On My Mind
Radioactive Decay: Challenges and Solutions to Looming Radioisotope Shortages for Nuclear Cardiology
Venkatesh L. Murthy, MD, PhD; Leslee J. Shaw, PhD; Brahmajee K. Nallamothu, MD, MPH

Clinical Implications of Basic Research
The Promise of Cardiac Regeneration by In Situ Lineage Conversion
Young-Jae Nam, MD, PhD; Nikhil V. Munshi, MD, PhD

ORIGINAL RESEARCH ARTICLES
Gene Expression Profiling for the Identification and Classification of Antibody-Mediated Heart Rejection
Alexandre Loupy, MD, PhD; Jean Paul Duong Van Huyen, MD, PhD; Luis Hidalgo, PhD; Jeff Reeve, PhD; Maud Racapé, PhD; Olivier Aubert, MD; Jeffery M. Venner, MSc; Konrad Falmuski, PhD; Marie Cécile Bories, MD; Thibaut Beuscart, MD; Romain Guillermian, MD; Arnaud François, MD; Sabine Pattier, MD; Claire Toquet, MD; Arnaud Gay, MD; Philippe Rouvier, MD, PhD; Shaída Varnous, MD; Pascal Leprince, MD, PhD; Jean Philippe Empana, MD, PhD; Carmen Lefaucheur, MD, PhD; Patrick Bruneval, MD; Xavier Jouven, MD, PhD; Philip F. Halloran, MD, PhD

Editorial
The Search for a Gold Standard to Detect Rejection in Heart Transplant Patients: Are We There Yet?
Jon A. Kobashigawa, MD

Impact of Heart Transplantation on the Functional Status of US Children With End-Stage Heart Failure
David M. Peng, MD; Yulin Zhang, PhD; David N. Rosenthal, MD; Michal Palmon, MPH; Sharon Chen, MD; Beth D. Kaufman, MD; Katsuhide Maeda, MD; Seth A. Hollander, MD; Nancy McDonald, NP; Leslie B. Smoot, MD; Daniel Bernstein, MD; Christopher S. Almond, MD, MPH

Population-Based Long-Term Cardiac-Specific Mortality Among 34 489 Five-Year Survivors of Childhood Cancer in Great Britain
Miranda M. Fidler, PhD; Raoul C. Reulen, PhD; Katherine Henson, DPhil; Julie Kelly; David Cutter, DPhil; Gill A. Levitt; Clare Froibisher, PhD; David L. Winter, HNC; Michael M. Hawkins, DPhil; On behalf of the British Childhood Cancer Survivor Study (BCCSS) Steering Group

High-Fiber Diet and Acetate Supplementation Change the Gut Microbiota and Prevent the Development of Hypertension and Heart Failure in Hypertensive Mice
Francine Z. Marques, PhD; Erin Nelson, MSc; Po-Yin Chu, PhD; Duncan Harlock, BSc; April Fiedler, BSc; Mark Ziemann, PhD; Jian K. Tan, PhD; Sanjaya Kuruppu, PhD; Niwanthi W. Rajapakse, PhD; Assam El-Osta, PhD; Charles R. Mackay, PhD; David M. Kaye, MD, PhD

Chemical Enhancement of In Vitro and In Vivo Direct Cardiac Reprogramming
Tamer M. A. Mohamed, PhD; Nicole R. Stone, MSc; Emily C. Berry, PhD; Ethan Radzinsky, BSc; Yu Huang, MD; Karishma Pratt, BSc; Yin-Sin Ang, PhD; Pengchi Yu, PhD; Haixia Wang, PhD; Shibing Tang, PhD; Sergey Magnitsky, PhD; Sheng Ding, PhD; Kathryn N. Ivey, PhD; Deepak Srivastava, MD

On the Cover: Circulation Doodle
This month’s doodle is in honor of Women’s History Month, and International Women’s Day.
For more information about the doodle, go to http://circ.ahajournals.org/content/circulation-cover-doodle.
CLINICAL STATEMENTS AND GUIDELINES

AHA Statistical Update
Heart Disease and Stroke Statistics—2017 Update: A Report From the American Heart Association
Emelia J. Benjamin, MD, SCM, FAHA; Michael J. Blaha, MD, MPH; Stephanie E. Chiueh, ScD; Mary Cushman, MD, MSc, FAHA; Sandeep R. Das, MD, MPH, FAHA; Rajat Deo, MD, MTR; Sarah D. de Ferranti, MD, MPH; James Floyd, MD, MS; Myriam Fornage, PhD, FAHA; Cathleen Gillespie, MS; Carmen R. Isasi, MD, PhD, FAHA; Monik C. Jiménez, ScD, SM; Lori Chaffin Jordan, MD, PhD; Suzanne E. Judd, PhD; Daniel Lackland, DrPH, FAHA; Judith H. Lichtman, PhD, MPH, FAHA; Lynda Lisabeth, PhD, MPH, FAHA; Simin Liu, MD, ScD, FAHA; Chris T. Longenecker, MD; Rachel H. Mackey, PhD, MPH, FAHA; Kunihiro Matsushita, MD, PhD, FAHA; Darush Mozaffarian, MD, DrPH, FAHA; Michael E. Mussolino, PhD, FAHA; Khurrram Nasir, MD, MPH, FAHA; Robert W. Neumar, MD, PhD, FAHA; Latha Palaniappan, MD, MS, FAHA; Dilip K. Pandey, MBBS, MS, PhD, FAHA; Ravi R. Thiagarajan, MD, MPH; Matthew J. Reeves, PhD; Matthew Ritchie, PT, DPT, OCS, MPH; Carlos J. Rodriguez, MD, MPH, FAHA; Gregory A. Roth, MD, MPH; Wayne D. Rosamond, PhD, FAHA; Comilla Sasson, MD, PhD, FAHA; Amylys Towfighi, MD; Connie W. Tsao, MD, MPH; Melanie B. Turner, MPH, Salim S. Virani, MD, PhD, FAHA; Jenifer H. Voeks, PhD; Joshua Z. Willey, MD, MS; John T. Wilkins, MD; Jason HY. Wu, MSc, PhD, FAHA; Heather M. Alger, PhD; Sally S. Wong, PhD, RD, CD, FAHA; Paul Muntner, PhD, MHSc; On behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee

