# PRAGMA Wide Student Mentoring Group

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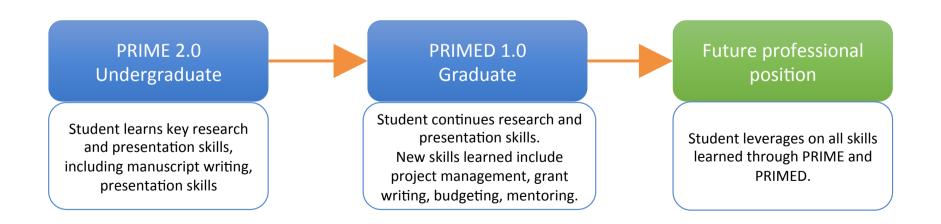
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# PRAGMA Wide Student Mentoring Group

- Leveraging on our longstanding PRAGMA community and experience with students, how can we collectively:
  - Enhance the PRAGMA student experience through individual or joint programs for students and add to student experiential learning
    - Networking
    - Professional opportunities
    - Leadership challenges
    - Research mobility
- The **goals** of this group are:
  - Transform the career potential for students involved PRAGMA
  - Change/create more opportunities at participating institutions
  - Create a mentor network to teach/support skills to host mentors
  - Facilitate the development of leaders in interdisciplinary research

# PRAGMA – Training Future Professionals

- Scenario: An undergraduate student joined PRIME and became very interested in the project. The student continued to work with mentors in PRAGMA through graduate school and beyond.
  - What would the student gain?
  - What is the benefit to the mentors/institutions?



### Students: New Ideas, Energy, and Strengthening of PRAGMA

Students infuse PRAGMA with new ideas and energy, improve organizational practice, create/sustain collaborations

Enhance and accelerate the development of talent: technically strong, culturally aware, globally engaged

#### **PRIME: Undergrad**

- · Created/tested Model for Experiential Learning
  - 6 month program for research, cultural, and professional development
  - Students are from single institution (UCSD)
- Research and Professional Accomplishments
  - 12 years, 200 students, 47% female; still in contact
  - Of 103 respondents to recent PRIME survey, 81 have or are gaining higher degrees
  - 28 research publications, 6 software components, 5 experiential papers by students
- Strengthened, broaden collaborations in PRAGMA

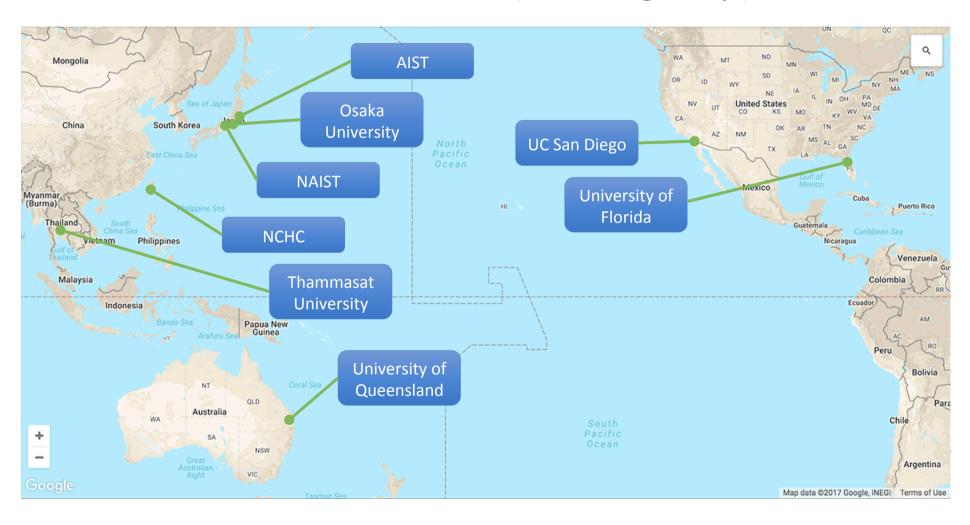
#### **PRAGMA Students: Grad**

- Modified PRAGMA's Practices
  - Currently, no formal program, but continuous engagement of students to organize poster sessions, lightening talks, workshops
  - Communicated with Steering Committee Members to accomplish activities or selfstarted by students
  - · Students are from multiple institutions
- · Research and Professional Accomplishments
  - 5 years, (?) students
  - Leadership (how many have gone on to leadership positions or higher degrees?)
  - 35 publications
  - 6 short-term research visits
- Experiments by, with and for students: Hackathons

- Expand/enhance the PRIME program
  - Focus on PRAGMA projects
  - Lengthen term of projects
  - Involve multiple US sites (teams)
  - Add Professional Components
    - Formalize process of presenting research results upon return (e.g. publication writing, poster creation, presentation skills, etc.)
    - Provide support/framework for PRIME students to mentor next cohort
    - Expand alumni engagement e.g. alumni from 5 years ago return to speak about PRIME impact on career

- Create a formal graduate PRIME program (PRIMED)
  - Continue practices that engage students
  - · Amplify exchanges by aligning project with dissertation research
  - Formalize process of research exchanges
  - Add Professional Components
    - Provide training for project management skills (e.g. budgets, managing staff, grant writing, overall project goals, etc.)
    - Develop and implement framework for PRIMED students to mentor undergraduates in PRIME
    - Engage postdoctoral fellow to provide support for PRIMED students (e.g. mentoring the mentors)
  - Prepare students to be leaders in interdisciplinary research

# Current Partners (Evolving Map)



# PRAGMA Wide Student Mentoring Group

- Short-term objective(s)
  - Create inventory of exchange opportunities
  - Consider / develop common (joint) approach to
    - engaging (and support) students in PRAGMA
    - identifying ways to align PRAGMA activities and thesis directions
    - looking for opportunities to serve on cross-institutional thesis committees
    - mentoring students in PRAGMA and learn/share mentoring practices
    - conveying to students several professional development skills, such as communications, presentation, poster development, proposal writing, mentoring
    - creating mobility opportunities for students such as international research rotations or jobs
  - Consider joint funding opportunities and assist PRAGMA members to develop programs
- Long-term objective(s)
  - Create a shift in thinking of training for graduate students
    - Rethink graduate education boundaries