

The 2010 ASCI/Stanley J. Korsmeyer Award

A heart-to-heart with Andrew R. Marks

Adding to his many accolades, National Academy member and former *JCI* editor in chief Andrew R. Marks, of the Columbia University College of Physicians & Surgeons, will receive the ASCI's annual prize, the Stanley J. Korsmeyer Award (Figure 1). Marks receives the award in recognition of his discovery that rapamycin inhibits coronary artery stent restenosis and for showing the role of leaky ryanodine receptor/calcium release channels in heart failure, cardiac arrhythmias, and muscular dystrophy.

Neill: Congratulations on the award. You are being recognized for your contributions to cardiovascular biology; what do you feel is your biggest contribution to science?

Marks: It is a major honor for me to receive this award named for a man about whom I have heard so many wonderful things, and also the recognition from my peers is the nicest kind of recognition I could get. The thing that I think will have the greatest long-term impact is the discovery I made about 10 years ago related to leaky calcium channels. The way the story has evolved now is that these channels, ryanodine receptors, become leaky in response to different stresses and in chronic diseases like heart failure or muscular dystrophy. We were lucky enough to develop a small-molecule drug that can specifically fix the leak. In animal models of disease, we can alter the course of heart failure and sudden cardiac death arrhythmias with this drug. We have started phase II clinical trials in Europe with one of the drugs we developed for heart failure and for exercise-induced arrhythmia, and if these drugs work in humans the way they do in animals, this research could have an enormous clinical impact.

Neill: Coming from your family, with a famous father [Paul A. Marks, President Emeritus of Memorial Sloan-Kettering and former dean of Columbia] and famous mother [Joan Marks, doyenne of the field of genetic counseling], what did you do to stand out?

Marks: What attracted me from the time I was a house officer was cardiology because you can intervene acutely and literally save a person's life, and that is very different from what my father did in cancer research and

what my mother does in genetic counseling. At the same time, I benefitted from coming from an academic family. I actually think I had an advantage from an early stage because I knew what the expectations were and I grew up around great scientists who are friends of my parents. Other scientists who know my dad ask me all the time what it is like to have a famous father, and I view it as a total plus.



Figure 1
Andrew R. Marks will receive the 2010 ASCI Stanley J. Korsmeyer Award at the annual ASCI/AAP Joint Meeting, April 23–25, in Chicago.

We're very close and it's always been easy for me to talk to him and get advice about my science and my career, and now I find he's also coming to me for advice: we're starting to equilibrate. It's a nice feeling to know he wants my opinion too.

Neill: I still remember you saying that when you called your mother to tell her you got into the National Academy, she said something to the effect of, "That's nice, dear. Have you seen your brother [prominent New York art dealer Matthew Marks] on the cover of this week's *New York Magazine*?"

Marks: She's enormously proud of all of us — and happily my brother and I have excelled in different areas. She did throw me a pretty fabulous party to celebrate my election to the National Academy.

Neill: I've always known you to be a man of many opinions and ideas. What are you doing for an outlet for these thoughts, now that you don't have the *JCI*'s editorial page at your disposal?

Marks: Ah, that is probably a good thing, and now I'm not getting myself into trouble for the things I say. As JCI Editor, when I did write controversial editorials, it was very distracting and created some anxiety and pressure on me. It was nice to know that people were reading what I wrote, but also it was extremely stressful, so that part I don't miss. Having said that, I have to admit that at least once a week, I say, "Wow, if I was Editor of JCI, I would have something to say about that." And I miss that. And I even think sometimes about calling you or Larry and asking if I could write a guest editorial, but I manage to control myself.

Neill: If you had it to do over again, would you still have written the editorial about the NIH and former director Elias Zerhouni (1) the same way?

Marks: I think the points I made were legitimate, and actually, not that original. I had reason to go back subsequently and read other peoples' editorials, and I found that other people had made most of the points I had made. I think the reason the editorial got noticed and the reason it had such an impact is due to what I thought at the time was a humorous introduction, relating him to a pop culture reference. If I had left that part out then it would not have been much of a departure from others' thoughts, but then, not as many people would have read it. Knowing what I now know, would I have done it the same way? Probably not. Not because of the criticism I got, but because I didn't intend to cause anybody any personal pain or hurt. The points that I raised were valid, and if you look at the way the NIH has changed in the last couple of years, many of the things I brought up in that editorial - like shortened applications and the change in review systems - are now in place. But I would never try to take any credit for that.

Neill: It certainly brought a lot of attention to the issue.

