CARDIOVASCULAR RESEARCH INSTITUTE

BAYLOR CARDIOVASCULAR GLOBAL RANKINGS

Newsletter Winter 2020

Baylor College of Medicine Cardiovascular Research Institute celebrates the tireless work of our cardiovascular community. Together our CVRI members continue to make a difference in the care of our patients, the education of our trainees and the discoveries of further research that give a better understanding of cardiovascular sciences. Congratulations to the members of CVRI, Baylor Cardiology, Cardiovascular Research and Physiology! As a result of everyone's collective effort with publishing in high impact journals and producing quality, highly cited research, US News and World Report 's 2021 summary of Best Global Universities reveal the competitive global rank of Baylor College of Medicine in Cardiac and Cardiovascular Systems. Click on the icon for further details.

#47

Global Rank

#14

Citation Impact

in Top 1% Most Cited

Quantity of

Highly Cited Papers

#34

#20

Publications

#20

Total Citations

#33

Quantity of **Publications** in top 10 % most cited

Source: U.S. News and World Report Global Ranking of Universities



As Theodore Roosevelt once said, "The best prize that life offers is the chance to work hard at work worth doing". I'm excited to be part of such an exciting and diverse research center, and look forward to what's to come! - Amber



Amber Eakin joins us as the new CVRI Administrator. She has been with Baylor over 9 years and has an extensive background in project leadership, educational development and advancement, recruitment, grants, event management, and community outreach. Amber manages the administrative operations in the CVRI financial management, annual planning, communications. In her spare time, Amber enjoys baking, reading, and working with a local animal rescue.

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FY 2021 CVRI Pilot Award Winners

Every year, the Cardiovascular Research Institute (CVRI) at Baylor College of Medicine provides the CVRI Pilot Awards. The goal of the Pilot Award is to support cardiovascular research (clinical, translational or basic) and promote collaboration between investigators that are likely to lead to externally funded grants.

Three proposals were selected for funding for the fiscal year of 2021. A \$15,000 award in unrestricted BCM funds went towards supporting the winning research proposals.

CONGRATULATIONS!!



CVRI is proud to support the cardiovascular research of these scientists with the FY 2021 Pilot Awards.

- Xander Wehrens. MD. PhD CVRI Director



Margaret Goodell, Ph.D. Professor Department of Molecular and Cellular Biology

Collaborator: James Martin, M.D., Ph.D. Department of Molecular Physiology and Biophysics

DNMT3A in Heart Development and Clonal Hemapoiesismediated Atherosclerosis



Na Li, Ph.D.

Assistant Professor Department of Medicine, Cardiovascular Sciences

Collaborator: Mihail Chelu, M.D., Ph.D. Associate Professor Department of Medicine, Cardiology

Collaborator: Kenneth Liao, M.D., Ph.D. Professor Department of Surgery, Cardiothoracic Transplantation and Circulatory Support

Mechanisms of Lamin A/C-mediated Cardiac Conduction Disorders



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

Department of Medicine, Health Services Research

Collaborator: Kenneth Liao, M.D., Ph.D. Department of Surgery, Cardiothoracic Transplantation and Circulatory Support

Bacteriophage Therapy for Drive Line Infections of Ventricular Assist Devices



FACULTY SPOTLIGHT

Rising Star, Zheng Sun, PhD

Zheng Sun, PhD, Associate Professor in the Department of Medicine, is our featured rising star in cardiovascular research. Dr. Sun has published extensively with 56 publications and 6583 citations. He has won numerous awards in 2020 such as the Young Investigator Award, Chinese-American Diabetes Association, the John S. Dunn Collaborative Research Award, Gulf Coast Consortia and the Clifford Elder White Graham Endowed Research Award. He teaches on diabetic cardiomyopathy in the GSBS Term 4 course Cardiovascular Diseases.



