

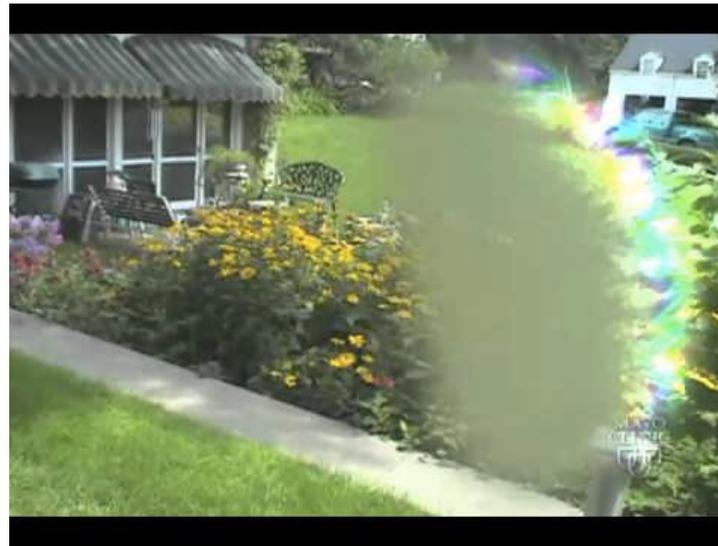
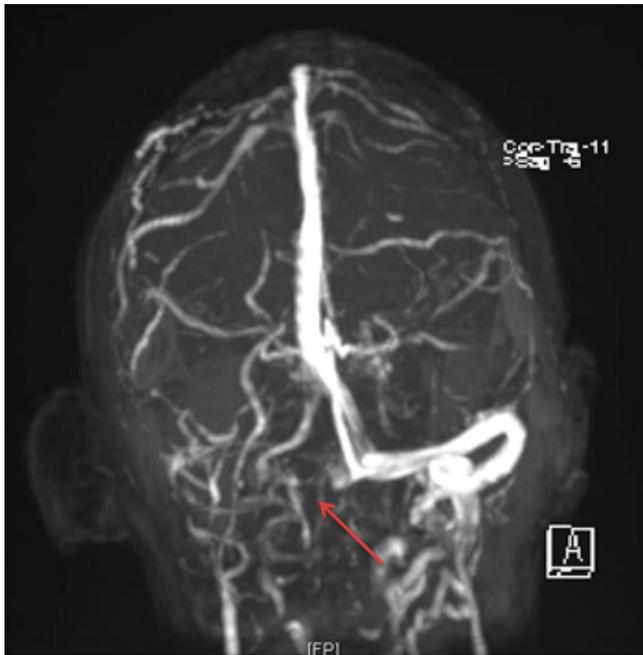
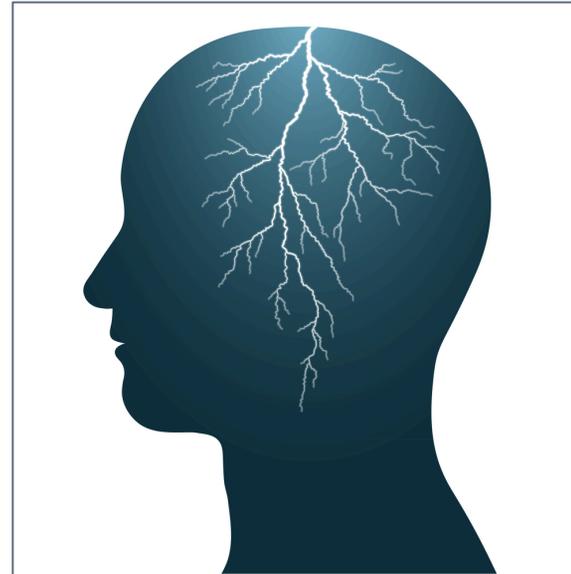
Collective Science Literacy

