

A photograph of the Baylor St. Luke's Medical Center building, a large glass skyscraper reflecting the sky. The building is the central focus of the image. A dark blue rectangular box is positioned in the upper left corner, containing the text 'Baylor College of Medicine'. The text 'Baylor St. Luke's Medical Center' is visible on the building's facade. The sky is a clear blue with some light clouds. The overall image has a professional and modern feel.

Baylor
College of
Medicine

Baylor St. Luke's
Medical Center

DEPARTMENT OF MEDICINE

2022 ANNUAL REPORT

The Margaret M. and Albert B. Alkek
DEPARTMENT OF MEDICINE
ACADEMIC ANNUAL REPORT 2022

Baylor College of Medicine

CHAIR'S MESSAGE

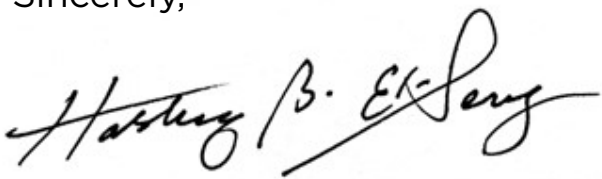
Dear Colleagues:

It is my pleasure to present to you the Department of Medicine's annual report for the year 2022. I am proud to say that we have achieved many significant milestones in the past year.

In the past year, we have made strategic investments in research, clinical care programs, medical education and training. These investments have allowed us to expand our capabilities and improve our offerings, which has resulted in a stronger competitive position for our patients, trainees and workers.

Looking ahead, we are optimistic about the future and are confident in our ability to continue delivering value to our patients and shareholders. We remain committed to innovation, integrity and excellence in our business practices and we are excited about the opportunities that lie ahead.

Sincerely,

A handwritten signature in black ink, reading "Hashem B. El-Serag". The signature is fluid and cursive, with the first name "Hashem" and last name "El-Serag" being the most prominent parts.

Hashem B. El-Serag, M.D., M.P.H.



Hashem B. El-Serag
M.D., M.P.H.

2022 ORGANIZATIONAL OVERVIEW

CHAIR

Hashem B. El-Serag, M.D., M.P.H.

OFFICE OF THE CHAIR

Vice Chair for Clinical Affairs

Vice Chair for Education

Vice Chair for Faculty and Staff Development

Vice Chair for Harris Health System/Ben Taub Hospital

Vice Chair for Quality Improvement and Innovation

Vice Chair for Research

Vice Chair for Veterans Affairs

Mandeep Bajaj, M.B.B.S.

Richard J. Hamill, M.D.

Sandra Haudek, Ph.D.

Hemant Roy, M.D.

Kyler Godwin, Ph.D.

Rolando Rumbaut, M.D., Ph.D.

Biykem Bozkurt, M.D., Ph.D.

SECTIONS

Cardiology

Cardiovascular Research

Endocrinology, Diabetes, and Metabolism

Epidemiology and Population Sciences

Gastroenterology and Hepatology

General Internal Medicine

Geriatrics and Palliative Medicine

Health Services Research

Hematology and Oncology

Immunology, Allergy, and Rheumatology

Infectious Diseases

Nephrology

Pulmonary, Critical Care and Sleep Medicine

Transition Medicine

Chief of Section

Christie Ballantyne, M.D.

Christie Ballantyne, M.D.

Mark Herman, M.D.

Christopher Amos, Ph.D.

Fasiha Kanwal, M.D., M.S.H.S.

Joslyn Fisher, M.D., M.P.H.

Aimee Garcia, M.D.

Laura Petersen, M.D., M.P.H., F.A.C.P.

Martha Mims, M.D.

Rashmi Maganti, M.D.

Thomas Giordano, M.D., M.P.H.

Wolfgang Winkelmayer, M.D., Sc.D.

Ivan Rosas, M.D.

Cynthia Peacock, M.D.

The Department of Medicine at Baylor College of Medicine is the professional home to over 1,800 professionals distributed across 14 sections. We have campus sites at Baylor St. Luke's Medical Center, the McNair Campus, Michael E DeBakey VA Medical Center, Harris Health System, Texas Children's Hospital, and the Pavilion for Women. We also have strong associations with numerous centers, programs, and organized research units. Our team is thrilled to celebrate our departmental achievements in research, patient care, and medical education and training.

THE DEPARTMENT OF MEDICINE

RESEARCH

In 2022, the research efforts of our department faculty were supported by \$120.3M in total extramural research funding including:

- \$77.2M from the NIH
- \$8.5M from the Veteran's Administration
- \$12.2M from other federal agencies
- \$17.7M from state and other non-federal sources
- \$4.7M from industry support

Two of our sections have NIH T32 grants to support research training in the fields of gastroenterology and infectious diseases.

CLINICAL CARE

Our physicians practice in Baylor St. Luke's Medical Center, the McNair Campus, Ben Taub Hospital, Michael E. DeBakey VA Medical Center and Houston Methodist Hospital. Many specialty and subspecialty services provided at these locations are nationally recognized as sites of premier clinical quality.

Patients receive state-of-the-art consultations, diagnoses and compassionate care from our world-renowned clinical staff. Our doctors specialize in diagnosing and treating various diseases ranging from heart disease, diabetes and allergies to breast cancer and cystic fibrosis. Teens with developmental disabilities transitioning into adult care receive personalized, quality care and social services through our unique Transition Medicine group.

EDUCATION

The Department of Medicine's education efforts train the next generation of leaders in medicine through medical school, graduate medical training, fellowships and internships. The Department of Medicine provides undergraduate medical education (UME) students a balance of training, exposure, and experience, which prepares them for graduate programs. Our faculty teaches two-thirds of the UME courses. Students first attend foundational sciences curriculum courses and then their clinical curriculum courses. Students choose one sub-internship, seven core clerkships and five or six clinical electives.

Students within the Internal Medicine sub-internship develop skills required for their internship. During these rotations, medical students experience increased autonomy, acting as interns supervised directly by senior residents and the attending physician. Students hone in on their history and physical skills, write orders and independently develop diagnostic and therapeutic plans. They expand their medical knowledge by using experiential and self-directed learning.

