Evaluation of the NIGMS Support for Competitive Research (SCORE) Program

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Co-Chair
*SCORE Evaluation Working Group*
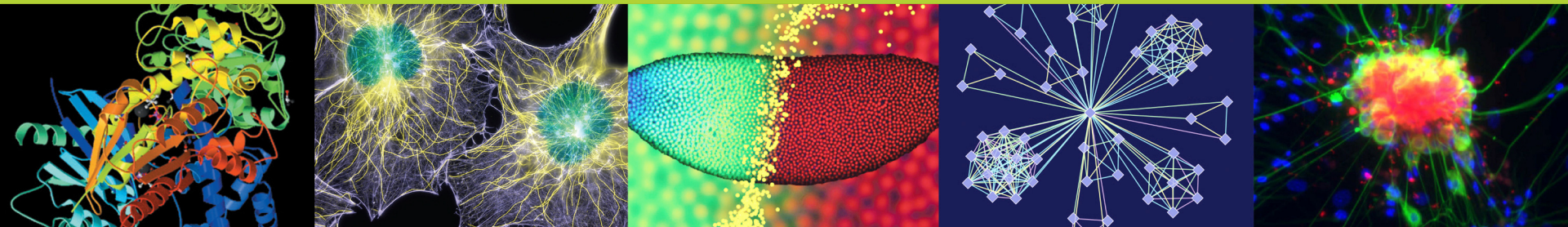
SCORE Evaluation

- Support for Competitive Research Program
  - Comprises 3 mechanisms (SC1/SC2/SC3) to support research and career development at institutions serving underrepresented groups.
    - o Awards are made for investigator-initiated projects.
    - o Investigators are ultimately expected to obtain and transition to non-SCORE funding.

  - A working group of Council was convened to evaluate the SCORE program:
    - o Co-chairs: Kaye Husbands Fealing, Ph.D. and Peter Espenshade, Ph.D.
    - o Panel: Drs. Squire Booker, Goldie Byrd, Lourdes Echegoyen, Elena Bastida, Bill Gern, Mark Lee, and Carlos Gutiérrez.

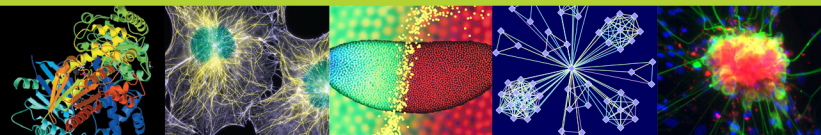 - Comprehensive data on SCORE applications, awards, trends, and outcomes were provided by NIGMS OPAE.

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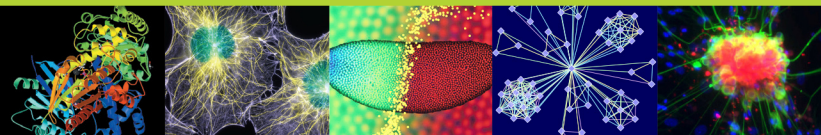
SCORE Funding Mechanisms

Mechanism	$/Year (Direct Costs)	# Years	Renewals?	PI eligibility	Award Goals	Post-Award Goals
SC1	250k	4	1 only	Established investigators but with no prior non-SCORE support.	Augment skills/productivity. Improve quantity/quality of data and publications.	Non-SCORE support
SC2 (primary comparator: K01)	100k	3	No	No prior support. Established advisor with substantial NIH funds required.	Generate preliminary data, test new idea.	Other external research support (could be SC1, SC3, or anything else)
SC3 (primary comparator: R15)	75k	4	Indefinite	No prior non-SCORE support. Progressive development of publication record required.	Research project of limited scope.	Non-SCORE support
R01	250k+	4	Indefinite	Any PI with requisite skills, knowledge, and resources.	Discrete, specified, circumscribed project.	R01 Renewal, if warranted

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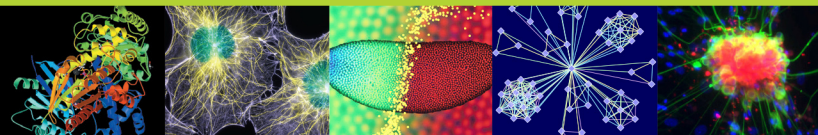
Evaluation Questions

1) Is the SCORE program meeting its objectives?

2) Are the current program objectives the right objectives?

3) What challenges or difficulties has the SCORE program faced?

