Hearty News
Quarterly Cardiovascular Medicine Newsletter
Spring 2019

Appointments and Promotions

Faculty
Promotions

Mohan Viswanathan MD was promoted to Clinical Professor (Cardiovascular Medicine) on April 1, 2019. Congratulations Mohan!

New appointments

Colleen Caleshu ScM LCGC was appointed to Clinical Associate Professor (Cardiovascular Medicine and by courtesy, Medical Genetics) on February 10, 2019. Colleen trained at Johns Hopkins and the National Human Genome Research Institute. She leads the genetic counseling team in the Stanford Center for Inherited Cardiovascular Disease. Her research focuses on genetic counseling and inherited cardiovascular disease.

Rahul Sharma MD was appointed to Clinical Assistant Professor (Cardiovascular Medicine) on March 11, 2019. Rahul trained in Melbourne, Australia and then did an advanced interventional/structural fellowship at Cedars-Sinai, before joining their faculty. He will be starting as a Clinical Assistant Professor and Director of Structural Interventions with a goal of further expanding our transcatheter heart valve and structural programs.

Reappointments

Peter Fitzgerald MD PhD was reappointed to Emeritus Professor (Cardiovascular Medicine) on March 1, 2019.

Victor Froelicher MD was reappointed to Emeritus Professor (Cardiovascular Medicine) on March 1, 2019.
Adjunct Faculty

Uma Valeti MD was appointed to Adjunct Professor (Cardiovascular Medicine) on March 1, 2019.

Staff

New appointments

Sujana Balla, Clinical Research Coordinator Associate, is working with Dr. Koen Nieman and the Electrophysiology group on various clinical trials. Sujana started on February 11th.

Andrea Linder, Research Nurse, is working with Dr. Matthew Wheeler on various clinical trials. Andrea started on February 25th.

Justin Toralba, Administrative Associate 2, is supporting the Interventional group. Justin started on March 11th.

Alyssa Sacro will be taking on a new role in the Division as Clinical Trials Accounting Associate starting on April 1, 2019. Congratulations to Alyssa!

Grants and Awards

Federal Grants and Subcontracts

Kiran Khush – National Institutes of Health subcontract with Massachusetts General Hospital “Targeting inflammation and alloimmunity in heart transplant recipients with Tocilizumab” May 1, 2018 – April 30, 2021

Patricia Nguyen – National Institutes of Health R03 grant “The contribution of T cells to the pathogenesis of atherosclerosis in older adults” August 1, 2018 – July 31, 2020

Euan Ashley and Matthew Wheeler – National Institutes of Health U01 grant “Center for Undiagnosed Diseases at Stanford” Phase II
Thomas Quertermous – National Institutes for Health R01 grant  
“lncRNA transcriptional mechanisms of coronary artery disease risk”  
January 18, 2019 – December 31, 2022

William Fearon – National Institutes of Health R61 grant  
“PCSK9 inhibition after heart transplantation”  
February 1, 2019 – January 31, 2020

Fatima Rodriguez – National Institutes of Health K01 grant  
“SURPASS: (Statin Use and Risk Prediction of Atherosclerotic Cardiovascular Disease in minority Subgroups)”  
February 1, 2019 – January 31, 2024

Alan Yeung – TriReme Medical Inc. contract  
“Assessment of improved interventional devices for cardiovascular disease – catheter evaluation”  
September 1, 2018 – August 31, 2020

Joshua Knowles – United States-Israel Binational Science Foundation (BSF) grant  
“An effort to flag and identify FH patients in Clalit Health Services using machine learning algorithms”  
October 1, 2018 – October 1, 2022

Victoria Parikh – Sarnoff Cardiovascular Research Foundation grant  
“Regional variants in RBM20 cause arrhythmogenic cardiomyopathy”  
October 15, 2018 – October 14, 2020

Kiran Khush – CareDX, Inc. contract  
“SURVEILLANCE HEALTHCARE OUTCOMES SURVEY (SHORE)”  
December 14, 2018 – January 6, 2024

Chad Brodt – Boston Scientific Corporation contract  
“PRecision Event Monitoring of PatienTs using HeartLogic”  
March 8, 2019 – March 7, 2021

Kiran Khush – 2019 ISHLT/Enduring Hearts Transplant Longevity Research grant  
“Leukotriene B4: A potential mediator and biomarker for cardiac allograft vasculopathy”  
May 1, 2019 – April 30, 2021

**Cardiology Fellowship Program**

Announcing the Translational Investigator Program (TIP) matches for 2020!