Our residencies are authorized by the Accreditation Council for Graduate Medical Education and its respective Residency Review Committees. We enroll highly competitive applicants each year and continue to match outstanding residents. Our graduates become leaders in Internal Medicine and its specialties, both academically and in clinical practice.

Beyond residency training, the Department of Medicine offers fellowships for two to four years of training in each major subspecialty, such as gastroenterology, cardiovascular disease, etc. This experience allows physicians to learn unique concepts, information and procedures for a particular subspecialty, with an opportunity to research if desired. Our department has more than 220 residents and more than 150 fellows.

Affiliations with leading research and healthcare institutions in the Texas Medical Center provide access to diverse people and resources. Our students and trainees can access numerous patients during these clerkships in various settings through our affiliation with eight leading healthcare institutions—all located in the world's largest medical center.

SECTION OF HEALTH SERVICES RESEARCH

SECTION ACCOMPLISHMENTS

- The mission of the section of Health Services Research (HSR) and the Center for Innovations in Quality, Effectiveness, and Safety (IQuEST) to improve health and well-being through innovations in healthcare delivery. Despite the challenges of the pandemic and the constraints of virtual work, the section of HSR continued to grow and thrive.
- The section recruited five new faculty Dr. Chase Eck (health economist), Dr. Anita Chary (ED physician/anthropologist), Dr. Kelley Arredondo (industrial/organizational psychology), Dr. Darius Dawson (behavioral health), and Dr. Kathryn Kanzler (behavioral health).
- The section faculty and fellows authored 65 articles published this year, including five manuscripts in journals with an impact factor >10, and our work impacted national policy.
- Dr. Hardeep Singh's team previously developed a checklist-based risk assessment tool (SAFER Guides). In August 2021, CMS issued the 2022 Inpatient Prospective Payment System final rule and included SAFER Guides as a new measure, requiring all eligible U.S. hospitals to annually attest that they performed a safety assessment of their EHR using SAFER Guides. Additionally, in November 2021, CMS published a rule requiring all clinicians eligible for the Merit-based Incentive Payment System (MIPS) to attest to conducting an annual self-assessment using one of the SAFER Guides.
- The section received 19 new grants, including six NIH grants, one AHRQ grant, and 12 VA grants, with combined total funding of \$16,610,209.
- IQuEST grew by 15% and added four faculty, Drs. Josh Hamer (department of psychiatry), Theresa Nguyen-Wenker (section of gastroenterology and hepatology), Vidya Eswaran (section of emergency medicine) and Christina Chapman (department of radiation oncology).
- Six of our HSR section faculty were ranked top 1% of experts in the worldwide by www.expertscape.com for their research topics (Drs. Rick Street, Hardeep Singh, Barbara Trautner, Drew Helmer, Laura Petersen and Jennifer Kramer).
- The leadership team added two new members due to their new leadership roles (Dr. Shubhada Sansgiry, chief of the methodology and analytics core, and Dr. Kyler Godwin, chief of the implementation science and innovations program).
- The weekly IQuEST seminar series was maintained in a virtual and hybrid format and is in its 23rd straight year. These seminars stimulate discussions among section faculty members and trainees and foster potential collaboration within BCM and beyond.
- The VA Quality Scholars Institute celebrated its 23rd year as well, hosting leading experts in healthcare improvement from across the nation.
- We have multiple world-class post-doctoral research training programs that provide outstanding educational opportunities in health services research, big data and leadership in health care quality.
- The IQuEST fellowships have become an important pipeline for excellent faculty members to join the section and contribute to multiple BCM initiatives.



SECTION CHIEF

Laura Petersen,
M.D., M.P.H., F.A.C.P.

FACULTY

Section Leadership

- Laura A. Petersen, M.D., M.P.H., F.A.C.P., Director
 - Drew A. Helmer, M.D., M.S., Deputy Director
 - Hardeep Singh, M.D., M.P.H., Co-Program Chief, Health Policy, Quality, and Informatics
 - Jessica Davila, Ph.D., Co-Program Chief, Health Policy, Quality, and Informatics
 - Mark E. Kunik, M.D., M.P.H., Program Chief, Behavioral Health
 - Thomas P. Giordano, M.D., M.P.H., Program Chief, Clinical Effectiveness and Population Health
 - Kyler Godwin, Ph.D., M.P.H., Program Chief, Implementation Science and Innovation
 - Natalie E. Hundt, Ph.D., Program Chief, Education and Training Core
 - Shubhada Sansgiry, Ph.D., Program Chief, Methodology and Analytics Core
 - Shannon Kenyon, M.B.A, Program Chief, Administration and Operations
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FACULTY

Primary Faculty

Professor

- Laura A. Petersen, M.D., M.P.H., F.A.C.P.
- Drew A. Helmer, M.D.
- Vivian Ho, Ph.D.
- Sylvia J. Hysong, Ph.D.
- Thomas McGinn, M.D., M.P.H.
- Hardeep Singh, M.D., M.P.H.
- Richard L. Street, Jr., Ph.D.
- Barbara W. Trautner, M.D., Ph.D.
- Anita Chary, M.D., Ph.D.
- Traber L. Giardina, Ph.D.
- Molly J. Horstman, M.D., M.S.
- Ashley N.D. Meyer, Ph.D.
- Javad Razjouyan, Ph.D., M.Sc.
- Peter A. Richardson, Ph.D.
- Shubhada Sansgiry, Ph.D., B.Pharm.
- Donna L. White, Ph.D., M.P.H.
- Andrew J. Zimolzak, M.D., M.M.Sc.

Associate Professor

- Jessica A. Davila, Ph.D.
- Lilian N. Dindo, Ph.D.
- Kyler M. Godwin, Ph.D.
- Kathryn Kanzler, Psy.D., A.B.P.P.
- Jennifer R. Kramer, Ph.D., M.P.H.
- Daniel R. Murphy, M.D., M.B.A.
- Sara Nowakowski, Ph.D., C.B.S.M., D.B.S.M.

