





LETTER FROM THE PRESIDENT



his was an unusual year. The global pandemic challenged us in unprecedented ways. We were forced apart from peers and colleagues, friends, and loved ones. We were forced to cancel meeting after meeting, event after event. Still, we found ways to work around these challenges so that we could continue to meet the USU mission. As COVID-19 ramped up, our operations adjusted on campus and off. All of our schools transitioned class schedules, training exercises, and workplaces to virtual platforms, while our essential personnel "held down the fort" and maintained the health and safety of our campus. Our visionary IT staff pre-positioned the University to easily pivot to online working and learning and became the model for the Military Health System. For the first time in the University's history, our Commencement Ceremony and quarterly Board of Regents meetings were held virtually. We leveraged social media to maintain physical fitness standards, readiness, and wellness, instituting daily online challenges.

Meanwhile, our faculty and researchers worked feverishly, responding to requests for assistance from DoD and communities around the country overwhelmed by the impact of the pandemic. They developed therapeutics, technologies, practice management guidelines, and sequenced the SARS-Cov-2 genome, and launched a multitude of scientific studies aimed at finding out information about the virus as rapidly as possible to aid our nation's recovery and inform future outbreaks—all while continuing to carry out their regular day-to-day mission. Along with others around the world, they worked to rapidly develop and deliver a COVID-19 vaccine. Early on, the University proactively launched an after action review (AAR), which led to a request to lead an AAR for the Military Health System.

Although we faced many challenges throughout the year, in the pages ahead you will see that our successes were many. I am honored to lead this team and excited to share our accomplishments with you.

Sincerely,

Richard W. Thomas, MD, DDS, FACS

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President, USU



USU SCHOOL OF MEDICINE

he F. Edward Hébert School of Medicine, "America's Medical School," is unique in that its curriculum places special emphasis on military and public health medicine. This foundation prepares students for their future important roles as uniformed physicians. Though 2020 looked a little different than years past, our faculty, students, and staff worked tirelessly to keep our vital research and academic work progressing, while much of the focus shifted to COVID-19.

In addition to efforts to fight against COVID, the School of Medicine continued to recruit several outstanding new leaders. Its Department of Surgery also made headway developing its KSA Clinical Readiness Program, receiving about \$34 million of additional research funding support in 2020 from 33 of 101 selected peer-reviewed grant submission applications. The Department of Physical Medicine and Rehabilitation also expanded a number of its ongoing research studies to 90, within its \$100 million research portfolio, in the pursuit of improving care of military beneficiaries and veterans with combat and other related training and musculoskeletal injuries. The School of Medicine continued to make these and many other great strides, despite facing the many challenges of a pandemic. Here, we highlight a few of the many School of Medicine achievements in 2020.



Murtha Cancer Center Research Program

Dr. Craig Shriver, MCCRP director, received a direct request from the National Capital Region Medical Directorate (NCR-MD) director to work with the National Cancer Institute (NCI) to establish a contingency plan, if needed, to transfer all clinical oncology patients from the Murtha Cancer Center/Walter Reed National Military Medical Center (WRNMMC), to the NCI Clinical Center on short notice. Dr. Shriver was then able to approve many requests from various military treatment facilities, staffed with MCCRP-funded Cancer Clinical Research Coordinators, to shift these individuals' work from cancer to direct support of COVID-19 clinical trials at those sites.

Surgical Critical Care Initiative (SC2i)

With its Emory University partner, SC2i co-developed Artificial Intelligence Sepsis Expert (AISE), which is designed to predict sepsis six to 12 hours prior to onset. In 2020, SC2i received funding and approval to deploy AISE into the 10 largest hospitals within the Military Health System (MHS). Additionally, SC2i released 31 abstracts, presentations, and publications, including BioMed Central, the *Journal of Vascular Surgery*, the *World Journal of Surgery*, and *Critical Care Medicine*.

USU-Surgery Sponsored Mesh Suture Project

The Mesh Suture project continued on track to develop a biomechanical abdominal wall simulation model to be used for our future Surgical Laparotomy training programs and was recently retooled to support existing simulation and training efforts to better understand closure strategies and technology to prevent incisional hernias in the warfighter, which includes fabrication of a 3D biomechanical abdominal wall frame, complete with a fabricated PVC bladder.

Department of Physical Medicine and Rehabilitation (PMR)

In 2020, PMR contributed to two book chapters, 48 abstracts, 35 peer-reviewed manuscripts, and 10 invited presentations, including 11 new Tri-Service clinical practice guidelines for post-operative physical therapy rehabilitation.

