

**Science Research & Engineering Program (SREP)
Facts, Figures & Alumnae Comments
from the First 10 Years**

During the first 10 years of the SREP, from 1998 to 2008, over 300 students conducted over 400 major research projects in the SREP (many conducted more than one). The topics have been:

Medicine.....	49%
Engineering.....	25%
Physical Science & Math.....	15%
Environmental & Natural Science.....	6%
Other.....	5%

Listed below are the locations where all of these projects were done:

Case Western Reserve University, CWRU Medical School, & University Hospitals.....	40%
Cleveland Clinic.....	25%
NASA Glenn Research Center.....	10%
Cleveland Museum of Natural History.....	5%
Other*.....	20%

(*JCU, CSU, KSU, MetroHealth, private medical clinics, and more)

From 1998 to 2008, the research conducted by SREP students garnered over 110 Siemens Westinghouse and Intel finalist or semifinalist awards, 3 United States Patents, over 160 professional publications, 7 USA Today All-American Academic Team Awards, 2 inductions into the American Young Inventors' Hall of Fame, and more

Of the 300 students who were counted as members of the SREP's first 10 years when we did an SREP alumnae survey in the summer of 2008, we were able to contact 200 SREP alumnae. Of the respondents:

Undergrad data: 58% of the respondents went into STEM majors (science, technology, engineering, medicine or math)

Graduate School Data: 40% of respondents went to graduate or medical school in STEM:

- 14% of respondents went to medical school
- 3% of respondents went to veterinary school
- 1% of respondents in an MD/PhD program
- 7% of respondents went to grad school in bio related field
- 15% went to grad school in engineering or physical science (chem., physics, etc)
- 6% went to law school

STEM Careers (but very few are out of college and grad school)

- 4% of respondents are in medical or biology related careers
- 4% of respondents are in engineering or physical science careers

***You don't have to take our word for it that the SREP profoundly affects the lives of young women.
Just read the comments below to learn what some of our alumnae have to say!***

Catherine McCarthy (HB'07, **Brown, neuroscience**): "The SREP absolutely had an effect on my life. (It) gave me a background in research that is very uncommon in high school graduates. Participating in competitions such as the Siemens radically improved my public speaking and my ability to write technical papers, and I have several publications and a lot of experience that will help me get research jobs in the future." (On HB's PEACE Team, Catherine conducted space flight experiments at NASA Glenn through the SREP)

Maya Wolpert – (HB’06, **Stanford, human biology**): “My SREP experience affected me more than most other experiences in my life. The maturity and professionalism I developed through my research at Cleveland Clinic have proven very useful to me as I have applied for, and been successfully receiving, various internships, jobs, and scholarships. My participation in various competitions through my SREP research taught me the values of public speaking, interacting with professionals, and being a good advocate for myself and my work. I have no doubt that my confidence, poise, and motivation to succeed were in no small part due to my experiences in HB’s SREP.” (At HB, Maya conducted research on autism at the Cleveland Clinic through the SREP)

Jane Chisholm (HB’05, **Johns Hopkins, chemical engineering**): “My SREP experience had a big effect on me. I wasn’t really interested in science until high school and, although I didn’t start until my junior year, working in a chemical engineering lab in high school further influenced my decision to major in chemical engineering in college. I also learned from the experience that I did not want to only do lab work for the rest of my life but that there are many outlets for chemical engineers. In addition, it has been a good conversation topic during interviews. Now I am applying to get my masters in chemical engineering and then planning on working in industry. I would definitely not be where I am today if I had not been a part of the SREP at HB.” (Jane worked in a fuel cell lab in the Chemical Engineering department at Case through the SREP.)

Emily Marcenkevicius (HB’02; **Pomona’06, BA in Molecular Biology; Weill Cornell Graduate School of Biomedical Sciences**): The SREP experience was my first introduction to the world of scientific research (as there are no scientists in my family) and my professional life has since been dominated by the pursuit of a career in scientific research.” (Emily conducted BioMEMS research (Biological Microelectromechanical Systems), aka, developing micro and nano systems for use inside the human body, at the Cleveland Clinic through the SREP)

Amy Saltzman (HB’01; **Princeton’05, AB Anthropology, Pine Award; Harvard MD/PhD (anthropology) program**): The SREP affected my life. When I got to college, I figured I could find a way to pull together the resources and support to do just about anything. SREP made me think more broadly than the resources that were immediately apparent to me and search to find opportunities/possibilities that helped me travel to Fiji to do original ethnographic research and think outside the box about how to reform university policy.” (In the SREP, Amy worked in a genetics lab at Case that addresses issues related to Spinal Muscular Atrophy.)

Caitlin Fogarty (HB’03; **Univ of Notre Dame, BS Chemical Engineering 2007; United States Patent Office Patent Examiner**): “My SREP experience had a big effect on my life after HB. The exposure to science outside the classroom through my SREP experience helped me realize my love for science and aided in the decision of my college major of chemical engineering. The opportunity I had to do research through the SREP also helped me earn an undergraduate research position at Notre Dame. The research and analytical skills I began to develop through my SREP experience and continued to build upon throughout college have been an asset in my current job.” (In the SREP, Caitlin conducted mechanical engineering research at Case School of Engineering, and also conducted theoretical astrophysics research in the Case Physics Department.)

Joanne Wang (HB’07, **Brown 8-year BA/MD program**): “My SREP experience definitely had an effect on my life after HB. I really give this program credit for being the beginning stepping stones for my future career in medicine. I am in the BA/MD program at Brown University, and it is surprising to me how little research the undergraduates at Brown in this program conduct while in the undergraduate portion of the program. I think that HB’s SREP has well prepared me for the future research positions as well as other positions in the medical field.” (In the SREP, Joanne designed and made Microelectrochemical Biosensors to detect live and heart disease in the Case Chemical Engineering lab of Dr.C.C Liu)

Ashley Drieir (HB’07; **Yale, Biomedical Engineering**): “The SREP prepared me for advanced science and math courses and gave me research experience early on which gave me an advantage as I entered college.” (In the SREP, Ashley conducted math based genetic bioinformatics research in the Hematology/Oncology Department at the Cleveland Clinic.)

Claire Pavlak (HB’08, **Emery, Emory Scholars Award**): “SREP helped me understand the professional researcher’s life at such a young age that I was able to determine my future plans such as college and major choice with a great deal of concrete knowledge. I also understand the importance of perseverance, accountability, and accuracy to a greater extent now.” (In the SREP, Claire conducted fuel cell research in the Chemical Engineering Department at Case.)