Welcome New Faculty! Dr. Jeffrey Teuteberg joins the Department of Medicine - Division of Cardiovascular Medicine and the Cardiovascular Institute as the Section Chief of Heart Failure, Cardiac Transplant and Mechanical Circulatory Support. He arrives at Stanford from the University of Pittsburgh Medical Center where he developed his clinical research career in outcomes and risk factors in patients who have mechanical circulatory support and novel immunosuppression in patients who receive cardiac transplantation. In addition to his administrative responsibilities he will continue to be clinically active, caring for patients with advanced heart failure as well as those who have received cardiac transplantation and mechanical support. He will also focus on building the clinical research program in the Heart Failure Section. Dr. Teuteberg also remains active in medical societies and will be serving as the President of the International Society for Heart and Lung Transplantation in 2018.

Lucile Packard Children’s Hospital Stanford ranks among the nation’s best in pediatric specialty care in U.S. News

In the U.S. News & World Report’s 2017–2018 Best Children’s Hospitals survey, Lucile Packard Children’s Hospital Stanford once again achieved rankings in all ten pediatric specialties.

“As we approach the debut of our newly expanded hospital this year, these rankings affirm the quality of specialty care that we are so proud to provide our patients,” said Christopher G. Dawes, Packard Children’s president and chief executive officer. “That quality will be amplified in our new, state-of-the-art facility when it opens in December.”

The new main building adds 149 patient beds, nearly all of them private, which Dawes says will serve to improve safety and quality as well as the patient experience. The expanded campus includes 3.5 acres of green space and gardens and will more than double the size of the current hospital. It will also allow for the original building to undergo enhancement renovations.


Stanford Hospital ranks among top 10 in the country

STANFORD, CALIF. – Stanford Hospital was named top 10 on the U.S. News & World Report’s Honor Roll of the best hospitals in the nation. The ranking, which reflects the hospital’s spot among the top 1 percent of more than 5,000 hospitals surveyed, is based on outstanding performance across multiple areas of care, with factors such as quality, patient safety, and reputation. Stanford Hospital was also ranked in 13 medical specialties and the number one hospital in the San Jose metropolitan area.

“We are very pleased that Stanford Hospital has again been named to the U.S. News & World Report Honor Roll,” said Stanford Health Care President and CEO David Entwistle. “This national recognition is a testament to the outstanding commitment to quality patient care and the unique Stanford spirit of innovation shared by all our physicians, nurses, administrative staff, and everyone on our care teams. We look forward to continuing our collective work to ensure that each and every patient receives personalized care of the highest quality and value.”


Faculty Recruitment

The Cardiovascular Institute and the Department of Medicine at Stanford University are recruiting a full-time academic faculty with expertise in any of the areas of drug/gene delivery, polymer chemistry/nanotechnology, bioengineering/biomaterial sciences, biomedical formulation, clinical medicinal chemistry, medical pharmacology/molecular pharmacology, toxicology, bioinformatics, applied proteomics and pharmacogenomics at the rank of Assistant or Associate Professor in the Non-Tenured Line-Research (NTL-R). More details.
Each year, CVI partners with leading institutions around the world to share research and foster collaboration of researchers, clinicians and trainees. This year, pioneering researchers from the twelve leading cardiovascular hospitals in China and U.S. will convene to discuss the latest advances in cardiovascular research.

WELCOME REMARKS

Joseph C. Wu, MD, PhD  
Director, Stanford Cardiovascular Institute  
Simon H. Stertzer Professor of Medicine and Radiology

Lloyd B. Minor, MD  
Carl and Elizabeth Naumann Professor for the Dean of the School of Medicine;  
Professor of Otolaryngology, Head and Neck Surgery, and by courtesy, of Neurobiology and Bioengineering

David Entwistle, MHSA  
President and Chief Executive Officer  
Stanford Health Care

Christopher G. Dawes, MBA  
President and Chief Executive Officer  
Lucile Packard Children’s Hospital

KEYNOTES

Victor J. Dzau, MD  
President, National Academy of Medicine  
James B. Duke Professor of Medicine  
Duke University School of Medicine

Zhe Zheng, MD, PhD  
Vice President, Fuwai Hospital, Peking Union Medical College & Chinese Academy of Medical Sciences; Professor, Deputy Director, National Center for Cardiovascular Diseases

Rui-Ping Xiao, MD, PhD  
Professor at the Institute of Molecular Medicine  
Peking University

Brian Kobilka, MD  
2012 Nobel Laureate  
Helene Irwin Fagan Chair in Cardiology  
Professor, by courtesy, of Chemical and Systems Biology  
Stanford University

