



SYMPOSIUM ION CHANNELS AND IMMUNITY

Stefan Feske, MD, NYU School of Medicine (Organizer)

NYU Langone Medical Center, Smilow Research Building, 1st floor seminar room

December 3rd, 2018

7:30 - 8:30am

BREAKFAST / COFFEE

8:30 - 8:45am

WELCOME & INTRODUCTION

Stefan Feske, New York University

8:45 - 10:30am

SESSION 1: Regulation of immune cell development and function by ion channels

Chair: Bimal Desai, University of Virginia

Michael Cahalan, University of California, Irvine

Calcium, calcium, calcium: Orai1 function and new probes for optical recording in T cells

Bimal Desai, University of Virginia

The function of TRPM7 channels in innate immunity

Janet Chou, Harvard Medical School

The contribution of LRRC8A, an essential component of the volume-regulated anion channel, to mature T cell function

Daniela Buccella, New York University (Short Talk)

Illuminating Metals: Fluorescent Probes for the Study of Cellular Ion Homeostasis

10:30 - 11:00am

COFFEE BREAK

11:00am - 12:45pm

SESSION 2. Ion channels in immunity and inflammation

Chair: Stefan Feske, New York University

Michael Lenardo, National Institute of Allergy and Infectious Diseases, NIH

Critical role of Mg²⁺ in T cell activation and proliferation

Susan Schwab, New York University

Exit strategies: S1P gradients and T cell migration

Stephen Jameson, University of Minnesota

Regulation of T cell memory by the P2RX7 ion channel

Stefan Feske, New York University

CRAC channels in immunity to infection and autoimmunity

12:45 - 1:30pm

LUNCH BREAK

1:30 - 2:45pm

POSTERS

2:45 - 4:30pm

SESSION 3. Ion channels in cancer

Chair: Kevin Foskett, University of Pennsylvania

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Ca²⁺ addiction of cancer cells

George Miller, NYULH, USA

Ion channels in innate and adaptive immunity to pancreatic ductal adenocarcinoma

Laura Conforti, University of Cincinnati

KCa3.1 channel activity and CD8⁺ T cell function in the tumor microenvironment

Minsoo Kim, University of Rochester

Targeted calcium influx boosts cytotoxic T lymphocyte function in the tumour microenvironment

4:30 - 4:45pm

COFFEE BREAK

4:45 - 6:30pm

SESSION 4: Ion channels as drug targets for immunotherapy

Chair: Michael Lenardo, NIH

Christine Beeton, Baylor College of Medicine

Targeting potassium channels in rheumatoid arthritis.

Edward Skolnik, New York University

Phosphoregulation of K⁺ channels in T cells

Anant Parekh, University of Oxford, UK

CRAC channels: drug targets in allergy and airway inflammation

Ken Stauderman, Calcimedica, La Jolla

CRAC Channels as Targets for Drug Discovery and Development

6:30 - 7:30pm

RECEPTION

8:00 - 11:00pm

SPEAKER DINNER