Learning to Care for Those in Harm’s Way
Borrow or Serve? An Economic Analysis of Options for Financing a Medical School Education

By USU External Affairs

An American medical education is expensive. The median cost of attending a four-year, public medical school is more than $240,000 and the median cost of a private medical school education is more than $314,000. Because few students are wealthy enough to pay cash, or fortunate enough to secure a no-strings scholarship, most take out large education loans. As a result, more than four out of five medical students graduate in substantial debt.

To help prospective medical students understand the long-term fiscal consequences of borrowing versus other major options for financing their education, a team of federal officials and a health economist modeled the 30-year economic impact of self-funding, taking out a federally-insured loan, and attending medical school with the support of one of three types of national-service scholarships — the National Health Service Corps, the Armed Forces’ Health Professions Scholarship Programs, or attending the Uniformed Services University of the Health Sciences (USU). National service scholarships cover all costs of a student’s medical education in exchange for four or more years of national service after residency training.

The results of this analysis have just been published in the latest web edition of Academic Medicine, the flagship journal of the Association of American Medical Colleges.

Key findings include:

• Over time, the value of a medical degree offsets its high up-front cost. However, it can take years, even decades, for medical students who borrow to catch up with those who avoid taking on debt.
• Debt avoidance, whether through self-financing or a national service scholarship, confers substantial economic benefits. Students who attend medical school with the help of a national service scholarship start their internship and residency training $300,000 to $400,000 ahead of peers who finance their medical education with loans.
• The benefits of debt avoidance last longer than commonly realized. It is widely thought that because doctors who enter private-sector practice earn more than their counterparts who serve in the military or U.S. public health service, students who borrow quickly catch up and soon surpass the earnings of classmates who attended with the help of a national service scholarship. In fact, the length of time it takes to reach economic parity depends a lot on the doctor’s choice of specialty. For example, private-sector orthopedic surgeons are paid much more than military orthopedic surgeons, so economic parity is reached roughly four years after completing residency training. However, for most specialties, including general surgeons, ophthalmologists and other comparably paid specialists, economic parity may not be reached for 20 years or longer.

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USU helps bring advanced prostheses to wounded warriors

During a recent ceremony at Walter Reed, retired Army Col. (Dr.) Paul Pasquina, professor and chair of USU’s Department of Rehabilitation Medicine, expressed how meaningful the LUKE arm is to so many people. (Photo by Joe Nieves, WRNMMC Public Affairs)

By Sarah Marshall

Researchers at the Uniformed Services University of the Health Sciences (USU) are supporting efforts to bring ground-breaking bionic prostheses to amputees recovering from upper limb-loss, ultimately improving their independence and enhancing their quality of life.

Although technology that powers prosthetic legs has advanced over the last two decades, prosthetic arms and hands have been more of a challenge to develop, in part because of the need for greater degrees of dexterity. In collaboration with Walter Reed National Military Medical Center (WRNMMC) and USU, the Defense Advanced Research Projects Agency (DARPA) has been working to develop bionic arms for those Service members and veterans who are rehabilitating after upper-limb loss. These efforts have led to DARPA recently receiving FDA approval for the “LUKE” arm.

LUKE stands for Life Under Kinetic Evolution, and is a passing reference to the limb given to Luke Skywalker in the *Star Wars* series. This modular, battery-powered limb is near-natural in control, size and weight. It enables dexterous arm and hand movement with grip force feedback, through an intuitive control system. It has six user-selectable grips, and an arm that allows for simultaneous control of multiple joints using a variety of inputs, including wireless signals generated by sensors worn on the user’s feet. The goal is to continue providing amputees even greater dexterity and highly-refined sensory experiences by eventually being able to connect these limbs directly to the patient’s peripheral and central nervous systems.

During a recent ceremony held at WRNMMC, DARPA presented the first production versions of this ground-breaking prosthesis to a team of collaborators, including WRNMMC leadership and staff, along with USU’s retired Army Col. (Dr.) Paul Pasquina, professor and chair of the Department of Rehabilitation Medicine, and Air Force Col. (Dr.) Jeffrey Bailey, professor of Surgery at USU, and director of Surgery at WRNMMC.