PARTICIPATING INSTITUTIONS

ORGANIZING COMMITTEE

Joseph C. Wu, MD, PhD  
Director, Stanford Cardiovascular Institute  
Simon H. Stertzer Professor of Medicine and Radiology

Alan Yeung, MD  
The Li Ka Shing Professor in Cardiology; Co-Chief, (Clinical), Division of Cardiovascular Medicine, Stanford School of Medicine

Hana Lee, MPH  
Associate Director, Stanford Cardiovascular Institute

Li Wang, MD, PhD  
Professor, State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, Peking Union Medical College and Chinese Academy of Medical Sciences

Feng Lan, PhD  
Professor and Deputy Director, Beijing Lab for Cardiovascular Precision Medicine, Beijing Institute of Heart Lung and Blood Vessel Disease, Beijing Anzhen Hospital, Capital Medical University

Sponsored in part by:

Register & Submit Posters  
http://tinyurl.com/schina2017
2017 Silicon Valley’s Heart Ball raised over $825,000 to fund critical research and programs in the Silicon Valley

The 2017 Heart Ball was held on June 3, 2017 hosted by the American Heart Association & American Stroke Association. The gala brought together physicians, philanthropists and local business communities, including prominent leaders in the technology and finance industry.

The Institute currently consists of over 241 faculty members representing physicians, surgeons, engineers, basic and clinical researchers. The mission of the Institute is integrating fundamental research across disciplines and applying technology to prevent and treat cardiovascular disease.

To support cardiovascular research and education at CVI, please contact: Cathy Hutton, Senior Associate Director, Medical Center Development at cathy.sutton@stanford.edu or Hana Lee, Associate Director, Cardiovascular Institute at hanalee@stanford.edu.


About the Stanford Cardiovascular Institute

Cathy Hutton, MBA

Hana Lee, MPH
Stanford researchers find intriguing clues about obesity by counting steps via smartphones  By Tom Abate

A global study based on daily steps counted by smartphones discovers “activity inequality.” It’s similar to income inequality, except that the “step-poor” are prone to obesity while the “step-rich” tend toward fitness and health.

Stanford researchers using smartphones to track the activity levels of hundreds of thousands of people around the globe made an intriguing discovery: In countries with little obesity, people mostly walked a similar amount per day. But big gaps between people who walked a lot and those who walked very little coincided with much higher levels of obesity.

The ground-breaking study, appearing in Nature, used data captured from smartphones to analyze the habits of 717,000 men and women from 111 countries, whose steps were studied for an average of 95 days.

The researchers, led by computer scientist Jure Leskovec, PhD and bioengineer Scott Delp, PhD dubbed this phenomenon “activity inequality” to evoke the well-established concept of income inequality. “If you think about some people in a country as ‘activity rich’ and others as ‘activity poor,’ the size of the gap between them is a strong indicator of obesity levels in that society,” Delp said.

A related finding was the powerful role that gender played in country-to-country differences. Prior studies of physical activity, done mainly in the United States, have shown that men walk more than women, and this was borne out in the global findings. What surprised researchers, however, was how greatly this gender step gap varied from country to country with negative consequences for women. “When activity inequality is greatest, women’s activity is reduced much more dramatically than men’s activity, and thus the negative connections to obesity can affect women more greatly,” Leskovec said.

The researchers, who are sharing their findings on an activity inequality website, hope their work will help improve public health campaigns against obesity and support policies to make cities more “walkable.”

Using step data captured by smartphones, Stanford researchers have defined a new public health risk they call activity inequality. This occurs when large gaps develop inside a country between people who walk a lot and those who walk very little, leading to unhealthy levels of obesity. (Image credit: Tim Althoff)

Scientists tie heart patients’ increased shingles risk to glucose-gobbling immune cells  By Bruce Goldman

People with coronary artery disease face an elevated risk for shingles because aberrant immune cells dial down the body’s immune response to viral pathogens, Stanford research shows. In a study published online June 12 in the Journal of Clinical Investigation, the researchers learned that a set of immune cells whose aberrantly large appetite for glucose predispaces people to this heart condition also disables the immune response to viral infections — and does so using the same immune-response-derailing technique often employed by cancer cells.


Researchers help develop technique for assessing, reducing risk of future stroke  

By Jennie Dusheck

Using health records, Stanford researchers developed an algorithm for scoring the risk of a stroke patient experiencing a heart condition known as atrial fibrillation, a major risk factor for a second stroke.

One stroke is dangerous, and a second, even more so. One important risk factor for that perilous second stroke is an irregular heart rhythm called atrial fibrillation. If doctors could identify the stroke patients who are most likely to experience atrial fibrillation, they could start treatments that would help prevent a second stroke. But which stroke patients are at risk for the condition has been hard to predict without costly 24/7 monitoring for the hundreds of thousands of people who have a first stroke every year.

