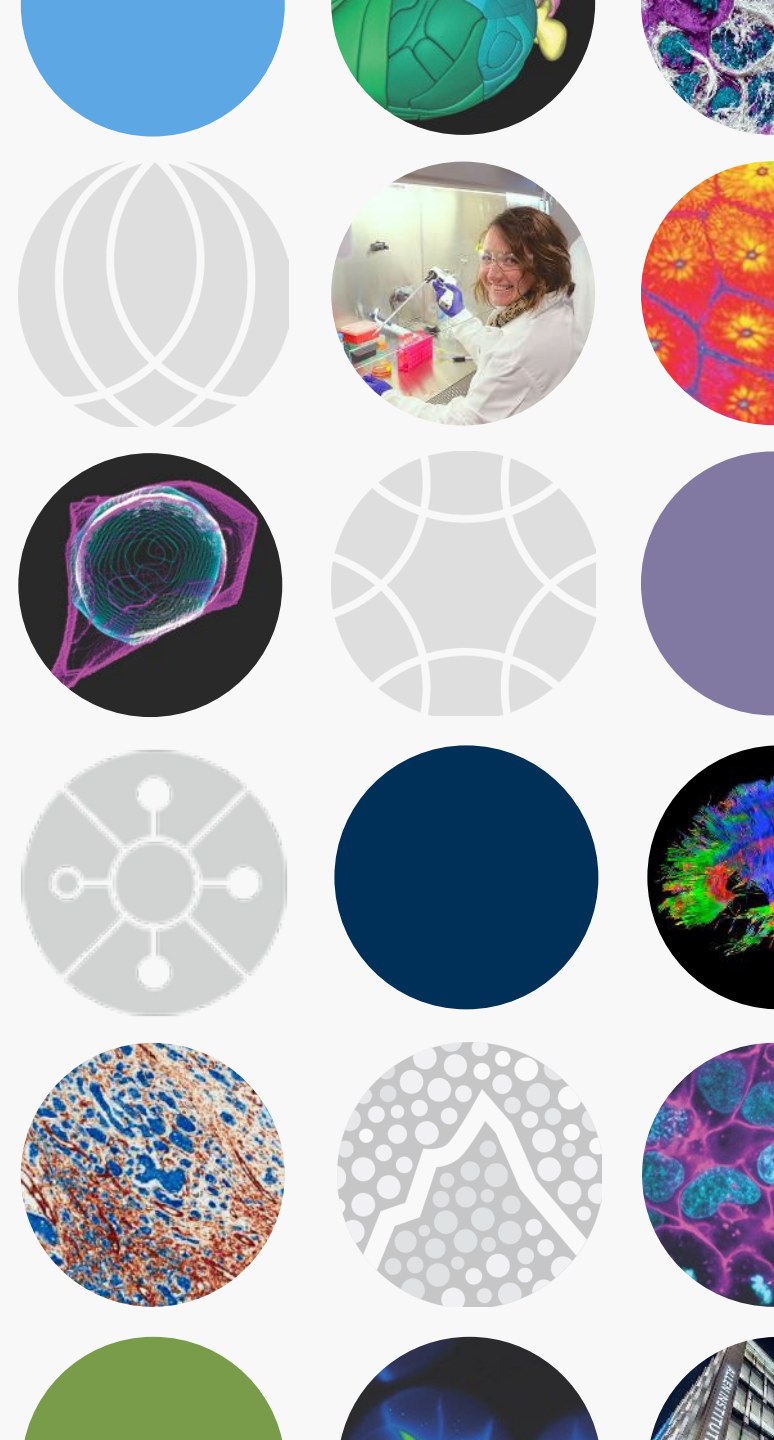




Understanding Brain-Body Interactions to Advance Brain Health

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No Conflicts to Disclose

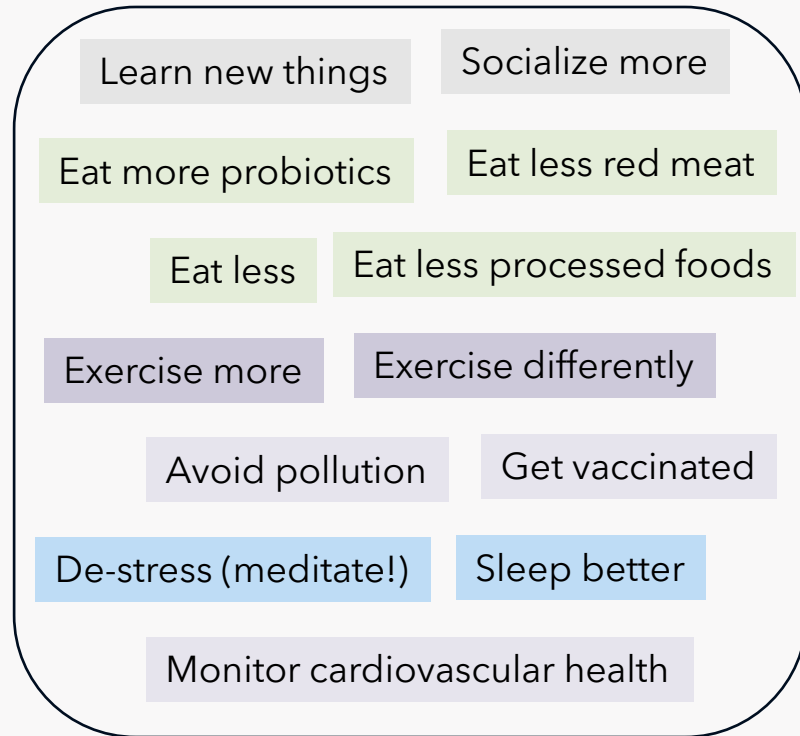
Workshop Reflections & Potential Directions Moving Forward

1. Lifestyle interventions work to support healthy brains. How?
2. Foundational datasets and open-access resources catalyze discoveries.
3. Translating discoveries into impact will be faster with a strong ecosystem.

Workshop Reflections & Potential Directions Moving Forward

1. Lifestyle interventions work to support healthy brains. How?

Science communication is not just about talking to the public - it's about listening too.



People who are currently healthy and people living with diseases are super interested in monitoring their own health and making lifestyle changes to improve brain functions and prevent decline.

But ... there are still too few examples of evidence-based recommendations for how *individuals* should implement changes to realize putative benefits.

It is also not always safe or feasible for some people to make these lifestyle changes.

Understanding how changes promote healthier brain function will unlock novel drug targets and new intervention strategies to maximize benefit for more people.

Workshop Reflections & Potential Directions Moving Forward

2. Foundational datasets and open-access resources catalyze discoveries.

