

Tkach, Colleen

From: Inform
Subject: EM: Dept of Natural Sciences Seminar Announcement - OCT 30

From: Lauran Soto

DNS SEMINAR ANNOUNCEMENT:

Generation and homeostasis of the coordinator of the immune response the helper T cell

Dr. Sophia Sarafova
Adjunct Associate Professor
Dept of Immunology
Duke University

Thursday, October 30, 2025
Burns Lecture Hall (NS E007)
12:15pm-1:15pm

In the Sarafova lab we are interested in all aspects of the life of CD4+ helper T cells. We focus on two main lines of investigation. The first one explores how a developing T cell makes the decision and commits to the helper lineage. We have identified a molecular mechanism that contributes to CD4 upregulation on the cell surface, necessary for faithful helper lineage commitment. Next, we will focus on the regulation of translation of Zbtb7b mRNA into Th-Pok protein, the master regulator of the helper lineage, and the relationship between CD4 kinetics and Th-Pok expression. The second line of investigation explores how the homeostasis of the helper T cells is established and regulated by the internal (cytokines, antigen presenting cells, MHC haplotype) and external (microbiome) environment by studying a pair of closely related mouse strains that differ in helper T cell homeostasis.

DNS and Chemistry Seminars can be found here: <https://natsci.claremont.edu/student-resources/seminars/>

Department of Natural Sciences
Seminar Series

***Generation and homeostasis of the
coordinator of the immune response
– the helper T cell***



Dr. Sophia Sarafova
Adjunct Associate Professor
Department of Immunology
Duke University

October 30, 2025 | 12:15-1:15 PM
Nucleus E007 (Burns Lecture Hall)

In the Sarafova lab we are interested in all aspects of the life of CD4+ helper T cells. We focus on two main lines of investigation. The first one explores how a developing T cell makes the decision and commits to the helper lineage. We have identified a molecular mechanism that contributes to CD4 upregulation on the cell surface, necessary for faithful helper lineage commitment. Next, we will focus on the regulation of translation of Zbtb7b mRNA into Th-Pok protein, the master regulator of the helper lineage, and the relationship between CD4 kinetics and Th-Pok expression. The second line of investigation explores how the homeostasis of the helper T cells is established and regulated by the internal (cytokines, antigen presenting cells, MHC haplotype) and external (microbiome) environment by studying a pair of closely related mouse strains that differ in helper T cell homeostasis.

Note the special date of the seminar

**Thursday, Oct 30 12:15-1:15PM in Nucleus E007
(Burns Lecture Hall)**

For more information, contact Pete Chandrangsu (pchandrangsu@natsci.claremont.edu)

Best,
Lauran Soto (she/they)
Administrative Assistant
Department of Natural Sciences
Pitzer and Scripps Colleges
Office Phone: (909) 621-8489