PMR published the "COVID-19 Patient and Caregiver Rehabilitation Recovery Guide," with English and Spanish versions, as well, which has been distributed internationally, including military units downrange to share with family and friends suffering from the pandemic, allowing them to stay mission focused. Rehabilitation leaders also established a WRNMMC COVID-19 Post-Discharge program, including the COVID-19 Peer Support Group. Investigators also received \$5.4 million VA-DoD Incentive Funding for a partnership between the DoD (USU) and VA (Miami) to miniaturize, optimize and clinically disseminate a wearable sensor augmented tele-rehabilitation tool for service members and veterans with lower limb amputation. PMR's Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR) also convened a consensus panel to publish the first Tri-Service Post-operative Physical Therapy treatment protocols for the 11 most commonly performed orthopedic surgeries within the MHS.

Anatomy, Physiology and Genetics

The 2020 Capital Area TBI Symposium was a large success, organized by Dr.Kimberly Byrnes in coordination with USU's Center for Neuroscience and Regenerative Medicine. Many faculty members participated in presentations and organized discussions.

Graduate Education Office (GEO)

In February 2020, GEO held a one-day "Open House" and interviewed 73 applicants for five graduate programs. When the pandemic hit, all GEO programs successfully implemented distance learning. Classroom lectures and interactive sessions were delivered through Google Hangouts, Adobe Connect, and Pre-recorded lectures. Thesis and dissertation committee meetings, candidacy exams, private and public defenses were also held using distance learning tools.

Military and Emergency Medicine (MEM)

Dr. Gillian Schmitz, assistant professor, led a multidisciplinary team of physician educators as well as enlisted and civilian staff to certify 169 third-year medical students in Advanced Cardiac Life Support.

Faculty and staff also led third-year students in peer-support discussions of leadership encounters during the clerkship period and methods of managing future conflicts. MEM, additionally, made contingency plans to hold Operation Bushmaster in the spring of 2021, to continue meeting learning goals and objectives for the overall Military Medicine 200 post-clerkship module.

THE FIGHT AGAINST COVID



Most of the Class of 2020 completed a focused COVID prep curriculum. All members of the Classes of 2021 and 2022 completed it by April 15, 2020. Many began actively contributing to the COVID-19 response in the National Capital Region, and all were engaged in independent study and/or academic distance learning activities.

Two **Medical and Clinical Psychology** courses included tele-behavioral health interactions with standardized patients. COVID-19 factors played into these patient scenarios.

Department of Medicine Chair Army Col. (Dr.) Kevin Chung, along with many interdisciplinary colleagues across the MHS, produced the first MHS clinical management guidelines, the "DoD COVID-19 Practice Management Guide." The second edition was released April 14, 2020.

DOD COVID-19 PRACTICE
MANAGEMENT GUIDE

BROWNING PROBLEM

TO THE PROBLEM OF THE P

The first USU-Joint Trauma System (JTS) hosted, COVID-19 Performance Improvement Conference was held April 2, 2020. The call was modeled after



the weekly DoD JTS calls and was intended to facilitate bidirectional exchange of clinical information and performance improvement during the pandemic.

Dr. Chris Broder, professor and chair of **Microbiology** and Immunology, along with Dr. Eric Laing, a postdoctoral fellow, expanded their existing research to include SARS-CoV-2 and other related viruses. They also developed the first-ever treatment, the monoclonal antibody m102.4, which prevents the Hendra and Nipah viruses from causing potentially lethal infections. This is a safe, well-tolerated treatment, and these findings were published in *The Lancet Infectious Diseases* journal in February 2020.



Dr. David Brody, director of USU's Center for Neuroscience and Regenerative Medicine (CNRM), led a study with Dr. Thomas Esparza, a Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF) employee working in support of CNRM, that identified a nanobody that could help in the

fight against COVID-19. The nanobody was produced by a llama, and appears to work well in either liquid or aerosol form, suggesting it could also help protect a person's lungs from infections.



Navy Cdmr. (Dr.) Arlene Hudson, chair of **Anesthesiology** at USU, led a team from USU and WRNMMC as part of a DoD-wide "Hack-a-Vent" Challenge. At the beginning of the pandemic, the U.S. Special Operations Command digital platform, Vulcan, in collaboration with the DoD, put out a call for proposals to build domestically-sourced ventilators that would be easy to operate and would cost under \$500 to produce. A week after "Hack-a-Vent" was launched, 172 ventilator proposals were

submitted. Hudson led a clinical assessment team that assessed and selected the proposals submitted to Vulcan and tested the prototypes in a USU lab, testing the ventilators' ability to control ventilation. The team was made up of surgical, medical, and critical care experts, who helped narrow the proposals to five finalists, based on criteria they developed for clinical usability and the most important features that would be required to support the most limited ventilation requirements. Their team also worked with a panel of engineers who tested the basic mechanics of the prototypes, ensuring the technology would be feasible. Five prototypes from organizations spanning large corporations, small businesses, universities and government engineering teams were selected for further development.