Daniel Kim (Stanford)  
Stephen Ma (Stanford)
Congratulations to David Ouyang for receiving an American College of Cardiology Foundation/Merck Research Fellowship in Cardiovascular Medicine award for his project “Data Science and Machine Learning for Cardiovascular Imaging”.

**Publications**

**Cost-effectiveness of Canakinumab for Prevention of Recurrent Cardiovascular Events.**

**Interventions to Reduce Ethnic and Racial Disparities in Dyslipidemia Management.** Chang A, Abou-Araj N, Rodriguez F. Current Treatment Options in Cardiovascular Medicine, 2019. [Preprint]

**Association Between Female Corresponding Authors and Female Co-Authors in Top Contemporary Cardiovascular Medicine Journals.**
Ouyang D, Harrington RA, Rodriguez F.

**Practice Variation in Anticoagulation Prescription and Outcomes after Device-Detected Atrial Fibrillation: Insights from the Veterans Health Administration.**
Circulation. 2019 Mar 17. doi: 10.1161/CIRCULATIONAHA.118.038988.

**Secular trends in success rate of catheter ablation for atrial fibrillation: The SMASH-AF cohort.**

**Efficacy of Ablation Lesion Sets in Addition to Pulmonary Vein Isolation for Paroxysmal Atrial Fibrillation: Findings From the SMASH - AF Meta-Analysis Study Cohort.**

**Featured Fellows at American College of Cardiology**

**Connor O’Brien**
Moderated poster presentation entitled: Microvesicles Larger than 200nm Rescue Cardiomyocytes from Doxorubicin Injury in a Patient-Specific Model of Anthracycline Induced Cardiomyopathy
Session: Heart Failure and Cardiomyopathies: Cutting Edge Basic Science Reports

**David Ouyang**
Oral presentation entitled: Big Data Analysis and Machine Learning in Cardiovascular Imaging
Session: ACC Research Awards

**Justin Parizo**
Poster presentation entitled: Evaluation of Trends in Readmission and Mortality Rates after Heart
Failure Hospitalization in the Veterans Affairs Health Care System Between 2007 and 2017  
Session: Heart Failure and Cardiomyopathies: Clinical 1

**Alex Perino**  
Oral Presentation entitled: How Much Atrial Fibrillation is Too Much? Treatment Benefit of Anticoagulation Based on Threshold of Device-Detected AF  
Session: Highlighted original research: Arrhythmias and Clinical EP and the year in review

**Albert Rogers**  
Moderated poster presentation entitled: Machine Learning Identifies Sites Where Ablation Terminates Persistent Atrial Fibrillation  
Session: Atrial arrhythmias: What the latest research tells us about mechanism and outcomes

Poster presentation entitled: Intraclass Correlations of Voltage, Fractionated Electrograms, and Dominant Frequency in Patients Where Localized Ablation Terminated Persistent Atrial Fibrillation  
Session: Arrhythmias and Clinical EP: Supraventricular/Ventricular Arrhythmias 5

**Pablo Sanchez (2019-2020 Fellowship class)**  
Poster presentation entitled: Contributors to Respiratory Failure and Outcomes in the Cardiac Intensive Care Unit  
Session: Acute and Stable Ischemic Heart Disease: Clinical 4

**Alberta Yen**  
Poster presentation entitled: Innovative Ultrasound Technologies EchoGPS and AutoEF Help Novices Perform Efficient and Accurate Echocardiographic Monitoring in Cancer Patients  
Session: Non-invasive imaging: Echo

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**Our Team in the News**

![Image of kidneys and DNA strand]

**Drug reduces risk of kidney failure in people with diabetes, study finds**  
Dr. Kenneth Mahaffey discusses a drug that reduces risk in kidney failure in people with diabetes.

**AI identifies risk of cholesterol-raising genetic disease**  
Dr. Joshua Knowles helped develop an algorithm that can predict a patient’s risk of potentially fatal heart disease known as hypercholesterolemia.
Apple Heart Study demonstrates ability of wearable technology to detect atrial fibrillation
Drs. Marco Perez and Mintu Turakhia presented preliminary data at the American College of Cardiology meeting in March. More than 400,000 participants are enrolled in the Apple Heart Study.

