

# Interdisciplinary research in the sciences and beyond

Benedetto Piccoli, Rutgers University Camden



**RUTGERS**  
UNIVERSITY | CAMDEN

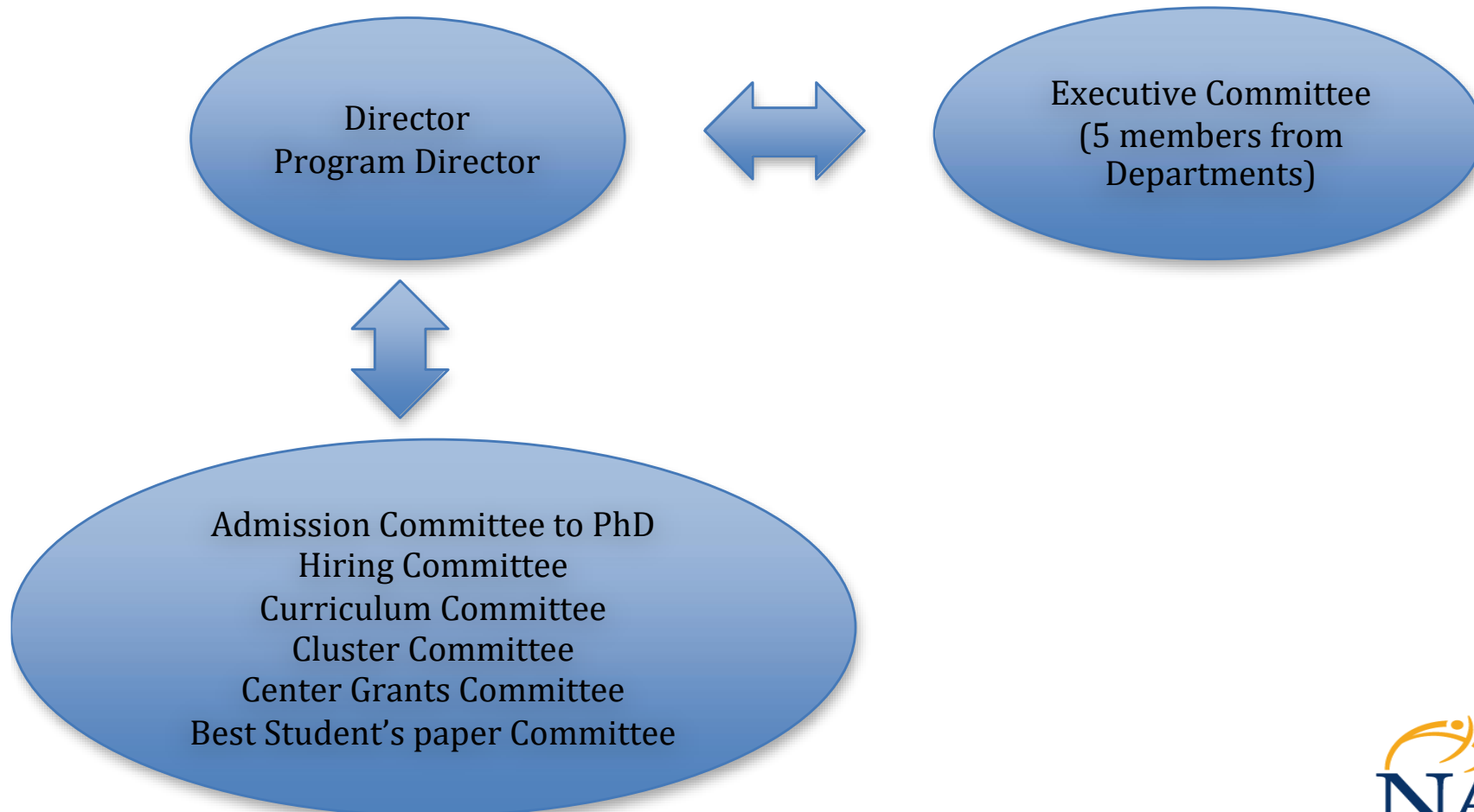


**NAFSA 2018**  
ANNUAL CONFERENCE & EXPO  
**Diverse Voices** ● ● ● ● ●  
**Shared Commitment**  
MAY 27-JUNE 1 • PHILADELPHIA, PA USA

# The CCIB at Rutgers-Camden

- CCIB was **established in 2007** by the Faculty of Arts and Science at Rutgers University – Camden and specifically by Math and Sciences Departments (Biology, Chemistry, Computer Science, Mathematical Sciences and Physics).
- The **Graduate Program** in Computational and Integrative Biology was **initiated in Fall 2010** with three PhD students.
- CCIB was **positively evaluated** in 2013 by Prof. Warren Ewens of UPenn to pass to **Phase 2** (additional 6 lines and 9 TAs were asked for).
- May 2014, Matthew Niepielko graduated as the **first PhD student**.
- Currently: 25 PhD students, 6 Masters, 19 Alumni (FDA, Princeton, other). Research funds for 11M+ (since '10), 60% externally funded student.

