

Academy Announcements

Prof. Dr. Bohuslav Ostadal was pleased to announce the following awards at the North American Section Meeting of the IACS in Orlando, Florida during August 31st - September 2nd, 2017.

1. Norman Alpert Award for Established Investigator in Cardiovascular Sciences
2. Naranjan S. Dhalla Award for Innovative Investigators in Cardiovascular Sciences
3. Distinguished Leadership Award in Cardiovascular Sciences
4. Two Distinguished Service Awards in Cardiovascular Science, Medicine and Surgery

Michael Czubryt Receives the Norman Alpert Award for Established Investigator in Cardiovascular Sciences



Dr. Michael Czubryt

Dr. Czubryt is a tenured Professor of Physiology and Pathophysiology at the University of Manitoba, and a Principal Investigator of the Institute of Cardiovascular Sciences at the St. Boniface Hospital Albrechtsen Research Centre. His research program focuses on how genes are activated or silenced, how these

regulatory mechanisms contribute to heart disease, and how this knowledge can be exploited to create new therapies for cardiac patients. The work from his laboratory has provided critical new insight into the processes by which altered gene regulation leads to heart dysfunction, and more importantly has shown the way forwards to innovative and novel treatments not previously envisioned.

Dr. Czubryt's current work has uncovered a surprising new regulator of fibrosis in the heart: a protein called scleraxis, which governs how tendons form before birth. Like the heart, tendons are collagen-rich, and he was the first to hypothesize a common role for scleraxis in both tissues – the control of matrix genes and thus matrix production. His recent publications have confirmed this hypothesis, and revealed scleraxis as a new target for development of anti-fibrotic drugs. He has found that scleraxis not only governs matrix production in the heart, but in fact is both sufficient and necessary for the conversion of cardiac fibroblasts to pathological myofibroblasts. He was the first to describe this critical role for scleraxis, and recently published the first evidence of post-translational modifications that may be targeted

for therapeutic effect. An editorial in the Journal of Molecular and Cellular Cardiology described his initial discovery as “the Achilles’ heel” of cardiac fibrosis (2009), and a more recent editorial (2016) in the same journal has further highlighted his work as bearing tremendous promise for the treatment of fibrosis.

Dr. Czubryt is actively working to translate his discoveries to the clinic, having launched seven provisional patents and with two full patents granted for targeting scleraxis in cardiac fibrosis, and for high throughput screening of potential blockers of scleraxis function. His laboratory is currently working to identify lead pharmaceutical compounds representing first-in-class for cardiac fibrosis treatment. For this, he was honored with the Ronald Duhamel Innovation Fund Award.

This body of work has prompted nearly 80 invitations to speak at universities, symposia (including the prestigious Keystone Symposium on Collagen, Biovaria 2012 in Munich and the 2015 Gordon Conference on Collagen) and national and international meetings (including the American Heart Association and Experimental Biology, where he has also been invited to develop speaker sessions and symposia). These speaking engagements have led directly to the establishment of numerous international collaborations.

To date Dr. Czubryt has published 60 papers, and has over 1400 citations to his work with an H-index of 17. He has been continuously funded by national granting agencies since opening his laboratory. He was recently elected as Fellow of the American Physiological Society Cardiovascular Section, of the American Heart Association, and of the International Academy of Cardiovascular Sciences. He has served on the editorial board of four scientific journals.