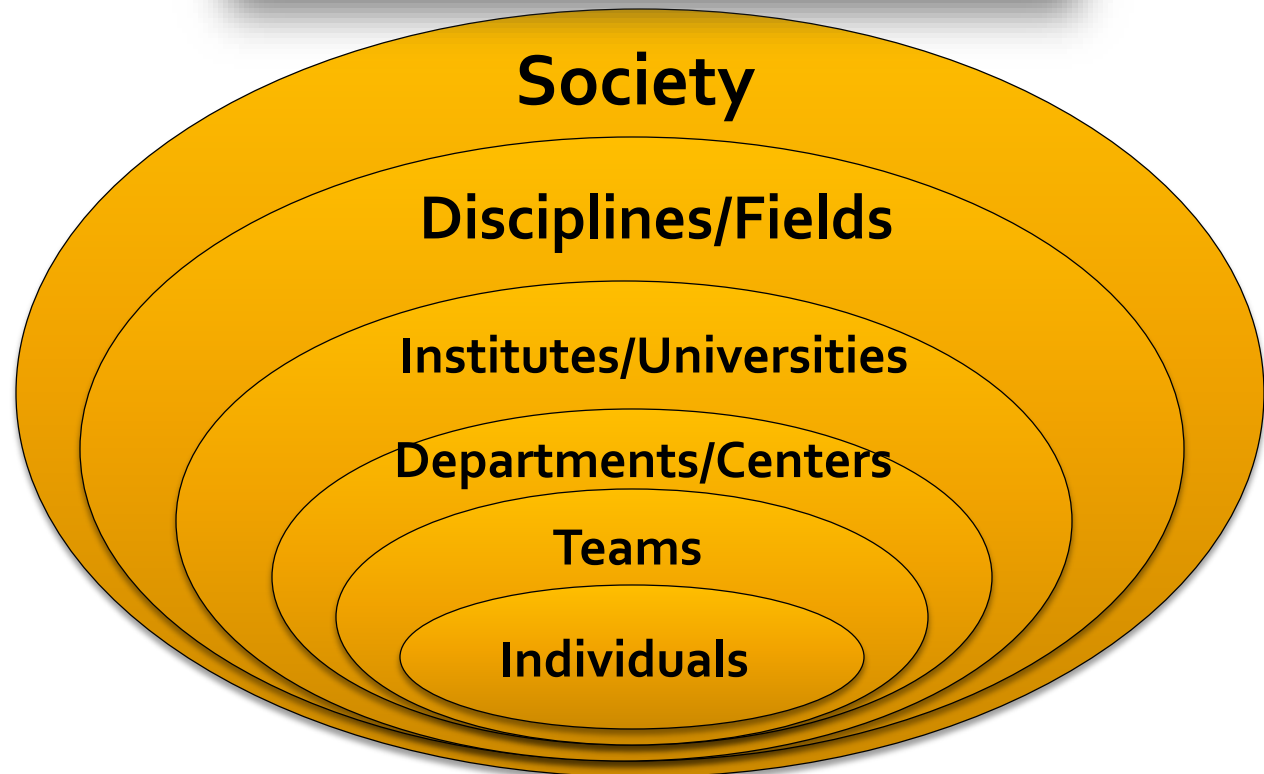
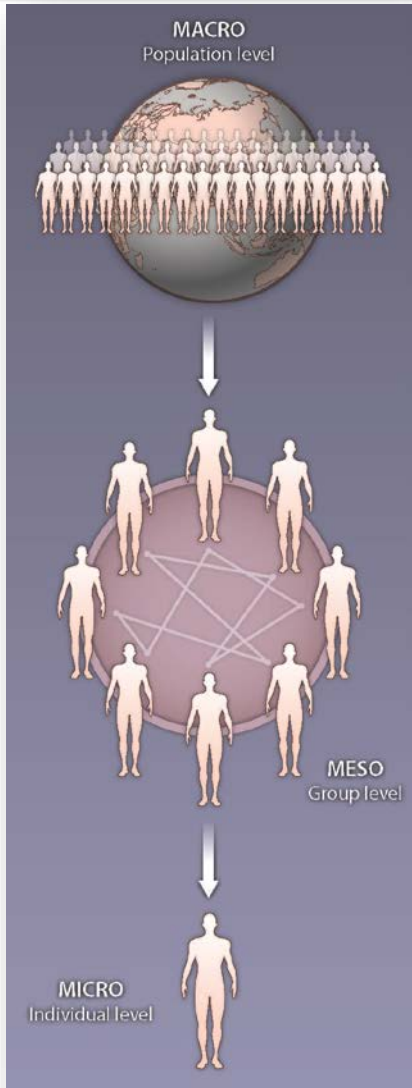