Drug could alleviate side effects of chemo for breast cancer patients
Dr. Joseph Wu and collaborators created heart cells known as cardiomyocytes and tested how the cells responded to the effects of the well-known chemotherapy drug Herceptin.

Congenital heart defects vastly increase risk of heart problems later in life
Dr. James Priest and collaborators found that people born with a minor heart defect are at greater risk of developing heart problems as they get older.

Why are so few interventional cardiologists women? A new study offers a few clues
Dr. James Priest and collaborators found that people born with a minor heart defect are at greater risk of developing heart problems as they get older.

Failure to take statins leads to higher mortality
Drs. Fatima Rodriguez and Paul Heidenreich discuss the implications for patients that do not take their statins as prescribed.

At event, experts talk heart health and share the latest on Apple Heart Study
Dr. Bob Harrington, Chair, Department of Medicine, Stanford University as well as the President of the American Heart Association on a panel at the Apple store for a special event, Heart Health with Apple
Upcoming Events and Conferences

Register TODAY!
Sunday, September 8, 2019
7:30am – 11:30am

CV Med Quarterly Socials – All socials begin at 4:30pm in the Falk Library (or outside patio when weather permits). 2019 Socials are on Thursdays. The next quarterly social will take place in May. Date TBD.

Featured Cardiovascular Medicine Conferences

Cardiology Grand Rounds calendar
Weekly CGR’s are on Thursdays at 8am in the Falk Library.

- Stanford Drug Discovery Symposium
  April 22-23, 2019
  Li Ka Shing Center, Stanford
  Organizers: Joseph Wu MD PhD and Mark Mercola PhD
- 12th Annual Cardiology for the Primary Care Practitioner
  May 11, 2019
  Li Ka Shing Center, Stanford
  Course Director: David Lee MD
- Big Data in Precision Health Conference
  May 22-23, 2019
  Li Ka Shing Center, Stanford
- EP in the West – Save the Date
  September 13, 2019
  Li Ka Shing Center, Stanford
  Course Director: Paul Wang MD

Additional Cardiovascular Medicine CME information

Complete list of Stanford CME courses
Monthly:

- **2018 Frontiers in Cardiovascular Science**
  Tuesdays from 12:30 – 1:20pm
  Stanford University Li Ka Shing Center
  2018 Frontiers in Cardiovascular Science

If you are thinking about applying to a grant, email Crystal or Pete to learn more about the Division of Cardiovascular Medicine’s research development and proposal writing resources.

**Upcoming Funding Opportunities**

- **AHA grants**
- **Additional Funding:**
  - Cardiovascular Disease Funding Opportunities, Internal Funding Opportunities, Postdocs and Clinical Fellows, Graduate Student
- **RMG Funding Information Resource webpage**
- **NIH, AHRQ and NIOSH K Career Development Award Funding Opportunities and Computer Lab Training Sessions:**
  - RMG Index of NIH K award program announcements and other resources

**Continuous Submissions**

- **Intermountain-Stanford Collaboration Grant**
  Request for Letters of Intent for Travel Grants
  Letters of intent may be submitted at any time. Applicants will be notified within 21 days of submission.
  Award Amount: Reimburse actual costs
  Intermountain-Stanford

**Cardiovascular Medicine Training Grants**

- Cardiovascular Imaging Postdoctoral Fellowship Training at Stanford
  CV Imaging
- Training in Myocardial Biology at Stanford (TIMBS)
  TIMBS
- Mechanisms and Innovations in Cardiovascular Disease T32 Training Grant
  Deadline: May 1, 2019
  Start date: July 1, 2019
  T32

**May 2019**
• **Stanford Spectrum**  
  2019 Spectrum MedTech Pilot Grants  
  Typical grants range between $15,000 and $50,000 per year  
  **Deadline:** May 1, 2019

2019 Spectrum MedTech

• **Children’s Heart Foundation - Medical Research Grant**  
  Up to $100K/yr for 2 years  
  Supports clinical and basic science research in congenital heart disease-including but not limited to these areas: molecular genetics, biochemistry, pharmacology devices, and procedural research (cardiac catherization and surgery) and long-term care of adults with congenital birth defects. Eligibility: faculty with PI eligibility and CE faculty (with an approved CE faculty PI waiver)  
  June 7, 2019  
  [https://www.childrensheartfoundation.org/for-researchers/](https://www.childrensheartfoundation.org/for-researchers/)

