



To: Whom it May Concern

Re: Student Testimonials about the impact of the Pennsylvania Governor's School for the Sciences

Since Governor Rendell announced cutting all funding to The Pennsylvania Governor's Schools of Excellence (PGSE) in February of this year, the alumni of PGSE have been organizing support to restore this unparalleled educational experience for gifted students. Over 11,000 signatures were collected on a petition to support PGSE and were presented with over 2,500 signed letters to the Governor's Office on March 10, 2009. The Governor was clear in stating his opinion that Pennsylvania could not afford to fund this outstanding program in light of the current budget situation, despite proposing new programs and new funding obligations such as a state wide graduation test, with an estimated cost more than 10-fold the PGSE annual budget. The alumni of the Pennsylvania Governor's School for the Sciences (PGSS) are in disbelief that the state cannot even find \$350,000 to fund a single governor's school. In response, they have submitted testimonials to justify that cost to the Pennsylvania taxpayers and the state government, to show them the return on investment for developing the next generation of scientists, engineers and doctors, and emphasize why we must continue this investment. This document contains the achievements and testimonials from over 100 alumni of PGSS.

Since its inception in 1982, PGSS has graduated 2,379 students. The PGSS is an ungraded summer enrichment program which is in session for five weeks, seven days per week. All students are required to live on the CMU campus in college dormitories. It is an intense program in which the students take lecture courses in biology, chemistry, physics, mathematics and computer science. In addition, they are expected to participate in their choice of one laboratory course in either biology, chemistry, physics, or computer science, and to engage in team research projects in one of the above five major discipline areas. The students also have the opportunity to take elective courses which may vary from year to year, to participate in several field trips, and to be further enriched by a distinguished guest lecture series and special seminars on leadership and college selection. The research efforts of PGSS students are packaged every year into a journal, many of which are available to the public at <http://www.pgss.mcs.cmu.edu/home/Publications.html> . The body of work produced by the students under the supervision of research faculty is impressive and represents real contributions to the scientific body of knowledge.

This packet contains the personal stories of over 100 alumni of PGSS. This cross section of PGSS alumni include Ph.D.'s, M.D.'s, J.D.'s entrepreneurs, patent holders,



published researchers, Rhodes Scholars, undergraduate students, and even high school students from the most recent class. They are leaders, they are teachers, they are parents, and they all have a deep love and appreciation for science that was bestowed on them during 5 weeks of one summer in high school. A few chose non-science careers but still felt strongly enough about the experience to know that PGSS is worth preserving and their testimonials are included. PGSS takes students with an interest in science and stimulates their ambition in a way that few high schools can. The rigor of PGSS is a pivotal event in student development, building confidence in one's abilities to flourish in a demanding academic atmosphere with likeminded individuals for support.

In a time when America is losing its dominance in science and engineering, and the educational system continues to decline, it is unfathomable that politicians could sacrifice the future minds of the country by cutting funding to the most elite gifted education program the state of Pennsylvania offers. At PGSS alone there are over 500 applications annually for 100 spots. Students are chosen on merit with at least one student chosen from each of the 29 intermediate units across Pennsylvania, to ensure a geographic diversity, and account for differences in regional educational resources. By having PGSS a fully state funded program, students can be selected on their intellectual merits and accomplishments, with no regard to economic background. The program is equal opportunity for all Pennsylvania students showing an aptitude in math or science. It would be awful to send the message to the state's most gifted youth that their academic achievements are not valued by their state. We urge you to reconsider and do what you can to help restore funding to the Pennsylvania Governor's Schools of Excellence as soon as possible.

Sincerely,

Benjamin R. Campbell, Ph.D.
PGSS class of 1997
PGSS TA/Counselor 2000-2003
PGSS Faculty 2005-Present

1029 Rural Ridge Drive
Cheswick, PA 15024
412-877-0072
brc138@psu.edu

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Alycia	Weinberger	1985
College/degree	Employer / Job Title	
University of Pennsylvania, BA in physics; California Institute of Technology, PhD in physics	Department of Terrestrial Magnetism of the Carnegie Institution of Washington, Member of the Scientific Staff	

Accomplishments

Vainu Bappu Gold Medal of Astronomical Society of India for 2000 (awarded 2002) UCLA Chancellor's Award for Postdoctoral Research (2001) Annie Jump Cannon Award of American Association of University Women and American Astronomical Society (2000) Phi Beta Kappa (1991) NASA Origins of Solar Systems Research Grant, PI, 2003-2006 Hubble Space Telescope Guest Observer, PI, Cycles 9,13, 14, and 15 Spitzer Space Telescope Guest Observer, PI, Cycles 1, 2, and 3 Co-Investigator, Carnegie NASA Astrobiology Institute Node (2004-present)

Author or co-author of more than 40 refereed scientific publications in the field of astrophysics

On the Binary Nature of Dust-encircled BD +20 307, Weinberger, A. J. 2008, ApJL, 679, L41

A Search for Warm Circumstellar Disks in the TW Hya Association, Weinberger, A. J., Becklin, E. E., Zuckerman, B. & Song, I. 2004, AJ, 127, 2246

The First Spatially Resolved Mid-Infrared Spectroscopy of Beta Pictoris. A. J. Weinberger, E. E. Becklin, and B. Zuckerman, 2003, ApJL, 584, L33

Infrared Views of the TW Hydra Disk, A. J. Weinberger, E. E. Becklin, G. Schneider, E. I. Chiang, P. J. Lowrance, M. Silverstone, B. Zuckerman, D. C. Hines, and B. A. Smith, 2002, ApJ, 566, 409

Stellar Companions and the Age of HD 141569 and its Circumstellar Disk, Weinberger, A. J., Rich, R. M., Becklin, E. E., Zuckerman, B. & Matthews, K. 2000, ApJ, 544, 937

The Circumstellar Disk of HD 141569 Imaged with NICMOS, A.J. Weinberger, E.E. Becklin, G. Schneider, B.A. Smith, P.J. Lowrance, M.D. Silverstone, B. Zuckerman, and R.J. Terrile, 1999, ApJL, 535, 53

Testimonial

That summer was the first time I met students as passionate and curious about science as I was. I left PGSS enthusiastic about learning more, loving physics, and eager to pursue a career in science.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Paul	Ricker	1985
College/degree	Employer / Job Title	
Penn State, B.S. in Physics with Distinction and with Honors in Astronomy, Mathematics minor, 1991 University of Chicago, M.S. in Physics, 1993 University of Chicago, Ph.D. in Physics, 1996	University of Illinois at Urbana-Champaign Assistant Professor of Astronomy	

Accomplishments

Complete vita at <http://www.astro.uiuc.edu/~pmricker/vita.pdf>

-Presidential Early Career Award for Scientists and Engineers (PECASE). 2002

-U. S. Dept. of Energy Defense Programs Early Career Award. 2002

-Gordon Bell Prize. 2000

-NASA Graduate Student Researchers Program (GSRP) Fellowship, High Performance Computing and Communications Focus. 1994–1996

Ricker, P. M. “A Direct Multigrid Poisson Solver for Oct-Tree Adaptive Meshes.” 2008, ApJS, 176, 293

Ricker, P. M. and Taam, R. E. “The Interaction of Stellar Objects within a Common Envelope.” 2008, ApJ, 672, L41

Ricker, P. M. and Sarazin, C. L. “Off-Axis Cluster Mergers: Effects of a Strongly Peaked Dark Matter Profile.” 2001, ApJ, 561, 621

Ricker, P. M., Dodelson, S., and Lamb, D. Q. “COSMOS: A Hybrid N-Body/Hydrodynamics Code for Cosmological Problems.” 2000, ApJ, 536, 122

Ricker, P. M. “Off-Center Collisions between Clusters of Galaxies.” 1998, ApJ, 496, 670

Ricker, P. M. and Meszaros, P. “Starburst and Reflection-Dominated AGN Contributions to the Cosmic X-Ray Background.” 1993, ApJ, 418, 49

Testimonial

I attended PGSS in 1985 after completing my sophomore year at Peters Township High School in McMurray, PA. Before attending PGSS, I generally did well in my science and math classes and was considering a career as a computer programmer. PGSS exposed me to advanced classes in special relativity, nuclear physics, discrete mathematics, artificial intelligence, organic chemistry, and molecular biology. It was the first time that I had been placed in such a challenging environment together with students like me from across the state. My coursework, my interactions with peers and professors, and my research project ignited a real desire within me to seek more such challenges. It also opened my eyes for the first time to the fact that I could realistically consider a career as a scientist and that I could succeed at such a career. In the fall after PGSS, my family moved to Mt. Lebanon, PA, and with my new confidence and enthusiasm I pushed hard to get into advanced placement classes in every subject I could. I graduated from Mt. Lebanon in 1987 with scores of 5 on the AP exams in calculus, physics, computer science, and Spanish, and a 4 on the English exam. I credit my PGSS experience with giving me the drive to perform to the best of my ability in all of these areas. That drive has sustained me through a successful career as a research astrophysicist specializing in high-performance computing.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Michael	Nystrom	1985
College/degree	Employer / Job Title	
Carnegie Mellon - B.S., Northwestern - Ph.D.	LensVector - Director, Process Development	

Accomplishments

18 issued patents including:

- 7,453,139 Compliant terminal mountings with vented spaces and methods
- 7,449,779 Wire bonded wafer level cavity package
- 7,315,115 Light-emitting and electron-emitting devices having getter regions
- 7,196,536 Method and apparatus for non-contact electrical probe
- 7,094,304 Method for selective area stamping of optical elements on a substrate
- 7,090,554 Fabrication of flat-panel display having spacer with rough face for inhibiting secondary electron escape
- 6,958,446 Compliant and hermetic solder seal
- 6,861,798 Tailored spacer wall coatings for reduced secondary electron emission
- 6,734,608 Constitution and fabrication of flat-panel display and porous-faced structure suitable for partial of full use in spacer of flat-panel display
- 6,732,905 Vented cavity, hermetic solder seal
- 6,691,404 Fabricating of a flat-panel displace using porous spacer
- 6,617,772 Flat-panel display having spacer with rough face for inhibiting secondary electron escape
- 6,560,383 High efficiency insulation for improving thermal efficiency of bubble optical switch
- 6,477,222 Getter for atmospheric gases in optical switch working fluid

Testimonial

Gave me a preview of the challenges of college. Helped me mentally prepare for the step up in difficulty and work load of a university such as Carnegie Mellon.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kevin	Frick	1985
College/degree	Employer / Job Title	
PSU, BS, Health Policy and Administration 1991 Univeristy of Michigan, MA Economics 1994 Univeristy of Michigan, PhD Economics and Health Services Research 1996	Associate Professor, Johns Hopkins BLoomberg School of Public Health	

Accomplishments

Look up Frick KD on PubMed, over 100 peer reviewed publicaitons:

Substitutive Hospital at Home for older persons: effects on costs. Frick KD, Burton LC, Clark R, Mader SI, Naughton WB, Burl JB, Greenough WB, Steinwachs DM, Leff B. Am J Manag Care. 2009 Jan;15(1):49-56.

Financial and quality-of-life burden of dysfunctional uterine bleeding among women agreeing to obtain surgical treatment. Frick KD, Clark MA, Steinwachs DM, Langenberg P, Stovall D, Munro MG, Dickersin K; STOP-DUB Research Group. Womens Health Issues. 2009 Jan-Feb;19(1):70-8.

Epidemiological economics. Frick KD. Ophthalmic Epidemiol. 2008 Mar-Apr;15(2):73-5.

Economic welfare implications of differently structured vision care markets. Frick KD, Walker DG. Br J Ophthalmol. 2008 Mar;92(3):301-2.

Gender bias in economic evaluation methods: quality of life and family role effects. Frick KD, Jones AS. Womens Health Issues. 2008 Jan-Feb;18(1):4-6.

Editorial: the paradox of economic tools promoting equitable access to self-sustainable services for the poorest--increased inequality. Frick KD, Baruwa EM. Trop Med Int Health. 2007 Jul;12(7):799-801.

Direct costs of blindness experienced by patients enrolled in managed care. Frick KD, Walt JG, Chiang TH, Doyle JJ, Stern LS, Katz LM, Dolgitsler M, Hendlish SK. Ophthalmology. 2008 Jan;115(1):11-7. Epub 2007 May 1.

Economic impact of visual impairment and blindness in the United States. Frick KD, Gower EW, Kempen JH, Wolff JL. Arch Ophthalmol. 2007 Apr;125(4):544-50.

A framework for comparing data collection methods for measuring costs and other outcomes that are aggregated over time. Frick KD

Testimonial

While I did not end up in one of the sciences featured in the PGSS 1985 curriculum, the experience did two things for me. First, it made me aware that there were a lot of other people out there who were just as scientifically curious as I was. That was not obvious from my high school experience. Second, it opened up insight into geneal principles of scientific inquiry and logic that I have continued to use in my career since then. Plus, it taught me that people interested in science can be fun, understandable, down to earth people and I try to reflect that in my own course development and teaching now.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Erik	Larsen	1985
College/degree	Employer / Job Title	
Univeristy of Virginia 1990 BS Aerospace Engineering University of Pittsburgh 2002 MS Telecommunications University of Southern California 2008 MS Astronautical Engineering	Bombardier, Engineering Specialist, Communications Accomplishments	

Accomplishments

1990 3rd Place AIAA group design project
2007 Transit Innovation Award (group award)

Testimonial

PGSS helped realize that there are a lot of really talented, intelligent people out there. It gave me a taste of several different disciplines and helped me to figure out what I wanted to pursue in college.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Michael	Pirrello	1986
College/degree	Employer / Job Title	
Penn State, B.S. Chem 1991	Cree, Inc., EH&S Engineer (Emergency Response Team Coordinator) Former Team Leader/Team Coordinator (Volunteer) of North Carolina Hazardous Materials Regional Response Team #4 (April 1997 - August 2004)	

Accomplishments

Selected Presentations/Publications:

25th Annual College and University Hazardous Waste Conference, Ithaca, NY "The ERG and the Standard of Care for emergency response" Aug. 2007
 Central Carolina Occupational Safety & Health School "Chemical Use: A Considered Approach" Mar. 2006
 Carolina Fire Rescue EMS Journal, Fall 2003 Issue "HazMat References: Are they ready? Are you ready?" Oct. 2003
 College and University Mail Services Assoc., Spring 2003 Conf., Asheville, NC "Receipt and Handling of Hazardous Materials" Apr. 2003
 NC Health Physics Society, Spring 1999 Conference, Wrightsville Beach, NC "Lead Pigs to Bricks - Do-it-Yourself Shielding" Mar. 1999
 NorthEast Winter (NEW) Safety '98, Princeton, NJ "Long-Term Planning to Accomplish Environmental Safety and Health Objectives" Jan. 1998
 14th Annual College and University Hazardous Waste Conference, Salt Lake City, UT "Labpacking I - Taking the Plunge" Aug. 1996

Certifications:

Certified Hazardous Materials Manager (#8263)
 NC Firefighter II, NC Fire Instructor III
 NC Hazardous Materials III (Specialist)

Testimonial

PGSS impacted my life and career by providing me with true peers. It is impossible for me to overstate the value of those 5 weeks.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Gary	Searer	1987 PGSS, 1986 PGSAS
College/degree		Employer / Job Title
University of Delaware, Bachelors of Civil Engineering, Cornell, Master of Science, Civil Engineering		Wiss, Janney, Elstner Associates, Inc. Current Position: Unit Manager and Associate Principal

Accomplishments

DuPont Scholarship (University of Delaware)
National Science Foundation Fellowship (Cornell University)

Published over 40 papers on earthquake and structural engineering including:

Searer G, Freeman S, Paret T (2007) Does it make sense from engineering and economic perspectives to design for a 2475-year earthquake? Special Paper 425: Continental Intraplate Earthquakes: Science, Hazard, and Policy Issues: Vol. 425, No. 0 pp. 353–361

Design drift requirements for long-period structures GR Searer, SA Freeman - 213th world conference on earthquake engineering, 2004

Does it make sense from engineering and economic perspectives to design for a 2475-year earthquake?
GR Searer, SA Freeman, TF Paret - SPECIAL PAPERS-GEOLOGICAL SOCIETY OF AMERICA, 2007

Impact of the Reliability/Redundancy Factor on Design GR Searer, SA Freeman - Seventh US National Conference on Earthquake Engineering, 2002

Testimonial

The School for the Agricultural Sciences introduced me to nuclear chemistry, economics, and the fundamentals of scientific research. The School for the Sciences introduced me to advanced physics, mathematics, chemistry, and computer science. During one memorable lecture, Rear Admiral Grace Hopper talked to us about her historic work on the first computers (including finding a moth in a computer – from whence the term “debugging” comes from, and describing in a comprehensible manner just how far light can travel in a nanosecond).

