Surgery Department Namesake Awarded Prestigious Master’s Medal

By Staff Sgt Matthew Rosine

Retired Army Col. Norman M. Rich, MD, the USU Department of Surgery's namesake and current deputy chair, was recently awarded the prestigious Master’s Medal from the Worshipful Society of Apothecaries of London.

“The Master (of the Society) has a one-year appointment as the leader of the organization,” said Dr. Rich. “The Master presents the medal, which dates back to 1180, to someone that they feel went above and beyond their duties.”

To many in the Society of Apothecaries, Dr. Rich's recognition is no surprise.

“Professor Norman Rich is well known to many of us as a great supporter of the Society, with particular reference to our diploma in Medical Care of Catastrophes,” said Mr. Andrew Wallington Smith, the Registrar of the Apothecaries of London in the citation of Dr. Rich's award. “He has been an examiner since the diploma's inception in 1992 and is a deputy convener. In that context he has enabled us to offer the examination to candidates in the United States of America and has worked tirelessly to ensure that the diploma is known to the U.S. Armed Services – and has helped materially in the practical aspects of the examination process.”

Dr. Rich has a well documented professional history with the Society. In 2001, Dr. Rich was the first non-British citizen to join the Society after the city of London changed its rules for membership. In fact, his work and study of the history of Gen. Henry Shrapnel has been an ongoing project for more than 45 years. This investigation with the Society has led Dr. Rich to many places, including the Forrester's Arm at Littlehampton, England and to the National Archives, Ottawa, Canada.

But, this award is not an accomplishment of Dr. Rich alone. “From the standpoint of the University, this is part of an ongoing effort,” Dr. Rich said. Specifically, Dr. Rich cited the emphasis of civilians in the military and the broad mix of medical specialties USU provides and the part the University plays in teaching its British colleagues.

The citation for the Master’s Medal was presented by Professor Sir Colin Berry prior to the award ceremony.

Adding a touch of humor, Dr. Rich noted that as a final benefit of this award, as a citizen and apothecary of London, he now has the right to drive sheep across London Bridge. Who else at USU can do that?
Army Capt. Steven G. Brewer is a clinical psychology student at USU. Like most USU students, behind him there is a spouse and a family that is making a difference, while also supporting the student.

Michelle McIntyre-Brewer is no different. A military spouse and mother, she also is founder of Soldier’s List, which since 2003 has supported high-risk service members and their families. Soldier’s List has sent tens of thousands of care packages around the world, providing critical medical relief and education to military families about their rights and responsibilities within Tricare and other offered services.

Recently, McIntyre-Brewer and her family were invited to a Presidential ceremony at the White House, where she was awarded the Citizens Medal for going above and beyond on behalf of troops and their families.

“This was quite a surprise and a wonderful recognition for what we do with Soldier’s List,” said McIntyre-Brewer from her home, where she cares for two children, Lorelei and Cavan, whom they adopted from China. “We are providing much needed advocacy for military families who may need support but they don’t know where to go for help.”

McIntyre-Brewer said that her father was a career Air Force officer who always encouraged giving back. “Steven and I really wanted to continue that belief with our family, and we also wanted to do something to honor Rory, our child who died as an infant, and Lorelei, who was born with special needs that require constant care,” she said. “And our 10 year old son also requires special services, so we have had to work through many challenges to get what we need, and we can share some things that we have learned with others.”

The Citizens Medal is the nation’s second-highest civilian honor. It was established in 1969 to recognize American citizens who have performed exemplary deeds of service for their country or their fellow citizens.

The Brewer family (l-r), Cavan, Michele, Lorelei and Steven outside the White House prior to their meeting with President Obama.

Photos by Sharon Willis

Dedication of the New Walter Reed National Military Medical Center

Defense Secretary Leon Panetta cut the ribbon Nov. 10, officially dedicating the Walter Reed National Military Medical Center in Bethesda, Maryland. Among those on hand for the dedication ceremony was Maryland Congressman Chris Van Hollen and British Army Col. Michael O’Dwyer, the great-great grandson of Maj. (Dr.) Walter Reed.
Things go wrong in operating rooms every day. Doctors’ blades slip, poor communication leads to complications, patients receive too much anesthesia – the list is endless.

These results can also be deadly, except on Army Lt. Col. (Dr.) Shad Deering’s tables at USU’s National Capital Area Medical Simulation Center (SimCenter) in Silver Spring. In his operating rooms, everyone gets second and third chances.

A flat line or too much bleeding here simply means USU’s up-and-coming medical students need more practice. With the push of a button and a little reprogramming, patients at the SimCenter – computerized mannequins and specialized task trainers – are ready for round two.

“Our simulators respond to treatment the way real patients do, except there are no serious consequences if things go awry,” said Deering, who came onboard recently as the center’s new director of the human patient simulator division. “That’s why the SimCenter is a good place to make mistakes and learn from them, so we can perform better in hospitals – where it matters most.”

