

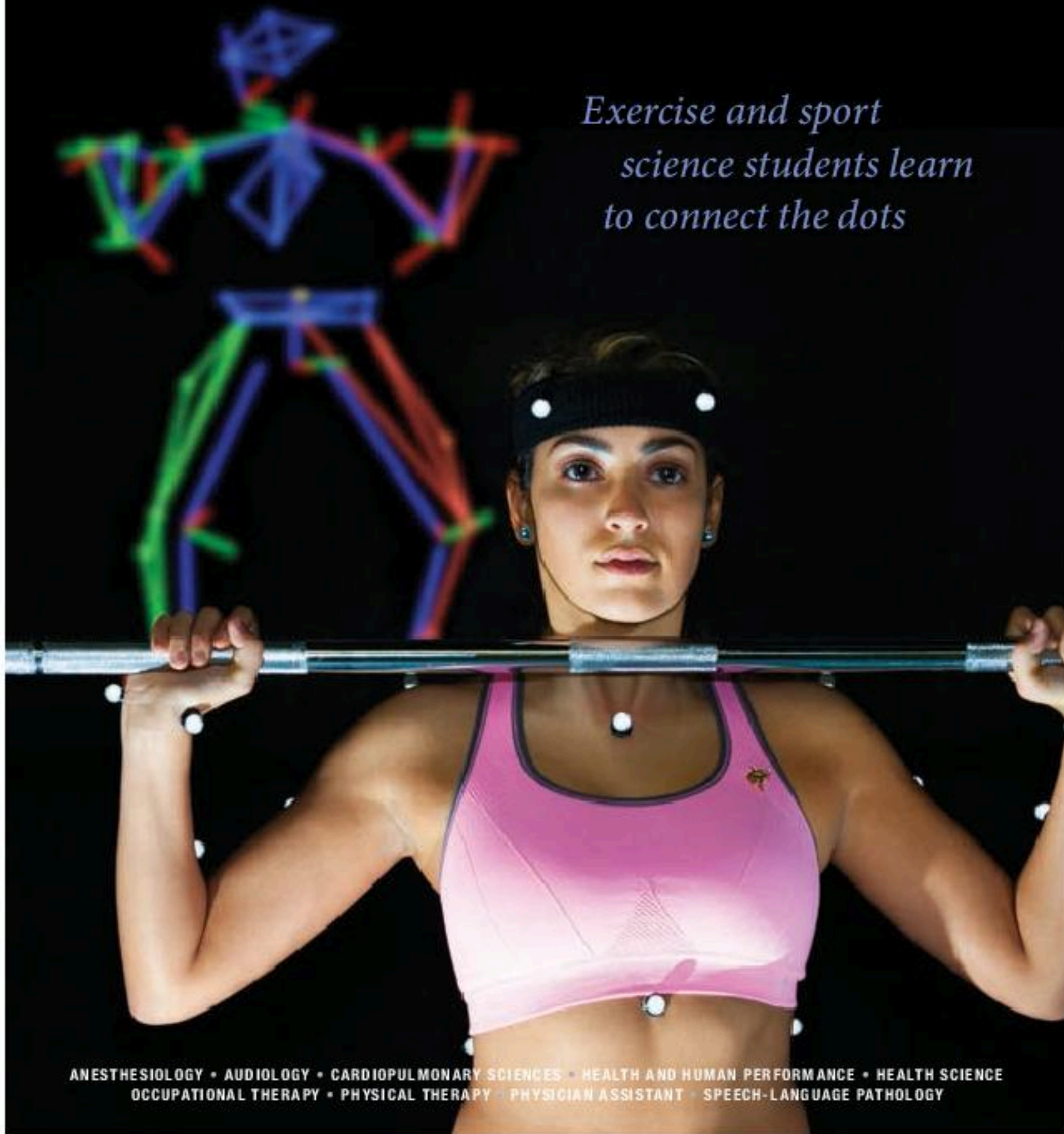


WINTER/SPRING 2016

PERSPECTIVES

COLLEGE OF HEALTH CARE SCIENCES

*Exercise and sport
science students learn
to connect the dots*



ANESTHESIOLOGY • AUDIOLOGY • CARDIOPULMONARY SCIENCES • HEALTH AND HUMAN PERFORMANCE • HEALTH SCIENCE
OCCUPATIONAL THERAPY • PHYSICAL THERAPY • PHYSICIAN ASSISTANT • SPEECH-LANGUAGE PATHOLOGY



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ON THE COVER: Shivani Wood, a junior with a dual major in exercise and sport science and biology, acts as a subject in NSU's Exercise and Sport Science Teaching and Research Laboratory to determine 3D biomechanics of the power-clean exercise.

Dean's Message



"If you want to go fast, go alone. If you want to go far, go together."
This African proverb expressly captures the refrain of the College of Health Care Sciences (CHCS) as it continues to embrace and add programs that embody the construct of allied health education.

The CHCS has experienced tremendous growth since its inception in 1993, and it is in keeping with this tradition that two more departments—Speech-Language Pathology and Health and Human Performance—were welcomed to the college on July 1, 2015. Both departments comprise programs that have a natural affinity to our existing programs and portend tremendous collaborative prospects for the future.

Importantly, the additions will provide opportunities for greater interprofessional engagement, with an eye toward enriching the educational experiences for both our faculty members and students. With interprofessional practice a goal to which health care strives, incorporating these programs into the CHCS only enhances the prospects of bringing this goal to fruition.

The programs are like new strands weaved into the CHCS cord, further strengthening the college's fabric. With its rich diversity, the CHCS remains committed to demonstrably exuding its vision and NSU's Core Values. Today, that vision is much more attainable because of the addition of gifted and committed faculty scholars, dedicated students, and committed staff members from the two departments. Essentially, the CHCS is much richer today than it was on June 30, 2015.

It is with great pride and satisfaction that the CHCS welcomes the departments of Speech-Language Pathology and Health and Human Performance to its diverse and vibrant community of scholars and learners dedicated to achieving its best for the health care community. In the words of Ralph Waldo Emerson, "Do not go where the path may lead, go instead where there is no path and leave a trail."

A handwritten signature in black ink, appearing to read "Stanley Wilson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Stanley Wilson, Ed.D., PT, CEAS
Dean, College of Health Care Sciences
Nova Southeastern University

Perspectives

Winter-Spring 2016 • Volume 4, Number 1

NOVA SOUTHEASTERN UNIVERSITY

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Chancellor's Communiqué



When we merged with Nova University in 1994 and came to the Fort Lauderdale/Davie Campus, there were about 1,900 full-time students in the various Health Professions Division (HPD) programs. Today, that number has grown to approximately 9,500 full-time students.

The wonderment of walking around our hallways and seeing the rainbow of white-coat patches and scrubs unmistakably indicates the diversity of our programs. It's a scenario that will only continue to increase with the recent approval of the NSU Board of Trustees to establish the College of Allopathic Medicine, which will exist alongside our esteemed College of Osteopathic Medicine. As a result, the HPD will consist of eight colleges in the not-too-distant future.

Because NSU has always endeavored to be at the forefront of educational innovation, the university took the bold step earlier this year to realign many of its colleges and programs. As part of this realignment, a number of the university's undergraduate programs were relocated to other NSU colleges, including the HPD's College of Health Care Sciences. This was a wise move in my opinion, because I believe it will serve as a catalyst to increase the number of dual-admission opportunities for our students.

During the past several months, five academic degree programs that were formerly housed at other NSU colleges were repositioned into the College of Health Care Sciences. These include the B.S. in Speech-Language and Communication Disorders, the M.S. in Speech-Language Pathology, the SLP.D. in Speech-Language Pathology, the B.S. in Athletic Training, and the B.S. in Exercise and Sport Science.

This realignment also brings tremendous efficiency to presenting education to our undergraduate students, because it creates an atmosphere of mentorship and collegiality between the undergraduate, graduate, and first-professional students. As a result, we're helping to set the educational paradigm for the rest of the nation.

Frederick Lippman, R.Ph., Ed.D.
Chancellor, Health Professions Division
Nova Southeastern University



HEALTH
PROFESSIONS
DIVISION

CHCS Welcomes TERRY BUILDING New 2 Departments

In 2015, the College of Health Care Sciences welcomed two new departments—the **Department of Health and Human Performance** and the **Department of Speech-Language Pathology**. The college is now home to 29 different academic programs that are preparing emerging professionals to serve the health care needs of our community and nation.