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jeffrey	Temple	1990 TA: 1993, 1994, 1996-1998 Faculty/TA: 1999
College/degree	Employer / Job Title	
Massachusetts Institute of Technology, B.S., Physics University of Arizona, Ph. D., Physics	Physics postdoctoral researcher, University of Maryland, working on the CMS experiment at the Large Hadron Collider at CERN	

Accomplishments

Teach For America Corps Member, Mississippi Delta, 1995-1999

Testimonial

My summer as a student at PGSS was my first experience with experimental physics, and that field is now my chosen career path. My summers working at PGSS gave me my first taste of teaching science to high school students, and I went on to become a high school science teacher with Teach For America when I graduated college. When I chose to return to physics research, several PGSS faculty members wrote recommendation letters that helped get me accepted into graduate school. To say that I would not be where I am today without PGSS is a profound understatement. It is the single most exceptional and enriching program in science education that I've ever encountered, and I fervently hope it is given the opportunity to continue.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kenneth	Unice	1991
College/degree		Employer / Job Title
B.S. Environmental Engineering, Cornell University M.S. Chemical and Environmental Engineering, University of Ariona		Senior Health Scientist, ChemRisk www.chemrisk.com

Accomplishments

Co-authored or authored approximately 8 peer-reviewed publications in risk assessment or environmental engineering including:

A Methodology for Estimating Human Exposure to Perfluorooctanoic Acid (PFOA): A Retrospective Exposure Assessment of a Community (1951-2003) Paustenbach, Dennis; Panko, Julie; Scott, Paul; Unice, Kenneth. Journal of Toxicology and Environmental Health Part A, Volume 70, Number 1, December 2007 , pp. 28-57(30)

Airborne Concentrations of Asbestos Onboard Maritime Shipping Vessels (1978–1992) Dana M. Murbach, Amy K. Madl, Ken M. Unice, Jeffrey S. Knutsen, Pamela S. Chapman, Jay L. Brown and Dennis J. Paustenbach Annals of Occupational Hygiene 2008 52(4):267-279

Risk of Gastrointestinal Disease Associated with Exposure to Pathogens in the Sediments of the Lower Passaic River. E. P. Donovan, D. F. Staskal, K. M. Unice, J. D. Roberts, L. C. Haws, B. L. Finley, and M. A. Harris Applied and Environmental Microbiology, February 2008, p. 1004-1018, Vol. 74, No. 4

Testimonial

- Instrumental in decision to move to Pittsburgh, PA and pursue a career in human health exposure and risk assessment
- Motivated me to apply to Cornell University and subsequently graduate with honors in 3 1/2 years
- Inspired me to pursue work as a computer programmer on the first multi-media textbook on fluid mechanics while a student at Cornell
- Encouraged me to pursue graduate studies in engineering

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Elizabeth	Johnson	1991
College/degree	Employer / Job Title	
Alfred University B.S. Chemistry University of Virginia, M.S. Chemistry University of Wisconsin, Madison M.S. Life Sciences Communication		

Accomplishments

Testimonial

I think Gov. School is a wonderful program and it saddens me greatly that it is being discontinued.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Hilary	Justh	1992
College/degree	Employer / Job Title	
The Pennsylvania State University B.S. with honors in Earth Sciences, May 1997, M.S. in Geosciences, December 2003, The University of Colorado at Boulder M.S. in Astrophysical, Planetary and Atmospheric Sciences, May 2000	The University of Colorado at Boulder M.S. in Astrophysical, Planetary and Atmospheric Sciences, May 2000	

Accomplishments

Member of the Flight Operations Support Team for Space Shuttle launches (at MSFC) Member of Mars Science Laboratory (MSL) Council of Atmospheres Mars Reconnaissance Orbiter (MRO) aerobraking support participated in the MRO Atmospheric Advisory Group (AAG) Received NASA Group Achievement Awards for work on the Mars Aerocapture System Study and MRO aerobraking

Testimonial

PGSS was a highlight of my high school career and I have many wonderful memories of my time spent at Carnegie Mellon University. To be surrounded by other students, faculty and counselors that all were as excited about science as I was a very unique experience for me. Through PGSS, I was able to participate in physics research, take classes that were above and beyond the level that was taught in my high school, and become friends with many like-minded students. PGSS gave me the first taste of what it would be like to pursue a degree in the sciences and provided the encouragement to continue to work through my senior year at Lock Haven High School, graduate, and attend the University Scholars Program at Penn State University. Since attending PGSS, I have earned a bachelors degree with honors in Earth Sciences from Penn State University and obtained a masters degree in Astrophysical, Planetary and Atmospheric Sciences from the University of Colorado in Boulder and a masters degree in Geosciences from the Penn State University. I am currently a scientist with NASA working at the Marshall Space Flight Center in Huntsville, AL. I truly believe that the PGSS program was one of the many vital steps that I took as a high school and college student that led to the position that I have today.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Joanna	Zarach	1993
College/degree	Employer / Job Title	
BS in Biology; BS in Brain and Cognitive Science - MIT 1998 PhD in Neuroscience - Johns Hopkins University 2004	Obama For America - Budget and Financial Strategy Previous employer - McKinsey & Co - Engagement Manager	

Accomplishments

Testimonial

PGSS was a pivotal experience of my life - it was the first time I was exposed to the broader disciplines of science beyond what my high school and local college could offer to me. This opportunity combined with meeting many of the brightest students in PA contributed tremendously to my drive and ambition. For the first time, I felt I was challenged to study topics that were not rudimentary and do it amongst people my own age who were also exceptional. Even though the friendships may be dormant, the bond of the experience and our common interest in science and engineering will always remain.

The Governor's School was the only program that was truly merit based and open to student of all socio-economic classes. This is now rare - as I see more and more for-profit programs that exclude those with potential and without means, creating a larger chiasm in our socio-economic patchwork. Being a first generation immigrant, such a program allowed me to experience the world beyond the small town I was living in at the time. After Governor's school I had all the confidence in the world to apply to many top schools and being accepted to them - I chose to go to MIT which continued to challenge me in the areas of science and engineering. I credit my attendance at PGSS as one of the strong points in my application. In college I realized that many of my fellow PGSS students also went on to top schools - and I felt like I was a part of a bigger community that now has expanded it's reach beyond those few weeks in the summer at Carnegie Mellon.

It would be a disasterous decision to eliminate this program - I think every effort should be made to continue this program - whether funded with State money or a non-profit fundraising effort. Merit programs are shrinking fast and being replaced with programs where influence and connctions are the criteria for admission. We need to encourage bright and brilliant minds to pursue science or our nation will quickly fall behind in the race to better our lives and save our planet.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Erin	Childs	1993
College/degree		Employer / Job Title
Carnegie Mellon, BS in Biology, specialization in Genetics, 1998 University of Pittsburgh, MS in Molecular Genetics and Biochemistry, 2003		University of Pittsburgh, Lab manager for Dr. Sarah Gaffen, Dept of Medicine (and ex-PGSS TA)

Accomplishments

Publications:

Zang Y, Velosa-Ramirez C, Thomas SM, Childs EE, Johnson DE, Grandis JR, Lai SY. Regulation of HIF-1 by the STAT3 Decoy in Head and Neck Squamous Cell Carcinoma. Manuscript in preparation.

Childs EE, Wilkinson EC, Freilino ML, Seethala RR, Grandis JR and Lai SY. HIF-1 promotes HNSCC invasion and metastasis through regulation of epithelial-mesenchymal transition. Manuscript in preparation.

Lai SY, Koppikar P, Thomas SM, Childs EE, Egloff AM, Seethala RR, Branstetter BF, Gooding WE, Muthukrishnan A, Mountz JM, Lui VW, Shin DM, Agarwala SS, Johnson R, Couture LA, Myers EN, Johnson JT, Mills G, Argiris A, Grandis JR. Intratumoral Epidermal Growth Factor Receptor Antisense DNA Therapy in Head and Neck Cancer: First Human Application and Potential Antitumor Mechanisms. J Clin Oncol. 2009 Feb 9. [Epub ahead of print]

Lui VW, Boehm AL, Koppikar P, Leeman RJ, Johnson D, Ogagan M, Childs E, Freilino M, Grandis JR. Antiproliferative mechanisms of a transcription factor decoy targeting signal transducer and activator of transcription (STAT) 3: the role of STAT1. Mol Pharmacol 2007 May; 71(5):1435-43.

Lai SY, Childs EE, Xi S, Coppelli FM, Gooding WE, Wells A, Ferris RL, and Grandis JR. Erythropoietin-Mediated Activation of JAK-STAT Signaling Contributes to Cellular Invasion in Head and Neck Squamous Cell Carcinoma. Oncogene 2005; Jun 23, 24(27):4442-9.

Testimonial

PGSS had a drastic effect on my life at the time that I attended.

I'm from a small-ish town that provided very little support for budding scientists... especially not young women. I could take all of the book-learning classes at the high school, but I only ever had two in which I learned about molecular biology... and there were zero opportunities for any hands-on learning. And, to be blunt, my high school classes weren't really all that challenging. Being at Governor's School gave me the chance to learn so much more about the subject I thought I would enjoy and to determine if the interest I had gained from one chapter in 9th grade biology was actually something I might want to dedicate my life to. And it pushed me to really work in classes and to learn how to truly work with my peers on a project, instead of lead them through it.

But, really, for me... PGSS was much more impactful on a social level. I had attended the John's Hopkins CTY program as a 7th and 8th grader, but had not been back due to money constraints. Having an opportunity to spend 5 weeks with other bright teens... an opportunity to not be the 'walking encyclopedia' in the room... it was both enjoyable and humbling. I was, by far, not the brightest one there. And, honestly, that did a wonderful job of preparing me for college at a competitive and high-level school (CMU). I've known many freshmen at CMU who came in thinking they were the smartest person there, because they've never been anything but that. It's a hard thing to learn that you're not. Being able to do that at PGSS, in a nurturing environment where you have dozens of other teens who want to help you succeed, was much less destructive.

In the long run, I'm not sure how much impact PGSS had on my career. It helped me decide that my choice of molecular biology was likely to be the right choice for me. But I'm not one of the alumni who have gone on to do amazing things. However, I am very proud to know that I once spent a summer working with those who have (or will).

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
George	Matcuk	1993 TA: 1996-1998; resident life director 1999
College/degree	Employer / Job Title	
Carnegie Mellon BS Biology and BS Chemistry, Stanford University MD Carnegie Mellon BS Biology and BS Chemistry	University of Southern California currently Fellow in Musculoskeletal Radiology, Assistant Professor of Clinical Radiology as of May 2009	

Accomplishments

07/07-07/08 Resident of the Year, USC Department of Radiology
06/08 Fourth Year Winner LAC/USC Resident Case-of-the-Week Competition
06/06 First Place LAC/USC Resident Case-of-the-Week Competition
06/05 Third Place LAC/USC Resident Case-of-the-Week Competition
9/00-3/01 Genentech Medical Scholars Research Fellowship. Second fellowship awarded for continuation and expansion of my research in the laboratory of Tom Quertermous, MD.
3/00-9/00 Genentech Medical Scholars Research Fellowship. Awarded for my research creating an angiogenesis cDNA library in the lab of Tom Quertermous, MD.

Testimonial

Dear Governor Rendell,

I recently heard that you are considering cutting funding for the Pennsylvania Governor's Schools of Excellence due to the general economic downturn and the state's budget crisis. I plead that you reconsider.

The Governor's Schools of Excellence are a small investment that pays dividends many times over, taking Pennsylvania's best and brightest students in a number of fields and giving them opportunities to network with other like-minded students throughout the state and develop their potential in a way like none other available. All while exposing these same students to the best institutions of higher learning the state has to offer.

I was a student at the Pennsylvania Governor's School for the Sciences (PGSS) in 1993, returned as a counselor in 1996, 1997, 1998, and as the residence life coordinator in 1999. My experiences over those summers had a profound impact on guiding my educational career and shaping me as a person. Although I always had confidence in myself, I never felt a sense of belonging or a shared sense of passion for learning until I experienced PGSS as a student in 1993. The friendships I made there and excellent teaching and mentoring I received was a large factor in my decision to matriculate at Carnegie Mellon University in 1994 (foregoing an appointment to the Naval Academy and admission to MIT among others).

My experience also solidified my interest in research and pursuing a career in medicine. I graduated at the top of my class from CMU in 1998, attending Stanford for medical school, and am now set to join the University of Southern California as a musculoskeletal radiology faculty member. My experiences at PGSS laid the foundation for my success.

I know that these are difficult times and that many compromises and hard decisions must be made. However, I urge you to continue to fund the Pennsylvania Governor's Schools of Excellence, particularly the Pennsylvania Governor's School for the Sciences. I can imagine few programs the state funds that could have such a large impact for a relatively modest cost. Many former graduates of these programs are now leaders in their respective fields. Their work builds a stronger, better Pennsylvania and spreads nationally the prestige of Pennsylvania's institutions of higher education. Please don't rob future generations of these opportunities and deprive Pennsylvania of these future leaders. These skills and opportunities are needed now more than ever. There is no more sound investment you could make.

Thank you for your time and consideration.

Sincerely,

George R. Matcuk Jr., MD

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Casey	Harris	1994
College/degree	Employer / Job Title	
BA, chemistry, minor in mathematics, BYU 2002 JD, law, Lewis & Clark Law School, 2006	Young Living Essential Oils, Lehi, UT; Associate Corporate Counsel	

Accomplishments

National Merit Scholar, US Patent Attorney

Testimonial

The love I had for the sciences was able to be amplified by my experience at PGSS. Getting to spend 5 intensive weeks of science studies helped me decide what I wanted to do with my career, and I always look back fondly on my experience. My love for science is still able to be fulfilled in my work as a patent attorney, where I deal with new ideas, and in my job as in-house counsel to a retail firm which produces and sells essential oils, where I can understand our exacting quality standards and the chemical properties of our products and which allows me to function in my attorney role to a higher degree. I will always be grateful for my PGSS experience.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Alfred	Schnabel	1994
College/degree	Employer / Job Title	
Case Western Reserve University BS in Astronomy 1999	Verizon Wireless, National Account Coordinator	

Accomplishments

Testimonial

I'd have to say PGSS was a wonderful experience that remains the highlight of my high school years. For the first time in my life, I was surrounded by people who shared my love of science and who were as intelligent and curious as me; they also turned out to be pretty cool people. It helped solidify my decision to major in science in college. Although I'm not currently in a scientific position, I'm hoping to transition to a more technical/science related field in the near future. PGSS is a model for how we should structure programs for our most gifted students. All too often I wasn't properly challenged by my high school studies. The bar was set way too low. Governor's School was the exact opposite. It challenged me to work and study hard, skills I needed to learn to be successful in college. We need to find more ways to encourage and challenge our brightest students; push them to do more than they think they can.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Dan	Kraut	1995
College/degree	Employer / Job Title	
Swarthmore College '00 (BA in Biochemistry) Stanford University '06 (Ph.D. in Biochemistry)	Postdoc, Andreas Matouschek's Lab, Department of Biochemistry, Molecular Biology & Cell Biology Northwestern University, Evanston, IL	

Accomplishments

HHMI Predoctoral Fellowship

American Cancer Society Postdoctoral Fellowship ,

Numerous publications in Biology and Chemistry Journals including:

CHALLENGES IN ENZYME MECHANISM AND ENERGETICS Daniel A. Kraut, Kate S. Carroll, and Daniel Herschlag Annual Review of Biochemistry Vol. 72: 517-571

Inactivation Studies of Acetylcholinesterase with Phenylmethylsulfonyl Fluoride. Daniel Kraut, Heather Goff, Reetesh K. Pai, Natilie A. Hosea, Israel Silman, Joel L. Sussman, Palmer Taylor, and Judith G. Voet. Molecular Pharmacology Vol. 57, Issue 6, 1243-1248, June 2000

Kraut DA, Sigala PA, Pybus B, Liu CW, Ringe D, et al. (2006) Testing Electrostatic Complementarity in Enzyme Catalysis: Hydrogen Bonding in the Ketosteroid Isomerase Oxyanion Hole. PLoS Biol 4(4): e99

To degrade or release: ubiquitin-chain remodeling. Daniel A. Kraut, Sumit Prakash and Andreas Matouschek, Trends in Cell Biology, Volume 17, Issue 9, September 2007, Pages 419-421

Testimonial

PGSS helped me get into college, and gave me the experience to know that I wanted to do research. That led me to do research every summer of college, including after my freshman year, and ultimately to pursue a career in science.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Nethra	Ankam	1996
College/degree	Employer / Job Title	
Penn State, Bachelor of Science in Science Jefferson Medical College, M.D.	Instructor in Rehabilitation Medicine at Jefferson Medical College, taking care of disabled people in Philadelphia on a daily basis.	