Now, a team led by researchers at the Stanford University School of Medicine and Santa Clara Valley Medical Center has used electronic medical records to predict the likelihood of a person experiencing atrial fibrillation after either of two kinds of strokes: a cryptogenic stroke or a transient ischemic attack.

A paper describing their findings was published online June 28 in Cardiology. The senior authors are Nigam Shah, MBBS, PhD, associate professor of Biomedical Data Science at Stanford, and Susan Zhao, MD, of Valley Medical Center. Stanford graduate student Albee Ling and Valley Medical Center internist Calvin Kwong, MD, share lead authorship.

“The scoring system we developed is simple to use and the results could help physicians tailor treatment to individual patients,” said Ling. The risk factors — age, obesity, congestive heart failure, hypertension, coronary artery disease, peripheral vascular disease and disease of the heart valves — are the basis of a scoring system that assigns patients to one of three risk groups.

It can help physicians decide which patients to monitor. Once it’s known that patients have a high risk of atrial fibrillation, they can wear a heart monitor at home to see if they actually are experiencing bouts of atrial fibrillation and then, if they are, treated with the appropriate drugs to try to prevent a second stroke.

The study is an example of Stanford Medicine’s focus on precision health, the goal of which is to anticipate and prevent disease in the healthy and precisely diagnose and treat disease in the ill.


Stanford Medicine publishes its inaugural 2017 Health Trends Report – Harnessing the Power of Data in Health

Harnessing the power of this data is among the most important tasks facing the medical community, and it’s why the inaugural Stanford Medicine Health Trends Report puts big data at the center of health care’s future. A comprehensive review of research and insights from both within and outside of Stanford, the Health Trends Report outlines how more needs to be done to channel the full potential of this new data-driven reality.

Study finds first possible drug treatment for lymphedema

By Tracie White

Collaboration between two Stanford labs has resulted in the discovery of a molecular cause for lymphedema and the first possible drug treatment for it.

Tracey Campbell has lived for seven years with lymphedema, a chronic condition that causes unsightly swelling in her left leg.

The disease, which stems from a damaged lymphatic system, can lead to infections, disfigurement, debilitating pain and disability. There is no cure. The only available treatment is to wear compression garments or use massage to suppress the swelling, which can occur throughout the body in some cases. Campbell — who had two quarts of excess water in her left leg by the time she was diagnosed — has for years worn restrictive garments 24 hours a day and has spent an hour each night massaging the lymph fluid out of her leg.

Lymphedema is uncomfortable, exhausting and dangerous if left uncontrolled. As many as 10 million Americans and hundreds of millions of people worldwide suffer from the condition, many from the after-effects of cancer therapy treatments. Now there’s new hope for a possible pharmaceutical treatment for patients like Campbell. A study led by scientists at the Stanford University School of Medicine has uncovered for the first time the molecular mechanism responsible for triggering lymphedema, as well as a drug with the potential for inhibiting that process.

The study was published May 10 in Science Translational Medicine.

“We figured out that the biology behind what has been historically deemed the irreversible process of lymphedema is, in fact, reversible if you can turn the molecular machinery around,” said Stanley Rockson, MD, professor of cardiovascular medicine and the Allan and Tina Neill Professor of Lymphatic Research and Medicine at Stanford. Rockson shares senior authorship of the study with Mark Nicolls, MD, professor of pulmonary and critical care medicine. Stanford research scientists Wen “Amy” Tian, PhD, and Xinguo Jiang, MD, PhD, share lead authorship of the study and are also affiliated with the Veterans Affairs Palo Alto Health Care System.

Read full article: http://med.stanford.edu/news/all-news/2017/05/study-finds-first-possible-drug-treatment-for-lymphedema.html

Cascade screening for familial hypercholesterolemia and the use of genetic testing

When assistant professor Joshua Knowles, MD, PhD (cardiovascular medicine), identifies a patient with familial hypercholesterolemia, that discovery marks the beginning of a hunt. Even as the new patient undergoes treatment to reduce levels of low-density lipoprotein cholesterol (LDL-C) and stave off early atherosclerotic cardiovascular disease, a search gets underway for family members who might unknowingly be harboring the same disorder. First in this family-based cascade screening are the proband’s closest relatives – parents, siblings, children – followed by screening of the closest relatives of any in that group who are positively identified and then by screening of the closest relatives of any in that group who have the disease.

Familial hypercholesterolemia (FH) is an autosomal dominant genetic disease that occurs in approximately 1 in 250 persons. Those who have FH exhibit very high levels of LDL-C even as children and have a very high (2.5 to 10 times increased) risk of cardiovascular disease. The existence of new therapies that promise to control LDL-C and reduce its attendant risks by about 80 percent increases the urgency to identify patients who are unaware that they have FH.

