

the challenge

Magazine for The Center for Gifted Studies

THE 20TH BIENNIAL WORLD CONFERENCE COMES TO KENTUCKY



The 20th Biennial World Conference of the World Council for Gifted and Talented Children will be held in Kentucky August 10-14. The World Conference will bring educators, parents, and citizens interested in gifted education to Louisville to talk about issues important in gifted education and to learn about best practices and research in the field. The theme of the conference is “Celebrating Giftedness and Creativity.”

The World Conference will provide the opportunity to learn from practitioners and specialists around the globe. Participants will hear the following keynote speakers: Peter Csermely, Hungary;

Christian Fischer, Germany; Todd Lubart, France; June Maker, U.S.A.; Megan Foley Nicpon, U.S.A.; Roland Persson, Sweden; Sally Reis, U.S.A.; Joe Renzulli, U.S.A.; Tracy Riley, New Zealand; and Linda Silverman, U.S.A. It is a rare opportunity to have several well-known speakers at one conference.

The conference will feature preconference workshops on Saturday before the opening session later that day. Ten preconference workshops provide opportunities to examine important topics in gifted education with specialists from several countries. Presenting preconference workshops will be Maud Besancon, France;

Leslie Graves, Ireland; Leonie Kronborg, Australia; Ken McCluskey, Canada; June Maker, U.S.A.; Sylvia Rimm, U.S.A.; Julia Link Roberts, U.S.A.; Dorothy Sisk, U.S.A.; Klaus Urban, Germany; and Taisir Subhi Yamin, France.

The 20th Biennial World Conference will include many presentations by participants from across the globe, exhibits from publishers and affiliates of the World Council, special entertainment, and many opportunities to meet individuals who share interests and who are eager to talk about important ideas in gifted education.

August will provide a rare opportunity to participate in a World Conference of the World Council for Gifted and Talented Children without flying across an ocean. Previous conferences have been held in London, San Francisco, Jerusalem, Montreal, Manila, Hamburg, Salt Lake City, Sydney, The Hague, Toronto, Hong Kong, Seattle, Istanbul, Barcelona, Adelaide, New Orleans, Warwick, Vancouver, and Prague. Learn more about the World Conference at www.worldgifted2013.org. Come for the entire conference. If that is not possible, there is a daily rate. The 20th Biennial World Conference is an opportunity not to be missed.



Letter from Julia

Dear Friends of The Center for Gifted Studies,

First of all, I want to thank all of you for making a gift to The Center for Gifted Studies, volunteering, and/or sharing information about opportunities that may be of interest to educators, parents, or young people you know. The Center depends on your generosity and loyalty. Thank you so much!

Your monetary gifts make it possible to do so many things that would otherwise be impossible. Financial assistance for young people to participate in SCATS, VAMPY, Super Saturdays, or The Summer Camp comes directly from your gifts. Workshops on twice-exceptional children and the social-emotional needs of gifted children are the direct result of gifts. The Victoria Fellows are superintendents and principals who are advocating for gifted children, and the creation of this important group came as the result of a gift. Alumni of The Center have started a fund to support The Center, and the goal is \$500,000.

Volunteering for The Center takes various forms. Many of you have indicated that you will be available to help during

the 20th Biennial World Conference of the World Council for Gifted and Talented Children that will be in August in Louisville. Others volunteer routinely during Super Saturdays or during other programming. Duke TIP's Kentucky Recognition Ceremony goes smoothly because of numerous people who volunteer their time to guide tours, pass out programs, or assist in myriad ways.

Sharing information about opportunities provided by The Center for Gifted Studies is the best way to interest others in SCATS, VAMPY, The Summer Camp, Super Saturdays, travel, the Advanced Placement Institute, the Berta Workshop, etc. So many people, even those who live fairly close by, don't know about the outstanding programming offered by The Center. I so appreciate that you spread the word about opportunities for children and young people, educators, and parents.

Without Friends, The Center for Gifted Studies wouldn't exist. We couldn't do without you!

Best,

Julia Link Roberts
Mahurin Professor of Gifted Studies

THE MISSION FOR THE CENTER

We are committed to encouraging excellence by providing educational opportunities and resources to three populations: gifted and talented students, educators working with gifted students, and parents of gifted students.

THE VISION FOR THE CENTER

Becoming an internationally preeminent center is the vision of The Center for Gifted Studies. This vision includes expanding services in five areas: (1) offering educational programs for gifted children and youth, (2) providing professional development opportunities for educators, (3) enhancing communication and advocacy for gifted children, (4) conducting research and developing curriculum to remove the learning ceiling, and (5) building a testing and counseling component for gifted children and their families.

the
challenge

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Happy 30th Birthday, VAMPY!

students

Alums also recognize the social importance of the camp where idea-mates make life-long friendships. For some it is the first time that they are around people like themselves – people who have a passion for learning. Software creator VAMPY 1984 alum Nick Temple remembered that first year as well. “There is so much I can say. I can remember the summer as well as any in the last 30 years. I was torn between the Computer Science and Writing tracks, and I chose Computer Science...

Thirty years ago this summer, 31 young people participated in the first VAMPY – then known as The Summer Program. Since that time over 4,500 young people from all over the United States and the world have spent three weeks of their summers learning, laughing, and living with idea-mates. Original camper biochemist Dr. Nancy Ayers Rice (VAMPY 1984; Travel to England; VAMPY teacher) recently reflected on her experience.

The first year, VAMPY offered four classes, but only two were open when Nancy applied – “a high intensity math course and an expository writing course.” Nancy explained, “Academically, I did not qualify for the math course, so, by default, I was in the writing course. I loved it. It wasn’t fiction, poetry, or creative writing – it was rhetorical, expository. Perhaps this was laying the foundation for my life in science. I remember distinctly learning how to write a succinct thesis and organize a paper, all in the 7th grade. The three weeks in VAMPY laid the groundwork for success in writing in high school, college, graduate school, and professionally. It challenged me and gave me a love for writing. As a result, I minored in English as an undergraduate. When I was in graduate school, my major professor commented that I was one of the few students he had had in his laboratory that he did not have to ‘teach to write.’



As a professional, my writing skills help make me successful in grantsmanship and publishing.”

Nancy continued, “Writing properly is critically devalued in our society. Lack of grammar, flowery pontification, and redundancy are the norm in writing assignments I receive from students. I am considered the Grammar Nazi because I grade not only the science but the writing – God forbid! Perhaps this is the biggest impact that VAMPY had on me – it gave me a passion for expository writing, and I am challenged today to continue to pass that on to my students regardless of their discipline. Good writing matters. Good writing is the key to professional success.”

Until VAMPY, I was an awkward ‘geek’ kid that everyone beat up on. Teachers consistently called me an ‘under performer,’ and, to tell the truth, I hated school with a passion. There, for the first time, I found a tribe of peers. I found a love of learning, of being able to push myself, comradeship, and, for the first time, a sense of inner confidence and worth. I can confidently say that three weeks changed my life forever.”

For 30 summers, VAMPY has provided a warm, encouraging environment where young people feel free to discover themselves, to develop meaningful friendships, and to challenge themselves as scholars. A very Happy Birthday to you, VAMPY!

The temperatures outside might have been below freezing, but the learning happening during Winter Super Saturdays was off the scale in January and February. Over 600 students from first through eighth grade enjoyed 35 classes at Western Kentucky University and the Kentucky Science Center that covered a range of topics, including math, art, science, history, writing, music, and performance.

The study of science went underground as second and third graders learned about a unique facet of

knowledge of some fascinating storms that occur all around the world, but most of all I hope that they saw that learning doesn't have to be textbook-based or lecture-based but instead can be exciting, fun, and intriguing," Stephanie said.

The connection between science, visual art, and music was studied in *The Art of the Painted Violin* and led to instructor and WKU art education student Amy Wallace's favorite memory from the class. On the "Sound of Color" day, the class of second and third graders

finally set in. Kids were lying on the ground and standing on benches to get better angles, and the work they produced was amazing."

Performing arts was the focus in *The Hunger Games: The Actor on Fire* as Lucie Cuskey and Rebecca Trimbur, WKU theatre students, taught the fifth and sixth graders a "huge sampler platter" of theatrical skills, including singing, dancing, form theater, and stage combat. Lucie and Rebecca had their students look at the way theaters used combat in order to participate in a

Learning is Cool at Winter Super Saturdays

Kentucky in *Under Our Feet*, which explored Kentucky's interconnected underground network of sinkholes, springs, caves, and aquifers. Beth Tyrie, a graduate student at WKU, taught the class and said her favorite memory came on the final day: "My favorite memory from teaching *Under Our Feet* was watching my students present to their parents and lead hands-on experiments on various course topics. It was so much fun to actually hear in their own words what they learned and watch their excitement as they conducted different karst-related experiments."