a key to community science capacity

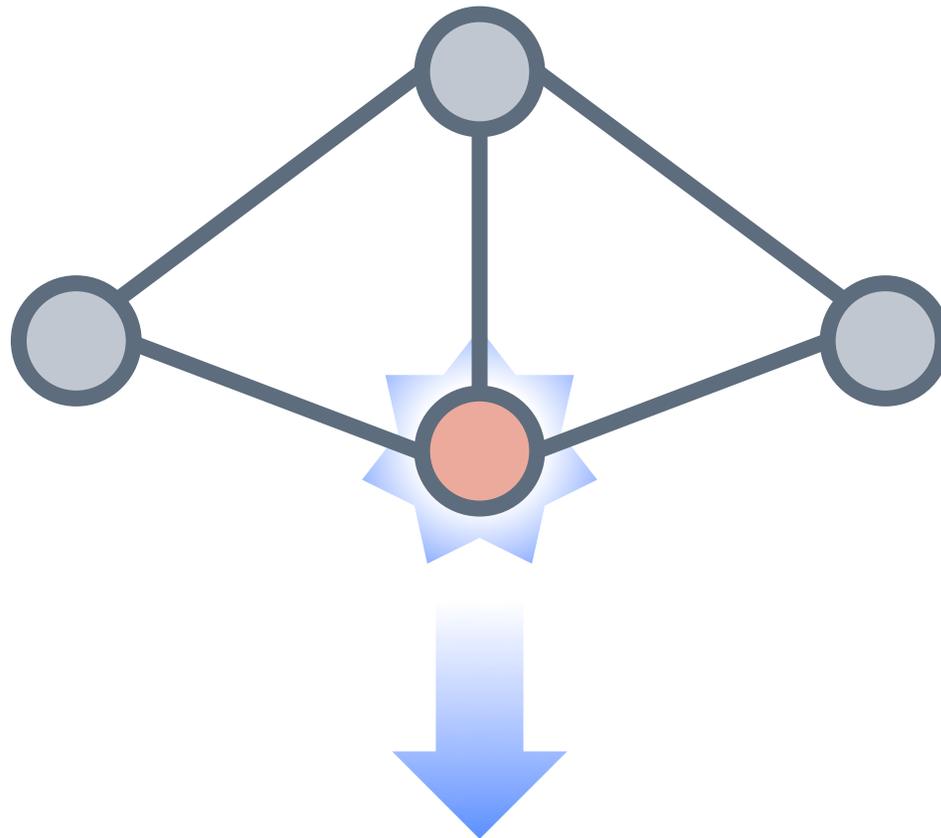
Noah Weeth Feinstein

AAAS – Austin, TX – 18 February, 2018





Collective science literacy



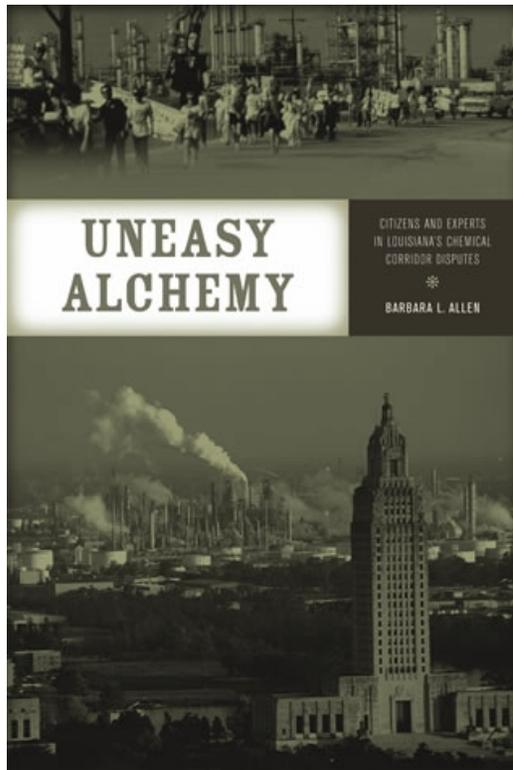
Collective science literacy



“Science literacy in a community does not require each individual to attain a particular threshold of knowledge, skills, and abilities; rather, **it is a matter of a community having sufficient shared resources that are distributed and organized in such a way that the varying abilities of community members work in concert to contribute to the community’s overall well-being.**”



Connections built around a shared project



Allen, B. L. (2003). *Uneasy alchemy: citizens and experts in Louisiana's chemical corridor disputes*. MIT Press.

