Dear Friends,

Exciting things are happening in the Fisher College! This year, for the first time, a whole residence hall at TU is filled with STEM (science, technology, engineering and mathematics) students. Imagine the 100 beds of Richmond Hall filled with our Fisher College majors! This vibrant STEM Residential Learning Community is our latest activity designed to promote student success – our major strategic objective for the coming years.

Another critical objective is to design and build a new science complex for the Fisher College to replace Smith Hall. Plans are underway to provide new 21st century learning and research spaces for the sciences, to be completed by 2019! In the meantime, construction has begun on the new Towson building at Harford Community College, where we will offer classes in science education and information technology, beginning in August 2014.

We recently held the 2013 FCSM Fall Forum where we introduced new faculty and staff members, announced the 2013 faculty and staff awards, and heard the State of the FCSM address. You can check out the awards here: [http://www.towson.edu/FCSM/faculty/2013_awards/2013-recipients.asp](http://www.towson.edu/FCSM/faculty/2013_awards/2013-recipients.asp)


In my speech I mentioned the Glen Arboretum, which is being managed by a Board of Directors headed by Professor Emeritus Jim Hull from the Department of Biological Sciences. Jim was recognized by the Alumni Association in October for his leadership work in the Glen with their 2013 Faculty Volunteer Recognition Award. This led me to write a letter to everyone who has donated to the Glen in the last ten years, in which I invited them to make a donation to the Glen in Jim’s honor. This appeal has resulted in gifts totaling $1,895 so far. If anyone else would like to help increase this total, please feel free to do so either on-line, or by sending me a check with Glen Arboretum in the memo line. Thank you!

Here’s wishing everyone a safe and enjoyable Holiday Season!

David A. Vanko
Dean
DEPARTMENT OF BIOLOGICAL SCIENCES

Student Research (* undergraduates; ** graduate)


Masters’ students, Jillian Sanford and Mary Neslund, and undergraduate Bridges student, Christina Seen (students in Vonnie Shields’ lab) were each awarded the Charlotte Mangum Student Support Fund by the Society of Integrative Biology national organization to financially support their travel to the 2014 annual meeting of this organization in January, 2014, Austin, TX where they will each present their research.


Grants and Donations

Richard Seigel received approval for a new grant from the Maryland State Highway Administration entitled “Are outbreaks of emerging pathogens correlated with construction of wetlands?” The funded amount is $30,245.

Publications (* undergraduates; ** graduates)


Presentations

Richard Seigel and Andrew Durso** (Utah State University) organized an international symposium entitled “Detectability and studying rare species: when cryptic natural histories defy both conventional and progressive statistics.” The symposium had 16 international participants and was held during the Joint Annual Meeting of Ichthyologists and Herpetologists, Albuquerque, New Mexico, July 2013.
Richard Seigel presented an invited paper entitled “Which snakes cross the road and when do they cross it? Use of a detectability analysis on a long-term road survey data set” at the Joint Annual Meeting of Ichthyologists and Herpetologists, Albuquerque, New Mexico, July 2013. The paper was co-authored with Andrew Durso**, a graduate student at Utah State University.

Brian Fath gave an invited keynote presentation titled “Quantifying Economic and Ecological Sustainability” at the Estuarine and Coastal Sciences Association annual conference which was held 13 – 17 October 2013 in Shanghai, China. This presentation highlighted research recently published in the journal Ecological Economics. More information about the presentation and conference can be found here: http://www.estuarinecoastalconference.com/bio-fath.html

Brian Fath gave an invited keynote presentation titled “Conceptual models of ecological dynamics: indicators of regime change” at the International Society for Ecological Modelling biennial conference which was held 28 – 31 October 2013 in Toulouse, France. More information about the presentation and conference can be found here: http://www.meteo.fr/cic/meetings/2013/ISEM/programme.html

Journal and Reviewing Activities

Sarah Haines reviewed manuscripts for the Journal of College Science Teaching and Science Activities Review.

Vonnie Shields reviewed manuscripts for the following journals: PLOS ONE, Journal of Experimental Biology, European Journal of Entomology, and Cell and Tissue Research.