**June 2019**

• **Children’s Cardiomyopathy Foundation Research Grant Program**  
  Amount of funding: up to $50,000 for one year of total direct costs.  
  **Letter of intent (required) deadline:** June  
  **Full proposals (by invitation only) deadline:** Sept.  
  CCF

• **NIH R01 Research Project Grant**  
  Improving Patient Adherence to Treatment and Prevention Regimens to Promote Health (R01 Clinical Trial Optional)  
  **Deadline:** June 5, 2019  
  PA-18-722

• **NIH R01 Research Project Grant**  
  Implementation of shared decision making for HLBS diseases and conditions (R01 Clinical Trial Optional)  
  **Deadline:** June 5, 2019  
  PA-19-166

• **NIH Research Project Grant (Parent R01-Clinical Trial Not Allowed)**  
  Eligibility: faculty with PI eligibility and CE faculty (with an approved CE faculty PI waiver)  
  June 5, 2019 (Standard R01 deadlines)  
  PA-19-056

• **NIH Research Project Grant (Parent R01 Clinical Trial Required)**  
  *NHLBI only accepts mechanistic studies*  
  Eligibility: faculty with PI eligibility and CE faculty with an approved CE faculty PI waiver  
  June 5, 2019 (Standard R01 deadlines)  
  PA-19-055

• **Children’s Heart Foundation Medical Research Grant**  
  Up to $100K/yr for 2 years  
  **Full application:** June 7, 2019
- NIH Mentored Clinical Scientist Research Career Development Award (Parent K08 Independent Clinical Trial Not Allowed)
  June 12, 2019 (Standard K deadlines)
  PA-19-117

- NIH Mentored Clinical Scientist Research Career Development Award (Parent K08 Independent Clinical Trial Required)
  June 12, 2019 (Standard K deadlines)
  PA-19-116

- NIH Mentored Patient-Oriented Research Career Development Award (Parent K23 Independent Clinical Trial Required)
  June 12, 2019 (Standard K deadlines)
  PA-19-118

- NIH Mentored Patient-Oriented Research Career Development Award (Parent K23 – Independent Clinical Trial Not Allowed)
  June 12, 2019 (Standard K deadlines)
  PA-19-119

- NIH/NHLBI - Single-Site Investigator-Initiated Clinical Trials (R61/R33 Clinical Trial Required)
  June 13, 2019
  PAR-18-406

**July 2019**

- **Dr. Jeffrey Thomas Stroke Shield Foundation**
  Blood Pressure Management Program: Community-research partnerships to reduce stroke rate and hypertension in underserved communities in Alameda County, CA New $210,000 funding opportunity from a local foundation for Stanford faculty with PI eligibility and CE faculty
  - **Letter of intent (required) deadline:** July
  - **Full proposal (by invitation only) deadline:** Sept.
  Guidelines
  LOI instructions

- **AHA**
  Improving Outcomes in Cancer Treatment-Related Cardiotoxicity (R21 Clinical Trial Optional)
  - **LOI (required):** July 11, 2019
  2019 Merit Award

- **NIH R21 Exploratory/Developmental Research Grant**
  Merit Award
  - **Deadline:** July 16, 2019
  PA-19-111

- **NIH/NHLBI R34 Planning Grant**
  Clinical Trial Pilot Studies (R34 Clinical Trial Optional)
  - **Deadline:** July 16, 2019
  PAR-19-155
Publications

Included in this newsletter are cardiovascular medicine faculty publications for the months of January – April. Publications are in date order from newest to oldest.

APRIL

Cardiac function response to stenting in atherosclerotic renal artery disease with and without heart failure: results from the Carmel study.

Personalized medicine in cardio-oncology: the role of induced pluripotent stem cell.
Sayed N, Ameen M, Wu JC.

Myocardial viability of the peri-infarct region measured by T1 mapping post manganese-enhanced MRI correlates with LV dysfunction.