Air Force Lt. Col. (Dr.) Bart Statt, chair of **Obstetrics and Gynecology**, led the Defense Health Agency's (DHA) Obstetrics COVID Clinical Community. He also helped the Air Force Medical Service with contingency planning for COVID surge at small and remote military treatment facilities.

Dr. Allison Malloy, an assistant professor in **Pediatrics**, served as a key advisor to WRNMMC to develop and implement COVID-19 response plans.



Army Col. (Dr.) David Benedek, chair of **Psychiatry**, along with Dr. Robert Ursano, professor of Psychiatry and Neuroscience, USPHS Capt. (Dr.) Joshua Morganstein, assistant director of USU's Center for the Study of Traumatic Stress (CSTS), and Dr. Stephen Cozza, CSTS associate director, collaborated with DHA and the White House All of Government Task Force to help with the National Association of Broadcasters in developing a public messaging campaign to address community mental health and wellbeing needs during the COVID-19 pandemic.

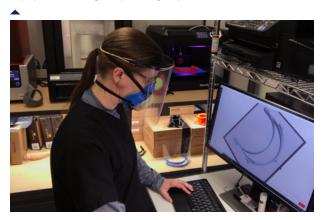
During the beginning of the pandemic, at the request of New York City's Mount Sinai Hospital and USU leadership, Benedek and Ursano also participated on a consultation team, providing knowledge and resources to address issues of healthcare worker wellbeing, crisis standards of care, and psychological effects on the health community. USU's National Center for Disaster Medicine and Public Health (NCDMPH) also participated in this collaborative group to provide leaders of New York City's Mount Sinai Health System with information on DoD work in human performance and mental health support in times of stress.

NCDMPH also collaborated in 2020 with Emory University to beta test a web-based COVID-19 self-triage tool, available at www.C19check.com.

USU's **Center for Deployment Psychology (CDP)** created a COVID-19 resource page, featuring new content to assist providers grappling with the pandemic. The site has been updated regularly and houses content related to telehealth, and responses to social distancing. CDP also answered daily requests for information from providers, clinics, agencies, and organizations both within the MHS and DoD for educational materials related to provider stress and self-care, social isolation, and modifying behavioral health treatment due to COVID-19 stress and anxiety.

Navy Capt. (Dr.) Timothy Burgess, director of USU's **Infectious Disease Clinical Research Program (IDCRP)**, was selected to represent DoD in a COVID-19, White House Advisory Committee coordinated by Health and Human Services, addressing a Treatment Guidelines Panel. IDCRP also played a key role in coordinating COVID-19 related clinical trials within the MHS.

Betsy Weissbrod, a medical illustrator and HJF employee working in support of USU's Val G. Hemming Simulation Center, developed and pilot-tested personal protective equipment using 3D printing capabilities.





PMR Chair Dr. Paul Pasquina r the 2020 AMSUS Lifetime Ach Award for his 30 years of service nation, both as a Soldier and no DoD physician. He has built work rehabilitation, therapy, research, a education programs, and cared for cowarfighter in combat during a tour to

Iraq. He has also cared for countless warfighters who came through Walter Reew with lost limbs, brain injuries, and other significant life-altering conditions.

Dr. Charles Via, professor of **Pathology**, was awarded an NIH R21 grant, "Mapping the Genes that Predispose to Murine Lupus."

Dr. Celia Byrne and Dr. Jennifer Rusiecki, associate professors in **Preventive**Medicine and Biostatistics, were awarded \$2 million in funding for more than four years through the Congressionally Directed Medical Research Programs, Breast Cancer Research Program (CDMRP, BCRP) Breakthrough Award. In collaboration with Columbia University, their research studies Polycyclic Aromatic Hydrocarbons and Breast Cancer Risk among active duty women.

Navy Cmdr. (Dr.) Chris Foster, clinical associate professor in **Pediatrics**, was awarded the Council on Medical Student Education in Pediatrics (COMSEP) Teaching and Education Award, presented annually to an individual drawn from medical schools across the U.S. and Canada. Air Force Lt. Col. (Dr.) Cade Nylund, associate professor in Pediatrics, won the 2019 Air Force Medical Service, Outstanding Achievement in Medical Research Award for his numerous studies in epidemiology and outcomes of multi-drug resistant enteric infections, pediatric gastrointestinal diseases, and the relationship between the microbiome with allergic/autoimmune conditions and obesity. Dr. Joseph Lopreiato, pediatrician and director of USU's Val G. Hemming Simulation Center, received the Greenberg-Serwint Award for Outstanding Leadership in Medical Education at the Academic Pediatric Association's regional meeting, and Air Force Col. (Sel) Courtney Judd, assistant professor of Pediatrics, was inducted into the Gold Humanism Honor Society, in honor of her thoughtful contributions to teaching humanistic medicine.