Accomplishments

Testimonial

I enjoyed PGSS, and enjoyed the people, but it also showed me how much I didn't like physics and computer science (which I had never been exposed to before in any type of serious way.) It put me on the trajectory to medicine much sooner, and probably greatly influenced my decision to go to a six year medical program, and I'm now a dying breed--a physician who trained in Philadelphia who stayed in Philadelphia to work.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jennifer	Gandy	1996
College/degree	Employer / Job Title	
Harvard College, BA, 2001	Harvard University, Admissions Officer, covering recruiting and admissions for students from Pennsylvania	

Accomplishments

Testimonial

PGSS exposed me to a caliber of student, teacher and coursework that I did not and could not have experienced in my rural PA public school. It opened my eyes to a much bigger world, and showed me to aim high in my college application process. Out of 90 students in my PGSS class, 9 of us were in the same freshman class at Harvard the next year. I come from a single-parent family in rural Pennsylvania, where Harvard is not usually on anyone's radar. PGSS changed that for me and now I'm excited to be recruiting students from Pennsylvania for Harvard.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Todd	Ellis	1996 TA: 1999
College/degree	Employer / Job Title	
Penn State B.S. in Physics and Meteorology, Honors in Meteorology; MS and PhD in Atmospheric Science, Colorado State University	Professor at SUNY College at Oneonta, Oneonta, NY	

Accomplishments

I received the American Meteorological Society Graduate Fellowship sponsored by the NSF in 2002

Testimonial

I could go on about many things that PGSS did for me. Professionally, I honed my ability to handle strenuous academic loads and extracurricular activities while at PGSS. I learned what it is to see a research project from concept to presentation - skills that serve me well as I start my own research program at a primarily undergraduate institution. The computing skills I learned from PGSS have continued to help me excel in every academic setting I've encountered. It is not an exaggeration to say that the formative experience of PGSS prepared me to hit the ground running in college and to distinguish myself from an early point in my career. That early success helped me to create further opportunities for distinction, which in turn paved the way to three successful graduate school applications with distinguished awards at all three. To have my choice of three premier atmospheric science programs was largely attributable to the successful start in college I got from PGSS.

Personally, I learned how to interact with other exceptional students in a college like setting. I learned how to be assertive, how to contribute in a group, and most importantly what it means to be a leader in an academic setting. How to utilize others strengths, how to be decisive, when to step back and let others receive credit. The leadership award I received from PGSS in 1997 was just the start of the ways I was able to become a leader amongst my colleagues since PGSS. The skills I developed as a TA at PGSS in 1999 went even further to awaken my desire to be an educator as well as a researcher - a significant part of who I am now as a professor at a small public college.

I have been deeply saddened to learn of the governor's proposed cuts to PGSE. I cannot overstate the importance this experience has had in my life, and I would hate to see Pennsylvania lose the opportunity to groom the talented students that the economy needs right now. If there is more I can do to assist in these efforts, please let me know. If you need specific anecdotes, I will provide them. Thanks

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Sara	Troyani	1997
College/degree	Employer / Job Title	
Cornell University, B.A. Suma cum laude; UC Berkeley, M.A.	Bishop O'Dowd High School, Teacher	

Accomplishments

Phi Beta Kappa, Rhodes Scholarship Finalist, Mortar Board Leadership Honor Society, Fredrick C. Wood Fellowship in European Studies (Declined), National Society for Collegiate Scholars, Golden Key International Honor Society, J.G. White Prize for Excellence in Spanish, Alpha Phi Outstanding Scholar, YMCA Western Pennsylvania Student Athlete of the Year, Dean's List

Testimonial

Governor's School was one of my most formative experiences. Although I did not pursue a career in the sciences after attending Science Governor's School at CMU, the program was an invaluable preview of college life and helped me manage my undergraduate years more effectively, especially in terms of time management and learning to work with other students to complete projects. As an inner city public high school student from a single-parent household, it would have been impossible for me to attend most other similar college prep programs. Additionally, the caliber of teaching that I experienced at PGSS continually informs my lesson designs as a high school teacher today. Finally, the opportunity to attend the PGSS has helped me create an especially gifted and caring network of friends and acquaintances who are passionate about pushing the limits in their respective fields. Knowing that I have the State of Pennsylvania to thank makes me likelier to return to Pennsylvania when pursuing an academic career in the future-especially if this could involve teaching at a program like PGSS!

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Zachariah	Miller	1997
College/degree	Employer / Job Title	
2002 honors graduate of the United States Military Academy at West Point, he received his diploma on June 1st 2002 from President George W. Bush. Bachelor of Science degree in mathematics and computer science	while commissioned as second lieutenant in the United States Army and branched Infantry, Zachariah Miller died in service to his country July 1, 2002.	

Accomplishments

Second Lieutenant Zachariah R. "Zac" Miller was named West Point's top graduate in math, computer science and the basic sciences. During the summer of 2000, he graduated from the U.S. Army Airborne School in Fort Benning and also served as a platoon leader for the Air Defense Artillery unit in Wackernheim, Germany. In the summer of 2001 he completed an internship in Baku, Azerbaijan, where he worked with refugee children and counseled local citizens concerning human rights abuses. He was selected as a Truman Scholar in 2001 and that December, a recipient of a prestigious Rhodes Scholarship. He was scheduled to leave in October for Oxford University in England where he was to study politics, philosophy, and economics. Between Ranger School and his departure for England, Zac was to serve an internship in Washington, DC with Senator Arlen Specter of Pennsylvania.

Testimonial

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kim	Herrmann	1997
College/degree	Employer / Job Title	
Pennsylvania State University, B.S. in Physics with an honors degree, Minors in Mathematics and Computer Science, 4.0 GPA, Schreyer Scholar Ph.D. in Astronomy and Astrophysics, 3.95 GPA	Lowell Observatory, Postdoctoral Researcher	

Accomplishments

Honors and Awards:

Senior Physics Award & Evan Pugh Senior Award (top 0.5%), 4/02
 Evan Pugh Junior Award (top 0.5%) & First Place Physics Poster Award, 4/01
 Irvin Kochel Award for Character, Scholarship, Leadership & Citizenship, 4/00

Publications and Copyrights:

- * Herrmann, K.A., and Ciardullo, R. in prep (kinematic analysis, Paper III)
- * Herrmann, K.A., and Ciardullo, R. in prep (kinematic analysis, Paper II)
- * Herrmann, K.A., Ciardullo, R., and Sigurdsson, S., "Kinematic Evidence for Halo Substructure in Spiral Galaxies," 2009, Astrophysical Journal Letters, 693, L19
- * Herrmann, K.A., Ciardullo, R., Feldmeier, J.J., and Vinciguerra, M., "Planetary Nebulae in Face-On Spiral Galaxies. I. Planetary Nebula Photometry and Distances," 2008, Astrophysical Journal, 683, 630
- Ciardullo, R., and Herrmann, K.A., "The Mass-to-Light Ratio of Spiral Disks," 2007, Galaxies in the Local Volume, ed. B. Koribalski and H. Jerjen, Springer Astrophysics and Space Science Proceedings, in press
- * Kim's Astronomy Riddles, Vol I, Copyright © Kimberly A. Herrmann, 2007
- Ciardullo, R., Durrell, P.R., Laychak, M.B., Herrmann, K.A., Moody, K., Jacoby, G.H., and Feldmeier, J.J., "The Planetary Nebula System of M33," 2004, Astrophysical Journal, 614, 167
- * Kim's Bird & Constellation Riddles, Vol I, Copyright © Kimberly A. Herrmann, 2003
- * Yeung, C., and Herrmann, K.A., "Molecular Dynamics Simulation of Reactive Compatibilization in Polymer Blends," 2003

Testimonial

Quite simply, PGSS was the critical impetus I needed to make me decide to become an astronomer. Up until then, I enjoyed almost all subjects in school (science, math, English, foreign languages, creative writing, chorus, theatre...) and was somewhat leaning towards creative or journal writing or teaching. However, my first real scientific research experience of simulating gravitational lensing with the stems of wine glasses completely enthralled me. That summer is also when the movie "Contact" came out, which I saw in Pittsburgh while I was at PGSS. Like the character of Dr. Ellie Arroway in the movie, I was hooked.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Elizabeth	Krichten	1997
College/degree	Employer / Job Title	
Massachusetts Institute of Technology, BS in Management Science, Concentration in Finance	CBRE Melody, Senior Analyst (commercial real estate finance)	

Accomplishments

Commercial Real Estate Women (CREW) Pittsburgh Creative Deal of the Year Award 2006
President, CREW Pittsburgh Foundation The CREW Foundation was formed in 2003 to maintain CREW's New You Program, which creates unique shoulder-bag satchels filled with items designed to support women undergoing chemotherapy. With help from the community and local schools, the Foundation was able to distribute over 1,100 satchels in 2008 (www.crewpittsburghfoundation.org)

Testimonial

My best friends are from this program, in fact, two of them are now married to each other. It is because of this program that I am now a resident of the city of Pittsburgh after attending college out of state. PGSS helped me to get into MIT (my second choice was CMU) and exposed me to the opportunities that were available outside of my small hometown. I credit PGSS with the direction my life has taken over the last 10+ years.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Ethan	Tira-Thompson	1997 TA: 2000,2001
College/degree	Employer / Job Title	
Carnegie Mellon University: 2002 (BS) 2004 (MS) currently PhD	Student	

Accomplishments

Testimonial

PGSS was my first exposure to parallel processing via an account at the Pittsburgh Supercomputing Center. That remains my most in-depth experience with massively parallel computing, and as the industry continues to move toward multi-core processors, parallelized algorithms are more important than ever — my early experience was very prescient.

Further, the experience of being at CMU during PGSS helped me to decide to do my studies there instead of an out-of-state university.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Beverly	Jogan	1997 TA: 2002,2003
College/degree	Employer / Job Title	
University of Pennsylvania for B.A. in Biology and Physical Anthropology and University of Pennsylvania for V.M.D (veterinary medicine)	Veterinarian, Raccoon Valley Animal Hospital	

Accomplishments

Magna Cum Laude and Phi Beta Kappa in undergrad; Volunteer for Remote Area Veterinary Services and at local animal shelters

Testimonial

PGSS opened my eyes to the academic possibilities available to me. Having graduated from one of the most notorious school districts in the state of Pennsylvania, I had little encouragement and even less guidance. The academic curriculum at PGSS was extremely challenging for me, but made me realize that I wanted to pursue a degree from an equally challenging college. It also helped me focus on the specific scientific field of Biology. As a teaching assistant, I also know that PGSS also has the added bonus of providing socialization for a large group of self-proclaimed science nerds. Many of us spent high school being ridiculed and having a hard time making friends, and it absolutely changed my outlook on my peers. I saw for the first time that "nerds" could be popular, and can make excellent leaders. We didn't have to *only* sit behind a lab bench -- there were many ways that we could improve our communities and advance science. PGSS has also certainly has been an important part of my personal life, as I married a PGSS classmate, and my best friend today was also a classmate.

The greatest impact that PGSS had on my career is that it taught me that learning for the sake of learning is worthwhile and immensely gratifying. We go through school being pressured to get straight A's so we can stand on a podium and accept an award, but PGSS simply encouraged us to learn for no other reason than to better ourselves and be able to better the world around us. As a veterinarian, this concept is of the utmost importance in my career, because I must motivate myself to keep up with current knowledge in medicine and the most recent scientific studies. There is no money or gold star as a prize at the end of the day when I go through my stack of journals, and it was PGSS that showed me that it's worth reading them anyway.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Benjamin	Campbell	1997 TA:2000-2003, Faculty 2005-present
College/degree	Employer / Job Title	
Penn State University: BS Physics with Honors 2003 Minors: Business, Mathematics, Astronomy and Astrophysics Penn State University: MS Electrical Engineering 2003 Robert Morris University: Ph.D. Engineering 2008	Penn State Electro Optics Center, Research Engineer (2003-Present) Penn State New Kensington Adjunct Faculty (2004-2005) PGSS Faculty at Carnegie Mellon University (2005-Present)	

Accomplishments

- Earned Brickwedde Prize for Undergraduate Research from the Penn State Physics Department (2003)
- Received PGSE Exemplary Service Award from PGSS (2005)
- Annual Invited Speaker at Westinghouse Science Honors Institute
- Annual Invited Speaker for Penn State Physics Department Freshman and Junior Seminars
- Conceived and produced Pennies with the entire Gettysburg Address laser etched on surface and Nickels with Declaration of Independence to demonstrate micromachining scale
- 4 Publications in Reviewed Journals (Journal of Physics B, Applied Surface Science, Journal of Manufacturing Science and Engineering)
- Over a dozen publications appearing in International Conference Proceedings (SPIE Photonics West, ICALEO, ICPEPA, SPIE High Power Laser Ablation, DEPS Ultrashort Laser Workshop, Munich LASER World of Photonics)

Testimonial

I can think of no other event in my life that had more of an impact on my intellectual or social development than the Pennsylvania Governor's School for the Sciences. It was the first place I was exposed to likeminded intellectuals who shared my sense of discovery and achievement in academics. Seeing their shared drive and determination motivated me to work harder in life. PGSS is unlike any other educational experience. It is the most rigorous academic program I have endured, to invoke the proverbial SAT analogy format "PGSS is to college as basic training is to military service". PGSS pushes young students to their limits and beyond, forcing those who have never been challenged academically to learn how to ask for help and accept it. Teamwork isn't a luxury, it's a necessity to survive the program.

My experience at PGSS as a student changed my life. I returned to high school with confidence and pride in who I was. The transition to college was easy the following year, PGSS taught me I was capable of far more than I had ever imagined. As soon as I was eligible, I applied to return as a TA/counselor to help create that experience for new generations of students. Compared to other potential summer jobs, PGSS requires long hours, and the pay is relatively low, but those who work there do it because they understand the value of the program. Working with those students each summer also gave me a renewed sense of drive and purpose for studying the sciences. Their enthusiasm was contagious and would recharged me for the upcoming academic year, packed with physics, math and engineering classes. Building off the PGSS work ethic, I pushed myself and in 5 years of college earned a Bachelor's degree (with honors), Master's degree, 3 minors, completed 2 theses and worked as a research assistant half time my 5th year (while taking a break every summer for PGSS!).

After graduating college I was fortunate enough to be invited back to PGSS as faculty. The first year, the budget was uncertain and I agreed to teach without knowing if I would be compensated, because I believe in the program. I have taught college courses, but have never encountered students like those at PGSS; the kind of students that make you love teaching because they are so eager to learn. They keep me on my toes, asking tough questions and stimulating thought-provoking discussions. I have been with the program long enough to see those students go on to our best schools and enter our workforce as doctors, scientists and engineers. Their accomplishments are long and impressive, and without exposure to science at this critical point in their development, they might have never have explored careers in these areas where U.S. talent is underrepresented.

I know this program changed my life for the better, giving me lifelong friends and a passion for my career. Even more rewarding it has given me a sense of purpose, to make an impact fighting against the decline of America's intellectual dominance in the sciences. People complain that America's educational system is broken, but PGSS has a proven record of educational excellence.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Audra	Pompeani	1998 TA:2001,2002,2003
College/degree	Employer / Job Title	
BS, Carnegie Mellon University 2003 MA, Princeton University 2005 PhD, Princeton University 2009	Princeton University graduate student	

Accomplishments

Pompeani AJ, Irgon JJ, Berger MF, Bulyk ML, Wingreen NS, Bassler BL. (2008). The *Vibrio harveyi* master quorum-sensing regulator, LuxR, a TetR-type protein is both an activator and a repressor: DNA recognition and binding specificity at target promoters. *Molecular Microbiology*. 2008. Oct;70(1):76-88.