“the most **successful activist strategies typically involved alliances...** between local citizens and expert-activists...”

“...science must be **filtered through the users**, including their agendas for what to study...”

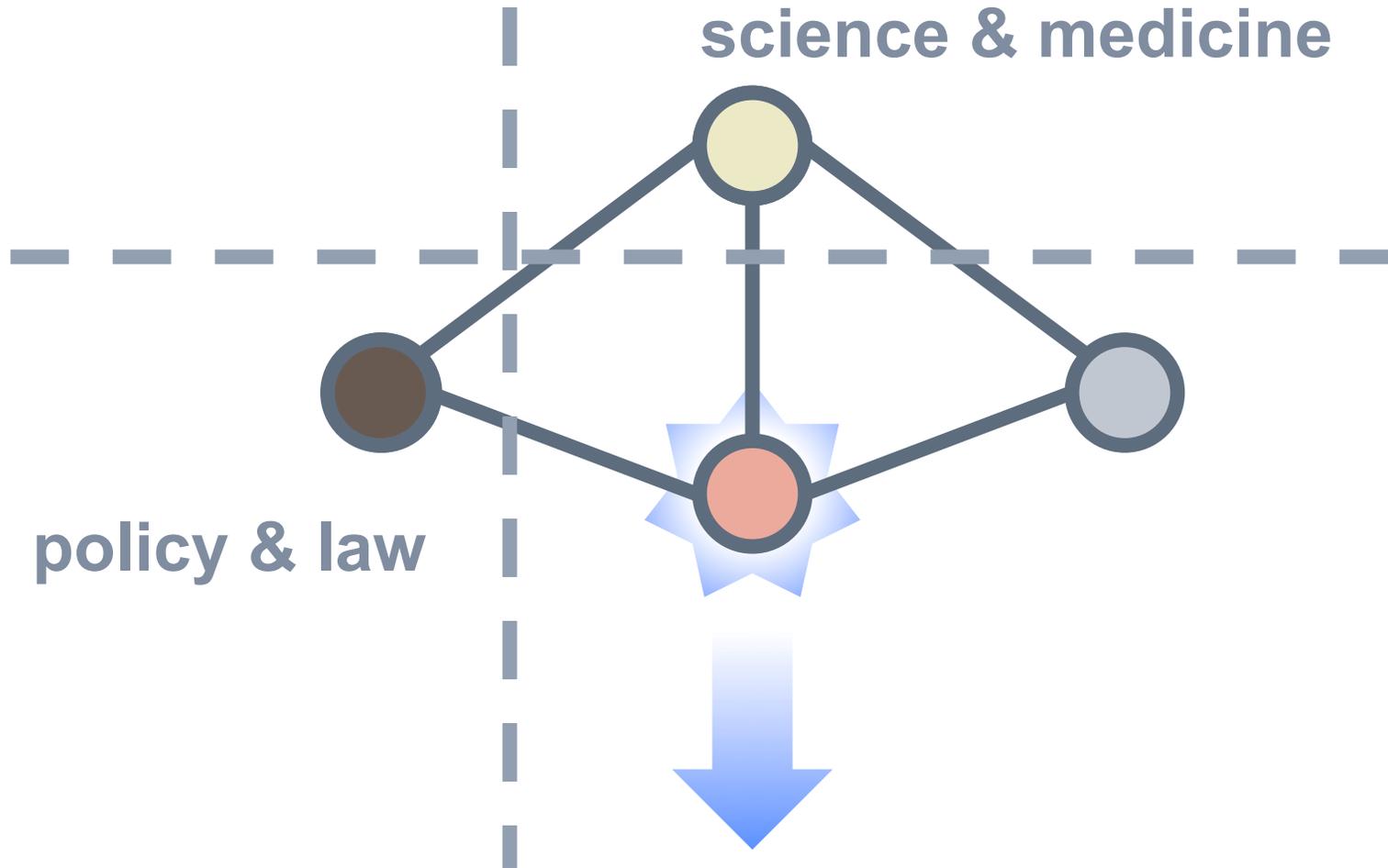
“The **reciprocal play** between expert and citizen in the toxic debate has strengthened the position of residents...”