In a recent publication in the Journal of the American Medical Association (2017;318:381-2), Knowles and his colleagues describe how they trace the disease throughout a family once they have identified a case. Finding new patients in a family requires cholesterol testing or genetic testing or both.

Electronic health records (EHR) are another means of identifying FH patients by searching for a specific ICD-10 code and a family history of FH. Researchers anticipate that they will soon be able to apply algorithms to EHR, laboratory, and billing code data or large-scale DNA sequencing to identify patients as well.

AHA awards $2 million for cardiovascular disease research  

By American Heart Association News

New studies will soon get underway thanks to a pair of million-dollar research grants announced Friday by the American Heart Association. One project will look at how to match the right drug to the right patient, and the other will attempt to extend the effectiveness of high blood pressure drugs for certain patients.

The two Merit Awards, each for $1 million doled out over five years, went to Joseph Wu, MD, PhD, from Stanford University School of Medicine and Garret FitzGerald, MD, from the University of Pennsylvania.

Ivor Benjamin, M.D., chairs the AHA’s research committee and said the goal is to support “visionary leaders.”

Wu plans to use information from stem cells to speed up the slow, expensive process of bringing a new drug to market — which can take years and cost millions, sometimes billions. Such a step would also help doctors who “are making educated but still semi-blind guesses” about a drug’s effectiveness for a particular patient, according to Wu.

“Our project has tremendous potential significance for testing new drugs very efficiently compared to the traditional drug screening that the pharmaceutical industry has to go through — a process that has stagnated and become almost too costly to help patients,” said Wu, director of the Stanford Cardiovascular Institute. Using so-called induced stem cells and novel techniques to grab genetic information, Wu’s team hopes to launch precision cardiovascular medicine from bench to bedside by matching “the best drugs for the individuals who will be most likely to benefit from them, as well as reduce mistakes in giving the wrong drugs to patients,” he said.

The AHA’s Merit Awards fund novel approaches to major research challenges in cardiovascular disease that have the potential to produce an unusually high impact. Last year, the AHA funded research studying how heart cells regenerate and another project examining what triggers coronary heart disease.

Read more: http://news.heart.org/aha-awards-2-million-for-cardiovascular-disease-research/
Recently Awarded Projects

Marlene Rabinovitch, MD
NIH | Endothelial injury, BMPR2 dysfunction and macrophage activation cause EndMT and PAH

Matthew Porteus, MD
CIRM | Genome editing to correct cystic fibrosis mutations in airway stem cells

Guang Li, PhD
NIH | Cellular and molecular mechanism of atrial cardiomyocyte lineage commitment

New Clinical Trials

Adult heart failure patients for stem cell clinical studies

Researchers at Stanford are studying the role of stem cells in patients with ischemic cardiomyopathy (ICM) and anthracycline-based chemotherapy induced cardiomyopathy (AIC).

StEm cell iNjEction in CANcer survivors (SENECA), is a Phase 1 trial to test the safety and feasibility of allogenic mesenchymal stem cells (MSCs) in patients with AIC who are previous cancer survivors. Since therapy for AIC are limited, stem cells may offer an opportunity to restore their heart function. Adult cell therapy has been studied in patients with heart disease with an excellent safety profile. SENECA is the first clinical study of cell therapy for AIC.

For more information, visit the SENECA Trial: https://clinicaltrials.gov/ct2/show/NCT02509156

Combination of meseNchymal and c-kit+ Cardiac stEm cells as Regenerative Therapy for Heart Failure (CONCERT HF), is a Phase 2 trial to examine the feasibility and efficacy of MSCs and c-kit+ cardiac stem cells (CSCs) in patients with ICM. CONCERT-HF is a randomized clinical trial that will evaluate heart function in four groups of patients: a) those treated with only their own MSCs, b) those treated with only their own CSCs, c) those treated with a combination of their own MSCs and CSCs, and d) those treated with placebo. All patients will be followed for one year.

For more information, visit the CONCERT HF: https://clinicaltrials.gov/ct2/show/NCT02501811

The National Heart, Lung, and Blood Institute (NHLBI) established the Cardiovascular Cell Therapy Research Network (CCTRN), which includes key stem cell centers with expertise in conducting clinical trials for cardiovascular diseases. These centers include Stanford University, Texas Heart Institute, University of Florida at Gainesville, Minneapolis Heart Institute Foundation, University of Louisville, University of Miami, and the Vascular and Cardiac Center for Adult Stem Cell Therapy in Indianapolis, Indiana.