Finding missed cases of familial hypercholesterolemia in health systems using machine learning.
Juan M. Banda, Ashish Sarraju, Bahim Abbasi, Justin Parizo, Mitchel Pariani, Hannah Ison, Elínor Briskin, Hannah Wand, Sebastien Dubois, Kenneth Jung, Seth A. Myers, Daniel J. Rader, Joseph B. Leader, Michael F. Murray, Kelly D. Myers, Katherine Wilemon, Nigam H. Shah and Joshua W. Knowles.

Guo H, Tian L, Zhang JZ, Kitani T, Paik DT, Lee WH, Wu JC.

New CENTERA Transcatheter Aortic Valve: Best of the Balloon-Expandable and Self-Expanding Valve Worlds?
Yeung AC

Developing a genomics rotation: Practical training around variant interpretation for genetic counseling students.

A toolkit for genetics providers in follow-up of patients with non-diagnostic exome sequencing.
Years of Potential Life Lost Because of Cardiovascular Disease in Asian-American Subgroups, 2003-2012.


An orange calcium-modulated bioluminescent indicator for non-invasive activity imaging.


MARCH


Extracutaneous manifestations in phacomatosis cesioflamea and cesiomarmorata: Case series and literature review.


Prometheus Unbound in Ya(p) Heart.

Buikema JW, Wu SM.

A Patient with Sjogren's Syndrome and Subsequent Diagnosis of Inclusion Body Myositis and Light-Chain Amyloidosis.


Comparing phase and electrographic flow mapping for persistent atrial fibrillation.


Discovery of Distinct Immune Phenotypes Using Machine Learning in Pulmonary Arterial Hypertension.


Human Induced Pluripotent Stem Cell Model of Trastuzumab-Induced Cardiac Dysfunction in Breast Cancer Patients.

Comparison of QT Interval Measurement Methods and Correction Formulas in Atrial Fibrillation.
Tooley J, Ouyang D, Hadley D, Turakhia M, Wang P, Ashley E, Froelicher V, Perez M.

Transthyretin Stabilization by AG10 in Symptomatic Transthyretin Amyloid Cardiomyopathy.

A Human iPSC Double-Reporter System Enables Purification of Cardiac Lineage Subpopulations with Distinct Function and Drug Response Profiles.

Rapid Genome Sequencing in the Critically Ill.
Buchan JG, White S, Joshi R, Ashley EA.

Vitamin D with calcium supplementation and risk of atrial fibrillation in postmenopausal women.
Boursiquot BC, Larson JC, Shalash OA, Vitolins MZ, Soliman EZ, Perez MV.

Regional Variation in RBM20 Causes a Highly Penetrant Arrhythmogenic Cardiomyopathy.

Doxycycline and Ursodiol for ATTR Amyloidosis: Not Ready for Prime Time.
Witteles RM.

Time based versus strain based myocardial performance indices in hypertrophic cardiomyopathy, the merging role of left atrial strain.

Let Them Eat Cake.
Rees J, Rodriguez F.

FEBRUARY

Serial Cardiac FDG-PET for the Diagnosis and Therapeutic Guidance of Patients With Cardiac Sarcoidosis.
Ning N, Guo HH, Iagaru A, Mittra E, Fowler M, Witteles R.

Association of Endothelin-1 with Accelerated Cardiac Allograft Vasculopathy and Late Mortality
Following Heart Transplantation.

Year in Review in Cardiac Electrophysiology.
Tzou WS, Hussein AA, Madhavan M, Viswanathan MN, Steinberg BA, Ceresnak SR, Davis DR, Park DS, Wang PJ, Kapa S.

Association Between Female Corresponding Authors and Female Co-Authors in Top Contemporary Cardiovascular Medicine Journals.
Ouyang D, Harrington RA, Rodriguez F.

Association of Statin Adherence With Mortality in Patients With Atherosclerotic Cardiovascular Disease.
Rodriguez F, Maron DJ, Knowles JW, Virani SS, Lin S, Heidenreich PA.

One Size Does Not Fit All: Improving Recruitment and Retention of Women in Cardiovascular Device-Related Clinical Trials.
Rodriguez F, Harrington RA.

Sex Differences in the Pursuit of Interventional Cardiology as a Subspecialty Among Cardiovascular Fellows-in-Training.
Yong CM, Abnousi F, Rzeszut AK, Douglas PS, Harrington RA, Mehran R, Grines C, Altin SE, Duvernoy CS; American College of Cardiology Women in Cardiology Leadership Council (ACC WIC); Society for Cardiovascular Angiography and Interventions Women in Innovations (SCAI WIN).

