

4. Figliola RS, Giardini A, Conover T, et al. In vitro simulation and validation of the circulation with congenital heart defects. *Prog Pediatr Cardiol* 2010;30:71-80.
5. Esses SJ, Berman P, Bloom AI, Sosna J. Clinical applications of physical 3D models derived from MDCT data and created by rapid prototyping. *Am J Roentgenol* 2011;196:W683-8.

## Is it Time to Launch *JACC: Early Career?*



We greatly enjoyed reading the recent report by Tong et al. (1). The authors beautifully summarized the current situation of academic cardiology for early-stage cardiologists, presenting current challenges for early career (EC) academic cardiologists, obstacles identified by a survey of current EC members of the American College of Cardiology (ACC), reasons for failure to receive funding from the National Institutes of Health/National Heart, Lung, and Blood Institute, potential solutions, and a call to action with specific recommendations. We respond to this call with a proposal for a dedicated *Journal of the American College of Cardiology (JACC)* publication showcasing articles by early career investigators (ECIs). Is it time to launch *JACC: Early Career*?

There are many cardiology fellows, residents, and students interested in pursuing careers in cardiology. The ACC's EC section has approximately 7,000 members. The ACC has taken tremendous initiative to encourage early-stage physicians with the Fellows' Bootcamp, Young Investigator Award at Scientific Sessions, and Fellows in Training and EC Sections with a mentor-mentee database. In an online survey about the ACC's offerings for early-stage cardiologists, 75% of the EC Section rated the ACC's overall value "very strong." Early-stage cardiovascular professionals desire support with research opportunities and academic planning. Eighty-five percent of EC professionals reported seeking an academic position and two-thirds wished to conduct research. Obstacles identified included lack of time, unstable funding, burdensome regulatory compliance, competing against PhDs, overemphasis on relative value unit-based metrics, which can discourage academic pursuits, and insufficient support from institutions. However, is part of the conundrum constituted by lack of dedicated space for publications by ECIs? After all, the final step for successful research is publication.

*JACC: Early Career* could be launched under the *JACC* flagship in the EC Section, with the current *JACC* editor serving as editor-in-chief. Under his direction, the editor could be the chair of the EC Section/working group chair/ECI with an accomplished research background. ECIs could include students, residents,

fellows in training, physician-scientists, and cardiologists within 10 years of completion of fellowship training. For consideration for publication in *JACC: Early Career*, the ECI ought to be the first author. The senior author could be an ECI/designated mentor.

Apart from original articles, unique features could be sections addressing grant writing, ethical considerations, common statistical scenarios, clinical quandaries akin to "Stump the Professor," experiences by seasoned cardiologists with successful careers in research, and success stories by EC cardiologists. This journal would be a resource for the reader to access the latest research by ECIs, learn something clinically relevant, increase knowledge of research methodology, and, most importantly, feel motivated to conduct meaningful successful research. The *JACC* audience would expand to include students and residents and would serve as an opportunity for senior cardiologists to identify ECIs with similar research interests and possibly forge mentee-mentor relationships.

"We have been fortunate to have great stalwarts in clinical research. Scientists have become the bearers of the torch of discovery in our quest for knowledge."

—Stephen Hawking (2)

*JACC: Early Career* would enable the next generation to develop the prowess to bear this torch when the time comes.

\*Maithili H. Shenoy, MD, MPH

Tushar A. Tuliani, MD

\*Division of Cardiology, Department of Internal Medicine

Loma Linda University

11234 Anderson Street

Loma Linda, California 92354

E-mail: [maithili\\_shenoy@yahoo.com](mailto:maithili_shenoy@yahoo.com)

<http://dx.doi.org/10.1016/j.jacc.2014.05.054>

### REFERENCES

1. Tong CW, Ahmad T, Brittain EL, et al. Challenges facing early career academic cardiologists. *J Am Coll Cardiol* 2014;63:2199-208.
2. Philosophy is dead: professor Stephen Hawking's quotations quotes. Available at: [http://www.age-of-the-sage.org/stephen\\_hawking/philosophy\\_is\\_dead.html](http://www.age-of-the-sage.org/stephen_hawking/philosophy_is_dead.html). Accessed August 18, 2014.