It’s also a place to learn important fundamentals like surgical technique and teamwork in multidisciplinary settings. Honing these skills, under the watchful eyes of seasoned instructors like Deering, a USU alumnus himself, has proven long-term benefits.

“Simulation education is a very dynamic, hands-on way of learning important concepts. It can also lead to better, safer patient care, according to recent data,” he said. “Training students with this technology, therefore, is not only an effective learning modality, but it’s also the right thing to do.”

Deering’s advocacy is also his life’s work. The experienced obstetrician is a simulation pioneer, responsible for the creation of systems like the Mobile Obstetric Emergencies Simulator, or MOES.

The MOES, patented and licensed by the U.S. Army, is a full-size birthing mannequin complete with a standardized curriculum. The comprehensive package is currently being used in every hospital with a labor and delivery ward across the Military Health System which includes hospitals in 14 countries and 41 states.

Like the technology available at the USU SimCenter, MOES provides emergency training for medical professionals without real-life collateral damage.

“Textbooks alone don’t give individuals and teams the confidence they need to perform well under stress,” Deering said. “Lots of experience does, and that’s what simulation training provides.”

With access to one of the nation’s most advanced simulation centers, that’s exactly what USU students get. The campus community spends more than 300,000 hours inside the SimCenter every year, with each student completing at least 40 simulated experiences before graduation.

“Education here at USU is truly cutting-edge because of places like the SimCenter. I know this from my own personal experience as a former medical student, current faculty member and simulation expert,” Deering said. “At USU, there is no such thing as an inexperienced graduate.”
HPRC Health Tips

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.

Stay active and reduce stress

Stressed out? Try getting more exercise, and you may find your high blood pressure dropping along with your stress level.

Many who suffer from a lot of stress also have high blood pressure and do not exercise. People who practice some form of activity or exercise benefit from less stress associated with personal, family and work situations. Reducing stress will improve your health. Exercise helps improve your stress tolerance and also can strengthen your cardiovascular system, increase endorphin levels and keep you mentally focused. Bike rides, power walking and yoga are some of the many inexpensive, time-efficient ways to improve your general fitness and reduce stress.

A simple tip to reduce your risk of colon cancer:

*Eat more whole grains and cereals to reduce colon cancer risk.*

A recent review of 25 studies revealed that a diet high in fiber—particularly fiber from whole grains and cereals—could reduce the risk of colorectal cancer. Consuming three servings of fiber per day (about 90 grams) is beneficial for reducing cancer risk.

Yoga lowers blood pressure

Yoga isn’t just for flexibility. It can make you calm and relaxed, helping to lower your blood pressure.

Practiced for many centuries around the world, yoga has several benefits to the human body, one of which is that it helps reduce your blood pressure. Performing yoga asanas (poses) requires focus on your body’s movements rather than on your otherwise busy life. By switching your thoughts to a present (or “mindful”) state, you are better able to achieve calmness and relaxation, which has been shown to help lower your heart rate and blood pressure.

Exercise safely in the cold

If you exercise in the cold, consider these tips from the American Council of Exercise (ACE; Exercising in the Cold) to stay safe. Check how cold it is before you go out, and do not exercise if the conditions are too extreme. Be sure to dress warmly (keep your head, hands, and feet warm) and dress in layers that can trap insulating dry air near your skin. In addition, avoid blowing air into your gloves and mittens because it will add moisture, which will cause your hands to be colder.

If you enjoy reading the HPRC Health Tips you can find more by “liking” the Human Performance Resource Center on Facebook.

Celebrating Nurse Practitioners

USU recognized the more than 225 nurse practitioner alumni and the nurse practitioner field as a whole with the traditional cake and celebration during National Nurse Practitioner Week, Nov. 13-19. Nurse practitioners are advanced practice registered nurses who are able to assess, diagnose, treat and prescribe medications to their patients.

The first nurse practitioner program was started in 1965, with the first Master’s degree program beginning in 1967. USU initiated its Family Nurse Practitioner program in 1993 and granted the first Psychiatric Mental Health Nurse Practitioner degrees in 2010.
Some people might say that the scalpel saves more lives than the brush. But, for one medical illustrator and animator at the SimCenter, that may not be true.

Betsy Weissbrod is in a class of artist that provides a unique look into the medical world.

“The main project we are working on is creating 3-D surgical animations in addition to traditional 2-D illustrations that will supplement a teaching curriculum focused on deploying surgeons,” said the 2010 graduate of the Johns Hopkins University’s Art as Applied to Medicine program. “These break down the steps of common surgeries that a surgeon could be faced with once down range. We also try to provide tips and tricks along with common pitfalls that will aid in the increased success of the procedures covered.”

Currently, Betsy is working on the steps of a craniectomy, the pathologies of sub- and epidural hematomas, and how to place two types of ICP microsensors.

There are also plans to cover many other procedures, including amputations and fasciotomies. These illustrations for classes will be provided in a pre-deployment setting for medical professionals. They also will eventually be made available both online and through mobile applications.

And new advances in technology are definitely an asset for Betsy.