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New Study Links ‘Mastermind’ Gene to Rare Cancer-Causing Tumor

Co-senior author on the Cancer Cell study, Dr. Matthew Wilkerson, associate professor and Bioinformatics Director of The American Genome Center and the Collaborative Health Initiative Research Program at the Uniformed Services University. (Photo by Sarah Marshall, USU)

By Sarah Marshall

Scientists have discovered that a new “mastermind fusion gene” may be associated with a rare cancer-causing tumor – pheochromocytomas (“pheo”) and paragangliomas, according to a study published Feb. 13 in Cancer Cell, by researchers at the Uniformed Services University of the Health Sciences (USU) and the National Cancer Institutes’ The Cancer Genome Atlas. This breakthrough discovery could lead to more precise treatment and a better understanding of cancer itself.

These adrenal gland tumors are often benign, but they can become malignant, and in some cases lead to life-threatening hypertension, arrhythmia, and stroke, but it’s not clear which tumors will become metastatic because of the disease’s rarity and complex biology. Therefore, patients with the metastatic disease have few treatment options and poor prognosis. To help detect genetic mutations and better understand this disease, a group of researchers at USU and the nationwide Cancer Genome Atlas Research Network examined 173 tumors, performing six genomic tests, such as DNA and RNA sequencing.

The researchers found what they refer to as the mastermind fusion gene – the first fusion gene associated with this type of tumor. This hybrid gene forms from two previously separate genes and only occurs in a new subtype of this disease. The researchers suggest this disrupts the normal biology of the cell and thus producing tumor cells. The researchers believe this mastermind fusion gene will help describe for some patients why the tumor has developed, and better predict patient outcome. The fusion gene may also lead to future targeted therapy and have implications for other cancers.

Additionally, the researchers found 18 “driver” genes in this type of tumor, meaning there are 18 different ways this tumor could become cancerous. This is an unusually large amount of drivers, not typical for many other tumor types, according the study’s senior author Dr. Matthew Wilkerson, associate professor and Bioinformatics Director of The American Genome Center and the Collaborative Health Initiative Research Program at USU. This finding allowed their team to classify tumors into four major molecular subtypes, which could also lead to developing new therapies.

“For patients who have this diagnosis, surrounded by its uncertainties, this new discovery sheds light on the disease. We think these results will ultimately lead to individuals and their families having a better understanding of their prognosis and more precise treatment,” Wilkerson said.

The paper’s co-senior authors are Dr. Katherine Nathanson, a professor in the division of Translational Medicine and Human Genetics at the University of Pennsylvania’s Abramson Cancer Center, and Dr. Karel Pacak, chief of the section on Medical Neuroendocrinology at the Eunice Kennedy Shriver National Institute of Child Health and Human Development at the National Institutes of Health.

The study was supported with grants by the National Institutes of Health.
Shriver receives Breast Cancer Research Foundation grant

By Sarah Marshall

As part of an effort to advance the understanding of metastatic disease, the Breast Cancer Research Foundation (BCRF) recently awarded a $500,000 team science grant to Army Col. (Dr.) Craig Shriver, professor of Surgery at the Uniformed Services University of the Health Sciences (USU).

The BCRF announced a $57 million commitment to breast cancer research. Nearly one-third of those grants (more than $16 million) are focused on metastatic breast cancer. Shriver and Dr. Peter Kuhn, at the University of Southern California, who are both the principal investigators at their institutions, were awarded the grant by BCRF.

The grant recognizes researchers leading the way in studying the biology of why and how cancer cells spread, and will support pilot projects that are using multiple technologies for analyzing rare events in the blood of cancer patients. These efforts will also be focused on developing new treatments for advanced disease, and correlative studies to discover biomarkers that can predict which breast cancers are more likely to spread. Subsequently, their data and associated protocols will be deposited into a recently-established Blood Profiling Atlas in Cancer (PAC).

In alignment with former Vice President Biden’s Moonshot initiative, the Blood PAC supports progress directly benefiting patients through research. It aims to create a database for liquid biopsies to expedite the development of safe and effective blood profiling diagnostic technologies, accelerating drug development, streamlining clinical research, and ultimately improving the lives of cancer patients. This public-private partnership includes more than 20 organizations contributing liquid biopsy data, protocols, and expertise.