# CCIB governing structure

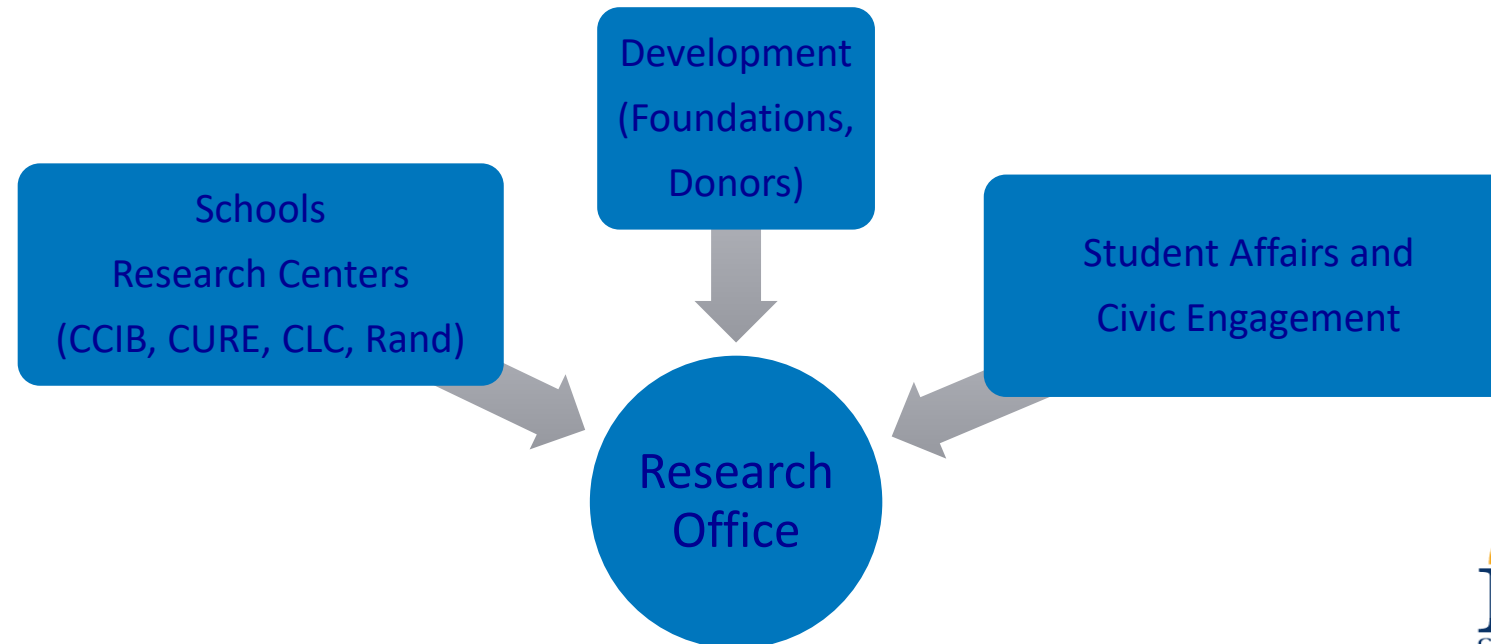


# CCIB: Promoting participation

- ⬡ Research collaborative fellowships (see funding), res. lunches.
- ⬡ Best students paper award, CCIB Honorary award.
- ⬡ CCIB seminar, annual retreat and full member assembly.
- ⬡ CCIB students. Gender: 14 Female, 17 Male. Nationality: 17 US, 14 non-US. Department affiliation of Primary Advisor: Biology 12, Chemistry 6, Computer Science 4, Mathematics 3, Physics 6.
- ⬡ Faculty members: Biology 12/12 (100%), Chemistry 5/7 (71%), Computer Science 7/9 (77%) Mathematics 6/12 (50%), Physics 4/4 (100%).