Science was also explored in *Storm Chasers*, which was taught by SKy-Teach students Stephanie Menser and Caley Melton and invited third and fourth graders to explore the creation of storms through experiments. Stephanie hoped that her students realized through her class that learning can be fun. "I hope they gained an in-depth

studied acoustic physics by making connections between light waves and sound wave frequencies. "We used the violin to watch the frequency of the vibrations and then associated the width of the vibration with a specific color," Amy explained. "We even created our own artwork using color to represent sound. The students were so enthusiastic and creative!"

The fourth and fifth graders in *Beyond the Lens: Exploring Photojournalism* were tasked with creating a different form of art – photography. Instructor Nathan Morgan, staff photographer at the *Daily News*, said everything clicked for his students during the final class meeting. "We stumbled upon a group of WKU students riding unicycles. It was the perfect scenario: the sun was shining, and we had subjects to photograph that were interesting. The students totally got into it, and what I had been teaching in the previous classes had

Hunger Games simulation. Lucie said her students had to shed some misconceptions during their four weeks together. "We had a mix of boys and girls, so it was fun to see everyone go from either 'I don't dance' or 'I'm a boy and boys don't do that' to learning how to do it and learning that boys can be athletic and have fun with it," she said.

Rebecca said her favorite moment was watching the students prepare to perform for their parents. "The last day when the kids came in and they'd practiced the dance and it was coming together, they were all really excited," she explained. "I really hope they took away a willingness to learn and try new things."

Winter Super Saturdays does indeed instill a willingness to learn and inspire students to try new things. The next opportunity will be Fall Super Saturdays scheduled for November 2, 9, 16, and 23, 2013.



JOSH RAYMER



ALI RAYMER



JOSH RAYMER



ALI RAYMER



ALI RAYMER



MIWON CHOE



CARRIE MOSCARDELLI



JOSH RAYMER



ALI RAYMER



ALI RAYMER

Marvels in Medicine

Celebrating the Talents of Alumni

After thirty years of minds-on, hands-on summer opportunities for young people, we have seen thousands of incredibly talented preteens and teens develop passions for learning, love of content areas, and, more importantly, lasting friendships and a sense of self. Many of these young people are now young professionals on the cutting edge of their fields. In issue 29 of *The Challenge*, we celebrated some of our alums who excelled in the visual arts. This issue we continue the series by spotlighting alumni who are talented in the health fields.

Meet a third-year medical student just beginning her journey, a family doctor who makes house calls, a general surgeon who returned to his hometown to practice, a Rhodes Scholar specializing in Reproductive Endocrinology and Infertility, a pediatric neurosurgeon just starting his career after 17 years of postsecondary education, a dermatologist who partially credits her love of the humanities for her success, and a physician/inventor/entrepreneur.

WILLIAM (PATRICK) KLAPHEKE (SCATS 1985-87)

Patrick returned to his hometown of Glasgow, KY, three years ago to practice medicine. A graduate of the University of Louisville Medical School, he is a general surgeon employed by T. J. Health Partners.

What are some of the landmark moments in your career?

I wasn't fortunate enough to gain acceptance to medical school on my first attempt, so getting that acceptance letter will always be a day I remember. Others of note would include my first night of call as a resident, the day I passed my boards, and my first case as an attending surgeon.

What impact did The Center for Gifted Studies have on you?

Summers spent at WKU allowed a curious, and sometimes mischievous, mind to grow in an acceptable way. I still can draw

back on a few of the classes for simple phrases in Chinese and German, but the bonds and friendships formed there left a lasting impression. I occasionally find myself looking up names on Facebook that I remember from those days and revel in the success that so many have had!

SCOTT NASS (VAMPY 1988-91; Counselor)

Scott is a faculty development fellow with the Ventura Family Medicine Residency in Ventura, CA, where he teaches in the clinic and the hospital while also caring for his own patients. Although his path to medicine was atypical, he knows that he is in the right field: "Family Medicine is an amazing specialty: I provide prenatal care, deliver babies, and take care of children and adults throughout the lifespan. I enjoy a really broad scope of practice, taking care of patients in clinic, the hospital,

urgent care, and the ER; and I deliver my own obstetrical patients. Every day presents new puzzles to solve, and the relationships I am developing with my patients are amazingly rewarding; I just wouldn't find that in any other specialty."

When and why did you become interested in medicine?

I started college as a pre-medical student, but university life opened so many opportunities for academic exploration that I wound up pursuing other interests. After earning a graduate degree in urban policy and working in inner-city Chicago for a year, I realized that I wanted to work more directly helping people – where I could

impact others one on one, rather than at the policy level (where sometimes I felt I really wasn't making a difference). Growing up in eastern Kentucky, my entire family saw the same doctor, who provided nearly all of our care. Specialists were at least an hour away, so having a good family doctor was important. Although there were many aspects of medicine that continue to intrigue me – neuroscience, for example – practically, there was never a specialty I considered other than family medicine.

What impact did The Center for Gifted Studies have on you?

I have always credited The Center for providing the spark that jumpstarted my academic pursuits. I was a good test-taker and did well in school without much effort, but The Center taught me to be a better learner rather than just take for granted the gift I had. My time in undergrad (where I eventually majored in psychology and English and minored in business administration) satisfied the curiosity that The Center encouraged me to pursue, and leveraging that into real-world experience before medical school has made me such a stronger physician. My bedside manner would be a bit worse, no doubt, without the social growth nurtured by The Center.

I recently lost a patient whom I had known for three years; I'd become close with him and his mother and even had begun to visit him at his home—yes, a house call—when he became too ill to see me regularly. My staff showed me his obituary before I had heard of his passing, and I was so honored to have the family mention me.

— SCOTT NASS

**SARAH GREER SMITH
(VAMPY 1990-92; Counselor)**

Sarah has several letters after her name: MD, FAAD, and Diplomate ABD. This means that as a young woman in her 30s, she is a doctor of medicine, a fellow of the American Academy of Dermatology, and board certified by the American Board of Dermatology. She is partner in a dermatology practice, so, in addition to her work with patients, she is also a small business owner.

When and why did you become interested in medicine?

As early as I can remember, I wanted to be a doctor. However, as a teenager, I changed my focus, and I became much more interested in the arts and humanities, partly because of experiences I had at VAMPY. I also think that my skills in the humanities came more easily to me than math and science did, so I developed what I perceived to be my strengths. When I was a freshman in college, I got pneumonia, and over the course of my illness I became interested in becoming a doctor again, both because I wanted to know the science of medicine, but also because I wanted to help others.

What are some of the landmark moments in your career?

The first would be getting a B in General Chemistry in college. I failed my first exam, but with the help of a wonderful teacher, I worked all semester and finished the course with a B. Had my professor let me quit, that would have been the end of my career in medicine.

For the most part, mine is a career of tiny, daily achievements, rather than big landmarks. Every time that I am successful in alleviating suffering, even if it is minor, I treasure those victories. The aspect of my career that I have the most pride in is the time I spent teaching dermatology residents as a faculty member. There is nothing better than teaching another person the skills needed to heal others.

What impact did The Center for Gifted Studies have on you?

My time at VAMPY gave me a true love of learning, which is indispensable for a physician. My love of the arts and humanities was nurtured by the courses I took at VAMPY. I am a better physician because I am a well-rounded person; I am able to relate to the universal experience of humanity better than if I had had a unidimensional focus on science. I also know I gained confidence that it was a-okay to be smart girl at a time when many young women learn that what's in their heads isn't as important as what they look like or how popular they are.

**WEI-SHIN LAI
(VAMPY 1990-91)**

Wei-Shin is a physician at Penn State University where she sees the students on campus. While in school, she had a ten-year goal of working at the Center for Disease Control and Prevention as an Epidemic Intelligence Service officer (the people who travel the world fighting infectious diseases). However, upon graduation her desire to interact more directly with patients prevailed.

What are some of the landmark moments in your career?