Neiditch MB, Federle MJ, Pompeani AJ, Kelly RC, Swem DL, Jeffrey PD, Bassler BL, Hughson FM. (2006). Autoinducer-2-induced asymmetry regulates LuxPQ quorum-sensing signal transduction. *Cell*. 2006 Sep 22; 126(6):1095-108.

Testimonial

PGSS 1998 provided me with opportunities in the classroom and in the laboratory that were not available at my public school. Without PGSS, I would never have learned that I have an affinity for science and research. Being surrounded by other exceptional teenagers also made a huge impact on me because for the first time in my life I felt normal instead of nerdy or weird. Finally, I think I was much better prepared to handle the workload in college than I would have been without my PGSS experience.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Vasily	Zhulin	2000
College/degree	Employer / Job Title	
Stanford, Computer Science and Haas School of Business at UC Berkeley for MBA	Barclays Capital, Investment Banking Associate	

Accomplishments

Testimonial

PGSS got me very interested in astrophysics and computer science. I went on to study computer science, but I kept a healthy interest in astrophysics to this day.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Allison	Petonic	2000
College/degree	Employer / Job Title	
Bryn Mawr College, BA in Biology	United Food and Commercials Workers Local Union 1059, Political Director	

Accomplishments

senior thesis on HIV protease inhibition; Thomas Prize for Advocacy of Diversity and Inclusion at Bryn Mawr College (2005); Initiated campaign for Bryn Mawr College to close operations for Dr. King Day celebration, campaign sustained from February 2005 through September 2007.

Testimonial

PGSS prepared me for college in a way that my high school could not. I formed friendships with aspiring scientists from across Pennsylvania and worked with them to keep up with demanding class and study schedules, in cooperation not competition. Learning at PGSS informed me of what I wanted from college, and I was a more competitive applicant at top colleges because of PGSS. In all likelihood, my good grades and extracurricular activities at a rural high school would not have been sufficient for getting into as many competitive colleges.

In college, I studied biology while also studying political science and became involved in campus politics. I have now worked in government and politics, but few of my colleagues have backgrounds in science or science policy. It surprises many, but that background has been helpful for work in politics- for following agriculture legislation and food policy in past and current work. I plan to attend law school in 2010, concentrating in environmental justice law.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Chrissy	Nesbitt	2000
College/degree	Employer / Job Title	
Princeton University, AB in East Asian Studies	Sisters Academy of Baltimore, math teacher	

Accomplishments

Testimonial

Though it wasn't my major, math has been a significant part of my studies through college and beyond. I'm currently enrolled in an online graduate level math class through the University of Northern Iowa.

PGSS gave me confidence. I learned that there is no Archetypal Mathematician, Scientist, or Problem Solver. We are all unique, with different ways of coming at proofs, different ways of conceptualizing problems. So often, people who say "I'm just not a math person" are not giving themselves -- or math -- enough credit. This is a conviction given to me by my teachers at PGSS, and this conviction has grown in me since. I now teach math at an all-girls school for at-risk students, and it is my passion to communicate my confidence to girls I teach every day.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Rich	Powell	2000
College/degree	Employer / Job Title	
Harvard College, B.A. '05; NYU Law, J.D. '10	Law Student	

Accomplishments

- 2009 Copenhagen Climate Change Negotiation Competition Team
- Third Millennium Foundation Human Rights Fellowship to work with Inuit Circumpolar Council on climate change
- Managing Director of the Circumpolar Conservation Union
- Hoopes Prize for College Senior Thesis on Environmental Reparations
- 3rd Place Team at 2005 North American Parliamentary Debating Championships

Testimonial

The education I received at the Pennsylvania Governors School for Science has been singularly influential in my path since the summer of 2000. The classroom experience was the most remarkable of my life, and challenged my thinking in every way imaginable. I had university-level coursework in five disciplines, saw lab science for the first time, learned basic computer programming, and returned to school in the fall already far ahead of my high school's science offerings.

Perhaps most importantly, we were taught to understand the way diverse disciplines interconnect, and how those with a background in and love of science could bring that understanding into other fields. I am firmly convinced that the recommendations sent on my behalf by PGSS faculty made the difference in my college applications. At Harvard, I was able to pursue this deep interest in science with a concentration in Environmental Science and Public Policy, and a particular focus on climate change.

While college academics were difficult, I was never as challenged as in those five weeks at Carnegie Mellon, and I would have been completely unprepared for that level of rigor without PGSS. Since then, I have decided to pursue a career somewhere at the intersection of science and policy, and after law school, plan to accept a position at McKinsey & Co, a management consulting firm with a world-class climate change practice.

I am immensely grateful for the opportunities presented to me by home state in 2000, and I hope that both our Governor and our Legislature will have the foresight to maintain these extraordinary formative experiences for young Pennsylvanians, even in these trying times.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Diana	Aronzon	2000
College/degree	Employer / Job Title	
BA in Chemical Physics, Swarthmore College, Swarthmore PA. MS in Applied Physics, Harvard School of Engineering and Applied Sciences, Cambridge MA	Environmental Engineer/Consultant at Harris Miller Miller and Hanson, Inc.	

Accomplishments

Anderson, K.S.; Ramachandran, N; Wong, J.; Raphael, J.V.; Hainsworth, E.; Demirkan G.; Cramer, D.; Aronzon, D.; Hodi, F.S.; Harris, L.; LaBaer, J.; Applications of protein microarrays for multiplexed detection of antibodies to tumor antigens in breast cancer. Journal of Proteomic Research. 2008.

Aronzon, D.; Levy, E.; Collings, P.J.; Chanishvili, A.; Chilaya, G.; Petriashvili, G.; Trhans-cis isomerization of an azoxybenzene liquid crystal. Liquid Crystals. June 2007.

Frydman, L; Shapira, B; Karton, A; Aronzon, D; Real-time 2D NMR identification of analytes undergoing continuous chromatographic separation. Journal of the American Chemical Society. February 2004.

Testimonial

PGSS was absolutely an essential piece of my development as a scientist and person. It gave me the confidence to pursue the best education I could find and made me believe that this was worthwhile.

I had not known my own self-worth prior to attending this phenomenal summer program. One of the features that influenced me the most while there was meeting strong, highly intelligent, and motivated female scientists. They were the best role models I could have ever hoped for and they truly inspired me to push myself. They gave me an image of what I was striving to become - and prior to PGSS I had not received that image from anywhere else. It deeply saddens me that this experience, that was so revolutionary for me, might not be available to future generations of Pennsylvania students.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Michael	Farias	2000
College/degree	Employer / Job Title	
University of Pennsylvania – B.A. Biochemistry and Biology (2005), M.S. Chemistry (2005); Harvard Medical School – M.D. (anticipated 2010); Harvard Business School – M.B.A. (anticipated 2010)	Harvard University, Student	

Accomplishments

Publications:

-Wilson L, Ching YH, Farias M, Hartford SA, Howell G, Shao H, Bucan M, Schimenti JC. "Random mutagenesis of proximal mouse chromosome 5 uncovers predominantly embryonic lethal mutations." *Genome Research* 8:1095-1105 (2005)

-Yang S, Farias M, Kapfhamer D, Tobias J, Grant G, Abel T, Bucan M. "Biochemical, molecular and behavioral phenotypes of Rab3A mutations in the mouse." *Genes, Brain, and Behavior* 6:77-96 (2007)

Awards: Eagle Scout Award (2001); National Merit Scholarship Winner (2001); Upenn: Phi Beta Kappa, Benjamin Franklin Scholar, Vagelos Scholar in Molecular Life Sciences, Makris Award for Excellence in Biochemistry (2005)

Testimonial

I went to a small high school outside of Philadelphia, and as such I did not get to experience many opportunities that larger high schools offered. In addition, I never had the chance to interact with other highly-motivated students interested in science except for brief interactions at science fairs. PGSS was a transformative experience – opening my eyes to brand new aspects of science and mathematics that I had never been exposed to, pushing me to work harder and learn more in a short period of time than I had ever done, and allowing me to interact with a group of students brighter than any other group I had ever met! Living in a college dorm and being taught by university professors with mentoring from outstanding teaching assistants was an amazing experience, and prepared me for college in a way that gave me an edge over my peers. I look back on my memories of PGSS quite fondly, and I know that my time there was a very important factor in helping me better understand my academic abilities and pushing me to excel in high school, college, and beyond. Thank you PGSS!

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Patricia	Foo	2000
College/degree	Employer / Job Title	
Harvard, BA in Biochemical Sciences	Medical Student, Stanford University School of Medicine	

Accomplishments

Testimonial

PGSS was instrumental in convincing me that I was and could be successful as a scientist. It truly opened my eyes to the process of scientific research and prepared me for the rigorous academic coursework that I would encounter in college. Although I attended a very good public high school, I think that I would not have been nearly as prepared for my college coursework had I not attended PGSS. The PGSS graduates who mentored and guided us through the summer served as phenomenal role models of success in science at world-class universities. Furthermore, PGSS convinced me that it was socially acceptable to be a nerdy scientist! It was the first time that I was able to relish being a lover of science and make esoteric scientific jokes about special relativity and feel celebrated and socially accepted for it. I am now a devout scientist for life, pursuing an MD-PhD in Health Policy with a focus on health economics.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Alexis	Book	2000 TA:2003
College/degree	Employer / Job Title	
Allegheny College, BS Chemistry, 2005. University of Pittsburgh, MAT science concentration, 2006.	Neighborhood Academy, Pittsburgh, PA. Chemistry and Physics Teacher.	

Accomplishments

National Science Teacher's Association New Science Teacher Academy Fellow 2008-2009.

Testimonial

It was as a student at PGSS that my love for the study of science was confirmed, but it was as a teaching assistant that I realized how much I love sharing what I love with others, especially young people; thus my decision to become a science teacher. I frequently point to my time at PGSS as a formative experience in my life that has played a huge role in the career path I have chosen to follow.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Carl	Yerger	2000, TA: 2005
College/degree	Employer / Job Title	
B.S., Harvey Mudd College, CASM (Master's equivalent), University of Cambridge, 2006, currently working on PhD in Algorithms, Combinatorics and Optimization at Georgia Institute of Technology	Georgia Tech	

Accomplishments

Numerous publications in journals such as Discrete Mathematics, Journal of Combinatorial Mathematics and Combinatorial Computing, Bulletin of the ICA

Testimonial

PGSS helped give me the confidence to pursue a career in mathematics. It allowed me to get a head start on college life and gave me a chance to learn how to work under the pressures of a rigorous academic program. I wouldn't have been so successful in college without the skills I developed at PGSS. As a TA, PGSS also confirmed my desire to become an academic (and make a commitment to teaching) after seeing how students' lives were positively affected after just five weeks.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Nina	Hsu	2001
College/degree	Employer / Job Title	
Duke University (BS, 2006), University of Pennsylvania (MA, 2008; PhD expected 2012)	University of Pennsylvania, graduate student	

Accomplishments

Testimonial

PGSS allowed me to conduct original college-level research in organic chemistry, foster a love for science and research that continues today, forge lasting friendships with 89 other remarkable individuals, and create five weeks of memories that I continue to look upon fondly. Where else but PGSS could you attend classes in computer science, physics, and biology in the morning, then visit "Crimes of Fashion" to buy a costume for the 70's-themed party that night? Make no mistake - I worked harder than I ever had before at PGSS, but I was immersed in and surrounded by an incredibly supportive and amazing community.

My interests eventually strayed from organic chemistry, but PGSS instilled in me a love for science and research. Following a degree in neuroscience from Duke University, in which I conducted independent research in a cognitive neuroscience lab, I am currently a third year graduate student in neuroscience at the University of Pennsylvania. Research in science is by no means a straight path - it is often full of stumbles and long-winding detours. But my first experience with research came from PGSS, and I attribute my continued pursuit and thirst for knowledge to that.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Talia	Rosenberg	2001
College/degree	Employer / Job Title	
Harvard University, AB, 2006 Yale University School of Medicine, MD expected 2012	Medical Student	

Accomplishments

Testimonial

I am an alumna of the 2001 Pennsylvania Governor School for the Sciences. It was a summer that literally transformed my education. It inspired me to apply to a college where I might find other intellectually curious and motivated students, students like my colleagues at PGSS. As an undergraduate at Harvard University, I studied mathematics and chemistry, inspired in no small part by my time at PGSS. I am now a medical student at Yale University. It is a program that makes me proud to be a Pennsylvanian.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Brian	Heath	2001
College/degree	Employer / Job Title	
Kettering University B.S. Industrial Engineering, Wright State University M.S. Industrial Engineering, Future: Wright State University Ph.D. Industrial Engineering	Wright State University, Dayton Area Graduate Studies Institute Fellow (Graduate Student)	

Accomplishments

Magna Cum Laude, Kettering University President's Medal, Graduate Student Excellence Award, Dayton Area Graduate Studies Fellow

Publications:

- Heath, B. L., Hill, R.R. & Ciarallo, F. Replicating the Bay of Biscay: Issues in Agent-Based Modeling Validation. Industrial Engineering Research Conference at the IIE Annual Conference and Expo. Miami, FL. Submitted January 2009.
- Heath, B. L., Hill, R.R. & Ciarallo, F. A Survey of Agent-Based Modeling Practices (January 1998 to July 2008). Journal of Artificial Societies and Social Simulation. Submitted November 2008.
- Heath, B. L. & Hill, R.R. Some Insights into the Emergence of Agent-Based Modeling. Journal of Simulation. Submitted December 2007.
- Heath, B. L. & Hill, R.R. (est. 2009) Agent-Based Modeling: A Historical Perspective and a Review of Validation and Verification Efforts in Handbook of Research on Discrete Event Simulation Environments: Technologies and Applications. IGI Global. Accepted November 2008.
- Heath, B. L. & Hill, R. (2008). The Early History of Agent-Based Modeling. Industrial Engineering Research Conference at the IIE Annual Conference and Expo. Vancouver, Canada.
- Redekop, B. W., & Heath, B. L. (2007). A Brief Examination of the Nature, Contexts, and Causes of Unethical Consultant Behaviors. Journal of Practical Consulting, 1(2), 40-50.

Testimonial

PGSS provided me insight in higher education and prepared me to be successful in that environment. It also gave me motivation through peer interaction and studies to pursue excellence in science and engineering.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Laura	Morton	2001
College/degree	Employer / Job Title	
University of Notre Dame, B.S. Biochemistry of Osteopathic Medicine, D.O. in June 2010	Philadelphia College	Medical Student

Accomplishments

Testimonial

PGSS encouraged me to major in biochemistry in college and introduced me to great friends.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Nathan	Stock	2001
College/degree	Employer / Job Title	
Carnegie Mellon University class of 2006: B.S. in physics, B.A. in philosophy. University of Arizona M.S. in astronomy, 2008.	Doctoral candidate at University of Arizona in astronomy.	

Accomplishments

Phi Beta Kappa Honors Society, Andrew Carnegie Society Scholar, Eagle Scout. Publication: 10 micron nulling interferometry of omicron & beta leo (in prep)

Testimonial

PGSS was the most important influence of my high school years. This is not a claim I make lightly, or without first taking a long time to consider the influences in my years at Souderton Area High School. My friends, who remain close to me even though we have scattered across the country and the world, were important. The years of service as a boy scout was important. The teachers who were my mentors for 4 years and who I regularly visit when I travel home were important. But none of them were as important to my well being, my citizenship or my education as PGSS. PGSS gave me confidence in myself and my abilities. It challenged me both academically and socially. It let me, for the first time in my life, feel comfortable around people my age. I even met my first sweetheart there. In truth, I was a socially awkward child prior to PGSS. I did not know how to act around others and as a result was very introverted. PGSS brought me out of my shell by allowing me to interact with others who loved to learn and experiment. In high school, despite the best intentions of teachers, curiosity and scholarship are often shunned by fellow classmates. At PGSS these attributes were strengths, not weaknesses. Without the confidence I gained from my experience there, I doubt I would have gained the friendships I did during my last year of high school, the very friendships that are so important to me now. I would not have had the fortitude to complete my scouting career and achieve the highest rank of Eagle. I would not have appreciated the work that my high school teachers put in each and every day for my and my classmates education. I am not just a smarter person because of PGSS, I am a better person. Such programs as can achieve that are rare and precious.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Monica	Lewis	2001
College/degree	Employer / Job Title	
BSc in Aeronautical & Astronautical Engineering	Arup, Mechanical Engineer in Sustainable Building Design	

Accomplishments

Testimonial

I am writing to ask you: please do not cut funding for the Pennsylvania Governor's School for the Sciences (PGSS) - this would be a tragic mistake. I attended PGSS in 2001 at Carnegie Mellon University, and this experience truly did shape my outlook on life and my ambitions. The program helped to propel me forward, and I honestly believe that it was with help from this program that I was admitted to the MIT Class of 2006; I also firmly believe that lessons I learned at PGSS helped me to thrive at MIT and beyond.

