Dear Friends of the School of Health Sciences:

When you drive on the highway, you may notice those milestones alongside the road; you may pass the same milestones if you are driving the same road and in the same direction again. But in human history, there are many milestones signifying the turning points that upon passing, there is no return; it's gone … becomes history, for good or bad … and we are just writing a new chapter today for tomorrow, knowingly or unknowingly.

Looking back on the past semester, it really amazes me how many milestones the School of Health Sciences has just passed unknowingly!

First, I would like to congratulate Prof. Neil Zimmerman and Mr. Bob Walkup for their major milestones in their long and successful careers at Purdue and in this School. Both will retire by the end of this semester. We will miss them profoundly for their lifelong contributions made to the School’s educational programs. I wish Neil joy in his time with girlfriend Jane at home or on the road, and Bob with his fishing poles in lakes and rivers. You can read more about their stories on page 3. An old saying states that the downside of retirement is that one never gets a day off. But, Neil and Bob, if you want to get some days off from your retirement, please come and visit us!

I would like also to congratulate Prof. Ulrike Dyda for her successful passage across yet another distinguished milestone in her career, i.e., her successful promotion to become a Tenured Associate Professor. Ulrike is very deserving of this promotion not only for her exceptional research achievements, but also for her contributions in graduate and undergraduate education. A tenured professorship certainly means a distinct honor and recognized academic status; yet it also implies more, but not less, responsibilities calling upon you, Ulrike, down the road!

Please allow me to represent our faculty, staff and students in welcoming Dr. Candace Tsai, Assistant Professor of Occupational Health Science, and Dr. Ellen Wells, Assistant Professor of Environmental Epidemiology, to the Health Sciences family. Candace and Ellen are the newest faculty members recruited among many outstanding candidates. Candace’s unique research focus on nanomaterial exposure and control in workplace and her devotion to the occupational health will unquestionably enhance our already successful industrial hygiene program.

(see next page)
Ellen’s expertise in epidemiology will perceptively bridge our bench-top research in metals and pesticides to human populations, locally and internationally. Both new faculty members have passed a significant milestone in their careers and have started to write a new chapter as independent scholars in their own fields. Welcome Candace and Ellen!

In addition, we are so pleased to see a new wave of our students who have finished their college life at Purdue, a memorable milestone in their young life, and advanced to the real world. Some have been accepted by the medical schools or professional schools; others are employed by the industry. You can appreciate their achievements starting on page 4. We wish our graduates the best luck in their career!

Finally, I am glad to inform you that I will be on sabbatical leave from July 1 to December 31, 2013. Prof. Charlie Santerre, a toxicologist in Department of Nutritional Science, will assume the leadership role as an Interim Head to manage School’s administrative matters during my absence. (Please read the information below on Prof. Santerre’s credentials.) I plan to use this opportunity to develop new research projects in human populations that are exposed to manganese, lead, and aluminum in China. Also, I’d like to step back to reflect on the jobs done during the past 5 years in this office to be considered a success or a failure, and what can be done to better my performance as a servant to the School and its constituents I bear the responsibility to. That, perhaps, will become a milestone in my own career, so that before I can look forward to the School’s advancement in any meaningful way, I will first be allowed to take a long look back, to learn how to improve ourselves and, together with my colleagues and our students, to become a better and useful people to the society.

Did I mention more exciting milestones ahead of us?

Hail Purdue!

Wei Zheng, Ph.D.
Professor and Head

**INTERIM HEAD, DR. CHARLES R. SANTERRE**

Charles R. Santerre is a Professor of Food Toxicology in the College of Health and Human Sciences at Purdue University. His public health and toxicology research have developed rapid assays for measuring chemical contaminants in seafood. He has also conducted human clinical studies to examine the clearance of chemical contaminants and the effects of seafood consumption on the status of dietary nutrients.

He recently served as an American Association for the Advancement of Science (AAAS) Science & Policy Technology Fellow and was sponsored by the USDA, Food Safety Inspection Service, Office of Public Health Science, Risk Assessment Division. He was tasked with developing a vision that would allow the Agency to identify and measure emerging contaminants in meat products.

He holds degrees in Human Nutrition (B.S.), and Environmental Toxicology & Food Science (Ph.D.) from Michigan State University. Prior to this, he served as an Adjunct Associate Professor in the Environmental Sciences Program at Ohio State University and as an Assistant Professor in the Environmental Health Science Program and the Interdepartmental Toxicology Program at the University of Georgia.
Goodbye to Good Friends...

“If people really concentrated on the really important things in life, there would be a shortage of fishing poles.” - Doug Larsen

So those are my plans for a life as a new member of the unemployed. Many of the mysteries of life have been revealed to me while sitting on the dry end of a fishing pole. More often than not I have gone hours without the slightest bite. To tell the truth, I really don’t even like fish! Furthermore I have never cleaned a fish that I have caught. You see, I guess, that I am merely a spectator of the pastime. Life just goes by easier from the end of a fishing pole.

Here is what I suggest when life has you at wits end. Grab your pole and come and see me. We can spend a few minutes or even hours at the pond by my house. Actually I have all kind of fishing gear so you really won’t even need a pole! Unfortunately it is a public place so you will legally need to purchase a license but WalMart is only 10 minutes from my house. Then we will get down to solving those issues that have been eating on you for the past few hours/days/months/years. If you don’t feel better when we are finished then we can set up a time to meet again. We will just keep doing this until you learn the true meaning of life. Friends can solve any problems just through talking with other friends. And more importantly, we all need to surround ourselves with trusting friends.

