AccelNet-Implementation: Multidisciplinary Integrated Contamination Research on Plastic Particle Pollution (MICRO-P^3)

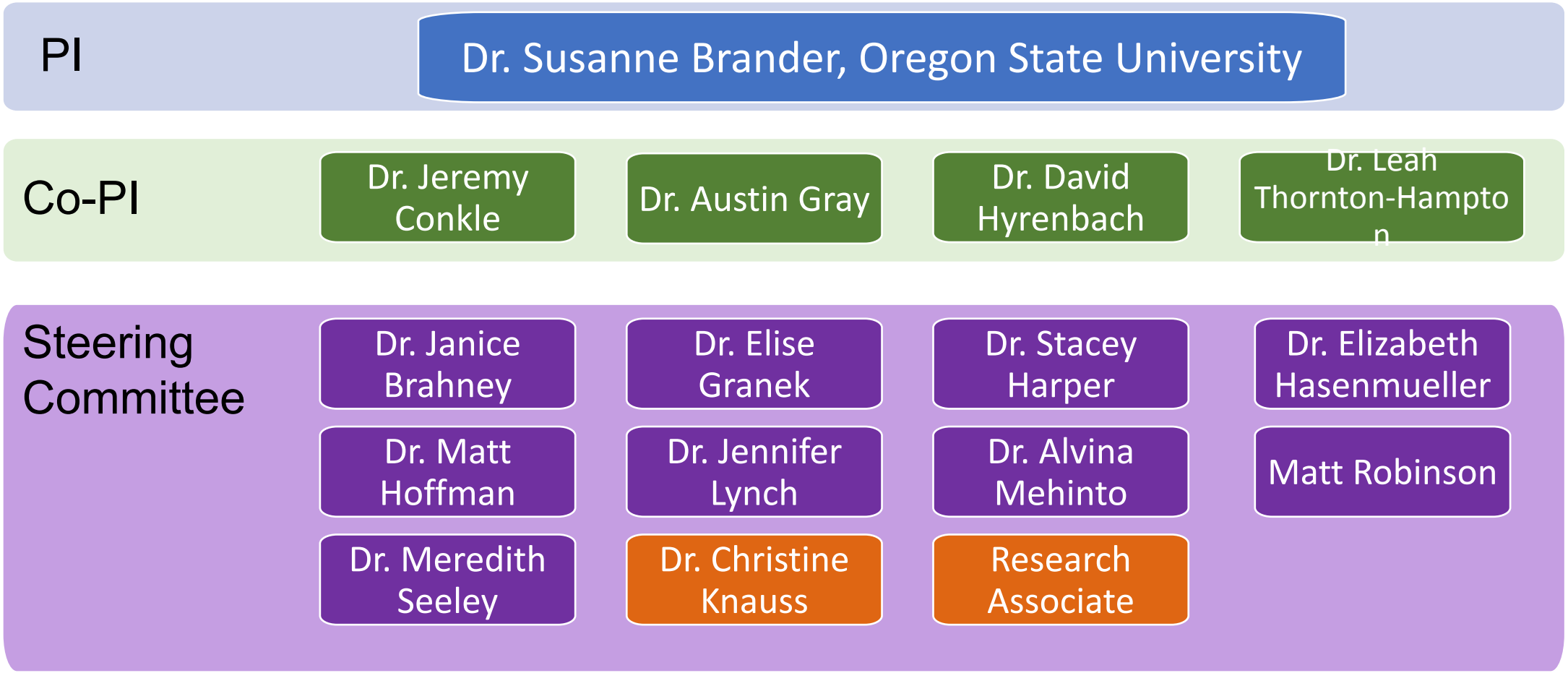
Microplastics Challenges

- Microplastic pollution is a grand global challenge
- Internationally, there are numerous yet disconnected efforts and networks attempting to harmonize and unite approaches to data sharing, training, and monitoring microplastic pollution to better understand emissions, fate, transport, risks, and impacts
- However, these efforts are funded by various entities with differing levels of governance and goals.
- Working together we could progress far more quickly and efficiently

AccelNet Program at NSF

- Accelerating Research through International Network-to-Network Collaborations (AccelNet)
- Aims to accelerate the process of scientific discovery and prepare the next generation of U.S. researchers for multiteam international collaborations.
- Supports strategic linkages among U.S. research networks and complementary networks abroad to leverage research and educational resources to tackle grand research challenges that require significant coordinated international efforts.
- The program seeks to foster high-impact science and engineering by providing opportunities to cooperatively identify and coordinate efforts to address knowledge gaps and research needs.