The class programs taught at PGSS help gifted students learn beyond what is accessible to them in the regular classroom. The Tas and Professors involved pour so much of themselves into their work, and this really shows through. They engage the students both in and out of the classroom, challenging us to really think and apply ourselves, all while helping us realize how much fun science and mathematics can be.

The other students I met through this program were also incredible - it was truly a unique and valuable experience to be able to meet others with such interest and passion for math and science subject, allowing me to feel be myself and truly comfortable around them. This helped me realize that science was a field I would enjoy studying, but also that I connected with others who had these interests. Seven years later, I am still close friends with several people I met as a student at PGSS.

I went on from PGSS to get a BSc in Aeronautical Engineering at MIT, and I now work as a mechanical engineer, designing sustainable buildings for Arup, with future aspirations of owning my own business on day, driving sustainable design to new heights. I was set on this career trajectory because of my attendance at PGSS, and it would be a real shame if funding was cut to this program. The fact that it is fully paid by the state enables students of all backgrounds to come together, and have a truly rich learning experience.

I realize times are hard right now, but now more than ever, it is important that we invest in our future, in the education of our future leaders, and programs like Pennsylvania Governor's School of Excellence are critical in this effort.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Brintha	Vasagar	2001
College/degree	Employer / Job Title	
University (B.S.), Ross University School of Medicine (3rd year Med Student)	Medical Student	

Accomplishments

Raised over \$500,000 for tsunami relief as a tsunami survivor and invited to speak before various members of Congress; Wrote a thesis on Science Education; Miss Philadelphia 2008-09

Testimonial

PGSS was the first time I wasn't an outsider. To finally be respected instead of ridiculed for my intelligence was a major turning point in developing my self-confidence and embracing my abilities. Years later, I had the opportunity to make a difference in the lives of tsunami survivors by sharing my experiences with influential U.S. politicians, and I question whether I would have had the confidence to stand before hundreds of strangers without the self-esteem which I gained during Governor's school.

This year, I had the unique opportunity to represent the 5 counties surrounding Philadelphia as Miss Philadelphia 2008-09. Everyone expected my year of service to focus on medicine, as that is my chosen profession, but instead I decided to spend time in schools encouraging kids to dream big and embrace their differences. I hope that I am for these kids what PGSS was for me. PGSS was so much more than an education in science - it was a place where intelligence and achievement were revered and the nerdy kids were no longer the outcasts. And ever since, I haven't been afraid to speak my mind in front of an audience.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Rachel	Tundel	2001
College/degree	Employer / Job Title	
MIT~ B.S. in chemistry Columbia University ~ PhD program	Graduate student	

Accomplishments

4 publications as an undergrad, 1 as a graduate student

Testimonial

Without PGSS, I would not have even dreamed of going to a school like MIT to pursue science. One, I hadn't ever heard of the school until I came into contact with the other motivated students, and two, I don't think I would have had the right credentials without PGSS. I also met some of my best friends at PGSS.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jordan	Strom	2001
College/degree	Employer / Job Title	
B.S. Yale College Biology '06, 3rd Year Medical Student at Harvard Medical School, Class of 2011	Medical Student	

Accomplishments

I can send a resume if you want. The abridged version consists of 2 publications, a book chapter in a textbook on Cardiovascular Medicine, several high school awards, and numerous fellowships.

Testimonial

I constantly run into govies everywhere I go. They are a constant network and I have stayed in touch with numerous people I met there. I still look back on PGSS as one of my best summers.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Cynthia	Wu	2001
College/degree	Employer / Job Title	
Swarthmore College, BA in Biochemistry with minor in Mathematics, High Honors, Phi Beta Kappa.	year medical student at University of Pennsylvania.	

Accomplishments

Testimonial

PGSS exposed me to an impressive breadth of science. It challenged me to perform to my potential academically while supporting me with an amazing group of peers as well as dedicated, caring professors and TAs. Since there were no grades and we were all encouraged to work together on homework assignments, I experienced firsthand the importance of genuine collaboration in science (as well as in life) and have sought to pursue that in all my ensuing endeavors. My goal in the future is to become an academic physician, and my summer at PGSS has instilled in me not only the interest to pursue a scientific career, but the confidence that I would be able to succeed, as well.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Matthew	Meisel	2002
College/degree	Employer / Job Title	
Harvard College, AB in Chemistry and Chemical Biology	Associate consultant at Bain & Company	

Accomplishments

Chemists of Pittsburgh four-year college scholarship (\$20,000)

Testimonial

PGSS solidified a love of science in me and further encouraged me to pursue an undergraduate science education at a top university (and, in turn, to pursue a career in science and public policy). PGSS also me to understand, simultaneously, the power of working on difficult scientific problems within a group as well as individually.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Laura	Sheard	2002
College/degree	Employer / Job Title	
Muhlenberg College (2003-2007), BS in Neuroscience. University of Washington (2007-present), PhD in Pharmacology (pending)	Graduate student in Ning Zheng's laboratory at the University of Washington	

Accomplishments

2007 Honors in Neuroscience (resulting from thesis and oral defense) Muhlenberg College
 2007 Fulbright Scholar Finalist, India
 2006 Phi Beta Kappa (National Honor Society for Academic Excellence)
 2006 President's Award for Outstanding Academic Achievement, Muhlenberg College
 2005 Barry M. Goldwater Foundation Scholar for Excellence in Undergraduate Science
 2005 Student Summer Study Grant for Neuroscience Muhlenberg College
 2003-2007 RJ Fellows Honors Program, Muhlenberg College

Testimonial

I grew up in rural Carbon County, Pennsylvania, the daughter of a soil scientist and a secretary. I always loved science, and utilized my public education for as many opportunities as I could. Even so, I had completed all of the advanced science courses that my school had to offer by my junior year of high school. Pennsylvania Governor's School for the Sciences was one of few places that was willing to take an outstanding student like myself, and challenge me with higher level science and math without requiring that my family provide monetary support. My family has always lived on modest means, and it was difficult to ask them to pay for a supplement to my high school education. PGSS gave me that supplement that I needed, introducing me to different opportunities in sciences that I had never been exposed to previously, guiding me to my current career path. Most importantly, however, PGSS taught me that excellence in science is the result of hard work, not of economic privilege. Even though I had very little to fund my education, I could still succeed if I worked hard and took advantage of opportunities as they were presented. Having a prestigious program like Governor's School on my resume meant that I did not have to settle for a community 2nd tier college, but allowed me to gain entrance in some excellent private universities, with a great deal of merit-based scholarship aid that I earned to pay my way through my undergraduate education. From there, I was accepted to very prestigious graduate programs to earn my PhD. I am now well on my way to a career as a biochemist and structural biologist, with an eye looking to settle back in Pennsylvania when it comes time to establish my career and my family.

Pennsylvania needs smart scientists, who work and build their families in our great state. By removing one of the few opportunities for talented Pennsylvanians of all economic backgrounds to come together and ignite their interest in pursuing science and scientific careers, we lose some of our hope for a better future. Education is not a fad, or a passing fancy. We do not educate our children only in the good times. Please don't allow a crisis that is happening presently to call us away from what we need for the future--our next generation of gifted scholars.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Ray	He	2002
College/degree	Employer / Job Title	
MIT BS Electrical Engineering and Computer Science '07, Master of Engineering, Electrical Engineering and Computer Science '08	Facebook Inc, Software Engineer	

Accomplishments

Testimonial

I eventually went into EECS as a result of classes in CS & linear algebra. My PGSS group project (<http://ozark.hendrix.edu/~burch/proj/unmouse/>) with computer vision influenced my master's thesis topic on vision-based control and mapping for autonomous helicopters.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Nick	Vidnovic	2002
College/degree	Employer / Job Title	
Harvard U, 2007 -- AB cum laude in Chemistry	Curently an Associate with The Boston Consulting Group in Boston; joining Bain Capital Private Equity in the fall.	

Accomplishments

During college I did a signigicant amount of work in molecular biology studying transcriptional regulation in non-Hodgkins lymphoma and breast cancer. I have been an author on 4 papers based on my work. Links to the PubMed summaries are below. The second one listed (on p63/p73) was my main research interest. I also was acknowledged on a Genes/Dev paper from that lab.

-Radioisotopic localization of (90)Yttrium-ibritumomab tiuxetan in patients with CD20+ non-Hodgkin's lymphoma. Jacobs SA, Harrison AM, Swerdlow SH, Foon KA, Avril N, Vidnovic N, Joyce J, DeMonaco N, McCarty KS Jr. Mol Imaging Biol. 2009 Jan-Feb;11(1):39-45. Epub 2008 Sep 5.

-The p63/p73 network mediates chemosensitivity to cisplatin in a biologically defined subset of primary breast cancers. Leong CO, Vidnovic N, DeYoung MP, Sgroi D, Ellisen LW. J Clin Invest. 2007 May;117(5):1370-80. Epub 2007 Apr 19.

-Durable remission of HIV-negative, Kaposi's sarcoma herpes virus-associated multicentric Castleman disease in patient with rheumatoid arthritis treated with methotrexate. Jacobs SA, Vidnovic N, Patel H, Soma LA, Chang Y, Bass N, Swerdlow SH. Clin Rheumatol. 2007 Jul;26(7):1148-50. Epub 2006 Jul 6.

-Full-dose 90Y ibritumomab tiuxetan therapy is safe in patients with prior myeloablative chemotherapy. Jacobs SA, Vidnovic N, Joyce J, McCook B, Torok F, Avril N. Clin Cancer Res. 2005 Oct 1;11(19 Pt 2):7146s-7150s.

Testimonial

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Ying	Lei	2002
College/degree	Employer / Job Title	
Harvard University, B.A. in Physics; Harvard University, M.A. in Chemistry	Dana Farber Cancer Institute, Research Assistant; Starting PhD in Fall 2009	

Accomplishments

Published in Science and BMC Genomics

Testimonial

PGSS exposed me to exciting new advances in science, simultaneously broadening my horizons and convincing me of the potential impact I could make as a scientist.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Roberta	DiLeo	2002
College/degree	Employer / Job Title	
Rochester Institute of Technology, BS in Physics, MS in Materials Science and Engineering,	pursuing a Ph.D. in Microsystems Engineering	

Accomplishments

Goldwater Scholar 2006
 2008 Inductee to Alpha Sigma Lambda Honors Society
 2008 Space Scholar at the Air Force Research Laboratories in Albuquerque, NM

Publications:

-DiLeo,R.A., Landi, B.J., Raffaele, R.P. "Purity Assessment of Multi-walled Carbon Nanotubes by Raman Spectroscopy." J. of App. Physics, 101, 064307, 2007
 - Krysak, M, Parekh, B., Debies, T., DiLeo, R.A., Landi, B.J., Raffaele, R.P., Tackacs, G.A. "Gas-phase surface functionalization of multiwalled carbon nanotubes with vacuum UV photo-oxidation." J. of Adhesion Sci. and Tech., 21, 999, 2007
 -DiLeo, R.A., Landi, B. J., Raffaele, R.P. "Application of the G'/D Raman Ratio for Purity Assessment of Multi-Walled Carbon Nanotubes" Presentated at Materials Research Society Spring Meeting, San Francisco, CA 2007 - Landi, B.J., DiLeo, R.A., Schauerman, C.M., Cress, C.D., Ganter, M.J., Raffaele, R.P. "Multi-walled carbon nanotube paper anodes for lithium ion batteries." Accepted at Journal of Nanoscience & Nanotechnology

Poster

-DiLeo, R.A., Landi, B. J., Raffaele, R.P. "Application of the G'/D Raman Ratio for Purity Assessment of Multi-Walled Carbon Nanotubes" Presentated at Materials Research Society Spring Meeting, San Francisco, CA 2007
 -DiLeo, R.A., Anctil, A., Cress, C D., Landi, B.J., Raffaele, R.P. "Determination of Nanomaterial Energy Levels for Organic Photovoltaics by Cyclic Voltammetry" Presented at Materials Research Society Fall Meeting, Boston, MA 2007

Testimonial

Attending PGSS in the summer of 2002 greatly influenced my decision to pursue education in the sciences, specifically physics, in college. That decision was the first step in moving toward a education highly influenced by research opportunities throughout my undergraduate work, which in turn led to scholarship opportunities and more potential research opportunities as well. The idea of pairing a research weighted education with classroom courses was certainly emphasized during my short time at PGSS and it guided my choice to pursue the same environment in college. Without this initial exposure to such an environment I would probably not have chosen the education path I am currently on, and my desire to continue in a research-related career would not have been fostered.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Sara	Mustin	2002
College/degree	Employer / Job Title	
MIT Class of 2007, BS in Computer Science & Engineering	Google, Partner Technology Manager	

Accomplishments

MIT Bachelor of Science, June 2007:
Majored in Computer Science and Engineering
Minored in Mathematics and Women's Studies
Member of Eta Kappa Nu (Electrical Engineering and Computer Science Honor Society)
Member of Tau Beta Pi (Engineering Honor Society)
MIT: GPA 5.0/5.0

Testimonial

PGSS was the primary reason I became interested in pursuing engineering. PGSS was the first time I was really challenged by math and science classes in a way that also inspired and motivated me. When I was choosing which college to attend, I chose MIT because my experience at PGSS gave me the confidence that I could be successful even when faced with challenging classes. Actually, it was one of the peers I met at PGSS who sparked my interest in applying to MIT in the first place! PGSS made me realize that I wanted to spend 4 years surrounded by really smart people because it was motivating and collaborative, and that I was "smart enough" to belong.

Currently I work for Google as a Partner Technology Manager. Everyday I'm faced with challenging problems of how to create innovative products that best meet the needs of Google's partners. The technology is complex, the market is constantly changing, and finding the best solution requires collaborating with a lot of people and being a team player. PGSS has helped build the foundation for approaching challenging problems in a collaborative way and not getting frustrated when a solution isn't obvious.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
David	Pickett	2002 TA: 2005,2006
College/degree	Employer / Job Title	
The University of Chicago - Biological Sciences with a specialization in Neuroscience	The University of Chicago - Video Producer	

Accomplishments

Testimonial

When I applied to PGSS I thought that science was something set in stone, something that you learned out of a textbook. Of course I knew that all the scientific laws had been discovered at some point, but I didn't think of science as the on-going process of discovery. I thought of science as the formulas and rules that were left in the wake. And I thought that science could more or less explain everything. At PGSS I experienced science hands-on. I came to realize that science was not a set of answers; it was a method for discovering new answers. I discovered that the world was a much more mysterious place than I had originally thought, a place where every new discovery generates a hundred new questions. I came to understand that science is the single most important human endeavor.

I do not have a career in science. After completing my undergraduate degree, I realized I don't have the dedication necessary to become a scientist. I have not given up on science though. I currently work as a video producer for the University of Chicago. Part of my job involves interviewing scientists and other professors about their latest findings and producing videos (<http://research.uchicago.edu/highlights/>) to explain/display their findings to the world. I hope to continue to find ways to communicate the importance of science to the general public.

Aside from this understanding of the importance of science, PGSS also taught me the value of community and collaboration. At my high school the emphasis was put on individual achievement and all classes were fiercely competitive. PGSS exposed me to a world where my peers were truly my peers, people who could challenge me without threatening me. I realized that the world didn't have to be an endless competition and that in fact, by working together we could all accomplish more than we would alone. This affected my choice of colleges as I wanted to go somewhere that had the same emphasis on collaboration and community.

In addition to attending PGSS as a student I also returned two summers to work there as a Teaching Assistant/ Counselor. These were some of the best summers of my life. There is nothing as exhilarating as helping someone understand a complicated problem or idea. These summers taught me the joy of teaching and creating a safe & fun environment for students. I hope to return to teaching some day, because there's nothing as rewarding.