“We’re excited that this grant will allow for continued collaboration, with the Blood PAC initiative, in order to better understand real-time metastatic diseases, and progress toward a future without cancer,” Shriver said.

While focusing his research on breast cancer, pancreatic cancer, and endocrine malignancies, Shriver also serves as director of the John P. Murtha Cancer Center at Walter Reed Bethesda. He leads the congressionally-mandated Clinical Breast Cancer Project, a military-civilian coalition that has received more than $100 million since its inception in 2000. This targeted cancer research has amassed one of the world’s most extensive human biorepositories of breast cancers and tissues, which are used by researchers around the world to study breast cancer and its treatment.

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“This arm represents so much to so many people,” Pasquina said. “Knowing that hundreds of engineers, scientists, and clinicians are behind just this single arm, all motivated to help our wounded warriors, is inspirational to say the least.”

Bailey emphasized that bringing this capability to our wounded warriors is all about making sure each patient receives a continuum of care, starting at the point of injury, all the way through their rehabilitation, allowing them to return to a life that’s meaningful. “That is really what we all strive to do,” he said.

DARPA will transfer LUKE arms from an initial production run to the medical center for prescription to patients. The New Hampshire-based company that’s manufacturing the arm will train WRNMMC staff to fit, service and support the arms.
By Sarah Marshall

The Uniformed Services University of the Health Sciences’ (USU) Center for Neuroscience and Regenerative Medicine (CNRM) is a federal research collaboration between the Department of Defense and the National Institutes of Health (NIH), and has an overarching goal of accelerating TBI research and improving warfighter recovery. The center also provides unique support for the TBI research community at both the University and other DoD sites throughout the National Capital Area. The Center’s 11 cores offer an array of services to investigators, such as assisting with data management, recruiting study participants, and consulting on data collection and interpretation.

“The center addresses the full spectrum of TBI, with a special focus on military-related TBI, and has been driving TBI translational research for the DoD since 2008,” said Dr. Regina Armstrong, professor in the Department of Anatomy, Physiology and Genetics (APG) at USU, and CNRM director.

A critical component to CNRM’s mission is its core research services, or “cores,” which provide technical expertise and state-of-the-art facilities, enabling the development of innovative ideas, techniques, and methods that support both preclinical and clinical studies – a pairing that’s a hallmark of the center. The cores also house much-needed research resources such as a biospecimen, brain tissue, and data repository, each of which are used to answer immediate research questions and serve as a foundation for accomplishing future research more quickly and effectively.

The cores also support research participants, assisting with travel and providing information about the research process and their injuries.

“We want to make sure people know they can reach out to CNRM’s cores and access these resources,” Dr. Armstrong said. “Accessing these facilities and expertise is a win-win for everyone – it helps all those working toward a shared goal of advancing TBI research.”

Researchers are granted access to the cores’ support on a tiered basis, with priority given to CNRM-funded studies, and access for other projects that are approved as collaborative studies. Second tier priority is given to on-site investigators working on research projects that are not CNRM-funded, but are related to TBI and/or PTSD. Access can also be approved for diverse research topics led by other federal investigators and then, finally, to external academic researchers based on capacity and funding.

The cores’ functions are separated into either the pre-clinical or clinical research area, or the research resource area. The Pre-Clinical Studies core is led by Dr. Joseph McCabe, professor
USU welcomes new assistant Research Vice Presidents

By Christopher Austin

The Uniformed Services University of the Health Sciences’ (USU) Office of Research welcomed two new faculty members. Retired Navy Rear Adm. (Dr.) Bruce Doll, as assistant vice president for Technological Research and Innovation, and U.S. Public Health Service Capt. (Dr.) Steven Hirschfeld, as the assistant vice president for Research Initiatives and Compliance.

Since his arrival at USU, Doll has commended the University for its commitment to new ideas and moving medical knowledge forward.

“This is a wonderful opportunity for empowering people – both military and civilians – that comprise USU,” he said. “I’ve enjoyed my time in academic environments because there’s a community of insightful, intelligent people who flourish in these institutions and create an atmosphere of asking questions, pursuing medical challenges: asking ‘what can we do to improve?’”