Dr. Regina Day and Dr. Vijay Singh, professors of **Pharmacology**, received funding from the DoD Joint Program Committee 7 for their research. Day received funding for her grant, "Mechanisms of Captopril Protection against Hermatopoietic Radiation Injury, Advanced Development," and Singh received funding for his grant, "Biomarkers for the Development of BIO 301 as a Prophylactic Radiation Countermeasure for the Acute and Delayed Effects of Radiation Exposure."



The School of Medicine is made up of the Medical School, and programs in Graduate Education, multiple departments, and centers, programs and initiatives.

19
Departments

M.D. Students

696

13
Centers

Graduate Students





USU GRADUATE NURSING

Daniel K. Inouye Graduate School of Nursing

SU's Daniel K. Inouye Graduate School of Nursing (GSN) graduates are uniquely prepared for practice and research in Military and Federal Health care systems. The school's curriculum focuses on operational readiness in a changing environment, clinical decision-making in the federal health care delivery system, and population health and outcomes. Its PhD program, established in 2003, is also focused on research germane to military and federal health.

Despite challenges that came along with the pandemic, GSN faculty and staff remained committed to promoting clinical excellence, furthering research and scholarship in healthcare and interprofessional collaboration in education with the School of Medicine and other USU departments. Among many efforts to support the fight against COVID-19, the GSN graduated its 2020 class several weeks early. One-hundred percent of students passed national board certification exams, and 100 percent of Nurse Practitioners and Clinical Nurse Specialist students passed on their first attempt, too, with no sacrifice to the mission. The GSN also made significant adjustments to curriculum with positive outcomes, as courses shifted to online instruction, telehealth opportunities expanded.



THE FIGHT AGAINST COVID

With COVID-19 restrictions in place in 2020, GSN faculty and student researchers experienced participant recruitment delays. However, research was not greatly impacted since faculty and students were able to adapt their research plans to account for delays in recruitment. Several students were also able to conduct their research interviews virtually, instead of in person.

The behavioral health community also supported several resilience initiatives within the GSN, including weekly cognitive and fitness activities for faculty, a 10-week Mindfulness Wellness series (July-September) for students in the 2023 class. They also developed a Well-Being GSN Intranet site, and supported the development of a USU-wide Family and Child COVID resource list.







The GSN was designated a 2020-2024 Center of Excellence by the National League for Nursing for excellence in the category "Enhance Student Learning and Professional Development." There were fewer than 70 schools of nursing from across the country and the academic spectrum of higher education that achieved this designation in any category.

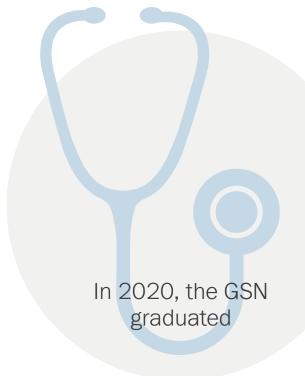
The **Office of Faculty Affairs** conducted nine faculty development sessions in FY 2020 and had a total of 53 faculty participants. The office is now able to offer American Medical Association Physician's Recognition Award (AMA PRA) credits, and its course, Teaching Strategies for Advanced Practice Registered Nurse (APRN) Preceptors, was approved for 15 AMA PRA Category 1 credits.

The National League for Nursing selected Dr. Laura Taylor, program chair of the Adult-Gerontology Clinical Nurse Specialist Program, to receive the 2020 "Mary Adelaide Nutting Award for Outstanding Teaching/Leadership."

The Army Nurse Corps Association selected Army Lt. Col. JoEllen Schimmels, GSN Psychiatric Mental Health Nurse Practitioner program director, to receive the Military Nursing Practice Award, which recognizes an officer in the rank of major or lieutenant colonel who has demonstrated outstanding proficiency in his or her duties, and has made a noteworthy mark on military nursing and patient care delivery.

The American Academy of Nursing selected Dr. Joan Wasserman, associate dean for Research, as Fellow in the Academy for her national impact on nursing, a recognition earned by less than 0.1% of all U.S. nurses.

Air Force Lt. Col. David Bradley, an instructor in the Adult Gerontology Clinical Nurse Specialist Program, was chosen for the USU Faculty Senate Education Day Innovation in Education Award in the Pre-Clerkship/Pre-Clinical category for "Operation Pumpkin." The award recognizes teachers who develop innovative teaching methods and/or transform existing teaching methods in innovative ways.



59 DNP

Doctor of Nursing Practice Students

1

Masters of Science in Nursing

3 Ph.D.

Students

100%

of students passed national board certification exams

100%

of Nursing Practice and Clinical Nurse Specialist students passed on their first attempt Navy Cmdr. Ken Radford and student Lt. Cmdr. Neal Petersen participated in a four-day immersive trauma training course in partnership with the Hostage Rescue Team of the Federal Bureau of Investigation in Quantico, Virginia, focused on rapid trauma assessment, advanced airway and blood management, wound care, and basic veterinary medicine for military working dogs.

