

FIFTH ANNUAL COLTON CENTER SYMPOSIUM

# ADVANCES IN AUTOIMMUNITY

Wednesday, December 4, 2019 • 2–5 pm  
NYU Langone Health, Science Building, 103

**The ABCs of Autoimmunity**

Alessandra Pernis, MD, *Hospital for Special Surgery*

**PLD3 and PLD4: nucleases that regulate nucleic acid sensing**

David Nemazee, PhD, *The Scripps Research Institute*

**Rheumatoid Arthritis: Updates in Pathogenesis, Prediction and Prevention**

Kevin Deane, MD, PhD, *University of Colorado*

**Collaborative Science: Enabling Moonshot Projects and Avoiding Wishful Thinking**

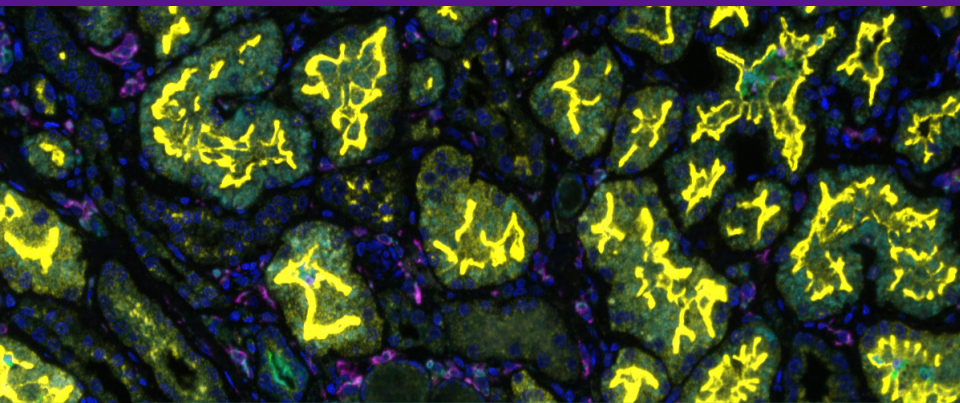
Navin Rao, PhD, *Janssen Pharmaceuticals*

**Hosts:** Timothy Niewold, MD

Steven Abramson, MD

Jill Buyon, MD

Boris Reizis, PhD



For additional information:  
[nyulmc.org/coltoncenter](http://nyulmc.org/coltoncenter)

Sponsored by:  
The Judith & Stewart  
Colton Center for  
Autoimmunity



We are pleased to welcome you to our fifth annual Judith and Stewart Colton Symposium on Autoimmunity and recognize the special commitment of Judith and Stewart Colton to foster fundamental discoveries that translate into improved clinical care and health for families living with autoimmune disease.

The Coltons have been generous benefactors of NYU Langone, with ties that date back to the 1960s, when Judith's uncle, a prominent surgeon, established a loan fund for medical students. Some of the couple's previous gifts to the Medical Center have supported asthma research and the research of early-career physician scientists known as the Colton Scholars. The recently established Judith and Stewart Colton Center for Autoimmunity is particularly close to their heart.

The center's researchers are furthering our understanding of immune system functions and how they are disrupted, so that we may more effectively treat and even prevent diseases like lupus, arthritis, Crohn's disease and multiple sclerosis. A large multi-disciplinary group has been brought together via the Colton Center to address autoimmunity on multiple fronts.

The Colton center continues to grow and thrive, under the direction of Dr. Timothy Niewold. He joins the leadership team with Drs. Jill Buyon, Boris Reizis, and Steve Abramson. The pilot grants awarded thus far have generated considerable progress in the field, leading to numerous high impact publications and prestigious external grant awards which accelerate the center's mission to find solutions for autoimmune disease. In conjunction with the NYU Office for Therapeutics Alliances, some of these projects are already moving along the pipeline toward the clinic. Thank you for joining us for the Annual Judith and Stewart Colton Symposium on Autoimmunity, I'm sure you will enjoy the inspiring science presented here today.

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Amrutesh S. Puranik, Kava Noah, Kayla Van Buren.

