

Funding to Foster Knowledge Co-creation: Lessons Learned from Thriving Earth Exchange

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We need to increase funding for research driven by societal needs and for translating basic research into societal application. The current underinvestment in these two areas has negative impacts for both basic research and for society. It is bad for society because it limits the capacity for rapid innovation, a dangerous thing to do in a time of rapid climate change. Under investing in translation means we leave potentially useful science on the table. Underinvestment in societally driven research is especially bad for marginalized groups, because their research priorities are disproportionately neglected. This underinvestment is bad for science, too. It undermines public support for science; makes it harder for scientists who are focused on societal impact to succeed in science and thus robs science of intellectual, moral and cultural diversity; and it isolates science from wider learning and practice.

On the other hand, it is plausible that increased funding in translation and societally relevant science will increase overall support for science. Increasing the impact of science will make the case for increased investment in science. Done well, societally driven research fosters more connection between scientists and non-scientists, and research shows that positive personal experiences with science are one of the biggest predictors of support for, and trust in, science.

AGU is eight years into an experiment, Thriving Earth Exchange, of growing the scientific capacity devoted to societally driven and translational research. The results of our experiment suggest that funding agencies should prioritize investment in participatory practices and take pains to ensure those participatory methods welcome historically marginalized communities. Promising participatory practices include public dialogues; collaborative budgeting; seed funding to jointly define research agendas; listening sessions to surface community priorities, especially in marginalized communities; and direct funding to community groups to “hire” scientists to work on their projects. Our experience with partners suggests that institutions in marginalized communities often have a proven track-record of community responsiveness and are good candidates for scaling up societally driven and translational research.

At the same time, we’ ve seen a need to invest in scientists who want to do societally driven and translational research. From Thriving Earth Exchange, we’ ve learned that these scientists benefit from training in skills that include cultural humility, listening, project management, facilitation, and systems management. These scientists also need ways to share and be recognized for their work, which drove AGU to explore, with partners, new publications and new kinds of scientific outputs beyond publications.

We’ ve also learned that scientists can’ t do this work alone, so agencies should also invest in opportunities and training for policy makers, decision-makers, local leaders and ordinary citizens to work with scientists. We’ ve also seen the need for new metrics to evaluate the impact of these new science investments and inform future investments. Some of the metrics we are developing in Thriving Earth Exchange focus on the satisfaction of community leaders, the concrete impact in communities, and the down-stream impacts of the scientific work in terms of policy changes, economic benefits, and community agency.

Taken together, all of this amounts to a culture shift in science. Culture shifts require resources and incentives –and funding agencies provide both. It is a culture shift, however, that will yield benefits for science and for society.

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