Assistant Professor

- Amber B. Amspoker, Ph.D.

Instructor

- Patricia Chen, Ph.D.
- Israel C. Christie, Ph.D.
- Darius Dawson, Ph.D.
- Chase Eck, Ph.D.
- Nipa Kamdar, Ph.D., R.N., F.N.P.-B.C.
- Houston Lester, Ph.D., M.S.
- Patrick N. O'Mahen, Ph.D.
- Annette Walder, M.S.

Secondary Faculty

Professor

- Jeffrey A. Cully, Ph.D.
- Mark E. Kunik, M.D., M.P.H.

Assistant Professor

- Vidya Eswaran, M.D., M.A.S.

HONORS AND ACHIEVEMENTS

Laura A. Petersen, M.D., M.P.H., F.A.C.P.

- Principal Investigator on three funded projects (Total Funding:\$6,298,507):
 - » VA HSR&D COIN, Center for Innovations in Quality, Effectiveness and Safety (IQuEst), \$4M
 - » VA HSR&D Investigator Initiated Research (IIR) Grant, Improving the Measurement of VA Facility Performance to Foster a Learning Health Care System, \$1,099,906
 - » VA HSR&D Investigator-Initiated Research (IIR) Grant, Medicaid Expansion and Quality, Utilization and Coordination of Health Care for Veterans with Chronic Kidney Disease, \$1,198,601
- Sponsor and Secondary Mentor (Total Funding: \$166,952):
 - » NIH F32 Grant, Optimizing the Risk-Adjusted CUSUM for Monitoring Hospital Non-Cardiac Perioperative Outcomes (PI: Vivi Chen)
- 18 peer-reviewed publications
- Panel Moderator, Keynote Address by Dr. Cedric Taylor, “Communicating Injustice Through the Powerful Lens of Media,” BCM Health and Science Policy Research Day
- Member, BCM Health and Science Policy Research Day Planning Committee
- Member, BCM Datathon Planning and Data Governance Committee

Amber B. Amspoker, Ph.D.

- Promoted to Associate Professor of Medicine
- Recipient, Norton Rose Fulbright Award in Educational Excellence
- Recipient, Women of Excellence Award, Baylor College of Medicine
- 11 peer-reviewed publications
- Member, Assistant Professor Women Faculty 2021-2022 cohort, Baylor College of Medicine Career Advancement Series

Anita N. Chary, M.D., Ph.D.

- Received three grants to support early career research about ED delirium and restraint use
 - » Baylor College of Medicine Department of Medicine Junior Faculty Seed Funding Award, Curtis Hankamer Basic Research Fund
 - » Academy for Women in Academic Emergency Medicine Research Grant, Society for Academic Emergency Medicine
 - » Ben Taub Emergency Center Committee on Justice, Equity, Diversity and Inclusion Research Grant (2)
- Recipient, Early Career Educator Award from the Society for Academic Emergency Medicine, Academy for Women in Academic Emergency Medicine
- Board Member, Executive Board of the Academy for Geriatric Emergency Medicine, Society for Academic Emergency Medicine

- Recipient, Rockstar Rookie Attending Award, Department of Emergency Medicine, Baylor College of Medicine
- Eight peer-reviewed original research publications (first author on four) and seven other peer-reviewed scholarly publications

Patricia Chen, Ph.D.

- Recipient, 5th Annual Excellence in Service IQuEST Faculty Award
- Recipient, Outstanding Junior Faculty Educator Award
- Two peer-reviewed publications
- Contributor, Trautner's R018 Funded Proposal "A Cluster Randomized Trial of Two Implementation Strategies to Disseminate a Successful Antibiotic Stewardship Intervention," Funding: \$2,487,444
- Chapter Founder, Community Liaison, Content Design and Production, & Volunteer Coordinator, Houston Chapter of vot-ER (voterhtx.org)

Israel C. Christie, Ph.D.

- Member, Methods, Analytics, and Data Education Committee, IQuEST
- Member, Mentorship Committee, Faculty K-award
- Mentor, Methodology and Analytics Core junior member
- Principal statistician on six funded research and operations projects

Darius B. Dawson, Ph.D.

- Recipient, VA Office of Research and Development Supplement to Promote Diversity (~\$196,000): Examining Racial/Ethnic Minority Veterans' Access to Mental Health Treatment and Research
- Principal Investigator, South Central Mental Illness Research, Education and Clinical Center Pilot Grant (~\$45,000): Increasing Engagement in Tobacco Cessation Treatment for African American Veterans
- Recipient, Health Services Research and Development Career Development Award (~\$680,000): Addressing health equity in behavioral medicine treatment for African American Veterans
- Member, Anxiety and Depression Association of America Professional Education Committee
- Member, Inclusion and Excellence Council, Baylor College of Medicine

Lilian Dindo, Ph.D.

- Reviewer, RR&D Career Development Panel
- Member, Editorial Board, The Journal of Contextual
- Member, Editorial Board, The Behavioral Sciences and Journal of Psychosomatic Medicine
- Recipient, 2022 Outstanding Senior Faculty Educator, Center for Innovations in Quality, Effectiveness, and Safety, Baylor College of Medicine and Houston MEDVAMC
- Principal Investigator on five nationally funded grants:
 - » NIH: Targeting HIV Retention and Improved Viral load through Engagement ('THRIVE')
 - » VA RR&D: One-day Life Skills Workshop for Veterans with TBI, pain, and Psychopathology: Evaluating efficacy and mechanism of change
 - » NIH: Preventing Persistent Post-Surgical Pain and Dysfunction in At-Risk Veterans: Effect of a Brief Behavioral Intervention
 - » ORH: Combination outreach and wellness intervention for distressed out-of-care rural Veterans
 - » VA HSR&D: Effect of Patient Priorities Care Implementation in Older Veterans with Multiple Chronic Conditions
- Review Panelist, 2022 Early Career Mentee Award Program, Association for Contextual and Behavioral Sciences

Chase S. Eck, Ph.D.

