TEAM MENTORING PROGRAM (TMP)
BUILDING CONNECTIONS FOR SUCCESS!

A special report:
Highlighting the Impact of TMP

TMP mentors 2018–2019
LEARNING AND CHANGING THE STEM CULTURE.

From the perspective of a research faculty mentor, this program helps students step out of their comfort zone, explore new aspects in life, and make a career choice. It helps students discover their passion for research or other career paths. Without support from Washington Research Foundation, I would not be able to accept these past students to do research in the lab.”

Joy Winuthayanon, Ph.D.
Assistant Professor and TMP Faculty Mentor
Center for Reproductive Biology, School of Molecular Biosciences

THE TEAM MENTORING PROGRAM (TMP)

was established at Washington State University in 2007 to increase the participation, retention, and graduation of underrepresented minorities (URMs) and women in sciences, technology, engineering, math (STEM) and pre-health disciplines. While demographics of the nation are changing, diversity within STEM disciplines has fallen behind. Women and URMs make up a disproportionately low percentage of STEM graduates, and attrition during these students’ undergraduate years compounds the problem. Nationally, URM students who initially pursue STEM degrees are about 40 percent less likely to complete them compared with their White and Asian-American counterparts.

ELIMINATING THE GAP

The Team Mentoring Program was established to focus on eliminating the representation gap, because STEM innovation relies on individuals with diverse perspectives working together. It is designed to provide mentoring for sophomores and new transfer students (mentees) interested in pursuing STEM and pre-health majors. The TMP partners a faculty member with 1-2 high-performing junior and senior student mentors to provide them with guidance and strategies for serving as peer mentors to teams of 7 to 15 student mentees. Student mentors, professionals in training, become role-models, engage in an “Experiential Learning and Internship for Students in STEM,” and receive more than 35 hours of training in mentoring, ethics, cultural and global competency, teamwork and leadership skills. They also enroll in an upper-division leadership course, learn and refine mentoring practices, prepare a portfolio of their mentoring growth and accomplishments, and document weekly interactions with mentees and their faculty mentor.

OVERARCHING GOALS OF TMP

1. Support the transition, adjustment, and achievement by helping mentees establish a community of support and a strong connection to their respective college, department, and faculty

2. Increase mentee retention, achievement, and graduation at WSU (to 80%) and in STEM majors (to 70%)

3. Connecting students to scholarly activities such as research, internships, preparation for graduate/professional school and the workforce

4. Help mentees balance academic, social, cultural activities
I went from TMP mentee to mentor and then alumna. In my experience, the program contributes to students’ success in professional school pre-entry exams by helping students financially and mentally prepare for them. It also enhances students’ experiences in STEM courses by informing them about tutoring for the classes provided on campus. TMP events throughout the academic year allow students to network with faculty to find a job, research, and mentorship opportunities. It also provides a safe place to build lifelong friendships and cultural humility.”

Marleny Carmona
Class of 2017, BS Biology, TMP mentee and mentor; TMP alumni mentor
Currently a Medical Student at the WSU Elson S Floyd College of Medicine

Many students receive textbook scholarships as a part of their participation in networking events or receive scholarships for engaging in research that helps mitigate the cost for faculty members to include them in their lab, participate in regional, national, international conferences to expand their professional network and/or present their research. These and other relevant scholarly opportunities are possible thanks to support from our partners like the Washington Research Foundation, which plays a pivotal role in removing financial barriers for many of our URMs in their pursuit of STEM degrees.

The TMP mentors gain leadership skills, developing workshops and events that encourage mentees to pursue STEM fields and create a supportive network that keeps them engaged on that path. Undergraduate students also participate in research, which plays a key role in retention.

**MAKING SIGNIFICANT IMPACT**

A longitudinal analysis of all mentees who have been selected to be part of the program and have become active participants clearly shows they stay enrolled and graduate at higher rates.

* Have graduated or still enrolled at WSU in spring of 2019
Since the program began in 2007, participants include:

- **40** faculty mentors
- **178** student mentors
- **1,602** active mentees pursuing STEM and pre-health related degrees

### SUCCESS BY THE NUMBERS

- **80** percent of active participants stayed or graduated, and **66** percent stayed in a STEM major or graduated
- **70** percent of active participants from the Voiland College of Engineering and Architecture stayed in a STEM major or graduated
- **169** research scholarships awarded to support student participation in research projects with faculty
- **178** TMP mentoring scholarships awarded to Student Mentors
- **96** study abroad and travel grants awarded to attend regional, national, and international conferences
- **502** students received textbook scholarships

### NATIONAL RECOGNITION

TMP received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, given by the Executive Office of the President of the United States and the National Science Foundation, in June 2018.

### UNIVERSITY AND PRIVATE PARTNERS SUPPORT UNIQUE PROGRAM

TMP exhibits a unique mentoring model of collaboration between the Division of Student Affairs represented by the Office of Multicultural Student Services; the Colleges of Agricultural, Human and Natural Resource Sciences; Arts and Sciences; Veterinary Medicine; and the Voiland College of Engineering and Architecture; and private sponsors such as the Washington Research Foundation, Boeing Company, and AT&T.

### THANK YOU!

TMP activities, support, and impact on students is only possible thanks to the financial commitment of each WSU TMP partner, Student Financial Services, the WSU development team, and most importantly, our sponsors and their generous contributions:

- The Boeing Company – Boeing Cyber Grant since 2010
- Washington Research Foundation since 2016
- AT&T
- Bank of America
- VCEA-MME Industrial Design Clinic and Dr. Chuck Pezeshki – Boeing field trip and internships abroad in Colombia, 2016–2017
- Alaska Airlines – Flight credits for 20 students to tour Boeing Renton and Everett campuses, 2016 and 2018
- Dr. Judith McDonald
- National Science Foundation
IN THEIR WORDS...