Doll wants to pursue the development of USU’s biorepositories – collections of various biological materials that serve as source material for medical research. Additionally, he intends to develop and lead the University’s capability in the area of databanks as it matures throughout the country.

“It’s a question of developing a general strategy for the University’s data management and integration with Big Data [working with other institutions],” Doll said. “It’s important to look across the DoD medical research community to see how we can complement and amplify other areas.”

Doll’s research experience includes his role as chief operating officer of Rutgers University and the Cleveland Clinic Armed Forces Institute for Regenerative Medicine Consortium. Coordinating 17 different academic institutions, the consortium conducted research on regenerative medicine for the wounded warrior. He is a grantee of both private and public organizations, most notably the National Institutes of Health.

Doll began his career in the military as an ensign in the U.S. Navy Reserve. After graduating from State University of New York Buffalo School of Dentistry, he was commissioned as a lieutenant in 1982. In addition, Doll served tours aboard ships, with the Marines, NATO and deployed overseas. Prior to his retirement, he served as the director for the Research, Development and Acquisition Directorate for the Defense Health Agency, overseeing the execution of $1.6 billion in annual funding for medical research. Concurrently, he was the deputy commander for the U.S. Army Medical Research and Materiel Command.

Hirschfeld came to the University in September and seeks to help use research to improve the quality of life for all Americans.

“I find the University to have a nice institutional atmosphere. I like the blend of military culture and academic priorities,” he said.

Hirschfeld hopes to make the USU Office of Research even more responsive to researchers so that processes, such as the Institutional Review Board, might be streamlined.

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USU Opens New College of Allied Health Sciences

Dr. Mitchell Seal Selected as Founding Dean

By Sharon Holland

The Uniformed Services University of the Health Sciences (USU) recently established a new College of Allied Health Sciences for both graduate and undergraduate education programs.

“We are excited to bring this new opportunity, through the University’s College of Allied Health Sciences, to address the needs of our students and the military Services,” said Dr. Richard W. Thomas, president of USU. “This is consistent with the National Defense Authorization Act directive and represents a tremendous opportunity for enabling superb graduate education for our officers across the Military Health System and ensuring high quality undergraduate education opportunities for our enlisted medics, corpsmen, and technicians.”

The College, which is headquartered on Joint Base San Antonio in Texas, will partner with existing graduate programs as determined by each of the military Services, as well as with the Medical Education and Training Campus (METC) for undergraduate programs. The Campus is aligned under the Defense Health Agency and is initially interested in USU assessing academic portfolios for students in four of their programs – surgical technologist, medical laboratory technologist, nuclear medicine technician, and neurodiagnostic technician. Students’ qualifications, as well as the training received at METC, will be properly documented and transferred to recognized, transcripted college credits with the opportunity to complete a degree awarded from USU. Approximately 1,100 students are anticipated to be phased over the next several years.

“All of these accredited programs yield civilian-sector health care credentials and reduce the initial cost of training to the Department of Defense. This also increases the longer-term value of the military education benefit as funds can now be applied to complete an associate, bachelor or master’s degree. Not only are we training better for the mission, we’re educating for a lifetime of service to the military and, ultimately, to the communities we call home,” said Dr. Mitchell Seal, founding dean of USU’s College of Allied Health Sciences.

Seal was selected as dean following a nationwide search. He has more than 30 years’ experience in higher education. Seal served in the Navy for 25 years, first as a drummer in the U.S. Navy Band, and later as a Nurse Corps officer. Among his assignments, Seal served as a medical-surgical staff and charge nurse at the Naval Hospital in Charleston, South Carolina; head of the Nursing Staff Development Division and Staff Education and Training department at the U.S. Naval Hospital in Guam and at the Naval Hospital in Lemoore, California; as head of the Education Support Services department at the Naval School of Health Sciences in San Diego; and as the Director of Strategic Planning and Partnerships at METC.

He retired from the Navy in July 2015 at the rank of commander. Following retirement, he served as the dean of the School of Online Learning at the University of the Incarnate Word in San Antonio, Texas.

