

TESTIMONIALS 11/2011

Was the STARS Program/Engelmann Institute instrumental in your career accomplishments?

“It certainly piqued my interest in computer-science-based research, which led me to get involved in undergraduate research, which ultimately led to my fulltime research position with one of my former professors. In short, I’m a research scientist, so mission accomplished.”

James D. Tucek, BS in Computer Science and Engineering, Washington University in St. Louis

“Yes, definitely. When I was planning to attend Washington University in the fall of 2002, I contacted Dr. Mares for recommendations for summer research positions. He suggested that I work with Dr. Dyke in civil engineering at Washington University. Though I was already interested in engineering, I did not know specifically what type of engineering I wanted to pursue. I ended up working in Dr. Dyke’s Structural Control and Earthquake Engineering laboratory the summer prior to starting Washington University, and through this experience, I decided to major in structural engineering. I continued to work in her laboratory for my four years as an undergraduate student there.”

Catherine A. Whyte, PhD in Civil Engineering 5/2012, University of California Berkeley

“It helped me decide that I didn’t want to do math research for a living. However, I think STARS was one of the most valuable experiences that I had as a high school student in terms of stretching me. I try to incorporate some element of discovery learning in my teaching today.”

Lia R. Tremont, MEd, Ohio State University

“Engelmann Institute was a very important reason why I chose the career path that I have. I decided to pursue a science and math degree in my undergraduate studies. The research experience that I gained in Engelmann Institute enabled me to get into a research lab during my second semester of my freshman year at Missouri University of Science and Technology. The early research experience in college enabled me to get into some prestigious summer research programs, which led to my acceptance to a Ph.D. program at MIT. My experiences in Engelmann caused me to see a definite path to graduate studies and enabled me to start striving for this early in my undergraduate years. I valued my experiences in Engelmann so much that I decided to serve as a mentor for the STARS program two times during my post-doc at Washington University. As a parent now, I hope that my children will be able to participate in such a wonderful program, and I hope that STARS will remain a strong program and will continue to influence the new generation of scientists and engineers.”

Dr. Christina M. Taylor (Collins), PhD, MIT

“Easiest way to describe it: Engelmann Institute gave high school kids another avenue to see that it is good to be a nerd, and shows that there are plenty of us around, all around the Metro area. Getting an early look into how academia works, and how a field in research can be

stimulating and enjoyable. Also shows that professors and staff are real people, and helps to show a prospective college student that they can use them as resources, too.”

James E. Dairaghi, MS in Electrical Engineering, Washington University

“Yes. I really enjoyed the early introduction to research and it fostered my current interests in academic medicine.”

Dr. Aneesh K. Tosh, MD, University of Missouri Columbia

“Yes, absolutely. Engelmann provided me with my first taste of real research, led me to choose the engineering sciences as my major and to have a lifelong fascination with fluid dynamical phenomena, and helped me with technical communication skills that I am using every day. The Engelmann experience was a world apart from regular high school science classes, in terms of the challenge, exposure, and opportunities for creativity that our lab placements provided.”

Dr. Youssef M. Marzouk, PhD in Mechanical Engineering, MIT

“Absolutely. I learned a ton about research and the lab environment in a way that was very formative and definitely helped my choice of major in college. Although I am in the financial world now, I still think that I may rejoin research science in the future and am still praying about my career choice.”

George A. Thampy, BS in Chemistry, Harvard

“The Engelmann Institute was instrumental in my career; it was my first experience with “real” science. For the first time, I saw how science included: collaboration; independent, out-of-the-box thinking; communication; and a deep desire to demand answers to tough questions. Getting REAL experiments to work required a lot of thought, time, and determination. I found out that success was about much more than just being “smart” and understanding complex ideas, as I learned in my high school science classes. While this may sound very trivial, it was this realization which more than prepared for my graduate work and my current research. Engelmann also introduced me to an enthusiastic and curious community filled with wonderfully-talented kids, college professors, and graduate students. As a teenager, my peers had a tremendously powerful influence and, outside of programs like Engelmann, my peers were beer-swilling thugs. My experience at programs like Engelmann was akin to Harry Potter’s experience at Hogwarts. I finally found myself surrounded with people who had similar abilities, strange quirks, and eccentric interests. After Engelmann, becoming a scientist was a tangible goal – not just fantasy.”

