

The Official USU Newsletter

the pulse

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Courtesy Photo

On the cover

Air Force 2nd Lieutenants Chase Rogers, Jeffrey Sorensen, Matthew Cellini, Corinne Harvey, Pansy Uberoi and Courtney Hintz took part in a unique training program called Top Knife during their summer learning experience following the completion of the MS-1 schedule. (See story, page 2)



Top Knife takes medical education to new heights

by Christine Creenan-Jones



Courtesy Photo

Air Force 2nd Lt. Jeffrey Sorensen took advantage of his two-week summer course to experience military medical training for flight surgeons.

Air Force 2nd Lt. Jeffrey Sorensen wanted to be a doctor since early in college, but his desire to care for those in need of medical care was intensified by the prospect of serving our military men and women as a uniformed physician. Two years ago he left Utah – the only home he'd ever known – to begin a new journey thousands of miles away at USU.

Sorensen found what he was looking for in Bethesda. The university's military-focused medical curriculum has been both challenging and exciting.

"The workload is difficult, and it can be a little overwhelming at times, but there are some really incredible aspects to USU's curriculum as well," he said.

The summer learning experience is one of them. First-year medical students without prior military experience choose from a variety of two-week courses, many of which give students like Sorensen the opportunity to explore a unique side of military medicine.

"I went to Top Knife last summer at Luke Air Force Base in Arizona, which is an Air Force training program designed for flight surgeons who are assigned to squadrons of high performance aircraft such as the F-16. While there, my classmates and I learned how a fighter base functions and how flight surgeons contribute to

fighter operations," he said. "It was an amazing experience I'll never forget."

Sorensen was accompanied by fellow 2013 Air Force classmates, Chase Rogers, Matthew Cellini, Corinne Harvey, Pansy Uberoi and Courtney Hintz.

The classrooms at Top Knife combine didactic instruction with hands-on learning in topics such as cockpit and airframe familiarity, the use of night vision goggles, and how to properly egress an aircraft on the ground or in the air.

"We learned a lot about flight physiology and aircraft safety before stepping foot on the jets," Sorensen said. "But I still wasn't prepared for how intense and thrilling my ride would be. The best roller coaster in the world doesn't compare to flying an F-16, I even got to take the stick for a minute and perform a barrel roll and some turns."

The experience also gave Sorensen a new outlook about what it means to serve and protect.

"Top Knife really opened my eyes to the operational side of the military," he said. "I observed the intricacies of Air Force operations, and was impressed with the character of those I met. It increased my desire to do well in school, as I gained respect for those on the operational side of the military and the job they do. I want to be well prepared to serve them once I graduate."

Muldoon awarded Carol Johns Medal

by Ken Frager



Photo by Thomas Balfour

USU Faculty Senate President Dr. Gary Wind presented Dr. Sheila Muldoon with the 2011 Carol Johns Medal.

Sheila Muldoon, M.D., professor and former chair, Department of Anesthesiology, has been named as the recipient of the 2011 Carol Johns Medal. Dr. Muldoon arrived at USU in 1977 from Dublin, Ireland via a postdoctoral fellowship at the Mayo Clinic, where she had completed her anesthesiology residency and served as staff anesthesiologist for a number of years.

In her long, distinguished tenure at USU, Dr. Muldoon has embodied the three criteria upon which this honor is awarded: furthering the welfare and excellence of USU faculty, promoting outstanding educational programs for students and advancing the reputation of the University locally, nationally and internationally.

The award namesake, Carol J. Johns, MD, was a professor at the Johns Hopkins School of Medicine, where she was a distinguished clinician, academician and teacher. She was a member of the USU Board of Regents from 1985 until her death in 2000 and long-time enthusiastic and effective supporter of the USU. The University established an annual award in her name, presenting the first medal during the 2001 commencement exercises.

Dr. Muldoon's nomination for this recognition included references from several academic anesthesiologists whom she has mentored and guided to

be first-class researchers and educators. Her nomination states that she "not only recruited outstanding faculty, but helped procure logistical and financial support and promoted some of the first translational research done at USU. To maintain clinical credibility, she ensured that her faculty practice at the hospitals at least three days a week."