Marks: I was disappointed that some people framed their opinion about what I was going to say based on that first para-



graph. Or rather, some people focused on that one aspect without acknowledging that I was trying to address real and very important issues. On the other hand, a lot of people did focus on the issues, and I got a lot of supportive letters.

Neill: Subsequent to that, how do you feel that the new NIH director, Francis Collins, is doing so far, even though it's been a short tenure?

Marks: I was at the NHLBI council meeting recently, and he came to speak to us and assured us that his commitment is not just to big science, but also to individual investigator initiatives (R01s), which is what I completely support. It's a very difficult time for the leadership of the NIH given the restricted funds available. Time will tell how successful he and his colleagues are, and I think they need and deserve our vigorous support to keep the NIH healthy!

Neill: I know you have several extracurricular commitments, such as the summer program to recruit more minorities to the biomedical sciences.

Marks: About 10 years ago, Columbia had an NIH grant for training PhD graduate students, and when it came up for renewal, the guy running it said it was not going to be renewed, and rightly so, as we hadn't been successful enough recruiting a diverse group of students. I volunteered to try and fix it, so I called up the chair of the biology department at Hunter College, a school here in New York City that attracts a diverse array of undergraduates, and introduced myself and asked if I could come and give a seminar and meet some students and give them information about our program. He lit into me about how Columbia is a racist place and how they specifically told their students *not* to apply there. A lot of his impression was based on a particular individual who had given a seminar and made some comment about minority students requiring extra training. I was shocked, to say the least, as my family has been involved with Columbia for over 50 years and to hear this was particularly painful. I realized I needed to do more than just go down there and give a seminar.

I decided to start this summer program that we call SPURS (Summer Program for Underrepresented Students), and the idea was that I raise money and get minority students primarily from the public colleges and universities in New York City to come to Columbia for the summer and do research in labs and live in the dorms on the Morningside campus so they can see what that is like and build relationships with the Columbia faculty that are long lasting.

It's really been successful, we've had 88 students over the last nine summers and we get people like Richard Axel and Eric Kandel to take students. I get letters from some of the students saying things like, "the reason Harvard accepted me for their PhD program was because of the letter I got from the Columbia faculty." It's very moving to have an impact like that. The typical student tells me that before the program they viewed Columbia as a place that wasn't for them, where they wouldn't feel comfortable, and they leave realizing they belong here. It's given me great personal pleasure to be part of that program. I view it as one of the best things I'm involved in. Of course the challenge is raising nearly \$150,000 every year to pay for the stipends and boarding, and administrative costs. So, donations are welcome!

Neill: What about your involvement with Israeli academics?

Marks: I just got back from Israel last week, actually. I gave a lecture and met with faculty. We have this foundation, the International Academic Friends of Israel (IAFI), that was designed to counteract attempted boycotts of Israeli scientists. I started it about seven years ago, when I was JCI Editor, when I heard about an attempt to kick two Israelis off an editorial board of an academic journal in the United Kingdom simply because they came from Israel.

I simply don't think we can use a litmus test for who can and should do science. I grew up in an academic family, and one of the things I really value is how open and international the academic community is. Once you start excluding a group because of politics, there is no telling

where that can lead. So, kicking two editors off of a journal's board for political reasons really resonated with me when I was an editor myself.

What we do with IAFI is to pay for international scientists to go to meetings that are already in the process of being put together in Israel. If, for example, the Genetics Society of Israel is having a meeting and they didn't have the budget to bring anyone other than other Israeli scientists, we'd make a donation from IAFI in order to enable them to bring over world-class geneticists from the US or Europe. It transforms the meeting from a local one to an international one. It de facto defeats any boycott. But it is particularly important because Israel is a very small country. There are only six academic research institutions there, and while they have terrific graduate students, they have limited opportunities. And where do most graduate students meet their prospective postdoc mentors? At meetings. So this enables the Israeli students to make those sorts of contacts. I have three Israelis in my lab right now, including a Palestinian woman who I met through trips to Israel.

Neill: And I imagine that receiving the Korsmeyer Award is the icing on the cake for you this year, with the Yankees wining the World Series.

Marks: For me, the Yankees have always been a nice distraction from the pressures of work. When I was in medical school I was a 15-minute walk away from Fenway Park and went to every Yankees game they had there. And since I'm a big guy, no one ever attacked me for being a Yankee fan. Now my lab is a 25-minute walk from Yankee Stadium and I go to about 12 games a year. During this year's playoffs, I was in Tunisia at a meeting. For a sense of what the Yankees mean to me, I woke up every night to watch the games on my computer between midnight and 4 am. I'm a committed fan.

Ushma S. Neill

1. Marks AR. Rescuing the NIH before it is too late. *J Clin Invest.* 2006;116(4):844.