Dr. Benjamin M. Braker, PhD, University of Colorado at Boulder

“Yes, participating in the Engelmann Institute introduced me to the exciting world of academic science and the experience was crucial to me obtaining my subsequent laboratory position.”

Jacqueline L. Blankman (Holschen), PhD 2012, The Scripps Research Institute

“I would not say it was an absolutely critical experience, however, it was quite significant. That is to say, without Engelmann, I think I would have likely still become a scientist/engineer, and my vitae would largely read the same. However, Engelmann was very significant in that it was

the first time in my life that anyone seriously suggested to me that science/engineering could be a viable career or vocation. To be honest, the concept of a career or vocation hadn't been brought up much at that point in my life. (This is probably why most college freshmen have undeclared majors.) So it was a very timely conversation to have, to plant those thoughts in my head: that if I wanted, I could major in science/engineering, go to graduate school, and have a career being a real scientist or engineer. (In fact, it was much more than a verbal conversation. We were treated basically as adults, and given the choice to accept the burden of extra summer, academic work. Accepting such a burden is perhaps emblematic of a career/life in science.) So, in this respect, Engelmann did significantly focus my college path; i.e., I entered university as a student in the college of engineering right from the start and took my calculus and physics right away as a freshman. In addition, I always planned on going to graduate school, largely as a result of Engelmann Institute (and NSF Young Scholars Program which I participated in the following summer). That kind of longer-term perspective is quite valuable when you might otherwise be struggling mentally and emotionally to just finish your bachelor's degree. I do feel indebted to the Engelmann Institute, as it was a very valuable experience indeed. I was honored to speak at a later STARS class convocation/graduation and also testified on the program's behalf to a Missouri state legislature committee. If there is anything I can do on behalf of this fine program, please let me know."

John J. Borchardt, MS EE, University of Illinois/Urbana-Champaign

"Very. It made the idea of a PhD real and gave me the first opportunity to learn and appreciate research."

Donivan W. Foster, PhD in progress, UMSL

"Engelmann furthered my interest in the engineering discipline. As my career has progressed, I have pursued more of a leadership path, rather than technical discipline, but the fundamental problem-solving approach of engineering has always served me very well."

Evan J. Gagnepain, BS EE, U.S. Military Academy at West Point

"Indirectly, yes. My two summers in Engelmann were absolutely instrumental in the development of my ability to think critically. While I ultimately decided in college not to pursue a science career, I still apply the lessons I learned at Engelmann – objective analysis, problem solving, and teamwork – every day. It was a fantastic experience and I am glad to see it is still ongoing."

Christopher J. Gloriod, BA, Washington University

"Yes. I especially enjoyed the talks from professors. The math professor from UMSL was very interesting. I had no idea what a mathematician did before his talk. The program was a great introduction to what real scientists and mathematicians do."

Joe Guinness, PhD in Statistics, 2012, University of Chicago

"I can say with certainty that the STARS Program was instrumental in setting me on the career path I am on today. I included participation in this program on my undergraduate admission applications, describing in an essay how the experience cemented my enthusiasm to pursue a

career in science research. I also included a copy of the research paper I wrote. After acceptance to MIT, I had access to what the admission committee had written concerning my application. They had check off “research experience” as one of the factors that led to my acceptance. My undergraduate experience became the next stepping stone that furthered my commitment of physics research, one of many in the path that brought me to where I am today. The STARS program was an integral early “foothold” that I hope continues for many more generations of scientists.”

Cassandra R. Hunt, PhD in progress, University of Illinois/Urbana-Champaign

“I don’t work in a scientific field right now so Engelmann Institute didn’t have a direct impact on my career. Still, the experience influenced my decision to go to graduate school and scientific, evidence-based approaches have been very helpful in the work I do.”