The relationships I have made through my affiliation with Purdue are the true blessings of life. The joy of knowing all of you who have helped me grow into a better man, a better Father, a trusted friend will sustain me for the coming years. I am so fortunate to have known each and every one of you. Thank you and bless your loving, caring ways. You have enriched my life beyond my dreams.

Let’s go fishing!
Hugs, Bob

Farewell from “Dr. Z”

It’s hard to believe, but I am retiring at the end of the Spring semester, 2013 after more than 32 years as a Purdue School of Health Sciences professor! I came here thinking I would “try it out for a few years” and enjoyed the camaraderie, the students and the challenges so much that “the rest is history” as they say.

I just want to say thank you to all my School of Health Sciences colleagues for their help, their support and their friendship throughout the years. Most of all I want to say thank you to my countless students, as they are what has made this the most worthwhile profession I could have ever chosen. I am so very proud of every one of them!

Although “Dr. Z” will no longer be a regular part of the day to day operations of the School, I imagine I will occasionally be spotted on campus and am always willing to lend my advice and support. People have been asking me what my plans are for retirement: I am planning to remain in West Lafayette for the time being, am planning to remain active in the American Industrial Hygiene Association and the IH profession in general, and am hoping to do some occasional consulting. I am most looking forward to spending more time with my 7 grandkids, my girlfriend, and to just sit on my apartment deck reading a book for pleasure (can’t remember the last time I did that) and watch the squirrels! Hopefully some exciting travel will be in the mix as well.

So, “thanks for the memories,” from Dr. Z!
# The Colleges of Science, Agriculture, Engineering, Liberal Arts, Technology and Honors hosted a Undergraduate Research Poster Symposium on April 16, 2013.

The School of Health Sciences is proud to announce the winners for our School who won awards:

**Isha Kaul**, sophomore, won the Abstract award for Life Science for her poster entitled "Presence of Radioactive Radon Gas on Purdue University Campus"; the project was mentored by Professor Jim Schweitzer.

**Claire Tighe**, freshman, won the College of Health and Human Sciences Student Choice Award for her poster entitled "Contact and Seating Surfaces in Relation to Development of Pressure Sores leading to MRSA Infections in Paraplegics and other Workers with Lower Limb Disabilities"; her mentor is Prof. Jim McGlothlin.

In addition, Stephanie Barthuly, Michele Devilbiss, Alex Jones, Elizabeth Rowland, and Karen Ma from our School have presented their research posters in the HHS event.
Lauren Gustafson of the women’s swimming & diving team won a $7,500 scholarship from the NCAA Postgraduate Scholarship Committee.

Alayna Skinner - Tutor of the year for Purdue Promise.

Kendall Smith - Host Co-Chair for Old Master’s Central Committee

Mortar Board Class of 2014 Christina Burke, Doug Day, Kendall Smith

Great Job Ladies!
After graduation from Purdue University, Craig Yoder began his career as a research scientist at Battelle, Pacific Northwest Laboratory in the Radiological Standards and Engineering Section where his work focused on radiological calibrations, particularly in the areas of personal dosimeter testing and calibrations. He left Battelle as a Senior Research Scientist in 1981 to become the Radiological Group Supervisor for Pennsylvania Power and Light who was finishing construction on the Susquehanna Steam Electric Station, a nuclear power facility.

In anticipation of regulations requiring the accreditation of personal dosimetry laboratories, R. S. Landauer Jr and Company, a Division of Tech Ops Inc., (today known as Landauer Inc.) recruited Craig in 1983 as the Technology Manager to lead its technical efforts to gain accreditation and commercialize developing technologies. A significant accomplishment during this early part of his career was guiding Landauer to be among the first to gain accreditation under the National Voluntary Laboratory Accreditation Program. Other notable achievements included developing a method for heating TLDs with lasers, developing a dosimeter for the American College of Radiology for testing mammographic x ray machines, implementing a new large - scale TLD dosimetry system and introducing Radtrak® an indoor radon monitor.

In 1994, he was promoted to Vice President, Operations that added to his technical oversight duties the direction of the day to day manufacturing and analytical activities. It was at this time that he began research into a new dosimetry method, optically stimulated luminescence (OSL). This position allowed him to direct the restructuring of Landauer from a film and TLD dosimetry laboratory to one that largely depended on the new OSL technology. This effort culminated in the launch of the Luxel® dosimeter in 1998.

In 2000, Craig was promoted to his current position as Senior Vice President, Marketing and Technology. In 2004, he directed the launch of the InLight® family of OSL analytical instruments and dosimeters that has been one of the key elements of Landauer’s growth over the past 5 years. His current responsibilities encompass overseeing the 7 international Landauer subsidiaries and developing analytical systems for the military (RadWatch™ and RadLight™) and patient monitoring (microStar® and nanoDot™) applications.

Dr. Yoder is a recognized scholar in the radiation safety research field. He has been on several standard development committees that wrote an American National Standards on dosimeter testing and another on the use of multiple dosimeters to assess the effective dose equivalent. In addition he was a member of the scientific committees that developed NCRP Report No. 158, Uncertainties in the Measurement and Dosimetry of External Radiation, and NCRP Report No. 122, Use of Personal Monitors to Estimate Effective Dose Equivalent and Effective Dose to Workers for External Exposure to Low-LET Radiation. Finally, he was on the National Research Council committee that prepared the report, —Film Badge Dosimetry in Atmospheric Nuclear Tests.|| He has been awarded 3 patents.

