



VRIC discussion agenda: Immune cell dysfunction and immunotherapy for vascular disease

## VRIC discussion agenda: Immune cell dysfunction and immunotherapy for vascular disease

Drugs and therapies that target immune cells and pathways within the body already exist to fight a number of diseases. Can vascular disease join the list?

Internationally renowned immunologists and vascular biologists, Kathryn J. Moore, PhD, and Katey Rayner, PhD, will lead the Translational Panel at this year's Vascular Research Initiatives Conference (VRIC), May 4, in Chicago. Moore is a professor of cell biology and the director of the New York University Cardiovascular Research Center. Rayner is an associate professor in the departments of biochemistry and microbiology and immunology at the University of Ottawa Heart Institute in Canada.

"The immune system and its critical role in inflammation is proving itself to be more and more relevant in all vascular disease," said Katherine Gallagher, MD, a member of the Society for Vascular Surgery (SVS) Research and Education Committee, which oversees VRIC. She and fellow committee member Jayer Chung, MD, championed the panel topic, "Immunology and Vascular Disease." Gallagher will moderate.

Some of the concepts will be applicable "to every disease we treat, PAD [peripheral arterial disease], AAA [abdominal aortic aneurysm], carotid disease, and all forms of atherosclerosis," she said. "All of these diseases have some form of immune system dysfunction and, once identified, these pathways can be targeted with therapeutics."

Moore and Rayner are investigating pathways and applying immune therapy to vascular disease, said Gallagher. "Their work is changing the field and identifying so many new targets for therapy."

Drugs could target a particular cell or the pathway the cell is activating. Therapies could block the pathway or "flip it" into becoming a "good" cell, she said. "A lot of these immune pathways are being targeted already in treating other diseases, with cancer probably the most common. FDA [Food and Drug Administration]-approved drugs already are out there."

That fact might speed the translation to treating vascular disease, Gallagher theorized. "It makes sense to develop things that have been found useful in another human disease."

## **VRIC discussion agenda: Immune cell dysfunction and immunotherapy for vascular disease**

Published on Society for Vascular Surgery (<https://vascular.org>)

---

The session will focus on the immunology-based mechanisms in vascular disease, with an eye on some of the translations that will be coming in the next five to 10 years. Innovations are coming quickly, said Gallagher. "It's only been in the past 15 to 20 years that our level of knowledge of the immune system and its role in disease has increased dramatically," she said.

VRIC Chicago 2020: "From Discovery to Translation" will be Monday, May 4, at the Chicago Hilton in downtown Chicago. It is scheduled the day before and in the same location as the American Heart Association's Vascular Discovery Scientific sessions. VRIC emphasizes emerging vascular science, with interactive participation with presenters and attendees. For more information visit [vsweb.org/VRIC20](https://vsweb.org/VRIC20) .

**Article Date:** Sunday, March 1, 2020

**Author:** Re-posted from the March 2020 issue of Vascular Specialist

**Tags:** Vascular Specialist

**Article Type:** Article