4) What are key findings and recommendations?

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Evaluation Findings

1) Is the SCORE program meeting its objectives?

    Increases in research competitiveness, number of underrepresented investigators, number of qualifying laboratories, but *few investigators transitioned to non-SCORE funding*.

2) Are the current program objectives the right objectives?

    While some current objectives are appropriate, others require substantive change.

3) What challenges or difficulties has the SCORE program faced?

    o Institutional support for PI and institutional readiness and commitment to growth are uneven.
    o SCORE is too concentrated in a few college/university systems.
    o Only 30% of SCORE awardees and applicants are racial/ethnic minorities.
    o Only 57% of SC2 awardees submit any later/subsequent SCORE applications.

4) What are the key findings and recommendations?
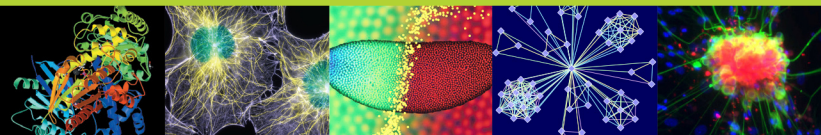
    Discussed on following slide.

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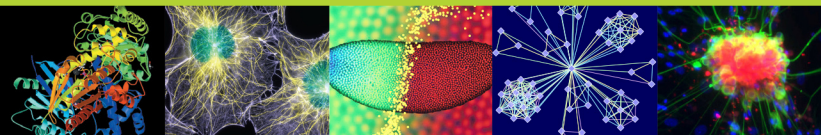
Recommendations

1) Modify program objectives to catalyze institutional support for SCORE funded investigators.

2) Revise SCORE PI expected outcomes.

3) Modify program objectives to prioritize increasing the number of students engaged in quality research.

4) Revise or consolidate funding mechanisms.

5) Develop prospective evaluation plan that aligns data collection with new objectives.

Note: Both recommendation 1 and 3 are modifications to the objectives, but are provided separately to emphasize priorities.

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Recommendation 1: Modify Program Objectives to Catalyze Institutional Support for SCORE Funded Investigators
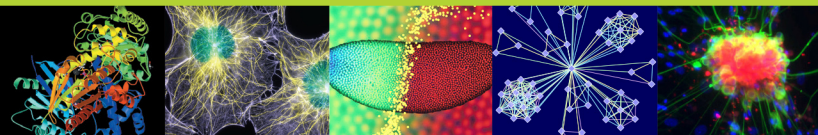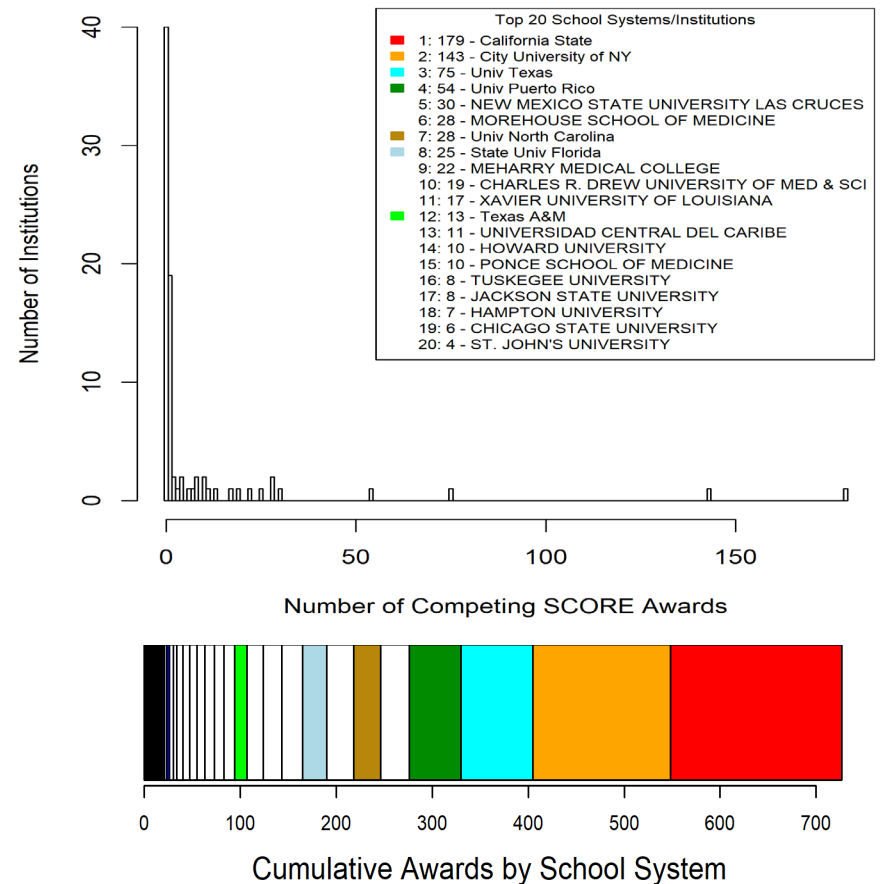
- **Suggested Action Items**
  - Require plan for institutional development of research capacity.
  - Require plan for SCORE PI support and development.