Joel Snodgrass reviewed manuscripts for Archives of Environmental Contamination and Toxicology, Herpetologica, and Environmental Toxicology & Chemistry.

Outreach

Sarah Haines conducted a presentation on horseshoe crab biology to 5th grade students at Deep Run Elementary School, Howard County.

DEPARTMENT OF CHEMISTRY

Publications

Kelly Elkins authored the following paper:


Ellen Hondrogiannis and her research students in the Masters in Forensic Science (MSFS) program had the following paper accepted for publication:

Grants

John Sivey submitted the following grant proposal:

Sivey, J. D. Kinetics of electrophilic aromatic substitution by aqueous BrCl, BrOCl, and Br₂O: Catalysis of alkylbenzene bromination. American Chemical Society, Petroleum Research Foundation, Undergraduate New Investigator Program. $55,000.

Ryan Sours submitted the following grant proposal:

Sours, R.E., Chromatographic Investigation of Molecular Interactions with Calcite Surfaces. NSF-Division of Materials Research. $316,016 (3 years).

Professional Presentations

Tim Brunker’s undergraduate research students presented two research posters at the UMBC Undergraduate Research Symposium in the Chemical and Biological Sciences on October 26:

Smith, J. R.*, Rheingold, A. L., Brunker, T. J. Studies of BCl3 and B(C6F5)3 Adducts of Azaferrocene (placed second in category).


Richard Preisler’s undergraduate research students also presented a poster at the UMBC Symposium:


Ellen Hondrogiannis gave the following platform presentation at the 246th ACS National Meeting in Indianapolis, IN.


Ellen Hondrogiannis and Erin Ehrlinger gave the following poster presentation at the 246th ACS National Meeting in Indianapolis, IN:

Hondrogiannis, E. and Ehrlinger, E.** Review of methods and analytical techniques for the attribution of drugs and explosives in the past 12 years.

Ana-Maria Soto’s undergraduate research student presented the following research poster at the 27th Annual Gibbs Conference on Biothermodynamics, Carbondale, Illinois, October 5-8:


Faculty Professional Development/Disciplinary Service

Tim Brunker served as a judge at the UMBC Undergraduate Research Symposium in the Chemical and Biological Sciences.

Ryan Casey reviewed a manuscript for the Journal of Hazardous Materials.

Kelly Elkins reviewed a manuscript for the Journal of Forensic Investigation.

John Sivey reviewed manuscripts for The International Journal of Chemical Kinetics and Water Research.

John Sivey served as a proposal referee on the following panel: U.S. Agency for International Development, Middle East Regional Cooperation Program, Water and Environment Panel.
Department Seminars

The department hosted the following Organic Chemistry seminars:


Dr. Yalan Xing, Harvard University. Transition Metal-Catalyzed Hydrative Functionalization of Alkynes and Applications, November 21.

Community Outreach

Kate Bowdy, Danniebelle Haase and Kelly Elkins presented “Creepy Chemistry” at the Maryland Science Center on October 26.

Kelly Elkins distributed materials for the Masters in Forensic Science program and answered student questions at the 2014 Career & Grad School Workshop and Fair, Loyola University, October 18.

DEPARTMENT OF
COMPUTER AND INFORMATION SCIENCES

Publications and Presentations

Marius Zimand gave a presentation on Oct 21, 2013 in the Computational Complexity Seminar at University of Maryland College Park with the title: “Short lists for short programs - the lower bounds.”

Marius Zimand had the paper "Counting dependent and independent strings" accepted for publication in the journal *Fundamental Informatica*.


S. Acharya, B. Coats, A. Saluja and D. Fuller, “A Roadmap for Information Security Assessment for Meaningful Use”, in the IEEE International Symposium on Network Analysis and Mining for Health Informatics, Biomedicine and Bioinformatics in conjunction with the IEEE International Conference on Bioinformatics and Biomedicine, Shanghai, China, December, 2013.

