



RFI/Convergence Accelerator

- Goal: accelerate **use-inspired convergence research** in areas of **national importance**.
- Use **partnerships** with non-academic stakeholders.
- Multiple Rounds. Final: **\$5M/year for 5 years**.
- NSF is seeking the next CA “topic.”
- **November 9 deadline.**
- <https://www.nsf.gov/pubs/2021/nsf21012/nsf21012.jsp>



Submissions should include

- **Why** is convergence research needed?
- Evidence of **research community readiness**
- Explanation of **potential for partnerships**
- **Deliverables** that can be expected within two years
- Expected **impacts** of the project in 10 years.



Convergence @



2021

2020

2019



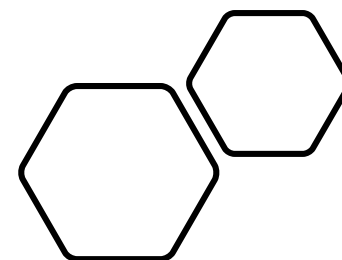


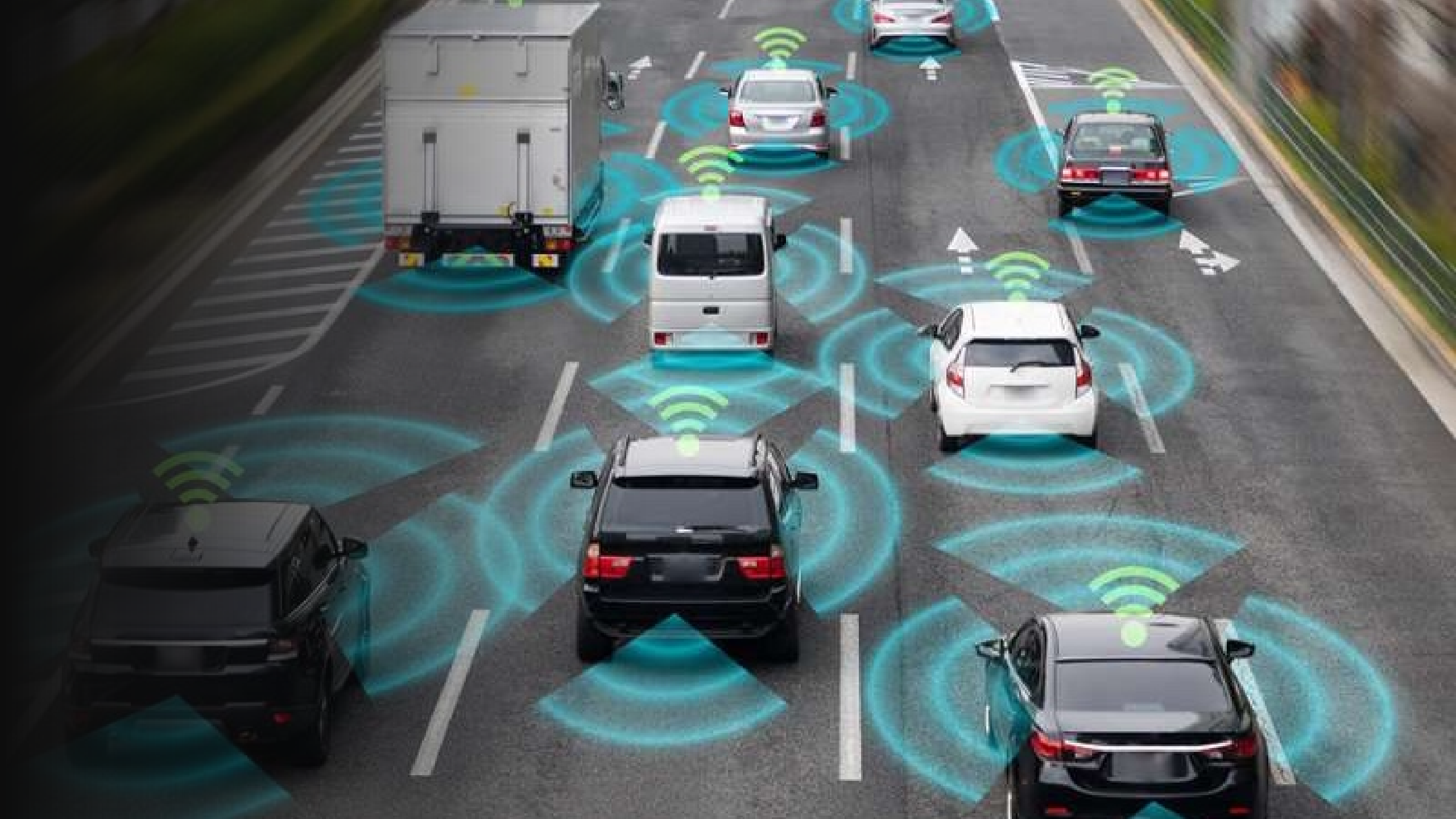


How do we rebuild?