- **Rationale**
  - Data show awards are **concentrated in a few colleges/university systems**, suggesting varying levels of institutional capacity to support applicants and awardees.
  - There is a **need to increase institutional commitment** to growing research capacity through support of individual SCORE investigators.
  - There is a **need to catalyze change** in institutional research culture and infrastructure.

Histogram of SCORE Awards by School System (N=83)

Number of Institutions

Number of Competing SCORE Awards

Top 20 School Systems/Institutions
1: 179 - California State
2: 143 - City University of NY
3: 75 - Univ Texas
4: 54 - Univ Puerto Rico
5: 30 - NEW MEXICO STATE UNIVERSITY LAS CRUCES
6: 28 - MOREHOUSE SCHOOL OF MEDICINE
7: 28 - Univ North Carolina
8: 25 - State Univ Florida
9: 22 - MEHARRY MEDICAL COLLEGE
10: 19 - CHARLES R. DREW UNIVERSITY OF MED & SCI
11: 17 - XAVIER UNIVERSITY OF LOUISIANA
12: 13 - Texas A&M
13: 11 - UNIVERSIDAD CENTRAL DEL CARIBE
14: 10 - HOWARD UNIVERSITY
15: 10 - PONCE SCHOOL OF MEDICINE
16: 8 - TUSKEGEE UNIVERSITY
17: 8 - JACKSON STATE UNIVERSITY
18: 7 - HAMPTON UNIVERSITY
19: 6 - CHICAGO STATE UNIVERSITY
20: 4 - ST. JOHN'S UNIVERSITY

Cumulative Awards by School System

Recommendation 2: Revise SCORE PI Expected Outcomes

- **Suggested Action Items**
  - **Expand qualifying funding** beyond R01.
  - **Define competitiveness** to align with SCORE goals.

- **Rationale**
  - Research excellence is a priority.
  - Data show SCORE awardees rarely apply for or receive R01s.
  - "Research competitiveness" is ambiguous.