Seal earned an Associate of Science degree from Trident Technical College in North Charleston, South Carolina, summa cum laude, in 1994, followed by a Bachelor of Science degree in Nursing from the Medical University of South Carolina, Charleston, summa cum laude, in 1996. In 2004, he earned a Master of Education and Instructional Technology, with honors, from the University of West Florida, and a Doctor of Educational Administration, in 2009, from the University of the Pacific, Stockton, California.

He began his duties as dean Feb. 1, 2017. As dean, he will advise the President of USU on a variety of issues related to non-privileged graduate and undergraduate health science technical and professional education, research, and workforce development.
in APG at USU, and provides equipment and training for diverse TBI models, and for those evaluating behavioral outcomes resulting from brain injuries. The core also provides investigators technical expertise for experimental design and data interpretation.

The Translational Imaging core, led by Dr. Bernard Dardzinski, assistant professor in the Department of Radiology, Radiological Sciences and Neuroscience (RAD) at USU, augments work done in the Pre-Clinical studies core by providing state-of-the-art neuroimaging support for those conducting in vivo research (involving living organisms) or ex vivo (involving tissues). The team assists with study design, data acquisition, analysis and interpretation. Scans from this core can also be correlated with functional data, and can be collected by the Pre-Clinical core at specific times to provide a comprehensive picture of the injury. This core also offers technical support for research studies at Walter Reed National Military Medical Center to facilitate clinical translation of advanced neuroimaging techniques. The Microscopy core, led by Dr. Sharon Juliano, professor in the Department of APG at USU, offers specialized fluorescence microscopy for high resolution analysis of cellular structure and function. They also have advanced tools to examine neuronal circuits, which dictate the flow of information in the nervous system.

The clinical cores work directly with research participants enrolled in CNRM observational or intervention studies. Participation in these studies begins with the Recruitment core, led by Dr. Michael Roy, professor in the USU Department of Medicine. This core helps researchers recruit, consent and evaluate participants, offering each the study options that match their interest and injury characteristics. They’ve also created a resource to educate research participants, through a series of patient-focused YouTube videos, about what to expect when they enroll in a clinical study. These videos can be found through the clinical studies website, www.usuhs.edu/cnrm/core10.

The Phenotyping core provides in-depth patient assessments and can also help enhance recruitment by serving as a study site for screening. This core conducts long-term parallel military and civilian natural history studies of patients who have experienced TBI. Dr. Louis French, at the WRNMMC/National Intrepid Center of Excellence, leads the study for WRNMMC patients, and Dr. Leighton Chan, at the NIH Clinical Center (NIH-CC), leads the phenotyping work at the NIH, which includes assessments evaluating cognitive functioning. Additionally, this core can help identify comparable cohort participants for CNRM-funded and collaborative projects.

Dr. Vincent Ho, chair of the Department of Radiology at USU, and Dr. John Butman of NIH-CC, lead the Human Imaging core, which guides researchers using CNRM human imaging facilities at WRNMMC and NIH-CC. The use of this advanced neuroimaging technology provides a window into the brain, better characterizing the injury in research participants. This core helps clinical investigators design and implement sequences for neuroimaging scans, and can help researchers with Magnetic Resonance Imaging and Positron Emission Tomography data extraction and archiving. The Image Processing core, led by Dr. Dzung Pham, research assistant professor in the Office of the Vice President for Research, and Dr. John Butman, at NIH-CC, processes and manages data for CNRM neuroimaging studies from multiple sites, such as

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NIH and WRNMMC. This imaging data also reveals how the brain has been damaged, e.g. hemorrhages, or whether brain structure has been altered from the injury.

“Our role is to help investigators analyze and interpret these images by either highlighting the effects of the injury, or quantifying various properties of the brain,” Dr. Pham said.

A high priority in TBI research is to study the brain soon after a head injury happens, so the Acute Studies core, led by Dr. Lawrence Latour at the National Institute of Neurological Disorders and Stroke (NIH/NINDS), focuses on gathering data on TBI within hours of an injury. This team initiates contact with patients to offer enrollment into CNRM studies. In some cases, as they work with local Level I trauma centers in the National Capital Region, they’ve been able to enroll patients and begin neuroimaging within hours after their injury. This allows researchers to collect and analyze the clinical variables at the acute stage to help improve detection and prognosis. This early interaction has detected changes that have benefited clinical care and may otherwise have been missed without this advanced early neuroimaging.