Who gets to speak? Who is heard?



“... structural inequality produces situations in which some people have **a more urgent and immediate need** to engage with science around pressing health and environmental concerns—and those same people often have **less access to informational and interpretive resources**, as well as fewer avenues for political participation.”

Extending credibility through networks

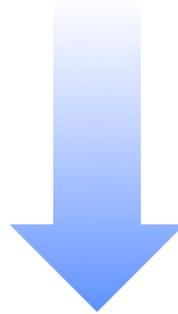


How can science support CSL?

- Do less transmitting knowledge, more nurturing and maintaining connections
- Partnership is an iterative process: it evolves through repeated exchanges over time
- Scientists don't define the goal or the question. They join projects that are already underway
- Building connections across community divides is critical to addressing structural inequality

Community science capacity

A community's science capacity?



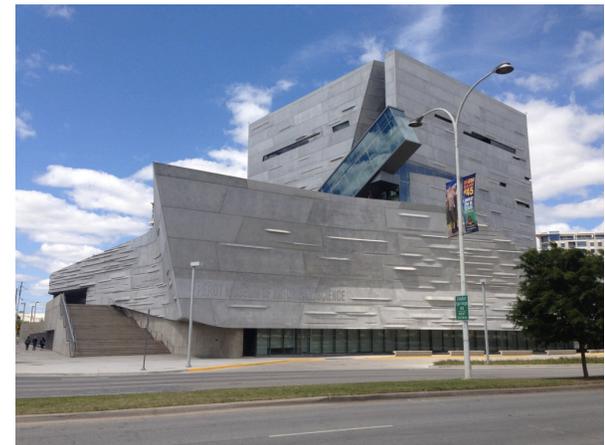
Community + science capacity

“A critical knowledge gap”

1. How do we move from examples to practices?
2. What existing institutions can systematically support the development of community-science capacity?

What would such institutions look like?

- Convene and facilitate
- Mediate complicated ideas to a wide range of audiences
- Connect to both scientific institutions and public groups
- Belong in/to diverse and underserved communities

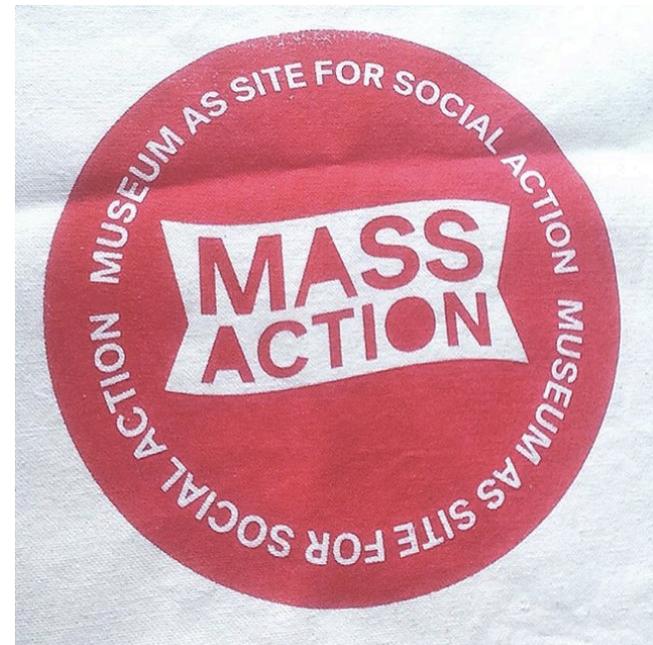




Examples of museum work in this vein



NISE Network
Public Forums Manual



Right now, this is mostly potential

- Here, too, we are in the experimental stage
- Most science museums do not yet belong in/to diverse and underserved communities
- Museums are very sensitive to perceptions that they are partisan – or not “objective”
- ...but the potential is enormous



QUESTIONS?

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