Accuracy of Administrative Coding to Identify Reduced and Preserved Left Ventricular Ejection Fraction.
Heidenreich PA, Natarajan S, Bahrami H.

In Vivo Translation of the CIRPI System—Revealing Molecular Pathology of Rabbit Aortic Atherosclerotic Plaques.

Body composition and atrial fibrillation: a Mendelian randomization study.
Tikkanen E, Gustafsson S, Knowles JW, Perez M, Burgess S, Ingelsson E.

A Premature Termination Codon Mutation in MYBPC3 Causes Hypertrophic Cardiomyopathy via Chronic Activation of Nonsense-Mediated Decay.
Donor-derived cell-free DNA predicts allograft failure and mortality after lung transplantation.

Whole-heart coronary MR angiography using a 3D cones phyllotaxis trajectory.
Malavé MO, Baron CA, Addy NO, Cheng JY, Yang PC, Hu BS, Nishimura DG.

Rodriguez F, Blum MR, Falasinnu T, Hastings KG, Hu J, Cullen MR, Palaniappan LP.

Complex heritability in cardiomyopathy.
Ma N, Zhang SL, Wu JC.

Secular trends in success rate of catheter ablation for atrial fibrillation: The SMASH-AF cohort.

Cost-effectiveness of Canakinumab for Prevention of Recurrent Cardiovascular Events.

Sarraju A, Knowles JW.

Systems-Wide Approaches in Induced Pluripotent Stem Cell Models.
Lau E, Paik DT, Wu JC.

Transcatheter redirection of hepatic venous blood to treat unilateral pulmonary arteriovenous malformations in a Fontan circulation by short-term total exclusion of the unaffected lung.
Adamson GT, Peng LF, Lui GK, Perry SB.

Efficacy of Ablation Lesion Sets in Addition to Pulmonary Vein Isolation for Paroxysmal Atrial Fibrillation: Findings From the SMASH - AF Meta-Analysis Study Cohort.

Convergences of Life Sciences and Engineering in Understanding and Treating Heart Failure.
Extended cardiac ambulatory rhythm monitoring in adults with congenital heart disease: Arrhythmia detection and impact of extended monitoring.


Rationale and design of a large-scale, app-based study to identify cardiac arrhythmias using a smartwatch: The Apple Heart Study.


Safety and Efficacy of PCSK9 Inhibitors After Heart Transplantation.


Expansion of the Human Phenotype Ontology (HPO) knowledge base and resources.


Association of Educational Attainment and Cardiovascular Risk in Hispanic Individuals: Findings From the Cooper Center Longitudinal Study.

Rodriguez F, Leonard D, DeFina L, Barlow CE, Willis BL, Haskell WL, Maron DJ.


Nativity and Occupational Determinants of Physical Activity Participation Among Latinos.

Echeverría SE, Divney A, Rodriguez F, Sterling M, Vasquez E, Murillo R, Lopez L.


Guidelines for Performing a Comprehensive Transesophageal Echocardiographic Examination in Children and All Patients with Congenital Heart Disease: Recommendations from the American Society of Echocardiography.


Clinical and Genetic Determinants of Varicose Veins.

Stroke Outcomes With Vorapaxar Versus Placebo in Patients With Acute Coronary Syndromes: Insights From the TRACER Trial.

Current Use of Hearts From Hepatitis C Viremic Donors.

Use of human induced pluripotent stem cell-derived cardiomyocytes to assess drug cardiotoxicity.

Repair of Untreated Older Patients with Tetralogy of Fallot with Major Aortopulmonary Collaterals.

The Incremental Value of Right Ventricular Size and Strain in the Risk Assessment of Right Heart Failure Post - Left Ventricular Assist Device Implantation.

Promise and Perils of Big Data and Artificial Intelligence in Clinical Medicine and Biomedical Research.

Determining the Pathogenicity of a Genomic Variant of Uncertain Significance Using CRISPR/Cas9 and Human-Induced Pluripotent Stem Cells.

Ventricular mechanics in adolescent and adult patients with a Fontan circulation: Relation to geometry and wall stress.

Sex Disparities in Authorship Order of Cardiology Scientific Publications.

Radiolabeled Duramycin: Promising Translational Imaging of Myocardial Apoptosis.


