

SenNet Consortium 2025 Annual Meeting Agenda

Senotype Mapping and Pathways to Translation

September 29-30, 2025

[The Johns Hopkins University Bloomberg Center](#)

555 Pennsylvania Avenue, NW, Washington, D.C. 20001

Virtual Attendance for SenNet Members Only: <https://pitt.zoom.us/j/98571389113>

Day 1 (September 29, 2025)

7:30 - 8:30 am	Registration/Check-in with Catered Full Breakfast
8:30 - 8:40 am	Welcome from Johns Hopkins Intro: Jennifer Elisseff Denis Wirtz, Vice Provost
8:40 - 8:50 am	Welcome from NIH Vivian Ota Wang, Common Fund
8:50 - 9:00 am	Overview of Meeting Goals Laura Niedernhofer & Marissa Schafer
9:00 - 10:00 am	Campisi Lecture: Using PROTAC to Develop Safer and Better BCL-XL/2 Targeting Senolytics Intro: Paul Robbins Daohong Zhou, University of Texas Health Sciences Center San Antonio
10:00 - 10:15 am	Break
10:15 - 11:15 am	Organ Groups 1: Moderator: Laura Niedernhofer & Peter Adams
10:15 - 10:45 am	CNS / Brain Marissa Schafer, Hemali Phatnani
10:45 - 11:00 am	Pancreas Cristina Aguayo-Mazzucato, Pei-Hsun Wu
11:00 - 11:15 am	Discussion
11:15 am - 12:15 pm	Organ Groups 2: Moderator: C Aguayo-Mazzucato & M Schafer
11:15 - 11:30 am	Placenta Paul Robson
11:30 - 11:45 am	Ovary Francesca Duncan, Birgit Schilling
11:45 am - 12:00 pm	Skeletal Vidyani Suryadevara
12:00 - 12:15 pm	Discussion
12:15 - 1:00 pm	Catered Lunch
1:00 - 2:00 pm	Organ Groups 3: Moderator: Paul Robson & Birgit Schilling
1:00 - 1:30 pm	Lung Melanie Koenigshoff
1:30 - 1:45 pm	Heart Aditi Gurkar, Nadia Rosenthal
1:45 - 2:00 pm	Discussion

2:00 - 3:00 pm

2:00 - 2:15 pm

2:15 - 2:30 pm

2:30 - 2:45 pm

2:45 - 3:00 pm

Organ Groups 4: Moderator: Rong Fan & Peter Adams

Skin Saranya Wyles and Burcin Duan Sahbaz

Colon Andrew Nixon

Immune Wen-hung Chou, Negin Farzad, Anthony Fung

Discussion

3:00 - 3:15 pm**Break****3:15 - 4:15 pm**

3:15 - 3:45 pm

3:45 - 4:00 am

4:00 - 4:15 pm

Organ Groups 5: Moderator: Andy Nixon & Ruth Montgomery

Liver Peter Adams

Kidney Ron Korstanje, Liangcai Gu

Discussion

4:15 - 5:00 pm**Flash Talks:** Moderator: Vidyani Suryadevara

(Strict 3 Minutes Each - Questions taken at poster session)

Speaker (et al)	Award / (Site)	Title
Nicholas Sloan	Columbia TMC	Uncovering the signatures of aging and senescence in the human dorsolateral prefrontal cortex
James Redden	Mayo Clinic TDA Schafer	Single-cell spatial profiling and deep rna sequencing of senescence signatures in the aging mouse cerebellum
Alberto Pappalardo	Columbia TDA	Characterization of cellular senescence in complex engineered skin constructs using spatial transcriptomics
Ana Catarina Franco	Mayo Clinic TDA Passos	Spatial multi-omics reveals senescent cell heterogeneity and oncogenic signatures in aged human skin
Sadiya Bi Shaikh	U Pittsburgh TMC U Rochester	Cellular senescence, senotyping, cellular heterogeneity, and molecular clock in lung development
Amalia Sinto	Jackson Laboratory TMC	Transcriptomic profiling, spatial distribution and dysregulated crosstalk between senescent and aged cells in the mammalian heart
Juliana Alcoforado Diniz	UConn Health TMC Jackson Laboratory	Spatial mapping of senescence and disease-associated cell states in the human kidney between health and type 2 diabetic donors
Elizabeth Schmidt	U Minnesota TMCs	Senescence evolution in metabolic liver disease progression
Tianqi Yang	Brown TDA	Spatial transcriptomics reveals senescence-associated tissue remodeling in aging mouse liver
Lexi Rindone	Johns Hopkins TMC	Integrated single cell and spatial transcriptomics analysis reveals distinct senescent cell phenotypes that regulate fibrosis
Christina Shi	Sanford Burnham TMC	Correcting imaging-based spatial transcriptomics data affected by a prevalent transcript leakage problem