Fraction of Cohort with Subsequent R01-Equivalent Funding
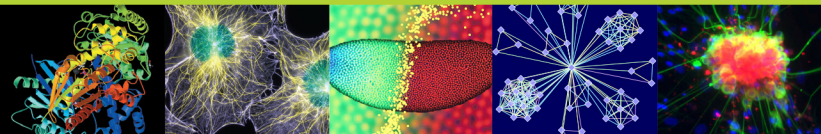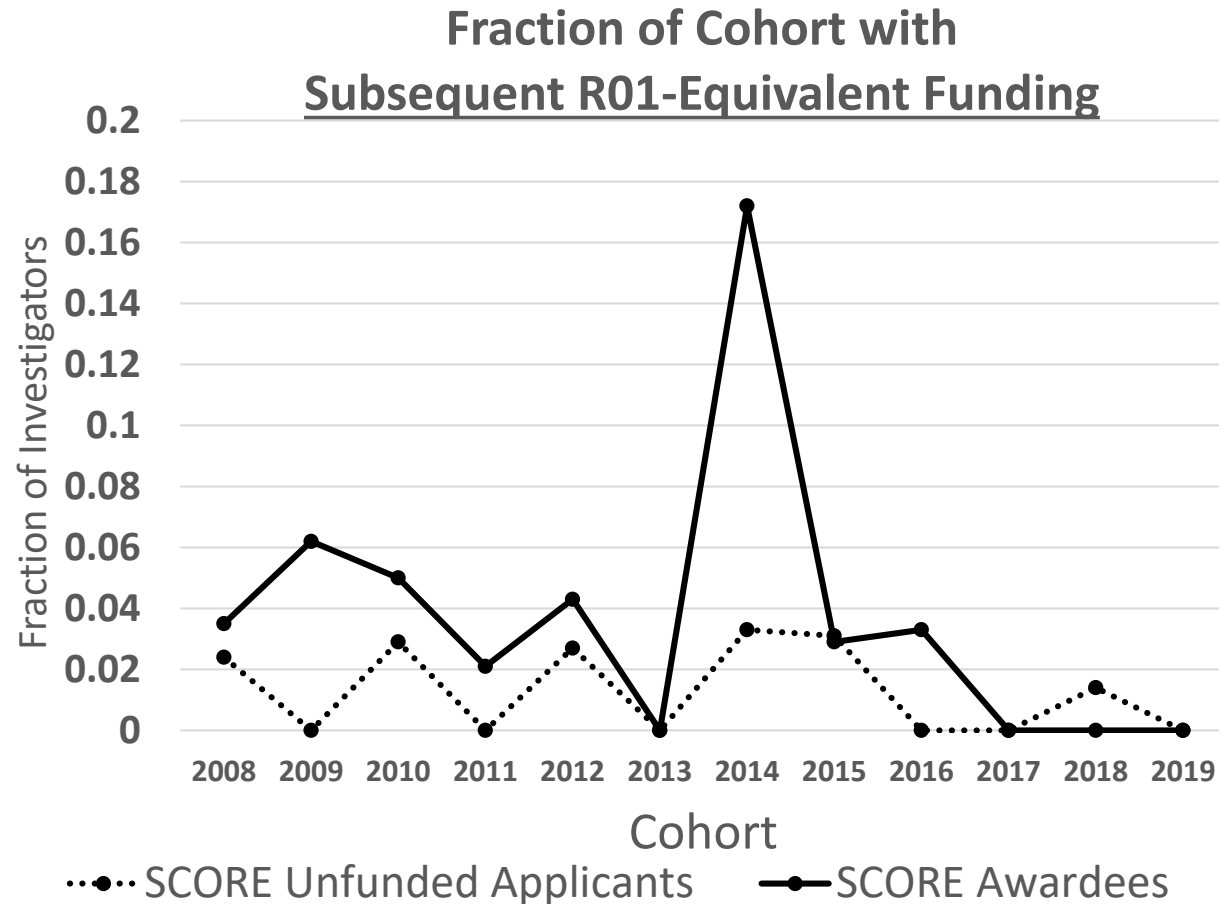
Recommendation 3: Modify Program Objectives to Prioritize Increasing the Number of Students Engaged in Quality Research
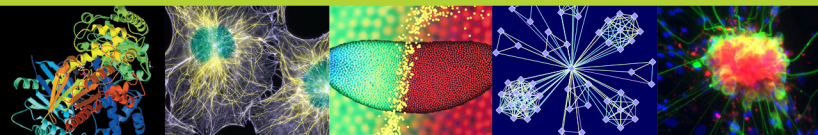
- **Suggested Action Items**
    - **Clarify student involvement** in SCORE supported research in the FOA.
   - **Prepare prospective evaluation** of student involvement in SCORE.

- **Rationale**
    - There is a need to:

        a) Increase the number of underrepresented students engaged in high quality motivating research, and

        b) Prepare the next generation of underrepresented faculty.

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Recommendation 4: Revise or Consolidate Funding Mechanisms

- **Suggested Action Items**
  - **Eliminate the SC1** mechanism.
  - **Strengthen the SC3** mechanism.
  - **Maintain the SC2** mechanism.

- **Rationale**
  - Allows continued participation in SCORE.
  - Few SC1 awardees received R01 awards.
  - Supports institutional capacity building through continued participation.
  - Stabilizes research opportunities for students.