- Principal Investigator, VA seed award worth \$50,000: “Variation in VA Community Care Utilization Across Different Clinical Services”
- Co-Investigator for IIR: “Using Medication Pass Data to Assess Impact of COVID-19 Disruptions and Shocks on Unit-Level Inpatient Nurse Workload and Turnover: A Mixed Methods Study”
- Presenter, two peer-reviewed national conferences and two local conferences
- Chair, “Health and Human Capital over the Life Cycle,” American Health Economics conference
- Provided research education through didactic presentations in the HSR Fundamentals series and HSR Grand Rounds and by mentoring two medical students

Traber L. Giardina, Ph.D.

- Recipient, 2021-2022 National Academy of Medicine Scholar in Diagnostic Excellence, “Overcoming Barriers to Diagnostic Safety for Underrepresented Populations: Implementing Structured Tools to Engage Patients in Diagnosis (The ISTEP Dx Project)”
- Principal Investigator, AHRQ K01, Engaging patients in diagnostic error reporting
- Member, Society to Improve Diagnosis in Medicine Patient Engagement Committee
- Member, IQuEST DEI Committee

Kyler Godwin, Ph.D.

- Principal Investigator/Director of grants (Total Funding: \$735,000)
- Director, National VA Quality Scholars Program
- Director, National Health Professions Education Evaluation and Research Coordinating Center
- Principal Investigator, Leading Healthcare Improvement: Leadership Training for Applied Improvement Strategies
- Three peer-reviewed publications
- Vice Chair, Quality Improvement and Innovation, Department of Medicine
- Chief, Implementation Science and Innovation Program, Center for Innovations in Quality, Effectiveness and Safety (IQuEST)
- Assistant Director of Education, BCM Institute for Continuing Professional Development in Quality Improvement and Patient Safety (QI/PS Institute). (ongoing)
- Promoted to Associate Professor with Tenure, June 2022
- Recipient, Norton Rose Fulbright Faculty Excellence Award in Teaching and Evaluation

Drew Helmer, M.D.

- Principal Investigator, three funded projects (Total Funding: \$5 million):
 - » Genomics of Gulf War Illness
 - » AHBPC/IQuEST Military Exposure Surveillance (AIMES) Collaboration
 - » Lung Injury Etiology, Risk Factors, and Morbidity of Single and Repeated Low-level Blast Overpressure Exposure
- Recipient, VA Military Exposure Research Program Data & Biorepository Commons Core (\$1.6 million over two years)
- 16 peer-reviewed publications
- Member, Research Advisory Committee on Gulf War Veterans' Illnesses

Molly J. Horstman, M.D., M.S.

- Recipient, VA HSR&D-National Institute on Aging Career Development Award “Hospital GamePlan4Care: A Web-Based Delivery System for Dementia Caregiver Support”
- Recipient, IQuEst Early Career Faculty Research Award
- Led successful renewal applications for three Internal Medicine VA Chief Resident in Quality and Safety positions at the Michael E. DeBakey VA Medical Center.
- Chair, Scholarship Sub-Committee for the Vice Chair Group for Quality Improvement and Innovation, Baylor College of Medicine

Sylvia J. Hysong, Ph.D.

- Principal Investigator, AHRQ R01 (Total Funding: \$1.5 million)
- Four new grants funded as principal investigator (Total Funding: \$835,000):
 - » Medical Support Assistants: An Untapped Resource for Quality Improvement in VA PACTs
 - » Giving, Receiving, and Using Feedback Effectively and Inclusively: An Evidence-Based Curriculum
 - » VA National REBOOT Task Force on Employee Burnout.
 - » Maintaining Preventive Care during Public Health Emergencies through Effective Coordination
- Six peer reviewed publications
- Recipient, Norton Rose Fulbright, Enduring Educational Materials (one of only 10 faculty at all BCM holding NRFs in all four categories and am the first non-clinical Ph.D. to do so)
- FACA-Appointed Member, VA HSR&D Scientific Merit Review Board
- Executive Advisory Board Member, Career Development Award Enhancement Initiative, VA Health Services Research and Development.
- Founding and Steering Committee Member, International Audit and Feedback Meta-Laboratory
- Chair, BCM Healthcare Innovations Grant Review Panel
- Member, Norton Rose Fulbright Faculty Excellence Award Review Committee
- Chair, Norton Rose Fulbright Education Grants Committee
- Researcher, Residence for REBOOT
 - » Designing evaluation plans for a NATIONAL initiative for workforce burnout mitigation.

Nipa Kamdar, Ph.D., R.N., F.N.P.-B.C.

- Recipient, Intent to fund Career Development Award (CDA 21-032), “Designing Veteran-Centered Strategies to Reduce and Prevent Food Insecurity: A Veteran and Community-Partnered Approach”
- Testified at U.S. House Committee on Agriculture Subcommittee on Nutrition, Oversight, and Department Operations Hearing, “Hunger among Veterans & Service members: Understanding the Problem and Evaluating Solutions”
- Participant, Round Table Discussion Center for Strategic International Studies Policy Solutions to Food Insecurity in the Military Community
- Recipient, 2022 University of Texas Health Science Center Cizik School of Nursing Distinguished Alumni Award
- Published five peer-reviewed publications with three more currently in revise-resubmit stage

Houston F. Lester, Ph.D.

- Statistician and Programmer, R01 grant, “Impact of Team Configuration and Team Stability on Primary Care Quality”
- Five peer reviewed publications
- Instructor, Baylor College of Medicine

Ashley N.D. Meyer, Ph.D.

- Principal Investigator, one funded project, “Understanding physicians’ diagnostic accuracy in the her era,” (Total Funding: \$800,000)
- Co-Director and Co-Investigator, one funded project “Diagnosis Improvement Safety Center (DIScovery) at the MEDVAMC, (Total Funding: \$900,000)
- Recipient, Norton Rose Fulbright Faculty Excellence Award in Educational Research
- Four peer-reviewed publications
- Co-Lead, Inaugural Peer Mentoring Group, Health Services Research, Baylor College of Medicine

Daniel R. Murphy, M.D., M.B.A.