Further information on the CCTRN is available at: www.cctrn.org

Contact:
Fouzia Khan, fouziak@stanford.edu or
Phillip Yang, MD, phillip@stanford.edu

The CANVAS Program

The CANVAS Program (CANagliflozin CardioVascular Assessment Study) results presented at the annual meeting of the American Diabetes Association in June 2017. The study investigated canagliflozin, a drug for patients with type 2 diabetes who were at high risk of cardiovascular events, in over 10,000 participants who were followed over an average of three years. The study showed that canagliflozin significantly reduced cardiovascular death, nonfatal myocardial infarction or nonfatal stroke by 14% compared with placebo. Canagliflozin increased the risk of amputation – usually at the level of toe or metatarsal.

Stanford CANVAS Program included Kenneth Mahaffey, MD, a member of the Steering Committee; Mark Hlatky, MD, and Nicholas Leeper, MD, members of the Cardiovascular Adjudication Committee; and Tara Chang, MD, MS, a member of the Renal Adjudication Committee. The adjudication work was coordinated through the Stanford Center for Clinical Research (SCCR).

The trial manuscript was published in The New England Journal of Medicine simultaneously with the presentation of the results: http://www.nejm.org/doi/full/10.1056/NEJMoA1611925
Future Leaders in Medicine

The CVI received many meritorious and exciting research proposals this year and would like to thank all students and their mentors for submitting their research ideas. The committee has chosen to support tuition stipend for four students based on past excellence and future potential in the field of cardiovascular medicine. The awards will be presented at the annual iHeart luncheon on August 18, 2017.

**Joetsaroop Bagga, MD Candidate, 1st Year**
Mentor: Tom Quertemous, MD
Project: The role of vascular smooth muscle cell phenotype in coronary artery disease

**Veronica Toro, MD Candidate, 1st Year**
Mentor: Alison Marsden, PhD
Project: Construction of patient specific models from angiography for CABG surgery planning

**Angela Zhang, MD PhD Candidate, 1st Year**
Mentor: Joseph Wu, MD PhD
Project: Using nano straws to improve the delivery of CRISPR/Cas 9 system to cardiomyocytes

**Xinyuan Lisa Zhang, MD Candidate, 2nd Year**
Mentor: Anson Lee, MD
Project: The role of epicardial-endocardial dissociation in atrial fibrillation measured with a novel electrode sensor array with high spatiotemporal resolution

Congratulations! to the 2017 Dorothy Dee & Marjorie Helene Boring Trust Award recipients!

Successful Joint Cardiovascular Research Meeting at the 2017 Duke-Stanford Symposium

Scientists and faculty of Duke University and the Stanford University met over a two-day symposium to share research and collaborative opportunities. This inaugural event was co-hosted by Howard Rockman, MD of Duke Cardiovascular Institute and Joseph Wu, MD, PhD of the Stanford Cardiovascular Institute. Robert Lefkowitz, MD, Professor at Duke University and the 2012 Nobel Laureate presented the keynote with remarks from Duke Chancellor A. Eugene Washington, MD, Dean Mary Klotman, MD, and Provost Sally Kornbluth, PhD. To watch the recorded presentations, visit: http://tinyurl.com/DukeStanford.

Next Fall, The Stanford-Duke Cardiovascular Research Symposium will be held at the Stanford University, Li Ka Shing Center on October 15-16, 2018 with Brian Kobilka, PhD of Stanford University, 2012 Nobel Laureate presenting a keynote address.
AUGUST

Human Genetics in Atherosclerosis
August 21, 2017
Stanford, CA
Amgen-Stanford

European Society of Cardiology – Congress 2017
Aug 26-30, 2017
Barcelona, Spain
ESC Congress

SEPTEMBER

Council on Hypertension 2017 Scientific Sessions
Sept 14-17, 2017
San Francisco, CA
Hypertension

Heart Failure Society of America Annual Scientific Meeting
Sept 16-19, 2017
Dallas, TX
HFSA meeting

Stanford CVI Retreat
Stanford-China Cardiovascular Research Symposium
September 21-22, 2017
Stanford, CA
CVI

Western Vascular Society
Sept 23-26, 2017
Blaine, WA
Western Vascular Society

NIH NHLBI Cardiovascular Regenerative Medicine Symposium
September 27-28, 2017
Bethesda, MD
Cardiovascular Regenerative Medicine

OCTOBER

Update in Clinical Cardiology
Harvard Medical School
Oct 11-13, 2017
Boston, MA
Clinical Cardiology

Vascular Biology (NAVBO – North American Vascular Biology)
Oct 15-19, 2017
Pacific Grove, CA
NAVBO

NOVEMBER

28th Annual Cardiovascular Interventions
November 7-10, 2017
La Jolla, CA
Cardiovascular Interventions

