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:
yulmc.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.

Cover photo credit: Amrutesh S. Puranik, Kava Noah, Kayla Van Buren.
INTRODUCTION

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

SCIENTIFIC PRESENTATIONS

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
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

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.
working with Janssen colleagues in Oncology and Neurosciences on overlapping disease pathways. In addition, Navin leads the Immunology portfolio activities focused on Adaptive Immunity. Navin has led multiple scientific and drug discovery collaborations involving academic, industry and cross-pharma partners.

Navin began his undergraduate studies at the University of Puget Sound focused on evolutionary biology and classical history until chance led him to immunology. He did his doctoral training at Harvard University in the Division of Rheumatology, Immunology and Allergy, where he focused on signaling pathways in autoimmunity and oncology. He conducted postdoctoral studies at Brigham & Womens’ Hospital and then Janssen La Jolla. He joined Janssen as a Scientist and worked on a variety of programs spanning multiple disease areas and ranging from target validation through clinical candidate progression to Phase 1b/2a. After 16 years with Janssen at the La Jolla, CA campus, Navin recently relocated to Janssen’s Spring House, PA campus. When not at work, he enjoys spending time outdoors with his family where his favorite past times include trail running, bird watching, wood working and nature photography.