A few years after making the decision to enter private practice, I decided to finally do something about not sleeping well when I was "on call." I would only get maybe 2-4 calls about patients every 4th night when I was on call, but those calls would keep me up for much of the night. It was hard for me to get back to sleep after a 3:00 a.m. phone call. I wanted to try listening to meditative music, but earbuds didn't fit my ears and headphones were too bulky for me to sleep on my side. So I invented my own headphones for sleeping. Six years later, SleepPhones® are in Brookstone stores nationwide, Amazon.com, over 50 countries, and the SleepPhones.com website. (Listen to the podcast Wei-Shin recorded about her invention at <http://innovateky.com>.)

What impact did The Center for Gifted Studies have on you?

It's lonely and socially difficult being gifted in school environments where it's not cool to be interested in learning. The VAMPY experience showed me that there are like-minded kids out there who are smart enough to learn quickly and like to do science experiments. When I entered my college honors program, I saw some kids from small towns who were used to being the smartest person around. They weren't used to competing on a different level. I think some of them became pretty depressed when they found out that they weren't as brilliant as they thought. For me, VAMPY taught me to respect the gifts of others, to not take my intelligence for granted, and to have hope that I could fit into a social circle. Being accepted into VAMPY validated my abilities, which gave me the confidence to know I could accomplish anything I set out to do.

**MICHAEL LANHAM
(SCATS 1991-92; VAMPY 1993;
Travel to Russia; Teaching Assistant;
VAMPY Teacher)**

Michael's various roles at The Center mirror the various roles he plays now: obstetrician/gynecologist, researcher, teacher, and administrator. He is currently in Reproductive Endocrinology and Infertility subspecialty fellowship training in the Obstetrics and Gynecology Department at the University of Michigan. His research is in mathematical and statistical modeling of serum markers of ovarian reserve and their relationship to reproductive outcomes. Also active on the inpatient and outpatient informatics committees, Michael serves as the president for the House Officers Association, which bargains collectively for the contracts of over 1100 medical trainees.

When and why did you become interested in medicine?

When I went to Oxford as a Rhodes Scholar, I decided to pursue studying mathematical biology. As my time in Oxford drew to a close, I decided that I wanted to pursue a better understanding of human physiology, and I realized that medicine would allow me to pursue a detailed knowledge of human physiology as well as require me to be an educator to my patients and to my peers. I continue to feel that the moments that are most rewarding to me are those when I can help teach patients about their conditions and explain my recommended plan to them in the ways that fit best with their background and previous understanding.

What are some of the landmark moments in your career?

I was fortunate to have been selected for a Graduate Medical Education Administrative Track sub-fellowship, which is a two-year course where trainees get to learn about the administration of the hospital system, and we get to use the skills learned to undertake a systems-improvement project. Because I enjoy looking at issues within the hospital system from a provider level, a patient level, and a systems level, learning about the ways to improve upon the already established processes has been fascinating and useful.

What impact did The Center for Gifted Studies have on you?

Though I was a part of a gifted pull-out program in Marion County, it was beneficial to get to meet other gifted students from around the state during those summers and to get to augment my education with classes that interested me and were taught at an appropriate level. VAMPY also specifically allowed me to learn the equivalent of a year's worth of Algebra II in those three weeks and test out of that class when I returned to high school the next year and take precalculus.

**DAVID F. BAUER
(VAMPY 1993-94; Travel to Russia,
Europe, Italy, and Britain)**

Patients 18 years old and younger are David's specialty. As Pediatric Neurosurgeon at Dartmouth-Hitchcock Medical Center in Lebanon, NH, and Assistant Professor of Surgery and Pediatrics through the Geisel School of Medicine at Dartmouth, he is an expert in epilepsy surgery, brain and spine tumor surgery, neuroendoscopy, surgical treatment of spasticity and dystonia, hydrocephalus, spinal dysraphism, and brain and spine trauma.

When and why did you become interested in medicine?

I became interested in medicine in grade school through my father, who worked at Trover Clinic in Madisonville. I was fortunate to be able to shadow a neurosurgeon at the clinic in high school. In college, I majored in Neuroscience, and this helped cement the foundation for my career in neurosurgery.

What are some of the landmark moments in your career?

One landmark moment of my career was completing my training! To become a pediatric neurosurgeon, one must complete college, four years of medical school, seven to eight years of residency, and a one year post-residency fellowship in pediatric neurosurgery. Honestly, I have rewarding moments every day I am at work. I am fortunate to be able to teach residents and perform research while making a difference in the lives of many children in New Hampshire and Vermont.

What impact did The Center for Gifted Studies have on you?

The Center for Gifted Studies really helped me to realize how many other talented people live in Kentucky! In high school, I found it hard to relate to other students academically. VAMPY helped me by introducing me to the many other high achieving students like myself throughout

the state. My experience at VAMPY really helped prepare me for college at Johns Hopkins University. I truly was unprepared for Johns Hopkins compared to my classmates who came from prep schools or public boarding schools for gifted students. I feel my VAMPY experience made the transition much easier than if I had never been in a college-like setting before.

SNEHA MEHTA SUNDARAM
(Super Saturdays 1999-2000;
VAMPY 2000-03)

Sneha, a Duke graduate, is currently in her third year of medical school at Boston University School of Medicine. She spent a year at the National Institutes of Health doing clinical research and plans on a residency in Internal Medicine.

When and why did you become interested in medicine?

My parents, both physicians, were excellent role models for me. Growing up, I was able to see the impact that they had on our community. I also saw the satisfaction that both my mom and dad had with their careers. When they came home and talked about a diagnosis they made or a patient's life they saved, I couldn't help but feel excited.

What are some of the landmark moments in your career?

I am constantly surprised and impressed with our patients' resilience and positivity. I find it particularly rewarding when a patient is appreciative just to have someone to chat with. Hearing their life stories is so

interesting, and I am constantly learning from their challenges and successes. One of my first patients was an elderly lady with terminal cancer. She always greeted me with a smile, even if it were 5:00 a.m. She loved showing me pictures of her grandchildren and was always thrilled when I brought her a popsicle to enjoy. I observed how physicians supported her and her family and helped them make some very difficult decisions. Through her, I learned that my career would involve not just medical healing but equally emotional and spiritual healing.

What advice do you have for young people interested in medicine?

One of the biggest regrets my colleagues express is how pressured they felt to muscle through college as a premed and then go directly through medical school. Residency adds at least three more years to the process, so not taking time to smell the roses at some point along the way can really take its toll. People asked me quite frequently on the interview trail for both medical school and residency whether I regretted not going straight through (to medical school after college). I always say that my path was a long one, but that the twists and turns led me along the scenic route; I earned a graduate degree, spent time revitalizing inner-city Chicago, and worked for Robert Redford. And now I really am the best family doctor I can be.

— SCOTT NASS

Medicine is very fulfilling, but it is a very hard life. You make a lot of sacrifices, and that doesn't end after you finish residency. I really believe you can only succeed in medicine if you can't imagine being happy doing anything else. If that doesn't scare you off, then take as much science as you can as early as you can. Try to get involved in research early. However, you have to hold on to a few outside interests; play an instrument, write poetry, read a book, nurture your family and friendships, because this is what connects you to humanity. It is the love of other people that allows you to be a compassionate physician.

— SARAH GREER SMITH

Our knowledge of medicine and human physiology continues to change at a rapid rate. For gifted students who love puzzles, it is a really fun way to work and to touch people's lives. Above and beyond the complexities of the human body, the intricacies of the interactions of large health systems, health insurance companies, Medicare and Medicaid reimbursements, and pharmaceutical and medical product companies continue to get more complicated. The country needs the brightest minds to tackle even learning enough about these problems to come up with sensible solutions. I think that anyone thinking about medicine as a career needs to do so with an open mind that there will be aspects of the path that have not been considered or that there may be ways to practice medicine in the future that don't exist right now.

— MICHAEL LANHAM

Keep in mind that the science of medicine is a critical component, but it isn't everything. While it is important to pursue your scientific curiosities, don't neglect your other interests. If you love sports, creative writing, or dance, continue to cultivate those talents. Some of the most impactful physician mentors that I have met are well rounded and passionate about many things other than medicine.

— SNEHA MEHTA SUNDARAM

If you are interested in medicine, I suggest that you seek out shadowing experiences as early as possible. Medicine is such an altruistic field. Doctors truly give up family time and personal time in order to best take care of their patients. By observing a clinic or an operation or by volunteering in an emergency room or children's hospital, I feel one will be able to realize if he or she truly wants to go down the long path to becoming a physician.

