Day 2: Overview of Day and Goals

- Yesterday covered a lot of content that goes into pre-research training
- Today is about building community and getting useful examples so you can start in earnest to develop and implement a plan to grow a pre-research training at your institution.
- You'll see many of the events are PMSC focused, which we think is the one that might be the least intuitive to implement
- During the day you need to work on your plans.
- Goal: "I can steal that idea"...

Day 2: Overview of Day

- Listen to PMSC Seminar: Research literacy
- Attend Library tour and overview with PMSC student groups (limited number of spots available)
- Lunch with SRA participants (in '63 South)
- Presentations from workshop participants

We asked you about what you wanted

- 1) How to support transfer students in a course designing primarily for freshmen and 2) What are the best practices for offering a course to everyone at the university (how do we reach students in all departments including non-STEM?)
- Get ideas on how to foster cross-campus communication, find other ways to engage students in research
- 1) How to successful grow our program to support pre-research and active research phases of undergraduate experiences. 2) How to make the experience structured, reflective and assessable. 3) How to create a sustainable and financially viable solution for a small state school that I can successfully market to administration and our diverse, primarily first-generational college students. 3
- To learn about what pre research is
- Learn how this course are taught at other research institutions. Learn about the course syllabus and course assignments.
- 1. Learn best practices in preparing diverse undergraduate students to succeed in independent research. 2. Network with other higher education professionals that have experience mentoring successful undergraduate researchers.
- How to approach undergraduate research courses and how to build interest in these courses.
- Working on access to funding, networking
- Learn new tools and strategies for implementing pre-research undergraduate course
- Program Models Assessment Ideas
- Develop a plan for a pre-research course, particularly for transfer students. Network with other UR professionals.
- 1. Identify models and practices used by similar institutions. 2. Identify one or more key takeaways regarding best practices that may support the award of an REU in the future.
- insight on how institutions run their CUR programs, tips to gain more faculty mentors working in medical intensive research and how to help them work with undergrads.
- 1. gain insights into effective infrastructure support for undergraduate research; 2. consider how better to support the UR conversation and efforts at my college.
- · Gain enough information to implement a pre-research program at my university and learn ways of assessing said program
- I would like to identify ways to create a context for each assignment so that students do not feel that it is busy work. Most students understand the importance of the assignments by the end of the course, but it would be nice to help them understand the importance while still in a pre-research course and not once research is finished. I would also like to learn best practices for creating a research safety culture.
- · concrete examples of courses and materials; tips on what has worked and not worked
- To learn how to begin the research cycle earlier in a student's training.
- The format for the workshop best suited to our campus (FLBC, PMSC or SLS?) Defining the intended student audience and effectively orienting them to research opportunities.
- to determine what is done and learn from it

Listen to PMSC Seminar: Research literacy (main ballroom)

Attend Library Tour
Delaney will guide you
or
stay and work on your plan

11:30 – Ken will guide you to '63 South for Lunch

Attendee Presentations I (Dave Facilitating)

- "Low-Cost Initiatives for Promoting Undergraduate Research at Universities" Svitlana Zbarsk
- "The STEM Leaders Program: Advancing Access to Undergraduate Research" Sophie Pierszalowsk,
- •• "O.U.R. University of Oklahoma Projects and Resources." Michael Faneros

Attend Library Tour
Delaney will guide you
or
Work on your implantation plan

Attendee Presentations 2 (Susan Facilitating)

- "SVSU Undergraduate Research Program: Efforts to foster longitudinal research experiences for undergraduate students" Jennifer McCullough
- "Preparing Undergraduate Students for International Research Experiences: Language Skills and Laboratory Culture" Laura Corey
- "Office of Student Scholarship, Creative Activities, and Research: 5 years and counting." Karen Lee

Short Break

3:45 be at Key West Ballroom, SU meet at 3:35 to walk over Take all belongings with you

Next Up:

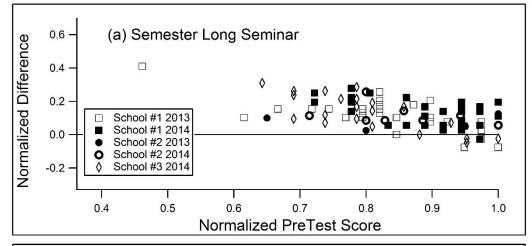
Attend PMSC Showcase and meet with students at 5:00 Garden Key Room 221, SU

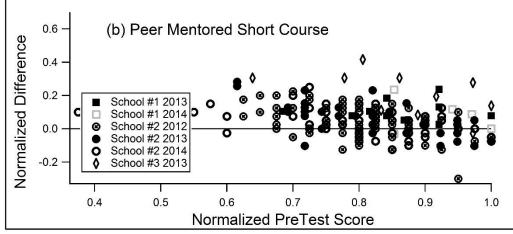
Working Dinner – Assessment & Posters

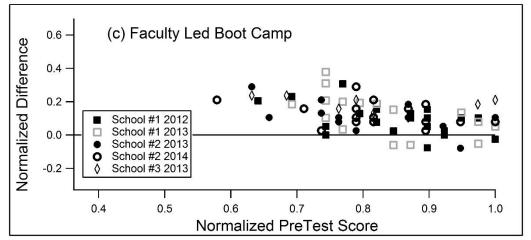
- 1 minute elevator speech for your poster
- Dinner
- Feel free to review posters Hanging around the room
- Assessment