Dr. Muldoon established a stimulating and outstanding anesthesiology experience for USU students and was one of the first to introduce simulation methodology. She tirelessly worked to establish strong relations with the DOD and services, fostering acceptance of USU students into service-wide anesthesiology programs.

Dr. Muldoon's long record of cutting-edge research has established her as one of the world's leading experts on the potentially lethal anesthetic complication of malignant hyperthermia. She established her testing center at USU as a center of excellence recognized worldwide. From the early invasive caffeine-halogen contraction tests involving muscle biopsy, she moved to the forefront of less-invasive lymphocyte testing to screen at-risk individuals. Most recently Dr. Muldoon has been leading cutting edge research on the ryanodine receptor gene, which has been linked with the condition.

University Media Services offers design and graphic services

by MC1 Chad Hallford

With space on the USU campus at a premium, some services have been moved off-site over the last few months, including University Media Services - USU's graphics, photography and videography division. While availability of services was not impacted, offering a convenient drop-off point on-site that also had limited resources available was seen as a priority for University leadership.

Now reopened in its original location on the ground floor, Mr. Patrice Bolte and his team of visual illustrators are ready and able to provide the best in graphics capabilities, including medical illustration to USU faculty, staff and students.

"We are set up to provide a full-range of services including design and publications, medical illustration, lamination, mounting and framing and, of course, large scale printing, including multiple print mediums available for display," said Mr. Bolte. "We also are available to provide consulting services before you begin a project that requires design, graphics or printing. It's much easier to accommodate needs when we are involved in the planning from the beginning. We can help before the projects become difficult and costly to correct."

A list of services and general prices is available on the UMS homepage www.usuhs.mil/avc/. The web site also offers links to provide information and hints for poster designs, business cards and other templates, along with tips for maintaining USU branding and avoiding copyright infringement.

"If there is a service that isn't included on the site don't assume it isn't available," said Mr. Bolte. "If we don't have the resources in-house we can help to identify vendors who can help you get the job done and stay within your budget."

Nobel Laureate to present Presidential Lecture

by Ken Frager



Courtesy Photo

Stanley B.
Prusiner, MD

Stanley B. Prusiner, MD, Director of the Institute for Neurodegenerative Diseases and Professor of Neurology at the University of California, San Francisco

(UCSF), and 1997 Nobel Laureate in Physiology or Medicine, will present the 2011 Presidential Lecture during USU's Research Week, May 18, 2011. Dr. Prusiner's lecture, *Therapeutic Approaches to Neurodegeneration in Head Trauma*, will offer an early perspective into a potentially new way to identify and treat traumatic brain injuries (TBIs).

"We are thrilled to have someone of Dr. Prusiner's caliber take the time to share his thoughts about an issue of critical importance to our faculty, staff, students and to those we seek to serve," said USU President Charles L. Rice. "His early work in the field of protein research, combined with the expertise of our research teams

here at USU, could have potentially breakthrough effects on the study of traumatic brain injuries and post traumatic stress disorder."

Dr. Prusiner was awarded the National Medal of Science in 2009 – an honor bestowed by the President of the United States to individuals in science and engineering who have made important contributions to the advancement of knowledge in the fields of behavioral and social sciences, biology, chemistry, engineering, mathematics and physics. He was awarded the Nobel Prize for his discovery of an unprecedented class of pathogens that he named prions. Prions, infectious proteins that cause neurodegenerative diseases in animals and humans, cause disorders in humans that manifest as sporadic, inherited and infectious illnesses. Dr. Prusiner demonstrated that prions are formed when a normal, benign cellular protein acquires an altered shape. At the time of discovery, his proposals of multiple shapes or conformations for a single protein and the concept of infectious proteins, were considered heretical.

Prior to Dr. Prusiner's discoveries, proteins were thought to possess only

one biologically active conformation. Remarkably, the more common neurodegenerative diseases like Alzheimer's and Parkinson's diseases have been found over the past two decades to be, like the prion diseases, disorders of protein processing. Dr. Prusiner's current research focuses on determining the atomic structure of prions, deciphering the mechanism of replication and defining how biological properties are enciphered in prion strains. Additionally, he is developing drug discovery aimed at producing therapeutics that retard neurodegeneration in Alzheimer's, Parkinson's and prion diseases, and in fronto-temporal dementias, including those found in patients with TBIs.