— DAVID BAUER

INNOVATE KENTUCKY SPARKS INTEREST IN ENGINEERING AND ENTREPRENEURSHIP

It was a busy winter for Innovate Kentucky as elementary school students attended an event to learn about engineering and WKU students spent three weeks exploring entrepreneurship in a winter colloquium.

Innovate Kentucky partnered with the Mary Wood Weldon Memorial Library in Glasgow for Engineering Tomorrow, an all-day event on January 19 for students to learn about engineering from hands-on activities. The event was part of the Discover Tech: Engineers Make a World of Difference exhibit that the library hosted from December 17 through February 20.

Discover Tech: Engineers Make a World of Difference came about as a collaboration between the American Library Association Public Programs Office, the National Center for Interactive Learning at Space Science Institute, the Lunar and Planetary Institute, and the National Girls Collaborative Project. The Mary Wood Weldon Memorial Library was one of only eight public libraries across the country selected to host the exhibit between September 2012 and June 2014.

Engineering Tomorrow was split into two sessions: the morning sessions for third and fourth graders and the afternoon session for fifth and sixth graders. Both sessions included two activities that were taught by SKyTeach



instructors. SKyTeach was initially a grant-funded program that offers opportunities to undergraduate students at WKU entering careers in math and science education. The first activity was titled Catching the Wind and challenged students to build a windmill capable of lifting metal washers off a tabletop. The second activity, The Best of Bugs, tasked students with building a hand pollinator.

Martha Nell Thomas, the outreach coordinator for the library, said Engineering Tomorrow left one parent asking for more science programming at the library. “The students in the morning and afternoon sessions were totally

engaged with the hands-on aspect of the program,” Martha Nell said. “The instructors were enthusiastic and innovative in their approach.”

Catherine Poteet and Martha Day, SKyTeach professors, led the different activities, and both said it was a joy to teach students about engineering. “It was delightful to observe the students in action,” Martha explained. “They each demonstrated a high level of energy, enthusiasm, and creativity in problem solving. These types of hands-on engineering activities serve to actively engage students in learning and empower them to take a leadership role in generating innovative ideas.”

Catherine agreed with her colleague, saying, “This opportunity to learn about engineering helped students use their background knowledge and creativity to explore a variety of solutions to hands-on engineering challenges and then be more confident in problem solving in the future.”

Engineering Tomorrow helped fulfill one of Innovate Kentucky’s goals – promoting innovative approaches to learning by offering multi-level educational programming. Capturing the Innovative Spirit, on the other hand, was one of the three prongs of Innovate Kentucky’s Pathways to Innovation: a winter colloquium.

The Gatton Academy was named the Top High School in the United States for the second consecutive year by *Newsweek/The Daily Beast*. The America's Best High School list recognized over 2,000 high schools from across the United States. This honor once again reveals what can happen when outstanding students are free to pursue the highest levels of academic challenge in an environment of support and encouragement.

What a Year for the GATTON ACADEMY!

Year six at the Gatton Academy was another banner year. From extracurricular activities to research to international travels, the Gatton Academy allows its students to develop to their fullest potential.

Academy Recognition

The Gatton Academy was named the number one public high school by *Newsweek* for the second year in a row.

The Academy was included in the *Washington Post* list of top performing schools with elite students for the fifth year in a row.

Extracurricular Activities

Naomi Kellogg (junior) was elected the Youth Governor of Kentucky at the Kentucky Youth Assembly.

Duncan Wood (senior) performed in the Macy's Thanksgiving Day Parade.

The Gatton Academy Science Bowl Team won the Western Kentucky Regionals and competed at the National Science Bowl in Washington, D.C.

Research

David Brown (senior) was honored as a Goldwater Scholar and Samuel Saarinen (senior) as a Goldwater honorable mention.

Through the generous financial support of Mr. Bill Gatton, 20 rising seniors will participate in summer research projects across the country through the Gatton Research Internship Grant program.

As the Gatton Academy's class of 2013 graduates, 94% participated in a research project. This academic year alone, Gatton Academy students made 105 separate presentations at conferences and scientific meetings.

International Reach

Seventy-seven percent of the Gatton Academy's class of 2013 participated in global learning opportunities in such countries as Greece, England, Costa Rica, and China.

Grace Babbs (junior) received a National Security Language Initiative for Youth Scholarship to study Arabic intensively in Jordan for summer 2013.

Volunteerism

Gatton Academy students completed over 3,200 hours of service in the Bowling Green area and their home communities.

Students organized a peer-tutoring program with a local elementary school providing after-school tutoring once a week.

Gretchen Walch (junior) completed job-shadowing with the Peace Corp Headquarters in Washington, DC, over the winter term, combining her passion for service with her interest in science and medicine.

Congratulations to the Gatton Academy staff and students and to the WKU faculty on a great year.

Eleven students from the Carol Martin Gatton Academy of Mathematics and Science and the WKU Honors College participated in Capturing the Innovative Spirit, which was taught by J. Krist Schell of the Gordon Ford College of Business. This three-week course helped students actualize their business ideas by writing SNIBs (proposals that identified the subject, need, idea, and benefit of each business) – a concept recently introduced by the Sales and Marketing Department at WKU. The students also took field trips to local businesses and the Innoplexx, WKU's Student Business Accelerator, and acted out various role-playing scenarios that could arise in a business environment.

Several students remarked that they left the class feeling inspired, including Allison Linn, a junior in the Honors College. "I have already been inspired to start the company I have had an idea for," Allison said. "I will be creating my own business and putting more of my ideas into action." Allison plans to sell a chemical that her grandfather created but has done nothing with for 10 years.

One of Krist's goals was to give students a chance to test drive their ideas in a safe environment and practice selling their ideas to other people. "There was tremendous give and take," Krist explained. "The amount of creativity and constructive feedback that flowed through that room was just fantastic."

Having three weeks to examine, test, and refine their ideas has led to some exciting results for these young entrepreneurs. "At least one person is pursuing an active business venture," Krist said. "I'm very confident that we're going to have two or three real businesses come out of this."

For other media from Engineering Tomorrow and Capturing the Innovative Spirit, as well as podcasts, STEM lesson plans, and an ever-growing STEM career database, be sure to visit our website: innovateky.org.



CLINTON LEWIS

Talent Searches: A History of Opening Doors

In the 1970s, visionary Dr. Julian Stanley at Johns Hopkins University unknowingly opened doors for millions of children. Interested in children with strong mathematical reasoning abilities, he used the Scholastic Aptitude Test (SAT) with middle schoolers and realized that the test did indeed indicate talent – a mathematical reasoning that went far beyond their age expectations. Dr. Paula Olszewski-Kublious' article *Talent Search: Purposes, Rationale, and Role in Gifted Education* (1998) outlined the next steps: "In fact, the SAT was so valuable in this regard that Stanley and his colleagues extended their use of it from individual students to groups of students, thus beginning the 'talent search' concept (Stanley, Keating and Fox, 1974)." The talent search was "a deliberate effort to find youths of middle school age who reasoned exceptionally well in the area

of mathematics within circumscribed geographical areas. Later, the talent search was broadened to include assessment of verbal as well as mathematical talent and enlarged to the entire United States" (p. 106).

Three decades later, literally millions of seventh graders have participated in a talent search through one of four national centers: Center for Talent Development at Northwestern University which serves eight states in the Midwest; Center for Talented Youth at Johns Hopkins University covering 19 New England and Pacific states; Duke TIP providing for 16 states in the southeastern United States; and Rocky Mountain Talent Search at A Center for Bright Kids in Denver University serving seven states in the west.

Off-level testing is the rationale behind the search. "Because different

children develop at different rates, they should be allowed to take tests at the level of their abilities not at the level that school officials or testing companies deem appropriate for their age" (Olszewski-Kublious, 1998, p. 107). Talent searches remove the assessment ceiling through the administration of the ACT (originally American College Testing) or SAT to students who have scored 95% or better on any one area of a sixth-grade achievement test. These students obviously know grade-level material, but do they know eighth-grade level, tenth-grade level, or even twelfth? Once the ceiling is removed, many middle schoolers demonstrate that, yes, they do indeed understand concepts well beyond their age-mates.

The testing is only one facet of the talent search. "Nowadays, when one uses the term 'talent search,' it means

much more than the testing described above. It is more properly viewed with three different 'lenses'; as a tool for diagnosis/evaluation, as a guide for educational placement, and as a structure to provide talent development opportunities" (Olszewski-Kubilius, 1998, p. 109). The talent development opportunities available to qualifying students include summer experiences – such as VAMPY.