Six USU students completed a rotation in American Samoa in 2020—three were GSN students and three were medical students. In March, these rotations were put on pause, but were scheduled to continue in January 2021. Professor Dr. Patrick Deleon and assistant professor Dr. Jill Schramm, who led these rotations in American Samoa, worked on two presentations about the endeavor, "Military Medicine in American Samoa- Connecting with Indo-Pacific Partners Through Global Health Engagement," and were presented at USU Research Days and the 2020 AMSUS Conference.

African Peacekeeping Rapid Response Partnership

Since 2018, GSN faculty have been involved in the AFRICOM African Peacekeeping Rapid Response Partnership trauma training initiative.

The course is offered to military nurses in several African partner nations to support their preparation for standing up Role 2 hospitals. These partner nations then provide assistance to other African nations in times of need, such as during conflict or in pandemics. In 2018 and 2019, the training was offered in Rwanda and Uganda. In 2020, Air Force Col. John Williamson and former faculty Col. (ret) Paul Lewis delivered the training in Senegal and Ghana. When COVID restrictions are lifted, they have been invited to return to Uganda to conduct an evaluation and assessment update.



In 2020,

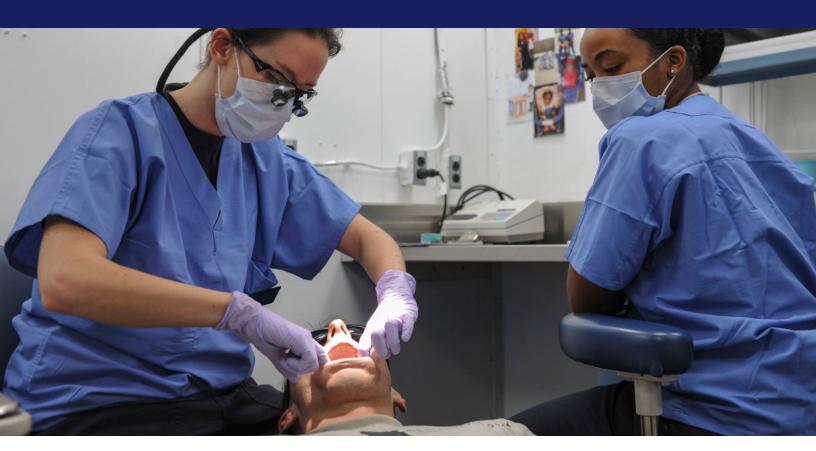
140 students
and
7 faculty members
participated in one of the GSN-led
Operational Medicine Electives





SU's Postgraduate Dental College (PDC) was established in 2010 to educate uniformed graduate dentists as future leaders in military operational environments, federal health systems and university settings. USU grants a Masters of Science in Oral Biology degree to dental residents after they successfully complete their specialty training, giving a sound scientific basis to the curriculum and helping these providers to embark upon a career of evidence-based clinical practice. The dental college also consists of six educational sites across the country that fall under three service dental schools - the Army, Navy, and Air Force Postgraduate Dental Schools.

The global pandemic did not stop the PDC from graduating nearly 80 students from its programs across the country. Not only did these grads find ways to make their way across the stage virtually, they also made remarkable strides in dental research that will ultimately continue to improve readiness.



THE FIGHT AGAINST COVID

The COVID-19 pandemic placed some restrictions on dental care, but that did not impact readiness or impact the start and end dates for the 2020 Masters of Science degree program.



In 2020, PDC graduation ceremonies took place in a variety of forums—some virtual, some pre-recorded. Regardless of how they "walked" across their virtual stage, all students were recognized, and will continue service as leaders in military dental health.



Army and Air Force residencies started training on July 1, 2020. The Navy residencies started on August 3, 2020. A total of 175 Army, Navy, and Air Force general dentists entering active duty began their 12-month PGY-1 certificate programs in the summer in PDC-affiliated military residencies.

2020 Graduation Ceremonies:



LOCATIONS:

Fort Bragg, NC
Fort Hood, TX
Schofield Barracks, HI
Fort Gordon, GA
Bethesda, MD
Keesler AFB, MS
JBSA Lackland, TX

USU Masters of Science in Oral Biology degrees:

33 21 24
ARMY NAVY AIR FORCE

547 Total degrees awarded

164

Army, Navy, and Air Force PGY-1 General Dentistry Certificate students graduated in July from

27

Military programs affiliated with the PDC



Army Col. Pete Guevara, dean of the Army Postgraduate Dental School, participated in a leadership panel with the deans of three civilian dental schools at the American Dental Education Association Deans' Conference, held virtually in November. Guevara was also named the 2020 Distinguished Alumnus for Advanced Education at the University of Pittsburgh School of Dental Medicine.