Zheng Sun, PhD

Dr. Sun is currently Primary Investigator to 3 ongoing R01 projects. In 2019 Dr. Sun was a recipient of a CVRI pilot award for his proposal, "Cardiac Circadian Clock and Obesity Paradox". This initial pilot grant helped support and eventually lead to his new R01 grant, "Cardiac Circadian Clock and Dialated Cardiomyopathy". "I'm very thankful for CVRI's support with the pilot award. It was very helpful and allowed us to run more important tests that led to my latest R01." Dr. Sun's latest study examines the epigenetic interplay of dietary environment, circadian rhythm and myocardial metabolism to better understand the pathology of heart failure. Relevant findings may lead to new chronotherapy strategies for cardiomyopathy and heart failure.

Problem Solving Through Perspective Change

CVRI caught up with Dr. Sun to get to know him and ask his secret to obtaining NIH funding. When asked about his secret to obtaining 3 R01 grants he says, "There is no secret. It's not easy. You must keep writing."

One piece of advice Dr. Sun gave is the use of perspective change to solve problems. "Throughout the years, one thing I've learned is to switch perspectives when working on the problem I am studying." When I am motivated and devoted to what I'm studying, switching to a bystander perspective helps me consider whether I'm doing the right thing or focusing on the right problem.

Another perspective I choose to switch to is that of the friend. I obtain the feedback of a trusted friend or colleague or imagine thoughts from their perspective. The questions I ask are: is this work novel; how deep should this inquiry focus; and is this study going in the right direction? Is it as exciting to everyone else as it is to me?

Another way to obtain a different perspective is to write and submit proposals to different grants. Most provide helpful feedback. Reviewers will comment on design flaws or appropriate interpretation of data.

I consider all these different perspectives to form and study the problem I am trying to tackle. Keeping these notes in mind, I continue to write and design my studies."







IMPACT OF CVRI COMMUNITY

Share Your work, Increase Your Impact

CVRI is dedicated to helping members increase collaborations and over all impact. If you have a recent published article, a new accolade or event you want posted and shared, please email cvri@bcm.edu. Share your recent discovery along with a short description and your twitter handle. CVRI will post it on our Twiter, Facebook and Instagram accounts.

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H-Index Metric

Our CVRI members have a broad scholarly impact as evidenced by the H-index metric. The H-index is one metric that shows the importance, significance, and broad impact of a scientist's cumulative research contributions. (Data received from SCOPUS.)

Congratulations to the CVRI scientists with an H-index of 30 and above!

Christie Ballantyne Joseph Coselli James Martin Wolfgang Winkelmayer Biykem Bozkurt Mary Dickinson Vijay Nambi Yochai Burnbaum Mark Entman Daniel Penny Johnny Chen Mary Goodell Salim Virani

Thomas Cooper Scott LeMaire Xander Wehrens

CVRI Celebrates 4 CVRI Faculty and 8 BCM Researchers on the Highly Cited Researchers 2020 List

CVRI is proud to announce that 4 CVRI members have been named on the annual Highly Cited Researchers™2020 list from Clarivate. Twelve Baylor College of Medicine faculty made the list.

Christie Ballantyne Hashem El-Serag Glenn Levine Biykem Bozkurt Richard Gibbs Donna Muzny Malcolm Brenner Joseph Jankovic Quinn Ostrom

Mathew Ellis Sheldon Kaplan Joseph Petrosino Highly Cited Researcher 2020

○ Clarivate

The highly anticipated annual list identifies researchers who demonstrated significant influence in their chosen field or fields through the publication of multiple highly cited papers during the last decade. Their names are drawn from the publications that rank in the top 1% by citations for field and publication year in the Web of Science™ citation index.

The methodology that determines the "who's who" of influential researchers draws on the data and analysis performed by bibliometric experts and data scientists at the Institute for Scientific Information™ at Clarivate. It also uses the tallies to identify the countries and research institutions where these scientific elite are based. The full 2020 Highly Cited Researchers list and executive summary can be found here.