He is a member of the Health Physics Society, the American Association of Physicists in Medicine and the Society of Nuclear Medicine in addition to being a council member of the National Council on Radiation Protection and Measurements. He is a Past President of the Council on Ionizing Measurements and Standards (CIRMS). Craig and his wife, Sheila, have been married since 1973 and have two sons, Bryan and Brent. Craig is an avid bicyclist, having raced competitively during his younger years and enjoys golf and sailing when possible. During the winter he makes furniture on a schedule that his wife patiently tolerates.
Hello, School of Health Science friends!

My name is Truda Strange and I joined the Office of Student Services, March 4, 2013. I have worked closely with Bob Walkup as he transitioned to retirement. We will sorely miss Bob as he was a dedicated servant to our School.

I earned my Bachelor of Science Degree in Elementary Education from Ball State University in 1981 and my Master of Science Education Degree from Purdue University in 1985.

I started my career at Purdue in September, 1995. I served as an academic advisor in the College of Education, First-Year Engineering, and spent the last 8 years as an academic advisor in the Weldon School of Biomedical Engineering.

I have truly enjoyed meeting the students, faculty and staff in the School. Academic advisors, Rosie Ricci and Dave Tate, have been especially helpful during my transition. I look forward to working with them as we deliver quality academic advising.

Please stop by HAMP 1163 and introduce yourself. I look forward to meeting you.

Hail Purdue!

Joining Dr. Dydak’s productive lab this past fall are three new "members" (from left to right) Shalmali Dharmadhikari (daughter Avni), Zaiyang Long (son Winston) and Ulrike Dydak (son Tobias).

PURDUE STUDENT’S INVENTION MAKES WALL STREET JOURNAL (continued from page 1)

Ward has self-funded the development of three vest prototypes he made after a summer internship. Velcro straps hold the equipment’s wires or tubing in place and counterweights in front ensure the equipment located on the back doesn’t pull the vest. "People in industrial, government and military settings work as hard as they can, and I have been told that traditional industrial hygiene sampling is made even harder because the equipment is heavy and awkward to carry," he said. "Since the vest keeps equipment and its wires or tubing in a consistent place, hygienists can better measure the levels of physical, chemical and biological agents in the workplace, which means they can better detect possible problems and effectively control them."

Ward has created large and extra-large prototypes, one of which can hold up to six sampling devices. They are being or will be tested by companies and government agencies in Indiana and Ohio. Ward also will make a poster presentation about his vests in Montreal at the AIHce 2013 conference for occupational and environmental health and safety professionals. Purdue Office of Technology Commercialization has filed two provisional patents for Ward's vest for industrial hygienists. For more information about developing and commercializing this invention, contact the Purdue Office of Technology Commercialization at 765-588-3470, otcpatent@prf.org; Purdue Research Foundation; Steve Martin, 765-588-3342; sgmartin@prf.org

SOURCE: Purdue Research Foundation Copyright Business Wire 2013 April 18, 2013, 11:15 a.m. ET WEST LAFAYETTE, Ind.--(BUSINESS WIRE)--
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Distinguished Students (Dean’s List, Semester Honors or Both) Cont.

Kevin M. Madayag
Shenrui Mahorney
David J. Manring
Christopher S. Marks
Stephanie L. Mason
Eric T. Mastanduono
Alison Mathena
Lauren Matrisciano
Mary G. McInerney
Tanner L. McKinley
Rachel M. Miller
Adam J. Morris
Riordan A. Murphy
Jake P. Musashe
Adrianna E. Myers
Michelle M. Myers
Kalen E. Ney
Kurt R. Niebauer
Corinne E. Novelli
Graham T. Owen
Jericho S. Parrett
Jeanna L. Patton
Zachary Pense
Emily Peppin
Gisella M. Pere
Aaron T. Pham
Ryan J. Pogotis
Molly E. Powers
Derek L. Price
Kelsey E. Quin
Amelia A. Reising
Lindsey K. Reprogle
Lauren. N. Rigg

Lindsey R. Roby
Elaina J. Roeing
Kirsten R. Ross
Kelsey M. Rosswurm
Allison R. Roth
Elizabeth A. Rowland
Paige A. Ruddick
Anneliese N. Rupp
Geoffrey A. Ryan
Sara A. Sadeghi
Betsy E. Schlehuser
Kelly E. Schlotman
Adam J. Schmidler
Bryan D. Schmidt
Lauren M. Schmidt
Brett N. Schuhler
Leonard K. Shaw
Nicholas W. Seager
Abigail L. Seifert
Michael S. Sesterhenn
Brett N. Schuhler
Leonard K. Shaw
Nicholas W. Seager
Abigail L. Seifert
Michael S. Sesterhenn
Nazfa Sheikh
Alison R. Shoemaker
Eric A. Simiele
Laura A. Simon
Alayna M. Skinner
Megan R. Skochdopole
Alex C. Slaten
Kendall P. Smith
Olivia F. Smith

Erin R. Sondgerath
Courtney A. Sperry
Alex M. Steenman
Kristin N. Stockton
Whitney L. Studer
Bridget F. Sullivan
Helen E. Svatos
Madaine L. Talucod
Sylvia F. Tawfik
Abigail M. Tetzloff
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Julia C. Thrapp
Claire E. Tighe
Aurelie Tollet
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Brittany R. Wilson
Anna E. Winchester
Andrew F. Wiseman
Elizabeth L. Witek
Yeung Ching Y. Wong
Allexys N. Woodard
Yadi Xu
Diana F. Yang
Taeyi You
Yuefeng Zhang
Mingyue Zheng
Patricia M. Ziccarelli
HEALTH SCIENCES AWARD PROGRAM

Celebrating Your Success!

