**The First Cellular Senescence Network (SenNet) Annual Meeting**

September 15-16, 2022

VisArts Center

155 Gibbs Street

Rockville, MD 20850

(301)315-8200

**Day 1** *(Thursday, September 15th, 2022)*

8:00-9:00 am **Registration/Check-in with Catered Full Breakfast**

**Session l: Introductions, Icebreakers and Networking**

*Co-chairs: Viviana Perez-Montes and Chamelli Jhappan*

9:00-9:15 am **SenNet Overview**

Betsy Wilder, NIH and Ananda Roy, NIH

9:15-9:30 am **CODCC** – Consortium Organization and Data Coordinating Center

Contact PI: Jonathan Silverstein

9:30-9:45 am **Introduction to Breakouts/Unconference**

9:45-10:00 am **Break**

**Session ll: The Science Sessions Part l**

*Co-chairs: Yousin Suh and Simon Melov*

10:00-10:15 am (TMC - Buck Institute for Research on Aging) Senescent cell mapping, identification and validation for human somatic and reproductive tissues

*Contact PI: Judy Campisi*

10:15-10:30 am (TDA - University of Washington) PIXEL-seq-based spatial, multi-omic profiling for senescent cell mapping with single-cell resolution

*Contact PI: Liangcai Gu*

10:30-10:45 am (TMC - University of Minnesota) Minnesota Tissue Mapping Center for Senescent Cells

*Contact PI: Laura Niedernhofer*

10:45-11:00 am (TDA - Stanford University) Cellular Senescence Network: New Imaging Tools for Arthritis Imaging

*Contact PI: Heike Daldrup-Link*

11:00-11:20 am **Break**

11:20-11:30 am (TMC - University of California San Diego) Spatial mapping senescent cells across the mouse lifespan by multiplex transcriptomics and epigenomics

*Contact PI: Peter Adams*

11:30-11:45 am (TDA - Massachusetts General Hospital) Single-cell proteomic identification of novel markers of senescence

*Contact PI: Zhixun Dou*

11:45 am-noon (TMC - Columbia University Irving Medical Center) A Multi-scale Atlas of Senescence in Diverse Tissue Types

*Contact PI: Hemali Phatnani*

12:00 -1:30 pm **Catered Lunch**

**Session lll: The Science Sessions Part 2**

*Co-chairs: Birgit Schilling and Jun Hee Lee*

1:30–1:40 pm (TDA - Johns Hopkins University) Three-dimensional maps of in the human pancreas

*Contact PI: Pei-Hsun Wu*

1:40-1:50 pm (TMC - The Jackson Laboratory) The Jackson Laboratory Senescence Tissue Mapping Center

*Contact PI: Nadia Rosenthal*

1:50-2:00 pm (TDA - Mayo Clinic) Spatially resolved protein and transcriptome mapping of senescent cells

*Contact PI: Marissa Schafer*

2:00-2:20 pm **Break**

2:20-2:35 pm (TMC - University of Pittsburgh) TriState SenNET (Lung and Heart) Tissue Map and Atlas consortium

*Contact PI: Toren Finkel*

2:35-2:50 pm (TDA - Buck Institute for Research on Aging) Evaluating diverse technologies for detecting and validating senescent cells in vivo

*Contact PI: Simon Melov*

2:50-3:00 pm (TMC - University of Minnesota) Midwest Murine-Tissue Mapping Center

*Contact PI: David Bernlohr*

3:00-3:10 pm (TDA - Columbia University) Senescence-on-a-chip: Building a microphysiological 3D skin model

*Contact PI: Angela Christiano*

3:10-3:30 pm **Break**

3:30- 4:15 pm **Breakout/Unconference Session**

4:15-4:45 pm **Report from Breakouts**

4:45 pm **Adjourn**

**Evening Networking – Local Restaurants**

**Day 2: *Consortium Activities*** *(Friday, September 16, 2022)*

8:00-9:00 am **Check-in/Catered Full Breakfast**

9:00-9:30 am **Steering Committee Update**

Heike Daldrup-Link (TDA - Stanford University)

Toren Finkel (TMC - University of Pittsburgh)

Hemali Phatnani (TMC - Columbia University Irving Medical Center)

9:30-10:15 am **SenNet Working Group Updates** (5 minutes/group)

10:15-10:30 am **Break**

**Session lV: The Science Sessions Part 3**

*Cochairs: Sheila Stewart and Zhixun Dou*

10:30-10:45 am (TMC - Duke University) The Duke Senescent Cell Evaluations in Normal Tissues (SCENT) Mapping Center

*Contact PI: Patty Lee*

10:45-11:00 am (TDA - Mayo Clinic) Development of machine learning software to quantitatively map telomere induced senescence in tissue sections during aging

*Contact PI: Joao Passos*

11:00-11:10 am (TMC - Johns Hopkins University) JHU-Mayo-NIA Murine Senescence Mapping Program

*Contact PI: Jennifer Elisseeff*

11:10-11:15 am Organ Mapping Antibody Panels (OMAPs)

Andrea Radtke, NIH

11:15-11:30 am **Break**

11:30- 11:45 am (TMC - Yale University) Yale TMC for Cellular Senescence in Lymphoid Organs

*Contact PI: Rong Fan*

11:45-11:55 am (TDA - Pacific Northwest National Laboratory) Spatially resolved proteome mapping of senescent cells and their tissue microenvironment at single-cell resolution

*Contact PI: Ying Zhu*

12:00-1:00 pm **Catered Lunch**

**Session V: The Science Session Part 4**

*Co-chairs: Melanie Koenigshoff and Joao Passos*

1:00-1:15 pm (TMC - Washington University in St. Louis) Washington University Senescence Tissue Mapping Center

*Contact PI: Li Ding*

1:15-1:30 pm (TDA - University of Michigan) Seq-Scope: Microscopic Examination of Spatial Single Cell Transcriptome in Cell and Tissue Senescence

*Contact PI: Jun Hee Lee*

1:30pm-1:40 pm (TMC - Yale University) Yale Murine-TMC on Immune Cell Senescence Derived Inflammation

*Contact PI: Deep Dixit*

1:40-1:50 pm (TDA - Massachusetts Institute of Technology) Single-cell label-free identification of senescence by Raman microscopy and spatial genomics

*Contact PI: Peter So*

1:50-2:00 pm **Break**

2:00-2:15 pm (TMC - UConn Health) The KAPP-Sen Tissue Mapping Center Collaborative

*Contact PI: George Kuchel*

2:15-2:30 pm (TDA - Brown University) Spatial omics technologies to map the senescent cell microenvironment

*Contact PI: Nicola Neretti*

2:30 pm **Adjourn**