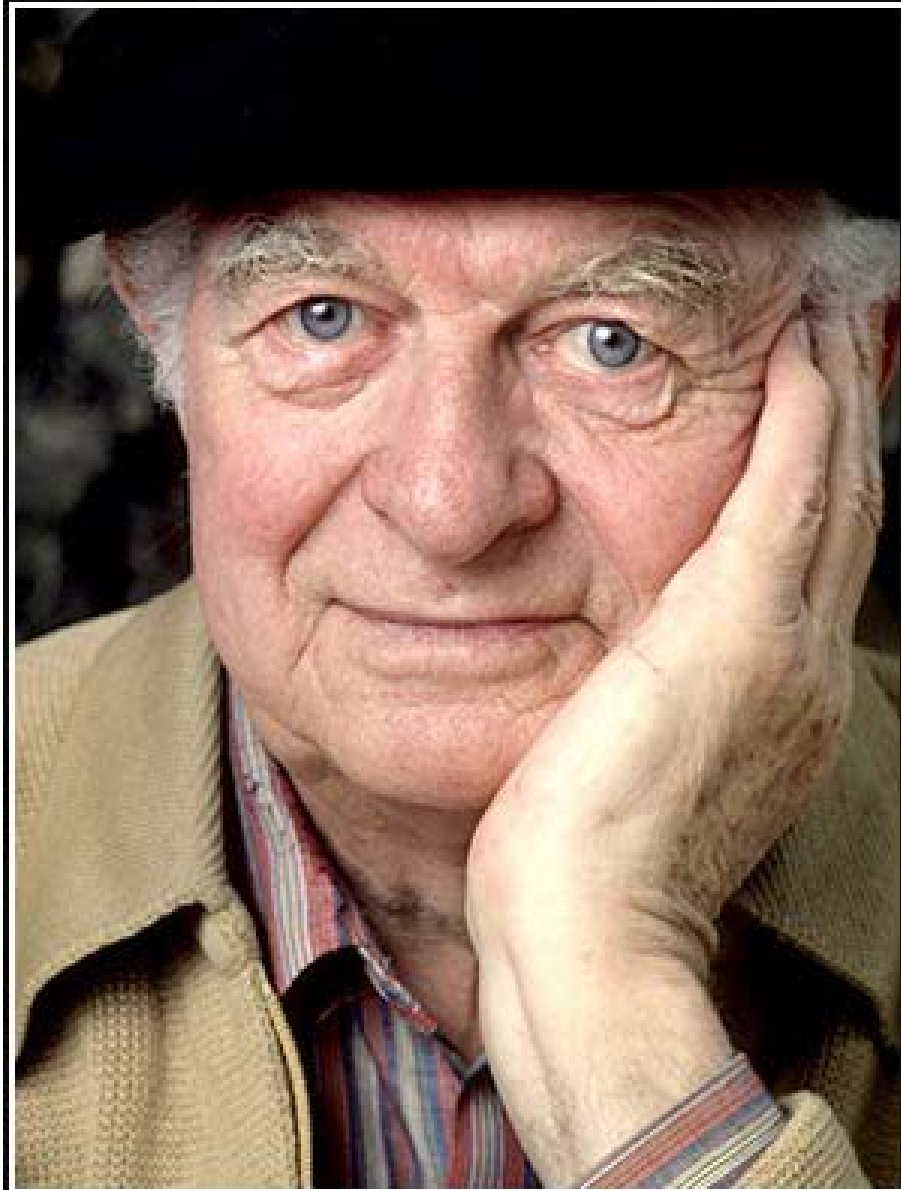
How can we empower?











The best way to have a good idea is
to have a lot of ideas.

— *Linus Pauling* —

AZ QUOTES

- A “new” idea is a novel combination of existing concepts.



Many “novel combinations” fall between the cracks of existing disciplinary categories.





Paths Forward

- Interdisciplinarity
- Multidisciplinarity
- Convergence



Answer: 2.5 hours

Convergence
Measurement
@



Goal

- Support rigorous, precise research that empowers people and improves quality of life

SBE Overview

- Produce groundbreaking research
- Create fundamental data and analytic infrastructure
- Provide essential training

SBE Principles

- Rigor
 - The ability to explain how we know what we know.
- Ethics
 - Empowering people through awareness of whole scientific workflow.
- Precision in measurement & conceptualization.
- Causality
 - We're very good at this.

Questions for the Group

1. Is a **valid and broadly legitimate** convergence measure possible?
 - a) A measure that signals standardization.
 - b) A measure that can be reliably derived from the activities of diverse institutions.
2. Is it possible to create **mutual exclusivity and collective exhaustion** in critical domains?
 - a) Is neuroscience convergent?
3. If 1 and 2 are possible, **who is then empowered** to accomplish high-value goals?
4. If 1, 2, and 3 are possible, what are NCSES's **opportunity costs** of developing the measure?
5. Is convergence **more effective as a motivational ideal** than a measured phenomenon?



Thank you for your service to
science & society.

Arthur Lupia, Assistant Director