The Center for Gifted Studies was the first cooperative program with Duke TIP. With their summer programming at capacity in the early 1980s, Duke realized the importance of expansion and approached Susan Leib at the Kentucky Department of Education. Susan then contacted Julia Roberts to see if she were interested. Then-WKU president Dr. Donald Zacharias and Julia traveled to Duke TIP and returned committed to replicate their summer programming. The Summer Program for Verbally and Mathematically Precocious Youth (VAMPY) was born in 1984. VAMPY turns 30 this summer.



In the mid-1990s, a 4th/5th Grade Talent Search was added wherein children take the Explore test through ACT. Duke TIP reports that "in 2011, over 40,000 participated in the 4th/5th Grade Talent Search. In 2012, we expanded the program to include sixth graders and renamed it the 4th–6th Grade Talent Search" (History, par. 3). Students participating in this search gain access to student programming, independent learning opportunities, and more.

Not only has The Center partnered with Duke TIP in providing engaging, life-changing summer opportunities, but we have also hosted their Kentucky Recognition Ceremony since 1983. Those seventh graders – and for almost the past ten years those fourth and fifth graders and recently with sixth graders added – who earn qualifying scores are recognized in a formal ceremony complete with medals, inspirational speakers, and a reception. (See below for a story on this year's Kentucky Recognition Ceremony.)

Participating in a talent search indeed opens doors: summer and weekend programming opportunities, independent learning options, newsletters and websites with insightful information, and, ideally, more appropriate learning experiences during the school year.

RESOURCES

History. (2011). Duke TIP. Retrieved from www.tip.duke.edu/node/12

Olszewski-Kubilius, P. (1998). Talent search: Purposes, rationale, and role in gifted education, *Journal of Secondary Gifted Education*, 9(3), pp. 106-13.

CONGRATULATIONS GO OUT to all those recognized on the state level at the Duke Talent Identification Program's Kentucky Recognition Ceremony on May 24. Over 2,000 people gathered in Diddle Arena to celebrate the accomplishments of these young people.

This year more than 63,000 seventh graders participated in the search and 23,379 qualified. In Kentucky, 2,856 tested with 1,517 qualifying for state recognition and 132 qualifying for national recognition at the Grand Recognition Ceremony held in Durham. To be recognized on the state level, the seventh graders earned a qualifying score on the ACT or SAT (i.e., ACT – English ≥ 20 ; Math ≥ 20 ; Reading ≥ 21 ; Science ≥ 21 , or with three of the four following scores: English = 19, Math = 19, Reading = 20, Science = 20; SAT – Math ≥ 520 , Critical Reading ≥ 510 , Writing ≥ 500 , or with two of the three following scores: Math = 510, Critical Reading = 500, Writing = 490). For national recognition students needed one of the following scores: English ≥ 29 , Math ≥ 28 , Reading ≥ 30 , Science ≥ 27 , or Composite ≥ 27 on the ACT or Math ≥ 680 , Critical Reading ≥ 660 , Writing ≥ 650 , or Math + Critical Reading + Writing ≥ 1850 on the SAT. There were also 23 fourth, fifth, and sixth graders honored in Diddle Arena as part of

the Duke's 4th-6th Grade Talent Search. These students scored better than 90% of the eighth graders taking the ACT Explore test.

Dr. William Gump who attended VAMPY from 1985 to 1988 and traveled with The Center keynoted the event. Now a pediatric neurosurgeon at Kosair Children's Hospital in Louisville, Will gave three pieces of advice: 1) Read a lot. 2) Write a little. 3) Think very carefully about what you read and write. He also emphasized the good news and bad news about those being honored. The good news, he explained, was that they were different from others in their school. This difference would take them far in life. The bad news, he countered, was that they were different from others in their school. They must learn to live with those differences.

Julia Roberts commented, "Being a partner with Duke TIP for 30 years has benefitted all parties. We enjoy this long-term collaboration."



A very special thank you goes to Kentucky Higher Education Assistance Authority, who generously sponsored the reception for awardees and their families.



Friends

John & Kathy Abbott
Louisville, KY

Danny & Mary Armstrong
Hopkinsville, KY

Pravin & Smita Avula
Bowling Green, KY

Beate Bachman
Bowling Green, KY

Brown & Sue Badgett
Hanson, KY

Francisco Battaglia
& Mariel Rovagnati
London, KY

Marilee Benson
Bardstown, KY

Steven & Corrie Beverly
Bowling Green, KY

Gary & Karen Bickett
Owensboro, KY

Mary Edith Bland
Campbellsville, KY

David & Cheryl Bolden
Pelham, AL

Emma Bolden
(VAMPY 1995-96; VAMPY teacher)
Statesboro, GA

Suneel & Prasanthi Boyareddygar
Bowling Green, KY

Karen Brey
Hodgenville, KY

Doug & Martha Brown
Winchester, KY

Jarrold & Kristi Brown
Beaver Dam, KY

Ray Buckberry
Bowling Green, KY
Gift of art

Peter Budny (VAMPY 1996-99)
Duluth, GA
Alumni Challenge Fund

Gary & Shanon Aymond
(VAMPY 1986-88) Buffington
Coppell, TX

Dan & Lane Camp
Jackson, TN

Dann & Kathi Cann
Leitchfield, KY

Pam Cassady
Auburn, KY

Dick & Beth Chapman
Nashville, TN

Raymond & Ann Cravens
Bowling Green, KY

Randy & Fran Crawford
Franklin, KY

Richard Crouse
Shaker Heights, OH

Tom & Janice Donan
Bardstown, KY

Warren & Darlene Eisenstein
Boca Raton, FL

Claus Ernst & Uta Ziegler
Bowling Green, KY

Mark Evans
Louisville, KY

Sam & Mary Evans
Bowling Green, KY

Philip & Martha Ferguson
Union, KY

John Fitts
Bowling Green, KY

Jim & Mary Ann Flueck
Lexington, KY

Michael Flueck
(VAMPY 1989-92; Counselor)
Brownsburg, IN

Kenny Foley
Longview, TX

David & Marion Fuqua
Benton, KY

John Gallagher
Prospect, KY

Randy Gardner
Glasgow, KY

Charles & Mary Giovannini
Kirksville, MO

Ruthene Glass
Bowling Green, KY

Scott Grant (VAMPY 1995-97)
Louisville, KY

Anne Guillory
(VAMPY Teaching Assistant)
Louisville, KY

John & Phyllis Gump
Richmond, KY

Will (VAMPY 1985-88; Travel)
& Paige Gump
Louisville, KY

John & Carolyn Hagaman
Bowling Green, KY

Bill & Sue Hamilton
Pflugerville, TX

Anita Hammond
Louisville, KY

Charles & Carolyn Hardcastle
Bowling Green, KY

Norman & Carole Harned
Bowling Green, KY

Richard Harris
Columbia, MO

Robert & Martha Haynes
Bowling Green, KY

Nelson & Susan Helm
Louisville, KY

JoNell Henderson
Clarkson, KY

Amanda Hines (SCATS 1983-84)
Evansville, IN

Bill & Renita Hines
Calhoun, KY

Sam & Kate Hinkle
Shelbyville, KY

John & Dawn Hitron
Louisville, KY

Scott Holladay (VAMPY 1993-95)
Knoxville, TN
Matching Gift: Yes Energy, LLC

John Hollis & Mary Lyon
Battletown, KY

Case Holmes
(SCATS 1999-2000;
VAMPY 2001-02)
Cleveland Heights, OH
Matching Gift: ControlSoft, Inc.