Jonathan Lazar gave a presentation titled "Teaching Accessibility & Universal Design Concepts Through the Use of Public Policy Projects" at the Accessing Higher Ground conference, November 6, 2013 in Westminster, Colorado. He also co-led a day-long workshop titled "Integrating Universal Design into University Curriculum" on November 5, 2013 at the same conference.

Jonathan Lazar gave a presentation titled "Locked Out: Investigating Societal Discrimination Against People with Disabilities Due to Inaccessible Websites" at the William and Mary Law School, Williamsburg, Va. on November 20, 2013.

Jonathan Lazar's research on pricing discrimination that occurs when airline web sites are inaccessible (which had been published in the journal Government Information Quarterly in 2010), was mentioned twice in the final regulation issued by the US Department of Transportation, titled "Nondiscrimination on the Basis of Disability in Air Travel: Accessibility of Web Sites and Automated Kiosks at U.S. Airports." See http://www.regulations.gov/#/documentDetail;D=DOT-OST-2011-0177-0111 for the final regulation.


Jonathan Lazar and Harry Hochheiser (previously a professor at Towson University, now a professor at the University of Pittsburgh Medical School) published a paper titled "Legal Aspects of Interface Accessibility in the US" in Communications of the ACM.

Services to the Discipline

S. Acharya, Executive Board and Organizing Committee member for the Women in Maryland Higher Education (WIMHE) Luncheon, Morgan State University, November 15th, 2013.

Gabriele Meiselwitz was elected to be Chair of the International Conference on Social Computing and Social Media, part of HCII (Human Computer Interaction International). Founded in 1984, HCII is a yearly conference with over 2000 participants each year.

Chao Lu was invited to give the keynote address at the ICCCS2013 International Conference, Nov. 1, 2013 at Daegu University, Korea.

Wei Yu was invited to attend the NSF 2013 National Workshop on Energy Cyber-Physical Systems (CPS), December 16-17, 2013.

Grant & Awards

Marius Zimand has submitted a grant proposal to NSF "AF: Medium: Collaborative Research: Exploring the Interplay between Pseudorandomness and Kolmogorov Randomness." This is planned as a joint project with researchers from University of Nebraska Lincoln, Iowa State Univ., Univ of Wyoming, and Rutgers Univ.


Michael McGuire recently received a subcontract of $265,456 over five years through Johns Hopkins University as a part of the NSF Data Infrastructure Building Blocks (DIBBs) award titled, "CIF21 DIBBs: Long Term Access to Large Scientific Data Sets: The SkyServer and Beyond." This project will research methods to use the SkyServer database framework to integrate data for ecologists. This will include the integration of spatial, sensor, and field datasets in spatial, temporal, and attribute dimensions for the development of a geospatial network to provide a collaborative data sharing environment aimed at long term research.

Joyram Chakraborty was issued a patent for his work entitled "Systems and Methods for Automatically Determining Culture-Based Behavior in Customer Service Interactions." US Patent number 20,120,310,629, 2012 was issued to Dr. Chakraborty and collaborators OT Stewart and DM Lubensky from IBM T.J. Watson Research Labs.
Grants Awarded

Tatyana Sorokina’s proposal (joint with Larry L. Schumaker of Vanderbilt and Henry K. Schenck of Urbana) to the Mathematisches Forschungsinstitut in Oberwolfach (MFO) in Germany to conduct a workshop on Multivariate Splines and Algebraic Geometry was awarded.

Papers Published or Accepted for Publication


Tatyana Sorokina’s paper "Redundancy of smoothness conditions and supersmoothness of bivariate splines" was accepted for publication by IMA Journal of Numerical Analysis at Oxford Journals.

Workshops

On November 13th, Honi Bamberger delivered a seminar for families living in the Edgewater area. “The Common Core in Mathematics and the Student Who Struggles with Learning” gave families information about the Common Core as well as suggestions for helping “learning different” students be successful with the rigor that these standards demand.

On October 7, November 4, and November 18, Ming Tomayko conducted “mini-workshops” on the Common Core domains of number and operations in base ten, place value, and measurement for grades 1 and 2 teachers at Holly Hall ES (Cecil County). She also taught demonstration lessons in first and second grade classrooms.