Dr. Prusiner received his undergraduate and medical training at the University of Pennsylvania and his postgraduate clinical training at UCSF. From 1969-72, he served in the U.S. Public Health Service at the National Institutes of Health. Editor of 12 books and author of more than 350 research articles, Dr. Prusiner's contributions to scientific research are internationally recognized.

USU Sweeps presentations at Public Health Conference

by Staff Sgt. Matthew Rosine

Three USU graduate students took top honors for poster presentations during the 2011 Armed Forces Public Health Conference.

Navy Lt. Anton Shufutinsky took first place in the Occupational Health category with his poster titled, *The Potential for the Application of Metallic Copper Surfaces as a Method for Preventing Surface and Airborne Microbial Contamination in Military Healthcare Facilities, Food Handling Operations and Other Occupational Settings*.

Navy Lt. Nicholas Martin took first place in the Environmental category with his poster titled, *T A Novel Thermal Desorption Gas*

Chromatography-Mass Spectrometry Method for the Discovery of DDT in Air.

Navy Lt. Carlis Brown took first place in the Industrial Hygiene category with his poster titled, *T A Novel Application of Tracer Gas Dilution for Evaluating Indoor Air Quality*.

In fact, USU Preventive Medicine and Biometrics (PMB) students have now taken first place five times at this conference over the past three years. This year was the inaugural joint Armed Forces Public Health Conference.

"I think the success of all of our posters at the conference is based

on a combination of factors," said Shufutinsky, whose poster research focuses on the use of copper surfaces to reduce secondary infections in hospitals, ventilation and food handling facilities. "The environment at USU encourages good research and good science. We read each other's work, discuss it and give quality feedback in open, honest discussion with other scientists."

This approach to quality scientific research provides USU presenters with a different look than their competition.

"From the perspective of the conference, I believe that a lot of the work

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The Human Performance Resource Center Health Tips is a new column intended to provide the USU community with information to help develop and maintain a healthy lifestyle. Check out the HPRC website at: <http://humanperformanceresourcecenter.org>.

Mix up your training routine

If you are bored with your training or find yourself stuck in a rut, consider adding some variety to your program.

Maintaining a physically fit body requires consistent training and motivation. It's common for individuals to get stale or fall into a training rut. Consider cross-training, adding new activities and exercises, or just doing something physical for fun!

Avoid smoking around children and the places they reside

Secondhand smoke can impact the mental health of those around you, so be especially careful not to smoke in areas inhabited by children.

It's well known that smoking is harmful to your physical health. What is less well known, however, is that secondhand smoke has an impact on the mental health of others. A recent study in Archives of Pediatrics & Adolescent Medicine shows that children exposed to secondhand smoke have a higher risk of developing mental conditions such as depression, anxiety, attention-deficit disorder (ADD), and conduct disorders.

Positive Mental Time Travel

"Positive mental time travel" is when an individual vividly remembers a positive event or vividly anticipates a future positive event. Individuals who are able to remember past positive events (or look forward to future ones) and savor those happy moments are more likely to be happy in general.

Family medicine program receives national recognition

by Ken Frager



Courtesy Photo

The American Academy of Family Physicians (AAFP) recently named the Uniformed Services University of the Health Sciences as one of the top 10 family medicine programs in the U.S., presenting Navy Capt. (Dr.) Mark Stephens and his faculty with an Achievement Award.

"We were quite pleased to receive this recognition from the AAFP because

it recognizes our continued efforts to develop those who will care for not just America's warfighters, but also for their families around the world," said Dr. Stephens, associate professor and Chair, Department of Family Medicine at USU.

According to the AAFP, the award recognizes USU's efforts to foster student interest in family medicine and produce graduates who enter the specialty. Based on a three-year average, for the period ending October 2010, 15.8% of USU graduates have entered an ACGME-accredited family medicine residency program.

Dr. Sandra Kimmer, assistant professor in the department of Family Medicine, accepted the award on behalf of the USU from AAFP President Dr. Roland Goertz during the recent Society of Teachers of Family Medicine (STFM) Annual Spring Conference, which was held in New Orleans.

