

# College of Science Transfer Learning Community: Supporting STEM Student Success

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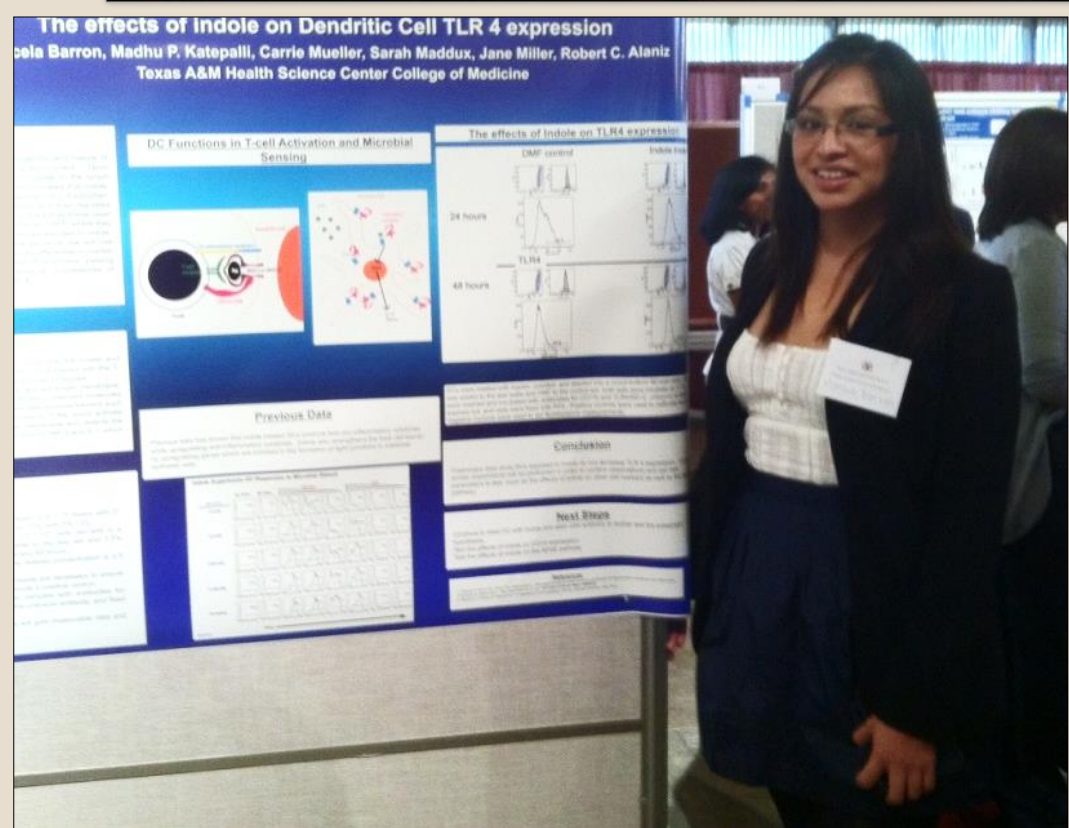
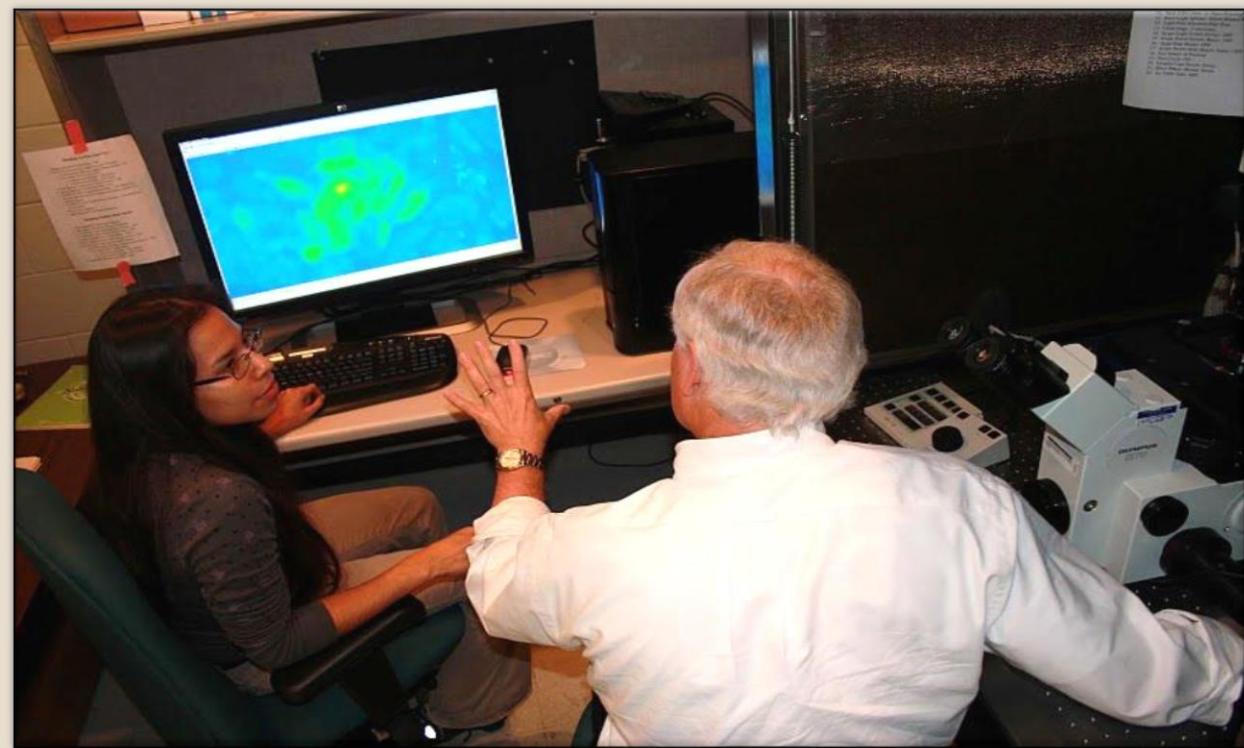
Approximately 100 students transfer into the College of Science at Texas A&M University (TAMU) each year. Transfer students are academically talented and interested in STEM and provide opportunities to increase the STEM pipeline. Beginning Fall 2012, open to all incoming transfer students, a Transfer Learning Community (TLC) was established. Based on the College's NSF funded S-STEM program, essential components have been incorporated into the program as key for successful transfer, retention, and completion of bachelor's degrees in mathematics and science.

