

STEP 2013

Identifying Best Practices

2013 NSF STEP Grantees Meeting

National Science Foundation

Directorate for Education and Human Resources (EHR)
Division of Undergraduate Education (DUE)
STEP 2013: Identifying Best Practices
Science, Technology, Engineering, and Mathematics
Talent Expansion Program (STEP)

2013 Grantees Meeting

March 14-15, 2013

Marriott Wardman Hotel, Washington, D.C.

Meeting Agenda

WEDNESDAY, MARCH 13, 2013

TIME

6:00 p.m. – 9:00 p.m.

6:00 p.m. – 9:00 p.m.

6:30 p.m. – 9:00 p.m.

TITLE

Registration

Poster Setup for Authors

Pre-Conference Workshop:
Building STEP Community using
STEPCentral.net
Light refreshments served

ROOM

Thurgood Marshall Foyer

Exhibit Hall C

Thurgood Marshall West

THURSDAY, MARCH 14, 2013

TIME

7:00 a.m. – 8:15 a.m.

7:00 a.m. – 5:00 p.m.

7:30 a.m. – 8:15 a.m.

7:30 a.m. – 8:15 a.m.

8:15 a.m. – 10:15 a.m.

TITLE

Poster Setup for Authors

Registration

Mentorship Meetings

Continental Breakfast

Opening Session

Opening Remarks and Meeting Information:
Lee Zia, STEP Lead Program Director, DUE, NSF
Joan Ferrini-Mundy, Assistant Director, EHR, NSF
Scott Grissom, Grand Valley State University, Meeting Co-organizer

ROOM

Exhibit Hall C

Thurgood Marshall Foyer

Thurgood Marshall Foyer

Thurgood Marshall Northwest

Thurgood Marshall Southeast

Speaker: Eduardo Padrón, President, Miami Dade College

Introduction of Speaker: Susan R. Singer, Division Director, DUE

Title: *The Meaning of Success: STEM Education in an Ever-Changing Workforce*

Abstract: By most accounts, attention to STEM education in the United States is growing stronger with time, acknowledging significant growth of STEM-related industries and the necessity of preparing students for a burgeoning range of career opportunities. But the very nature of STEM research and development implies change that inevitably affects workforce trends and career paths. How best to prepare our students for an unpredictable workforce environment and a changing global society? Beyond STEM acumen, what is the relevant toolkit of skills and understandings that will serve our students and enhance partnerships with industry? These questions are addressed in the context of a recovering economy that will continue to influence policy and support.

10:15 a.m. – 10:45 a.m.

Networking Break

Thurgood Marshall Foyer

TIME	TITLE	ROOM
10:45 a.m. – 12:15 p.m.	Breakout Session I	

Session Title	Room
I-1: Keynote: Continue the Conversation with Eduardo Padrón	Harding
I-2: Introductory Research Experiences for At-risk Freshman-Sophomore STEM Majors	Coolidge
I-3: Fostering Changes in Institutional Culture & Practice	Hoover
I-4: First-year STEM Student Cohorts: Assessment and Best Practices	Wilson A
I-5: Identifying Deficiencies in Your STEP Program	Wilson B
I-6: Strategies for Promoting Faculty Engagement with Early STEM Students	Wilson C
I-7: Working Smart: How to Build, Evaluate, and Sustain a Portfolio of Strategies	Madison A
I-8: Developing Effective Bridge Programs	Madison B
I-9: Strategies for Sustainability / Institutionalization	Lincoln 3
I-10: Successful Experiences in First-year Mathematics Courses	Lincoln 2
I-11: Strategies for Promoting Diversity	McKinley
I-12: Data Collection, Publishing, and Dissemination of Results	Lincoln 4

11:30 a.m. – 7:00 p.m.	STEP Help Desk	Registration Area
12:15 p.m. – 2:00 p.m.	Lunch and Networking	Thurgood Marshall Northwest
12:45 p.m. – 1:45 p.m.	Lunch Speakers: Lee Zia and Connie Della-Piana, STEP Lead Program Directors, DUE	

Title: *STEP: What are we learning and what would we like to learn?*

Abstract: It is an exciting time for the undergraduate STEM education enterprise with national and Federal acknowledgment of the important role it plays in the context of U.S. global competitiveness. The various PCAST reports over the last eighteen months have done much to foreground this theme. Furthermore, a recent announcement from OSTP calls attention to a Cross-Agency Priority goal that is seen as the next step towards putting into operation the PCAST call for one million more STEM graduates by 2020. STEP provides one of several opportunities for NSF to participate in achieving this Cross-Agency Priority goal. Towards this end, it is also vital that the program can demonstrate that its investments are paying off. At the project level we want to learn about the connection between increased degree attainment and project activities. Furthermore, we would like to be able to “roll up” project-level data in support of an overall understanding of “program impact and effectiveness.”