Twitter @WebofScience #HighlyCited2020

GLOBAL COLLABORATION

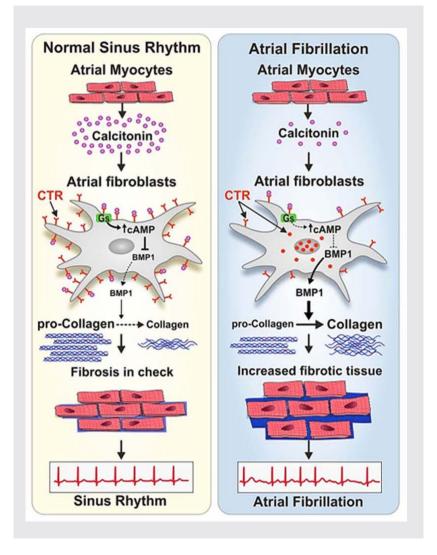
Bone hormone, new treatment for heart rhythm disorder?

- By Graciela Gutierrez

A hormone that helps regulate bone mass also is produced by the heart and could be a treatment for people with a dangerous heart rhythm disorder, according to new research from an international collaboration among Baylor College of Medicine, the University of Oxford, University of Montreal and University of Melbourne.

Until recently, the hormone calcitonin was only thought to be produced by the thyroid gland, with no known effects on the heart. Now, research published in Nature has revealed that cells in the upper chambers of the heart, known as the atria, produce approximately 16 times more calcitonin than cells in the thyroid.

Researchers at Oxford also found that the hormone plays a vital role in reducing atrial scarring. Such scarring makes it harder for electrical impulses to travel smoothly through the atria and can cause them to beat in a chaotic manner, known as atrial fibrilation.



The researchers studied muscle cells from atrial biopsies taken from people undergoing heart surgery and found that they released calcitonin. Interestingly, cells from biopsies of patients with severe AF produced six times less calcitonin.

Looking further, they saw that the calcitonin receptor was present in atrial cells responsible for producing collagen, a major component of scar tissue. When the team treated these cells – called fibroblasts – with calcitonin the cells produced 46 percent less collagen.

Further experiments conducted at Baylor showed that mice that were unable to produce calcitonin in their hearts developed two-and-a-half times more atrial scar tissue compared to mice with normal levels of calcitonin. They also developed AF at a younger age and had approximately 16 times longer episodes of AF. Strikingly, atrial scarring and AF were completely prevented in mice whose hearts produced greater amounts of calcitonin.

"Our studies at Baylor, performed by talented postdoctoral scientists Drs. Mohit Hulsurkar and Satadru Lahiri, show promising results for a new type of gene therapy that increases calcitonin levels within atrial muscle cells. Restoring communication between muscle cells and fibroblasts within the atria could suppress scar tissue formation and limit the progression of AF," according to Dr. Xander Wehrens, director of the Cardiovascular Research Institute at Baylor.

Being diagnosed with atrial fibrillation can significantly increase a person's risk of stroke by promoting the formation of blood clots in the heart that may then travel to the brain and block blood vessels there. Researchers now hope that this new heart hormone and its receptor may hold the key to treating this potentially devastating condition.

"For a long time we've known the heart only produces a small number of hormones, and we can now add a new one to the list. Discovering that calcitonin is released by the heart should open new doors for developing heart treatments," said Dr. Svetlana Reilly of the British Heart Foundation at Oxford. "We now need to explore how we can best restore the actions of this hormone to treat people with AF, and to understand when the best time to treat someone would be."

"These discoveries could be game-changing for the management of AF. Developing a new treatment to prevent or reverse atrial scarring could provide a lifeline to many people at risk of or living with AF," said Dr. Metin Avkiran, associate medical director at the British Heart Foundation.

This study was funded by the British Heart Foundation (BHF) Intermediate Fellowship in Basic Science, by the Oxford BHF Centre of Research Excellence (CRE; RG/13/1/30181) Transitional Fellowship, BHF CRE Overseas Collaboration Travel award, the Medical Science Division Internal Fund, the Wellcome Trust Institutional Strategic Support Fund, the Oxfordshire Health Services Research Committee, the National Institute for Health (NIHR) Oxford Biomedical Research Centre and LAB282 grants (to S.R.); BHF Chair award CH/16/1/32013 (to K.M.C); by Canadian Institutes of Health Research (CIHR) and Heart and Stroke Foundation of Canada (to S.N.) and Fonds de Recherche en Santé de Québec (FRQS) & CIHR postdoctoral fellowships to A.T.