- Chief Quality Officer, Baylor College of Medicine
- Chair, Baylor Medicine Quality and Safety Committee
- Member, Datathon Planning and Data Governance Committees
- Leader, Baylor Medicine Telemedicine Planning Committee
- Medical Director, General Internal Medicine Clinic

Sara Nowakowski, Ph.D., C.B.S.M., D.B.S.M.

- President-Elect, Society of Behavioral Sleep Medicine
- Grants: Ongoing R01 in Year 4, MEDVAMC Bridge Grant
- Publications: six peer reviewed papers, 10 conference abstracts, two book chapters, book editor (Adapting Cognitive Behavior Therapy for Insomnia)
- C-Chair, course, World Sleep Conference, Rio, Brazil
- Mentor, three postdoctoral fellows: Jessica Meers, Samantha Carreon, and Arash Maghousdi

Patrick O’Mahen, Ph.D.

- Principal or Co-Investigator, three funded projects, (Total Funding: \$1.28 million):
 - » Effects of VA State Medicaid Expansion on VA Dual Enrollment and Care Utilization
 - » Effects on Population Health of Having more than one source of care: Expanding Medicaid Coverage for Veterans with Advanced Chronic Kidney Disease
 - » IIR 19-057: Medicaid Expansion and Quality, Utilization and Coordination of Health Care for Veterans with Chronic Kidney Disease
- Recipient, BCM Junior Faculty Seed Grant (\$30,000), Caroline Weiss Law Fund for Research in Molecular Medicine
- Two peer-reviewed publications
- Presenter, three first-author research posters at local and national research symposia, including Academy Health’s Annual Research Meeting
- Invited lecturer: Foundations in Health Services Research Seminar “Public vs. Private Health Care”

Javad Razjouyan, Ph.D., M.Sc.

- Recipient, AIM-AHEAD grant (Total Funding: \$500,000)
- Chair, CHEST 2022
- Editorial Board Member, Journal of the American Geriatrics Society
- Editorial Board Member, Frontier in Medicine
- Published nine peer-reviewed publications

Shubhada Sansgiry, Ph.D., BPharm

- Chief, Methodology and Analytics Core, VA Center for Innovations in Quality, Effectiveness & Safety, Michael E. DeBakey VA Medical Center (MEDVAMC)
- Chair, Data Security Committee. Center for Innovations in Quality, Effectiveness, and Safety. MEDVAMC
- Editorial Board Member, Journal of Pharmaceutical Analytics, and Insights
- Member, Research EHRM Data Evaluation, National Committee for evaluation of transitioning to the Cerner Millennium Electronic Health Record Modernization
- Primary Voting Member, Research & Development Committee, MEDVAMC
- Co-Investigator and Methodologist on seven funded projects worth annual direct cost about \$1.2 million and three contracts worth an annual direct cost about \$2 million. Seven peer-reviewed publications and four national presentations.
- Funded projects:
 - » Effectiveness, safety, and patient preferences of Infliximab biosimilar medications for inflammatory bowel disease. (PI: Jason Hou, M.D.) Funding Agency: VA HSR&D IIR
 - » A Pragmatic Trial of Brief CBT for Anxiety in VA Primary Care. (PI: Terri Fletcher, Ph.D./Jeff Cully, Ph.D.) Funding Agency: VA HSR&D IIR
 - » Anxiety diagnostic accuracy in VA primary care mental health integration settings: Identifying barriers and facilitators to inform a learning health care system. (PI: Terri Fletcher, Ph.D.) Funding Agency: VA HSR&D IIR
 - » Anemia treatment patterns and outcomes among a national cohort of patients with inflammatory bowel disease. (PI: Jason Hou, M.D.) Funding Agency: DOA IIS
 - » Feasibility of video teleconference self-management to prevent stroke (V-STOP II) for rural and underserved Texas residents. (PI: Jane Andersen, Ph.D.) Funding Agency: Lone Star Stroke Tele-Stroke Research Network BCM: HUB
 - » Examining the Association Between Food Insecurity and Health Conditions and Healthcare Utilization Among Veterans Using VA Databases. (PI: Drew Helmer, Ph.D.) Funding Agency: IQuEst Citizenship Award.
 - » Improving Quality of Life for Veterans with Stroke and Psychological Distress. (PI: Gina Evans, Ph.D.) Funding Agency: VA RR&D SPIRE
- Funded Contracts:
 - » Coordinating Hub to Promote Research Optimizing Veteran-centric EHR Networks (PROVEN). (PI: Jessica Davila, Ph.D.) Funding Agency: Department of Veterans Affairs
 - » The Rural Interprofessional Faculty Development Initiative (RIFDI) Program. (PI: Jessica Davila, Ph.D.) Funding Agency: Veterans Health Administration, Office of Academic Affiliations (OAA)
 - Design and Analysis of research projects for VISN 16 MIRECC investigators. (PI: Mark Kunik, M.D./Ellen Fisher, Ph.D.) Funding Agency: MIDAS (MIRECC Implementation, Design, and Analysis Support)
- Seven peer-reviewed publications
- Four national presentations

Hardeep Singh, M.D., M.P.H.

