Broadening Participation of Undergraduates in CSEH: CSEH, MARC & Chem Scholars

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Academic and social integration, knowledge and skill development, support and motivation, monitoring and advising

13 Key Components
1. Recruitment
2. Financial Aid
3. Summer Bridge
4. Program Values
5. Study Groups
6. Program Community
7. Advising and Counseling
8. Tutoring
9. Summer Research
10. Mentors
11. Faculty Involvement
12. Admin and Public Support
13. Family Involvement

2014-2015 MEYERHOFF STUDENTS (290)

- 423 advanced science degrees and 107 medical degrees earned
- 300 alumni in graduate or professional school

1Summers and Harbowski Science, Vol 311, March 2009
2http://news.sciencemag.org/education/2014/05/hhmi-hopes-replicate-program-produce-more-minority-science-ph.d.s
Improve retention, graduation and matriculation into graduate programs for all CSEH students at UWF with an emphasis on underrepresented students.
Established in Fall 2011, to focus on high achieving students in chemistry with an emphasis on underrepresented (UR) students.

- 96% retained in program
- 100% retained in STEM at UWF
Chem Scholar Accomplishments

- National awards
  - 9 National American Chemical Society Scholars
    - over $50,000 in annual, renewable scholarship funds
  - DOW-MIT ACCESS Program recipient

- Undergraduate research: 100% participation
  - 19 accepted to off-campus summer research programs

- Presentations: 59 student research conference presentations

- Jerome E. Gurst Excellence in Chemistry endowment created to support underrepresented students in chemistry
Chemistry Scholar Graduates

- 34 Chem Scholar graduates with 100% 5 year graduation rate
- 100% accepted into graduate and professional programs

Matriculation to Graduate Programs

- 2014-2015: 55% non-UR, 83% % UR
- 2013-2014: 50% non-UR, 59% % UR
- 2012-2013: 50% non-UR, 59% % UR
- 2011-2012: 35% non-UR, 0% % UR
- 2010-2011: 47% non-UR, 0% % UR
National Institutes of Health
MARC Scholars

Program Goal: Increase retention, academic performance, degree attainment, and graduate school matriculation rates among underrepresented minority students in Biology, Chemistry and Physics by expanding Chemistry Scholars into CSEH Scholars

• **Maximizing Access to Research Careers** for Undergraduate Student Training in Academic Research (MARC U*STAR) grant awarded for $964,000 during 2014-2019
  
  o 16 total MARC Scholars receive ~$16,000 annually

• **Undergraduate research** projects on and off campus
  
  o 17 UWF faculty mentors from Biology, Chemistry and Physics
  o 43 faculty mentors at 26 research-intensive institutions
College of Science, Engineering and Health Scholars

Program Goal: Promoting STEM education, professional development and scholarly opportunities at the undergraduate level. Our target population are freshman and sophomore students who can benefit from the early exposure.

WE INTEND TO ACCOMPLISH THE PROGRAM GOAL WITH THE 3 E’S APPROACH:

- **EXPERIENCE**
  Students learn how to market themselves through networking interactions with faculty and industry leaders

- **EXPOSURE**
  Research, summer programs and internship opportunities tailored to future career goals

- **EVOLUTION**
  Opportunities extended to students allow preparation for communication in professional success
Two advisory boards:

- Faculty advisory board
  - Consists of faculty members from most departments under the CSEH

- Student advisory board
  - Consists of 2-4 members from each department under CSEH
  - Student recommended by faculty member
    - A sense of ownership
CSEH Scholars Impact on Campus

Total Participation:
- January = 23 students
- February = 9 students
CSEH Scholars
Departmental Participation

March

- Computer Science: 32%
- Business: 4%
- Engineering: 4%
- Nursing: 1%
- Sports Management: 2%
- Biology: 5%
- Psychology: 4%
- HLES: 4%
- Criminal Justice: 24%
- Athletic Training: 2%
- CLS: 1%
- Management: 1%
- Information Systems: 9%
- Legal Studies: 2%
- Design: 1%
- Therapy (Physical or Occupational): 1%
- Undeclared/Undecided: 13%

CSEH: 73%
CSEH Scholars Programming

Overall Vision:
- Increase partnerships with schools that have STEM focused summer programs
- Increase relationships with area high schools for recruiting STEM interested students to UWF

Past Events
- Faculty and Student Panel Discussion
- Resume Building Workshop
- Professional development seminar with graduate school representative from University of Alabama at Birmingham

Upcoming Events
- Professional development opportunities
  - Field Industry professionals
  - Graduate Schools
  - Recruitment
- Interview Speed Dating
- Navigating Social Media