## INTRODUCTION

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2:00-2:10pm **Timothy Niewold, MD**  
*Judith and Stewart Colton Professor of Medicine and Pathology*  
*Director, Colton Center for Autoimmunity*

## SCIENTIFIC PRESENTATIONS

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2:10-2:45pm **Alessandra Pernis, MD**  
*Senior Scientist*  
*Peter Jay Sharp Chair*  
*Hospital for Special Surgery*  
***The ABCs of Autoimmunity***

2:45-3:20pm **David Nemazee, PhD**  
*Professor of Immunology and Microbiology*  
*The Scripps Research Institute*  
***PLD3 and PLD4: nucleases that regulate nucleic acid sensing***

3:20-3:50pm **Coffee Break**

3:50-4:25pm **Kevin Deane, MD, PhD**  
*Associate Professor of Medicine*  
*William P. Arend Endowed Chair in Rheumatology Research*  
*University of Colorado*  
***Rheumatoid Arthritis: Updates in Pathogenesis, Prediction and Prevention***

4:25-5:00pm **Navin Rao, PhD**  
*Senior Scientific Director, Immunology Discovery*  
*Rheumatology Diseases Area Stronghold Scientific Lead & Adaptive Immunity Strategic Lead*  
*Janssen Pharmaceuticals*  
***Collaborative Science: Enabling Moonshot Projects and Avoiding Wishful Thinking***

## BIOGRAPHICAL INFORMATION OF PRESENTING SCIENTISTS IN ORDER OF PRESENTATIONS



### **Alessandra Pernis, MD**

*Senior Scientist  
Peter Jay Sharp Chair  
Hospital for Special Surgery*

Dr. Pernis is a Senior Scientist and the Peter Jay Sharp Chair in Lupus Research at the Hospital for Special Surgery. She is a Professor of Medicine at Weill Cornell Medical College and a member of the HSS-Cornell-MSKCC Tri-institutional Immunology and Microbial Pathogenesis program. She employs both comparative models and translational approaches to delineate the molecular networks responsible for lymphocyte dysfunction in autoimmune diseases. Her recent studies have demonstrated that improper regulation of members of the Interferon Regulatory Factor family of transcription factors can lead to lupus.



### **David Nemazee, PhD**

*Professor of Immunology and Microbiology  
The Scripps Research Institute*

Dr. Nemazee is Professor of Immunology and Microbiology at The Scripps Research Institute. He has worked for many years on antibody transgenic mice, B cell tolerance, receptor editing and vaccinology. In this lecture, he will discuss recent work on a novel class of endolysosomal exonucleases that regulate TLR recognition and have been linked in GWAS studies to a number of inflammatory diseases including Systemic Sclerosis, Rheumatoid Arthritis, Systemic Lupus Erythematosus, and Alzheimer's disease.



### **Kevin Deane, MD, PhD**

*Associate Professor of Medicine  
William P. Arend Endowed Chair in Rheumatology  
Research  
University of Colorado*

Kevin Deane is currently an Associate Professor of Medicine and the William P. Arend Endowed Chair in Rheumatology Research at the University of Colorado. His research focuses on understanding the natural history of rheumatoid arthritis (RA) prior to the onset of the first swollen joint – a period that can be termed 'Preclinical RA'. He has a particular interest in understanding how mucosal inflammation may contribute to the initiation and propagation of RA-related autoimmunity. In addition, he is the Principal Investigator on the 'StopRA' study which is an NIH-funded trial testing whether or not hydroxychloroquine use in high-risk individuals can prevent or delay the future onset of classifiable RA.



### **Navin Rao, PhD**

*Senior Scientific Director, Immunology Discovery  
Rheumatology Diseases Area Stronghold Scientific  
Lead & Adaptive Immunity Strategic Lead  
Janssen Pharmaceuticals*

Navin is a Senior Scientific Director in Immunology Discovery at Janssen Research & Development, LLC. His current responsibilities include leading the Adaptive Immunity Discovery Research group, strategic and leadership responsibilities as a member of the Rheumatology Disease Area Stronghold (DAS) and the Immunology Discovery Leadership Team, as well as external scientific and business development activities. The Rheumatology DAS is focused on finding meaningful solutions for patients with rheumatoid arthritis, lupus, psoriatic arthritis and other autoimmune diseases while closely