The PDC Associate Dean for Faculty Affairs, Dr. Drew Fallis, was appointed to the Research Study Committee for the Midwest Angle Society of Orthodontists and as a Writer Section Editor for the American Board of Orthodontics.

The USU/PDC additional training location at Keesler Air Force Base was restructured, so that the Masters of Science degree-affiliated Comprehensive Dentistry and Endodontics residencies closed, and were consolidated within the training programs at Joint Base San Antonio, Lackland, Texas.

Both 2019 graduates from the Endodontics Residency, Air Force Postgraduate Dental School, Joint Base San Antonio Lackland, Texas, had manuscripts published in peer review journals and were featured as cover articles—one of which was featured in the May 2020 edition of the *International Endodontic Journal*, the highest "Impact Factor" endodontic journal in publication, giving USU international recognition.

The Naval Postgraduate Dental School (NPDS) and the Air Force Postgraduate Dental School (AFPDS) selected their top research projects from their respective 2020 graduating class. Navy Lt. Cmdr. Kerry Baumann, a graduate from the NPDS Oral and Maxillofacial Pathology Residency was recognized for her Masters of Science research, "Distribution of Human Tongue Fat and Obstructive Sleep Apnea." She was also awarded the Navy and Marine Corps Achievement Medal for the Chief of the Navy Dental Corps Award for Excellence in recognition of her superior performance as a graduating resident. Maj. Bracken Smith, a graduate from the AFPDS Endodontics Residency at Joint Base San Antonio, in Lackland, Texas, was recognized for his Masters of Science research, "Targeted Endodontic Microsurgery: Implications of the Greater Palatine Artery." The Army Postgraduate Dental School will be naming their winner later this year.



The winner of the 2020 Board of Regents Patrick D. Sculley DDS Award was Army Capt. (Dr.) Daniel J. Phillips. In 2016, Phillips entered residency training in Periodontics at Fort Gordon, Georgia. While there, he completed a research investigation titled, "Buccal Bone Thickness Adjacent to Virtual Dental Implants Following Guided Bone Regeneration." His research was judged as best within the Postgraduate Dental College among 74 entries from the Army, Navy, and Air Force Postgraduate Dental Schools, which in the Postgraduate Dental College process is considered a primary discriminating factor in conjunction with his demonstrated excellence in service, leadership, and scholarship, thus identifying him as our nominee for the Board of Regents Award.

The PDC successfully pursued a dedicated dental breakout session at the virtual 2020 Military Health System Research Symposium. Eight PDC podium presentations and nine poster presentations were selected for the 2020 annual session.

PDC faculty members also earned several Faculty Development Certificates for teaching, as follows: Air Force Col. Jay Graver, AFPDS associate professor of Prosthodontics; Navy Lt. Cdmr. Nicholas Hamlin, NPDS professor of Dental Research; Dr. Jeffrey Kim, NPDS associate professor of Dental Research; Air Force Lt. Col. Daniel Palazzolo, associate professor of Periodontics, and Air Force Lt. Col. James Renda, AFPDS assistant professor of Comprehensive Dentistry.

Navy Cmdr. Keith Merchant, NPDS associate professor of Periodontics, earned a Faculty Development Certificate for academic leadership.

Navy Lt. Cmdr. James Hawkins, NPDS associate professor of Orofacial Pain, served on a working group and was a contributing author to the VA/DoD Clinical Practice Guideline, "The Primary Care Management of Headache."

"Dental Faculty Development 1 – Introduction to Graduate Teaching 2020" was offered as an opportunity to all non-billeted PDC faculty. It consists of seven modules and focuses on practical applications of principles learned from the prerequisite course, Getting Started in Health Professions Education, conducted by the USU Center for Health Professions Education. The courses's faculty included partnerships between the PDC, the Department of Education and Technology Innovation, and the Office of General Counsel.

New Leadership



Air Force Col. James Knowles succeeded Col. Jay Graver as the new AFPDS dean. Col. Knowles has served as the AFPDS Associate Dean since 2018, and as an associate professor of Comprehensive Dentistry since 2016. He also serves as the Consultant for General Dentistry to the Air Force Surgeon General.

Navy Capt. Marc Stokes succeeded Capt. Sean Meehan as the new NPDS dean. Stokes previously served as the NPSD associate dean since 2016 and as a professor of Oral and Maxillofacial Pathology since 2018.