“New technology definitely provides new tools, but new tools do not necessarily equate with effective illustrations,” she said. “It is the artist who must use those tools effectively to clearly convey the teaching point of the illustrations they are creating. Often times the simplest solution is the best solution. I still very much enjoy creating illustrations using pencil and paper or pen and ink.”

And her work is already having a positive impact. In just over a year’s time, Weissbrod has created six animations in 2-D and 3-D, 11 storyboards, more than 130 3-D models, and more than 115 2-D “traditional” illustrations for books and journals.

In fact, many of these illustrations and animations are currently being utilized in several different academic courses from the new USU Introduction to Clinical Medicine (ICM) course to the American College of Surgeons - Advanced Surgical Skills for Exposure in Trauma (ASSET) course.

And while her skilled hands have made her a success, for Betsy the best part of her work is to know she is making a difference both today and in the future.

“I enjoy being a part of something that is bigger than me. Here, I have the privilege to work with amazing people who are brilliant leaders in their professions,” she said. “I sincerely hope the teaching products I create for the SimCenter will help medical students and professionals learn, retain and apply the concepts and skills we teach to save and improve the lives of others.”
Technology Update

By Dennis Stutz

The OCIO is currently working on the following items and wanted to bring you up to date on our progress.

1. NEW USU ONLY .MIL CIRCUIT ESTABLISHED - The University has been moved off of Navy’s (WRNMMC) .mil circuit. This has been planned for some time in order to meet both the requirements for our ATO (Authorization to Operate) as well as Navy’s. This allows us to have a dedicated circuit that does not rely on others to maintain or dictate usage. There were some initial routing problems with the DNS in terms of filtering Army and Navy locations on 3-4 Nov; much of that is resolved. We will continue to address any isolated individual issues as they are discovered.

2. DOD 411 DIRECTORY AVAILABLE - A reminder that the DoD 411 directories are available on-line and instructions to set them up for use with GroupWise and/or Outlook can be found at: http://www.usuhs.mil/helpdesk/documentation/LDAPDoD411AddressGW.docx (GroupWise) http://www.usuhs.mil/helpdesk/documentation/LDAPDoD411OutlookInstructions.pdf (Outlook)

These directories are available for you to use to locate other members of the DoD community via email.

3. CELLULAR EXPANSION COMING TO USU - Contracts have been awarded to deploy a five band cellular expansion throughout the university. Once the project is complete it will allow you to make cell calls from nearly anywhere in the University to include the parking garage. Network Operations & Communications (NOC) is currently working with the vendor on a deployment schedule. We expect to be completed within six months.

4. USU MIGRATING FROM GROUPWISE TO GOOGLE - A recent agreement between USU and Google Inc. will make Google e-mail and other applications available at USU by February 2012. The arrangement gives the USU community access to an online suite of communication and collaboration tools, called Google Apps for Government. These tools include Gmail (e-mail with 25 GB of storage per account), integrated chat, calendaring, contacts and applications for document, forms, presentation and spreadsheet production.

Google Web-based Google Docs, which allows documents to be uploaded or created online. The word processing and spreadsheet program makes it possible for users to collaborate online in real time, keeping a record of individual edits and document versions. Google Apps does not require users to install separate software. NOTE: This suite of applications will NOT replace Microsoft Office, but will instead augment it, providing a tool for rapid document collaboration without the tedious “check-in/check-out” process.

The USU-branded Gmail accounts also offer users considerable advantages. USU Gmail accounts will not be subject to the university’s previous 60-day e-mail retention policy, saving faculty and students the inconvenience of moving e-mail that they wish to save beyond 60-days to a personal e-mail account or to their hard drive. The additional storage space also means that users will spend less time deleting e-mail to stay within quota. Google Apps has been adopted by many universities across the country. Anticipate additional information and training in the Dec/Jan time frame as the OCIO project team works with Google on deployment timelines.

Any Unifined Services University faculty member, staff, or student may submit nominations for the Awards. The nominee must be either a member of the full-time faculty or an AFRRI scientist at the University. The nomination should include:

- Brief statement outlining the significance of the published research. This research should have been published (a) within the last three years, (b) while the nominee has been at the University and (c) the nominee should be first or senior author on the paper. The nomination letter should be signed by the person submitting the nomination.

- A copy of the nominee’s curriculum vitae and a copy of the selected paper (Published after January 2008) upon which the nomination is based.

The closing date for nominations is Monday, January 30, 2012.

Briefs

Nominations being accepted for annual USU research awards

The Leonard and Wu Awards for Excellence in Research recognize faculty members and AFRRI scientists who, in the estimation of their peers, have made the most significant published scientific contribution to translational/clinical and basic biomedical research respectively, during the past three years.

The Wu award recognizes excellence in the Basics Sciences and the Leonard award excellence in the translational and Clinical Sciences.

The closing date for nominations is Monday, January 30, 2012.

Neuroscience Open House and Poster Session

The Neuroscience Program will host its 21st annual Open House and Poster Session on Thursday, December 1, 2011, beginning at 3:30 in the USU dining room. Soft drinks and light refreshments will be available.