



# Teaching Statistical Collaboration through a Community of Practice: Strategies for Engaging Faculty

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**LISA**

Laboratory for Interdisciplinary  
Statistical Analysis

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# Background

- **Statistics and data science are interdisciplinary fields**
  - Multiple studies describe and evaluate methods of teaching interdisciplinary collaboration (Alzen et al. 2024; Bangdiwala et al. 2002; Davidson et al. 2019; Kolaczyk et al. 2021; Metzger et al. 2024; Sima et al. 2020; Thabane et al. 2008; Vance 2021)
  - Prior literature largely isn't based in education theory, which is problematic for reproducibility
  - We take up a particular theory, identify it in our work, and use it to engage other faculty

# What makes a Community of Practice?

- **Domain**

- Shared domain of interest

- **Community**

- Engagement in activities and discussion around the domain together

- **Practice**

- Jointly developed resources related to bettering themselves within the domain

# Community of Practice in Our Project

- **Domain**

- Enrolled in Statistical Collaboration/work in Laboratory for Interdisciplinary Statistical Analysis (LISA)

- **Community**

- Students move from novice to expert through class activities and progressively advanced roles on collaboration projects
- Within and across project collaboration

- **Practice**

- Training and application with specific collaboration tools

# Ways to Strengthen our Community of Practice

- **Domain**

- Grow the membership feeling of the training

- **Community**

- More specific self-reflection on how students move from novice to expert in each project and what they want to try next to further growth

- **Practice**

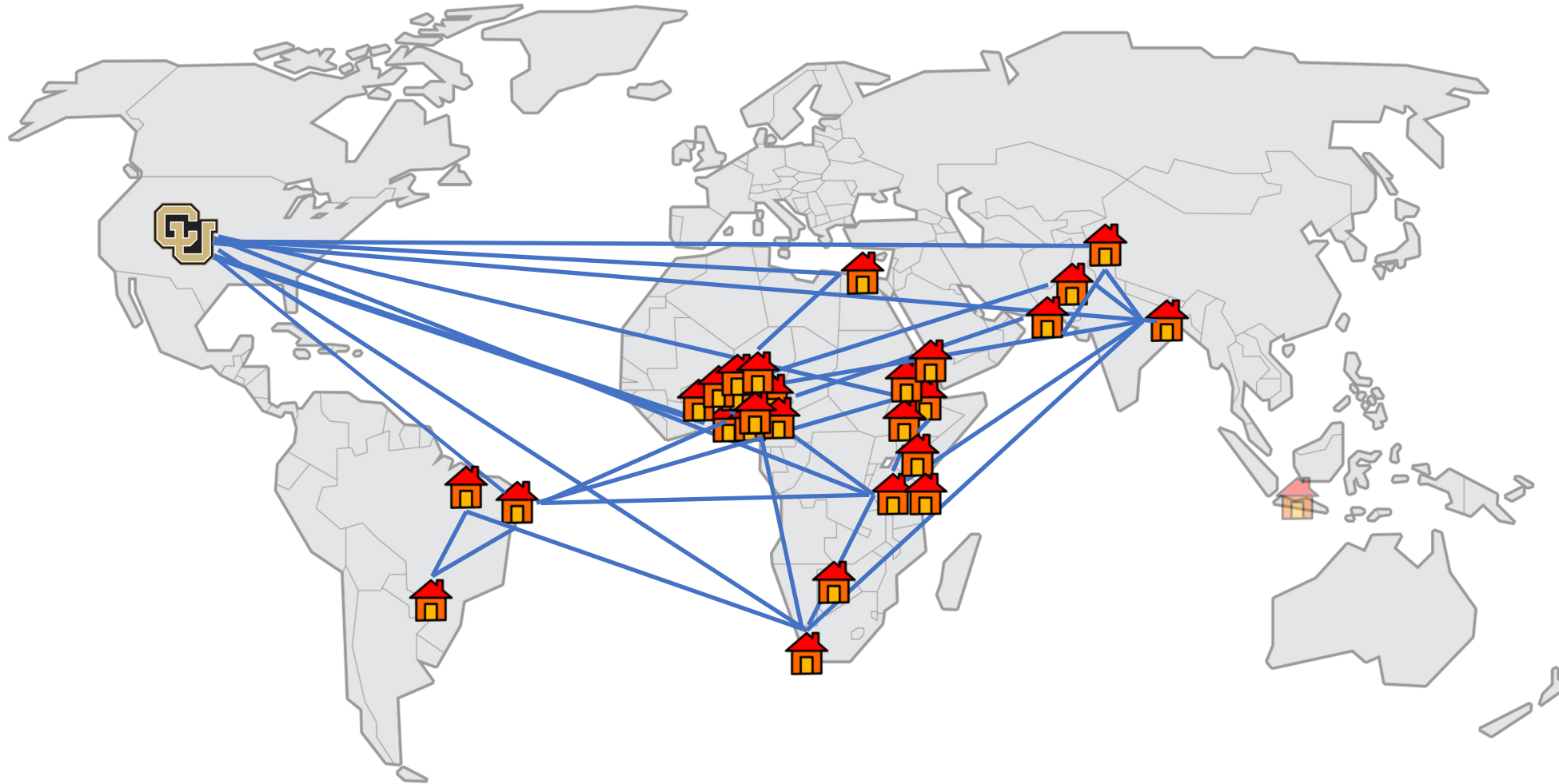
- Improve approaches to joint collaboration or students developing and sharing tools among themselves

# Engaging Faculty

- **Starting at home**
  - Our faculty going through this process
- **Communities of Practice Publication**
  - Paper in-press about this project
- **LISA 2020 Global Network**



# LISA 2020 Global Network



# Thank You!

- TETRIDS Teaching materials



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