AHA Scientific Sessions 2017
Nov 11-15, 2017
Anaheim, CA
AHA 2017

Controversies & Advances in the Treatment of Cardiovascular Disease: The Seventeenth in the Series 2017
November 16-17, 2017
Beverly Hills, CA
Cardiovascular Disease

SPECIAL LECTURES at STANFORD

September 29, 2017
Lawrence H. and Roberta Cohn Lectureship

With a generous gift, the Lawrence H. and Roberta Cohn Lectureship was established in 2015. Dr. Lawrence Cohn was a San Francisco born pioneering cardiac surgeon, researcher, and medical education who performed more than 11,500 cardiac surgical operations and was a world-renowned expert in the field of valve repair and replacement surgery.

Joseph S. Coselli, MD
Professor, Vice-Chair and Chief; Cullen Foundation Endowed Chair; Chief, Adult Cardiac Surgery, Texas Heart Institute; Department of Surgery, Baylor College of Medicine

March 6, 2018
Inaugural Steven M. Gootter Foundation Lectureship

The Gootter Foundation is working to defeat Sudden Cardiac Death (SCD). With their support, the Stanford Cardiovascular Institute has established its inaugural lectureship.

Mark E. Anderson, MD, PhD
William Osler Professor of Medicine
Director, Department of Medicine
Johns Hopkins University Department of Medicine
Physician in Chief, Johns Hopkins Hospital

For more information, contact: stanfordcvi@stanford.edu
Frontiers in Cardiovascular Science 2017-2018

Tuesdays 12:30 - 1:20 p.m. (unless otherwise noted), Li Ka Shing Center, LK130

September 6, 2017 (Wednesday)
FLEMING ORNSKOV, MD, MPH
CEO of Shire Pharmaceuticals

September 12, 2017 (1 p.m.)
ALVIN L. ROYSE, JD, CPA
Immediate Past Chairman of American Heart Association; Councilman, Town of Hillsborough; Retired Senior Partner Deloit & Touche LLP

September 26, 2017
PHILLIP C. YANG, MD
Associate Professor of Medicine (Cardiovascular Medicine), Stanford

October 5, 2017 (Thursday)
BRUCE D. GELB, MD
Director of the Center for Molecular Cardiology; Professor of Pediatrics and Genetics and Genomic Sciences, Icahn School of Medicine, Mount Sinai

October 10, 2017
MICHAEL KAPILOFF, MD, PHD
Professor of Ophthalmology, Stanford

October 24, 2017
FRANCOIS HADDAD, MD
Clinical Associate Professor of Medicine (Cardiovascular Medicine), Stanford

October 31, 2017
WILSON TANG, MD
Professor of Medicine, Cleveland Clinic Lerner College of Medicine at Case Western Reserve University

November 7, 2017
GORDON M. KELLER, PHD
Director, McEwen Centre for Regenerative Medicine
Senior Scientist, Ontario Cancer Institute

November 21, 2017
JOSEPH HILL, MD, PHD
Distinguished Chair in Cardiovascular Diseases; Frank M. Ryburn Jr. Chair in Heart Research; Chief of Cardiology, University of Texas Southwestern

November 28, 2017
MARK KAHN, MD
Professor of Medicine, University of Pennsylvania

December 5, 2017
FRANK W. SELLKE, MD
Karl E. Karson, MD and Gloria A. Karson Professor of Cardiothoracic Surgery, Brown Medical School and Lifespan Hospitals

December 12, 2017
JAMES K. LIAO, MD
Harold Hines Jr. Professor; Chief, Cardiology Section; Director, Physician Scientist Training Program University of Chicago, University of Chicago

January 23, 2018
JAMES F. MARTIN, MD, PHD
Professor, Vivian L. Smith Chair in Regenerative Medicine, Baylor College of Medicine

February 13, 2018
WALTER J. KOCH, PHD
William Wikoff Smith Endowed Chair in Cardiovascular Medicine; Professor and Chair, Pharmacology, Temple University

March 6, 2018
Inaugural Steven M. Gootter Foundation Lecture
MARK E. ANDERSON, MD, PHD
William Osler Professor of Medicine; Chair, Department of Medicine, Johns Hopkins University

March 13, 2018
KAM W. LEONG, PHD
Samuel Y. Sheng Professor; EiC, Biomaterials; Department of Biomedical Engineering, Columbia University

April 10, 2018
THOMAS M. VONDRISKA, PHD
Professor of Anesthesiology, Medicine and Physiology, UCLA

April 17, 2018
PEIPEI PING, PHD
Professor, Physiology, Medicine, Cardiology, and Bioinformatics, UCLA; Director, NIH BD2K Center of Excellence at UCLA; Director, NIH BD2K Centers-Coordination Center at UCLA

