

Swiss Heart Foundation Research Prize 2020

Lüscher Thomas F., Camici Giovanni G.

In 1980, the Swiss Heart Foundation established a research prize, which ever since has been awarded to clinicians and scientists working in cardiovascular medicine or surgery, generally on a yearly basis. The Swiss Heart Foundation is proud to see that many of its awardees later became leaders in their field and some became chairs of the finest academic institutions in Switzerland (table 1).

The research prize is preferentially given to young consultants and research group leaders who have already established themselves in their field of interest. As such therefore, and unlike other research awards in cardiovascular medicine in Switzerland, the Swiss Heart Foundation Research Prize is not given for a single outstanding publication or discovery, but rather for the body of scientific achievement in the middle of a promising career. Thus, awardees are typically 35–45 years of age. With their research prize, the Swiss Heart Foundation aims to motivate such promising leaders of the next generation to continue their academic path to the benefit of cardiovascular science and eventually also patients with cardiovascular disease.

This year, the 10 members of the Swiss Heart Foundation's research committee led by their president Professor Thomas F. Lüscher from London and Zurich, received 11 excellent and in some cases outstanding applications from many Swiss institutions. This year's awardee is Giovanni G. Camici PhD, Assistant Professor of Vascular Biology at the University of Zurich and Director of the Centre of Molecular Cardiology at the Schlieren Campus (fig. 1).

The president of the Swiss Heart Foundation's research committee, Professor Thomas F. Lüscher interviewed this year's awardee and asked Giovanni G. Camici the following questions:

1. What was your professional education like?

I studied biology at Queen Mary University of London in the United Kingdom and after a short working experience at the Hammersmith hospital of the Imperial College, London, I moved to Switzerland in 2002. I then worked for 2 years at the University of Zurich, in the Cardiovascular Research Unit of the Institute of Physiology at the Irchel Campus of the University of Zurich. After that I did my PhD at the University of Fribourg, Switzerland.

In 2007 I started as a full time postdoc at the Cardiovascular Research Laboratories of the University of Zurich. In 2010 I became group leader, in 2013 Privatdozent and in 2017 Assistant Professor in Vascular Biology at the University of Zurich.

2. Why did you decide to study biology?

Table 1: Swiss Heart Foundation Research Prize awardees. The medical titles of the award winners correspond to the status at the time of the respective award ceremony. In the meantime, around 30 prize winners have been awarded the title of professor.

1981	PD Dr. Felix Gutzwiller and PD Dr. Bernard Junod
1982	PD Dr. Matthias Pfisterer and Dr. Otto M. Hess
1983	PD Dr. Lukas Kappenberger
1984	PD Dr. Marc Zimmermann
1985	PD Dr. André Kléber
1986	PD Dr. René Lerch
1987	PD Dr. Bernhard Meier
1988	Dr. Thomas Felix Lüscher
1989	Dr. François Chappuis
1990	Dr. Werner Inauen
1991	PD Dr. Ludwig Karl von Segesser
1992	PD Dr. Wolfgang Kiowski
1993	PD Dr. Martin Fromer
1994	Dr. Stephan Maier and Dr. Guiseppe Vassalli
1995	Dr. Beat J. Meyer
1996	PD Dr. Dan Atar
1997	PD Dr. Philip Urban sowie Dr. Zhihong Yang
1999	PD Dr. Christian Seiler
2000	PD Dr. Vincent Mooser
2001	PD Dr. Philipp Kaufmann
2002	PD Dr. Patrick Hunziker
2003	PD Dr. Xavier M. Mueller
2004	Dr. Marcel Arnold and Dr. Krassen Nedeltchev
2005	PD Dr. Marco Roffi sowie Prof. Dr. Christian Müller
2006	Prof. Dr. Etienne Delacretaz
2007	Dr. Christoph Kaiser
2008	PD Dr. Stefan Engelter sowie Dr. Jean-François Sormely
2009	Dr. Christoph Huber
2010	PD Dr. David Conen
2011	Dr. Leo Bonati sowie Dr. Tobias Reichlin
2012	PD Dr. Giacomo Simonetti
2013	Dr. Georg Ehret
2014	PD Dr. Andreas Flammer
2015	PD Dr. Stefan Freigang
2016	Dr. Jelena-Rima Ghadri and PD Dr. Christian Templin
2017	Dr. David Nanchen and Dr. David Seiffge
2018	PD Dr. Henrik Gensicke
2019	Dr. Raphael Twerenbold
2020	Prof. Dr. Giovanni G. Camici

Due to the change of the financial year to the calendar year, the Swiss Heart Foundation did not award a research prize in 1998.

I was always intrigued by human biology ever since I was a young boy. Certainly, the fact that in my family there are several physicians and scientists played an important role. However, also my biology teacher during secondary school

played an important role. She was an excellent teacher and motivated me to learn and think “outside the box”.

3. What were your most interesting achievements in science?

I believe that my work on aging represents one of the most important contributions I made to science. Age is a crucial risk factor for the development of cardiovascular disease. However, little is known about how age and aging *per se* favours the development of cardiovascular disease. My work demonstrated that genes controlling life span not only determine how long we live, but also mediate the development of age-dependent cardiovascular diseases such as vascular dysfunction, myocardial infarction and stroke, thus underscoring once again the tight link between age and cardiovascular disease.

4. What have you done and are you doing for your young students and post docs?

Working with my team and caring for their development is perhaps one of the best aspects of my job. What is important for me is that my fellows develop their own ideas, and I see my role in teaching them how to express their ideas and turn them into concrete projects. I believe this is central for becoming an independent scientist. Also, I always remain available even after they leave my group and move on with their careers; often, ex-fellows come back to me to ask for advice, reference letters or help in finding a job and I always enjoy remaining a reference point for them. I think this is an important aspect of my job.

Figure 1: Professors Thomas F. Lüscher and Giovanni G. Camici.



5. What are the next steps in your research?

Having developed the tools and know-how for studying aging I wish to capitalise on this and decipher the contributions of different mediators of age-dependent cardiovascular disease. In particular, I have now turned my attention to inflamm-aging, which is an interesting new concept representing a possible link between age and cardiovascular disease.

6. What do you do outside of science?

I devote a large part of my life to working. When I am not working, I enjoy spending time with my family and one of our favourite activities is travelling together and exploring different sea locations. Beside this, I have a long standing passion for cars and in particular vintage cars so whenever possible, I like to participate to classic cars races or static events. I often share this passion with my father.

Due to the COVID-19 epidemic, this year's Swiss Heart Foundation Research Prize could not be handed over during the traditional ceremony usually scheduled in the spring each year. Indeed, unfortunately the planned event in Lausanne this spring had to be cancelled and thus Giovanni G. Camici received the award from the president of the Swiss Heart Foundation Professor Ludwig K. von Segesser from Lausanne in a private event (figure 2).

Figure 2: Professors Ludwig K. von Segesser, Giovanni G. Camici and Thomas F. Lüscher.