Gniewko Lubecki, MA in Molecular Biology, MIT

“Yes! My participation in Engelmann sparked my interest in science and provided much of my early motivation to become a physician/scientist heavily involved in research. Educational programs such as this at the high school level are absolutely critical in engaging the interest of young scientists and fostering their development into researchers who will lead this country’s scientific and biomedical enterprises.”

Dr. David T. Miyamoto, PhD Cell and Development Biology, Harvard; MD, Harvard Med. School

“Yes, Engelmann helped solidify the strong interest that I had in high school in science and engineering. Specifically, the experience convinced me that I wanted to pursue these fields of study in college, and ultimately, in my career. It also gave me the confidence needed to tackle a difficult academic course of study during both engineering school and law school. Finally, it helped foster my scientific/technological curiosity that I continue to rely on today in learning the complex technologies at issue in my cases.”

Robert M. Jason, JD, University of Missouri-Columbia School of Law

“I don’t know if it was instrumental, but I remember having a great experience. It furthered my interest in science and further supported my inclination that I wanted to pursue a career in a scientific field in the future.”

Nathan Newbold, PharmD/UMKC/Pharmacy, JD/University of New Hampshire School of Law

“Engelmann/STARS definitely played a role in shaping my career path. It was first exposure to hands-on research and dissemination (in the form of a scientific conference-style presentation). Once I had that experience, I knew my career would involve research in some form. Based on my experience during Engelmann, I sought research opportunities during undergrad. Having had previous exposure helped make me an attractive candidate for faculty looking for student workers for their labs. Each step in my career thus far has built upon that summer in Dr. Taylor’s lab at UMSL as my earliest research foundation.”

Dr. Sharyn E. Parks, PhD, University of Pittsburgh Graduate School of Public Health

“While I’m not pursuing a directly science-related career, the program taught me the importance of research and how to do it well. It also ramped up my interest in scientific fields, particularly healthcare. Though I did not study it specifically, I was drawn to many of the social issues surrounding healthcare and other scientific topics, which influenced my undergraduate courses and research.”

Kathleen A. Pointer, BJ/BA, University of Missouri-Columbia

“Yes, stimulated an early interest in research, and the experience helped me gain admission to the Clinical Scientist Training Program at the University of Pittsburgh School of Medicine, and subsequently a year-long research fellowship sponsored by the Howard Hughes Medical Institute.”

Dr. Rebecca G. Pomerantz, MD, University of Pittsburgh School of Medicine

“Yes, it encouraged my passion for research that has continued and led to multiple peer-reviewed publications.”

Dr. Karthikeyan E. Ponnusamy, MD, Stanford University School of Medicine

“I personally feel that if it was not for Engelmann, I would not have gotten into medical school, thus Engelmann has been very instrumental in my career. Engelmann also provided an early understanding of the scientific process and some methods used. Furthermore, working with Dr. Lagunoff at SLU allowed me to have publications very early in my career, a step that was advantageous in securing training opportunities. I was able to work with Dr. Lagunoff during the summers in college, not only providing me employment during that time, but also further research opportunities.”

Dr. Craig A. Portell, MD, Saint Louis University School of Medicine

“Absolutely. The first Engelmann Institute allowed me to explore and define my interest in biological science. The second Engelmann Institute I attended allowed me to develop my understanding of bench research and established this as my career plan. Without these experiences, I probably would have pursued a career in medicine alone (not academic medicine nor medical research) which would not have been right for me. I derive great professional satisfaction and fulfillment from the research component of my career.”

Dr. Zohar Sachs, MD/PhD, Tufts Medical School

“Yes, it helped with the college application process for school in that I could demonstrate my experience and interest in research science. The program also exposed me to real laboratory research in a low-stress way and allowed me to be creative. I was expected to really do the research myself, not just be trained, and this allowed me to make an informed decision when deciding to go to graduate school. My only wish would be that I could have continued researching during the school year so I could have continued with the exciting research, especially as I was already trained on certain equipment. Thank you for the wonderful experience.”

