



The SNF Institute 4th Annual Symposium

Tuesday, March 24, 2026 at 8:00 a.m. – 5:00 p.m.

Caspary Auditorium and Abby Reception Hall, The Rockefeller University

- 8:00 a.m. **Breakfast & Poster Viewing**
- 8:45 a.m. **Rick Lifton:** Welcome
- 8:50 a.m. **Charlie Rice:** Introduction
- 9:00 a.m. **Dom Olinares (Chait Lab):** High-resolution native mass spectrometry for inhibitor screening
- 9:10 a.m. **Katya Vinogradova:** Studying and targeting immune-relevant proteins and proteoforms
- 9:20 a.m. **Sean Brady:** Antibiotics from microbial dark matter
- 9:30 a.m. **Avi Flamholz:** Towards a microbial platform for sustainable production of foods, fuels, and pharmaceuticals
- 9:40 a.m. **Barry Collier:** What can basic scientists and early phase translational scientists do to enhance global access to new medical advances?
- 9:50 a.m. **Jonathan Tobin:** Conducting full spectrum translational research on Chagas disease: from basic science to public health
- 10:00 a.m. **Break & Poster Viewing (20 min)**
- 10:20 a.m. **Qian Zhang (Casanova Lab):** Autoantibodies neutralizing type I IFNs
- 10:30 a.m. **Viviana Risca:** Host–nucleus interaction and nucleosome dynamics in circular DNA virus regulation
- 10:40 a.m. **Hiro Funabiki:** Chromatinization of invading DNA
- 10:50 a.m. **Sohail Tavazoie:** Dietary amino acid regulation of MHC translation and antiviral immunity
- 11:00 a.m. **Elaine Fuchs:** Tissue memories of acute inflammatory experiences
- 11:10 a.m. **Gabriel Victora:** Antibody-mediated feedback in the germinal center
- 11:20 a.m. **Liz Campbell:** Multiscale in situ structural studies of *Mycobacterium tuberculosis*
- 11:30 a.m. **Shixin Liu:** Regulation of the innate immunity DNA sensor cGAS by chromatin and pathogen DNA
- 11:40 a.m. **Isaac Kresse (Rock Lab):** Mapping genetic interactions in *Mycobacteria*
- 11:50 a.m. **Ana Badimon (Strickland Lab):** Investigating the therapeutic potential of plasma contact system inhibition in sepsis
- 12:00 p.m. **Jiankun Lyu:** Molecular generative models for ligand discovery
- 12:10 p.m. **Lunch & Poster Viewing (1 hour)**
- 1:10 p.m. **Sharon Lewin:** Towards an HIV cure: novel approaches to reduce and control the HIV reservoir
- 1:30 p.m. **Mike Rout:** Highly synergistic combinations of nanobodies that target betacoronaviruses
- 1:40 p.m. **Theodora Hatzioannou:** Anti-receptor nanobodies for pandemic viruses
- 1:50 p.m. **Jeff Ravetch:** Enhancing adaptive immunity through differential FcγR targeting
- 2:00 p.m. **Daniel Mucida:** Tissue-specific clonal selection and differentiation of CD4⁺ T cells during infection
- 2:10 p.m. **Break & Poster Viewing (20 min)**





2:30 p.m.	Peggy MacDonald (Rice Lab): Diagnosis of tick-borne infections: small answers to big problems
2:40 p.m.	Tom Sakmar : Multiplexed GPCR autoantibody diagnostics
2:50 p.m.	Li Zhao : <i>Sporothrix</i> evolution and zoonosis
3:00 p.m.	Paul Bieniasz : Antiviral proteins and coronaviruses
3:10 p.m.	Seth Darst : Genome replication in pathogenic viruses
3:20 p.m.	Steve Bonilla : Flavivirus RNA structural ensembles
3:30 p.m.	Linas Urnavicius (Kapoor Lab): In situ cryo-EM studies of ER-bound alphavirus translation
3:40 p.m.	Aitor Garcia (Tuschl Lab): Therapeutic innovation through inhibition of poxvirus RNA capping enzymes
3:50 p.m.	Michel Nussenzweig : Concluding remarks
4:00 p.m.	Reception & Poster Session
5:00 p.m.	Conclusion

