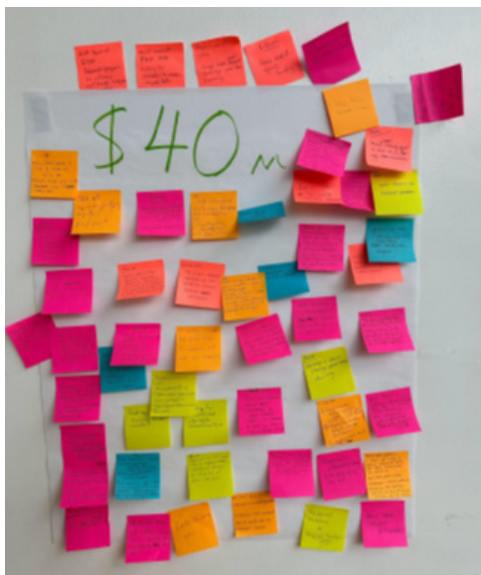Set-up:

At the conclusion of the AG2PI organized conference, "Mapping the Future of Agricultural Genome to Phenome Research", and prior to moving to dinner, attendees were asked to write on a post-it note, "What one thing must be in a future $40M RFA?" and "What one thing must be in a future $2.5M RFA?" Five central themes emerged across the two questions, along with several subthemes specific to each question.

Selection of ideas shared by attendees on Post-Its:

- *The Farm of the future as a phenotyping facility" enabling meaning of phenotyping for breeding in commercial farms all over the world*
- *Collaborative study that starts from seed to plant growth to feed development to animal production.*
- *A project develops methodology that predicts unknown future variables*

Question to attendees: "What one thing must be in the next $40M RFA" question posed at the end of the conference. Responses were provided on post-it notes.

Central Themes	"What one thing must be in next $40 million RFA?" examples
Investment in research projects, people, and workforce development	• Seed grants, long-term projects, citizen-science projects • Infrastructure development • Student training and research
Data infrastructure building, maintenance, and accessibility	• Data accessibility by producer and from industry • Develop FAIR data standards • Create centralized data storage
Building more and better collaborations	• Cross- agency, discipline & sector • Team-building & training • Build a stakeholder network
Transforming agricultural research and who is involved	• New phenomics technology • Discovering relevant phenotypes • Study plant-to-animal as a system • "Farm of the future" phenotyping facility to inform breeding
Improving public relations and translating research into broader impacts	• Public education on AG2P work • Primary or secondary school education in ag areas

*analysis and summary by Nicole Scott, AG2PI Project Manager

2023 Conference: $2.5M Question

"What one thing must be in the next $2.5M RFA" question posed at the end of the conference. Responses were provided on post-it notes (left).

Selection of ideas written on the Post-Its:
- *Database to house genomic and phenomic information so it's publicly available*
- *support commercialization of open access, species-agnostic phenomic / genomic tools.*

Central Themes	"What one thing must be in next $2.5 million RFA?" examples
Investment in research projects, people, and workforce development	• Seed grants, risky research, non-model species • Early career research • Education module development
Data infrastructure building, maintenance, and accessibility	• Data infrastructure design & proof of concept • Public access database • Phenotyping infrastructure
Building more and better collaborations	• Develop collaboration hubs • Across disciplines & sectors
Transforming agricultural research and who is involved	• New prediction tools • Focus on phenomics / producer-identified key traits
Improving public relations and translating research into broader impacts	• Public education on AG2P work • Community-based research • Early training in AI & data science

*analysis and summary by Nicole Scott, AG2PI Project Manager