BY ELIZABETH SWANN, PH.D., ATC, DEPARTMENT CHAIR, HEALTH AND HUMAN PERFORMANCE, AND
ELIZABETH ROBERTS, PH.D., OCC-SLP, ASSOCIATE PROFESSOR, DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY



From left: Exercise science students Winter Rodriguez, Kyle Welp, and Sean Lopez, watch as Tobin Silver, Ph.D., CSCS, right, associate professor of the exercise and sports science program, prepares to measure the fat-free mass and fat mass of Michael Salerno, a student, using the Bod Pod.

DEPARTMENT OF HEALTH AND HUMAN PERFORMANCE

The Department of Health and Human Performance was created in 2015 and encompasses the Athletic Training Education Program, the exercise and sport science major, and the exercise science minor, with the potential for growth to add new programs. The Athletic Training Education Program, established in 2003 by Elizabeth Swann, Ph.D., is accredited by the Commission on Accreditation of Athletic Training Education.

Athletic training students graduate with a Bachelor of Science in Athletic Training and are eligible to sit for the Board of Certification (BOC) examination. In 2015, the college's BOC pass rate was 100 percent in the graduating class. Athletic trainers (ATs) are health care professionals who collaborate with physicians to provide preventative services, emergency care, clinical diagnoses, therapeutic intervention, and rehabilitation of injuries and medical conditions.

Pradeep Vanguri, Ph.D., ATC, serves as the program director along with Megan Colas, Ph.D., ATC, NEMT-B, clinical education director.

Continued on next page

Jeffrey Doeringer, Ph.D., ATC, recently completed research investigating the effects of cold-water immersion on athletic performance.

The AT curriculum provides a balance between classroom instruction and clinical experience that allows students to begin fieldwork during their freshmen year. Currently, more than 30 clinical sites are used, including the NSU Athletic Training Clinic on the Fort Lauderdale/Davie Campus, which is located in the Don Taft University Center and encompasses more than 3,000 square feet of cutting-edge equipment for the more than 350 student-athletes on campus. In addition to NSU, the college's athletic training students have clinical field experiences in a variety of settings throughout South Florida.

Monique Mokha, Ph.D., ATC, CSCS, who serves as program director of the B.S. in Exercise and Sport Science Program, builds the bridge for both majors with her expertise in biomechanics and kinesiology, among other research and service-learning interests. The exercise and sport science (EXSC) major provides students with a foundation in the movement sciences, which promotes improvements in health, fitness, and performance for the physically

To learn more about the Health and Human Performance programs, visit www.healthsciences.nova.edu/index.html.

active. The program's primary goal is to prepare students to be evidence-based practitioners of exercise and human movement disciplines who think critically about the science behind their practice.

A student graduating from the program, which recently received recognition from the National Strength and Condition Association, will be able to seek employment as an exercise specialist, fitness and wellness coordinator, sport performance researcher, and strength and conditioning specialist. He or she will also be able to enter professional graduate programs in exercise sciences and other fields, such as biomechanics, exercise physiology, and motor behavior.

The Exercise and Sport Science Teaching and Research Laboratory is a 2,400-square-foot facility dedicated to enhancing the preparation of undergraduate students. The impressive equipment inventory used with both teaching and research includes the Bod Pod, a Vicon motion capture system, an in-ground force plate to measure power and balance, a Parvo metabolic cart, and other strength-training equipment.

Jose Antonio, Ph.D., FNSCA, FISSN, CSCS, and Corey Peacock, Ph.D., CSCS, CISSN, CPT, are two of the four Exercise and Sport Science Program

faculty members who have active research studies ongoing with undergraduate students every semester. The current areas of focus include, but are not limited to, increased protein supplementation for strength training, the effects of myofascial release techniques on athletic performance, physiological characteristics with elite athletes, and ongoing functional movement screening on NCAA Division II athletes.

During the last semester of the Exercise and Sport Science Program, Tobin Silver, Ph.D., CSCS, practicum director, guides senior students through a practicum experience. More than 90 sites have been used around the globe, including a yoga retreat in Hawaii, the Pete Bommatiro Performance Systems with the National Football League, the Special Olympics, the U.S. Coast Guard, the Miami-Dade Police Wellness Program, and the IMG Performance Institute in Bradenton, Florida. This service-learning opportunity provides real-world experiences to help develop the students' professional goals. ■



From left: Speech language pathology students Rebecca Ramos and Katie Lewis discuss a videoendoscopic study of a patient's vocal folds with Elizabeth Roberts, Ph.D., CCC-SLP, a associate professor.

DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY

The Department of Speech-Language Pathology became part of the College of Health Care Sciences in July 2015. This department, which is managed by Wren Newman, Ed.D., is housed in a three-story facility at 6100 Griffin Road in Davie. Located within this building is the NSU Clinic for Speech, Language, and Communication, the University of Miami/NSU Center for Autism and Related Disabilities, and numerous faculty offices and classrooms.

This department previously had a long and successful history as part of NSU's Abraham S. Fischler College of Education, starting with the Master of Science in Speech-Language Pathology in 1983. The department now consists of three degree programs—the Bachelor of Science (B.S.) in Speech-Language and Communication Disorders, the Master of Science (M.S.) in Speech-Language Pathology, and the Doctor of Speech-Language Pathology (SLP.D.).

"The program at NSU was a perfect fit for me," said recent graduate Jane Weddington Flagg, M.S., CCC-SLP. "The delivery method allowed me to be a full-time student, while also working full time. The easy access to the professors and my fellow students was an invaluable asset. The program encouraged a hands-on approach that allowed me to apply what I learned to my interactions with clients and students in the field."

Continued on next page

The Bachelor of Science in Speech-Language and Communication Disorders, which is the newest degree program in the

department, is administered by Melissa Edrich, Ed.D., CCC-SLP, undergraduate coordinator and SLP program instructor. The program was approved by the NSU Board of Trustees in December 2012 and currently has 103 students. Classes are offered in the daytime, evening, and online in the 120-credit program. Graduates may continue into the master's program or become speech-language pathology assistants—support personnel who assist graduate-level, certified SLPs in providing a variety of services in various work settings.

In the speech-language pathology field, possessing a master's degree is of paramount importance. The Master of Science in Speech-Language Pathology Program, led by Steven Vertz, M.S., CCC-SLP, associate director and SLP program instructor, has approximately 700 students and is the largest such program in the United States. It is accredited by the Council of Academic Programs in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association and approved by the Florida Department of Education and the Nevada Department of Education.

Coursework is delivered face-to-face at several NSU campuses, as well as online. The program, which consists of 52 credits at the graduate level and 28 credits in prerequisite courses, allows students to complete clinical requirements in both local and national clinical placements.

M.S. graduates are employed in a variety of settings that includes public schools, preschools, hospitals, nursing homes, skilled nursing facilities, inpatient and outpatient rehabilitation clinics, private practices, and universities. "I felt well prepared for my externships, both pediatric and adult, and have continued to feel confident in my position as an acute-care speech pathologist with a special interest in swallowing," said Cheryl Lopez, M.S., CCC-SLP, a recent program graduate.

For additional information about the
Speech-Language Pathology programs, visit
www.healthsciences.nova.edu/slp/index.html.

The Doctor of Speech-Language Pathology (SLP.D.), with Rachel Williams, Ph.D., CCC-SLP, who serves as SLP coordinator

and program professor, was first offered in 1996 and has the distinction of being the first professional degree program in the United States for speech-language pathologists. The students are primarily certified speech-language pathologists holding master's degrees who wish to obtain a doctoral degree.

The program follows the cohort concept model, and classes are offered online and in a weekend format with hybrid delivery of online and live instruction on campus. All doctoral students are required to travel to Florida to participate in the Summer Institute on Leadership Development and Research.

In the fall of 2015, the program's 22nd cohort began. Currently, there are 63 students and 54 recent graduates. Program requirements include 26 credits in core courses, 12 credits in research courses, 12 credits for the applied dissertation, and 3 credits in leadership development. The program typically requires two years for the coursework, while additional time may be necessary for the dissertation process.

The NSU Clinic for Speech, Language, and Communication provides individual and group therapy to children and adults with communication disorders. It also offers outreach programs in the Broward County Schools Voice Resonance Clinic, the Charter Schools of Excellence, the NSU Mailman Segal Center for Human Development, and the Cleft and Craniofacial Center at Joe DiMaggio Children's Hospital.