Fraction of Cohort with Subsequent R01-Equivalent Funding
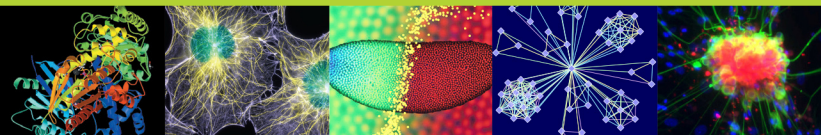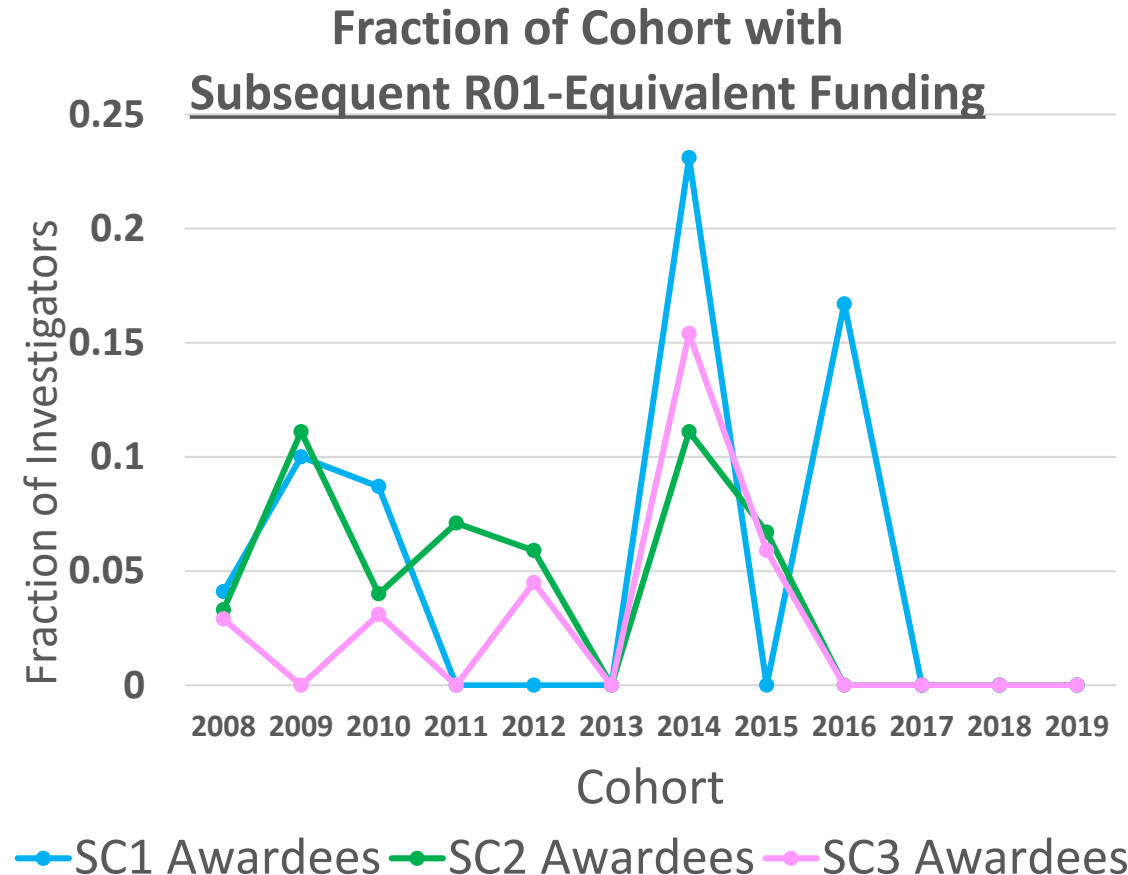
# Recommendation 5: Develop a Prospective Evaluation Plan That Aligns Data Collection with New Objectives

- **Rationale**
  - Need more robust, complete, and relevant evaluation data.
  - Evaluation (including prospective evaluative strategies) is a priority outlined in the NIGMS Strategic Plan.

- **Example**
  - Data on students participating in SCORE-supported research is not currently collected but will be necessary to evaluate new objectives.

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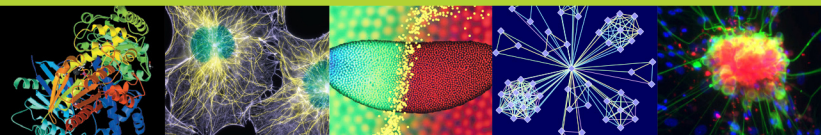
Summary

- **SCORE is meeting many of its *current* objectives….**
  - SCORE has increased the number of labs and underrepresented PIs at eligible institutions; PI research competitiveness has also increased, <u>*but*</u>
  - Few SCORE PIs transitioned to non-SCORE funding.

- **Objectives, however, should be examined and appropriately modified.**
  - More emphasis needed on the institutional role in SCORE (e.g., support for PIs, plans for growth).
  - Supporting opportunities for student research should be an explicit program goal.

- **SC1 ($250k, R01-like) should be eliminated, SC3 ($75k, R15-like) should be strengthened.**

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