"In addition to being a high health risk on its own, atrial fibrillation contributes to progression of heart failure and stroke. The disease burden in the US alone is billions of dollars each year in terms of direct and indirect expenses across the healthcare system and our current therapies are not highly effective.

To develop better therapies, we need better models of the disease and our newly developed model offers just that! With our ability to deliver genes exclusively to the atria, we have not only developed an excellent model to study how atrial fibrillation progresses, but potentially, an innovative therapy to potentially ameliorate its effects."

-Mohit Hulsurkar, PhD Postdoctoral Associate, Wehrens Lab





CVRI MEMBER ACCOMPLISHMENTS



Keila Natilde Lopez, MD, MPH

Dr. Keila Lopez serves on the Mayor's Health Equity Response (H.E.R.) Initiative and Task Force

Dr. Keila Lopez, Assistant Professor of pediatrics – cardiology, was selected to serve on the H.E.R. taskforce in addressing health inequities in at-risk neighborhoods. Lopez is on the medical and public health subcommittees, where she advocates for communities for whom English is a second language.

"I make sure they are receiving culturally appropriate and tailored messaging surrounding COVID-19 in the appropriate languages. That includes making sure we have a medical writer and translators on board to make sure the messages are clear," Lopez said.

She also participates in town halls in Spanish, where she's addressed the myths and misconceptions of the virus. She has discussed public health principles and factors to consider for parents thinking about sending their children back to school.

For more information about the Mayor Sylvester Turner's H.E.R. Initiative and Task Force, click on the link. https://houstoncovid19recovery.org/health-equity-response-task-force/



2020 MCNAIR SCHOLAR

CVRI member and Seminar and Symposium Committee student leader CHRISTINA MAGYAR is the recipient of the McNair MD/ PhD Scholar award in 2020. CONGRATULATIONS!



Dr. Bijan Najafi, Professor and Director of Clinical Research in the Division of Vascular Surgery and Endovascular Therapy and director of the Interdisciplinary Consortium on Advanced Motion Performance (iCAMP), has been awarded two NIH grants. He received a \$450,000 NIH Fast Track award for his project titled, "TeleExergame: An Interactive Tele-Rehabilitation Platform for Improving Motor Function in Older Adults with Cognitive Deficit." Dr. Najafi also received an NIH-SBIR Phase 1 collaborative award in the amount of \$600k. For this project, Dr. Najafi will be working with Dr. Jan Lindsay and Dr. Sharkhaneh from the VA-Houston, along with Biosenics in Boston, to develop a novel wearable device that automatically detects respiratory arrest due to overdose and automatically delivers naloxone to save the life of a person who is overdosing from narcotics.

CVRI FALL SEMINAR SERIES

The Cardiovascular Research Institute at Baylor College of Medicine conducts a seminar series during the spring and fall of each year open to faculty, students and all who are interested in cardiovascular research. This year, CVRI expanded to bimonthly virtual seminars with local, national and international cardiovascular scientists. The aim is to teach and share the recent work of renowned invited speakers and foster meaningful conversations and collaborations between speakers, students and faculty. To watch previous seminars please go to our CVRI Seminar webpage.

Thank you to all our speakers this fall!



August 26, 2020

Speaker: Svetlana Reilly, MD, D.Phil Associate Professor, Cardiovascular Science University of Oxford, UK

Topic: Calcitonin Paracrine Signaling Controls Atrial Fibrogenesis and Arrhythmia



September 16, 2020

Speaker: Lalitha Nayak, M.D. Assistant Professor, Department of Medicine, School of Medicine Case Western Reserve University

Topic: Targeting Neutrophils in Thrombosis: Leading from the Back



September 30, 2020

Speaker: Guo Huang, Ph.D. Assistant Professor, Department of Physiology University of California, San Francisco

Topic: Molecular Control of Heart Regeneration: Insights from Platypus, Armadillos, **Bats and Whales**



October 7, 2020

Speaker: Rajan Jain, M.D, Ph.D. Assistant Professor of Medicine, Cell and Developmental Biology

University of Pennsylvania

Topic: Dynamic 3DGenome Organization in Regulating Cellular Identity

CVRI FALL SEMINAR SERIES



October 21, 2020

Speaker: Huaizhu Wu, M.D.

