



San Diego Nathan Shock Center 2022 Workshop

Tackling the Heterogeneity of Aging

Friday March 25 2022, 9:00 am PST, Hybrid Event

HOSTS: Alessandra Sacco, SBP; Gerald Shadel, Salk

- 9:00 - 9:10 AM **Welcome/Introduction**
- 9:10 - 10:10 AM **Keynote**
Meng Wang (Baylor College of Medicine) - **Building multidisciplinary research in understanding aging biology**
- 10:10 - 10:15 AM *Break*
- 10:15 - 11:30 AM **2021 SD-NSC Pilot Grant Projects**
* Vanessa Delcroix (The Scripps Research Institute) - **A single-cell atlas of the aging lacrimal gland to understand the mechanisms underlying age-associated dry eye disease**
* Lara Labarta Bajo (Salk) - **Astrocyte Plasticity in the Aging Brain**
* Adam Konopka (University of Wisconsin-Madison) - **The Metabolic-Epigenomic Network of Metformin and Exercise**
* Maria Clara Guida (SBP) - **Investigating the epigenetic drift of aging hearts using Drosophila**
* Maria Mihaylova (The Ohio State University) - **Characterizing Age-Dependent Changes in the Mammalian Colon**
* Ana Chucair-Elliott (Oklahoma Medical Research Foundation) - **A novel inducible cell-specific mouse model for chromatin accessibility and transcriptomic studies of retina Müller glia in age-related macular degeneration**
- 11:30 - 12:00 PM **Human Cell Models Core**
Anthony Molina (UCSD) - **Clinical Cohort**
Jeffrey Jones (Salk) - **Human Cell Models of Aging**
- 12:00 - 12:40 PM *Lunch Break*
- 12:40 - 1:30 PM **Heterogeneity Core**
Peter Adams (SBP) - **Spatial -omics at Salk and SBP**
Uri Manor (Salk) - **Age-related changes to cochlear hair cell organelle morphology**
Jolene Diedrich (Salk) - **Mass Spectrometry**
Nasun Hah (Salk) - **Studying aging at single-cell resolution**
- 1:30 - 2:00 PM **Integrative Models Core**
Tanya Sharpee, April Williams (Salk) - **Introduction**
Alexey Terskikh (SBP) - **Heterogeneity of epigenetic landscape at single cell level.**
- 2:00 - 2:30 PM **SD-NSC Services Q&A - Virtual only – Join the breakout room**
* Sequencing and Single Cell Analysis - Nasun Hah
* Electron Microscopy and Imaging - Uri Manor
* Integrative Models Core - Tanya Sharpee, April Williams
* Mass Spectrometry - Jolene Diedrich
- SD-NSC Mentorship meetings - in-person only, 2022 awardees**
- 2:30 - 2:40 PM *Break*
- 2:40 - 3:25 PM **Career Development Panel**
* **Academia** – Timothy Huang, Assistant Professor at Sanford Burnham Prebys Medical Discovery Institute
* **Industry** – Daniel Oliver, CEO and Co-Founder of RejuvenateBio
* **Core Facilities** – Yoav Altman, Flow Cytometry Core Director at Sanford Burnham Prebys Medical Discovery Institute
* **Scientific Writing** – Monica May, Communications Officer in the Department of Neurological Surgery at UCSD and Vice President of the San Diego Science Writers Association
- 3:25 - 3:30 PM **Thank you and Closing Comments**
- 3:30 - 4:00 PM **Core Technologies Q&A - in-person only**
- 4:00 - 5:00 PM **Networking Happy Hour - in-person only**

More information:

<https://www.salk.edu/events/science-events/san-diego-nathan-shock-center-workshop/>