- Principal Investigator, seven funded projects (Total Funding: \$4 million):
 - » A Safer Dx Guide for Organizational Risk Assessment to Improve Diagnostic Safety: A Proposal for Development and Refinement
 - » The Safer Dx Learning Lab: A Demonstration Project for Improving Diagnostic Safety
 - » Clinical Quality Measure to Improve Diagnosis of Cancer: The Safer Dx Cancer e-Measure
 - » Diagnosis Improvement Safety Center (DIScovery)
 - » Measuring and Improving the Safety of Test Result Follow-Up
 - » Application of Machine Learning to Enhance e-Triggers to Detect and Learn from Diagnostic Safety Event
 - » Developing e-Triggers to Detect Telemedicine Related Diagnostic Safety Events
- 32 peer-reviewed publications
- Recipient, Individual Achievement Award in the 20th John M. Eisenberg Patient Safety and Quality Awards by the Joint Commission and the National Quality Forum (NQF)
- Member, Cerner Implementation Workgroup, Michael E. DeBakey VA Medical Center
- Mentor, National Academy of Medicine (NAM) Scholars in Diagnostic Excellence
- Expert, National Academy of Medicine (NAM) Scholars in Diagnostic Excellence
- Co-Chair, Institute for Healthcare Improvement (IHI) Climate Action Committee
- Chair, Expert Stakeholder Panel for the 'Promote Research Optimizing Veteran-Centric EHR Networks (PROVEN) Hub' that provides research guidance for VA's EHR Transformation
- Member, The National Academy of Medicine (NAM) Action Collaborative on Decarbonizing the U.S. Health Sector
- Expert, Drafting and Review Task Force. Global Patient Safety Action Plan 2021-2030. World Health Organization (WHO) Released and Adopted by the World Health Assembly
- Expert Advisory Panelist – Patient Safety Measures of Hospital Harm Technical Expert Panel, Centers for Medicare and Medicaid Services (CMS)
- Co-Leader, VHA Communication of Test Results Policy Work Group to revise national VA policy on test results communication to providers and patients

Richard L. Street, Jr., Ph.D.

- Co-Editor in Chief, Journal Patient Education and Counseling.
- Ten peer-reviewed publications and one book chapter

Barbara W. Trautner, M.D., Ph.D.

- Principal Investigator, two funded projects (Total Funding: \$3.6 million):
 - » Reducing Use of Antibiotics without a Prescription among Outpatients in a Safety Net Healthcare System (AHRQ R01)
 - » Bacteriophage to treat multidrug-resistant UTI in Persons with Spinal Cord Injury (VA RR&D)
 - » Less is More: Improving Antibiotic Stewardship for Asymptomatic Bacteriuria
- Principal Investigator or site PI four funded projects:
 - » AHRQ R18: A Cluster Randomized Trial of Two Implementation Strategies to Disseminate a Successful Antibiotic Stewardship Intervention (\$2.5 million)
 - » Neilsen Foundation: Clinical Trial of Bacteriophage for UTI in Persons with SCI (\$800,000)
 - » MEVAMC co-lead for NIAID and NIH funded ACTIV-3 trial (monoclonal antibodies for COVID): Multicenter, Adaptive, Randomized, Blinded Controlled Trial of the Safety and Efficacy of Investigational Therapeutics for Hospitalized Patients with COVID-19 (\$1.3 million to date)
 - » Site PI for HSR&D Mindful Hand Hygiene to Reduce Infections Among Veterans While Enhancing Provider Well-Being

- 16 peer-reviewed publications
 - » Co-chair of IDSA UTI Guidelines Committee
 - » Kickoff speaker for FDA uncomplicated UTI workshop
 - » Deputy ACOS, Clinical Research, MEDVAMC
 - » Director, NODES CSP Studies, MEDVAMC

Annette Walder, M.S.

- Chair, IQuEst Team Leadership Advisory Committee
- Four peer-reviewed publications
- History of Suicide Attempts and COVID-19
 - » Infection in Veterans with Schizophrenia or schizoaffective disorder: Moderating Effects of Age and Body Mass Index, Complex Psychiatry
 - » Clozapine Is Associated with Higher COVID19 Infection Rate in Veterans with Schizophrenia or Schizoaffective Disorder, J Clin Psychiatry
 - » Differential Impact of COVID-19 on the Use of Telemental Health Among Veterans Living in Urban or Rural Areas, Psychiatric Services
 - » Role of deployment-related mTBI and resilience in perceived participation limitations among Veterans, Military Psychology

Andrew Zimolzak, M.D., MM.Sc.

- Co-Investigator, three funded projects:
 - » Co-Investigator: Application of Machine Learning to Enhance e-Triggers to Detect and Learn from Diagnostic Safety Events. AHRQ R01 HS27363-01
 - » Co-Investigator: An Electronic Trigger Tool to Detect Missed Opportunities for Barrett's Esophagus Screening. Baylor College of Medicine, Department of Medicine Physician-Scientist/Investigator Faculty Development Award. Amount: \$207,906
 - » Co-Investigator: Measuring and Improving the Safety of Test Result Follow-Up. VA HSR&D. 10/2018–9/2023. I01 HX002439 / IIR 17-127
- Two peer-reviewed papers published, and eight conference abstracts presented
- Member, Research data security committee
- Member, Electronic laboratory notebook working group
- Member, Methods, analytics, and data education initiative
- Recipient, Most innovative use of data, Baylor College of Medicine Datathon

Secondary Faculty

Mark E. Kunik, M.D., M.P.H.

- Principal Investigator two funded projects, (Total Funding: \$3.7 million):
 - » Using Peer Navigators to Increase Access to VA and Community Resources for Veterans with Diabetes-related Distress
 - » South Central Mental Illness Research, Education and Clinical Center
- Principal Investigator Texas Alzheimer's Research Consortium Grant, (Total Funding: \$600,000), Precision Recruitment for Precision Medicine
- 15 peer-reviewed publications
- Recipient, Baylor College of Medicine Clark Service Award
- Board Member and Walk to End Alzheimer's Co-Chair, Alzheimer's Association, Houston & Southeast Texas Chapter

RESEARCH ACTIVITIES

Grants

Petersen, Laura A., M.D., M.P.H., F.A.C.P.

- NIH R01 subcontract with Emory University; Using Modern Data Science Methods and Advanced Analytics to Improve the Efficiency, Reliability, and Timeliness of Cardiac Surgical Quality Data; \$3,977,888

Derrecka Boykin, Ph.D.

- VA HSR&D CDA; Understanding Community-based Mental Healthcare for Rural Veterans with Military Sexual Trauma; \$686,405

Biykem Bozkurt, M.D.