The impact of PGSS on my life has been immense, perhaps immeasurable. I don't know who or where I'd be with out it.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Joe	Roberts	2002 TA:2005-2008
College/degree	Employer / Job Title	
State University, BS Math,Physics University of Michigan, Ph.D. Math in progress	Graduate Student	

Accomplishments

Had full science scholarship for PSU

Testimonial

?*: It gave me the opportunity to interact with other students who shared my interests and made me excited about science and math. It was a major turning point for me academically and socially, and I have no doubt that my life would be very different if I never had the opportunity to attend PGSS.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jackee	Nowicke	2003
College/degree	Employer / Job Title	
MIT, B.S. in Mechanical Engineering	The Boeing Company, V-22 Osprey Helicopter Structural Engineering Analysis	

Accomplishments

Testimonial

I strongly believe that PGSS helped me get into MIT. Not only did it boost my college application, but the research project I did was an interesting topic on college interviews. PGSS motivated me to stay in the science field, as evidenced by my engineering degree.

In terms of benefiting PA, I came back to PA to work for Boeing in the Philadelphia area. Not only was PA investing in improving the my college application, they were also investing in improving the quality of prospective PA employees. In some part to PGSS, I was able to attend a prestigious university, and bring my knowledge and skill set back to PA. If employers see motivated and qualified employees in PA, they are more willing to locate there, thus provided more income for PA. I also know of at least 3 other PGSS students that have attended prestigious universities and are working or planning to work in PA.

Also, this might not be a strong argument for continuing funding, but the friendships I have made from PGSS are invaluable. Whether it was already knowing 8 people that I attended MIT with from my PGSS class, or meeting up with PGSS classmates in Boston who attended other colleges, to meeting up with classmates that are in Philadelphia now, I have a network of people that I know I can count on. In terms of bonds formed at PGSS, perhaps the biggest impact PGSS has made on my life, is that I am still dating the guy I met there, and we have plans to get engaged soon.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Sarah	Krahe	2003
College/degree	Employer / Job Title	
Penn State University (2008) - B.S. in Biochemistry and Molecular Biology University of Pittsburgh School of Pharmacy (2012) - PharmD	Giant Eagle Pharmacy - Pharmacy Intern	

Accomplishments

Testimonial

PGSS stimulated my curiosity in science and pushed me to follow my interests. It introduced me to Biochemistry which I ended up majoring in at Penn State. Coming from a small high school, I was academically the top dog and I hadn't really been challenged much. PGSS introduced me to a level of thinking that I had never been exposed to and taught me how to learn which helped me succeed in college. Finally, I am still close friends with a number of the people I met at Gov. School and I have returned to Pittsburgh thanks to my time here during PGSS.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jonathan	Shahlman	2003
College/degree	Employer / Job Title	
B.S. Physics, Carnegie Mellon University 2008 Ph.D. Physics, University of Pennsylvania 2013 (underway)	Graduate Student	

Accomplishments

2007 Barry G. Goldwater Scholar
 2008 Richard E. Cutkosky Award
 Currently working on the ATLAS experiment (one of the four major experiments at the LHC)

Testimonial

PGSS gave me the opportunity to see science beyond the scope of my small rural high school's classes. While in the program, I met other students who were just as excited about science as I was. As well, I witnessed the large scale structure of science at CMU. I can also directly attribute my choice to study physics to my experience in PGSS: Before attending the program, I knew I was adept in math and science, but was very unsure of what I wanted to do. During PGSS, I was enthralled with my physics class in special relativity, leading to my choice of studying physics in college.

PGSS gave me the opportunity to see science beyond the scope of my small rural high school's classes. While in the program, I met other students who were just as excited about science as I was. As well, I witnessed the large scale structure of science at CMU. I can also directly attribute my choice to study physics to my experience in PGSS: Before attending the program, I knew I was adept in math and science, but was very unsure of what I wanted to do. During PGSS, I was enthralled with my physics class in special relativity, leading to my choice of studying physics in college.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Katie	Liu	2003
College/degree	Employer / Job Title	
Duke University, Class of 2008: B.S. in Biology, B.S. in Psychology, Concentration in Neuroscience	University of Washington, Medical Scientist Training Program (MD/PhD in progress)	

Accomplishments

2 second-author publications from undergraduate research:

Identification of chemical inhibitors to human tissue transglutaminase by screening existing drug libraries. Lai TS, Liu Y, Tucker T, Daniel KR, Sane DC, Toone E, Burke JR, Strittmatter WJ, Greenberg CS. Chemistry & biology. 2008 Sep 22;15(9):969-78.

Identification of two GTP-independent alternatively spliced forms of tissue transglutaminase in human leukocytes, vascular smooth muscle, and endothelial cells. Lai TS, Liu Y, Li W, Greenberg CS. The FASEB journal : official publication of the Federation of American Societies for Experimental Biology. 2007 Dec;21(14):4131-43.

Testimonial

PGSS taught me... RESEARCH.

The biology team project was my first experience with research in my life. I had grown up in Latrobe and never had opportunities to work in labs or explore research like students attending high schools in larger cities. My PGSS research was a stepping stone -- I was chosen for a competitive research fellowship in college at Duke University because it was related to what I had done at PGSS. I stayed with the same lab for all four years, and ended up with two publications in respected journals, which helped me get into my top choice medical school just last year.

PGSS taught me... GENERAL RELATIVITY.

The professors at Carnegie Mellon University were phenomenal. They had a magical way of breaking down something as complicated as general relativity to high school juniors in a way that made complete sense. I am a die-hard biologist at heart, but learning about other disciplines from such inspirational faculty members has really shaped my way of thinking about science through the years; I've learned that you don't make great discoveries by zooming in on your area of interest, but rather by understanding the workings of the universe as a whole.

PGSS taught me... FRIENDSHIP.

In Latrobe, I never found classmates who shared the same interests and curiosity. At PGSS, I was amazed to find myself surrounded by others as driven as I was. It was also incredible how diverse everyone was. We bonded over our similarities as well as our differences, and grew SO close in such a short time; I remember so many people, myself included, crying like there was no tomorrow the day we all had to leave. Many of those friendships are still a huge part of my life right now, and I am so thankful for that.

PGSS taught me... TEAMWORK.

PGSS challenged every single one of us. We each entered with one or two subjects of expertise, and left with a deep appreciation for science and multidisciplinary learning. During our time there, we relied on each other and taught each other, filled in each other's gaps. I realize that it would have been impossible to learn as much as I did if I had set about trying to do it all on my own.

PGSS taught me... PASSION.

For the first time in my life, I was truly engaged in thinking. For the first time, I LOVED learning. For the first time, I felt challenged and pushed my own limits. I never knew what potential I had until the last day when I looked back on all that I had learned. The experience has helped me discover what I am truly passionate about in life and how to wholeheartedly devote myself to it.

I am now a first year MD/PhD student at the University of Washington. It is the top-ranked MD/PhD dual degree program according to the National Institutes of Health, and is renowned for both its medical school and research. PGSS helped me grow in so many different ways; I am not sure if I would be here right now without that experience.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Elena	Glassman	2003
College/degree	Employer / Job Title	
MIT, B.S. in Electrical Sci and Eng., M.Eng in Elec. Eng./Comp. Sci. expected in 2009	Grad Student	

Accomplishments

NDSEG fellow

Testimonial

PGSS had a profoundly positive effect on my life. It helped me gain admission to MIT, one of the top colleges for science and engineering, which is where I recently received my bachelor's degree in electrical engineering. I am expected to receive a master's degree there as well before continuing on for my PhD, as are many of my PGSS classmates. The second aspect to PGSS's positive impact on my life is social. My PGSS classmates and I met each other at PGSS six years ago and many of us have stayed together, supporting each other as we each pursued our respective passions.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Joshua	Cogan	2003
College/degree	Employer / Job Title	
The Johns Hopkins University Fall 2004-Spring 2008 Bachelor of Science in Physics Spring 2008 Bachelor of Arts in Mathematics Spring 2008 PhD Candidate in Physics	Stanford University Stanford, CA Fall 2008-Present	

Accomplishments

- Szlavec , K, A. Terzis, S. Ozer, R. Musăloiu-E., J. Cogan, S. Small, R. Burns, J. Gray, A. Szalay. Life Under Your Feet: An End-to-End Soil Ecology Sensor Network, Database, Web Server, and Analysis Service.
- Musaloui-E, R. A. Terzis, Szlavec , K., , A. Szalay, J. Cogan, R, J.Gray Life under your feet: Wireless sensors in soil ecology. Proceedings of the Third Workshop on Embedded Networked Sensors (EmNets 2006) May 30-31, 2006 Harvard University, Cambridge, Massachusetts, USA p. 51-55.
- Terzis , A, R. Musaloiu-E, R. Szlavec , K., A. Szalay, J. Cogan, R, J.Gray, R. Burns, Small Life under your feet: Wireless sensors in soil ecology. Ad Hoc Networks Journal Special Issue on: Recent Advances in Wireless Sensor Networks submitted

Testimonial

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Hui Ying	Wen	2003
College/degree	Employer / Job Title	
MIT, B.S. Aerospace Engineering with Information Technology, B.S. Humanities	NASA Jet Propulsion Laboratory, flight software systems engineer	

Accomplishments

Testimonial

Meeting other kids my age who were as serious about science and engineering as I was, and who were brilliant, vibrant people, for the first time in my life was a huge shock - a sudden jump-start to my own social and intellectual growth. The Pennsylvania friends I've met at PGSS are now spread all over the country, working and studying in the highest tiers of science and engineering. It is an honor to know them and have them as resources in my academic and professional life.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kim	Weston	2003
College/degree		Employer / Job Title
Carnegie Mellon, BS in Computer Science, May 2008 Cornell University, working towards a PhD (expected ~2013)		Cornell University, PhD student in applied mathematics (mathematical finance)

Accomplishments

Achievements: Phi Beta Kappa, Andrew Carnegie Scholar, Phi Kappa Phi (honor society), graduation with University Honors (Carnegie Mellon)

Contributions: Currently beginning research in credit risk modeling with "frailty", hopefully being able to price credit derivatives more successfully than prior Wall Street attempts

Testimonial

There are very few experiences that I can pinpoint as turning points in my life, and PGSS is one of them. Coming from a mediocre school district with few advanced course options, PGSS exposed me to intensity, rigor, and higher expectations than I could have imagined. For the first time, I was surrounded by people who shared my passion for learning, mathematics, and science; before this program, I would have never imagined an atmosphere where students scrambled to work on homework that wasn't assigned a point value and didn't count for school credit. From PGSS, I didn't just gain knowledge and friends--I gained an understanding of the opportunities available to me and that I had the ability to push myself much farther than my high school had provided. After this summer experience, I set my sights high and applied for colleges that I thought would challenge me, eventually ending up at Carnegie Mellon.

I cannot say that without PGSS I wouldn't have been able to obtain admission or be successful at a place like Carnegie Mellon (my alma mater). But this program exposed me to academic rigor and challenges that were previously unimaginable. A program like this has the ability to tap into the academic property of young people in the state of Pennsylvania and continue to advance science and maintain a competitive edge in this state and country. It would be devastating to see a successful program shut down when its effects can be seen so quickly when outstanding high school seniors enter universities (many of which in my PGSS year were in Pennsylvania) and contribute positively to college learning environments. This program forever changed my life, and I hope that it will be around for years to change the lives of others.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Ojus	Doshi	2003
College/degree	Employer / Job Title	
Brown University; B.A. Biology	Genentech, Inc., Process Development Rotational Program	

Accomplishments

Publication in Journal of Molecular Biology

Testimonial

PGSS was the foundation of my interest in scientific lab work, which definitely helped throughout college and in my first job at the top biotech company in the country. The type of collaborative efforts that went into the final research project as well as normal problem sets were critical to my interaction with other students during college.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Allison	Lau	2003
College/degree	Employer / Job Title	
Penn State University, BS in Biology (2008)	Graduate Student, Harvard Medical School	

Accomplishments

Lau AN, Peng L, Goto H, Chemnick L, Ryder OA, Makova KD. Horse domestication and conservation genetics of Przewalski's horse inferred from sex chromosomal and autosomal sequences. Mol Biol Evol. 2009 Jan;26(1):199-208. Epub 2008 Oct 17.

Testimonial

My experience attending PGSS convinced me to pursue a biology degree in college and a career in the sciences in general. I see regularly and am in contact with many of the friends that I made at PGSS, even though it was over 5 years ago. PGSS was my first real experience with scientific research and the supportive scientific community at PGSS really influenced me in a positive way. I would hate to see future generations of potential scientists miss out on this amazing opportunity!

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Daniel	Denis	2003 TA: 2006
College/degree	Employer / Job Title	
MIT, B.S. in Nuclear Science and Engineering, B.S. in Literature	MIT Plasma Science and Fusion Center, High Energy Density Physics Division --> (from April) Westinghouse Nuclear, Engineer in Nuclear Materials	

Accomplishments

NDSEG fellow

Testimonial

PGSS had a profoundly positive effect on my life. It helped me gain admission to MIT, one of the top colleges for science and engineering, which is where I recently received my bachelor's degree in electrical engineering. I am expected to receive a master's degree there as well before continuing on for my PhD, as are many of my PGSS classmates.

The second aspect to PGSS's positive impact on my life is social. My PGSS classmates and I met each other at PGSS six years ago and many of us have stayed together, supporting each other as we each pursued our respective passions.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Laura	Anzaldi	2003 TA: 2006,2007,2008
College/degree	Employer / Job Title	
Duke '08, Chemistry BS with a concentration in Pharmacology and a minor in Biology	Graduate student in Biomedical Science at Vanderbilt University	

Accomplishments

Major Awards:

- Graduated summa cum laude from Duke University
- Merck Index Award. This prize is awarded annually to a graduating senior chemistry major intending to pursue a career in medicine. Selection is based upon scholastic excellence.
- Junior Marshall for Duke University
- Research Experience for Undergraduates Travel Award to present at a National Meeting of the American Chemical Society

Presentations:

- Pittsburgh Summer Research Symposium (oral and poster)
- 231st National Meeting of the American Chemical Society in Atlanta, GA (poster)

Publications:

- Langmuir. 2007 Dec 18;23(26):13203-8. Epub 2007 Nov 20.
- Photochem Photobiol. 2006 Nov-Dec;82(6):1475-81.

Testimonial

PGSS gave me the opportunity to experience science in a positive and nourishing environment. I had excellent instructors in all the different science disciplines that made science exciting and inspired me to pursue science further (despite the challenges of the field). I met peers who accepted me for who I was, and encouraged the pursuit of knowledge. PGSS gave me the confidence to aim high and set my mind to pursuing my passions, no matter how difficult the journey might become.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jeremy	Hurwitz	2003 TA:2006
College/degree	Employer / Job Title	
MIT - Math and Computer Science	MIT - Master's of Engineering Student Accomplishments	

Accomplishments
Todd Anderson Teaching Award PCTM Outstanding Student in Math Phi Beta Kappa

Testimonial

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Christopher	Baldassano	2004
College/degree	Employer / Job Title	
Princeton University, BSE in Electrical Engineering with certificates in Physics and Robotics	Offers for fully-funded PhD programs from Stanford, CMU, MIT, Cornell, and Upenn	

Accomplishments

Hertz Fellowship Finalist, Phi Beta Kappa, member of the Princeton Autonomous Vehicle Engineering group (working on projects including the 2007 DARPA Urban Challenge), published the paper "Kratos: Princeton University's Entry in the 2008 IGVC" at 21st Annual IS&T/SPIE Symposium on Electronic Imaging, was awarded an NSF fellowship last summer at UPenn.

Testimonial

PGSS was a major factor in my decision to study engineering at Princeton University, and inspired in me a love for science and research that has continued to drive me to apply for PhD programs. Governor's School was not just a supplement to my normal academic studies, but a radically different experience in learning and discovery that was simply not otherwise available to gifted high school students.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
David	Renshaw	2004
College/degree	Employer / Job Title	
B.S. Mathematics 2009, California Institute of Technology	Undergraduate at Caltech.	