The clinic's patient population includes individuals with articulation/phonological disorders, language delays/disorders, stuttering, voice disorders, and aphasia. Some of the patients have incurred speech and/or language disorders secondary to autism, traumatic brain injury, stroke, and Parkinson's disease. The clinic provides these services, as well as accent modification, to both the local and NSU communities. ■

Student Affairs



Members of the NSU Interprofessional Diabetes Education and Awareness team provide diabetes education at the American Diabetes Association Walk for the Cure.

CHCS Students Positively Impact the Community

NSU College of Health Care Sciences' students are making a valuable difference in their communities. Last year, they raised more than \$4,000 for local charities, contributed nearly 3,000 hours of community service, served more than 3,000 individuals, and donated more than 300 pounds of food and clothing to local homeless and special-needs shelters. The students are not just positively impacting those whom they serve; they are also developing their leadership skills, building their moral muscles, and expanding their capacity for compassion.

One example of the many outstanding community-service initiatives led by CHCS student leaders is

Project SEED (Serving Everyone and Embracing Diversity). Every year in November, Fort Myers physician assistant (PA) students and faculty members go to Immokalee, Florida, to serve the migrant workers and others in the city.

Throughout the year, students work with local organizations to secure donations for items such as protective eyeglasses, bicycles for transportation, books, and clothing. Every year, residents anxiously await the team's arrival. Nursing students joined the PA team, and this interprofessional team of faculty members and students provided free education on dental health, blood pressure, blood sugar, and nutrition.



NSU Fort Myers physician assistant students provide health care screenings to Immokalee residents.

At the end of the day, every adult and child who attended walked away empowered to improve and maintain good health, while many went home with new clothes, books, and/or a new bicycle.

For more information about the community-service initiatives led by CHCS student leaders, visit www.healthsciences.nova.edu/studentaffairs/success/index.html. ■

CAPE Corner

Embracing Interprofessional Education and Interprofessional Practice

BY SUZIE SAGUES WOLF, M.S., PAS, PA-C, CHAIR, IPE BEST PRACTICES SUBCOMMITTEE, AND ASSISTANT PROFESSOR, PHYSICIAN ASSISTANT PROGRAM—JACKSONVILLE

The CHCS Best Practices Forum, which is a component of the Center for Academic and Professional Excellence (CAPE), has placed a strong focus on the significance of interprofessional education (IPE) and interprofessional practice (IPP). The IPE Best Practices Subcommittee, formerly led by Jacqueline Reese Walter, Ph.D., OTR/L, is diligently working on constructing methods of promoting IPE curriculum and activities at all NSU campuses.

Interprofessional education activities are a vital part of health care education and are now being included in many program accreditation standards.

Interprofessional education is when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Interprofessional education has shown to provide health care personnel with the interprofessional skills needed to be “collaborative practice-ready” when caring for patients. Overall, IPE and collaborative practice improve health care access, clinical resources, outcomes for patients with chronic disease, patient care, and safety. IPE is also linked to decreased patient complications, length of hospital stay, tension among caregivers, staff turnover, hospital admissions, clinical errors, and mortality rates.¹

Exposure to interprofessional activities will provide students with the skills needed to practice health care more effectively and improve health outcomes.

The CHCS IPE Best Practices Subcommittee is focusing on the following goals:

- developing, conducting, and evaluating IPE educational seminars for effective IPE faculty member training
- enhancing interprofessional team approaches in NSU clinics and clinical educational sites
- demonstrating evidence of regional campus involvement in IPE/IPP activities
- establishing formal IPE initiatives within curricula and aligning with accreditation standards across disciplines

By working toward these goals, the IPE Subcommittee hopes to gain full faculty support and involvement to ultimately improve student experiences and health care outcomes.

One of the crucial measures of the committee’s initiatives is to also promote and emphasize IPE activities at all NSU campuses. Physician assistant students in Fort Myers annually host Project SEED (Serving Everyone and Embracing Diversity) and invite nursing students and others to join them in this collaborative event. Additionally, a number of NSU programs, including the physician assistant (PA) programs in Orlando and Jacksonville, have participated in IPE simulation events.

¹From the World Health Organization, framework for action on interprofessional education and collaborative practice, www.who.int/hrh/resources/framework_action/en/, published in 2010 and accessed on April 23, 2015.

“Interprofessional education is important for the growth and development of our students, who will be working in interprofessional medical teams upon graduation.”

—Kerry Whitaker, D.H.Sc., PA-C

The PA—Orlando Program has participated in emergency simulations with paramedics and nurses, mock disaster drills, and multiple sports physicals with other nurses, physicians, and physical therapists. On September 28, 2015, the PA—Jacksonville class of 2016 students collaborated and participated in a burn-patient simulation with neighboring instructor St. Johns River State College.

“Interprofessional education is important for the growth and development of our students, who will be working in interprofessional medical teams upon graduation,” said Kerry Whitaker, D.H.Sc., PA-C, who serves as program and director of the PA—Jacksonville Program. “The value of introducing medical teams in the medical home as part of the educational process will prepare our students to communicate to other team members more effectively, as well as utilize available resources to ensure patients receive quality patient care and improve overall patient health care outcomes.”

Interprofessional education will continue to be an important

initiative as it becomes more popular within academic curricula. The IPE Best Practices Subcommittee Forum plans to expand its current resources and events within the CHCS. For more information on the CHCS IPE Subcommittee, please contact Sandra Dunbar at (954) 262-1305 or Suzie Wolf at (904) 245-8976. ■



From left: Jillian Capas, Andrew Goodwin, and Rajesh Krishnan, interprofessional program students

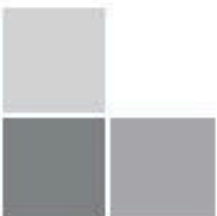
Anesthesiologist Assistant

FORT LAUDERDALE



Hospital Credentialing: *An Essential Clinical Component*

BY MICHAEL STOUT, M.M.S.C., AA-C, PROGRAM DIRECTOR



CHCS faculty members and students participated in a collaborative, published review of hospital credentialing for anesthesiologist assistants. In partnership with the Florida Association of Medical Staff Services (FAMSS), they aimed to bring the best practices in hospital credentialing to the American Academy of Anesthesiologist Assistants (AAAA) membership.

Published in the AAAA newsletter, the article provided valuable insight into the process for which anesthesiologist assistants, among other allied health professionals, are reviewed for patient care privileges in the hospital setting. The process stems from the Joint Commission Standards requiring hospitals to ensure providers are “competent to perform the privileges requested.” Providers must be credentialed initially, then every two years with monitoring of practice patterns along the way.

“The primary goal of medical staff members in the office is ensuring patient safety,” said Trudy Kraemer, FAMSS president. “This goal is achieved through two main objectives—verifying the accuracy of information provided to the hospital credentialing committee and ensuring the appropriateness of requested privileges.”

In this review, the practitioner’s program of study plays an influential role in maintaining professional scope of practice. The opportunities NSU offers through its comprehensive training programs ensure that its graduates are credentialed to perform all of the common competencies in the provider’s field. Credentialing, if properly applied, can document patient care competency throughout a practitioner’s career. In keeping with the university’s core values of academic excellence and community, the College of Health Care Sciences engages key stakeholders in practice-management issues that support our students’ roles as highly skilled health care providers.

Faculty members and students described the task as an “enriching experience.” The opportunity to participate in a national practice issue heightened their awareness of the advocacy and service components that contribute to their development of professionalism. By working alongside expert faculty members and industry leaders, CHCS students experienced the role of higher education in the implementation of research-to-practice methods.

Through their leadership efforts, the students gained valuable experience toward their competency. “I was really excited when I saw our article published,” commented one CHCS student. “It was great to see that, as students, we can contribute to our profession.”

Their work will also be featured at the AAAA 40th Annual Conference being held April 2–5, 2016, in Denver, Colorado, where it will be presented to the AAAA Practice Committee. Anesthesiologist assistant faculty members encourage their students to participate in publication, both in scholarly research and practice editorials. These activities foster the development of their leadership skills as they master their respective clinical competencies. ■

“It was great to see that, as students, we can contribute to our profession.”

—CHCS student

Audiology

FORT LAUDERDALE



Alumna Shares Update

BY JAMIE ANGUS ALLD. (CLASS OF 2006)

Jamie Angus, Au.D., who serves as chief of the Department of Otolaryngology's Division of Audiology and Hearing Research at MedStar Georgetown University Hospital in Washington, D.C., provided a brief update of what she has been doing professionally since graduating from the college nearly a decade ago.