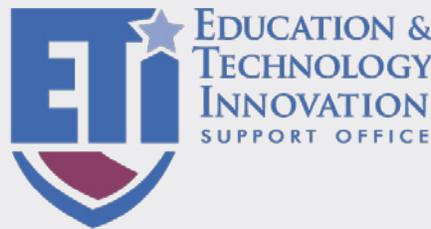
Showcase highlights teaching innovation

by Ken Frager

Faculty and staff looking for new ways to connect with medical students at USU are invited to stop by the Education & Technology Innovation (ETI) Showcase, May 26, 27 and June 2 from 1130 – 1330, outside of the cafeteria across from the elevators in B building.

"The showcase is a show and tell of sorts, where faculty and staff can share ideas about how to best reach our medical students, develop modern-based teaching methods to reach the next generation of medical students, and who in many cases may have different ideas about the best way to teach and learn," said Dale Smith, Ph.D., USU senior vice president who oversees the department.

"The showcase also can serve to identify potential collaborators or expand existing relationships in



an environment that encourages sharing," said Dina Kurzweil, deputy director for ETI. "This is an informal setting, but one that we feel allows for free discussion and interaction."

The services of the ETI are available to USU faculty without direct charge. Members of the ETI team will be available to discuss innovative instructional techniques and technologies that can be used to advance course learning objectives and support curriculum reform.

Additional information on the showcase and about the ETI is available at www.usuhs.mil/eti/services.htm

Tech Watch

Upcoming Events

The Office of the Chief Information Officer (OCIO) wanted to bring you up to date on the progress of several ongoing projects.

The USU email system (GroupWise) will be upgraded to the latest version of Groupwise 8.

Enhancements to GroupWise Web Access include:

1. Improved interface to include scrollable item lists such as your mailbox or sent items.
2. Task list folder.
3. Autosave feature which will save a copy of any email being composed every 10-60 seconds.
4. Improved spell check and name completion.
5. Calendar improvements including day, week or year view, creation of one or more personal calendars and display of personal calendars in the main view.
6. Search improvements including date range and category search.
7. Contacts folder displays all personal address books.
8. Ability to publish personal calendars.

The GroupWise 7 client will continue to work and will be updated to GroupWise 8 gradually for both Windows and Mac OSX systems (including OS 10.6).

During this time, in order to log into GroupWise Web Access, you must log into the server where your email account is actually located. (i.e. mxh.usuhs.mil, mxr.usuhs.mil, etc.) or you will get an error due to the different versions of GroupWise that will exist after the first round of upgrades are complete.

Reminder about:

1. Software discounts for USU employees - An additional feature of the University's annually negotiated Microsoft and Adobe licenses is an 'employee purchase program,' which allows USU faculty, students, and staff to purchase Microsoft and Adobe software for personal or home use at significantly reduced prices. A USU Portal for personal purchases of Adobe and Microsoft Products was recently established and general information can be found at: <http://e5.onthehub.com/Portal/PortalSelectInstitution.aspx?p=95ad5269-86e1-dc11-8873-0030485a6b08&JSEnabled=1>

The following Adobe products are currently included: Acrobat X (personal use); Creative Suite 5 Design, Creative Suite 5 Master Collection, Creative Suite 5 Production, Creative Suite 5 Web, Dreamweaver CS5, Adobe Flash CS5, Adobe Lightroom, Adobe Photoshop CS5.

Microsoft Products include: Office 2010, Office 2011 for MAC, Office 2008 for MAC, Project 2010, Visio 2010, Windows 7 (Operating System) Expression Studio 4.

Anyone wishing to take advantage of the discounted prices can register using their USU email address at <http://usuhs.onthehub.com>. This site is powered by e-Academy, accepts personal credit cards, and is customized for USU personal home-use software purchases.

2. USU Service Desk (the replacement for the Heat System) went live on 1 April meaning online submission and tracking of tickets has been restored. We emailed a "How-To" sheet, which is also available on the Help Desk Website. This new program allows you to enter your trouble ticket on line, receive email updates on progress with the ticket, see who it has been assigned to, and what the final resolution to the problem was. There also is an announcements section that, at a glance, will detail what changes are occurring across the network; where there are outages; any upcoming network-wide program pushes; anticipated security changes, etc. This announcement section will not take the place of the emails that come out, but will allow you to quickly see updates on situations and hopefully anticipate any problems you might have with upcoming events. This program also is being adapted to allow you to enter MDL trouble tickets and potentially other support departments.