Wimpy & Regena Hudson
Scottsville, KY

Geoffrey & Shannon Hulse
Owensboro, KY

Mark & Catherine Hunt
Lexington, KY

Robert & Stacey Hyde
Germantown, TN

Anthony & Julie Isaac
Bowling Green, KY

Sue Jenne
Louisville, KY

Lee & Judy Johnson
Alvaton, KY

Thomas Johnston
(VAMPY 1999-2000; Counselor)
& Anna Hitron
(VAMPY 1996-99; Counselor)
Louisville, KY

Nick & Pat Kafoglis
Bowling Green, KY

Jose & Dianne Labrado
Dawson Springs, KY

Jih-Sheng & Ying-Ru Lai
Blacksburg, VA

David & Nancy Laird
Louisville, KY

Charles & Mary Ellen Lamar
Owensboro, KY

Mariann Lawrence
Louisville, KY
Riley Jane Lawrence Fund

David & Laura Harper Lee
Bowling Green, KY

Lawrence & Barbara Lewis
Park City, UT

Stewart & Amanda Lich
Brownsville, KY

Benny & Chris Lile
Hardyville, KY

Christopher & Melissa Lind
Nashville, TN

Kim Lorch (VAMPY 1994-97)
Atlanta, GA

Gerald & Jolene Lord
Bowling Green, KY

David & Alex Luken
Louisville, KY

Charles & Fannie Louise Maddux
Pembroke, KY

Pete & Dixie Mahurin
Bowling Green, KY

Charles & Bobbi Mann
Calhoun, KY
*Matching Gift:
Boardwalk Pipeline Partners*

Eva Markham
Louisville, KY
Riley Jane Lawrence Fund

Jim & Diane Matherly
Bay City, MI
Matching Gift: Dow Corning

William McLean
Lumberton, NC

Rodney & Janet Meeks
Custer, KY

Brian & Allison Thomas
(SCATS 1984) Mefford
Alvaton, KY

James & J. R. Mennella
Oklahoma City, OK

Scott Nass
Ventura, CA
Riley Jane Lawrence Fund

Wake Norris
(VAMPY 1989-1992; Counselor)
& Elizabeth Zimmerman
(VAMPY 1992-93; Counselor)
LaGrange, IL
*Alumni Challenge Fund
Matching Gift: Emerson*

Graham Oliver (SCATS 1996-98;
VAMPY 1999-2001; Travel)
& Carolina Davila-Graham
Round Rock, TX
Alumni Challenge Fund

Roger & Mary Ann Pardieck
Columbus, IN

Deepak & Neema Patel
Hopkinsville, KY

Richard & Jeanne Marie Patterson
Bowling Green, KY

Paul & Anne Pedersen
Barbourville, KY

Ron & Jan Peeler
Bowling Green, KY

Melanie Maron Pell
(VAMPY 1986-88)
Silver Spring, MD

Judy Pennington Price
Annville, KY
*In memory of teachers & children
who lost their lives at Sandy Hook
Elementary School on Dec. 14, 2012*

James & Emily Peyton
Lebanon, TN

Mark & Elizabeth Pichea
Prospect, KY

Jonathan Plucker
Glastonbury, CT

Steve & Frances Porter
La Canada, CA

Charles Prince & Kapauner Lewis
Anchorage, KY

Peter & Sarah Reed
Louisville, KY

Deb Reese
Louisville, KY

Richard & Julia Roberts
Bowling Green, KY

Carlos & Mary Jane Rotellar
Bowling Green, KY

Elizabeth Rush
Lexington, KY

J. T. & Martha Sandefur
Bowling Green, KY

Murali & Madhavi Santapuram
Glasgow, KY

Justin & Marcia Eisenstein
(Super Saturdays; VAMPY 1998-
2000; Counselor; VAMPY TA) Segall
Boulder, CO

Mike & Jennifer Sheffield
Bowling Green, KY

Michael Shepherd
Madisonville, KY
Riley Jane Lawrence Fund

Jim & Joyce Ann Spiceland
Salisbury, NC
In Honor of Julia Roberts

Kathy Strunk
Nashville, TN

Flora Templeton Stuart
Bowling Green, KY
Twice Exceptional Fund

Allen & Susan Summers
Utica, KY

John & Carol Talbert
Henderson, KY

Bruce & Joyce Teale
New Port Richey, FL

Mary Nancy Todd
Bardstown, KY

Clarence & Carolyn Traum
Princeton, KY

Kristen Von Gruben
(VAMPY 1990-93)
Fenton, MO
Alumni Challenge Fund

Hillel Weinberg & Debra Weiner
Falls Church, VA
In Honor of Julia Roberts

Jed & Tracey Weinberg
Hindman, KY

Mary Ellen Wiederwohl
(SCATS 1987-88)
Louisville, KY

Max & Lucy Wilson
Hickman, KY

Sue Wilson
Bowling Green, KY

Steve (SCATS 1984)
& Amy Winger
Bowling Green, KY

Kurt & Linda Winkenhofer
Plano, TX

Joe & Judy Wismann
Talent, OR

Lori Wittlin (VAMPY 1987-89)
Houston, TX

Stuart & Linda Yeoman
Alvaton, KY

Hank Zimmerman
(VAMPY 1990-92; counselor)
Philadelphia, PA
Alumni Challenge Fund



A very special thank you goes to Friends of The Center.

A dream for most grant writers is the institutionalization of the grant, that is the initiatives and objectives of the grant would be replicated or continued once the funding is gone. When the federal Javits funding was cut in the middle of our five-year Project GEMS (Gifted Education in Math and Science), a dream for us was simply the completion of the grant. Thanks to the generosity of WKU and friends of The

Center, Project GEMS is currently finishing its fifth and final year. And it is with great excitement that we report that shared dream of grant writers is coming true as well.

Project GEMS was written with institutionalization in mind. Warren County Public Schools (WCPS) committed to taking over another 20% of the costs each additional year of the grant, so, that at five-year's end, the program would be almost fully supported by the school system. Given that guideline, WCPS Superintendent Tim Murley pledged support for two full-time teachers to continue some form of the GEMS Academy (which is one component of Project GEMS: www.warren.kyschools.us/~gemsacademy/GEMS_ACADEMY/Home.html) before he retired in February. Plans for 212° Academy (named to match the boiling point of water) were underway.

Those plans became more elaborate when WCPS received a \$58,858 grant from the American Honda Foundation. Under Project GEMS, the GEMS Academy only serviced two of the fourteen elementary schools. Thanks in part to Honda, those services will now be available to the entire district. Like the GEMS Academy, 212° Academy will provide challenging instruction in the STEM (Science, Technology, Engineering, and Math) disciplines to fifth and sixth graders. Students will come one day a week to the magnet school to experience problem-based learning in math and



Project GEMS Carries on in 212° Academy

science with idea-mates. GEMS teachers David Baxter and Jennifer Smith Sheffield will continue their roles at 212° Academy. Selection is underway with over 400 applications for 160 spots for the inaugural group starting this fall.

"I am very pleased the Warren County Public School system has decided to continue its commitment to taking a leadership role in gifted education," Jennifer said. "My co-teacher, David Baxter, and I are thrilled that we will have the opportunity to work with gifted and high-ability students from all fourteen district elementary schools in the upcoming school year – bringing one of the original goals of the GEMS grant to fruition. We greatly appreciate the American Honda Foundation for providing support for 212° Academy's vision of fostering innovation, creativity, and problem-solving skills in our students – the STEM leaders of tomorrow."

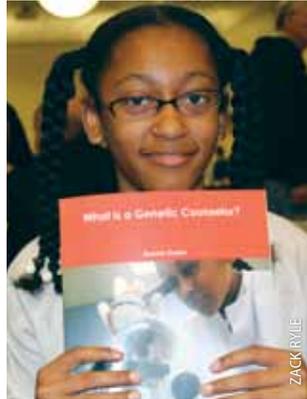
212° Academy was one of eight Honda Foundation finalists selected from a field of 540 applicants. Donna Cotton-Hammond, the grant representative from American Honda Foundation, stated that the research documenting the success of the GEMS program was one of the deciding factors involved in awarding 212° Academy the one-year grant.

Julia Roberts, director of Project GEMS, commented: "The five years of the GEMS project have yielded very promising research data. They also have allowed us to launch the GEMS Academy which will be continued as the 212° Academy. Teachers at our four project schools have had ongoing professional development that has prepared them for implementing the Common Core Standards in ways that will allow all students, including advanced students, to thrive. Thank you to all of the principals, teachers, and students who have been involved in Project GEMS."

GEMS Academy Young Science Writers

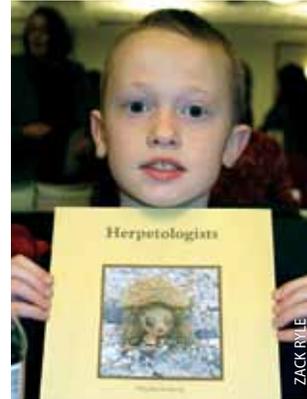
Two GEMS (Gifted Education in Math and Science) Academy students had their published works showcased this April at the SOKY Book Fest Children’s Day. Warren County Public School students Hayden Isenberg and Kamrin Green were selected as the winners of the “GEMS Academy Young Science Writers” competition. During the Book Fest, both Hayden and Kamrin signed copies of their books for interested readers.