***Plenary Panel:  
Science of Groups and Teams***

# Perspective



# The Scholarly Study of Science *Foundational Approaches*

## History and Philosophy of Science

- Decades long tradition of scholarly work **examining science and medicine through historical lens**
  - Examines how humanity's **understanding of the natural world has changed** over the centuries
  - Addresses how **assumptions** (e.g., about concepts or process) influence production of knowledge
  - Considers what **drives fundamental shifts** in how or what of science (e.g., paradigm shifts)
  - Studies the cultural, economic, and political impacts of scientific innovation



# The Scholarly Study of Science *Foundational Approaches*

## Social Studies of Science

- Studies of **scientific knowledge, policy, and R&D**
- Examines dynamics of science including **relationship to politics, society, and culture**

## Science & Technology Studies

- Examines **social dimensions** of **science and technology**
- Explores the **role and ethical implications** of **S&T in society**





# The Scholarly Study of Science *Foundational Approaches*

## Scientometrics

- **Measures** and analyzes **science, technology, and innovation**
- Examines **scientific impact** (e.g., bibliometrics)
- **Maps** scientific fields

## Science of Science Policy

- Relies on **quantitative** data and **qualitative** information
- Seeks to provide **rigorous, quantitative basis for science policy**
- Develops **theory and models** to guide decisions about **investments in science**



# The Science of Team Science

## *Why Study Teams in Science*

- Science of Team Science (SciTS)

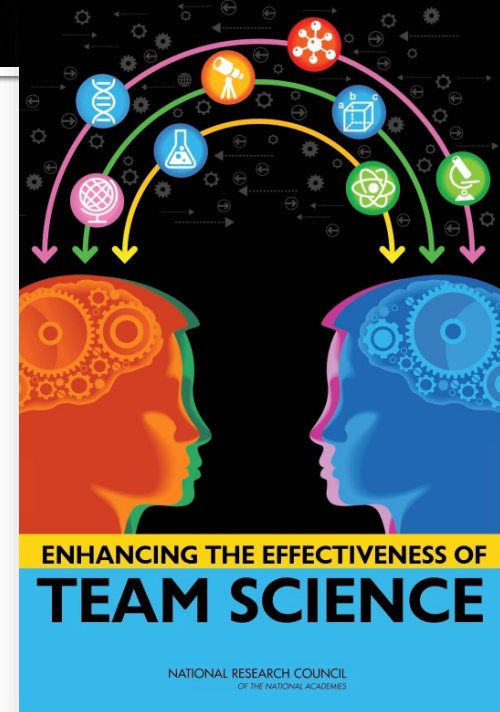
- Exists a **complementarity** in our goals
- Draws from iterative give-and-take between **understanding and use**
- Must understand how to make full use of the **intellectual capacity** of science teams

- (1) Studying science teams to:

- Gain **fundamental understanding** about the production of knowledge
- Develop **methods and models to improve** the scientific enterprise

- (2) Applying what is known to improve effectiveness of science teams

- **Utilize concepts** from study of other team types (e.g., team training)
- Draw from **measures and metrics** of teamwork (e.g., information sharing)



# The Science of Team Science



## *Panel: Science of Groups and Teams*

Panelists: Lindred L. Greer, John R. Hollenbeck, Dan R. Ilgen, Steve Kozlowski

Moderator: Stephen M. Fiore, University of Central Florida

- **Lindred L. Greer** - Associate Professor of Organizational Behavior at Stanford School of Business
  - Focuses on group dynamics in groups in early phases of development
  - Interested in the social dynamics surrounding power, conflict, and diversity in groups
- **John R. Hollenbeck** is University Distinguished Professor at MSU and Eli Broad Professor of Management at the Eli Broad Graduate School of Business Administration.
  - Studies team structure, composition and performance.
  - Interested in self-regulation and goal setting processes
- **Daniel R. Ilgen** is John A. Hannah Distinguished Professor Emeritus at MSU in the Departments of Psychology and Management
  - Studies work motivation and performance evaluation in organizations
  - Interested in team behavior and leadership

# The Science of Team Science



## *Panel: Science of Groups and Teams*

Panelists: Lindred L. Greer, John R. Hollenbeck, Dan R. Ilgen, Steve Kozlowski

Moderator: Stephen M. Fiore, University of Central Florida

### Structure for Panel

- Part 1 – Panelists research area and questions/issues for team science
- Part 2 – Open the floor for Q&A and Discussion