BARBARA YOUNG AWARD
Christopher Marks

DISTINGUISHED HEALTH SCIENCES STUDENT AWARD
Lauren Rigg

BOOTSMA DISTINGUISHED MEDICAL LABORATORY SCIENCES SCHOLARSHIP
Dylan Meadows

ROBERT R. LANDOLT RADIOLOGICAL HEALTH SCHOLARSHIP
Alison Roth

WAYNE V. KESSLER GRADUATE STUDENT AWARD
Zaiyang Long & Greg Weber

GRADUATE SERVICE AWARD
Christopher Bates

RICHARD VETTER SCHOLARSHIP
Anna Winchester

ELI LILLY AND COMPANY HEALTH PHYSICS AWARD
Eric Simeile

PAUL L. ZIEMER AWARD FOR OUTSTANDING FRESHMAN SCHOLASTIC PERFORMANCE
Claire Tighe

SERVICE AWARD
Anneliese Rupp

ELI LILLY AND COMPANY INDUSTRIAL HYGIENE AWARD
Jeff Bainter and Josh Horton

HEALTH & HUMAN SCIENCES COLLEGE AWARDS

OUTSTANDING DOCTORAL STUDENT AWARD
Greg Weber

OUTSTANDING MS STUDENT AWARD
Sara Wirbisky

CETA TEACHING ASSISTANT AWARD
Stephanie O’Neal
The School of Health Sciences is proud to announce the recipient of the 2013 Outstanding Young Alumni Award: Genevieve Viduya, a 2011 graduate of the School of Health Sciences. Genevieve is employed with SSCI, A division of Aptuit in West Lafayette, Indiana. Ms. Viduya was nominated for this award by Jason Gadlage. Below is his nomination letter to the Awards Committee:

I am writing this letter to nominate Genevieve Viduya for the Outstanding Young Alumni Award. It is my opinion that you will find no other candidate as deserving of this award as Miss Viduya. I first met Genevieve during my freshman year at Purdue University and since that moment I have been continually impressed by her actions and accomplishments. We were both volunteering in the Boiler Gold Rush program where she excelled in all aspects of the organization and exemplified the program in all of her actions. While I volunteered for two more years with the program Genevieve continued with the program to its highest student position serving on the Student Orientation Committee (SOC). I can recall her level of commitment as we finished our dual bachelor degrees within the same year, I truly do not know how she managed her time. On top of this commitment to Purdue University she also served as a Health Sciences Ambassador, a member of the Purdue Industrial Hygiene Student Association, a member of the Purdue Filipino Association, Campus Crusade for Christ, Phi Delta Chi (Pharmacy Organization), and finally Purdue University Dance Marathon. Her involvement during our undergraduate program has already been recognized in 2009 with the Jeff Kizer Award.

The previous accolades are indeed impressive but I would like to share the main reason for nominating Miss Viduya. It is true that she has shown continued success in our profession completing two internships and recently accepting her second professional position requiring more responsibilities and further utilization of her diverse skill set. However, I am even more impressed by her actions outside of our field. In August of 2012 Genevieve combined her experiences while volunteering on mission trips around the world and working part time for Mary Kay to start a non-profit business to raise money for charity. The result was Makeovers for Missions and it has since partnered with another non-profit called Love is Ethiopia which is working to provide a day care center for children in Addis Ababa, Ethiopia so their mothers may work and better provide for their families. When I initially learned of her venture I discovered that her non-profit works with Mary Kay but instead diverts all profits she would earn to the charity of her choice.

In summary, I would like to emphasize Genevieve’s ability to serve as a role model for young alumni and current students in the School of Health Sciences. Not only is Genevieve already experienced in her professional career but she has separated herself from other young alumni with her selfless charity. She has shown commitment to principals that all programs within the School of Health Sciences can relate and shows promise to continue with her achievements and professional development with her involvement in professional organizations and private ventures. Genevieve truly is a role model for our school and university.

Genevieve was honored at our Annual Health Sciences Banquet on April 19, 2013. Her family was in attendance to share this special award with her. We look forward to hearing more great things about Ms. Viduya in the coming years!

Keep up the great work!
Congratulations to our award winners who were honored at our Annual Health Sciences Graduation and Awards Banquet on April 19, 2013.

David Tate and Christopher Marks

Jason Cannon and Lauren Rigg

David Tate and Dylan Meadows

Keith Stantz and Alison Roth

Truda Strange and Anneliese Rupp

Shuang Liu and Anna Winchester

Christie Clem, Eric Simile and Linda Nie

Jim McGlothlin and Claire Tighe
Congratulations to Dr. Neil Zimmerman on being selected as 2013 the recipient of the Health Sciences Robert R. Landolt Award for Excellence in Teaching.