**REPLY: Is it Time to Launch  
*JACC: Early Career?***



We thank Drs. Shenoy and Tuliani for their kind letter and novel idea in response to our report (1). We agree that early career academic cardiologists are in need of publications. Publications are the scientific currency that enables early career academic cardiologists to achieve recognition and grants for successful

progression. Unfortunately, in parallel with decreasing funding opportunities, publishing in respected journals has grown more difficult. Thus, early career academic cardiologists might greatly benefit from dedicated space in a high-impact journal such as *Journal of the American College of Cardiology (JACC)*.

There are important factors that need to be considered carefully before launching an exclusively early career journal. We should avoid the appearance of an early career journal as a reservoir of less than compelling research. Additionally, starting a journal is a large undertaking that requires commitment of resources from the American College of Cardiology and our academic workgroup. In an environment of limited means, a more effective use of resources is to dedicate funding and mentorship to early career cardiologists and trainees. With this support, early career investigators will have greater chances of publishing in well-respected pre-existing journals.

There are alternatives to launching a new journal that still provide publication space for early career members. For example, in *JACC* or one of its associated journals, there could be a dedicated issue each year or one paper per issue that highlights research of emerging young investigators. Other paper types include reviews or viewpoint pieces that particularly address issues, challenges, and opportunities for early stage investigators. Furthermore, we could ask early career members to rotate on the editorial board to ensure the review process has an early career perspective; this would also provide a valuable career development opportunity for these junior investigators.

We appreciate the passion and the novel proposal of Drs. Shenoy and Tuliani. It has stimulated our workgroup to consider these important issues, which we plan to discuss further with forthcoming recommendations to promote greater development and flourishing of early stage investigators.

**\*Carl W. Tong, MD, PhD**  
on behalf of the Early Career Academic Cardiologist  
Workgroup of the American College of Cardiology

\*Department of Medical Physiology  
Texas A&M University College of Medicine  
Internal Medicine/Cardiology Division  
Baylor Scott & White Health Central Texas  
110 Medical Research Building  
702 Southwest H. K. Dodgen Loop  
Temple, Texas 76504  
E-mail: [ctong@medicine.tamhsc.edu](mailto:ctong@medicine.tamhsc.edu)  
<http://dx.doi.org/10.1016/j.jacc.2014.06.1165>

#### REFERENCE

1. Tong CW, Ahmad T, Brittain EL, et al. Challenges facing early career academic cardiologists. *J Am Coll Cardiol* 2014;63:2199-208.

## Ejection Fraction May Improve But the Scar Still Exists! The Risk May Be Lower But Not Zero



We read with great interest the report by Kini et al. (1). The results are interesting, and the authors make a strong case against the clinical utility and cost-effectiveness of continued generator replacements in patients with implantable cardioverter-defibrillators who have improved ejection fraction (EF). We disagree with the conclusions of the authors and find it rather bold to arrive at such sweeping recommendations based on limited data. In this study, 8% (n = 5) of the 59 patients received appropriate therapy despite improvement in EF over a mean of 3.5 years, for an event rate of 2.8% per person-year or 1.4% per year (n = 5/3.5 years). This rate is much higher than the 0.1% risk of sudden cardiac death in the general population (2). If the general population is considered a control group, then the absolute risk reduction is 1.3% with a number needed to treat of 76. With that number needed to treat, we find it hard to explain the recommendation that a potentially lifesaving therapy should be withheld. Again, if we consider all patients who had an improvement in EF to >35%, we would include the 8 patients who had an event before generator replacement despite an EF >35%, which would increase the event rate to 20% (n = 13 of 67) or 3.7% per year. This reduces the number needed to treat even further. Although EF, which is the surrogate marker for the risk of sudden cardiac death, may improve over time, the scar that is the substrate for reentry is unlikely to resolve, especially in patients with ischemic cardiomyopathy (3). The cost-effective analysis used in the current paper is not robust either. Thus, until larger studies are reported that can effectively predict those who are at risk for sudden cardiac death despite improvement in EF, we should continue to replace generators after a thorough discussion with the individual patient respecting his or her preferences.

**\*Jayasree Pillarisetti, MD**  
Madhu Yeruva Reddy, MD  
Dhanunjaya Lakkireddy, MD

\*Division of Cardiovascular Diseases  
University of Kansas Medical Center and Hospital  
3901 Rainbow Boulevard, G-600  
Kansas City, Kansas 66196  
E-mail: [jayasreep24@gmail.com](mailto:jayasreep24@gmail.com)  
<http://dx.doi.org/10.1016/j.jacc.2014.05.053>