Who are we?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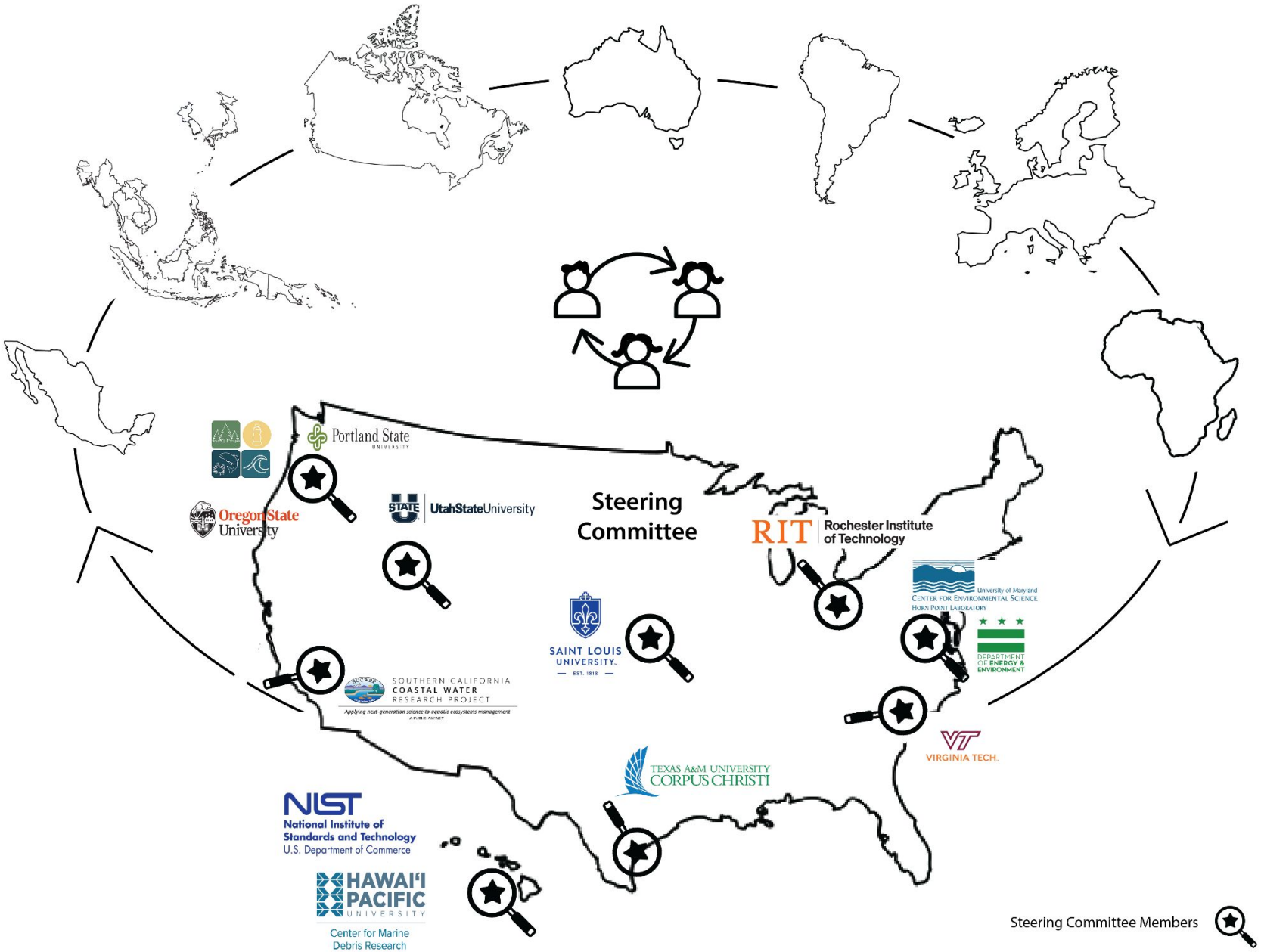
Connections to Microplastics Global Network



Focus on 4 major areas

1. Facilitating the harmonization of materials, methods, and monitoring
2. Support existing or create new pathways for open sharing of data and support database integration
3. Elucidate mechanisms of toxicity of microplastics by facilitating discussion and collaborations
4. Broaden the diversity of researchers and disciplines in the microplastics field and provide support for students and early career researchers

How we plan to address these 4 topics

- Host and coordinate a suite of bi-annual workshops on a variety of topics
  - Methodologies for the measurement and characterization of microplastics in the marine environment
  - Translating science to policy
- Webinars
  - Coding
  - Modeling
- Student and early career researcher lab exchanges
- Student leadership training
- Technical trainings with instruments and field sampling

What you gain being part of this network

- Opportunities for lab exchanges and externships
- Participation in workshops and training opportunities
- Increased instrument / knowledge access for early career researchers
- New avenues for collaboration
- Increased diversity and inclusion in a rapidly growing research area