Associate Professor, Department of Medicine

Baylor College of Medicine

Topic: Metabolic Inflammation in Obesity: Friend or Foe



November 4, 2020

Speaker: Michihisa Umetani, Ph.D.

Assistant Professor, Department of Biology and Biochemistry

University of Houston

Topic: Modulation of Estrogen Receptor Action by 27-Hydroxycholesterol in

Cardiovascular Diseases and Metabolism



November 18, 2020

Speaker: Vasanth Vedantham, M.D., Ph.D.

Associate Professor, Department of Medicine

University of California, San Francisco

Topic: A Deeply Conserved Gene Regulatory Network Organizes Vertebrate Heart

Rhythm





Speaker: Rebekah L. Gundry, Ph.D, FAHA

Professor and Vice-Chair Department of Cellular & Integrative Physiology

Director, CardiOmics Program

Assistant Chief, Basic and Translational Research

University of Nebraska Medical Center

Topic: New Technologies for Exploiting the Human Glycoproteome for

Personalized Medicine



December 16, 2020

Speaker: Julie Phillippi, Ph.D.

Vice Chair, Cardiac Research,

Department of Cardiothoracic Surgery

University of Pittsburg School of Medicine

Topic: Microvascular Perspectives of Aortic Disease

2021 SPRING CVRI SEMINAR SERIES



Thomas Cooper, MD
Baylor College of Medicine
January 13, 2021



Isabelle Deschenes, PhD Ohio State University January 27, 2021



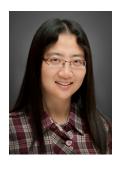
Jonathan Silva, PhD, FAHA Washington University February 10, 2021



Adam Engler, PhD University of California February 24, 2021



Peng Yao, PhD University of Rochester March 10, 2021



Li Qian, PhD University of North Carolina March 24, 2021



Travis Hinson, MD University of Connecticut Health April 14, 2021



Javed Butler, MD Stony Brook University April 28, 2021



Rong Tian, MD, PhD
University of Washington
May 12, 2021

Baylor College of Medicine

SAVE THE DATE & CALL FOR ABSTRACTS

Cardiovascular Research Institute 8th Annual Symposium

April 7, 2021 & April 8, 2021

12:00 PM- 4:30 PM



Featured Keynote Speaker

Alan Daugherty, PhD, DSc

Director, Saha Cardiovascular Research Center Gill Foundation Chair, Preventive Cardiology Chair, Department of Physiology Senior Associate Dean for Research Associate Vice President for Research University of Kentucky

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EDUCATION

Graduate School of Biomedical Sciences Courses

TERM 3 CARDIOVASCULAR DISEASES

GS-DD-6210

2 Credits

This course is held on Tuesdays and Thursdays. It provides a general overview of the main common cardiovascular diseases and their causes. Topics covered include atherosclerosis, hypertension, congenital heart disease, ischemic heart disease, cerebral stroke, cardiac arrhythmias, and the effects of aging on the cardiovascular system. 1/4/2021 – 3/5/2021 Course Director: Xander Wehrens, MD, PhD