Criteria for the award include: Clarity of Presentation, Creating Student Interest in the Subject, Intellectual Challenge to the Students, Development of Logical Approaches and Critical Evaluation.

Dr. Zimmerman was honored at The Annual Awards Banquet on Friday, April 19, in the Spurgeon Room in Mackey Arena.

Congratulations - Great Job Dr. Zimmerman!
LEGAL LEVELS OF ATRAZINE ALTER NEUROENDOCRINE, REPRODUCTIVE GENES IN ZEBRAFISH

WEST LAFAYETTE, Ind. - A Purdue University study found an agricultural herbicide alters reproductive and neuroendocrine genes during embryonic development in fish, a finding that will help establish a genetic profile to determine atrazine's specific effects.

The exact connection to health outcomes is not defined, but we found gene alterations in our animal model when exposed to the level of atrazine that is deemed safe for drinking water," said Jennifer Freeman, an assistant professor of toxicology in the School of Health Sciences. "Also of concern was an increase in head length in the study's young zebrafish when exposed to low doses of this widely used herbicide." The federally approved amount of atrazine is 3 parts per billion in drinking water. The amount is currently under review by the Environmental Protection Agency because the herbicide is considered an endocrine disrupting chemical and potential carcinogen. While atrazine is confirmed by many animal studies as harmful to endocrine systems, its specific effects are still unknown, Freeman said. Atrazine is used to kill broadleaf and grassy weeds in crops, such as corn, especially in the Midwest. The chemical is sometimes used on residential lawns in the Southeast.

This study, partially funded by the National Institutes of Health and published by Toxicological Sciences journal, focused on exact gene changes. The researchers tested atrazine at three levels, 0.3 ppb, 3 ppb and 30 ppb, by exposing developing zebrafish embryos. The 3 ppb level is the current safe level in drinking water, and the larger amount of atrazine tested represents what a worker may be exposed to or may be present in surface water. By using the zebrafish model the researchers were able to focus on the 72-hour embryonic development time, which mirrors human prenatal development.

The researchers started by evaluating the more than 35,000 genes in the zebrafish's genome. They found that two genes, CYP17A1 and SAMHD1, were changed in all three treatments. CYP17A1 plays a role in biosynthesis of steroid hormones and the conversion of androgens to estrogen, and SAMHD1 controls immune function. Also of concern was that 42 of the genes, including CYP17A1 and SAMHD1, were affected in the 30 ppb treatments as well as in the 3 ppb treatment. The LH gene, which produces the hormone that triggers ovulation, is another example of an affected gene at both 3 ppb and 30 ppb treatment levels. "There is a connection between the current legal level of atrazine and higher concentrations that need further study," Freeman said. "Specifically, we need to focus on the 3 ppb level to determine if it is safe or if these changes play a role in adverse health effects." The affected genes in this study correlate with findings in other studies, but Freeman and her team also identified a number of novel genes that are linked with functions previously associated with atrazine toxicity but for which genetic targets are not yet known. "Identification is just the beginning," Freeman said. "The goal is to understand the genetic pathways and how they are altered to see what's happening in the big picture." Another difference in the Purdue study was the increase in head length of the exposed zebrafish.

"This was a subtle change for the fish larva at all exposure levels that we were able to see with finer measurements but not with the eye alone," Freeman said. "This morphological change in the zebrafish indicates that low levels of atrazine can stimulate development and alter the physiology of exposed individuals." The researchers also will be looking at the long-term effects of the fish exposed to these three atrazine levels as they grow and reproduce to link the developmental gene changes to adverse health outcomes. The EPA, working with the Federal Insecticide, Fungicide and Rodenticide Act Scientific Advisory Panel, continues to evaluate scientific research regarding a potential link between atrazine and cancer in humans. According to the EPA website, "Even though the panel agreed with EPA that the epidemiologic evidence does not strongly suggest a link between atrazine and cancer, the panel did not agree that a lack of strong evidence justifies a conclusion that atrazine is not likely to be a human carcinogen."

Freeman said continuing to investigate changes in genes associated with cancer is critical because there needs to be more information before determining if atrazine is a human carcinogen. "In our study, a number of gene changes were associated with cancer pathways, too, and while related gene pathways for cancer are involved, we are not saying atrazine causes cancer," she said. "We know these genes are changing in some way, and we need to do further targeted mechanistic studies to determine if there is a connection."

The grants from the National Institutes of Health's National Center for Research Resources and National Institute of Environmental Health Sciences supporting this work are shared between Freeman and Maria Sepúlveda, an associate professor of forestry and natural resources. Gregory Weber, a doctoral student in health sciences, is the paper's lead author. Other authors are Samuel Peterson, a former health sciences graduate student, and Solange Lewis, a former postdoctoral researcher in forestry and natural resources.
Congratulations to Dr. Ulrike Dydak on her promotion to Tenured Associate Professor of Health Sciences. This appointment was formally approved by Purdue's Board of Trustees on Friday April 5, 2013.

Dr. Dydak obtained her M.S. at University of Vienna in Austria in 1996, and her Ph.D. at Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland in 2002. She was an associate research scientist and group leader in Institute for Biomedical Engineering at ETH Zurich prior to joining Purdue's School of Health Sciences in 2007.