As an audiologist at MedStar Georgetown University Hospital's Division of Audiology and Hearing Research, I have had opportunities in many different areas

of hearing and balance health care. I started working for MedStar Georgetown in February 2008 and began to evaluate, diagnose, and treat pediatric through geriatric populations in both inpatient and outpatient settings. The ability to complete diagnostic hearing evaluations, unседated and sedated auditory-evoked potentials, vestibular evaluations, and auditory processing evaluations, as well as offer hearing-aid services, has provided a diverse, yet rewarding, work environment.

The education of Doctor of Audiology, as well as medical students, at Georgetown University has been another area of focus. The development of MedStar Georgetown's Au.D. Externship Program has enabled our site to be a successful and desired placement for students across the country. As an instructor for Georgetown University's medical students, participation in grand rounds, otology conferences, and basic audiology science courses is completed during the academic year.

During my tenure, I have had the opportunity to serve as MedStar Georgetown's newborn hearing screener coordinator and represent the division at multidisciplinary team meetings for the hospital's Neonatal Intensive Care Unit and at Department of Health meetings for the District of Columbia, Maryland, and Virginia.

Thanks to the support of my colleagues and the physicians in the Department of Otolaryngology, I was encouraged to welcome the next step of my career—becoming chief of the Division of Audiology and Hearing Research in January 2015. The administrative side of running a hospital-based audiology practice has been an enlightening and gratifying experience. ■



Auditory Acoustic Reflex Patterns in Children with APD

Jackie M. Davie, Ph.D., CCC-A, and Sarah Wakefield, Au.D., who serve as associate professors and faculty preceptors in the NSU Audiology Clinic, are conducting a study to assess the outcomes of auditory processing disorders (APD) evaluation in order to better understand the location of dysfunction within the central auditory nervous system.

Davie has worked as a pediatric audiological researcher for the past 19 years, primarily studying middle-ear function in infants and children with ear infections. Wakefield has been involved in assessing auditory processing disorders for the past seven years and began researching in the same field three years ago.

The central auditory nervous system (CANS) is organized to include redundancy in its pathway, which helps make the system less susceptible to functional deficits if a lesion exists. In children, however, the CANS does not completely mature until puberty, somewhat negating the positive impact of the pathway redundancy. If a lesion exists prior to maturation, children can display difficulties with their ability to listen and comprehend. These deficits are frequently classified as an auditory processing disorder.

The definition and assessment of APD is a somewhat contentious area of debate within the field of audiology and child development. Part of the contention is due to a lack of research, which defines the precise etiology of the disorder. For example, is there a single locus of dysfunction confined to the central auditory system or is it more of a spectrum of processing difficulties? Are the deficits cortical in nature (top-down), such as language, or attention oriented? Or is this a result of a breakdown in lower-level sensory processing (bottom-up) of auditory stimuli? Currently, the researchers are evaluating the possible site of dysfunction in the central auditory nervous system by analyzing previously collected clinical data.

As part of the auditory processing testing battery used at NSU, testing includes both low-brainstem level



Jackie M. Davie (seated) and Sarah Wakefield

electrophysiological and higher-cortical level behavioral testing procedures. At the low brainstem level, testing consists of acoustic reflexes. The response for this test is received through the superior olivary complex in the pons and provides data about low-brainstem level auditory integration.

Behavioral procedures consist of a variety of tests examining auditory closure, auditory integration, auditory separation, pattern perception, gap detection, and selective auditory attention. In order to evaluate for patterns in results, medical charts were reviewed for the children who were assessed for auditory processing disorders. Data was evaluated using descriptive analysis of the test results in comparison to the various APD profiles.

More than 300 APD evaluations have been completed in the past five years in the NSU Audiology Clinic. Preliminary results revealed a higher-than-expected pattern of elevated/absent acoustic reflexes for certain APD profiles. Due to a higher-than-expected number of children with elevated acoustic reflexes, and in light of other normal peripheral measures, abnormal function at the level of the superior olivary complex, or even the efferent auditory system, is suspected. Further evaluation into superior olivary complex and efferent function is warranted, including prospective evaluation of electrophysiological function, auditory brainstem, and cortical-evoked potentials. ■

Audiology

FORT LAUDERDALE



From left: Sherry Rauh, Au.D.; Sarah Wakefield, Au.D.; Teri Hamill, Ph.D.; Alyssa Needleman, Ph.D.; Patricia Gaffney, Au.D.; Elna Friedland, Au.D.; and Alexis Cohen, Au.D.

Inaugural Alpha Upsilon Delta Members Inducted

BY ALYSSA NEEDLEMAN, PH.D., CLINIC DIRECTOR AND ASSOCIATE PROFESSOR



The CHCS Alpha Upsilon Delta Audiology National Honor Society was established on July 28, 2015. The society's purpose is to promote and recognize significant scholarship, leadership, and service to the audiology profession, as well as advance the science of hearing and vestibular disorders.

Alpha Upsilon Delta is the first and only national honor society dedicated to academic scholarship in audiology. Membership is granted to those individuals graduating from programs with a doctoral degree in audiology or the hearing sciences who have maintained an overall scholarship average of 3.8 or better and shown capacity for leadership, service, and achievement.



ALPHA UPSILON DELTA **AUDIOLOGY HONOR SOCIETY**

The CHCS Alpha Upsilon Delta, Alpha Chapter, inducted its inaugural class on August 20, 2015. Inductees included

CLASS OF 2015 GRADUATES

Alexis Cohan, Au.D.

Sherry Rauh, Au.D.

CLASS OF 2014 GRADUATES

Paige Aufseeser, Au.D.

Brianna Kuzbyt, Au.D.

Chelsea Nava, Au.D.

Diana Russell, Au.D.

Ania Tomasik, Au.D.

FACULTY MEMBERS

Jackie Davie, Ph.D.

Erica Friedland, Au.D.

Patricia Gaffney, Au.D.

Teri Hamill, Ph.D.

Alyssa Needleman, Ph.D.

Sarah Wakefield, Au.D.

Cardiopulmonary Sciences

PALM BEACH

New Faculty Member Joins CHCS

BY LISA FARACH, M.S., R.N., RRT, CHAIR

K. Todd King, Ph.D., M.A., RRT, CPFT, CHES, who recently joined the Respiratory Therapy Program, is an Atlanta, Georgia, native who lived in Pennsylvania for about 10 years. Prior to joining the CHCS faculty, he worked at Johns Hopkins Bayview Medical Center in Baltimore, Maryland, as the coordinator of respiratory therapy education and advanced cardiac life support.

In addition to working within the respiratory therapy department, he also participated in hospital-wide and interdepartmental educational processes that were developed and implemented to train the staff members and benefit the patients served at Bayview. King also taught at Towson University in Baltimore, Maryland, for the Department of Health Sciences and at Harrisburg Area Community College's York Campus.

During his extensive respiratory therapy career, King has worked in some of the nation's top trauma facilities. Prior to entering graduate school, he worked as a traveling respiratory therapist in more than 10 different states and protectorates. He earned his M.A. and Ph.D. degrees from the University of Alabama—Birmingham School of Education. ■



K. Todd King, Ph.D., M.A., RRT, CPFT, CHES, joined NSU's Respiratory Therapy Program in the Department of Cardiopulmonary Sciences.

Professional B.S. in Respiratory Therapy Program Launches

BY JENNIFER BENCSIK, M.A., RRT, INTERIM CLINICAL DIRECTOR, RESPIRATORY THERAPY PROGRAM

The Department of Cardiopulmonary Sciences kicked off the fall semester with the launch of its Professional Bachelor of Science in Respiratory Therapy Program, which comprises nine enthusiastic students from Saudi Arabia, the Bahamas, Haiti, Holland, and multiple locations within the United States. In the true diverse culture that NSU has been recognized for, each student brings a different background and perspective into the program. This diversity allows for constant learning, both inside and outside the classroom.

The students, who attend four courses from Tuesday through Thursday, enjoy the condensed schedule because it allows them to have additional free time on Monday and Friday for tutoring or extra practice in the labs. Their typical school week starts at 9:00 a.m. on Tuesday, when they learn about the fundamentals of respiratory care. In this course, the students are introduced to the history of respiratory therapy, then jump right into the physics and equipment that make up the foundation of respiratory care. If you pass by the Intensive Care Lab on Tuesday afternoons, you might see the students learning about oxygen devices or humidity and aerosols.

On Wednesdays, the day begins with statistics, which prepares the students for conducting research in their upcoming course—Evidence-Based Practice. After lunch, they move into the Cardiopulmonary Anatomy and Physiology course, which might be considered one of the hardest in the semester.