The OCIO will continue to provide updates and notification of changes to the university community. If you have any problems, Mr. Dennis Stutz, Director, Customer Service, is acting as an ombudsman to help communicate issues. He can be contacted at 301-295-9560 or dstutz@usuhs.mil.

USU sweeps award

Continued from page 4

presented there was very qualitative," said Shufutinsky, a PhD student in PMB. "Here we do very technical, evidence-based science, which gives us a bit of an advantage."

But all things considered, these award-winning students attribute much of their success to good old-fashioned hard work.

"I think the personal effort from each student is what really determines success. If your work ethic is strong, you will be a success," Shufutinsky said. "Me, personally, I didn't submit this poster to win an award. Presenting posters is not a requirement for us. I put my time and effort into this because I

felt this was beneficial to the science community as a whole."

While first-place ribbons adorn their work and co-workers pat them on the back, these USU students find their real reward in the impact they are making in people's lives.

"I think the real success of our work is ultimately found in the exposure we have developed here. We have helped bridge a very large gap between hard-core science and field operation," said Martin. Martin and his fellow students applied hands-on application of their research at a field study in Thailand. "By being able to take a very scientific process and drop it in the field for use, we are able to bridge the gap between the scientist in the lab and the warfighter in the field."

Briefs

Using Computer Resources

Security incidents continue to be a drain to limited USU Information Assurance manpower. The following highlight current DoD policy and best practices:

Personnel must not install self-coded or non-licensed software on network resources; add, remove, configure, or attempt to modify USU computer operating systems or programs; move audio/visual or network cables, computers or attempt to connect personal computers to the network including MDL and lecture hall spaces; connect personal devices except for those previously authorized by NOC; download pornographic material and store or display offensive material, such as racist literature, sexually harassing or obscene language or material; store or process classified information on any USU system.

Personnel must not permit unauthorized individuals access to a government-owned or government-operated system or program; access online gambling, games and social engineering sites, dates or times.

Helpdesk Closure

The NOC helpdesk is closed for training on Thursdays from 10 to 11 a.m.

During this time, you can leave a voicemail message at 295-9800, utilize the HEAT Self Service (<http://www.usuhs.mil/uis/forms/trouble.html>), or email help@usuhs.mil.

If an emergency should arise, please call 295-9870.

Exercise/Fitness Areas

Physical Fitness training should be conducted in designated areas.

The only authorized space for PT within the university is room G060.

The campus' Student Community Lounge area is also authorized, but only during specified PFT dates or times.

Professional activities

The Department of Defense and USU policy requires that all employees, both military and civilian, receive approval for engaging in any activity outside their work environment, which involves their professional expertise or government occupation, and involves compensation.

This approval is required prior to engaging in the activity.

In order to get approval, any employee can complete a USU Form

1004. This completed form must be approved and signed by each department chair or activity head.

These forms are available in the General Counsel's office or online at the USU OGC Web site.

Completed forms must be turned in to the General Counsel's office. The form will be routed to the appropriate dean, brigade commander or USU president.

Once processing is completed, a copy of the approved form will be returned to the employee for the employee's records.



USU Research Week 2011

May 17–18, 2011

Celebrating Excellence in Research



USU Faculty Senate Education Day 2011

Tools for Transformation: How to be a better educator

Thursday 16 June 2011

For more information visit, www.usuhs.mil

Funding Applications

The USU Merit Review Committee is accepting applications for the fiscal year 2012 USU Intramural Research Funding.

Applications may be submitted for Pilot, Standard and Exploratory grant funding. New or revised applications will be accepted. Competing continuations are no longer funded. These applications are for basic, clinical or behavioral research.

Projects will be evaluated for demonstrated relevance to military concerns and/or are specific to the USU mission.

Eligibility for funding from the University's intramural program is restricted to USU-billeted civilian and uniformed faculty members with full, associate or assistant professor titles.

Late applications will not be accepted and incomplete applications will not be reviewed.

Applications must be submitted by June 17, 2011.

For additional information: <http://www.usuhs.mil/research/intramuralfunds.html> or contact the Office of Research at (301) 295-3303.



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