In a relatively short period, Dr. Dydak has successfully established herself as a world-class scholar in magnetic resonance spectroscopy (MRS) research field. She was one of the few physicists who have successfully applied the innovative technologies to environmental health science and toxicological research fields for which she was awarded the Outstanding New Environmental Scientist award by NIH/National Institute of Environmental Health Science in 2011.

Not only has she made significant contributions to manganese-induced parkinsonism research, she has also contributed to key educational programs in School of Health Sciences in the areas of medical physics, environmental toxicology and occupational health by mentoring graduate students across these learning disciplines and hosting undergraduate students in her research group.

Research Funding

Dr. Jason Cannon has just received a new NIH fund as a subcontract to University of Pittsburgh. His project entitled “Phenotype Characterization of BAC LRRK2 Transgenic Rats” will determine how well newly developed transgenic rats expressing mutated human LRRK2 (a disease-causing mutation) replicate the key features of human Parkinson's disease ($95,900 for 08/01/2012-7/31/2013). Jason's work will further enhance our world-class environmental toxicology research programs at Purdue University.

Dr. Jennifer Freeman has been awarded a Laboratory Equipment grant for her proposal on Agilent Microarray SureScan Scanner ($89,511). The program initiated by the Office of the Vice President for Research (OVPR) was announced in the early Fall semester. There were total 76 applications. Dr. Freeman's proposal is one of a few being selected based on the rank made by a committee of peer reviewers from the colleges whose faculty submitted applications to the program. This highly competitive award will further enhance the competitiveness of Dr. Freeman's research for external funding. She has received $100,000 from the Emerging Research Incentive Grant Program by Purdue's Office of the Vice President for Research. Jennifer's research proposal entitled "Role of Exposure to Environmental Chemical Stressors in Generating Spontaneous Copy Number Variants (CNVs)" was selected from a highly competitive pool of 47 applications with a wide research breath across many disciplines at Purdue. As the award letter states, “the final funding decisions were very difficult.” And Jennifer finally won the difficult funding decision! Dr. Freeman also won the Colgate-Palmolive 2012 Awards for Alternative Research.

Dr. Shuang Liu has recently received a grant award by Indiana CTSI Purdue Project Development Team for his research project entitled “99mTc-3P-RGD2 SPECT/CT for Monitoring Linifanib Therapy of Breast Cancer” ($10,000). He also received a 2012-2013 Challenge Award Grant ($30,000) from Purdue's Cancer Center for his project on noninvasive monitoring early response of antiangiogenic linifanib therapy. More interestingly, Shuang will be invited to the 2013 Challenge TM 5K Walk/Run, where he will be introduced as the recipient of this grant and tell the story about his project to everyone participating in the race.

We are so proud of all of our hard-working faculty!
Members of the School of Health Sciences attended the annual meeting of the Society of Toxicology in San Antonio, Texas March 10-14, 2013. Purdue faculty, postdocs, graduate students, and an undergraduate student from the laboratories of Drs. Jason Cannon, Ulrike Dydak, Jennifer Freeman, Linda Nie, and Wei Zheng presented their research findings related to environmental and occupational toxicology. Drs. Freeman and Zheng co-chaired a symposium titled “Application of Systems Biology to Identify Molecular Mechanisms and Biomarkers of Lead (Pb) Neurotoxicity: Implications in a Developmental Origin of Alzheimer’s Disease”. The symposium invited accountable researchers who have been doing the pioneering discovery on environmental causes of Alzheimer’s disease and was well received by the meeting attendees. Dr. Zheng also taught a SOT-sponsored Continuing Educational course on metal toxicology. Dr. Freeman was elected as the Councilor to SOT Metals Specialty Section leadership team.

Students and postdocs shared their ongoing work in poster presentations and interacted with their peers as well as seasoned experts in their respective fields. All enjoyed networking with national and international colleagues. Many Purdue Alumni including past graduates in toxicology or pharmacy programs or living in San Antonio area attended the School of Health Sciences Alumni Reception on Monday evening. Mr. Sam Peterson (Mentor: Dr. Jennifer Freeman) won the Third Place of Graduate Student Research Award by the SOT Metals Specialty Section for his presentation entitled “Neurological Effects in the Zebrafish Model System Caused by a Developmental Exposure to Lead.” Sam was also selected as the Chairperson for Poster Session on Developmental Neurotoxicity: Metals and Pesticides. From my own experience with SOT for the past 25 years, it is quite rare to see a graduate student to be appointed as the chairperson in a major session in SOT in the past couple months).

Mr. Geoffrey Ryan (Mentor: Dr. Freeman) an undergraduate researcher was awarded a Sally Mason Travel Scholarship for his presentation titled “Characterization of glo1 gene expression during development and alterations induced by atrazine exposure in zebrafish.”

Ms. Sara Wirbisky won Third Place of Graduate Student Research Award by the SOT Metals Specialty Section for her presentation entitled “Neurological Effects in the Zebrafish Model System Caused by a Developmental Exposure to Lead.”

Mr. Gregory Weber (Mentor: Dr. Freeman) won the First Place Graduate Student Award by the SOT In vitro and Alternative Methods Specialty Section for his presentation. Greg also received a PULSe and a Purdue Graduate Student Government Travel Awards to attend the meeting.
4TH ANNUAL “CRITICAL EVENT” EMERGENCY RESPONSE/CHEMICAL EXPLOSION SCENARIO

The School of Health Sciences’ Industrial Hygiene award winning student club, PIHSA (a Student Local Section of the American Industrial Hygiene Association, AIHA) held its 4th Annual Critical Event this past April 13th when students came out on a Saturday morning to learn how to deal with a chemical explosion, the subsequent chemical and physical damage, injuries, evacuations, at a fictitious campus bio-chemistry building and the need for quick reflexes and thinking, learning from many Purdue and local police, fire and emergency professionals who graciously volunteered their time.