Assessment

- 50 question test bank (can be used as pre/post assessment (questions and answers are in the workbook)
- Focus group feedback
- Follow-up surveys (1 year later and 2 years later)







Summary (50 question test)

- Overall positive learning gains in all courses
- Knowledge Gain ~20% (post vs. pre)
- No significant difference between Institutions
- Very little difference between course format
 - SLS lots of time
 - PMSC a lot of information quickly and led by peers

Lessons Learned – Based on Focus Group

- Focus group feedback page 85
- Conducted by an external review group

Lessons Learned – Based on follow-up

- Follow-up surveys (1 year later and 2 years later) – page 86
- Well over half of the students became involved in research
- Students indicated the program helped them be more prepared
- Some students realized research isn't for them (and that's ok) or they don't have time

Transportation back to Hotel at 6:30

Day 3: meet in La Quinta Lobby at 9:00 for transportation to UCF Student Union

Day 3: Overview of Peer Mentor Training- Section VIII in the manual

Peer Mentors

- Students enjoy learning about research through students
 - Experienced students essential
- Good experience for advanced students
- Provide support at all levels
- Variety of responsibilities:
 - Facilitate portions of the course
 - Review
 - Grade (with guidance)

Logistics

- Recruitment
 - Word of mouth
 - Previous participants
 - Formal advertisement
- Compensation (and swag!)
 - Hourly wage
 - Credit
- Training
 - One full day
 - Led by staff, students, etc.

Peer Mentor Training Topics

- Review of schedule and syllabus
- Review of workshops
 - Role of mentor in each workshop
- Review of assignments
- Communication
 - Activity
 - Handouts: facilitating discussions and techniques
- Logistics
 - Icebreakers
 - Site Visits

Participate in PMSC activity: Research ethics – Attend as needed (or work and network)

Listen to PMSC seminar: Technology transfer, IRB OR Work on Implementation Plan Development

Short Break

Return by 11:10 to hear first portion of Graduate School Panel

Time to work on your plans

Finish up plans by End of Day

12:20 Lunch

Mini-Workshop Overview

- SRA Mini-workshop sessions last 25 minutes
- The students can select 4 topics (out of 16 topics)
- You may attend 1 or 2 topics
 - Attend 1 (for 25 minutes) and return to work on your individual plan
 - Attend 2, and return at 2:00 for Final Wrap-up

Mini-Workshop Topics (1 of 2)

- RESEARCH AS PREPARATION FOR PROFESSIONAL SCHOOL (Facilitators: Susan Yantz (Pre- Health and Pre-Law Advising) and (Undergraduate Research))
- TIPS ON APPLYING TO GRADUATE SCHOOL (Facilitator: George Fulginiti (College of Graduate Studies))
- WRITING A THESIS— STUDENT PERSPECTIVE (Facilitators: Peer Mentors)
- ONCE I FIND A MENTOR, WHAT IS THE NEXT STEP? CONFERENCES, SHOWCASES, GRANTS, ETC (Facilitator: Dr. Kevin Jardaneh (Undergraduate Research))
- EMAIL AND RESUME CRITIQUE (Facilitator: Emi Gonzalez-Luna (Undergraduate Research)
- TIME MANAGEMENT FOR UNDERGRADUATE RESEARCHERS (Facilitator: Colleen Smith (Undergraduate Research))
- **COMMUNITY-BASED RESEARCH** (Facilitators: Aubrey Kuperman (Undergraduate Research))

Mini-Workshop Topics (2 of 2)

- NATIONAL AND INTERNATIONAL FELLOWSHIPS Breakout Room 1 (Facilitator: Morgan Bauer (Office of Prestigious Awards, Burnett Honors College))
- ACADEMIC ADVANCEMENT PROGRAMS: EXPLORING THE RESEARCH AND MENTORING PROGRAM (RAMP) AND MCNAIR SCHOLARS PROGRAMS-Breakout Room 2 (Facilitators: Natalia Toro (AAP, Undergraduate Studies))
- SUMMER OFF-CAMPUS EXPERIENCES- Breakout Room 3 (Facilitator: Dr. Kimberly Schneider (Undergraduate Research) and Rebecca McLean)
- CAREER PLANNING FOR AFTER GRADUATE SCHOOL: ACADEMIA, INDUSTRY, ETC (Facilitator: Dr. Stephen Kuebler (Associate Professor, Chemistry and Optics, College of Sciences))
- NAVIGATING SOCIAL SCIENCE RESEARCH (Facilitator: Dr. Jana Jasinski (Associate Dean, College of Sciences; Professor, Sociology))
- PUBLISHING YOUR RESEARCH (Facilitator: Xian Nguyen (UCF Undergraduate Research Journal))

Final Wrap Up

Email your individual plan to your facilitator

- Dave: <u>dfbahr@purdue.edu</u>
- Susan: sburkett@eng.ua.edu
- Shelley: spressley@wsu.edu

Final Remarks - Questions? Discussion?

Final Wrap Up con't

- Next Steps your facilitators will contact you in the fall for a check-in
- Post workshop Survey

https://wsu.co1.qualtrics.com/jfe/form/SV_3D VS1j9uK6FV2cd

Thank you for Attending!