May 1, 2018
GEOFFREY PITT, MD, PHD
Director of the Cardiovascular Research Institute; The Ida and Theo Rossi Distinguished Professor of Medicine, Weill Cornell Medical College

May 8, 2018
ROBERT J. GROPLER, MD
Professor of Radiology, Medicine and Biomedical Engineering
Senior Vice-Chair and Division Director Radiological Sciences & Chief, Cardiovascular Imaging Laboratory Washington University School of Medicine

May 15, 2018
BRADFORD C. BERK, MD, PHD
Distinguished University Professor in Medicine, Neurology, Pathology, and Pharmacology & Physiology
Director, University of Rochester Neurorestoration Institute University of Rochester Medical Center

May 22, 2018
PETER LIBBY, MD
Mallinckrodt Professor of Medicine, Harvard Medical School
Senior Physician, Brigham and Women’s Hospital

June 5, 2018
CHRISTINE MUMMERY, PHD
Professor of Developmental Biology, Chair Department of Anatomy & Embryology, Leiden University Medical Center

http://cvi.stanford.edu
Tobacco-related Disease Research Program (TRDRP) of California
Amount of funding: $60K to $250K
Letter of Intent (required): Aug 21, 2017
Deadline: Sept 25, 2017
TRDRP

Burroughs Wellcome Fund
Amount of funding: $700K over 5 yrs
Deadline: Oct 3, 2017
Burroughs

Stanford Child Health Research Institute (CHRI)
Clinician Educator (CE) Grants Program
Amount of funding: $25K for one year
Deadline: Sept 1, 2017
CHRI

Fondation Leduq
Transatlantic Networks of Excellence in Cardiovascular and Neurovascular Research
Amount of funding: $6 over 5 years
Deadline: LOI: Sept. 5, 2017
Deadline: Feb 14, 2018
Fondation Leduq

High Risk, High Reward Programs (DP1, DP2, TRA):
- NIH Director's Pioneer Award (DP1)
  $3.5M (Sept. 1) RFA-RM-17-005
- NIH Director's New Innovator Award (DP2) $1.5M (Sept. 8) RFA-RM-17-006
- NIH Transformative Research Award (no budget limit) (Sept. 15) RFA-RM-17-007

NHLBI Program Project Applications (P01)
PAR-16-402
Amount of funding: $1,515,000 direct costs per year (5yr max)
Deadline: Sept. 25, 2017
PAR-16-402

The Strategically Focused Research Vascular Disease Network
Please note: Because only ONE center application is permitted from Stanford,
Dr. Tom Quertermous, the Division Chief of Cardiovascular Medicine in the Department of Medicine, will facilitate/coordinate Stanford's response to this RFP.
Letter of Intent: Aug 1, 2017
Deadline: Sept. 26, 2017
AHA

The Pac-12 Student-Athlete Health and Well-Being Grant Program- 2018 Cycle
Amount of funding: no limit, 3yrs maximum
Internal proposal deadline: Aug 31, 2017
Deadline: Oct 1, 2017 (for selected proposals)
Pac-12

NHLBI Basic Research in Calcific Aortic Valve Disease (R01)
Deadline: October 18, 2017
RFA-HL-18-010

Spectrum Pilot Grants
Amount of funding: $275K direct costs for 2 year period; 2 year maximum
Deadline: January 10, 2018
RFA-HL-17-015

NHLBI Bold New Bioengineering Methods and Approaches for Heart, Lung, Blood and Sleep Disorders and Diseases (R21)
Amount of funding: $15-50K for 1 year
Deadline: Anticipated to be end of 2017/early 2018
Spectrum Pilot Grants

NHLBI Mentored Career Development Award to Promote Faculty Diversity in Biomedical Research (K01)
Deadline: October 15, 2017
RFA-HL-16-006

Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Postdoctoral Fellows
Deadline: December 8, 2017
PA-16-307
Clinical Biomarker & Phenotyping Core Lab (BPCL)

BPCL provides quantitative assessment of clinical cardiovascular phenotypes for translational research and clinical trials. These cardiovascular phenotypes include evaluating cardiac structure and function, measuring carotid intimal thickness and arterial stiffness, and testing endothelial function and cardiopulmonary exercise testing.

In collaboration with the Human Immune Monitoring Center at Stanford and members of the Cardiovascular Institute, we also offer central blood processing and banking capabilities. In addition, we develop new biomarker platforms and imaging modalities.