Together, the clinical cores form the foundation of all clinical studies carried out by CNRM, providing a comprehensive way to fully evaluate research participants with TBI. CNRM study participants provide researchers a wealth of data and biospecimens that can be used for current and future studies. These specimens and data are stored in either the CNRM data, biospecimen, or brain tissue repositories.

The data repository is housed within the Informatics core, led by Dr. Ann Scher, professor in the Department of Preventive Medicine and Biostatistics at USU, and Dr. Yang Fann (NIH/NINDS). This core provides data management, storage and analytic services for CNRM clinical studies, and helps the research community capture and report electronic data for clinical protocols. They’ve also provided their technical and clinical expertise to help develop multiple software modules used in the Federal Interagency TBI Research Informatics system.

Many of these clinical studies conducted by CNRM involve collecting blood samples for current and future analyses, and to facilitate these efforts, the Clinical Biomarkers core, led by Dr. Brian Cox, professor in the Department of Pharmacology at USU, and Dr. Jessica Gill at the National Institute of Nursing Research, focuses on developing and managing a biospecimen repository for related conditions and appropriate control subjects.

“These specimens are used to support research on biomarkers for TBI, which can help lead to advances in diagnosis, treatment and clinical care for TBI patients,” Dr. Cox said.

Finally, assessing brain injury from a structural standpoint, the Neuropathology core is led by Dr. Daniel Perl, professor in the Department of Pathology at USU. This core houses and maintains the CNRM Brain Tissue Repository, to which families of deceased service members, veterans and other eligible donors, including civilians, may contribute. Through these donations, scientists can conduct research on many aspects of TBI, which can lead to identifying causes and possible treatments for the short- and long-term neuropathologic consequences of TBI and TBI-related illnesses. CNRM has an approval process to help distribute brain tissue specimens to investigators from any institution.

To learn more about CNRM’s cores, and to find out how to request access to these resources, visit www.usuhs.edu/cnrm/coresindex.
Cybersecurity tips for USU personnel

Courtesy of the Office of the USU CIO

While new technology makes life easier, it also gives malicious actors greater means to compromise users’ identity and data. Information Security at Uniformed Services University of the Health Sciences (USU) has released a list of cybersecurity tips in order to help inform USU personnel in how they can protect themselves.

1. You are an attractive target to malicious actors. Always be "cyber aware" and realize your online actions can have consequences both to you personally and to your unit/organization.

2. Be a good steward of passwords/passphrases. Use a strong mix of characters (see Cyber Alert 2016-001 for additional tips). Do not share them with others, write them down, or post them in your work space(s) and do not allow your browser to store your passwords/passphrases. Although it’s convenient, it increases your risk since anyone with access to your browser can see them.

3. Use two-factor authentication when logging into your DoD-affiliated account at work (e.g., your CAC). When accessing sensitive web services such as financial and email accounts, use services requiring a password and a code that is sent to your specific device as an added measure of security.

4. Ensure embedded links are legitimate before clicking on them. Double-check the URL of the website by holding the cursor over the link to display the real website you’re being taken to before you click on it. If the link doesn’t match or looks suspicious, it’s very likely a phishing attempt. Institutions such as banks, utilities and retailers almost always have your account information to include PINs, Passwords, and Security Questions so they shouldn’t need you to provide this information via email. If there is a question, call them directly.

5. Use caution when web browsing in public areas. Only use a device that belongs to you if accessing private/personal data such as banking information. Publicly available Wi-Fi hotspots are often insecure and put your private/personal data at risk so avoid entering personal data, information, or passwords when using these public services.

6. Surf the Internet securely. Ensure URLs begin with "https://" and display a locked padlock symbol for secure Internet sessions. Also, bad actors often take advantage of spelling errors to direct you to harmful domains. So, take care in typing website names to avoid mistakes.