Refereeing, Reviewing, and Panel Service


Lawrence Shirley served as External Examiner for a doctoral dissertation in mathematics education from Edith Cowan University in Australia.

Ana Maria Soane reviewed a paper for the SIAM Journal on Scientific Computing.

Conference and Seminar Presentations

Sergiy Borodachov presented a talk entitled “Optimal multivariate spline methods for recovery of twice differentiable functions” (joint work with Tatyana Sorokina) at the Finite Element Circus at the University of Delaware, October 18-19, 2013.

On October 16-18, 2013 the National Council of Teachers of Mathematics (NCTM) held its eastern regional conference at the Baltimore Convention Center. Ming Tomayko gave a presentation entitled “Get Ready for the PARCC Assessment.”

Ana Maria Soane gave a talk entitled “Multigrid Preconditioners for Optimal Control Problems in Fluid Flow” at the Finite Element Circus, University of Delaware, October 18-19, 2013.
Tatyana Sorokina gave a talk "Using MOOCs in Precalculus" at the Third Kennesaw Mountain Undergraduate Mathematics Conference, November 8-9, 2013.

Tatyana Sorokina gave a plenary talk "In the Barycentric World" at the Third Kennesaw Mountain Undergraduate Mathematics Conference, November 8-9, 2013.

Jim Hughes, Rachael Mady, and Larry Allen (undergraduate mathematics majors) gave talks at the Third Kennesaw Mountain Undergraduate Mathematics Conference, entitled "Dimension of Smooth Bivariate Splines on Hexagonal Partitions", "Application of Akima Method to Cubic Splines", and "Multiplication of Polynomials in Bernstein-Bézier Form", respectively. Their research was supervised by A. Kolesnikov and T. Sorokina, sponsored by FSCM research and travel grants (see photo below), November 8-9, 2013.

Undergraduate Students: Jim Hughes, Rachael Mady, and Larry Allen, Presenting their research at the Third Kennesaw Mountain Undergraduate Mathematics Conference, November 2013.

Campus and Community Outreach

Honi Bamberger registered over 80 Towson University student volunteers for the National Council of Teachers of Mathematics (NCTM) Regional Conference, held at the Baltimore Convention Center on October 17th – 18th. In addition to helping attendees, student volunteers were able to participate in sessions when they were not working.

On Thursday, November 14th, 22 Towson University mathematics methods students participated in a Family Math Night held at Tunbridge Public Charter School. Under the supervision of Honi Bamberger, TU students played games and shared activities with the families who attended this event.

On Saturday, November 2nd, Honi Bamberger moderated the annual Maryland Mathalon. This middle school competition, held at Ft. Meade Middle School, brought 53 teams of four students to compete in an individual problem solving event, a team invention event, and a team problem solving event. This is the fourth year that Dr. Bamberger has been the moderator.

Diana Cheng coaches the Towson University Figure Skating Club, a club sport at Towson University. Nine members of the TU figure skating team competed at the Cornell University intercollegiate figure skating competition (Ithaca, NY) on November 16-17. The Towson University team placed 6th out of 20 colleges. In the attached picture, Rachel Jones (Secondary mathematics major, left) and Mary Jean Joyce (Computer Science major, middle) proudly display their medals.
Miscellaneous Professional Activities and Service to the Discipline

Lawrence Shirley has been appointed as Co-Chair of the Topic Study Group on ethnomathematics for the Thirteenth International Congress of Mathematical Education (ICME-13) in Hamburg, Germany, in July 2016.

Mathematics Department Colloquia

On Thursday, October 24, Dr. Arthur Benjamin of Harvey Mudd College presented a talk entitled “Combinatorial Trigonometry.”

On Thursday, November 7, Dr. Karen Ross of the Maryland State Department of Education spoke about “The Maryland Common Core State Curriculum (CCSC) in Mathematics and the Partnership for Assessment of Readiness for College and Careers (PARCC): What We Know Now.”