Accomplishments

Ku, Cheng-Yeaw and David Renshaw. Erdos-Ko-Rado Theorems for Permutations and Set Partitions, Journal of Combinatorial Theory, Series A, DOI: 10.1016/j.jcta.2007.12.004

Testimonial

I can say without exaggeration that those five weeks were the most influential in my life. It was eye-opening to be surrounded by extremely motivated and intelligent students with interests similar to mine. It inspired me to redouble my academic efforts in my senior year of high school, and it encouraged me to apply to the best colleges.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Mollie	Schwartz	2004
College/degree	Employer / Job Title	
Columbia College, Columbia University, BA May 2009 in Chemical Physics	Student	

Accomplishments

2008 Goldwater Scholar; 2009 Rhodes Scholar Finalist; Phi Beta Kappa; Dean's List
Publications:

Schwartz, M.E. and Solomon, T.H. "Reaction Fronts in Ordered and Disordered Cellular Flows with Opposing Winds." Physical Review Letters 100, 028302 (2008).

E.A. Henriksen, Z. Jiang, L.C. Tung, M.E. Schwartz, M. Takita, Y.J. Wang, P. Kim, and H. L. Stormer. "Cyclotron Resonance in Bilayer Graphene." Physical Review Letters 100 (8), 087408 (2008).

L.M. Beauvilliers, M.E. Schwartz, M.S. Paoletti and T.H. Solomon. "Chaotic Mixing and Reaction Dynamics in a Chain of Vortices". Proceedings of the International Conference on Nonlinear Science and Complexity (NSC08, 2008).

T.H. Solomon, M.S. Paoletti and M.E. Schwartz. "Experimental Studies of Advection-Reaction-Diffusion Systems." Proceedings of Chaos, Complexity and Transport (CCT07) conference, Marseilles, France (2007).

Z. Jiang, E.A. Henriksen, L.C. Tung, Y.J. Wang, M.E. Schwartz, M.Y Han, P. Kim, and H.L. Stormer. "Infrared Spectroscopy of Landau Levels of Graphene." Physical Review Letters 98, 197403 (2007).

Testimonial

PGSS, quite simply, turned me into a scientist. Like many bright young students, I spent my time in high school interested in everything: on any given day, I planned to be a human rights lawyer, a professional musician, a martial artist, a scientist, a rabbi, or the President, with no clear preferences and no real mechanism for choosing. At PGSS, though, I got to work in a lab. Until this point, science had been equations, derivations and puzzles: an interesting mind game, but not more. In the lab, however, science came alive. I loved getting my hands dirty in the pursuit new scientific knowledge, and I especially loved doing so in the company of other excited young scientists. PGSS showed me that the life of a scientist is intellectually vigorous, physically tactile, and socially rich. Real lab experience is almost impossible to get as a high-school student, especially in more rural parts of Pennsylvania. It breaks my heart that young Pennsylvanians will not get to experience the vitality of science the way I did.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
David	Chi	2004
College/degree	Employer / Job Title	
United States Military Academy at West Point Duke University, B.S. in Biology	Future Plans: Teach For America, Medical School at the Mayo Clinic	

Accomplishments

Top-ranked cadet in overall academic, physical, and military measures at West Point
MIT Amgen Scholar

Testimonial

PGSS was exceptionally valuable in my personal development and maturation. Prior to that summer in 2004, I had always enjoyed the position of being the smartest and most capable student in my high school, but Governor's School opened my eyes for the first time to peers that were just as competent and talented as me. For the first time in my life, I was challenged by those around me and learned so much from my new friends. But what was most important to me that summer was not the immense knowledge I gained, but the internal humbling that occurred in me and the resulting maturity. I am now always motivated to gain more knowledge into the world and better myself, seeking to resist complacency, yet I am able to balance this drive with the desire for cooperation with my fellow students in the pursuit of collective excellence.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Hannah	Yin	2004 TA: 2008
College/degree	Employer / Job Title	
- University of North Carolina at Chapel Hill (will graduate in May 2009 with B.S. Biology & B.A. Linguistics)	- UNC School of Medicine (M.D., intended graduation in May 2013... or 2014, see the following) - (Maybe) UNC School of Public Health (M.P.H., 2012; in this case, I would graduate from medical school in 2014)	

Accomplishments

1) Scientific research-related

- Publication: Wang S, Xing Z, Vosler PS, Yin H, Li W, Zhang F, Signore AP, Stetler RA, Gao Y, Chen J. (2008). Cellular NAD replenishment confers marked neuroprotection against ischemic cell death: role of enhanced DNA repair. *Stroke*, 39 (9): 2587-95.
- Pending publication: Sunman JA, Yin H, Akiyama SK. Inhibition of PC-3 Cancer Cell Migration and Invasion by 4-Phenyl-3-Butenoic Acid. In preparation.
- Award: Outstanding Summer Poster, National Institute of Environmental Health Sciences (NIH-NIEHS), 2006
- Beta Beta Beta National Biological Honor Society, 2005

2) Service-related

- Community Impact Student Award, North Carolina Campus Compact, 2007
- UNC Public Service Scholar

3) Leadership experience

- Workshop presenter, National Service Learning Conference, Nashville, TN, 2009
- President, UNC APPLES Service-Learning Program, 2008-2009
- Member, Carolina Union Board of Directors, 2007-2009
- Senior Adviser, Duke-Carolina Student Basketball Marathon, 2008-2009

Testimonial

I entered PGSS already loving science, but only on a theoretical level, for I'd never had any experience *doing* science before the summer of 2004. The challenging lecture and laboratory work at PGSS, and, in particular, the team research project, made science tangible as a field to me. Even more incredibly, the social dynamic generated at PGSS demonstrated just how rewarding and *fun* it is to work with other driven, talented students. It's the nights we stayed up, first doing homework and then just hanging out, that will stay with me forever. I am so thankful for the network of friends I now have, and take pride in knowing that amongst them will emerge some of the leaders in a wide range of fields in the following decades.

But PGSS gave me more than just an increased grasp on the scientific field. It instilled in me a sense of responsibility to use my skills to contribute in new and creative ways to society. PGSS is not a didactic program; it does not tell you how great science is and how we should go about our scientific careers. Rather, it offers us a glimmer of just how rewarding it is to put our talents into action; it gives us the tools to pursue our own course, and urges us to dream big dreams.

For me, this has meant diving into social entrepreneurial applications of science. My personal drive to work with people from all walks has guided me into a medical career, but to merely practice clinically will never satisfy me. I want to do my part in helping the under-served, working for those who few others are working for. I want to conduct community-based research and make health care affordable in the most impoverished counties of North Carolina. NC is, after all, where I grew up and where I am receiving both my collegiate and graduate educations.

PGSS has been instrumental in shaping my life's path. My five weeks there gave me some of the most fun moments and best friends I will ever know. It pushed me to my very intellectual limits and demonstrated the beauty of collaborating with peers. But perhaps most importantly of all, PGSS has shown me that each person has to find their own calling, and that it is precisely the most challenging battles are the ones most worth fighting. It is this quality, above all else, that gives me such hope for the future. I know that many PGSS alumni will lead our nation and world through tough times and to greater heights in the years to come.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Brian	Kroener	2005
College/degree	Employer / Job Title	
expected B.A.in Biological Basis of Behavior, School of Arts and Sciences, University of Pennsylvania, Class of 2010	Ted Abel, Ph.D. - Independent Study/Research Asst.	

Accomplishments

- Dean's List for 2007-2008
- DAAD RISE Scholarship recipient, Summer 2008

Testimonial

PGSS 2005 literally changed my life- I would not be an undergraduate at Penn, an Ivy League university, if I had not been exposed to the positive influence of academics and science at PGSS. I found that my interest in the basic sciences lies in biology, which has led me to a neuroscience degree program and a goal of becoming an M.D. in the short term. I met driven, smart and fun peers who enjoyed learning as much as I did, something I had never experienced before. These fellow PGSSers became and are still my dear friends, and I look forward to having many of them as colleagues someday. But mostly, PGSS taught me to always strive for deeper understanding in science and in life, and that science should be at the service of my fellow man.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jason	Ma	2005
College/degree	Employer / Job Title	
Stanford University	Student	

Accomplishments

Testimonial

It was my first opportunity to do what I wanted to do, to learn what I wanted to learn. It was excellent preparation for college, and I can honestly say that it was the best summer I've had.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kevin	Bancroft	2005
College/degree	Employer / Job Title	
Penn State, working on an honors Chemistry B.S.	Penn State Earth and Mineral Sciences college, Lab Assistant	

Accomplishments

Publication in Nano Letters following a summer REU at Lehigh

Testimonial

I always had a passion for learning about the unknown. My 5 weeks at PGSS confirmed this and solidified my budding interest in materials chemistry. With Dr. Butera, I was able to work in a group that steered me towards my choice of major at school. I also believe that my involvement in PGSS almost guaranteed me a spot in the Schreyer Honors College at PSU. This involvement has opened many opportunities for me for research and advanced classes that I otherwise would have missed.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Andrew	Ko	2005
College/degree	Employer / Job Title	
Attending Carnegie Mellon University Expected Graduation Date: Dec 2010 Majoring in Computer Science Double major in Discrete Math and Logic	Student	

Accomplishments

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Testimonial

I believe that the PGSS program is vital in locating bright students from all areas of Pennsylvania and giving them the experience necessary to succeed at major universities.

I came from a small high school with very few AP courses and none in certain areas such as microeconomics, philosophy, or computer science. The courses I took a PGSS were incomparable to those accessible by myself as a high school student (whether it be online courses, or attending a local college). The PGSS program gives its students a rigorous introduction to non-introductory topics covered at top universities. Admitted students are expected to have mastered the basic principles of chemistry, biology, and physics. Only the computer science and discrete math courses were less harsh since most high schools do not cover those topics at even an introductory university level. The exposure to computer science during my PGSS program was the cause of my decision to major in computer science, despite never having taken computer courses before.

At my local high school, the coursework was repetitive and mandatory. At PGSS, the projects and homeworks were challenging and had a degree of freedom. The homework problems given required much thought and insight. Also, in my high school, most projects or coursework required at most a single partner. Projects at PGSS were group based, involving design decisions as well as implementation details. The homework problems were often done in groups balancing people's strengths and weaknesses. The level of challenge and cooperation are definitely present in my current academic work. The experiences I had gave me much better preparation for the type of work expected both in work and secondary education.

The PGSS program had a major impact on my future career decisions. It showed me areas of interests that I could explore, what challenges await me in those fields, and how to successfully meet my goals.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Stephanie	Li	2005
College/degree	Employer / Job Title	
Duke University	Student	

Accomplishments

Testimonial

PGSS exposed me to other students who were as motivated and passionate about sciences as I have always been. It expanded my background knowledge on computer science, discrete math, and organic chemistry, which gave me a headstart in college. Even now as a junior in college, I still maintain the friendships that I developed during PGSS.

These memories will last a lifetime for me because I have met people that have changed my perspective on science for the better. I truly hope that future students will have the opportunity to attend PGSS because it has left such a positive impact in my life.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Liuyi (Ye)	Pei	2005
College/degree	Employer / Job Title	
California Institute of Technology, still earning my B.S.	Caltech	

Accomplishments

Testimonial

While I've always liked math and science, PGSS was where I realized that I wanted to pursue a career in science. It was where I first got exposed to astrophysics, my now declared major in college. I have never regretted going into this major, and I have PGSS to thank for helping me realize what I want to spend my life doing.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kaleigh	Felisberto	2005 TA:2008
College/degree	Employer / Job Title	
University, currently attending for a BA in Chem	The Historian, the official journal of the History Honor Society, Senior Editorial Assistant	

Accomplishments

President's Environmental Youth Award, National Youth Science Camp

Testimonial

PGSS basically made my life what it is. It introduced me to challenging classes with completely new information, presented me with brilliant new friends who shared my interest in science, and fostered a great environment to learn and grow. Everything that has happened since then happened because of PGSS. I attended the National Youth Science Camp as PA's representative as a direct result. PGSS cemented my interests in science while promoting my maturation in my social life, something that I really needed the boost in. I ran with it; I loved the freedom and responsibility of the program. Even now, hundreds of miles from home, my friends at school know how important PGSS is to me. I cannot begin to describe the positive impact of Gov School, it's just that mind-blowing.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Karen	Tsai	2006
College/degree	Employer / Job Title	
Princeton University	Student	

Accomplishments

1st Runner Up in America's Junior Miss

Testimonial

I cannot express enough the impact the PGSS experience has had on my life. I wrote my college application essay to Princeton on Governor's School, and am now currently pursuing a Computer Science BSE degree with certificates in Neuroscience and Engineering Biology, all while still being pre-medicine. PGSS gave me the inspiration to pursue a dream - the seed of interest was planted in me that summer, and through the experience I gained the confidence to pursue a major in science and engineering in a highly selective university despite my gender or my insecurities at being from a public high school.

However, it was not only the academics that made PGSS so priceless to me. I still maintain close and cherished friendships with many fellow govies three years after attending PGSS, and expect these friendships to last much longer. Through the social events I discovered a love of dance, which I now pursue through joining two dance groups on campus. Through late night talks with govies and TAs I've gained a more mature world perspective. Through it all I discovered a sense of identity, confidence, and communication that eventually led me to do very well in the America's Junior Miss program, resulting in a scholarship award of \$44,100. I can't describe enough how much Governor's School changed every aspect of my life, and how remarkably blessed I feel to have been a part of it. I sincerely hope that this opportunity will continue to be available for future classes and generations.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Chris	Tralie	2006
College/degree	Employer / Job Title	
Bachelor's of Science and Engineering candidate at Princeton University, undergraduate class of 2011	Student	

Accomplishments

US Copyright for work with DSP for violin music composition

Testimonial

PGSS opened my eyes to the infinite world of science. Before PGSS, I was very interested in learning, but I didn't have an outlet for my talents yet. The program gave me an opportunity to meet with many like-minded people my age and to see first hand what cutting-edge research was at a young age, and it got me really excited to learn more. The experience helped to give me an edge for future technical work at Princeton, an extremely competitive environment. It also was the spark to what I believe will be a lifetime dedication to science and engineering.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Lynley	Doonan	2006
College/degree	Employer / Job Title	
Carnegie Mellon University 2011	Student	

Accomplishments

Testimonial

PGSS led me back to my love of benchwork. When I attended PGSS I was considering doing a computational biology degree in college. However I had no formal programming classes at my high school and only slight lab work. I took programming lab I learned that I did enjoy programming but I really missed the benchwork of the other sciences especially biology. This led me to my major, biology. It also led me to fall in love with CMU and want to attend it for college. There is also the people aspect. Our class had an amazing bond, that we still share today. I know so many people that I would have otherwise not in so many different amazing schools with so many different passions and interests. It's awesome to know all these people and to keep this bond to this day. I made so many awesome friends and had such an amazing experience that I wouldn't have changed anything. It was the best summer of my life and I wish I could experience it again.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Andrew	Watkins	2006
College/degree	Employer / Job Title	
Harvard College '11, in pursuit of a BA in Chemistry	Student	

Accomplishments

Testimonial

It's difficult to overstate the influence that attending PGSS had on my life; at the same time, it's difficult to project how much more of an influence it may yet have--since, simply put, I'm still a kid.

The best way to encapsulate the way that PGSS changed my life is to explain what I felt about my future before attending PGSS. It looked, in a word, bleak. I knew, subconsciously, that my greatest talents lay in science, that that was my calling. But I looked around myself at school and noticed that the most compelling people I knew were in the humanities: in fact, many of my classmates in the sciences were intolerable. I faced a difficult decision: whether to pursue the sciences, and make the most out of my life, but surround myself with people I disliked, or to pursue the humanities, which comprise many noble vocations but none to which I'm best suited, and in so doing keep more enjoyable company.

Before attending PGSS, I leaned towards the latter, and was quite sure that I would feel guilty about it for a long time. Within the first day of PGSS, I had realized just how false a dilemma I had posed myself: the best science students in the state were fantastic people to spend time with. I had found my calling.

It seems inappropriate to ignore everything I discovered about the sciences, about how satisfying (and how hard!) research is, about other cultures and political beliefs (whether Philadelphian or ardent mainland Chinese), and about how to relate to people (I like to think I was as funny as I am now before I met David Shore, but then again, I've always liked to tell lies).