Thursdays mean it's time for the Respiratory Care Basics and Patient Assessment course, which provides a strong foundation in head-to-toe assessment of patients. Some of the areas covered include vital signs, pulse oximetry, and arterial blood-gas analysis. Following the lecture, students can be found in the Physical Assessment Lab practicing manual blood pressures and listening to

breath sounds on their lab partners. All of the courses flow together, creating repetition in material, which makes for a reinforced learning environment.

When the semester concluded, the department and the students began preparing for inaugural clinical rotations, which began in January and involved the students being assigned to local hospitals for eight-hour shifts



once a week to practice the skills they acquired in their first semester. Thanks to the clinical affiliation agreements the department has cultivated throughout South Florida, the students are guaranteed to obtain a vast level of experiences.

As a new part of CHCS, the Department of Cardiopulmonary Sciences, it strives to provide a nurturing learning environment where all students' needs are met. This goal will ensure that every student gains the knowledge and confidence required to be successful in the program, as well as in their careers. Seeing the development of this program come to life has already proven rewarding to everyone who participated in getting the department off the ground. ■

Cardiovascular Sonography

TAMPA



Above, Stanislav Timofeev, M.D., is shown in the learning lab at the NSU Tampa Campus.

Left, the site of the Symposium on Echocardiography in Congenital Heart Disease in Cedar Falls, Iowa

Cardiovascular Sonography Faculty Member Presents at National Conference

BY SAMUEL YODERS, ED.S., RVT, PROGRAM DIRECTOR

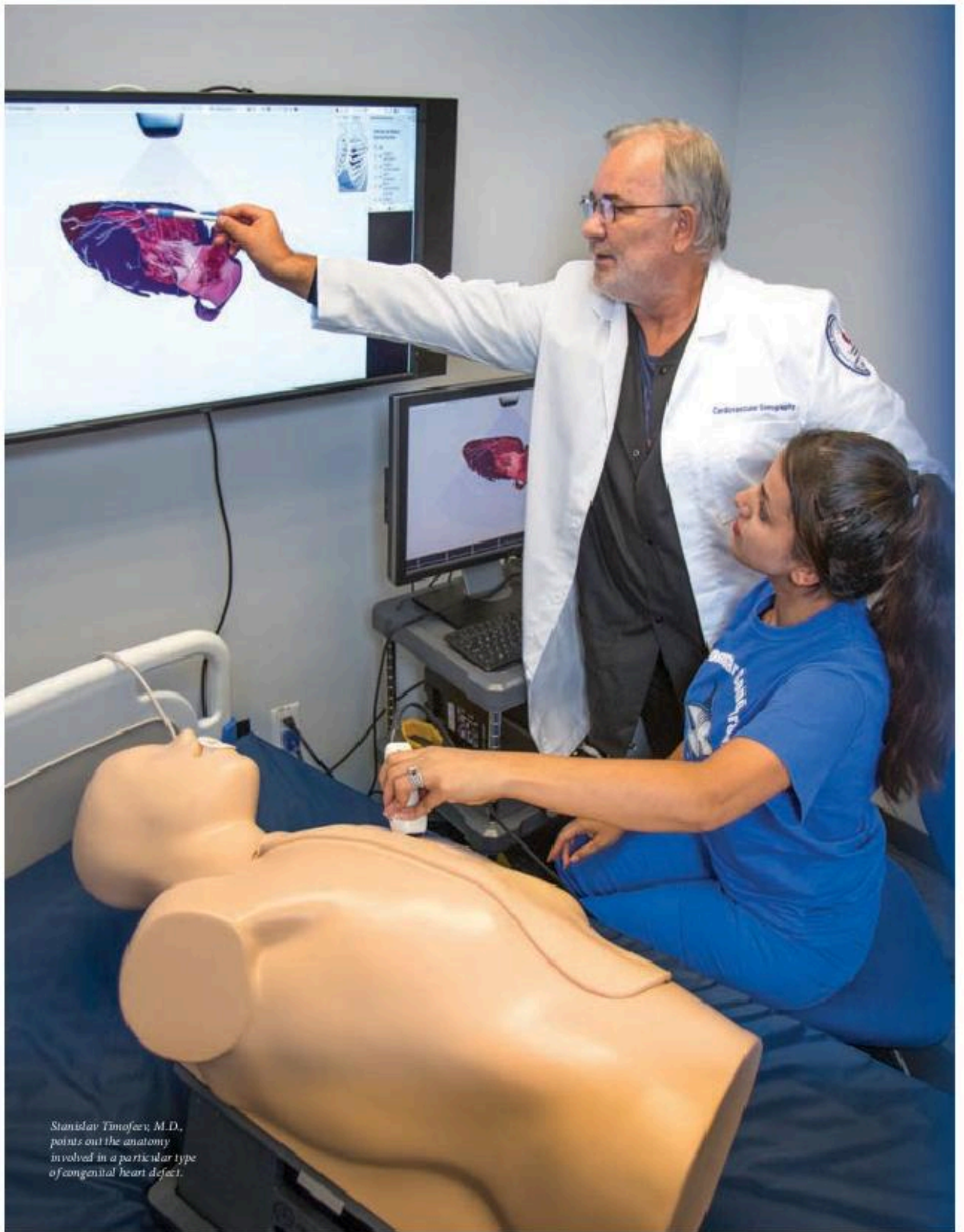
During the Fifth Annual Symposium on Echocardiography in Congenital Heart Disease, held September 24, 2015, in Cedar Falls, Iowa, Stanislav Timofeev, M.D., RDCS, RVS, assistant professor, presented two papers on congenital heart defects and their detection and diagnosis via advanced echocardiography techniques.

Timofeev's first presentation, "Cardiomegaly: Focus on Pediatric Cardiomyopathies," described the gross classifications of cardiomegaly malformations based upon characteristics of contraction and contractility and how

to detect, classify, and document such malformations using echocardiography for diagnosis and treatment.

His second presentation, "Right Ventricular Cardiomegaly: Preload Pathophysiology Associated with Different Types of Circulatory Communications," described the variety of anatomical malformations leading to extraneous circulatory formations affecting heart circulation and function and how to detect, recognize, and document them for diagnosis and treatment using echocardiography.





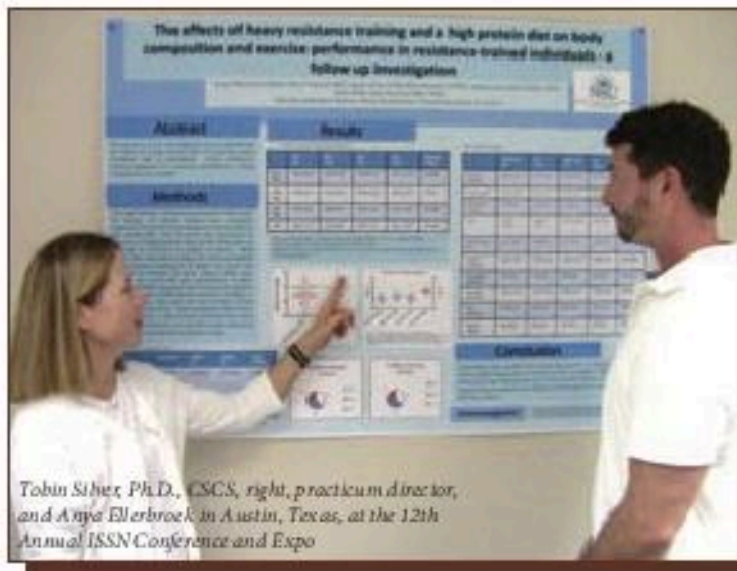
Stanislav Timofeev, M.D., points out the anatomy involved in a particular type of congenital heart defect.

Health and Human Performance

FORT LAUDERDALE

Networking Offers Priceless Exposure

BY ANYA ELLERBROEK, EXERCISE AND SPORT SCIENCE EXERCISE STUDENT



Tobin Sijter, Ph.D., CSCS, right, practicum director, and Anya Ellerbroek in Austin, Texas, at the 12th Annual ISSN Conference and Expo

Working with Jose Antonio, Ph.D., FNCSA, FISSN, CSCS, assistant professor, in the Exercise and Sport Science Lab on several sports nutrition studies has been nothing less than a life-changing experience. I have had the privilege of presenting data from our studies at the 2014 and 2015 International Society of Sports Nutrition (ISSN) conferences in Clearwater Beach, Florida, and Austin, Texas, respectively.