AHA Scientific Statement
Management of Patients on Non–Vitamin K Antagonist Oral Anticoagulants in the Acute Care and Periprocedural Setting: A Scientific Statement From the American Heart Association
Amish N. Raval, MD, FAHA, Chair; Joaquin E. Cigarroa, MD; Mina K. Chung, MD, FAHA; Larry J. Díaz-Sandoval, MD, FAHA; Deborah Diekirs, MD; Jonathan P. Piccini, MD, MHS, FAHA; Hee Soo Jung, MD; Jeffrey B. Washam, PharmD, FAHA; Babu G. Welch, MD; Allyson R. Zazulia, MD, FAHA; Sean P. Collins, MD, MSc, FAHA, Co-Chair; On behalf of the American Heart Association Clinical Pharmacology Subcommittee of the Acute Cardiac Care and General Cardiology Committee of the Council on Clinical Cardiology; Council on Cardiovascular Disease in the Young; and Council on Quality of Care and Outcomes Research

THE PULSE

Cardiology News
From the Literature
Tracy Hampton, PhD

CASES AND TRACES

ECG Challenge
Chest Pain and T-Wave Inversions in a 56-Year-Old Man
Nishant Verma, MD, MPH; Bradley P. Knight, MD

CORRESPONDENCE

Research Letter
Treatment Consistency Across Levels of Baseline Renal Function With Rivaroxaban or Warfarin: A ROCKET AF (Rivaroxaban Once-Daily, Oral, Direct Factor Xa Inhibition Compared With Vitamin K Antagonism for Prevention of Stroke and Embolism Trial in Atrial Fibrillation) Analysis
Samuel M. Lindner, MD; Christopher B. Fordyce, MD, MHS, MSc; Anne S. Hellkamp, MS; Yuliya Lokhnygina, PhD; Jonathan P. Piccini, MD, MHS; Günter Breithardt, MD; Kenneth W. Mahaffey, MD; Daniel E. Singer, MD; Werner Hacke, MD, PhD; Jonathan L. Halperin, MD; Graeme J. Hankey, MD; Scott D. Berkowitz, MD; Christopher C. Nessel, MD; Richard C. Becker, MD; Keith A.A. Fox, MB, ChB; Manesh R. Patel, MD; On behalf of the ROCKET AF Steering Committee and Investigators

Correspondence
Letter by Fysekidis et al Regarding Article, “Development and Validation of a Sudden Cardiac Death Prediction Model for the General Population”
Marinos Fysekidis, MD, PhD; Régis Cohen, MD, PhD; Abdallah Al-Salameh, MD

Letter by Karam et al Regarding Article, “Development and Validation of a Sudden Cardiac Death Prediction Model for the General Population”
Nicole Karam, MD, MPH; Kumar Narayan, MD; Elior Marijón, MD, PhD
CORRESPONDENCE

Response by Deo et al to Letters Regarding Article, “Development and Validation of a Sudden Cardiac Death Prediction Model for the General Population”
Rajat Deo, MD, MTR; Selcuk Adabag, MD, MS; Alvaro Alonso, MD, PhD

Letter by Čulić Regarding Article, “Physical Activity and Anger or Emotional Upset as Triggers of Acute Myocardial Infarction: The INTERHEART Study”
Viktor Čulić, MD, PhD

Letter by Scherff et al Regarding Article, “Physical Activity and Anger or Emotional Upset as Triggers of Acute Myocardial Infarction: The INTERHEART Study”
Frank Scherff, MD; Jelena Ghadri, MD; Christian Templin, MD, PhD

Response by Smyth et al to Letters Regarding Article, “Physical Activity and Anger or Emotional Upset as Triggers of Acute Myocardial Infarction: The INTERHEART Study”
Andrew Smyth, PhD; Martin O’Donnell, PhD; Salim Yusuf, PhD; On behalf of the INTERHEART Investigators

CORRECTIONS

Correction to: Heart Disease and Stroke Statistics—2017 Update: A Report From the American Heart Association

Correction to: Management of Patients on Non–Vitamin K Antagonist Oral Anticoagulants in the Acute Care and Periprocedural Setting: A Scientific Statement From the American Heart Association