

Best Practices for Successful Formation of Interdisciplinary Science Teams

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Bring a Spirit of Cooperation and Commitment to the Team – Show up each day to cooperate and contribute.

Be Patient. Actively Listen to and Ask Questions of Each Other – Co-create a team environment where all members feel comfortable expressing independent thoughts and opinions. View diversity of background and disciplines as a strength. Encourage each member to explain his or her background, ideas, approaches and disciplinary language. A term that seems perfectly simple to you may indeed have a completely different interpretation from the perspective of another field of research.

Establish Shared Understanding of the Problem of Interest – This can be scientific or societal, and should lead toward developing specific research question(s), a conceptual framework, or a new methodology for instance. This can be as open ended as “agreeing to stay open to the data to inform the right questions to ask” ; all the way to very specific goals such as “derive an automated method for accurately counting abnormal cells from microscope images” . It can be helpful to have short-term, and longer-term goals identified.

A Task/Role for each Team Member – ideally the task(s) chosen should leverage each team member’s knowledge, and lead to an exchange and sharing of knowledge.

Leverage and Outreach - You are not limited to using specific tools for data analysis – leverage the knowledge of all team members. When you discover serious gaps reach out to experts in those areas for input. Consider adding a new team member in some cases.

Beyond Formation, Successful Teams Do These:

- Commit to a regular meeting schedule, in person and using distance technology
- Continue best practices above, and share in the hard work and the credit of breakthroughs and solutions – co-authors on papers, co-presenting at conferences.
- Leverage their successes through future grants and projects

Sources:

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