This competition was a collaborative effort between the SOKY Book Fest and the GEMS Academy. The goals of the writing competition were for GEMS students to research and explore a variety of STEM careers and to also experience the process of crafting an online book for publication. Most of the 121 books were written with a target audience of elementary school-aged readers in mind. Each book was published through Lulu.com, an online book self-publishing website, printed in full-color with a saddle-stitched



binding in soft cover format, and completed with a unique ISBN number.

Kamrin, a 10-year old fifth grade student at Cumberland Trace Elementary School, was excited to present her book



What is a Genetic Counselor? at the Book Fest. “It really is pretty interesting,” Kamrin said. “It really is pretty awesome to just be able to come here and meet different authors and sell my books.”

Hayden, a 9-year old fourth grade student at Cumberland Trace Elementary School, enjoyed getting to write his book *Herpetologists*. “A herpetologist is someone who studies reptiles and amphibians,” stated Hayden. “In my book, I focused on those who study reptiles.”

For additional pictures and more information on these two GEMS students at the SOKY Book Fest, please visit our website at www.wku.edu/gifted/news.

ALUMNI FUND OFF TO A STRONG START: A \$500,000 CHALLENGE. JOIN US.

That was the opening line in a letter from Wake Norris (VAMPY 1989-92; Counselor) to every Super Saturdays, SCATS, and VAMPY alumni who already graduated from high school. Accompanied by a letter from Julia Roberts and a five-year pledge form, the development mailing went out to over 6,000 households. The fund is intended to endow a Coordinator of Alumni position, create an alumni scholarship, and support the activities necessary to ensure the future of The

Annual Pledge	Number of Alumni	5-Year Total	% of Alumni	
\$2,000	25	\$250,000	0.3%	◀ <i>Been working for 10+ years? Join us!</i>
\$1,000	25	\$125,000	0.3%	◀ <i>Onto your second promotion? Join us!</i>
\$500	35	\$87,500	0.4%	◀ <i>Just started your first job? Join us!</i>
\$100	75	\$37,500	0.8%	◀ <i>Still in school? Join us!</i>
	160	\$500,000	1.8%	

Center. So far, the response has been positive with \$22,500 pledged over a five-year span – with more pledges coming in weekly. We encourage you to make a pledge or a one-time gift. Go

to www.wku.edu/gifted, then Support The Center. As Wake encouraged, “These programs made a difference in our lives. Let’s make sure future generations can say the same.”

Spotlight: Tracy Harkins

When the headquarters for the World Council for Gifted and Talented Children moved from The University of Winnipeg, Manitoba, to Western Kentucky University in 2011, Tracy Harkins was selected to be the Executive Administrator. She brings a great deal of relevant experience to the position, including a variety of international study and work, event planning, broadcasting, and overseas travel experiences. She is also a wonderful addition to the staff of The Center for Gifted Studies and can be counted on to join the team efforts at particularly busy times.

Tracy graduated from high school at the International School of Brussels in Belgium. She went on to Ithaca College in Ithaca, NY, where she earned a BS in Television-Radio and a MS in Communications. She interned with *Good Morning America* for ABC News in London and was an international radio broadcaster for the *Voice of America* in Washington, D.C. These are just some of the highlights; for more details, go to www.wku.edu/gifted/staff/tracy_harkins.

Tracy and her family recently spent a semester in Austria where her husband, Dr. Anthony Harkins, an Associate Professor in Western Kentucky University's History Department, was a Fulbright Scholar. In her own words, she explains and describes some of the highlights and benefits of the experience.

My children and I were with Tony in Graz, Austria for a semester. He received a Fulbright Scholar award to teach



in the American Studies department at Karl Franzens University – or Uni Graz for short – for the spring semester, 2012. Tony and I, and our two children, Chloe (then 15) and Owen (then 12), had some wonderful experiences. Graz is the second largest city in Austria and is in the southeastern part of Austria known as Styria. There are four universities there, so there are a lot of college students – but also retirees who love the warmer climate and easy access to neighboring countries such as the Czech Republic and Italy. In fact, Tony was invited to give a talk in the

Czech Republic, so we spent Easter in Prague and then returned via Salzburg. The mountain scenery was spectacular and very different from Graz which has a flatter landscape and more Mediterranean climate.

As Executive Administrator of the World Council for Gifted and Talented Children, I was fortunate to be able to network with the various educators we met and was invited to a symposium at Uni Graz titled Awareness-Creativity-Innovation where I heard talks on topics such as Global Education and International Partnerships and Cross-Cultural Aspects of Anxiety in Young People.

While in Austria, our children were home schooled part of the time to complete their work from Bowling Green and also attended an Austrian bi-lingual school in Graz called GIBS. I was so fortunate that I was able to continue my work with the WCGTC while we were in Austria.

Talking with people about a universal concern, how to best educate our high ability students, and sharing best practices while learning from others are what Senator J. William Fulbright hoped for when he helped to establish the Fulbright exchange program.

We all appreciate the value of this experience for Tracy, in her role as Executive Administrator of the World Council, as part of The Center for Gifted Studies staff, and for her whole family. Such experiences encourage a world view in our work on behalf of gifted young people.



MANDY SIMPSON

The Center for Gifted Studies hosted two delegations of educators from Saudi Arabia this academic year. The first group included 17 educators, and the second one had 14 educators. Each group spent two weeks at Western Kentucky University learning about gifted education in the United States. All educators have responsibilities for gifted education at the national, regional, and local levels in Saudi Arabia.

Days were filled with sharing opportunities for young people to engage in learning at high levels, especially in science and mathematics. Time spent at the Gifted Education in Mathematics and Science (GEMS) Academy allowed the guests to interact with elementary children as they were involved in problem-based learning. They visited the SKyTeach program in which middle and high school teachers are prepared to teach science and mathematics. They participated in sessions that focused on The Center for

Two Delegations from Saudi Arabia Come to WKU

Gifted Studies' offerings for educators, parents, and children and young people. They spent a day learning about the Gatton Academy of Mathematics and Science in Kentucky, interacting with staff and students.

Trips were made to visit Mammoth Cave and the Space Center at Huntsville,

AL. The first group went to Lexington to learn about Alltech, an international company that focuses on animal nutrition and health. One group traveled to observe how mathematics is taught at Cox's Creek Elementary School in Nelson County and then on to Lexington to visit the Saudi exhibit at the Kentucky Horse Park.

Both groups were welcomed at a luncheon hosted by Dr. Sam Evans, Dean of the College of Education and Behavioral Sciences. They also were entertained at a dinner hosted Dr. Gary Ransdell, President of Western Kentucky University.

Dr. Abdullah Abdulaziz Alofeis, the Director General of General Administration of Gifted Education for the Ministry of Education, said the Ministry of Education in Saudi Arabia pays special attention to giftedness. He was the sponsor of the delegations' visits to The Center for Gifted Studies at WKU to learn about gifted education in the United States.

Dr. Julia Link Roberts, Executive Director of The Center for Gifted Studies

and the Carol Martin Gatton Academy of Mathematics and Science in Kentucky, coordinated the visits. She said, "Our lives were enriched by opportunities to learn from and interact with our guests from Saudi Arabia. The delegates from Saudi Arabia were eager to learn as well as gracious and enjoyable guests."



She provided examples from the Common Core to illustrate the thinking that is required in order to hone skills enumerated in the Common Core Standards.

Katie Decker, curriculum coordinator at Jody Richards Elementary School in Warren County, commented, "Participating in the session on problem-based learning with Dr. Gallagher was very powerful for me. Though I have read some of her work, it was very impactful listening to her speak on a topic she is so passionate about. What was most beneficial for me is the fact that during her presentation we worked in small table groups through a problem-based learning activity that she designed. She quoted something that has resonated with me, "The source of a

CLINTON LEWIS

Problem-Based Learning

Highlighted by Shelagh Gallagher

Dr. Shelagh Gallagher was the 2013 Wedge Scholar, making presentations to WKU students and faculty as well as educators in school districts and interested other individuals. Shelagh shared her experience and expertise as she introduced problem-based learning to those to whom it was a new concept and expanded the knowledge and interest of those who have implemented problem-based learning in their classrooms. These sessions were held on the evening of February 25 and during the day on February 26.

Mark Twain said, "A man who carries a cat by the tail learns something he can learn in no other way." Shelagh used this quote as the title for one of her sessions, Taking the Cat by the Tail: Problem-Based



CLINTON LEWIS

Learning, Authentic Learning, and the Common Core. Problem-Based Learning (PBL) immerses students in real-world problems to engage them in learning at high levels. The right answers are not presented to be remembered, but rather students problem solve as they consider various possibilities for arriving at a solution.

mystery for a life long learner is a problem.' As educators, we should be offering our children opportunities to learn through problem-based learning activities to give students the opportunity to learn by working through a problem. Problem-based learning is an opportunity to remove the ceiling for gifted learners and support continuous progress for all students."

