

## Training Methods for Transdisciplinary Collaboration: Best Practices and Didactics for Team Work

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### Introduction

Collaborative work appears as a need for successful transdisciplinary efforts and communal professional activity among individuals with different expertise. Collaboration frames activities in a scenario of mutual benefits, where each participant contributes with her work to personal and group goals. Collaboration is expected to augment individuality because participants' peculiarities, strengths, knowledge, and skills may articulate and negotiate to achieve an integrated outcome, which could be more successful and constructive.

However, individuals have limited abilities to exploit the personal and collective benefits of collaboration. Formal or informal training methods need to be refined and tested to enhance transdisciplinary work. In the Manizales Mutualism Project, we are exploring training methods for transdisciplinary collaboration. We are looking for multiple perspectives of training methods, but we are also interested in inspiration from metaphors from the natural environment. Training methods, and pedagogics, exist for team management training and team building in other fields such as medicine or industry; we are interested in the specifics for transdisciplinary training on creative projects that bridge the design, arts, and humanities with science and engineering.

A key issue in transdisciplinary collaborations is understanding the metaphors and terminology used in each discipline; we seek to clarify and make visible the metaphors and language shared in transdisciplinary practice. In nature, some animals and plants master interspecies communal living in some biological relationships and collaborative work. In mutualism, for instance, individuals from different species live together and benefit from a relationship based on strategic alliances. There could be much to learn from the mutualism as a metaphor in human transdisciplinary collaboration, including training methods, while recognizing the limits of translating from one field of

application to another.

In this ISEA panel, experienced transdisciplinary collaborators present their collaboration methodologies. A half day working group meeting would also be held with interested participants (see workshop proposal). An annotated critical bibliography of collaboration references would be published as well as a report from the ISEA panel and workshop meetings.