Contact: Francois Haddad, MD / fhaddad@stanford.edu

CVI Clinical Trials Core

The CVI Clinical Trials Core provides full spectrum of support to CVI members and their clinical trials. The coordinators have extensive clinical research experience in both industry and academia. The team provides services and support to principal investigators and sponsors, including:

- Consultation
- Study start-up management, including IRB applications, budget development
- Subject recruitment, site visits, and follow-ups (AE reporting and queries)
- Data management
- Regulatory compliance and documentation
- Closeout

Contact: Ed Finn, Clinical Trials Manager or Hoa Ly, Clinical Research Coordinator at (650) 498-6279

Cardiovascular Pharmacology (BioADD)

The Cardiovascular Pharmacology/Biomaterials and Advanced Drug Delivery (BioADD) Laboratory is a cutting edge research facility that specializes in the creation of biomaterials and drug delivery agents. The lab lends its expertise toward designing and analyzing biomaterials, developing drug delivery devices and formulations, pharmacokinetic and pharmacodynamic studies, and developing smart materials for biomedical applications. The CVI Cardiovascular Pharmacology also offers trainings and lectures.

Contact: Jayakumar Rajadas, PhD / jayraja@stanford.edu

3DQ Imaging Laboratory

Stanford’s 3DQ Imaging Laboratory develops new approaches to exploration, analysis and quantitative assessments of diagnostic images that result in new and/or more cost-effective diagnostic approaches, and new techniques for the design and monitoring of therapy. The lab processes over 1,200 clinical cases to deliver relevant visualization and analysis of medical imaging data at Stanford.

The lab is co-directed by Dominik Fleischmann, MD, Roland Bammer, PhD and Sandy Napel, PhD.

Contact: Dominik Fleischmann, MD / d.fleischmann@stanford.edu

Stanford CVI Human iPSC Biobank Service

Normal and patient-derived reprogrammed cardiomyocytes are a tremendous resource for researchers and physicians here at Stanford and around the country. Understanding the disease process directly at the population level and observing these cells as surrogates under a myriad conditions has the potential to be a game-changer for cardiovascular medical research.

To facilitate research in a dish that allows screening of new compounds or characterization of human disease phenotypes using cardiomyocytes, the Institute created a service by which de-identified peripheral blood mononuclear cell (PBMC) samples from selected patients can be sent to Stanford CVI for reprogramming free of cost.

SCVI biobank is supported in part by National Heart, Lung and Blood Institute (NHLBI) and the Stanford Cardiovascular Institute (CVI).

Stanford iPSC Biobank was recently mentioned in Nature Methods news: nature.com/nmeth/journal/v12/n2/full/nmeth.3263.html.

Contact: Joseph Wu, MD, PhD / joewu@stanford.edu or Biobank manager, Yan Zhuge / yanzhuge@stanford.edu with any questions.
Communication is at the heart of scientific advancement and innovation. This quarter, the Stanford Cardiovascular Institute members published over 267 original manuscripts and reviews, further contributing to our understanding of cardiovascular biology and disease. Here, we highlight selected manuscripts by our members.

**JULY**


Leadership

Joseph C. Wu, MD, PhD
Director, Stanford Cardiovascular Institute
Simon H. Stertzer Professor of Medicine and Radiology

Robert A. Harrington, MD
Arthur L. Bloomfield Professor of Medicine
Chair, Dept. of Medicine

Ronald L. Dalman, MD
Walter C. and Elsa R. Chidester Professor of Surgery
Chief, Division of Vascular Surgery

Stephen J. Roth, MD, MPH
Professor and Chief, Pediatric Cardiology
Director, Children's Heart Center

Dominik Fleischmann, MD
Professor, Dept. of Radiology
Chief, Cardiovascular Imaging

Michael Snyder, PhD
Professor and Chair, Dept. of Genetics
Director, Stanford Center for Genomics and Personalized Medicine

Kenneth Mahaffey, MD
Professor, Dept. of Medicine
Vice Chair of Medicine for Clinical Research

Y. Joseph Woo, MD
Norman E. Shumway Professor in Cardiothoracic Surgery
Chair, Dept. of Cardiothoracic Surgery

Mark Nicolls, MD
The Stanford Professor of Pulmonary and Critical Care Medicine, Dept. of Medicine,
Chief, Pulmonary and Critical Care Medicine

Alan Yeung, MD
Li Ka Shing Professor of Medicine
Co-Chief (Clinical), Division of Cardiovascular Medicine

Tom Quertermous, MD
William G. Irwin Professor of Medicine
Co-Chief (Research), Division of Cardiovascular Medicine

Paul Yock, MD
Martha Meier Weiland Professor, Bioengineering and Medicine; and Professor, by courtesy,
of Mechanical Engineering, Director, Byers Center for Biodesign

Marlene Rabinovitch, MD
Dwight and Vera Dunlevie Professor in Pediatric Cardiology