The Wedge Annual Scholar is invited to present on a current topic that will be of interest to undergraduate and graduate students in the College of Education and Behavioral Sciences as well as for educators in schools across Kentucky. This opportunity is made possible by a gift from Carol and Denny Wedge.

Mistakes: Good or Bad News

BY JULIA LINK ROBERTS

Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe we are gifted for something, and that this thing must be attained. — MARIE CURIE

An interesting question focuses on mistakes or errors: Is it good news or bad news to make mistakes? The answer to that question will be important to parents, educators, and young people. If making mistakes is always bad news, then it is fairly important to avoid making errors. The result of this view is that young people are reluctant to take an academic risk but rather continue doing what they know they can do well. On the other hand, if mistakes can be positive, in what way is that true? Learning from mistakes signals the ability to be resilient, persevere, and pursue lifelong learning and high goals. Occasionally, unexpected results or “mistakes” prove to be incredibly useful as in the discoveries of penicillin and graphene.

Of course, it is important to have a sound information base. Children acquire basic information in various content areas as they learn at home and in school and as they interact with their environments wherever they are. Correct information is needed, yet it is as important for children to ask good questions as it is to give right answers. In fact, asking good questions may be more important in terms of lifelong



learning. Creative thinking and problem-solving skills are basic skills for becoming producers rather than strictly consumers of information. Creative thinking means having lots of ideas as well as varied and unusual ideas. In life, good thinkers stand out in terms of productivity.

An examination of patterns in school fits into this discussion. Children who go through school with all right answers have likely been in classrooms in which not enough rigor is expected of them. Earning an easy A may seem great, but assignments that require little thinking or effort do not present challenge or offer the opportunity to acquire study skills. Good grades and high praise for right answers that are arrived at with little effort do not prepare

young people to be successful in postsecondary education or in life. A repertoire of skills is essential for tackling challenging tasks, so children are advantaged if they build that skill set early on. Only then are they undaunted when confronted with challenging work. Educators and parents must partner to ensure that children are developing study skills and working hard to achieve at high levels in school.

It is important for children to develop resilience. Being resilient means that children have the capacity to “come back” from disappointment or from a situation that does not turn out as they anticipated or hoped it would. Without a backlog of experiences that teach children to be resilient, they may be devastated when things do not go their way. Frankly, everyone faces disappointments in life – writers get rejections, job applicants do not always get positions after their interviews, and scientists have experiments that do not yield hoped-for results. Parents who consistently rescue children from disappointment are not preparing them for life. In fact, helicopter parents (those who swoop down and rescue their children from hard classes or from awkward situations) are preventing young people from learning to be resilient. If parents protect them from all disappointments, children do not learn to be resilient. Young people need opportunities to problem solve on their own. Educators who do not engage students in higher-level learning deprive them of the opportunity to learn to be resilient – and persistent.

Persistence is another valuable quality that is needed for success in life. It is not possible to persist without a reason to do so. Easy academic work does not provide the opportunity to persevere. That is a very key reason to make sure that an A means more than that all answers are correct. Does the

academic challenge require students to persevere? Unless school requires thinking and perseverance students are being deprived of opportunities to become effective lifelong learners.

Siegle (2012) refers to Dweck's (1999) work on mindset:

Students who have a fixed mindset approach new situations as opportunities to show what they know. Therefore, they may view any mistakes as evidence they lack ability. This belief can be a significant handicap in a challenging mathematics class.... In contrast, students who have a growth mindset view new situations as opportunities to acquire new skills or improve their existing skills. They are more likely to tackle difficult tasks to become smarter. p. 237

Young people who see mistakes as learning opportunities are likely to be resilient and persistent. They have experienced frustration and disappointment and understand the need to push on to learning at higher levels. They know that mistakes are something that everyone encounters as they aspire to excellence. They have learned that mistakes are to be expected. They realize that anyone who wants to achieve at advanced levels will need to try things various ways in order to understand complex content and hone advanced skills. They understand that they can learn from errors just as they do when conducting an experiment. No one reaches levels of excellence or eminence without sustained effort and a strong work ethic. Yes, mistakes are good news for people who are lifelong learners because they see mistakes as opportunities for learning.

REFERENCES

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- Siegle, D. (2012). *Recognizing both effort and talent: How do we keep from throwing the baby out with the bathwater?* In R. F. Subotnik, A. Robinson, C. M. Callahan, & E. J. Gubbins (Eds.). *Malleable minds: Translating insights from psychology and neuroscience to gifted education*. Storrs, CT: National Research Center on Gifted and Talented.

ALUMNI UPDATE

AMBER CANN, PharmD, (SCATS 1988-90; Travel to China and London; Counselor) was recently hired as director of the Drug Information Center and assistant professor at Sullivan University College of Pharmacy in Louisville, KY. Her goal is to digitize the center and to offer timely and relevant research support to the faculty, students, and healthcare community. As Sullivan University expands its physician's assistant and nursing programs, the Drug Information Center will also be expanding to serve the entire health sciences campus.

CASE HOLMES (SCATS 1999-2000; VAMPY 2001-02) graduated from Case Western Reserve University in May 2009 with a BS in Electrical Engineering. Since then, he has been working in the Cleveland area for ControlSoft, working on development and implementation of software for industrial process control. In his spare time, he tries to enjoy life and take all the adventures that he can.

KARL MILLER (SCATS 1983) was recently named Executive Director of Development for Major Gifts and Annual Giving at The University of Texas at Austin. Previously, Karl served for over six years as Assistant Dean of Development in the College of Education at UT-Austin. His wife of 20 years and a fellow WKU alumna, Jennifer Anderson Miller is the Chief Executive Officer of Austin Lakes Hospital. Austin Lakes is considered one of the best mental health facilities in central Texas. Their 14-year-old son Tristan (FSS 2005-06; WSS 2005-06) just finished his freshman year at Round Rock High School and will represent his Marine Corps Junior ROTC unit at the 2013 JROTC Academic Bowl National Championships in Washington, DC. Their 9-year-old daughter Karlie, a straight A student, plays soccer and basketball every chance she gets.

JUSTIN PENNY (SCATS 2004-05; VAMPY 2006-07; Counselor) graduated *magna cum laude* from the University of Kentucky with a BS in Biology, a BA in Classics with Departmental Honors, and Honors in the University Honors Program. He will be attending Kansas City University of Medicine and Biosciences pursuing a dual degree, combining a Doctor of Osteopathic Medicine degree and a Master of Arts in Bioethics. He remains active with Alpha Phi Omega, National Service Fraternity, and other community organizations.

ANDREW SMITH (VAMPY 1993-96) is president of Fast Guys, Inc., a full service golf cart repair, maintenance and customization company. He has over 14 years of experience in the automotive maintenance, performance, and racing industry. Andrew began his business after relocating his family back to northwest Florida after living in Louisiana for 10 years. Andrew has a BS in Construction Management from the LSU College of Engineering. He and his wife of 10 years have a two-year-old son, and they enjoy playing golf, going to the beach, and spending time together in the Florida sun.

NED WRIGHT (VAMPY 1997; Travel to Britain, Italy, and London) graduated from Georgia Tech in 2007 with a degree in Civil Engineering. He is now a senior engineer for MBP, a multi-disciplined construction consulting firm, in Atlanta.

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ALI BAYMER

CALENDAR

June 9 – 21, 2013

**The Summer Camp for Academically
Talented Middle School Students (SCATS)**

June 23 – 28, 2013

The Advanced Placement Summer Institute

June 23 – July 13, 2013

**The Summer Program for Verbally and
Mathematically Precocious Youth (VAMPY)**

July 15 – 19, 2013

The Summer Camp

August 10 – 14, 2013

**20th Biennial World Conference of the World Council
for Gifted and Talented Children, Louisville, KY**

September 6, 2013

**The Association for the Gifted Fall Institute:
Diversity and Developing Gifts and Talents**

October 4 – 13, 2013

Fall Break in Germany

November 2, 9, 16, and 23, 2013

Fall Super Saturdays

February 1, 8, 15 and 22, 2014

Winter Super Saturdays

March 28 – April 6, 2014

Spring Break Trip to Italy