

Circulation Research

Volume 120 Number 6 March 17, 2017

★ **Featured Article**

📄 Online supplementary information

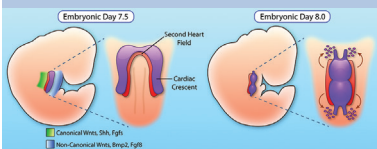
🎬 Online movie files

Available at <http://circres.ahajournals.org>

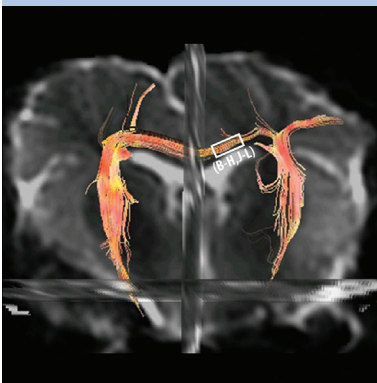


TOF (CTD)

**Genetics and Genomics of
Congenital Heart Disease**
Zaidi and Brueckner page 923



**Cardiac Development and
Regeneration**
Galdos *et al.* page 941



**Brain Maturation and
Congenital Heart Disease**
Morton *et al.* page 960

Editorial

Congenital Heart Disease: The Remarkable Journey From the “Post-Mortem Room” to Adult Clinics

Ali J. Marian 895

Viewpoints

Perspective on Congenital Heart Disease Research

Jonathan R. Kaltman, Kristin M. Burns, Gail D. Pearson 898

Has the Congenitally Malformed Heart Changed Its Face? Journey From Understanding Morphology to Surgical Cure in Congenital Heart Disease

Robert H. Anderson 901

Impact of Three-Dimensional Printing on the Study and Treatment of Congenital Heart Disease

Matthew Bramlet, Laura Olivieri, Kanwal Farooqi, Beth Ripley, Meghan Coakley 904

Congenital Heart Disease Compendium

Changing Landscape of Congenital Heart Disease

Berto J. Bouma, Barbara J.M. Mulder 908

Genetics and Genomics of Congenital Heart Disease

Samir Zaidi, Martina Brueckner 923

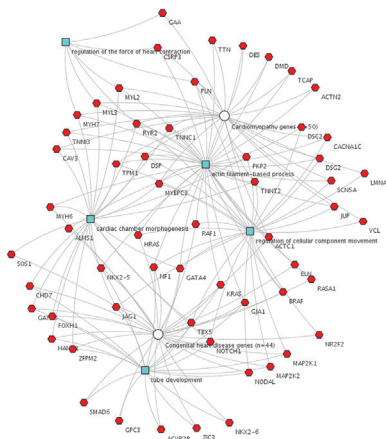
Cardiac Regeneration: Lessons From Development

Francisco X. Galdos, Yuxuan Guo, Sharon L. Paige, Nathan J. VanDusen, Sean M. Wu, William T. Pu 941

Neurodevelopmental Abnormalities and Congenital Heart Disease: Insights Into Altered Brain Maturation

Paul D. Morton, Nobuyuki Ishibashi, Richard A. Jonas 960

CIRCULATION RESEARCH (ISSN 0009-7330 print / 1524-4571 online) is published semimonthly for 24 total issues a year by Wolters Kluwer Health, Inc. at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742. Business offices are located at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103. Production offices are located at 351 West Camden Street, Baltimore, MD 21201-2436. AHA members will have online access to the journal as a benefit of membership. In the US, individuals may subscribe in print for their personal use at the annual rate of \$749 for nonmembers. International: \$888 for nonmembers. Online-only and other additional rates can be found online at <http://lww.com/circres>. AHA membership information can be found online at professional.heart.org. Periodicals postage paid at Hagerstown, MD, and additional mailing offices. POSTMASTER: Send address changes to *Circulation Research*, American Heart Association, Wolters Kluwer Health, Inc., PO Box 1550, Hagerstown, MD 21740.



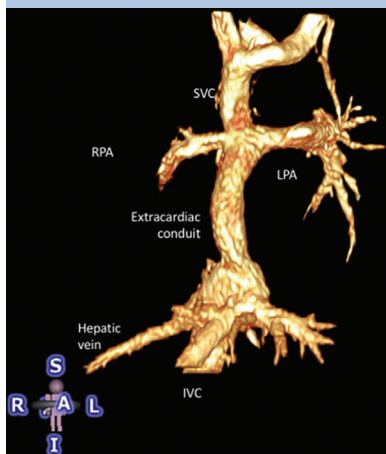
Heart Failure in Pediatric Patients With Congenital Heart Disease
Robert B. Hinton, Stephanie M. Ware 978

Noninvasive Imaging in Adult Congenital Heart Disease
Luke J. Burchill, Jennifer Huang, Justin T. Tretter, Abigail M. Khan, Andrew M. Crean, Gruschen R. Veldtman, Sanjiv Kaul, Craig S. Broberg 995

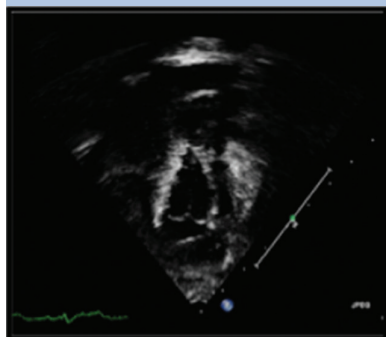
Current Status and Future Potential of Transcatheter Interventions in Congenital Heart Disease
Damien P. Kenny, Ziyad M. Hijazi 1015

Current Interventional and Surgical Management of Congenital Heart Disease: Specific Focus on Valvular Disease and Cardiac Arrhythmias
Kimberly A. Holst, Sameh M. Said, Timothy J. Nelson, Bryan C. Cannon, Joseph A. Dearani 1027

Heart Failure in Congenital Heart Disease
Hinton and Ware page 978



Imaging in Congenital Heart Disease
Burchill et al. page 995



Congenital Heart Interventions
Kenny and Hijazi page 1015

In January 2017, the average time from submission to first decision for all original research papers submitted to *Circulation Research* was 13.77 days.

On the Cover: The illustration depicts a coarctation of the aorta occurring distal to the left subclavian artery. In this form of the coarctation, there is no pressure gradient between the right and left upper extremities. However, there is a significant pressure gradient between upper and lower extremities (higher in the upper extremities). See related Compendium introduction, page 895.

Circulation Research

JOURNAL OF THE AMERICAN HEART ASSOCIATION



120 (6)

Circ Res. 2017;120:895-1044

Circulation Research is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2017 American Heart Association, Inc. All rights reserved.

Print ISSN: 0009-7330. Online ISSN: 1524-4571

The online version of this article, along with updated information and services, is located on the
World Wide Web at:

<http://circres.ahajournals.org/content/120/6>

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Circulation Research* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

Reprints: Information about reprints can be found online at:
<http://www.lww.com/reprints>

Subscriptions: Information about subscribing to *Circulation Research* is online at:
<http://circres.ahajournals.org/subscriptions/>