5:00 - 6:30 pm**Poster Session and Networking (End of Day One)**

Day 2: (September 30, 2025)

7:30 - 8:30 am	Check-in/Catered Full Breakfast
8:30 - 8:45 am	Introduction & Level Set (Integrate day 1 & setup day 2) Marissa Schafer & Peter Adams
8:45 - 10:00 am	Working Group Updates: Moderator: Peter Adams
8:45 - 8:52 am	Senescence Biomarkers - Nicola Neretti
8:52 - 8:57 am	Omics/Imaging - Sheng Li & Joao Passos
8:57 - 9:09 am	Data Coordination - Richard Morgan & Jonathan Silverstein
9:09 - 9:14 am	Senescence Mapping - Jonathan Silverstein & Paul Robson
9:14 - 9:28 am	Human Reference Atlas (HRA) - Katy Börner
9:28 - 9:36 am	Publications - Rong Fan & Paul Robbins
9:36 - 9:41 am	Early Career Investigators - Birgit Schilling & Lexi Rindone
9:41 - 9:46 am	Outreach - Joe Bisciotti & Kay Métis
9:46 - 10:00 am	Good Modeling Practices - Constantin Aliferis & Yuval Kluger Benchmarking - Vilas Menon - will present in next session
10:00-10:15 am	Break
10:15 am - 12:00 pm	Data Access & Analytics: Moderator: Jian Shu & Rong Fan
10:15 - 10:30 am	Data Access Jeff Chuang, Sergii Domanskyi, Sam Peters, Max Sibilla
10:30 - 11:45 am	Analytic tools (10 minutes each presenter) <i>SAKURA: Knowledge-guided data analysis to identify rare SnCs</i> - Kevin Yip BLADE - Constantin Aliferis & Erich Kummerfeld DeepSAS - Qin Ma Evaluation of statistical differential analysis methods for identification of senescent cells using single-cell transcriptomics - Dongmei Li DIANNE - Sergii Domanskyi SenNetRamanOmics - Ke Zhang
11:45 am - 12:00 pm	Integrated Analysis Cross-Consortium Benchmarking Project - Nicola Neretti, Joao Passos, Vilas Menon, Sheng Li, Jonathan Silverstein
12:00-1:00 pm	Catered Lunch (External Program Consultants closed meeting)

SenNet Consortium Industry Workshop

Senescent Cells in Human Tissues: From Discovery to Clinical Impact

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Purpose: to gather, in person only, the consortium and pharmaceutical companies and related biotechnology businesses focused on cellular senescence drug discovery and manufacture. The consortium's interest in meeting in-person in focused areas among awards and outside parties is to engage the corporate ecosystem with shared interest in senescence biology relevant to pharmaceutical development and manufacture.

Questions:

What in SenNet is ready for translation, commercialization, measurement?

What are the barriers in the corporate world to translation in cellular senescence?

What are new opportunities for academic corporate partnerships?

1:00 – 1:05 pm	Goals in building the SenNet Consortium Ananda Roy, National Institutes of Health
1:05 – 1:15 pm	Overview of SenNet Achievements and Challenges Marissa Schafer & Laura Niedernhofer
1:15 – 1:30 pm	SenNet Data Products and Integrations with Others Katy Börner
1:30 - 1:45 pm	Imaging tool to detect senescent cells in vivo Vidyani Suryadevara
1:45 – 2:00 pm	Development of new senotherapeutics Andrew Haak
2:00 – 2:15 pm	Clinical trial of senolytics dasatinib plus quercetin Sundeep Khosla
2:15 - 2:35 pm	Panel Discussion Moderators: Marissa Schafer & Peter Adams
2:35 – 2:45 pm	Break
2:50 – 3:10 pm	Clinical trial design for senotherapeutics: lessons learned Mike Sapienza (Unity Biotechnology)
3:10 – 3:30 pm	Biotech experience in healthy aging Alex Laslavic (Rubio Life)

3:30 – 3:50 pm	Senolytics for All? Evaluating the Promise and the Pitfalls Natalia Mitin (Sapere Bio)
3:50 – 4:10 pm	Using affinity proteomics to build a protein signature for drug discovery and clinical impact Lindsey Bishop (Olink)
4:10 – 5:10 pm	Open Forum Focused on Questions Moderators: Andrew Nixon & Laura Niedernhofer (All participants: SenNet, NIH, and Industry)
5:10 - 6:30 pm	Networking Reception and Collaboration Formation (Hors d'Oeuvres / Bar)