Lunch Table Discussion Groups (see table poster for locations)

- L-1 Project Sustainability
- L-2 Early Warning Systems for At-Risk Students
- L-3 Project Coordinators
- L-4 Project Evaluators
- L-5 Peer-Led Team Learning (PLTL)
- L-6 Recruiting and Retaining Underrepresented Groups
- L-7 2yr / 4yr Partnerships
- L-8 Projects for Community Colleges
- L-9 Projects for Large Universities
- L-10 Projects for Small Colleges
- L-11 Projects for Minority Serving Institutions
- L-12 Intrusive Advising Strategies
- L-13 Learning Communities

2:00 p.m. – 3:15 p.m.	Poster Session A	Exhibit Hall C
3:15 p.m. – 3:30 p.m.	Networking Break	Thurgood Marshall Foyer

3:30 p.m. – 5:00 p.m. Breakout Session II

Session Title	Room
II-1: Building Bridges for STEM Success: Implementing Effective Summer Bridge Design	Harding
II-2: Supporting Community College Transfers	Coolidge
II-3: Characteristics of Excellence in Undergraduate Research (COEUR): A guide for undergraduate research initiatives	Hoover
II-4: 6 Steps to Your STEP Evaluation	Wilson A
II-5: Developing and Sustaining a Successful Peer Mentoring Program: Positive Effects on Student Retention	Wilson B

II-6: Amplifying the ripples: Disseminating your Educational Project to a Larger Audience	Wilson C
II-7: STEM Education Organizations	Madison A
II-8: Sparking and Sustaining Active Student Engagement	Lincoln 4
II-9: Effectively Managing Your Project	McKinley
II-10: Preparing for Your 3rd-year Review	Lincoln 2
II-11: Collecting and Organizing Data: How and Why	Lincoln 3
II-12: Type 2 Round Table	Madison B

5:00 p.m. – 6:15 p.m.

Poster Session B
Refreshments served

Exhibit Hall C

6:30 p.m.

Poster Board Takedown

Exhibit Hall C

FRIDAY, MARCH 15, 2013

TIME

TITLE

ROOM

7:45 a.m. – 12:30 p.m.

Registration

Thurgood Marshall Foyer

7:45 a.m. – 8:30 a.m.

Continental Breakfast

Thurgood Marshall Northwest

8:30 a.m. – 12:00 p.m.

STEP Help Desk

Registration Area

8:30 a.m. – 10:00 a.m.

Plenary Session

Thurgood Marshall Southeast

Speaker: Philip Uri Treisman, Professor of Mathematics and Public Affairs, University of Texas at Austin

Introduction of Speaker: Claire Duggan, Center for STEM Education, Northeastern University

Title: *Innovation as Ornament and the Challenge of Improvement at Scale*

Abstract: Compelling economic forecasts indicate that our country will need to produce, over the next decade, one million more college graduates in STEM fields than would be expected at current rates. Fortunately, everywhere and all the time armies of responsible faculty members and administrators are working to improve their undergraduate programs with the goal of increasing the number and diversity of STEM graduates. Many of these academics recognize that the health of their disciplines depends on developing a next generation of STEM professionals that represents the full diversity of our society. Yet progress is disappointingly slow--despite the enormous energy expended on the task. How might we proceed differently so that necessary change occurs at scale? And, what new arrangements must be created to allow those working at different levels of the educational system to collaborate on meeting national and disciplinary goals? These questions and suggested answers are the heart of the talk.

10:00 a.m. – 10:15 a.m.

Networking Break

Thurgood Marshall Foyer

10:15 a.m. – 11:45 p.m.

Breakout Session III

Session Title	Room
III-1: Keynote: Continue the Conversation with Philip Uri Treisman	Harding
III-2: Using Undergraduate Research and Internships to Recruit and Retain STEM Students	Coolidge
III-3: Utilizing Peer Mentors in Supplemental Instruction	Hoover
III-4: Learning Communities & Cohort-building	Madison B
III-5: Increasing Student Success in STEM through Application-based Math Instruction	Wilson B
III-6: STEM Culture of Success: A Cultural Approach for Increasing Diversity and Inclusion in STEM	Wilson C
III-7: The E-Portfolio: Using Technology to Increase Student Academic and Social Development	Madison A
III-8: Improving Retention, Transfer and Successful Graduation	Wilson A
III-9: Creating a Faculty Fellows Community: Developing Collaboration Through Facilitation	McKinley
III-10: Recruitment and Retention in Foundational Science Courses	Lincoln 2
III-11: Planning for a Competitive STEP 1B Submission	Lincoln 3
III-12: Fostering Critical Thinking for STEM Students at Risk: Nuts, Bolts and Details	Lincoln 4

11:45 a.m. – 12:15 p.m.