Rohini P. Sankaran, BS, Stanford; PhD 2013, University of California/Berkeley

“The STARS program was the birthplace of my interest in research. My exposure to the lab as a high school teenager gave rise to a passion for academia. Fostering this passion throughout my undergraduate and medical studies, I am now on the path to pursue a career in academic medical oncology.”

Dr. Mina S. Sedrak, MD, Ruth Medical College, Rush University

“Absolutely. The STARS Program was instrumental in my education regarding scientific methods and presentation skills. Those skills still serve me in my career today.”

Dr. Nishant Shah, MD, Northwestern University Feinberg School of Medicine

“Very much so. The research skills I learned and cultivated in both years of Engelmann have served me well throughout my philosophy and biology studies at Mizzou, my law study at UMKC, and my career as a practicing attorney in St. Charles, Missouri.”

Cort M. Smith, JD, University of Missouri-Kansas City, School of Law

“The actual subject matter studied at the Engelmann Institute had no impact on my career accomplishments. However, the opportunity to be involved in a higher institute of education during high school significantly reinforced my desire to go to college and to pursue a technological degree. Not only that, but the people I met while attending were also very inspirational. Specifically, Dr. Kenneth Mares. I’m sure he doesn’t remember me as I wasn’t the most outgoing person, but I always remember the couple of trips he took us on in St. Louis and how he inspired me to become a successful, well-educated person.”

Michael K. Wilson, BS in Mechanical Engineering, University of Notre Dame

“Engelmann was my first exposure to significant levels of data analysis, which I’ve subsequently done a lot of, and has thus been valuable. Given my departure from the hard sciences, however, it would be a stretch to call it instrumental.”

Robert E. Zager, MBA 2013, Yale University

“Not as much as it would have been if I understood its significance when applying to college. As an experience, STARS was an excellent opportunity for me. In some ways, it supported kicking off a successful five years in chemistry in which I was involved in undergraduate and post-graduate research (including an NSF-REU fellow and DOE-national alb fellow). What I did not understand at the time, being both a first generation college student and from a high school that lacked strong college track mentoring, was that I could have at the very least mentioned STARS on a college application. I never did, because at the time I didn’t recognize it as something that colleges might look for (over SAT/ACT scores and GPA). Rather, I treated it simply as a very fun and inspirational summer camp experience. It was a relief from house-bound boredom to my 16-year-old self and a rare opportunity to meet like-minded individuals and feel very much in my element at an age and in a place (suburban St. Louis) where such opportunities simply did not exist. Looking back, it seems that much of the mentoring at STARS centered on students from schools with higher SES – the teachers from those schools better understood the significance of the program. So did the parents of those students, who were often college graduates and scientists themselves. Despite not knowing to use the experience

to the fullest in college applications, having been in STARS was no doubt helpful when applying for an NSF-REU. I was accepted to all of the chemistry graduate programs I applied to, but left chemistry after a semester of graduate school having realized non-laboratory-based careers would be more appropriate for me. I have always been very grateful to have been a part of the program – always energized and excited about new ideas, it was one of the best six weeks of my life.”

Thomas J. Fennewald, PhD 5/2012, Indiana University/Bloomington

“Yes, as it opened the door to research which was fundamental in providing work opportunities and even in opening doors during medical school applications and, now residency applications.”

Jessica M. Degnan, MD 5/2012, Saint Louis University School of Medicine

“The STARS program has definitely made quite an impact on me, giving me research experiences and allowing me to meet people that were very meaningful. In fact, it was so impressionable that I’ve decided to make it one of my 15 important activities for my medical school application, classifying it as my most impacting high school science and research experience! I was glad that you convinced me to join the STARS experience even though I was going to be two weeks late due to the chemistry olympiad summer camp.”

Andrew Liu, MIT, 2012