Many scientists turn to reference data and resources as a first stop when designing new experiments.

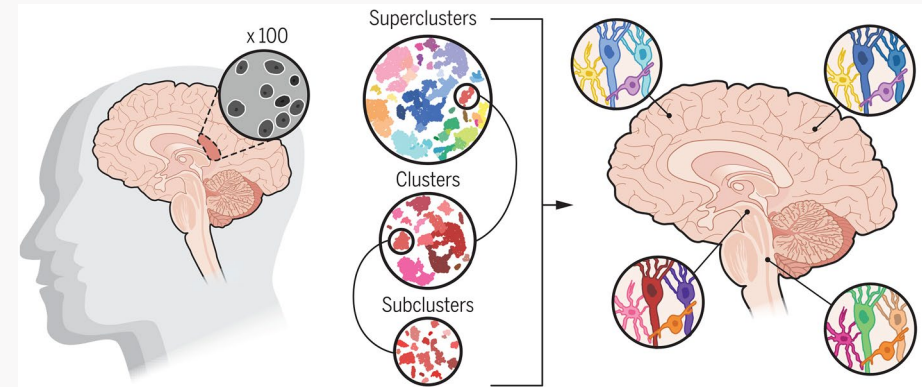
Examples:

- Human Genome Project
- Allen Mouse Brain Atlases
- UK Biobank
- Human Cell Atlas
- BRAIN Initiative Cell Atlas Network (Human)

Single-cell transcriptomic atlases exist for organs in isolation.

Molecular and anatomical maps of human cells, molecules, circuits, metabolites, etc, in the systems that enable brain-body communication will accelerate progress.

The distributed nature of these interacting systems presents a major challenge for creating maps and doing mechanistic studies. Animal models and new tools are still needed.



Transcriptomic diversity of cell types across the adult human brain. *Siletti al, Science 2023*

Workshop Reflections & Potential Directions Moving Forward

3. Translating discoveries into impact is faster with a strong ecosystem of partners.

Realizing impact depends on success at every stage of the standard pipeline and at the transition points.



What's in a Field Building "Toolkit":

- Training (early career, cross-discipline, cross-sector)
- Funding (research, collaborations, training, meetings)
- Convenings (workshops, symposia)
- Partnerships (big, small, focused, aligned on goals)

How can we leverage this amazing momentum to keep the brain-body field moving fast to meaningful impact?