Closing Remarks

Thurgood Marshall Southeast

12:15 p.m.

Meeting Adjourns

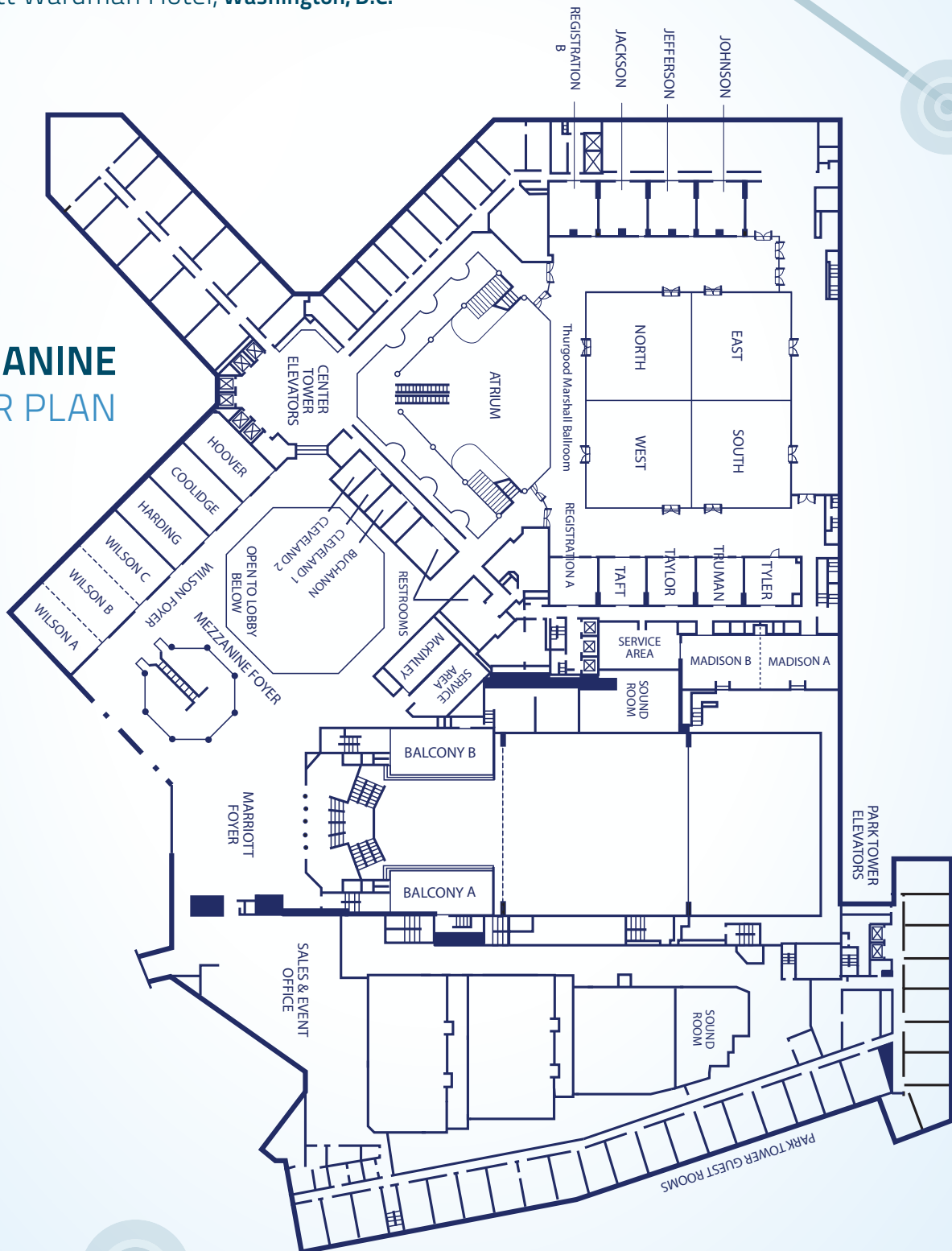
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MEZZANINE FLOOR PLAN



Lincoln Rooms and Exhibit Hall C are located on the Exhibit Level