A total of

101

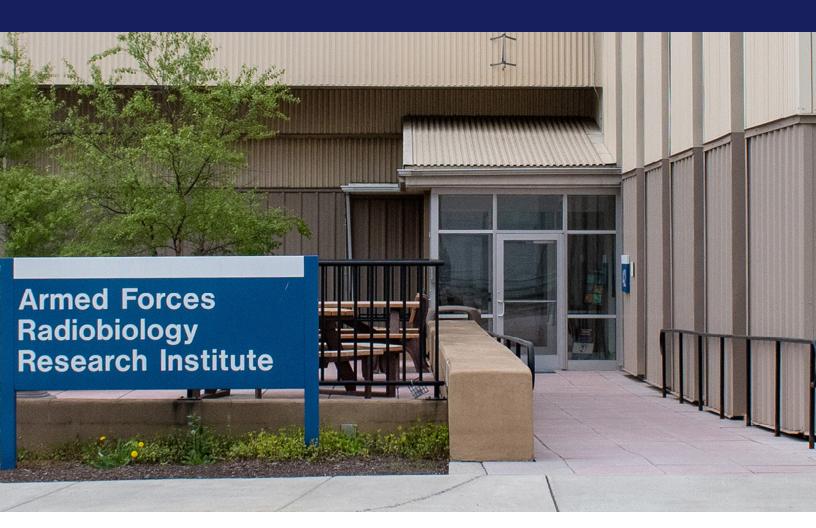
manuscripts or abstracts were published or submitted/ were accepted for publication in 2020 by PDC faculty, students, and alumni.



AFRRI Armed Forces Radiobiology Research Institute

he Armed Forces Radiobiology Research Institute (AFRRI) serves to protect and preserve the health and performance of U.S. military personnel through research and training, advancing the understanding of ionizing radiation effects.

AFRRI's mission includes education and training to maintain a pool of qualified radiation biologists, as well as basic and applied research. AFRRI's research thrusts include medical countermeasures, diagnosis of injury, low dose/low dose rate/late effects, internalized radionuclides, and combined injury. In 2020, AFRRI continued on with its mission, despite the pandemic, achieving many great accomplishments.



AFRRI WELCOMES NEW DIRECTOR

NOTEWORTHY ACHIEVEMENTS



In May 2020, AFRRI and USU welcomed a new director, Army Col. (Dr.) Mohammed Naeem. Originally from Pakistan, Naeem earned his undergraduate degree from the University of Punjab in Lahore, Pakistan. He immigrated to the U.S. in 1987, settling in New York, but later returned to Pakistan to attend medical school at King Edward Medical College, also in Lahore. He completed a radiology residency at Penn State Milton S. Hershey Medical Center in Pennsylvania in 2002 and received his commission through the Army Reserve during his residency training.

Naeem went on to complete an abdominal imaging fellowship from the University of Colorado Health Sciences Center in Denver in 2003, and a chest imaging fellowship from the National Jewish Medical and Research Center at the University of Colorado Health Sciences Center, later in 2003. In 2005, he switched to active duty service through the direct accession program.

Throughout his career, Naeem has held a number of leadership assignments, including chief of Chest Radiology and Radiology Residency program director at Madigan Army Medical Center, officer-in-charge of Radiology Education, chief of Nuclear Medicine, and chief of Radiology at Landstuhl Regional Medical Center, and Europe Regional Radiology consultant. He also served as chief of Radiology for a NATO-led hospital in Afghanistan as part of the 10th Combat Support Hospital, chief of Chest and Body Imaging, and officer-in-charge of Strategic Radiology Operations at Fort Belvoir and the Fort Belvoir Community Hospital Emergency Response Team, among other assignments. He is board certified in Diagnostic Radiology and is a Fellow of the American College of Radiology as well as the American College of Chest Physicians.

The Nuclear Regulatory Commission (NRC) concluded routine inspection of the AFRRI reactor license and follow up for missing fission chamber, with no violations.

Army Lt. Col. Lien Senchak, in AFRRI's Military Medical Operations, was appointed to become a member of a NATO Research Task Group for Ionizing Radiation Bioeffects and Countermeasures.



Medical research agreements with federal partners funded and supported research for the Biomedical Advanced Research and Development Authority, the Joint Program Committee 7 (JPC-7), and Congressionally Directed Medical Research Programs, to name a few.

AFRRI leaders also participated in Coordinated Safety Conscious Work Environment Leadership Training, responding to safety concerns in a way that would prevent retaliation.

AFRRI's reactor team completed its license amendment request for submission to the NRC, allowing the TRIGA (Training, Research, Isotopes, General Atomics) reactor to become operational.