The next Mathematics Colloquium will take place on Thursday, December 5, at 4 p.m. in YR 320, with refreshments served before the talk at 3:30 p.m. The speaker will be Dr. Min A of Coppin State University. Her talk is entitled “Effectiveness of Online Instruction in Basic Statistics and Algebra Courses.”

Student Clubs

The Mathematics Education Club, with Honi Bamberger as its faculty advisor, held two meetings:
On Wednesday, October 30th, Ms. Jennifer Penniman, from Howard Community College, spoke to club members on “Activities to Help Students Build Fact Fluency.”
On Monday, November 4th, Ms. Beth Kobett, from Stevenson University, spoke to club members on “Looking at Students’ Thinking: What Do We Really Know?”

DEPARTMENT OF PHYSICS, ASTRONOMY & GEOSCIENCES

The Society of Physics Students (SPS) has been recognized by the national office as an Outstanding SPS Chapter for 2012-2013. Less than 10% of the chapters were provided with this distinction, equating to approximately 1 per state. This marks the third time in four years the TU SPS has been honored with this award.

Proposals

Dr. Vera Smolyaninova submitted a proposal to the NSF EPM program entitled: Self-assembled tunable hyperbolic metamaterials, $349,987.

Dr. Yan (PI), Dr. Schaefer (Co-PI) and Dr. Simpson (Co-PI) submitted a proposal to NSF with the title “RUI: Integration of Computational Modeling and Experiment to Study the Electric Field Effects on Nanolithography of Graphene.”

In addition, P. Ghavamian was awarded three nights observing time (Jan 19-21) in 2014 at the 6.5 meter MMT observatory telescope, for the project “Optical Spectroscopy of the Galactic Balmer-Dominated Supernova Remnant G156.2+5.7”.

Publications


Presentations and abstracts

Joel Moore gave a seminar presentation at Millersville University entitled “A high sodium diet: Road salt impacts on soil, groundwater, and stream chemistry in Baltimore County, MD.”

Raj Kolagani attended the National Professional Science Masters Association (NPSMA) Conference Nov 14-15 in Arlington, VA.

Community Engagement and Professional Service


Joel Moore reviewed manuscripts for Biogeochemistry, Geobiology, and Geochimica et Cosmochimica Acta.

Raj Kolagani reviewed a paper for the journal Sensors.

The planetarium hosted an MFA program by Lynn Tomlinson in October, making use of the immersive projection system to show some scenes from Shakespeare’s “Midsummer Night’s Dream” in new and interesting ways. A dozen school and local groups were hosted in the permanent planetarium and as many more with the portable planetarium, and at least 50 people attended our public planetarium show, “An Intergalactic Tour”, on Oct. 18. Another 50 or so attended “The Music of the Spheres” on Nov. 15. The observatory has seen heavy use in this time frame as well, with six students pursuing a variety of projects from cometary spectra through to gravitational lens observations, in more than a dozen “observing runs.”

Student News

Physics Major David Lahnemen (faculty mentor Vera Smolyaninova) was awarded FCSM Undergraduate Research Grant ($500) and Towson Undergraduate Research Grant ($450) for his project “Experimental demonstration of Luneburg lens waveguides.”


N. Prins (presenter) and J.M. Overduin, "Intergalactic dust and the darkness of the night sky," oral presentation, American Institute for Aeronautics and Astronautics Region I Young Professional, Student and Education Conference, Johns Hopkins University Applied Physics Laboratory, Laurel, MD, November 15.

D. Molloy (presenter), J.M. Overduin and J. Selway, “Physics almost saved the president!” oral presentation, Fall 2013 Meeting of the American Association of Physics Teachers (Chesapeake Section), Tidewater College, VA, November 8-9. Awarded top prize for "Best Student Presentation"

Zoey Warecki undergraduate physics major won the best poster award ($500 scholarship) for her research poster at the honors college poster session held in October. (Research Mentor: Raj Kolagani)
Emeritus News

Henry Chen has been appointed Music Director of the Baltimore Philharmonia Orchestra (http://www.baltimorephilharmonia.org/), a community orchestra that originated from the Gettysburg Symphony of Dr. Sebastian Hart. He will be conducting a pair of Holiday concerts: December 8 (at St. Anthony of Padua) and December 15 (at Loch Raven Senior High). Presented will be Sibelius’ Symphony #2, Copland’s Fanfare for the Common Man, Tchaikovsky’s Nutcracker Suite, a Hanukkah Medley by Baltimore composer Harriet Katz, and selections from Handel’s Messiah, culminating with an audience sing-along of the Hallelujah Chorus. All are invited to come along and sing ... scores will be provided!