This experience has inspired me to pursue a master's degree in sports nutrition, and eventually, a Ph.D., and to continue to conduct studies in this field. Having the opportunity to conduct research projects at NSU, such as "The Effects of Consuming a High-Protein Diet

(4.4g/kg/d) on Body Composition in Resistance-Trained Individuals," is exciting, especially since it resulted in a published article.

In addition, the soon-to-be-published follow-up study, "The Effects of Heavy Resistance Training and a High-Protein Diet on Body Composition and Performance in Resistance-Trained Individuals," has been discussed by researchers who are highly respected in the field of exercise and sports nutrition science, which is very rewarding.

I have had the chance to listen to, as well as personally meet, many of the world's leading sports nutrition scientists at the ISSN conferences. Notable experts, such as Brad Schoenfeld, Alan Aragon, and many more, gave me the opportunity to discuss the studies and our findings. After my presentation at the 2015 conference, I was contacted by Aragon for an interview about our study, which was published in his monthly subscription blog.

Presenting the studies at the ISSN conferences has helped connect me with many people in the field from around the world, which can lead to new opportunities in the future. The knowledge and experience I have gained have been invaluable. ■

Students, Teachers Provide Medical Care at Beach Volleyball Finals

BY JEFFREY R. DOERINGER, PH.D., ATC, ASSISTANT PROFESSOR

In late September, the Athletic Training Education Program (ATEP) faculty members and students provided medical care to the world's top international beach volleyball players at the Swatch Beach Volleyball FIVB World Tour Finals held in Fort Lauderdale. The CHCS faculty participants were Elizabeth Swann, Ph.D., ATC, department chair; Pradeep Vanguri, Ph.D., ATC, program director; Megan Colas, Ph.D., ATC, NEMT-B, clinical education director; and me.

The aforementioned faculty members were invited to provide medical care with an interprofessional medical team that included sports medicine physicians, chiropractors, physical therapists, sports massage therapists, physiotherapists, and athletic trainers. This was the first time the ATEP had the opportunity to work this event side by side with students as they interacted with professional athletes through an international experience.

The ATEP students said they were impressed by how each health care professional worked together and openly communicated in order to achieve one common goal—to get the athlete back to play in the quickest and safest manner possible. It was a great learning experience for everyone to see each other's specialties put into practice at a major international event.

The students also gained new and diverse manual therapy techniques that are generally outside of the standard athletic trainer's educational experience. The trained individuals demonstrated and taught the students unique skills they will be able to continue to incorporate and utilize to enrich their personal practice expertise.

"I was very impressed with your students, and that is a direct reflection of the strength of your program and the faculty," said Ward Daron, PT, tournament medical director and regional vice president of operations for Jacksonville/South Carolina CORA Health Services, Inc. The feeling was mutual for both parties on the appreciation of collaborating and the experience gained working together. ■



Health and Human Performance

FORT LAUDERDALE

Collaboration With NSU Athletics Proves Beneficial for HHP

The CHCS Department of Health and Human Performance (HHP) and the NSU Department of Athletics are a natural fit. At the heart of both entities are the desires to enhance athletic performance and reduce the risk of injury. Before classes even begin for HHP students and faculty members in the fall, many are getting a leg up on clinical and research opportunities by working alongside NSU's athletic training staff members to screen more than 350 student-athletes during the pre-participation examinations.

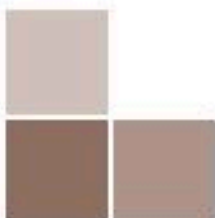
Pradeep Vanguri, Ph.D., ATC, and Jeffrey Doeringer, Ph.D., ATC, from the HHP's Athletic Training Education Program (ATEP), assist with tasks such as orthopedic screening, blood pressure measurement, and vision screening. According to Zoe Greim, an ATEP level II student, "Taking the opportunities to fully immerse myself in the high level of athletic training culture here at NSU has benefited my professional preparation exponentially," she said. "The vast exposure and hands-on experience with different testing and screening tools, modalities, treatments, and an interprofessional team is like no other and has enabled me to feel very confident in my progression into the athletic training profession."

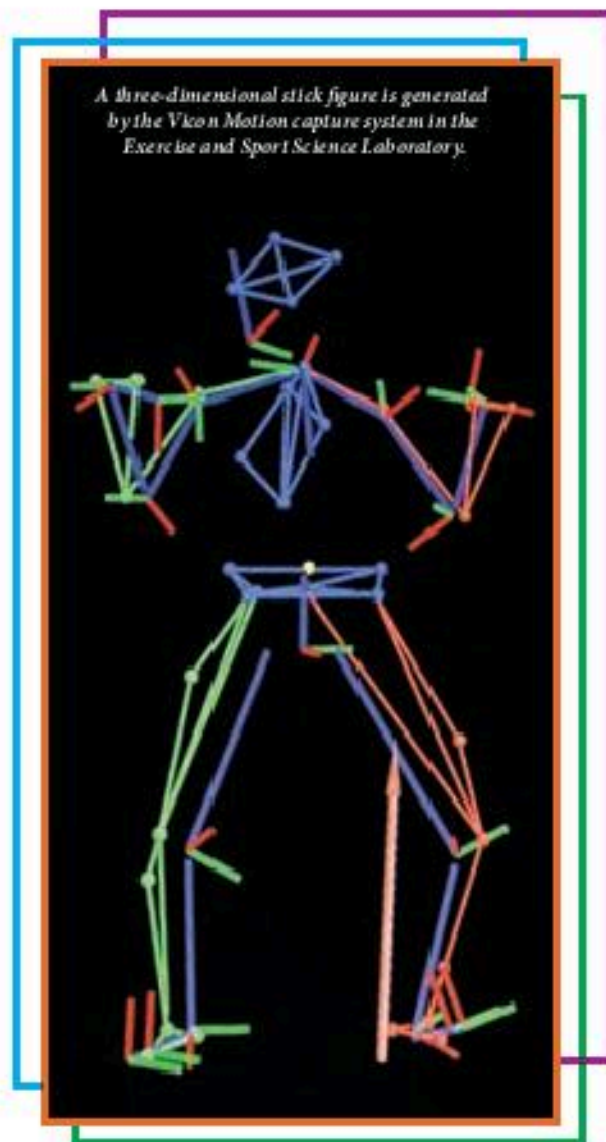
The HHP's Exercise and Sport Science (EXSC) students, along with program director Monique Mokha, Ph.D., ATC, CSCS, primarily assist with screening movement

patterns using the Functional Movement Screen™ (FMS) and compiling data for research purposes. FMS monitoring continues throughout the athletes' competitive seasons, presenting more opportunities for clinical experiences and research. Additionally, Mokha is a member of NSU's Sports Medicine Interdisciplinary Team (SMIT), where her role is to support the SMIT through data collection and producing research in injury prevention.

Mokha and her students, along with Peter Sprague, D.P.T., OCS, in the Department of Physical Therapy, and Dustin Gatens, M.S., ATC, in the Department of Athletics, have published four peer-reviewed manuscripts in the past 15 months. "The role of the EXSC and ATEP programs in the health care that is delivered by our staff members cannot be overstated," said Gatens, who is a strong proponent of the HHP's collaboration with the Department of Athletics.

For the past several years, Mokha and her students have been instrumental in both the collection and utilization of data on NSU's student-athletes. Starting with preseason physicals every August, exercise and sport science faculty members and students work hand in hand with NSU's athletic training staff members to handle the logistics of collecting valuable data that help shape injury prevention and health maintenance strategies for NSU's student-athletes.





From functional movement assessments and gait analysis to body composition measurements, the EXSC faculty members and students have participated in collaborative, student-centered research opportunities that have resulted in several published articles in peer-reviewed journals. Not only do HHP students and faculty members help collect data, but the EXSC students—with Mokha's oversight—also compile and organize the data by team and work alongside the athletic trainers to help identify deficiencies. The athletic trainers, in tandem with the strength and conditioning specialists, provide corrective exercises or other interventions.

"The program's hands-on approach has given me a better understanding of the significance of all the departments collaborating together to enhance the

effectiveness of the treatments applied to the athletes," said Kourtney Kostzer, a senior in the Exercise and Sport Science Program who has witnessed this full-circle approach every step of the way.

This culture of interprofessional collaboration was established in 2004 by former head athletic trainer Larry Starr, Ed.D., ATC, CSCS, and former AT program director, Elizabeth Swann, Ph.D., ATC, who believed that necessary athletic health care could not be delivered without the expertise of a multidisciplinary team. Starr assembled expert physicians, athletic trainers, physical therapists, sports nutritionists, sports psychologists, and exercise scientists. This belief is the impetus for the quality interprofessional clinical and research opportunities that are available to the HHP students and faculty members, as well as the Department of Athletics staff team.