- VA HSR&D subsite; Continuous Wearable Monitoring Analytics to Improve Outcomes in Heart Failure - LINK-HF2 multicenter implantation study; \$95,200

Anita Chary, M.D., Ph.D.

- NIH R03; Identifying Implementation Strategies for Emergency Department (ED) Delirium Screening in Older Adults; \$320,000

Darius Dawson, Ph.D.

- VA ORD research supplement to promote diversity; Examining Racial/Ethnic Minority Veterans' Access to Mental Health Treatment and Research; \$196,403

Lilian Dindo, Ph.D.

- VA HSR&D IIR; Effect of Patient Priorities Care Implementation in Older Veterans with Multiple Chronic Conditions; \$1,200,000

Terri Fletcher, Ph.D.

- VA HSR&D subsite (Breeland); The EMBER Trial for Weight Management Engagement; \$150,999

Drew Helmer, M.D.

- VA ORD; Military Exposures Research Program (MERP); \$1,046,557

Molly Horstman, M.D., M.S.

- VA HSR&D / NIH NCI CDA; Hospital GamePlan4Care: A Web-Based Delivery System for Dementia Caregiver Support; \$2,355,631

Sylvia Hysong, Ph.D.

- NIH R21 subcontract with NCIRE; Moral Injury Among Healthcare Workers on the Frontlines of the COVID-19 Crisis: Developing a Blueprint for Awareness, Prevention & Mitigation; \$16,140

Natalia Khalaf, M.D.

- VA HSR&D CDA; Health informatics approaches to reduce missed opportunities in diagnosis of pancreatic cancer; \$1,090,647
- Moore Foundation: Measuring Missed Opportunities in the Diagnosis of Gastrointestinal Cancers; \$499,864

Jennifer Kramer, Ph.D., M.P.H.

- NIH R01 subcontract with Kaiser Permanente; (PQ3) Addressing Cancer Treatment Disparities for Persons with HIV; \$822,528

Kostas Makris, M.D.

- VA HSR&D I21; Understanding Reasons for Underdiagnosis and Undertreatment of Primary Hyperparathyroidism in the VA; \$ centered Multidisciplinary care for veterans undergoing surgery (PAUSE): a hybrid one clinical effectiveness-implementation intervention trial; \$64,895
- VA HSR&D Subsite (Goodney); Surveillance priorities and outcomes for Veterans treated with endovascular abdominal aortic aneurysm repair; \$200,000

Hardeep Singh, M.D., M.P.H.

- AHRQ R01 subcontract with NORC; Diagnostic Accuracy and Antibiotic Stewardship; \$1,127,819

Felicia Skelton, M.D.

- NIH R03; Quantifying the Cardiovascular and Immunologic Changes after Spinal Cord Injury to Aid Diagnosis of Clinically Meaningful Infections; \$320,000

Barbara Trautner, M.D., Ph.D.

- NIH R18; A Cluster Randomized Trial of Two Implementation Strategies to Disseminate a Successful Antibiotic Stewardship Intervention; \$2,378,706
- VA HSR&D IIR sub-site (Greene); Mindful Hand Hygiene to Reduce Infections Among Veterans While Enhancing Provider Well-Being; \$45,377
- VA HSR&D IIR sub-site (Harris); Targeted Contact Precaution Use to Prevent MRSA Transmission; \$15,150

Publications (29)

- Academic Medicine (IF **5.354**): 1
- American Journal of Medicine (The) (IF **4.76**): 2
- American Journal of Preventive Cardiology (IF **4.435**): 1
- Annals of Surgery (IF **9.203**): 2
- Annals of Surgical Oncology (IF **4.179**): 4
- BMJ Quality and Safety (IF **7.226**): 5
- Cancers (IF **6.126**): 2
- Cardiovascular Drugs Therapy (IF **4.069**): 4
- Clinical Gastroenterology and Hepatology (IF **8.549**): 3
- Clinical Infectious Diseases (IF **9.117**): 2
- Crohn's & Colitis (IF **7.827**): 1
- Health Affairs (IF **5.23**): 1
- Heart (IF **5.213**): 1
- Hepatology (IF **14.679**): 1
- Journal of the American Medical Association (IF **45.54**): 1
- JAMA Cardiology (IF **12.794**): 1
- JAMA Internal Medicine (IF **18.652**): 1
- JAMA Network Open (IF **5.032**): 6
- JAMA Surgery (IF **13.625**): 4
- Journal of General Internal Medicine (IF **4.606**): 6
- Journal of Medical Internet Research (IF **5.03**): 1
- Journal of American College of Surgeons (IF **5.122**): 1
- Journal of American Geriatrics Society (IF **4.388**): 2
- Journal of American Heart Association (IF **4.45**): 1
- Journal of American Medical Directors Association (IF **5.325**): 1
- Journal of Medical Informatics Association (IF **4.112**): 1
- Journal of Thoracic and Cardiovascular Surgery (IF **4.88**): 1
- mBio (IF **6.784**): 3
- Nephrology Dialysis Transplantation (IF **4.085**): 2
- Sleep (IF **4.805**): 3

CENTERS

Center for Innovations in Quality, Effectiveness and Safety (IQuEST)

The Center for Innovations in Quality, Effectiveness and Safety (IQuEST) is one of 18 competitively awarded Centers of Innovation (COIN). Over the years, IQuEST has flourished as a research powerhouse with a growing operating budget, primarily from grants and contracts, and a national reputation for excellence in health services research, faculty development and scientific leadership. IQuEST is the largest center for health services research in the Southwest and houses more than 200 faculty, post

doctoral fellows, trainees, and research staff in the Texas Medical Center. IQuEST manages more than \$15 million of total VA funding and \$10 million in non-VA federal and foundation funding (FY21). This year, our investigators published 321 manuscripts in 194 peer-reviewed journals and gave 240 presentations at local and national meetings. Our work has contributed to 55 papers cited in 14 Institute for Healthcare Improvement reports, 124 papers cited in 63 clinical guidelines for patient care, one paper selected by Faculty of 1000 (F1000) as one of the top 2% of all published articles in the biology and medicine sciences and five papers cited in U.S. Centers for Disease Control-recommended programs.