POSTERS

1. **Chris Bianco (Bieniasz & Hatziioannou Lab)**: Replication compartment interactions and genome recombination in coronavirus co-infections
2. **Manivel Lodha (Bieniasz & Hatziioannou Lab)**: Genome-wide CRISPr screens reveal novel entry determinants for human coronavirus OC43
3. **Lorena Streit (Bonilla Lab)**: Intrinsic structural dynamics of a conserved RNA 3D motif guide initiation of genome replication in flaviviruses
4. **Wu Zuo (Risca Lab)**: Mechanistic analysis of host-nucleus interaction and nucleosome dynamics in circular DNA virus regulation
5. **Terence Tang (Chen Lab)**: The HCMV viral inhibitor US3 inhibits dynamics of peptide loading
6. **Jared Ramsey (Kapoor Lab)**: Designing covalent inhibitors of the SARS-CoV-2 helicase, nsp13
7. **Cindy Meyer (Tuschl Lab)**: Development of small molecule inhibitors of the SARS-CoV-2 RNA cap methyltransferase nsp14
8. **Mary Tenuta (Nussenzweig Lab)**: Antibody therapy for hepatitis B enhances antiviral immunity
9. **Robert Boer (Brady Lab)**: Discovery of a novel polycationic lipopeptide antibiotic using a synthetic bioinformatic natural product (synBNP) approach
10. **Kaylyn Spotton (Brady Lab)**: Dodecacylagicin, an optimized antibiotic development candidate that evades resistance by dual polyprenyl phosphate binding
11. **Brandon Lam (Lyu Lab)**: Virtual discovery and characterization of mycobacterial ATP synthase inhibitors
12. **Frank Tucci (Campbell Lab)**: Ultrastructural investigation of mycobacterial pathogenesis
13. **Dom Olinares (Chait Lab)**: A high-resolution native mass spectrometry-based platform to characterize transcription regulators and profile RNA polymerase inhibitors in *Mycobacterium tuberculosis*
14. **Nicolai Tornow (Rock Lab)**: Tunable genome-wide CRISPRi reveals context-dependent gene vulnerabilities and metabolic rewiring in *Mycobacterium abscessus* in cystic fibrosis lung condition
15. **Andrew Jones (Ravetch Lab)**: Enhancing adaptive immunity through differential FcγR targeting
16. **Jana Bilanovic (Victora Lab)**: Antibody-mediated feedback modulates interclonal competition in the germinal center
17. **Railia Gabbasova (Vinogradova Lab)**: Studying and targeting immune-relevant protein isoforms





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18. **Natalia Ketaren (Cross/Rout Labs):** Creating highly sensitive nanobody-based tests to identify *Trypanosoma cruzi*, the causative agent of Chagas disease
19. **Margaret Hoang (Sakmar Lab):** Development of a multiplexed diagnostics platform to detect serum anti-GPCR autoantibodies in long COVID or post-COVID conditions
20. **Abbey Jones (J Cohen Lab/Tobin):** A mixed-methods pilot project to examine Chagas disease in the United States
21. **Barry Collier (Coller Lab):** Enhancing global access to biomedical advances
22. **Eden Elkayam (Flamholz Lab):** The chemoautotroph olympics
23. **Shanshan Liu (Birsoy Lab):** SLC33A1 exports oxidized glutathione to maintain endoplasmic reticulum redox homeostasis
24. **Natalie Alexander (Fuchs Lab):** Investigating metabolically driven reprogramming of epidermal stem cells
25. **Raj Sajjath (Fuchs Lab):** Systemic tissue stem cell adaptation to localized acute type 2 skin inflammation
26. **John Watters (Liu/Alushin Labs):** Structural principles of transcriptional collisions
27. **Ana Badimon (Strickland Lab):** Investigating the therapeutic potential of plasma contact system inhibition in sepsis
28. **Sean Chen & Mariana Batista (Rice Lab):** Liver homeostasis following viral cure: insights from a mouse model of hepatitis C

