The Worcester Pipeline Collaborative
Executive Summary
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Its mission: “to encourage, educate, and challenge underrepresented, educationally and economically disadvantaged students for success in the biotechnology, biomedical research, and healthcare professions (BBHP), where they are traditionally underrepresented.”

In 1996, the University of Massachusetts Medical School (UMMS) made a conscious commitment to get directly involved with the public education system to help improve and strengthen the curricula of students from disadvantaged backgrounds. To that end, UMMS teamed with local education, community and business partners to establish the Worcester Pipeline Collaborative (WPC). Current partners include the Worcester Public Schools, Worcester State University, Quinsigamond Community College (QCC), Plumley Village (low-income housing complex), Abbott Bioresearch Center (ABC) and UMass Memorial Health Care System, Inc. (UMMHC).

Partnership activities include: mentoring, job-shadowing, tutoring, clinical and research internships, touring, laboratory opportunities, after-school science programs, visiting scientist programs, and a speaker’s bureau. The WPC also provides family involvement activities and professional development opportunities for teachers. Through these efforts, students learn to set high expectations for themselves, as they participate in rigorous K-12 mathematics and science curricula, and develop language skills required to enter competitive collegiate programs. Students also become academically prepared to pursue BBHP in Massachusetts.

Through the WPC, there are over 6,400 North Quadrant students among seven elementary schools, Worcester East Middle School, North High School and Worcester Technical High School participating in numerous opportunities in a “seamless K-12 pipeline approach” focused on healthcare, biomedical research. Annually, an additional 1,000 students from other Massachusetts’ high schools participate in UMMS tours coordinated by the Office of Outreach Programs and the WPC.

Since 2006, QCC reserves ten slots annually for qualified WPC graduates from North High School and/or Worcester Technical High School, to enroll within their allied health programs, eliminating these graduates from having to be placed on a two to three year waiting lists. These students have the benefit of being the only students advised by the QCC’s Dean of Allied Health.

In efforts to strengthen the collaboration at the next level of the “seamless pipeline,” the concept has grown considerably, since 1996. It now includes many new initiatives and collaborations among the partners that have resulted from discussions that have taken place at WPC monthly board meetings. These initiatives help to further meet the additional needs of students within partnership’s institutions. This also helps participants to be able to “connect the dots.”

WSU professors were recruited to work in the Summer Enrichment Program (SEP). For several years (2005, 2006 and 2008), Dr. Margaret Kerr, Chemistry professor was hired to be the SEP Summer Program Coordinator. This provided Dr. Kerr and her colleagues the opportunity to gain
a better understanding of medical school admissions requirements for advising WSU students interested in careers in medicine. Dr. Sudha Swaminthian has taught Physics 2006-2010, and Dr. Barbara Zang has taught the Writing and Study Skills course 2008-2012. Jennifer Safford, WSU Life Skills Instructor, has taught Communication Skills in the UMMS High School Health Careers Program 2007-2012.

Dr. Chaitanya Hiremath from Fitchburg State University (FTU) has been the SEP Physics instructor for 2011 and 2012 summers. He has been able to help inform interested FSU students about the program.

QCC released Henry Ritter, Allied Health Advisor from his QCC responsibilities to learn first-hand about medical school admissions requirements. During the summers of 2009 and 2010 Mr. Ritter was hired as the Summer Program Coordinator for the SEP. This program helps college sophomores and juniors improve their qualifications and competitive standings for admissions to professional, graduate and/or medical schools. Eligible students from QCC and WSU are given priority consideration during the selection process. Upon completion of the program, participants meet individually with Dr. Hines annually to review their transcripts, academic standings and be advised about pursuing graduate and professional schools.

In 2008, QCC with began holding its’ EMT program classes at WTHS. In lieu of QCC paying rent for the WTHS space to conduct their EMT classes, the agreement allows QCC to offer the EMT program to WTHS students free of charge. The value of the program is $2,500.00 plus three college credits. For three consecutive years all WTHS students enrolled in the EMT program have successfully completed the course and passed the exam. Year-one, there were sixteen students; year-two there were eighteen students, and year-three another eighteen students.

In February 2011, a WPC collaboration with the Central Massachusetts Area Health Education Center (CMAHEC), and funded by the Greater Worcester Community Foundation, a thirty-hour, ten-week Medical Interpreters Course was created to benefit the students enrolled at North High School and Worcester Technical High School that speak a second language and have an interest in healthcare. Twenty-two students representing eight different languages are being trained to become junior Medical Interpreters. This course is the pre-requisite to the sixty-hour course offered for students who are eighteen years and older.

On-going WPC activities from 2006-2011 that benefit the program participants are as follows:

- Students from WSU, QCC, NHS and WTHS have been given priority consideration for our college and high school summer programs.

- One (1) QCC student and eight (9) WSU students have participated in the UMMS Summer Enrichment Program (SEP) since 2006. This is out of fifty (50) possible slots.

- Thirty-seven (37) WPS students have participated in the HSHCP. This is out of one-hundred (100) possible slots.
• WSU, QCC, NHS and WTHS students have accessed job-shadowing/internships opportunities through the WPC office and the Volunteer Services Department. They have been mentored by UMass professionals.

• WSU students are placed in WPS classrooms, as tutors and mentors.

In continuing to be fiscally conscientious, we collaborate with our partners:

• WSU students have been given preference when hiring staff as Dorm Parents for the High School Health Careers Program (HSHCP). WSU students have occupied eleven (11) of the twenty (20) available positions since 2006.

• Because of the WPC partnership, UMMS continues to rent dormitory space from WSU to house participants from all three summer programs.

• Program participants have been hired by UMMMC clinical departments due to WSU’s and QCC’s affiliation with the WPC. College and high school alumni from the “outreach and pipeline” programs were hired for full-time summer positions by the same clinical and research departments that hosted them, as program interns.

This commitment fosters the seamless pipeline approach of placing students with successful educational experiences in employment opportunities at UMass. This also encourages program participants to establish positive lasting professional relationships with their internship hosts, as they pursue clinical and research careers.