
University of New Mexico Combined
BA/MD Degree Program

University of New Mexico
Health Sciences

Presentation:

*“Building a Diverse Health Care
Workforce”*

Alvin L. Schultz Education and Research Fund 2021

Alvin L. Schultz, M.D. Visiting Professorship at HCMC was established in 1989 upon Dr. Alvin L. Schultz's retirement as Chairman of the Department of Medicine to honor his devoted service to the Department for the purpose of enhancing the education and research activities within the Department of Medicine.

ALVIN L. SCHULTZ, M.D. VISITING PROFESSORS:

1989 R. Gordon Douglas, Jr., M.D.
1990 Alvan R. Feinstein, M.D.
1991 Allen C. Steere, M.D.
1992 John M. Eisenberg, M.D.
1993 Stephen C. Joseph, M.D.
1994 Jordan J. Cohen, M.D.
1995 Frank B. Cerra, M.D.
1996 David Satcher, M.D.
1997 Charles H. Hennekens, M.D.
1998 Elizabeth Barrett-Connor, M.D.
1999 William P. Castelli, M.D.
2000 Stephen Straus, M.D.
2001 Nicole Lurie, M.D., M.S.P.H.
2002 George A. Sarosi, M.D., M.A.C.P.
2003 Michael Osterholm, Ph.D., M.P.H.
2004 Christopher J.L. Murray, M.D.
2005 Christine K. Cassel, M.D., M.A.C.P.
2006 Jeffrey Glassroth, M.D., M.A.C.P.
2007 Deborah Prothrow-Stith, M.D.
2008 Lonnie R. Bristow, M.D., M.A.C.P.
2009 Jeffrey G. Wiese, M.D., F.A.C.P.
2010 Faith T. Fitzgerald, M.D., M.A.C.P.
2011 William T. Branch, Jr, M.D., M.A.C.P.
2012 Judith Bowen, M.D., F.A.C.P.
2013 Edward Ehlinger, M.D., M.S.P.H.
2014 Victor M. Montori, M.D., M.Sc.
2015 David L. Battinelli, M.D.
2018 Sanjeev Arora, M.D., F.A.C.G., M.A.C.P.
2021 Donald Warne, M.D., M.P.H.
2022 Valerie Romero-Leggott, M.D.

Distinguished Resident Alumnus of the Year was inaugurated in 2007 to bring former HCMC Residents who are established in their medical/research practice back to the HCMC Department of Medicine to present current topics of their expertise.

DISTINGUISHED RESIDENT ALUMNUS OF THE YEAR:

2007 Rosemary A. Quirk, M.D., D.T.M.H.
2008 Rama K. Mallampalli, M.D.
2009 Kenneth McQuaid, M.D.
2010 Hernando González Quirós, M.D.
2011 Robert H. Lohr, M.D., F.A.C.P.
2012 Sue Ravencraft, M.D., F.A.C.P.
2013 Karin Nelson, M.D.
2014 Heather Gantzer, M.D.
2016 David Van Dyke, M.D.
2017 Andrew Kamp, M.D.
2021 Kevin Larsen, M.D., F.A.C.P.

Fund Donors

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Mark Sprenkle
Martin Stillman
Haylee Veazey
Allison Wert
Jennifer Wu

ACKNOWLEDGEMENTS

Editors

Sandra M. Main
Belinda J. Rogers

Design

Lisa Haines, juju

Section Introductions

Arti Prasad, M.D.
Rosemary Quirk, M.D., D.T.M.H
Michelle L. Herbers
Jill E. Kennedy
Sandra M. Main
Renee L. B. Marrero
Belinda J. Rogers