7. Stay up to date. Specifically, operating systems and browser updates often include security patches. Set your devices to automatically install updates when they become available so you never miss an update. Also, don’t forget to back up your data on a regular basis.

8. Watch what you post on social media. Facebook, Twitter, LinkedIn, and other social media platforms are invaluable tools for networking purposes. However, malicious actors can easily gain access to sensitive information such as where you work, information about your family, upcoming deployments, and other valuable information -- that could allow them access to even more sensitive information.

9. For your home router(s), take the time to enable encrypted connections to your wireless devices. In general, the stronger encryption techniques such as "WPA2/PSK" (Strongest) or "WPA/TKIP" (Moderate) are best.

10. Be diligent when you plug devices into your computer. Malicious software, viruses, or malware can easily be spread through infected flash drives, external hard drives, smartphones, and other similar devices. The DoD specifically prohibits the use of removable media unless specifically wavered by your Installation Commander.
New attorney joins USU General Counsel staff

By Christopher Austin

Steven Weiss, a civilian attorney for the Uniformed Services University of the Health Sciences (USU), began his work at USU in 2016, and advises leadership on topics of labor and employment laws, ethics, contracting, and policy.

"If people have any questions, I welcome the opportunity for them to stop by," Weiss said. "Anyone who supervises a civilian, they’re likely going to have labor and employment questions. I’m a resource for them.”

One of the things that Weiss enjoys about the University is how collegial it is. He previously worked in the Pentagon in labor and employment law, and enjoys the more personal atmosphere the University provides.

“People here are very friendly. The Pentagon has 205,000 employees and 5,000 visitors every day. You don’t get a chance to know people well,” Weiss said. "Here, you get a lot more time to learn about people and talk to them, which I appreciate.”

Weiss began his career in 1990 when he joined the Army Reserves. There, he served as an operating room technician until 1994, passing through some of the same military hospitals that many USU alumni have worked at. He then went through officer candidate school and was commissioned the following year in the Army National Guard. He left the National Guard in 2003 as a first lieutenant.

From 1999-2002, Weiss attended Fordham University School of Law in New York where he earned his Juris Doctor degree, and then returned to Federal service as a lawyer for the Army Corps of Engineers in Virginia. In 2005, he worked at the Pentagon until coming to USU this past year, working his entire legal career in the Department of Defense.

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“The interdisciplinary centers here are a wonderful model for collaboration and for effective team science. I think the University is uniquely positioned to become more of a leader in innovative research,” he said. “We have many strengths and accomplishments to provide credibility, and we have to remain flexible to accept the cultural and operational changes in a highly dynamic environment.”

Joining the U.S. Public Health Service in 1989, Hirschfeld is a pediatric hematologist-oncologist, and previously worked at the National Cancer Institute as a clinical and lab investigator.

In 1995, he joined the Food and Drug Administration where he contributed to government initiatives focused on child health. These include the 1998 Pediatric Rule to mandate pediatric studies when diseases of children could be linked to diseases in adults, the Best Pharmaceuticals for Children Act, the Pediatric Research Equity Act, and the Pediatric Medical Devices Safety and Improvement Act. These initiatives led to 500 labeling changes for medical products for children.

Hirschfeld has taken part in several disaster response deployments including to Louisiana in 2005 for the Gulf Coast hurricanes, to Texas in 2008 for Hurricane Ike, and to New York City in 2012 for the November nor’easter. He was also the founding operations chief and chief medical officer of the U.S. Public Health Service Rapid Deployment Force Team 1 in 2006, and is currently the chief medical officer and deputy team commander.
• National service scholarships are particularly worthwhile for students interested in primary care (e.g., general internal medicine, family medicine and pediatrics). That's because military and public health service doctors earn salaries roughly comparable to those paid in the private-sector. As a result, borrowers never catch up with peers who avoid debt by securing a national service scholarship.

Dr. Art Kellermann, dean of the School of Medicine at USU, and a study co-author, notes the study's findings affirm a medical degree is well worth the cost in the long run, but the benefits of debt avoidance in pursuit of that degree are both greater and longer-lasting than commonly realized.