THE GLEN ARBORETUM

Grant awarded for English ivy removal in Glen Arboretum

Alien invasive species occupy much of the Glen Arboretum. Species including Japanese honeysuckle, porcelain berry, Norway maple and wineberry are problematic, but by far the most troublesome is English ivy (Hedera helix). English ivy covers most of the surface area of the Glen and has climbed into the canopy of many of the trees. Besides being an unsightly climber of tree trunks, it inhibits native plant reproduction and provides minimal habitat for native species, both plant and animal. When ivy grows up the trunks of trees, it is able to branch out, flower and reproduce. For conservation purposes the first priority is to remove English ivy from the trees.

This fall the Glen Arboretum was awarded a $2,100.00 grant from Baltimore Gas and Electric to help eradicate the species. With matching funds from the University, students were hired to remove ivy from trees. This involves cutting the vines from the first four feet of the trunk and clearing ivy away from the base of the tree. The ivy will die and eventually be sloughed off the tree. In addition to the efforts of these students, work days from volunteer students has cleared ivy from the ground, planted ferns and herbs, and cleared trails. Over 200 students have participated in these activities this fall.

ENVIRONMENTAL SCIENCE AND STUDIES PROGRAM

Environmental Science graduate student Bill LaBarre won a travel award from the Chesapeake Potomac Regional Chapter of the Society of Environmental Toxicology and Chemistry (SETAC) to present his work at the national SETAC meeting in Nashville, TN. Bill gave the following talk based on his masters work that is being funded by the International Copper Association and the Copper Development Association.

MOLECULAR BIOLOGY, BIOCHEMISTRY BIOINFORMATICS (MB3) PROGRAM

On October 4th two MB3 students, Lauren Rosso and April Gilkey presented their research at the biweekly MB3 seminar series. Lauren spoke about her work on the effects of mutant forms of chaperone ERp29 on the intracellular transport of CFTR, the protein responsible for Cystic Fibrosis. April presented her work on the role of the blood/brain barrier in cancer metastasis.

On October 18th two MB3 students, Curtisha Charles and Kenneth Harris presented their research. Curtisha spoke about her project inventorying and characterizing the distribution of sensory organs on the antennae of the House Cricket. Kenneth discussed his work on the role of the large protein Obscurin and slow myosin binding protein C.

On November 1, two MB3 students, Thomas McIlroy and Sarah Galinn presented seminars on their research. Thomas spoke about the expression of CYP2E1, an enzyme that helps in cellular detoxification, in livers of mice in which the 15kDa selenoprotein gene had been knocked out. Sarah described her work on the influence of dietary polyphenols and sulforaphane on the expression of selenoproteins in colon cancer cells.

On November 14 the MB3 program sponsored a trip to Fort Detrick to participate in a scientific career workshop sponsored by the National Interagency Confederation for Biological Research. The workshop included presentations by scientists from the United States Army Medical Research Institute of Infectious Disease, the National Cancer Institute, The National Institute of Allergy and Infectious Disease, the United States Department of Agriculture, the Naval Medical Research Center, the Food and Drug Administration and the National Biodefense and Countermeasures Center. Students also toured research facilities, including Biosafety level 4 labs.

On November 18th, MB3 students sponsored an international potluck lunch.

Baltimore Excellence in STEM Teaching Project (BEST)

The 2013-2014 Cohort has met for two Learning Community Meetings. These meetings provide time for BEST Teachers to share feedback on their Curriculum Implementation Projects and explore various ways to enhance their STEM instruction. On Saturday, October 12th, teachers learned about several formative assessment strategies and the difference between assessment for learning as compared to assessment of learning. The teachers also engaged in a pumpkin-themed open inquiry lesson and reflected on how this type of student-centered activity could be implemented with their own students.