Date	Торіс	Instructor
Jan 5	Overview of Cardiovascular Disease Burden in the US and Abroad	Xander Wehrens, MD, PhD
Jan 7	Congenital Heart Defects	Joshua Wythe, PhD
Jan 12	Cardiac Arrhythmias	Christina Y. Miyake, MD, MS
Jan 14	Cardiomyopathies and Heart Failure	Na Li, PhD
Jan 19	Cerebrovascular Disease and Stroke	Robert Bryan, PhD
Jan 21	Hypertension	Dave Durgan, PhD
Jan 26	Aortic Disease	Scott LeMaire, MD, FACS, FAHA, FCCP
Jan 28	Midterm Exam	
Feb 2	Coronary Artery Disease	Yochai Birnbaum, MD, FAHA, FACC
Feb 4	Aging of the Cardiovascular System	George Taffet, MD
Feb 9	Valvular Disease	Dhaval Parekh, MD
Feb 11	Inflammation of the Heart	Katarzyna Cieslik, PhD
Feb 16	Animal Models of CV Disease	Xander Wehrens, MD, PhD
Feb 18	Drug-Induced Cardiac Toxicity	Tyler Moran, MD, PhD
Feb 23	Epidemiology and Prevention of CV Diseases	Umair Khalid, MD
Mar 2	Final Fxam	

Term 4 Advanced Topics in Cardiac Physiology and Disease GS-DD-6401

4 Credits

Register for Term 4 (GS-DD-6403) February 15–26, 2021

This course covers the fundamentals of cardiac development, and cardiac function in both physiological and pathological conditions. The course will also discuss the cutting-edge research approaches used in cardiovascular research.

Course Director: Na Li, PhD & Xander Wehrens, MD, PhD

Term 5 Advanced Topics in Vascular Physiology and Disease GS-DD-6402

4 Credits

Register for Term 5 (GS-DD 6404) April 26-May 7, 2021

This course emphasizes cardiovascular disease pathology with a focus on vascular disorders and atherosclerosis. Lectures will cover all components of the normal system, inherited forms of disease, and the pathogenesis of acquired types of disease. Topics include vascular diseases, lipid disorders, atherosclerosis, hemostasis and bleeding disorders, microcirculation disorders, stroke, hypertension, and peripheral artery disease. The course will also discuss the cutting-edge research approaches used in cardiovascular research.

Course Director: William Lagor, PhD & Xander Wehrens, MD, PhD







CVRI GSBS TEACHING AWARDS 2020

GSBS Teaching Awards 2020



David Durgan, PhD
Outstanding Lecturer
in Development, Disease Models &
Therapeutics Courses

Thomas Cooper, MD
Outstanding Lecturer
in Development, Disease Models &
Therapeutics Courses



Daryl Scott, PhD, MD
Outstanding Lecturer
in Genetics & Genomics Courses
Best Course: Human Genetics

Md. Hassan Samee, PhD
Outstanding Lecturer
in Quantitative & Computational
Biosciences Courses





WILLIAM LAGOR, PhD

Marc Dresden Award for Excellence in Graduate Education

COVID-19 PUBLICATIONS

Jacobs, A, Ali, M, Best, PJ, Bieniarz, M, Cohen, MG, French, WJ, Fonarow, GC, Granger, CB, Goyal, A, Henry, T, Hollowell, L, Jneid, H, Jollis, JG, Katz, JN, Mason, P, Menon, V, Redlener, M, Tamis-Holland, JE, Zegre-Hemsey, J. **Temporary emergency guidance to STEMI systems of care during the COVID-19 pandemic: AHA s Mission: Lifeline** (2020) *Circulation*, 142 (3), pp. 199-202.

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FUNDING OPPORTUNITIES

American Heart Association 2020-2021

Program	Letter of Intent Deadline	Application Deadline	Award Start Date
Institutional Award for Undergraduate Student Training This award is made to qualified instituti that can offer a meaningful research experience that supports the AHA missic that encourages undergraduate college students from all disciplines to consider research careers.	on	Jan. 14, 2021	April 1, 2021
Disparities in Cardio-Oncology Strategic Focused Research Network Career Development Award Supports highly promising healthcare a academic professionals in the early year of first professional appointment, to expinnovative questions or pilot studies the will provide preliminary data and training to assure the applicant's future success a research scientist in the field of cardiovascular and/or cerebrovascular disease research.	Feb. 9, 2021 nd rs plore at	March 30, 2021	July 1, 2021
Research Supplement to Promote Diversin Science Open to currently-funded AHA faculty as (e.g., TPA, EIA, Merit, CDA, CSA, and SFR Project PIs) with at least two years of furemaining at the time of submission, to support research experiences for predoction of the support research experiences for predoction of t	wardees N nding	Feb. 16, 2021	July 1, 2021

