

AGENDA

Simons Collaboration on Plasticity and the Aging Brain

2022 PRE-MEETING

| CSHL

| SEPTEMBER 26 - 27

AGENDA

Monday, Sept 26

Session 1	Intro to Session 1 Grace Auditorium
3:30 - 3:40 pm	Coleen Murphy: Welcome Remarks (pre-recorded) and Intro to Session 1
3:40 - 4:00 pm	Gregor Bieri and Rachel Kaletsky: EGL-30/GNAQ activation rejuvenates age-related cognitive decline in worms and mammals
4:00 - 4:20 pm	Shiyi Zhou: Signaling from the C. elegans hypodermis non-autonomously regulates memory
4:20 - 4:40 pm	Berenice Benayoun: Understanding the impact of sex hormones on mouse brain aging
4:40 - 5:00 pm	Dena Dubal: X Chromosome-derived mechanisms in the aging brain
5:00 - 5:20 pm	Samira Abdulai-Saiku: The maternal X chromosome impairs cognition and accelerates brain aging through epigenetic modulation in female mice
5:20 - 5:40 pm	Frankie Heyward: AgRP neuron epigenomes across hunger states reveal novel transcriptional effectors of leptin
5:45 - 6:30pm	Reception Blackford Lawn
6:30 - 8:30pm	Buffet Dinner Blackford Dining Hall
8:30 - 10:00pm	Poster Session Bush Auditorium

Poster Session Bush Auditorium

- 1) **Rockwell Anyoha:** Neural correlates of age-specific behavioral patterns
- 2) **Aulden Foltz:** Scalable approach to investigate RNA correlates of cognitive decline in aging
- 3) **Oliver Hahn:** Finding the weakest link: Tracing brain aging hotspots for preventive intervention
- 4) **Aslihan Terzi:** How does sleep sustain synaptic lipid function across life?
- 5) **Cana Park:** Platelet factors are induced by longevity factor klotho and enhance cognition and its molecular signature in the aging hippocampus
- 6) **Cayce Shaw:** Aging awakens transcription of the inactive X chromosome in cells of the female hippocampus
- 7) **Francesca Marino:** Female XX sex chromosomes and ovaries confer resilience to cognitive deficits in aging male and female mice
- 8) **Bryan Teefy:** Sex and strain-specific differences in Nothobranchius furzeri brain aging
- 9) **Cassandra McGill:** Understanding the impact of sex hormones on mouse brain aging
- 10) **Nicole Scott-Hewitt:** Microglial C1q alters intraneuronal protein homeostasis through RNA-dependent liquid-liquid phase separation
- 11) **Laura Remesal Gomez:** Role of the iron associated protein FTL1 as a neuronal pro-aging factor promoting cognitive decline

AGENDA

Tuesday, Sept 27

8:00 - 9:30 am **Breakfast** Blackford Dining Hall

Session 2

9:30 - 9:40 am **Intro to Session 2** Grace Auditorium

9:40 - 10:00 am **Philippe Mourrain and Tom Clandinin:** How does sleep sustain synaptic lipid function across life?

10:00 - 10:20 am **Adam Schroer:** Young platelet factors attenuate inflammation and rescue cognition in aging

10:20 - 10:40 am **Nannan Lu:** Systematic circulatory factors affect microglial function in health and aging

10:40 - 11:00 am **Caterina Gasperini:** Targeting brain vasculature to improve the function of the aging brain

11:00 - 11:20 am **Jia Guo:** Spatiotemporal mapping the effects of the blood-borne factors GDF11 and VCAM1

11:20 - 11:40 am **Yousin Suh:** Genetic mechanisms of cognitive decline in aging humans

11:40 - 12:00 pm **Maiken Nedergaard:** Importance of glial cells and sleep in healthy aging

12:00 - 12:20 pm **Cinzia Vicidomini:** An aging-induced neuronally secreted factor that promotes cognitive resilience

12:30 - 1:45 pm **Lunch** Blackford Dining Hall

Session 3

1:50 – 2:00 pm **Intro to Session 3** Grace Auditorium

2:00 – 2:20 pm **Michael Ryan:** Discovering how large-scale changes in cortico-striatal activity guide decision-making

2:20 – 2:40 pm **Yu-Tzu Shih:** A molecular blueprint for parvalbumin Inhibitory neuron experience-dependent plasticity

2:40 – 3:00 pm **Anna Gillespie:** Using hippocampal spatial representations to understand the mechanisms of cognitive impairment in the aging brain

3:00 – 3:20 pm **Jeremy Shea:** The diverging molecular architecture of the aging rat hippocampus

3:20 – 3:40 pm **Catherine Kaczorowski:** Multi-omic analysis identifies drivers associated with resilience to cognitive aging and Alzheimer's dementia

3:40 – 4:00 pm **Kristen O'Connell:** Identifying signatures of resilience to cognitive aging in genetically diverse aging mice

4:00 – 4:20 pm **Vilas Menon:** Aligning molecular signatures between aged human and mouse brain

Building Directory

1. Axinn Laboratory
2. Beckman Laboratory
3. Blackford Hall/Racker
4. Bush Lecture Hall
5. Cairns Laboratory
6. Carnegie Library
7. Delbrück/Page Laboratory
8. DeMatteis Laboratory
9. Demerec Laboratory
10. Dolan Hall
11. Freeman Laboratory
12. Grace Auditorium
13. Harris
14. Hershey Laboratory
15. James/Sambrook Laboratory
16. Jones Laboratory
17. Koch Laboratory
18. Lindsay Child Care Center
19. Luke Building
20. Marks Laboratory
21. Matheson Laboratory
22. McClintock Laboratory
23. Nichols Building
24. Nicholls Biondi Hall
25. Osterhout
26. Quick Laboratory
27. Richards Building
28. Urey Cottage
29. Wawepex Building
30. Wendt Laboratory
31. Williams House

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