According to Zevon Stubblefield, NSU's assistant athletic director of sports medicine, "The collaborative relationship between the HHP faculty members and the athletic training staff allows us to get the help we need to make sure all new NSU student-athletes are properly screened to ensure their medial safety to participate, while allowing the HHP students to gain valuable hands-on experience," he explained. "From assessing vital signs and assisting the NSU athletic training staff members with orthopedic evaluations, NSU's ATEP students have the opportunity to utilize the same skills they will need when they enter the athletic training profession."

This mutually beneficial collaboration between the CHCS Department of Health and Human Performance and the NSU Department of Athletics has led to a student-centered approach that embodies NSU's Core Values. Please visit www.nsuspartans.com for more information about the sports medicine interdisciplinary team. ■

Health Science

ONLINE PROGRAM



CREATE Addresses Trafficking and Exploitation of Humans

BY CHENNEL WILLIAMS, M.S., M.B.A., MANAGER





From left: Meline Kevorkian, Ed.D., associate provost, academic affairs; Heidi Schaeffer, M.D., Community Foundation of Broward; Jennifer O'Flannery Anderson, Ph.D., vice president for Advancement and Community Relations; Brianna Black Kent, Ph.D., CREATE co-founder; Sandrine Gaillard-Kenney, Ed.D., CREATE co-founder; and Stanley H. Wilson, Ed.D., PT, CEAS, CHCS dean.

The NSU Coalition for Research and Education Against Trafficking and Exploitation (CREATE) was founded in January 2015 by Brianna Black Kent, Ph.D., associate chair and assistant professor, and Sandrine Gaillard-Kenney, Ed.D., assistant dean and associate professor. The purpose of NSU CREATE is to equip all members of the community—including private citizens, educators, current and future health care professionals, and organizations—with skills to identify victims of human trafficking, resulting in increased reporting and referrals to appropriate health and social service agencies.

Florida ranks third in the nation for human trafficking, including sex trafficking, just behind California and New York, while Broward County ranks first in the United States for buyers of commercial sex online. NSU CREATE is focused on educating faculty members, students, and the community-at-large about human trafficking. NSU CREATE is an expansion of ProjectHEAT (Health Educators Against Trafficking), which was founded by Gaillard-Kenney and Kent in 2010.

ProjectHEAT was designed to teach health care educators to recognize signs and symptoms of trafficked victims. ProjectHEAT advocates for curriculum change in the health professions, with a goal to help future

health care professionals identify and assist victims appropriately.

NSU CREATE celebrated the establishment of its new headquarters at the NSU Miramar Campus on September 15, 2015. Event speakers included Stanley H. Wilson, Ed.D., PT, CEAS, dean of the College of

Health Care Sciences; Meline Kevorkian, Ed.D., NSU associate provost of academic affairs; Nabil El Sanadi, M.D., president and CEO, Broward Health; Maria Clara Rodriguez, M.S., Project GOLD director, Kristi House of Miami; and Corey Steinberg, J.D., assistant United States attorney, Southern District of Florida.

In a demonstration of the collaborative nature of NSU CREATE, members of the NSU community and representatives from the U.S. Attorney's Office—Southern District of Florida, Kristi House Miami, Broward Health, and the Community Foundation of Broward attended the celebration. The speakers all emphasized the importance of uniting community members, community organizations, educators, health care providers, and law enforcement in the fight against human trafficking.

The speakers also highlighted the impact that NSU CREATE co-founders Kent and Gaillard-Kenney have had in the battle against human trafficking. Their work has significantly increased awareness of human trafficking among health care providers and community members. The opening of NSU CREATE is the next step in the journey to provide support and services to human trafficking survivors and increase human trafficking awareness throughout the health care and education communities. ■

Occupational Therapy

FORT LAUDERDALE

Event Spotlights Assembly of 3-D Prosthetic Hands



The HPD Library and the Occupational Therapy Department hosted a 3-D printed prosthetic hand assembly event in order to assemble five 3-D printed prostheses for children with digital amputations. The interprofessional members that participated included occupational and physical therapy students and was led by the occupational therapy graduate students of Jerry Coverdale, O.T.D., OTR/L, CHT, assistant professor.

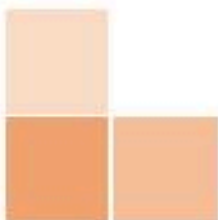
The prosthetic hands are on display in the HPD Library in order to expose students to this rapidly developing technology. "It was exciting to see busy students donate their time for such an amazing cause and find creative ways to overcome some of the challenges that were presented to them in the prosthesis assembly process,"

said Jacqueline Reese Walter, Ph.D., OTR/L, CHT, assistant professor.

The 3-D printed hands may also be donated to children in need of a prosthetic hand via the e-NABLE project. NSU is now an approved provider of 3-D printed prosthetic hands for e-NABLE, a nonprofit organization that matches children in need of a prosthesis with a provider of the printed prosthetics. The organization is made up of a passionate group of volunteers who include engineers, academicians, students, occupational and physical therapists, 3-D print enthusiasts, and others who want to make a positive difference in the world.

Since its inception, e-NABLE volunteers have provided an estimated 1,500 free hands around the globe. A hand can be provided for a child at a cost of approximately \$50, compared to the thousands of dollars a traditionally manufactured prosthesis can cost. This is invaluable when a growing child may outgrow his or her prosthesis within six months to a year.

If you know someone in need of a 3-D printed prosthetic hand, please visit www.enablethefuture.org, complete the intake form on the e-NABLE website, and hit submit. For additional information, please contact Jerry Coverdale at jcoverdale@nova.edu. ■





Occupational therapy students are hard at work making prosthetic hands.



From left, in the front: Kelsara Gilchrist and Kelley Cartwright (with prosthetic hand); middle row, Meghan Byrne, Alexa Smith, and Tammy Pham (far right); in the back, Neal Shah



From left, Natalie Rossmiller, Samantha Golob, Matthew Mallory, Thairia Edgcomb, and Cayla Penatzer

Occupational Therapy

FORT LAUDERDALE



By having students engage in activities, they are able to directly apply the information to their own learning process.

Students Merge Occupational Analysis with Community Service

BY CAROL LAMB DIN PATAVINA, D.O.T., OTR/L, ASSISTANT PROFESSOR,
AND KRISTIN WINSTON, PH.D., OTR/L, DIRECTOR AND ASSOCIATE PROFESSOR

Many passersby may have wondered why all of the purple-scrubbed students were busy tearing apart wooden pallets in the shadow of the campus clock tower. While the banging of hammers was a stress reliever for many of the students, it was actually a faculty-planned, in-class assignment designed to provide occupational therapy students with a hands-on opportunity to learn about and analyze activities.





Opposite page: Occupational therapy students show off their completed window boxes. Front row from left are Jazmin Lozano, Aimee Denise, and Devan Cossu-Edwards. In the back row, from left, are Kristie Cabrera, Angela Nadler, Ramneek Williams, and Aaron Miller.

Left: Students Paolo Stanchi and Kelly Hammond deconstruct donated wooden pallets.

Below: From left, Juli Carbone, Carlyn Evans, Carolyn Cherish, and Carl Immerman construct their window box.



Occupational therapists are experts in activity and occupational analysis. Activity analysis is the process of breaking down an activity—such as walking a dog, eating a meal, or texting a friend—into the unique demands, performance skills, and cultural implications that may be associated with engaging in that task. This type of analysis would include assessing task demands, including those associated with object and material, space, social, sequencing, and timing demands. Performance skills would include those associated with the motor, process, and social interaction skills required for successful completion of the activity.

Finally, an occupational therapist will analyze the potential for cultural meaning the activity may hold. An occupational analysis adds an additional layer, as this type of analysis includes both the

personal meaning and way of completing the task that is unique to every individual.

By having students engage in activities, they are able to directly apply the information to their own learning process. In this instance, students became acutely aware of the need for a large space to account for excessive noise, as well as the high degree of upper extremity muscle strength that is needed to pull the boards apart. The ability to cope effectively with frustration is another one of the demands involved with participation in this project.