FUNDING OPPORTUNITIES

Other Funding Opportunities

Program

Letter of Intent Deadline Application Deadline

BRISTOL MYERS SQUIBB FOUNDATION DIVERSITY IN CLINICAL TRIALS CAREER DEVELOPMENT PROGRAM

Jan. 4, 2021

July 2, 2021

The BMSF Diversity In Clinical Trials Career Development Program (DCTCDP) is a 2-year program designed to support the career development of early stage investigator (as defined by NIH) physicians underrepresented in medicine, or, physicians who have a demonstrated commitment to increasing diversity in clinical research, to become independent clinical trial investigators who are engaged in advancing health equity through their research and mentoring.

The DCTCDP offers a comprehensive and integrated approach to increasing diversity in clinical trials through workforce development and clinical trial site development in underserved communities where underrepresented patients receive care. The program will support established clinical trials sites/centers of excellence to engage with nearby community and safety net healthcare delivery institutions to enhance their clinical trial capacity and to collaborate on research, and it will support the transition of research naïve sites to fully functional clinical trial sites through an infrastructure investment fund.

BURROUGHS WELLCOME FUND POSTDOCTORAL ENRICHMENT PROGRAM

JAN 14, 2021

The Postdoctoral Enrichment Program (PDEP) provides a total of \$60,000 over three years to support the career development activities for underrepresented minority postdoctoral fellows in a degree-granting institution in the United States or Canada whose training and professional development are guided by mentors committed to helping them advance to stellar careers in biomedical or medical research.

Applicants should have no more than 36 months of postdoctoral research experience at the time of application and should not be more than five years from their Ph.D. Applicants must be citizens of the United States or Canada at the time of the application deadline.

DORIS DUKE CHARITABLE FOUNDATION PHYSICIAN SCIENTIST FELLOWSHIP

Jan 5, 2021

The Physician Scientist Fellowship (PSF) award aims to support research during the final years of subspecialty fellowship and aid in the transition into an academic faculty appointment. The specific goals of the PSF program are to:

- 1) support physician scientists in subspecialty fellowship to conduct an outstanding clinical research project
- 2) ensure research time protection to enable development of research skills; and
- 3) facilitate strong mentorship relations.

Grants of up to \$220,000 over two years (\$100,000 direct cost and \$10,000 indirect costs per year) will be awarded to physician scientists (MD, MD/PhD, DO, or foreign equivalent) in subspecialty fellowship training working at US medical institutions to support two years of clinical research that will strengthen their careers as biomedical investigators.

IN MEMORIAM

James T. Willerson, MD (1988-2020)



Dear CVRI Members,

It is with great sadness that we share with you that world-renowned cardiologist James T. Willerson, MD, passed away on Wednesday, September 16, 2020, from a lengthy illness. He was 81. At the time of his passing, Dr. Willerson was President Emeritus, Director of Cardiology Research, and Co-Director of the Cullen Cardiovascular Research Laboratories at the Texas Heart® Institute (THI) at CHI St. Luke's Health-Baylor St. Luke's Hospital.

Dr. Willerson served as President of The University of Texas Health Science Center in Houston from 2001-2008, and he recently retired as the Edward Randall III Professor of Internal Medicine at The UT Medical School at Houston. He held the Dunn Chair in Cardiology Research at THI, the Willerson/O'Quinn