Investigating how the mass of a pumpkin affects the number of seeds
Designing a device to measure lung capacity
Analyzing the relationship between pumpkin mass and stem circumference
On Saturday, November 9th, the BEST teachers analyzed a sample lesson using an inquiry-based instruction rubric. They then spent the afternoon investigating several activities that modeled integrated STEM instruction including building and testing devices that measure lung capacity and designing straw rockets and testing predictions about their flight patterns.

Thanks to Dr. Don Thomas, Director of the Hackerman Academy of Mathematics and Science, for his presentations at the schools of three BEST Project teachers. Dr. Thomas's presentations reached over 800 middle and high school students.

BEST teacher Rennie Watson (on the right) co-presented a poster on her summer research project at the National Association of Biology Teachers Conference in Atlanta, Georgia on November 21. She and Sade Eukolana presented findings on the use of halophiles as biomarkers for road salt pollution. Sade is a graduate student in Dr. Shil DasSarma’s Immunology and Microbiology Lab, University of Maryland School of Medicine. (see photo below)

Presentations and Publications

Dr. Miranda and Ms. Damico are co-authors on a paper submitted to Science Educator titled “Changes in teachers’ beliefs and classroom practices concerning inquiry-based instruction following a year-long RET-PLC PD program.” Ms. Damico is the author of an article submitted to The Science Teacher titled “Exploring Experimental Design.”

Ms. Damico presented “Implementing Inquiry in the Science Classroom” and “Exploring Experimental Design” at the 2013 Maryland Association of Science Teachers Conference.


TOPS  (Towson Opportunities in STEM)

Programming

TOPS first year students continued to attend the bi-weekly group meetings held throughout their first year. Time management, course registration, observation, and personal responsibility were among the topics covered during the months of October and November.

On October 29th TOPS students living in the STEM Residential Learning Community facilitated a program that took place throughout Richmond Hall. Participants encountered multiple hands on activities that allowed them to experiment with a non-newtonian fluid, make a polymer, and watch “radioactive decay” take place before their very eyes.

Thanks to a webinar put on by Pathways to Science November 19, 2013, TOPS students had the opportunity to learn more about paid summer research experiences and the various options available to them.
Outreach

The annual visits from the staff and students of the Building STEPS organization took place in October of this year. On October 9, 2013 forty high school seniors in the program worked with Building STEPS staff and TOPS staff member Annie McMahon to complete the Common Application for college. The high school juniors in Building STEPS visited on October 24, 2013. TOPS students were ambassadors to this group of 60 students as they participated in numerous activities in a variety of locations on campus.

Awards, Accolades, and Accomplishments

TOPS Student Darren Johnson was inducted into the National Society of Collegiate Scholars (NSCS) on November 15. He was joined by TOPS Program Director Annie McMahon who was inducted as an honorary member for the impact she has had on the academic and professional careers of numerous NSCS members.

Professional Activities

Annie McMahon was an invited panelist at the NASPA Careers Conference. She served on a panel with other professionals who work in non-traditional student affairs roles. During this session she highlighted the work being done in STEM fields and the numerous ways new and experienced professionals could partner with academic affairs to impact the STEM student experience.

STEM Leaders

The STEM leaders held their 3rd annual Halloween Event and were joined by 13 FCSM faculty and 12 children. There were costume contests for the children and the STEM students, with a variety of wonderful costumes.

Here are two photos:

Memorial Gifts... from the Development Office - Gifts benefiting The Jess and Mildred Fisher College of Science and Mathematics or any of the departments mentioned in this newsletter, may be made to Towson University Foundation in honor of a birthday, anniversary or other special occasion, or simply as a thank you for a special favor. Gift acknowledgements will be sent to the donor as well as the individual being honored. For more information, contact the Towson University Development Office at 410-704-3375 or 1-866-301-3375 or write to the Towson University Foundation, 8000 York Road, Towson, MD 21252-0001.