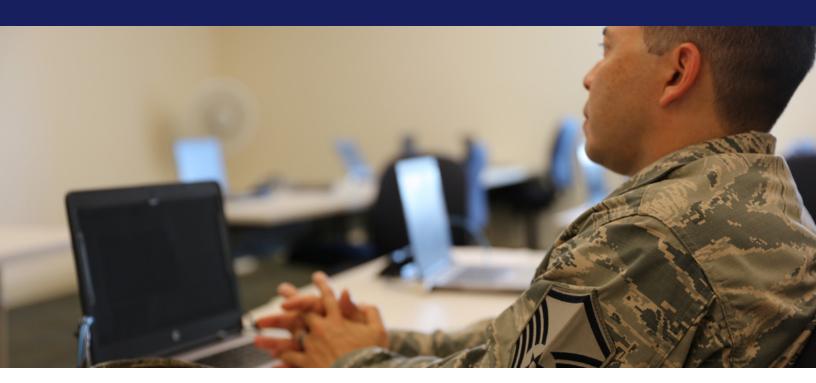
Dr. Vijay Singh, professor of Pharmacology and Molecular Therapeutics, completed the first nonhuman primate partial-body irradiation at the AFRRI linear accelerator (LINAC) facility.

AFRRIS's Scientific Research Department published eight scientific articles related to radiation countermeasures, and initiated synthesis of magnetic-core dendrimeters of various sizes for testing, as potential decorporation agents.



he College of Allied Health Sciences, CAHS, in coordination with its branch campuses and other instructional sites, such as the Medical Education and Training Campus (METC) in San Antonio, Texas, allows service members to apply their training and previously completed coursework toward a recognized, accredited degree opening doors to a successful, fulfilling career in the military and beyond. Enlisted students are rarely stationed in one place for very long, making academic residency at any one academic institution challenging, and so CAHS provides students with the opportunity to establish academic residency and compile their credits from other academic institutions into a cohesive transcript, allowing them to graduate with a degree that allows them to sit for certification exams and transfers to the private sector.

Despite the pandemic, CAHS continued to award degrees to qualified technicians so they could then use that knowledge and those skills learned in the military, and pursue careers after separating from service. Not only did CAHS allow students to continue to meet the DoD mission, CAHS also allowed students to achieve education for a lifetime of service to their communities and to the nation, long after leaving the military.



NEW LEADERSHIP



In September 2020, Dr. Lula Pelayo was tapped to serve as the next CAHS dean. She brings more than 30 years of experience in higher education. Her vast experience includes serving as faculty, continuing education coordinator, and chair person in the Department of Nursing. She has served as the dean of Professional and Technical Education at San Antonio College and as the district director of Nursing and Allied Health Programs at the Alamo Colleges. She has also conducted peer reviews of federal grants for the Health Resources & Services Administration (HRSA) division of Independent Review, in addition to having been awarded multi-million dollar grants from a private foundation to implement innovative initiatives designed to address clinical instruction space and faculty shortages in nursing education. Her academic career as an executive nurse leader has also allowed her to be instrumental in the creation, development, and implementation of educational programs, enhancing the achievement of undergraduate and graduate studies in the healthcare arena.



In January 2020, CAHS began enrolling students for college credit in Navy Medicine's Independent Duty Corpsman (Surface) Program in San Diego. Thirty students were enrolled in the first cohorts of the Army Paramedic Program at the U.S. Army Medical Center of Excellence (MEDCoE), Fort Sam Houston, Texas, and 12 students were enrolled in the Navy Independent Duty Corpsman (Submarine) at Naval Undersea Medical Institute (NUMI), in Groton, Connecticut.

Also in January, CAHS received an official request to develop a degree plan for the Navy Hospital Corpsman Basic "Corps School." The program's student load can be as high as 4,300 students per year, and the estimated academic load is 20 semester hours.



CAHS held a Curriculum Committee meeting in May 2020, updating three of its existing programs—Nuclear Medicine, Nutrition Science, Education, Training Administration and Leadership.

In July, the Army University and MEDCoE requested CAHS evaluate and include their Faculty Development Course – Instructor for inclusion in the USU Catalog, allowing enlisted USU faculty at MEDCoE to achieve an Associate of Science in Health Science (ASHS), like their peers at METC.

In August, CAHS implemented academic operations with METC's Army/Air Force Ophthalmic Technician Program and began enrollment. MEDCoE graduated its first cohort, that same month, from the Combat Paramedic Program, including two Soldiers who completed all academic requirements in order to be awarded an Associate of Science in Health Science degree.

CAHS enrolled its first cohort of students in the Tri-Service Pharmacy Technician Program at METC (Fort Sam Houston) and Special Operations Paramedic Program at the Joint Special Operations Medical Training Center (JSOMTC), at Fort Bragg, in October. That month, CAHS also participated in the METC Board of Directors meeting along with the Medical Airman Degree Work Group, keeping mission partners synchronized along educational lines of effort. CAHS also briefed the Assistant Secretary of Defense for Health Affairs, in October, to continue to convey how education directly supports readiness and multiple National Defense Authorization Act (NDAA) initiatives.

In November, CAHS enrolled its first cohort of students in the Advanced Tactical Provider Program at JSOMTC. This program supports Army Special Forces Medics and Navy Special Operations Independent Duty Corpsman.

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