PIHSA’s 2ND SEMI-ANNUAL “SENIOR SEND-OFF” & JOINT AIHA INDIANA DINNER MEETING AND AWARDS PRESENTATION

PIHSA and its parent sponsoring Local Section of the American Industrial Hygiene Association, the AIHA Indiana Local Section will hold their joint dinner meeting as the final PIHSA event of the 2012-13 year, May 3rd at Pucinni’s on the Levee, with Purdue BS and MS IH alum Brent Yeagy, now Vice President of Wabash National, Lafayette, as the guest speaker. The dinner is being sponsored by Pam and Jim Seneczko of AFC International, Inc, DeMotte, IN. Certificates of IH accomplishment, a “suitable for framing” copy of the IH Code of Ethics and a Purdue hardhat will be presented to all attending graduating seniors. In addition the most active PIHSA students of this school year will be presented with the AIHA Indiana’s Zimmerman Student Service Awards.

SCHOOL OF HEALTH SCIENCES UNDERGRADUATE AND GRADUATE STUDENTS TO ATTEND THE ANNUAL AMERICAN INDUSTRIAL HYGIENE CONFERENCE AND EXPOSITION IN MONTREAL

Thanks to a very generous donation from PIHSA’s co-sponsoring Local Section, the Chicago AIHA Local Section, a number of Health Science OHS/OEHS majors will be attending the big annual IH conference this May 20-23 in Montreal. In addition, grad students Sandra Cole, Stephen Ong, Eric Ward, and Josh Horton and undergrads Elizabeth Rowling and Karen Ma will be presenting research posters. Purdue’s IH program will be quite visible at the conference as always, with a booth on “University Row” of the conference Exposition Hall, and an alumni and students reception and dinner.

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION [AIHA]

On February 20th, 2013 the Chicago Section of the American Industrial Hygiene Association held its annual student night at the William Tell Hotel and Conference Center in Chicago, Ill. Purdue had 28 students and two faculty members (Dr Neil Zimmerman and Dr. Jim McGlothlin) attend this meeting. The annual meeting features a student poster competition where students compete from various universities in the region including the University of Illinois at Chicago, Illinois State University, Purdue University, among others. This year Purdue entered 7 posters and fared well in the competition winning 3 of the top 4 awards.

The top graduate award went to Sandra Cole for her poster titled: Modeling Fingertip Radiation Exposure in a Nuclear Pharmacy Based on Work Practices, Upper Limb Anthropometry and Workstation Design; 2nd place went to Josh Horton for his poster titled: Development of ASAP-VEM System for Rapid Detection and Monitoring of Airborne Pathogens. In the undergraduate category, Karen Ma, a Freshman Scholar in the School of Health Sciences took second place for her poster titled: The Efficacy of ZUMBA® as a Stress Reliever to Improve the Mental and Physical Health of College Workers.

In addition, Sandra Cole was awarded the Fred Tremmel Award for “Best of Show” of all the posters. Congratulations to all the poster competitors including: Eric Ward, Stephen Ong, Claire Tighe, Elizabeth Rowland, Michelle DeVilbiss, Chelsea Baker, and especially to Josh Horton, and Karen Ma and Alum, Sandra Cole for their award winning posters.
Dr. Paul L. Zieme was awarded the 2012 Distinguished Public Service Award at the 57th Annual Meeting of the Health Physics Society, held in Sacramento, CA July 23-26, 2012.

The Health Physics Society Distinguished Public Service Award is given in recognition of contributions while in public service or service to the general public, which significantly contributed to the relationship between the public and the health physics profession. Dr. Paul L. Zieme has excelled in all domains of health physics but has made singular contributions to public service. During his career, Dr. Zieme distinguished himself as an outstanding university professor, leader in the profession, and public servant, having been appointed by two U.S. Presidents to distinguished public service positions.

Dr. Paul Zieme spent his academic career at Purdue University teaching and conducting research in health physics. He served as Acting Head of the Purdue Bionucleonics Department in 1982 and 1983 and as Head of the School of Health Sciences from 1983 until 1990, when President George H. W. Bush appointed him Assistant Secretary of Energy for Environment, Safety, and Health in 1990. In 1993, Dr. Zieme returned to Purdue to resume his academic career as Professor of Health Physics and Head of the School of Health Sciences until his retirement in 2000.

Dr. Zieme chaired the First Midyear Topical Symposium of the Health Physics Society in 1966. He has served on many Society committees, on the Board of Directors, as President of the Society and President of the American Academy of Health Physics. He is a Certified Health Physicist and has served on the American Board of Health Physics. The Society awarded Dr. Zieme the Elda Anderson Award in 1971 and the Founders Award in 2001. In 2002, the American Board of Health Physics presented him with the William B. McAdams Outstanding Service Award.