IQuEST provides an inclusive environment to support, mentor and develop outstanding research leaders. IQuEST research extends from patient experience to clinical practice and outcomes of care to the development of health care policy. It has been disseminated to key policymakers, healthcare administrative leaders, influential stakeholders, the mainstream media and the best academic journals and professional scientific societies. In addition, IQuEST investigators are nationally renowned for their excellence in research involving large national healthcare databases. Within the Department of Medicine at Baylor College of Medicine, we have faculty in multiple sections, including Health Services Research, Nephrology, Cardiovascular Research, Gastroenterology, Geriatrics, Rheumatology, Pulmonary/Critical Care and Infectious Diseases. In addition, our faculty is represented in several Baylor departments apart from Medicine, including Psychiatry, Pediatrics, Surgery and Physical Medicine & Rehabilitation.

Diagnosis Improvement Safety Center (DISCOVERY)

This multidisciplinary team (physicians and professionals from a range of fields - including social science, cognitive psychology, public health, internal medicine, computer science and human factors engineering) is focused on improving diagnostic errors. This goal is approached through several methods, ranging from developing trigger algorithms for Electronic Health Records (EHRs) to proactively monitoring for delays in test result follow-up to creating guidelines for safe EHR usage in the form of the SAFER Guides. Their research is funded by government-sponsored grants (including the Agency for Healthcare Research and Quality and the Veterans Affairs Health Services Research and Development Service) and private foundation grants (such as the Gordon and Betty Moore Foundation). The team publishes its findings in various high impact journals and disseminates research by speaking at events and conferences throughout the country.

Health Profession Education Evaluation and Research (HPEER)

The Advanced Fellowship in Health Professions Education Evaluation and Research (HPEER), funded through the Office of Academic Affiliations (OAA), is an interprofessional, 2-year fellowship for post-doctoral and post-masters' fellows in curriculum design and implementation, evaluation and research. HPEER fellows are trained with the knowledge and skills to lead, evaluate, and transform health professions education. There are six HPEER sites in VA hospitals across the United States: (Boston, MA; Cleveland, OH; Dublin, GA; Salt Lake City, UT; San Francisco, CA; and West Haven, CT). The Coordinating Center (CC) was established in 2021 with leadership from Houston, TX and White River Junction, VT and is physically located within the Houston Center for Innovations in Quality, Effectiveness, and Safety (IQuEST) at the Michael E. DeBakey VA Medical Center and Baylor College of Medicine. The Coordinating Center is responsible for the development and execution of a coordinated, cohesive national HPEER program, which includes curricula development and delivery, program evaluation, continuous program improvement, site support and engagement, outreach, and marketing.

VA Military Exposures Research Program

The VA Military Exposures Research Program (MERP) seeks to advance military exposure assessments and to understand the effects of military exposures on Veterans' health outcomes to inform care and policy. Military exposures are toxic agents, singly or in combination, incurred through military service (Deployment, Occupation, or Garrison). Many military exposures have long-term or latent health effects and the impact of these exposures on the health and quality of life of veterans is poorly understood. IQuEst will develop and host the Data and Biorepository Commons (DBC) Core (PI-Helmer) of the VA Military Exposure Research Program. The DBC Core will facilitate access for investigators to military-exposure relevant data and biospecimens through existing resources and create opportunities for investigators to retain and share prospectively gathered data and biospecimens.

National VA Quality Scholars (VAQS) Program

The national VA Quality Scholars (VAQS) program was established in 1999 and is the leading interprofessional fellowship program in healthcare improvement throughout North America. VAQS trains clinician leaders in quality improvement (QI) at 9 VA Medical Centers (Atlanta, GA; Birmingham, AL; Cleveland, OH; Charleston, SC; Durham, NC; Iowa City, IA; Minneapolis, MN; Nashville, TN; and San Francisco, CA), as well as an affiliate site in Toronto. Faculty and fellow scholars at the sites include physicians, nurses, and associated health professionals, such as pharmacists, physical therapists, and clinical psychologists. Since 2015, the Coordinating Center, located in the Houston Center for Innovations in Quality, Effectiveness, and Safety (IQuEst) at the Michael E. DeBakey VA Medical Center and Baylor College of Medicine, has administered a 2-year national curriculum, along with a range of experiential training opportunities, national program evaluation, and continuous program improvement. Upon completing the program, fellows demonstrate competence in interprofessional collaboration and teamwork, improvement methods and skills, organization and system leadership for quality and safety, research, teaching and learning.

South Central Mental Illness Research, Education and Clinical Center (SC-MIRECC)

The mission of SC-MIRECC is to promote equity in engagement, access, and quality of mental health care for Veterans facing barriers to care, especially rural Veterans. Their organizational structure has four major components: Research, Education, Improving Clinical Care and Research Training. SC-MIRECC was founded in 1998 and encompasses all or parts of four states: Arkansas, Louisiana, Mississippi and Texas. The Center has anchor sites at three medical centers in Houston, Little Rock and New Orleans. It is closely aligned with the VISN 16 Mental Health Product Line, which oversees the mental health care delivery and the facility's Mental Health Directors. Drs. Mark Kunik and Michael Kauth are co-directors and members of IQuEst.

Southeast Texas Geriatrics Workforce Enhancement Program

The SETx-GWEP is a federally funded U01 training program partnering with health professions, schools, and facilities across Southeast Texas. It is one of two GWEP programs in Texas and among a select number of federal U01-funded programs supported by the Health Resources & Services Administration. The BCM Geriatrics and Palliative Medicine Section leads a regional consortium that includes partnerships with UT Houston, University of Houston, Texas Southern University, Baker Ripley Senior Services, the Montrose Center, MEDVAMC, and several other area healthcare systems. The grant creates the foundation for a Geriatrics training and education center with outreach across Southeast Texas. The SETx-GWEP was established in July 2019 with funding until June 2024.

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