IDENTIFYING AS A SCIENTIST, ENGINEER, HEALTH PROFESSIONAL

TMP supported me in studying abroad, encouraged me to attend professional conferences, and connected me to physicians and professionals. As a first-generation student who comes from a lower-income family, these experiences seemed impossible. TMP made them possible for me and allowed me to self-realize that yes, I can do this.

Shi Min Tan
Class of 2019, BS Neuroscience,
TMP mentee and mentor
Medical Student at the WSU Elson S Floyd College of Medicine

TMP provided travel grants to attend national conferences in my field of research. The experience of presenting and meeting with professionals in air, soil, and water quality research has allowed me to learn of potential career paths and where to look for them.

Yoni Rodriguez
Senior, Biochemistry, TMP Mentee
McNair Scholar, Auvil Fellow, Office of Undergraduate Research Mentor, LSAMP Student Ambassador, Research Assistant in the Laboratory for Atmospheric Research

My mentees really identify as scientists because of their research experiences, regardless of their major. They have opportunities to develop close relationships with professors, post-docs and graduate students. Some have had the opportunity to present at conferences, where they could join a larger community of scientists.

Anita Vasavada, Ph.D.
Associate Professor and TMP Faculty Mentor
School of Chemical Engineering and Bioengineering, Voiland College of Engineering and Architecture

BUILDING A NETWORK FOR SUCCESS

What we learn from each other about different ways of working with people will always be valuable and useful in our careers. Our mentors, and the relationship they have with each other and with faculty becomes a special type of networking and mentoring. For our mentees, the single most exciting thing for the mentors and for me is when one of them connects with a research opportunity that they like. We celebrated those connections. Without the extra push and support from the mentors, I do not think many of our student mentees would connect with research.

Mary Sánchez Lanier, Ph.D.
Assistant Vice Provost and TMP Faculty Mentor
School of Molecular Biosciences

As an underrepresented student, college can be especially difficult. Because of TMP, students like me can become successful and graduate. The program provided much support and various resources that greatly impacted my future.

Yemeserach Bishaw
Class of 2019, BS Microbiology, TMP mentee and mentor
Preparing to apply to medical school

The TMP alumni connection allows me to give advice on the various paths to get to med school, give guidance through the application process, and give a perspective on what habits are worth building that will help them be successful in medical school--all while we are in completely different parts of the country! I’ve also spoken to faculty at my school to connect mentees with physicians currently practicing in the specific field of medicine.

Joel Alvarez
Class of 2014, BS Chemistry, TMP mentee and mentor,
currently TMP alumni mentor
3rd year medical student at Meharry Medical College

TMP has helped me prepare for my career in health by getting me in contact with professionals nearly every step of the way. It blended the barrier between professionals and students because they treated us as professionals rather than adolescences with dreams.

Devinae McNeil
Class of 2019, BS Biology, TMP mentee
Preparing to apply to medical school
As a Faculty Mentor I’ve witnessed the impact TMP has on both student mentors and mentees. My mentors often enter the program with doubts about their ability to provide value-added insights to their mentees. By the end of the year, they have gained valuable skills related to communication and service that they carry forward with them to graduate and professional school. Further, their impact continues long after their work with TMP. I think every one of my student mentors left a legacy by recruiting a future student mentor. That ‘pay it forward’ mentality teaches students about one of the most important lessons in leadership--how to build sustainable programs that endure long after one’s participation ends. TMP mentees often make deep connections with their student and faculty mentors that last beyond their year of engagement with TMP. The energy and enthusiasm that the mentees bring to the program is contagious and the time and energy invested in them by their mentors are resources well-spent. The ability of TMP to reward and recognize its engaged mentees through research and book scholarships is a critical contributor to student success in STEM through the alleviation of two educational barriers-access to high-impact practices and financial roadblocks.”
Five years ago, my four siblings and single mom moved from the Republic of Congo to Seattle as refugees from the 1994 Rwandan genocide. I am proud to graduate with the magna cum laude honor and to have presented at 22 conferences. TMP has made it feel like a home away from my own despite my past.”

Lambert Ngenzi
Class of 2019, BS Earth and Environmental Sciences, TMP mentee
Princeton Fellowship in Uganda, Africa to work with a conservation organization

TMP became one of my biggest supporters in college, especially as a female student in engineering. It told me I could do amazing things, so I did. It told me my voice is just as important as anyone even if I am the only one who looks like me, and it was. Because of TMP, I grew as a person, a young engineer, and a global citizen.”

Mandi Lye
Class of 2019, BS Mechanical Engineering, TMP mentee
Applying for jobs in biomedical research while preparing to start a Ph.D. in Mechanical Engineering

Due to the lack of representation and role models in STEM classes, finding internships was often intimidating for my mentees. This peer-peer mentorship not only allowed me to guide my mentees, but also motivated me to perform my best, knowing that someone else was looking up to me.”

Deepika Kubsad
Class of 2018, BS Biology, TMP mentor
Working in a diagnostic lab, applying to medical school
Through encouragement and support from their mentors, mentees are encouraged to become more involved and participate in undergraduate research, travel, and volunteer work as undergraduate students. The mentors themselves learn the importance of teamwork, leadership, patience and resiliency in their roles, as they too progress toward their own professional goals.”

Christine Nishimoto
Class of 2017, BS Microbiology, TMP mentee, mentor, and program assistant
Currently a Professional Student, WSU College of Veterinary Medicine