But all that pales in comparison to the fact that I now know that I will find beautiful, enchanting people whatever field I pursue. Not only am I more comfortable in the sciences, I'm more comfortable in life. I can't thank PGSS enough.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Amy	Liao	2006
College/degree	Employer / Job Title	
Yale University, New Haven, CT. BS, Mathematics (expected May 2011)	Student	

Accomplishments

Testimonial

PGSS truly opened up my eyes to the degree of potential and talent in people my age. I grew up in a small town and went to a good but not particularly inspiring public high school. I bonded with the govies at PGSS more than I ever had with anyone in high school, worked harder than I ever had before, and had more fun doing so than I could have imagined possible. It's difficult to quantify in words how the experience of working collaboratively with brilliant future scientists with such a pure passion for learning and knowledge. I learned more from my fellow govies in five weeks than I did at any point in high school. PGSS sealed my resolve to pursue a career in the sciences.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Alexander	Laun	2006
College/degree	Employer / Job Title	
United States Naval Academy, Class of 2011 Bachelor's of Science Degree Major: Naval Architecture Minor: Russian	United States Navy Current Position: Midshipman (Third-Class)	

Accomplishments

4.00 Academic QPR (to-date), Ranked 11th in Class of 2011 (previous semester); Billets - 22nd Company Academic Corporal, Brigade Character Corporal.

Testimonial

PGSS provided an unparalleled technical and scientific background for comparable academic pursuits in the future. Through the PGSS program, my knowledge of mathematics, physics, and chemistry was greatly improved, allowing me to succeed through the rigorous coursework of the Naval Academy. Additionally, the knowledge provided by the PGSS program allowed me to participate in a unique internship program this past summer: I integrated computer technologies and command-and-control (C4ISR) equipment into military vehicles (PM C4ISR OTM Program, United States Army; Fort Dix, NJ). Because of my passion for science and mathematics, fostered by PGSS, I intend to early-interview into the submarine warfare community (next year), a training process that includes completion of Nuclear Power School (and Prototype training). Ultimately, the PGSS program has contributed greatly to my development as a future naval officer: I developed not only as a technically-proficient individual, but also as a leader and teammate/shipmate.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Madeline	Eckenrode	2006
College/degree	Employer / Job Title	
Current sophomore at Wake Forest University, Winston-Salem, North Carolina	Student	

Accomplishments

Carswell Scholar at Wake Forest (full scholarship plus living and research stipend) Recipient of a \$5,000 Richter grant to study Islamic charitable foundations during the summer of 2008 in Egypt and South Africa Presenter at the National Conference on Undergraduate Research at the University of Wisconsin - LaCrosse to be held in April 2009 Undergraduate researcher in the lab of Dr. Susan Fahrback, an internationally recognized expert on insect neurobiology. Currently studying the "clock proteins" in the honeybee brain.

Testimonial

While at PGSS, faith was placed in my abilities to think critically and creatively - I was unleashed into an organic chemistry lab and asked to consider the mechanisms of the reactions is performed; I was asked to develop a project under the tutelage of a professor of physical chemistry even though I had never considered the Schroedinger wave equation; and I was given homework that was more challenging than any I had ever received. All of those things gave me the confidence to declare a major in chemistry and to approach a professor during my freshman year in college about doing research in her lab. Additionally, the fact that I had been accepted into PGSS and successfully completed the program was, for many people, a testament to my abilities as a student, and a valuable one at that (I received a scholarship worth about \$250,000, meaning that I will be able to enter medical school debt-free). After I left my summer at PGSS, I was sure I wanted to be a doctor (and I was nearly as sure that I actually could be one, if I could cope with the loads of work and sleepless nights involved in PGSS). That was one benefit. Making many brilliant, interesting friends was definitely another. People I met at PGSS will be my friends forever. They inspire me and they encourage me to pursue excellence.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Julia	Goldner	2006
College/degree	Employer / Job Title	
Brown University, Biomedical Engineering, class of 2011	Student	

Accomplishments

National Merit Scholarship

Testimonial

PGSS gave me the opportunity to immerse myself in my academic interests in a challenging and encouraging environment. I am so lucky to have become friends with 99 other driven, talented and fascinating people who are drawn to science, but who also have cultivated a truly diverse array of experiences and interests. During those five weeks, I learned how to collaborate effectively, strive to be a positive intellectual force in a team, innovate analytically, and appreciate the ideas of my peers. PGSS affirmed my love for science and my experience there persuaded me to continue on the path to a career in Biomedical engineering or medicine; I am currently pursuing a B.S. in Biomedical Engineering at Brown University.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jack	Zhang	2006
College/degree	Employer / Job Title	
Duke University BS Political Science	Student	

Accomplishments

Several Pennsylvania Junior Academy of Science First Place awards

Testimonial

(College Essay) "Only at Gov. School" I muttered signing the armistice that ended the Prank War of Hamerslag Hall after I found everything on my side of the dorm room had disappeared. In fact "Only at Gov. School" became our byword for everything in those extraordinary five weeks. Without doubt, my participation in the Pennsylvania Governor's School for the Sciences was one of the most rewarding experiences of my life. Like many, I began Gov. School a skeptic, lamenting the sacrifice of summer vacation for nerd camp, and ended it a convert, despondent that the experience went by so quickly.

One key element that made Gov. School magical was the people. We came from across Pennsylvania; we were farm boys and city kids and suburbanites united by our passion for learning and for our achievements in science. However, we did not realize that we were much more. We were artists, musicians, comedians, dancers, athletes, and much more. Five weeks of living, learning, and laughing together knit us into a dynamic whole. We were each wowed by the achievement of the others, and in this way Gov. School was a humbling experience. In belonging to this beautiful whole we came to better understand ourselves. We often found that our accomplishments were eclipsed by our peers and thus we learned to define ourselves in ways beyond our academic personas.

Another unforgettable aspect was that it was organized like college without the competition. We were given much more freedom than we were used to, and we did not have to worry about grades or exams. For the first time in our lives we learned for learning's sake. The material was by no means easy and we were expected to finish all the homework. We found the solution in collaboration; I was not embarrassed to get help with the discreet math because I was able to give help with chemistry and biology. Gov. School provided me with my first opportunity to engage in a college level team project and my first chance to publish a research paper. It was also a new experience socially, giving me environment and opportunity to be who I truly am.

Above all, what made the program so memorable were the innumerable connections between the people. Having expected geeky introverts, I was astounded by the majority of my fellow Govies who were often even more outgoing than I was. We congregated in the lounges and game halls of CMU in the day and in each other's rooms at night. The friendships I built while at Governor School are likely to stay with. Govies stay in touch online, on the phone, and in person whenever possible. Though my memory grows hazy when it comes to the material covered in lectures, I retain vivid mental pictures of many unforgettable moments. Of course many of the great things in life happen "Only at Gov. School" but if college is anything like it then I might be happy for the next four years of my life.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Kim	Krisada	2006
College/degree	Employer / Job Title	
Yale University, Class of 2011	Student	

Accomplishments

Contributing writer to The Triple Helix

Testimonial

PGSS gave me the opportunity to meet high schoolers who shared the same passion for the sciences as me. We learned from and taught each other, and just the experience of being surrounded such intelligent, motivated individuals with shared interests reaffirmed my love for the sciences. PGSS helped me realize my place in this world, and gave my life a direction. I met some of my best friends at PGSS, and the bond I have with the people I met will last me a life time. I was so lucky to have this opportunity, and I can only hope that other prospective scientists will also have this experience.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Sharon	Warner	2007
College/degree	Employer / Job Title	
Haverford College, freshman	Student	

Accomplishments

commended by National Merit Association, AP Scholar, salutatorian of high school class

Testimonial

I performed well in my college science classes only because of the broad background provided at gov school that couldn't be provided at my public high school. Socially, I met talented, intellectual students from across the state with different cultural backgrounds than my own.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Melissa	Elfont	2007
College/degree	Employer / Job Title	
University of Pennsylvania, Class of 2012	Student	

Accomplishments

Testimonial

PGSS was one of the most positive experience I have ever been lucky to be a part of. PGSS introduced to some of my best friends, whom I still keep in contact with and visit to this day. Academically, PGSS allowed me to explore fields that are just not available on the high school level, all while I was in my junior year of high school. The Governor's School program offered me a glimpse into the world of college, independent living, responsibility, and adulthood, and I believe I matured more in my 5 weeks at Carnegie Mellon than at any other point in my life. Even today, I find myself looking back on my summer in Pittsburgh as one of the best and most fruitful periods of my life.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Isabela	Negrin	2007
College/degree	Employer / Job Title	
Freshman at University of Pittsburgh	Student	

Accomplishments

University of Pittsburgh Honors College, Honors Full Tuition Scholarship, Dean's List, Phi Eta Sigma (National Honor Society)

Testimonial

It exposed me to higher level science and math that I would not have experienced in my high school. I believe it greatly prepared me for college both with the social atmosphere of living in a dorm and with the high level of coursework required.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Natalie	Morris	2007
College/degree	Employer / Job Title	
Carnegie Mellon, pursuing a double major in Computer Science and Physics	Student	

Accomplishments

Testimonial

When I came to PGSS, I had no idea what computer science entailed. I figured you had to be a slightly neurotic genius to sit in front of a computer all day coding who knew what. Now I am back at CMU pursuing my primary degree in this field, thanks to my experience at PGSS. After five weeks of taking a class I was sure I wouldn't like, I had discovered that, a)CS is absolutely fascinating, and b)it was actually making sense to me. Thanks to PGSS, I am studying CS at the top school in this field. As for the second major? That is also thanks to PGSS. I have always been interested in the subject, but I never thought I could actually *be* a physicist. My classes in physics and astrophysics at PGSS showed me that I love physics too much to *not* study it. I still don't know what I will do with these two degrees, but that is because I have the lovely problem of too many options. And I know that whatever I do in my future, I will enjoy every minute of it.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Molly	Kozminsky	2007
College/degree	Employer / Job Title	
MIT	Student	

Accomplishments

Participated in a BattleCode 2009 team, placing top 24 out of over 200 teams; the rest is all high school stuff at this point National Merit Scholar, USABO semifinalist, school-related biology awards

Testimonial

PGSS reminded me of the joy of learning, which high school had basically demolished by the end of my junior year. I was surrounded by motivated students instead of people simply scrambling for grades. This reinvigorated my interest in science. Now that I am a freshman in college, I find topics and facts covered in Gov School coming up in my classes, allowing me to make important connections. PGSS also introduced me to Java programming, which is essential in a world increasing integrated with computers. I found the introduction to organic chemistry particularly helpful.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Diya	Das	2007
College/degree	Employer / Job Title	
Princeton	Student	

Accomplishments

RPI medal award, and a National Merit Scholarship

Testimonial

PGSS was the first opportunity I had to work in a physics research lab. I am currently considering a career in science research. Er, socially, PGSS gave me the opportunity to make plenty of good friends who managed to stay good friends over a year later, despite our lack of proximity (that is quite rare for a summer program). I'm not sure how important this is, but the balance between work and fun was also something new for me (I spent a lot of time doing one or the other, but not both), and it helped me relax a bit during my senior year.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Caroline	Hsu	2007
College/degree	Employer / Job Title	
working toward Bachelor of Science in Chemical-Biological Engineering at the Massachusetts Institute of Technology	Undergraduate researcher at MIT's Langer Lab (the largest biomedical engineering lab in the world)	

Accomplishments

: Inducted into Academic Hall of Fame (one student chosen per graduating class), two-time representative to National Chemistry Olympiad, National Merit Air Products Scholarship, four-time competitor at international level of the American Computer Science League (won 5th place as a team one year)

Testimonial

I can state unequivocally that it was one of the greatest experiences of my life. For five weeks, my classmates and I gave our everything to take advantage of all that we were offered. Some took on massive amounts of academic work; others threw themselves into learning from each other and exploring Pittsburgh. Whatever the case, we all shared one thing – a passion for our life at PGSS. Thinking back, I cannot remember anyone who was inactive, who did not expand and thrive under that shared passion. Other PGSS alumni to whom I have spoken made it clear to me that my experience was by no means unique, and I shudder to think that future generations may miss out on this golden opportunity.

Today, I am a student at the Massachusetts Institute of Technology, and I just started researching in the Langer Lab, the largest biomedical engineering laboratory in the world. In both my application to MIT and my interview with the Langer Lab, I described in detail the exhilarating five weeks that was PGSS, and I have no doubt that it played a major role in getting me to where I am now – working in cutting-edge research in an invigorating atmosphere of science and technology. Most of my old PGSS classmates are in similar positions of success, and we have all agreed that our PGSS days proved a huge asset, both on paper in applications and in our maturing into the young adults we are today.

To the above, I would like to add that the collaborative atmosphere at PGSS has stayed with me in college, and PGSS prepared me extremely well for working with classmates on difficult problem sets. I cannot even begin to measure how much PGSS has impacted my life - I truly believe that I am a better student, a better researcher, and a better classmate because of my summer at CMU.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Stanley	Zheng	2007
College/degree	Employer / Job Title	
Harvard College Class of 2012 (Degree Candidate in Applied Mathematics)	Student	

Accomplishments

Testimonial

I think that the most amazing thing about PGSS is the friendships made. I still keep in contact with a significant portion of PGSSers. For instance, a PGSSer from Pittsburgh (I live in Philly) has become my best friend. The people are great, and you find common interests with other students through PGSS. The late nights--working on problem sets together--bring us closer as friends and really defined my experience at PGSS. Everything was done collectively and as a unit. Kids truly cared for each other. Although I may have forgot most of what I learned at PGSS, the concepts still stick with me, but most of all, the friends are still there for me. I remain in contact with a dozen of the PGSSers because they have become some of my closest friends. PGSS is more than just an education for the gifted; it is a way for people to build relationships and find mutual interests. PGSS has changed my life because it has allowed me to develop as an individual who has had to manage academics, extracurriculars, and relationships away from home. I have grown and become much more mature and intelligent in the way I behave because of PGSS. I think that PGSS is an invaluable experience, and if I could, I would go through the experience again.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Lucas	Rhodes	2008
College/degree	Employer / Job Title	
	Student	

Accomplishments

Testimonial

PGSS allowed me to experience science at an in depth level that cannot be achieved at the high school level. It furthered my passion for science and has lead me to major in engineering in college.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Jonathan	Schall	2008
College/degree	Employer / Job Title	
will attend the University of Scranton this fall on a full Presidential Scholarship majoring in biochemistry and pre-med	Student	

Accomplishments

Accomplishments (Major awards, contributions, achievements, publications, patents, etc.):

- University of Scranton: Presidential Scholarship
- Bausch and Lomb Honorary Science Award
- Greater Wyoming Valley Youth Salute "Youth Leader of the Year" 1st Runner-up
- 2009 Toyota Community Scholars semifinalist
- competitor at 2007 National Ocean Sciences Bowl
- numerous Science Olympiad regional and state medals
- two-time Bloomsburg U Science Iditarod Champion

Testimonial

My time at Governor's School was such an unforgettable experience. This was a one-of-a-kind opportunity for a high school student to explore various scientific specialties, engage in original research, and interact with passionate and gifted students from all over our great Commonwealth. The faculty and staff were very excited about their work, infusing us with even greater enthusiasm for the sciences. I made many friendships with a great, diverse, and wonderful group of people that will last a lifetime. Through this experience, I have grown as both a scientist and a person. I have been empowered and inspired to pursue scientific work to benefit my future patients and the health care system as well as to do my part to contribute to the betterment of our Nation. I will always cherish the many fond memories of my summer at PGSS.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Spencer	Katz	2008
College/degree	Employer / Job Title	
	Student	

Accomplishments

Testimonial

PGSS has had a profound impact on my life and I consider it one of the best experiences I've ever had. At PGSS I encountered a community of students dedicated to learning science for the sake of learning, and I am now perpetually in search of another community of this caliber. The friends I have made at PGSS are far deeper than most friends I have made inside or outside of school. In addition, PGSS has taught me what it takes to succeed in a career related to science and has reinforced my desire to pursue a science career.

Pennsylvania Governor's School for the Sciences Testimonials

First Name	Last Name	PGSS Year(s)
Syeda	Ahmad	TA: 2006
College/degree	Employer / Job Title	
Carnegie Mellon, Chemistry	Carnegie Mellon, Special Faculty, Dept of Chemistry	

Accomplishments

Senior Leadership Award @ CMU, Departmental and College Honors (2007), Vice-President Sustainable Earth, Undergraduate Research Office Presentation Award.

Testimonial

PGSS allowed me to work with some of the most talented high school students I have ever met. Through the work I did at CMU I was nominated and awarded the Senior Leadership Award at Carnegie Mellon. I've never had a work experience like PGSS and met so many talented people. They really did inspire me to become more confident and step into a leadership position.