Chair at THI, the James T. Willerson, MD Distinguished Chair in Cardiovascular Diseases at UT Southwestern Medical School in Dallas and The Institute of Molecular Medicine "IMM" at the University of U.T. Health Houston. He has been named a Distinguished Alumnus at the University of Texas, Austin, and at the Baylor College of Medicine. Dr. Willerson was a Phi Beta Kappa graduate of UT Austin, where he was a three-year swimming letterman and a member of the Texas Cowboys. He was an AOA graduate of Baylor College of Medicine and received his postgraduate training at Harvard Medical School and the Massachusetts General Hospital in Boston. Dr. Willerson was a member of the National Academy of Medicine. In addition to having served on numerous editorial boards for professional publications, he has edited or co-edited 27 textbooks, including his signature textbook, the Third Edition of Cardiovascular Medicine, released in February 2007. He has published more than 1,000scientific articles in majorjournals. Dr. Willerson served as a visiting professor and invited lecturer at more than 260 institutions worldwide.

Dr. Willerson worked closely with cardiovascular physicians and scientist affiliated with Baylor College of Medicine for over 40 years. A close personal friend and long-term collaborator, Dr. Mark Entman, William J. Osher Chair in Cardiovascular Research in the Department of Medicine and Scientific Director of the DeBakey Heart Center, remembers Dr. Willerson as follows:

"In many ways, Jim was a prototype of the academic evolution of cardiovascular therapy and science evolving in the post-NIH era. He was, in his heart, a physician first and was the best cardiologist I ever knew. His restless impatience with our limitations in that area led him to use his great talent as a leader to develop the necessary institutions required to grow cardiovascular science. He was the Editor-in-Chief of Circulation for more than a decade and helped define excellence and expand the American Heart Association publication program. He began his scientific contribution by assembling the 'Support of Competitive Research' SCORE program at UT Dallas to a model that ultimately spawned three Nobel Prizes.





He came to Houston as Chairman at UTHealth after a major administrative cataclysm and righted the ship while helping Dr. Cooley expand the Texas Heart Institute into a scientific institution and assumed its leadership after stepping down from the chair. He made the Texas Heart Institute part of the Cardiovascular Environment in Houston and was very generous with its resources in contributing to many of our careers. The eponymic weekly 'James T. Willlerson Cardiovascular Seminar Series' at THI assured a train of scholars with whom our local scientists could interact and allowed us to meet with each other on a weekly basis. Finally, although he was competitive, he cheered on all of us and always lent a shoulder or helping hand".

Dr. Willerson was an exceptional cardiologist both in practice and research, with patients including former Secretary of State James A. Baker, former Houston Mayor Bob Lanier, and legendary heart surgeon Denton A. Cooley, MD, with whom Dr. Willerson developed a close friendship. His discoveries focused on detecting and treating heart disease, including pioneering research on using stem cells to repair heart tissue and vessels damaged by heart attack. Due to his work, the U.S. Food and Drug Administration awarded the institute approval to launch the first human clinical trial testing this method. His brilliance as a scientist was only equaled by his devotion to his patients. So committed to his patients, Dr. Willerson was known to return phone calls to them back in Houston whether he was in China, Turkey or South America.

Dr. Christie Ballantyne, Chief of Cardiology at Baylor College of Medicine, remembers Dr. Willerson as follows: "I first met Jim when I was an intern in Parkland Hospital and he has been a huge influence throughout my career. Without a doubt, Jim was the most dedicated and hard-working clinician scientists that I have ever known. He was not only dedicated to research but also to patient care, education and training countless numbers of resident and fellows."

We were honored to host Dr. Willerson as the keynote lecturer at our 2nd Annual Symposium of the Cardiovascular Research Institute at Baylor College of Medicine in 2014 (see picture, with CVRI Associate Director Dr. Biykem Bozkurt). His brilliant lecture on the use of stem cell treatment of coronary heart disease and severe heart failure in humans will long be remembered and has inspired numerous colleagues and trainees to pursue the exciting field of stem cells and cardiac regeneration. Dr. Willerson's passion for cardiovascular medicine and research will be missed greatly in the Texas Medical Center.

Sincerely,

Xander Wehrens, MD, PhD Biykem Bozkurt, MD, PhD Cardiovascular Research Institute



CVRI EXECUTIVE LEADERSHIP



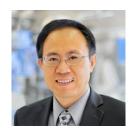
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