

Welcome to

Conversations with Scientists

IMMUNOLOGY

The Best Offense is a Good Defense

Presented in partnership with the MCW Center for Immunology

Tuesday, October 16, 2018

6:30 - 8:30 p.m.

Medical College of Wisconsin

Milwaukee | Central Wisconsin | Green Bay

Speakers

**MEET THE TEAM:
Introducing Your
Immune System**



“Immunity: Our Best Medicine.
The Immune System in Health”

Michael Dwinell, PhD

Director, Center for Immunology,
Professor of Microbiology & Immunology,
Professor of Surgery,
Medical College of Wisconsin



“Immunity: Our Best Medicine.
The Immune System in Sickness”

Anna Huppler, MD

Assistant Professor of Pediatrics,
Division of Infectious Diseases,
Medical College of Wisconsin



Online Webcast

Email us your questions
throughout the program
at ahw@mcw.edu

ABOUT THE SPEAKERS



Michael Dwinell, PhD

Director, Center for Immunology,
Professor of Microbiology & Immunology,
Professor of Surgery,
Medical College of Wisconsin

Michael Dwinell, PhD, is a Professor of Microbiology & Immunology, and Director of the Center for Immunology at the Medical College of Wisconsin. He has a secondary faculty appointment as Professor of Surgery and is a member of the MCW Cancer Center. Dr. Dwinell received his PhD from the University of Wisconsin-Madison in 1996 and completed post-doctoral research in the Department of Medicine at the University of California-San Diego in 2001.

Area of Interest: My research studies communication mechanisms in inflammation and cancer. Specifically, I study the mechanisms that control cell movement in immune responses, and how those mechanisms are co-opted in cancer. My recent work is developing and testing targeted molecules to decrease tumor cell metastasis and improve anti-tumor immunity. Work in my lab is focused on pancreatic cancer and colon cancer and is spreading to the study of leukemias.

Highlight of My Career: The highlight of my career is... all of it. Just when you think science has you beat, you get that “eureka” discovery when everything comes together. That moment makes it all worthwhile.

Fun Fact: I joined the United States Navy Reserve to help pay for college and was on ships in San Diego, Jacksonville, Long Beach, and Norfolk. The best stories from the Navy involve when I was “volunteered” (that happens a lot in the military) to be the “man overboard” for the ship’s overboard drill, and when I unknowingly visited a bar full of SEALs in Coronado.

Take Away Message: The immune system is exciting and is involved in nearly every aspect of disease. Newer therapies are harnessing the awesome power of the immune system to improve human health.



Anna Huppler, MD

Assistant Professor of Pediatrics,
Division of Infectious Diseases,
Medical College of Wisconsin

Anna Huppler, MD, is an Assistant Professor of Medicine, Division of Infectious Diseases at the Medical College of Wisconsin. Dr. Huppler received her MD from The Geisel School of Medicine at Dartmouth in 2006 and completed infectious diseases training at the Children’s Hospital of Pittsburgh in 2013.

Area of Interest: My research area of interest is the immune control of fungal infections. I investigate how a healthy immune system prevents illness due to yeasts. I hope this work will lead to new strategies to treat fungal infections, especially since available anti-fungal medications are limited. My clinical work focuses on the care of children with serious or unusual infections. I have a special interest in the care of children with compromised immune systems.

Highlight of My Career: The highlight of my career is the privilege I have to play a part in the lives of patients and families. From listening to an ill child belt out a song to celebrating a young man playing football after a long illness, these moments of connection make it all worthwhile.

Fun Fact: I learned a new sport during each stage of my medical training: rock climbing in medical school, ice hockey as I learned to be a pediatrician, and ultimate frisbee when I specialized in infectious diseases. All of this prepared me for my current sport of toddler-chasing.

Take Away Message: The immune system is better than any tool of modern medicine at protecting our bodies from threats. Harnessing immunity, such as with vaccination, is a powerful way to decrease human disease.

DO MORE ... THINK BIG

Explore the power of your immune system and its role in our health with these resources:

● Watch

- **Personal stories of people's encounters with preventable diseases:** www.shotbyshot.org
- **A cartoon demonstrating how your immune system works:** kidshealth.org/en/kids/ismovie.html
- **An interactive tutorial explaining the cells of the immune system and human immunodeficiency virus (HIV):** www.hhmi.org/biointeractive/cells-immune-system

● Read

- **Accurate information about vaccines:** www.cdc.gov/vaccines/parents/vaccine-decision/index.html
- **Learn about the latest research from the National Institutes of Health (the largest funder of biomedical research in the U.S.) Institute of Allergy and Infectious Disease:** www.niaid.nih.gov/research/immune-system-research
- **Extensive resources to learn about your immune system and disorders:** medlineplus.gov/immunesystemanddisorders.html

● Do

- **Visit the website "Vax and the Virus" for fun, downloadable resources for parents and kids:** vaxbook.com
- **Be intentional about taking steps to strengthen your immune system:** www.health.harvard.edu/staying-healthy/how-to-boost-your-immune-system
- **Activities that illustrate how vaccines work:** www.historyofvaccines.org/activities



JOIN US NEXT WEEK!

**Using Different Playbooks:
When immune responses go wrong**
Tuesday, October 23, 6:30 - 8:30 p.m.

Join us next week as Medical College of Wisconsin experts explore what happens when the immune system goes rogue. The evening's discussion will cover tolerance, when the immune system does not respond the way it should, and autoimmunity, when the immune system attacks things it shouldn't.



ADVANCING A HEALTHIER
WISCONSIN ENDOWMENT

Driven by a vision of a healthier Wisconsin, the Advancing a Healthier Wisconsin Endowment was established at the MCW Medical School to propel the most promising work and ideas to build a healthier Wisconsin for generations to come.

Conversations with Scientists is a free, public learning series presented by AHW to bring the research of MCW experts to the public, translating new discoveries into community knowledge and taking discussions out of the classroom or health clinic and into public conversation.

www.AHWendowment.org