### Historical Retention to Science/TAMU:

- 3.6 Transfer GPA – retained in Science and graduated in Science on time
- 3.5 Transfer GPA – retained in Science
- 3.3 Transfer GPA – retained to TAMU, but not in Science
- 3.2 and below Transfer GPA – not retained to TAMU

### Transfer Learning Community Semester Schedule

August/January Orientation
– Academic Boot Camp
September/February Meeting
– 3 Week Check-Up
– <u>Research</u>
October/March Meeting
– Mid-Term Grades
– Q-Drop & Withdrawal
November/April Meeting
– Pre-Registration
– Preparing for Final Exams
– <u>Focus Groups</u>



### Program Components

#### Student Learning Outcomes:

- ❖ Critical Thinking
- ❖ Prepare to Engage in Lifelong Learning
- ❖ Work Collaboratively

#### High Impact Practices:

- ❖ First-Year Seminar
- ❖ Elements of Learning Community

#### Undergraduate Research:

- ❖ Introduce Topic of Undergraduate Research
- ❖ Concepts and Value of Undergraduate Research
- ❖ How To's of Identifying Research and Registration

#### Intentional Advising:

- ❖ Degree Plans for All Students are Collected
- ❖ Courses are Monitored to Ensure Progress Towards Degree
- ❖ Early Intervention for Academic Deficiency and Change of Major

#### Peer Mentoring:

- ❖ Provide Stipends/Scholarships for Peer Mentors for TLC
- ❖ Peer Mentors are Previous TLC Participants
- ❖ Mentors Posted a 3.5 or Better GPA in First Year at TAMU
- ❖ Assigned to No More Than 10 Mentees

#### Supplemental Instruction:

- ❖ Additional Supplemental Instruction Sessions Have Been Added for Courses Known to be Problematic for First Semester Transfer Students

#### Assessment:

- ❖ Surveys given to participants at orientation and final meeting
- ❖ Surveys assess learning outcomes
- ❖ Tracking of students
- ❖ Focus groups

#### Next Steps:

- ❖ Currently in year 3 of TLC – program adjustments made based on assessment of year 1 and 2
- ❖ Last cohort of NSF funded students graduating 2015
- ❖ First cohort of TLC students graduated May 2014



### College of Science (CLSC) Learning Community Population

#### NSF funded S-STEM Program - Year 6 (2008-present) Total 24 Students

Gender:  
15 female  
9 male

Graduation Rate: 76.1%  
(16 of 21 Scholars)

Transfer Rate: 87% (21 of 24)  
21 students transferred to  
TAMU from community college

14 TAMU Graduates  
2 professional school  
5 graduate school  
5 employed in STEM  
1 applying to graduate school

Retention Rate of 21 Scholars  
to date at TAMU: 75%

Research Experience:  
14 Scholars to date

2 students currently enrolled

TAMU Majors:  
5 Biology  
3 Microbiology  
1 Zoology  
1 Chemistry  
1 Spanish/Physics minor  
1 Biomedical Eng.  
1 Civil Eng.  
2 Computer Science & Eng.  
4 Biomedical Sciences  
2 Bioenvir. Sciences

#### Transfer Learning Community Total 185 Students (fall cohorts 2012 & 2013)

Majors:  
4 Applied Mathematics  
103 Biology  
23 Chemistry  
20 Mathematics  
14 Microbiology  
4 Molecular & Cell Biology  
10 Physics  
7 Zoology

Gender:  
93female  
92 male

1<sup>st</sup> Semester Retention Rate:  
Cohort 1 & 2 (fall 2012 & 2013) n=185  
86% retained to CLSC  
95% retained to TAMU