Dr. Zieme served as a consultant, advisor, or member of many organizations including the EPA Committee to Review the Environmental Impact Statement on Decontamination of Three Mile Island Nuclear Station, the DOE Advisory Committee for the Nuclear Science and Engineering and Health Physics Fellowship Program, the Radioactive Waste Management (chair), the Scientific Advisory Committee for the International Radioecology Laboratory in Chernobyl, the National Academies Committee on Biological Effects on Ionizing Radiation (BEIR VI), the National Academies Nuclear and Radiation Studies Board, the Board of Directors of the Radiation Effects Research Foundation, and the Advisory Board on Radiation and Worker Health (chair 2001-2010) for the Energy Employees Occupational Illness Compensation Program Act.

Two U.S. Presidents recruited Dr. Zieme for his scientific and technical knowledge, professional wisdom, and ability to lead. President George H. W. Bush appointed him Assistant Secretary of Energy for Environment, Safety, and Health in 1990. He was the first with a health physics background to serve in this position. Dr. Zieme increased funding for health physics fellowships and assured continuation of U.S. support of the Radiation Effects Research Foundation. He represented the U.S. at the International Atomic Energy Agency for release of the Chernobyl report and represented the DOE at the U.S. Interagency Committee on the health and environmental effects of the oil fires and oil spills in Kuwait and Saudi Arabia. In 2001 President George W. Bush appointed D. Zieme Chair of the Advisory Board on Radiation and Worker Health.

Dr. Zieme’s distinguished public service contributions and his many others partially listed above attest to his gracious and charitable spirit focused on servant leadership for the benefit of humankind and applied to the profession of health physics. His contributions clearly demonstrate his dedication toward building a strong relationship between the public and the health physics profession.

[written by Richard J. Vetter, Radiation Safety Office, Mayo Clinic, Rochester, MN 55902].
Dr. Jason Timothy Harris was presented with the 2012 Elda E. Anderson Award at the 57th Annual Meeting of the Health Physics Society, held in Sacramento, CA on July 23 - July 26, 2012.

I find this year's presentation of the Elda E. Anderson Award to Dr. Jason Timothy Harris extraordinarily fitting in recognition of a career clearly dedicated to the ideals of the Health Physics Society—excellence in teaching, research, and professional service. I fully expect this demonstrated excellence to continue far into the future. This award citation will emphasize how Dr. Harris's professional engagement both embodies the philosophy and spirit of the Elda E. Anderson Award and to a greater extent shadow's the dynamic nature of Dr. Anderson in respect to her dedication to the profession of Health Physics and students.

Dr. Harris's teaching has been prolific and of high quality. He has taught at least 21 course offerings since starting his employment at Idaho State University (ISU). These comprise many different courses, some with multiple sections and multiple locations (distance learning). Prior to joining ISU, he taught courses at Purdue University, where he received the 2005 Purdue Graduate School of Excellence in Teaching Award and was inducted into the Purdue Teaching Academy. This summer he received the Purdue University Young Alumni Award.

Dr. Harris has engaged in a broad range of research areas pertinent to our profession and absolutely necessary to engaging his professional responsibility in academia. Most recently he has conducted research on occupational dose, public dose, and the environment related to nuclear power, accelerator applications for Homeland Security, medical radionuclide production, and in support of DOE nuclear science and technology programs. He was a research fellow within the Los Alamos National Lab radiation dosimetry and luminescence dating group and has performed research in the area of nuclear waste amelioration, fuel cell development, and retrospective dosimetry.

It is clear that Dr. Harris has a productive research program. Since coming to ISU 5 years ago, this young faculty member already has published seven peer reviewed journal articles and has submitted an additional five articles, which are now in the review process. Additionally, he has published 25 abstracts, made four national presentations of his research, and presented six poster papers. Added to this, he has completed one book chapter. Dr. Harris has served or is serving as either run advisor or co-advisor for 14 Ph.D. students and 30 M.S. students. He has directed undergraduate research for five B.S. students. His efforts in several areas have been recognized by outside authorities; the evidence of his includes Dr. Harris being named as the 2011 Outstanding Contributor by the Center for Advanced Studies (CAES) and receiving the 2008 New Investigator Award from the American Statistical Association Conference on Radiation and Health. This summary, although brief, clearly and unequivocally demonstrates an aggressive, active, and collaborative research effort.

Dr. Harris, who currently is an Associate Professor of Health Physics at Idaho State University, is actively engaged in many facets of our profession and professional society. He is currently serving as an Officer for the Eastern Idaho Chapter and serves on several committees and working groups, including the Academic Education Committee, Power Reactor Section and the HPS Health Physics Student DVD Ad Hoc Committee. He has served as an HPS delegate at the last three International Radiation Protection Association (IRPA) congresses; on the RETS-REMP Workshop Steering Committee; the North American Technical Center Public Radiation Safety Research Program Effluent Expert Committee; and the international ALARA Symposium Organizing Committee. He is the Director of the ISU Environmental Monitoring Laboratory and an Associate Director, Analytical Instrumentation Laboratory Lead, and Nuclear Science and Engineering Initiative Lead for the CAES. He serves as a senior consultant for the North American Technical Center nuclear power plant radiation protection and environmental studies group. This year he was also chosen as the chair for the IAEA International Nuclear Security Education Network.

Dr. Harris earned his Ph.D. in health physics from Purdue University, where he was employed concurrently as an instructor; an M.S. in nuclear engineering from the University of Illinois at Urbana-Champaign; and a B.S. in biology and chemistry from the University of Tampa.

[written by Richard Brey, Idaho State University, Pocatello, ID]