“The Armed Forces Scholarship Programs (Army, Navy and Air Force), the National Health Service Corps or attendance at the F. Edward Hebert School of Medicine at USU – is a win-win-win,” Kellermann said. “Medical students win because their tuition is paid and they earn a stipend or salary to help with living expenses. The sponsoring services win by attracting dedicated men and women who are prepared to serve their country or a physician shortage community, and our nation wins because these programs provide a doorway for many students who might not otherwise become doctors.”

For many years, half of America’s medical students have come from the top quintile of household incomes, while only 5.5 percent have come from the bottom quintile. So, Kellermann and his fellow authors believe it's important for policymakers to consider options to make medical school more affordable. That will help attract a more diverse population of aspiring physicians and, therefore, a more diverse health care workforce.

Economics are only one of many factors medical students consider when choosing a financing pathway. The authors note that National Health Service Corps scholarships are restricted to students willing to commit to primary care and prepared to practice up to 4 years in a federally-designated health professions shortage area, so students interested in becoming specialists are unlikely to apply. Likewise, students averse to military service are unlikely to consider a military scholarship, regardless of the economic advantage of doing so. Conversely, the authors note, “debt-averse students and those drawn to the ideals of national service may find [National Service Scholarships] attractive.”
Navin provides legal guidance for USU Service members

By Christopher Austin

Air Force Lt. Col. Nicole Navin joined the Uniformed Services University of the Health Sciences (USU) in 2016 as the brigade judge advocate, advising the brigade commander on legal matters, as well as providing legal support to more than 1,300 military personnel at USU.

“Most of my job is advising the command on a variety of legal issues, to include military justice, ethics, and general law, but I also do a lot of legal assistance for the University’s military faculty, staff, students, and their dependents,” Navin said. “Individuals come to see me for advice on a broad range of civil law matters…whether it’s landlord-tenant or family law issues, wills, notaries, powers of attorney, legal advice, etc."

Navin enjoys working at the University, particularly because it is a joint environment and enables her to exercise her legal skills in a way that is unique from a traditional Air Force judge advocate role. In addition, as the only attorney to the brigade, she’s allowed to engage in a wide variety of legal practice areas. She also enjoys working in the medical environment of the University, having spent two years as a regional medical law consultant at the medical center at Wright-Patterson Air Force Base in Dayton, Ohio.

She was inspired to become a judge advocate by her twin sister’s career path, and her own prior experience in the Air Force.

“After graduating from college, I enlisted in the Air Force for four years in the intel career field while my twin sister went on to law school,” Navin said. “After graduation, my sister became an active duty attorney in the Marine Corps. Since I already knew that I liked the military culture from my time in the Air Force, and because of my sister’s positive experiences as a military lawyer, I decided to separate from active duty after four years and pursue a law degree.”

Hailing from Kenosha, Wisconsin, Navin enlisted in the Air Force in 1997 and was stationed at Hickman Air Force Base, Hawaii, as a Chinese linguist. She separated from the military in 2001 and attended law school at Florida State University, and was admitted to the Hawaii Bar in 2004.

The next year, Navin was commissioned through the Air Force Direct Appointment Program and attended Commissioned Officers’ Training School at Maxwell Air Force Base in Montgomery, Alabama. She started her judge advocate career at Langley Air Force Base in Langley, Virginia as an assistant staff judge advocate and area defense counsel. She then went on to serve as a regional medical law consultant at Wright Patterson Air Force Base in Dayton, Ohio; the deputy staff judge advocate at Spangdahlem Air Base in Germany; as chief of both the Fraud Remedies Branch, and Contingency Contracting Branch at Joint Base Andrews, Maryland; and as a deployed assistant command judge advocate for CENTCOM Joint Theater Support Contracting Command at Camp As in Sayliyah, Qatar.

While on active duty, Navin also attended the Army Judge Advocate General’s Legal Center and School in Charlottesville, Virginia, where she graduated with a Master of Laws, specializing in government contracts and fiscal laws.
Members of the Daniel K. Inouye Graduate School of Nursing at the Uniformed Services University of the Health Sciences, celebrate the achievements of certified registered nurses during National Nurse Anesthetist week, on Jan. 26. (Photo by Tom Balfour)