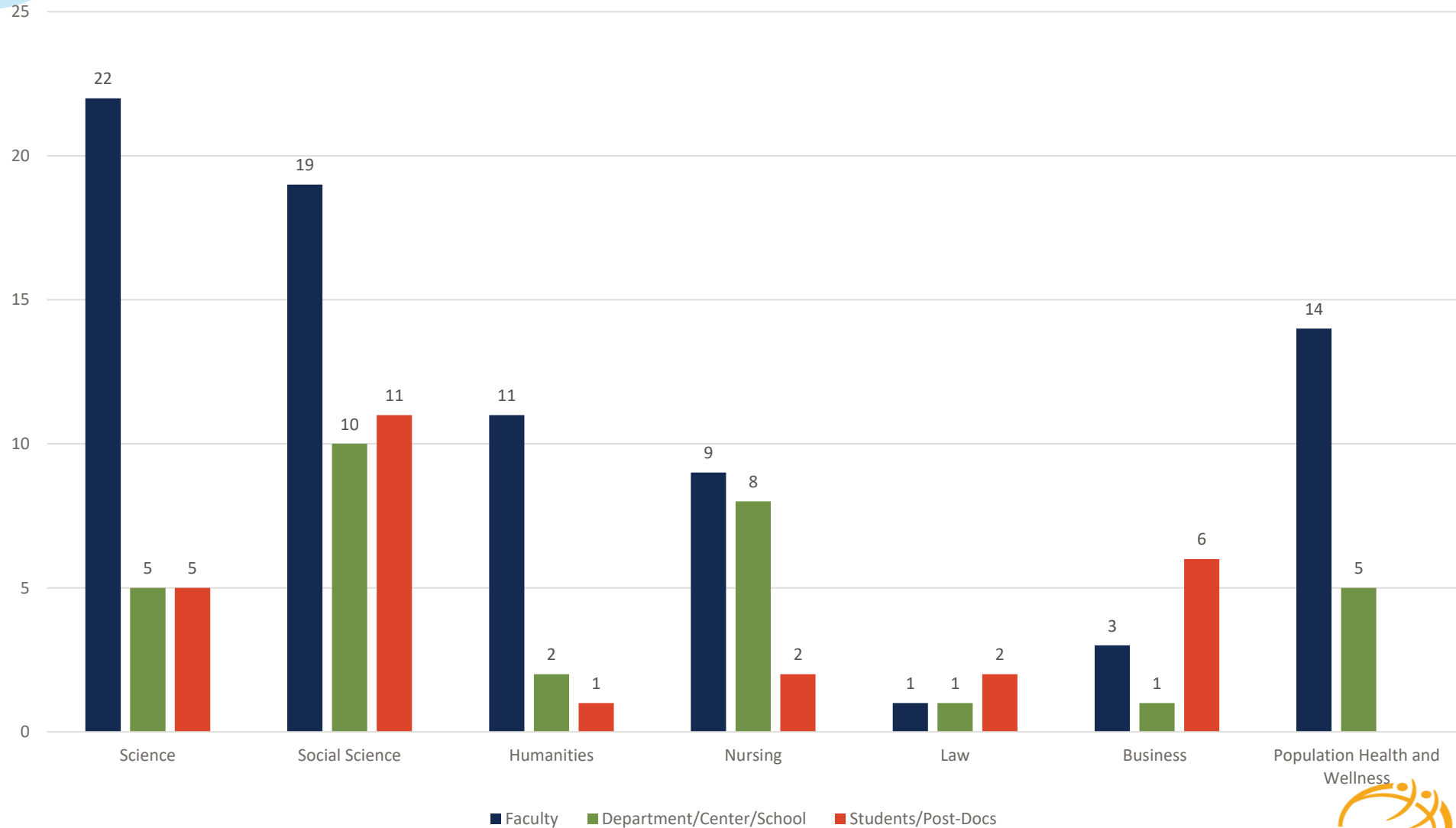
# Research office at RUC

- Strategic Direction 1: Providing a First-rate Undergraduate Education Grounded in Research and Providing Experiential Learning
- Strategic Direction 2: Enhancing High-quality and Interdisciplinary Graduate and Professional Programs
- Strategic Direction 3: Advancing Faculty Research Excellence



# Research office at RUC

## Targeted Funding Opportunities (119)



# Provost fund for reserach

## Cross-Disciplinary Program- \$15,000 award limit

**PI:** **Dr. Nir Yakoby** ( associate professor, FASC-biology and director, Center for Computational and Integrative Biology)  
**Co-PI(s):** **Dr. Andrey Grigoriev** (professor, FASC-biology) and **Dr. Sunil Shende** (associate professor, FASC-computer science)  
**Title:** *An Interdisciplinary Approach to Study the Development of Epithelial Cells by tRFs*

**PI:** **Dr. John Wall** (professor, FASC-religion and acting associate dean of The Graduate School)  
**Co-PI(s):** **Dr. Sarada Balagopalan** (associate professor, FASC-childhood studies), **Dr. Carla Giaudrone** (associate professor, FASC-Spanish), Dr. M.A. Rafey Habib (professor, FASC-English), **Dr. Jean-Louis Hippolyte** (associate professor, FASC-French), and **Dr. Harry Rhea** (assistant professor, FASC criminal justice)  
**Title:** *Exploring Interdisciplinary Global Studies*


**PI:** **Dr. Richard Harris** (professor, FASC-political science)  
**Co-PI(s):** **Prof. John Oberdiek** (professor, RLAW)  
**Title:** *Our Dangerous Delusion: Moral Groupthink in Policy Making*

**PI:** **Dr. Bonnie Jerome-D'Emilia** (associate professor, SNC)  
**Co-PI(s):** **Dr. Patricia Suplee** (associate professor, SNC) and **Dr. Debashis Kushary** (associate professor, FASC-mathematics)  
**Title:** *Insurance Status and Breast Cancer in New Jersey*

# Facilitated Small Group Discussions

## Applying new paradigms to your curriculum (Part I)



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- ⬡ GOOTB (Get Out of the Building) approach vs. interdisciplinary collaborations – what makes the most sense for your program(s)?
  - ⬡ How can you promote diversity at all levels in interdisciplinary initiatives?
  - ⬡ How can you guarantee students' success in an academic world still functioning with disciplinary barriers?