Once deconstructed, the students designed and then created floral window boxes. The learning did not stop there, however. The students then engaged in community service by delivering the window boxes to local community programs that the Occupational Therapy—Fort Lauderdale Program has partnered with in the past. The students worked side by side with clients to plant flowers and learn more about some of the challenges and successes individuals can have when participating in daily occupations. ■

Occupational Therapy

TAMPA



From left: Chelsea Bryant, My-Lynn Tran, Ellie Edrissi, Shree Patel, Ashley R. Stedman, Meghan A. Granaia, Kristin S. McMillen, Hillary Whitacre Anderson, and Lillian M. Freeman

Celebrating the Inaugural O.T.D. Alumni

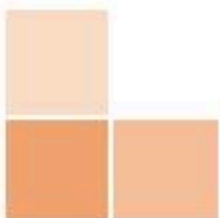
BY SHEILA M. LONGPRÉ, M.O.T., OTR/L, ASSISTANT PROFESSOR AND DIRECTOR OF CLINICAL AND COMMUNITY RELATIONS

August 21, 2015, marked the commencement of the inaugural class of the Tampa Entry-Level Doctor of Occupational Therapy (O.T.D.) Program, as students came from as far as California, Nevada, and Minnesota to participate. Commencement is one of several ceremonies the students participated in throughout their NSU academic careers.

Providing a blended program offers challenges to building a community from a distance, which is why the O.T.D. program has intentionally incorporated several opportunities for students to develop community through a series of traditions.

The first rite of passage is the White Coat Ceremony students participate in during the fall semester of their first year. Mirtha Whaley, Ph.D., OTR/L, described the significance of the ceremony as an entry into the students' professional coursework. Accepting the white coat also signifies accepting the responsibility of entering into a community of professionals. It involves more than the acquisition of skills; it is the beginning of a student's journey to becoming a professional.

The second rite of passage is the doctoral pinning. Gustavo Reinoso, Ph.D., OTR/L, describes the significance of the pinning as a symbol that indicates the





From left: Stephanie M. Sylvia, Ricardo A. Demetrius, and Larry B. Holmes

students' entry into their doctoral transformation. It is recognized by the program as an additional step of the doctoral transformation and the students' preparedness for the next step of their journey of practice beyond that of an entry-level occupational therapist.

The third rite of passage is the Legacy Project. With the support of Ricardo Carrasco, Ph.D., OTR/L, FAOTA, and Whaley, the class of 2015 initiated the Legacy Project, which is a product of the specialized courses offered in the students' third year that integrates occupational science and wellness. The students created a professional organization called Community and Health Advocacy through Occupational Studies (CHAOS), which aims to inspire, promote, and contribute to the study of human beings as occupation beings within the global community.

As part of the students' mission to create a global community, they also developed a new journal, *OCCUPATION: A Medium of Inquiry for Students, Faculty, and Other Practitioners Advocating for Health Through Occupational Studies*. The journal will serve as a platform for contributors from around the world, including current students, recent graduates, occupational therapy practitioners, and professionals from a variety of disciplines. The development of the Legacy Project can be seen as the responsibility of the students to contribute to occupational therapy through research.

The fourth rite of passage is commencement, which marks the completion of the students' final didactic and entry-level clinical components. During the graduation ceremonies, students had the opportunity to attend an awards banquet, where several students received awards for their

academic achievements, as well as their contributions toward the profession.

Following the graduation ceremonies, students will return to their final Doctoral Experiential Component (doctoral residency), in which they will spend four months with a mentor learning about one of the eight identified practice pillars—clinical practice skills, research skills, administration, leadership, program and policy development, advocacy, education, and theory development. It is through this step that the journey takes the students toward their personal vision of their future practice area.

The fifth and final step of the students' transformation to becoming occupational therapists is the Annual Research Colloquium, which provides an opportunity for students to disseminate the findings from their culminating research projects to faculty members, clinicians, and the community. It is at this moment that all academic requirements are completed and students can take the National Board for Certification in Occupational Therapy qualifying exam.

Through each step of the journey, students have had the opportunity to create a community and accept responsibility toward becoming occupational therapy practitioners and contributors to the profession. ■

Occupational Therapy

TAMPA

Duo Takes on “Sexuality and Sexual Function” as Research

Mirtha M. Whaley, Ph.D., M.P.H., OTR/L, assistant professor, Entry-Level Doctor of Occupational Therapy (O.T.D.) Program, and Lillian M. Freeman, graduating O.T.D. student, are embarking on the second of a two-part research project of occupational therapists’ practices in adult rehabilitation.

The study, titled “Sexuality and Sexual Function: Survey of Occupational Therapists’ Practices with Individuals Across Conditions and Throughout the Life Span,” will use a quantitative survey research methodology framed by the Theory of Planned Behavior. Whaley, in her role as the study’s principal investigator, is mentoring Freeman while she completes the residency requirement for her O.T.D. degree.

The research duo, who recently concluded their qualitative pilot study of occupational therapists in spinal-cord rehabilitation, inquired as to therapists’ assessment and intervention practices in the area of sexuality and sexual function—an activities of daily living (ADL) recognized by the *Occupational Therapy Practice Framework: Domain and Process, 3rd Edition* (American Occupational Therapy Association, 2014). That initial research study, with Freeman as principal investigator and Whaley as coinvestigator and adviser, was part of Freeman’s capstone project requirement for graduation and was accepted for presentation at the Texas Occupational Therapy Association in November 2015.

Study data was collected through in-depth and individual face-to-face and virtual interviews. Participants’ responses revealed that addressing the ADL of sexual function was inconsistent among younger therapists participating in the study, and more consistent among



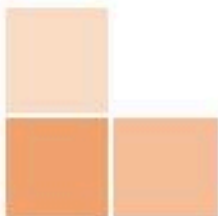
Mirtha M. Whaley

Lillian M. Freeman

the older, more experienced practitioners. Results also indicated that several factors impacted therapists’ assessment and intervention practices, and that these included personal characteristics of the therapist and the client; contextual limitations of the practice setting and the health care environment; individual and practice-related temporal factors; and availability and accessibility of outpatient therapy.

The new study will use a quantitative methodology, and data will be collected through an online survey that is presently under construction. Items for the survey questionnaire are based on results of the qualitative study and findings from the research literature.

The second study has two objectives. First, to quantify therapists’ inclusion of sexuality and sexual function in their practice. Second, to identify factors that are predictive of therapists’ inclusion of this important ADL, and those that pose barriers to assessing and addressing clients’ needs and concerns regarding sexuality and sexual function. ■



Research Colloquium Showcases Informative Topics

BY RICK DAVENPORT, PH.D., OTR/L, ASSISTANT PROFESSOR AND DIRECTOR OF RESEARCH



The O.T.D. class of 2015, above, attend their last institute before commencement. From left, top row, are Lillian M. Freeman, Hillarie G. Hough, Ellie Edrissi, Larry B. Holmes, Hillary Whitacre Anderson, Ricardo A. Demetrius, and Chelsea Bryant (in NSU shirt). Front row, from left, are Meghan A. Granata, Kristin S. McMillen, My-Lynn Tran, Jamie T. Williams, Stephanie M. Sylvia, Shree Patel, and Ni He-Strocchio. Ashley R. Stedman is seated in front.

On December 13, 2015, the Entry-Level O.T.D. program hosted its inaugural Research Colloquium, which showcased the culminating research projects conducted by the graduating class of 2015.

The colloquium is also designed to give back to the community by providing complimentary registration/continuing education unit credits in the form of previously mentioned doctoral research posters, as well as 50-minute podium presentations by faculty members on a range of topics.

Below are the nine doctoral research posters that were presented to community members, fellow students, and faculty and staff members.

- Ellie Edrissi, O.T.D. student, and Dennis P. McCarthy, Ph.D., OTR/L: "The Effectiveness of Music Therapy for Test Anxiety"
- Lillian M. Freeman, O.T.D. student, and Mirtha M. Whaley, Ph.D., OTR/L: "Sexuality and Sexual Function as Occupation: An Exploratory Pilot Study of Interventions Used by Occupational Therapists Working with Individuals with Spinal Cord Injury"
- Meghan A. Granata, O.T.D. student, and Mirtha M. Whaley, Ph.D., OTR/L: "The Occupation of Mothering in the NICU: A Mother's Narrative"
- Ni He-Strocchio, O.T.D. student; Ashley R. Stedman, O.T.D. student; My-Lynn Tran, O.T.D. student; and Rick D. Davenport, Ph.D., OTR/L: "Virtual Reality Gaming for Older Adults at Risk for Falls: A Feasibility Study"
- Larry B. Holmes, O.T.D. student; Ricardo A. Demetrius, O.T.D. student; and Dennis P. McCarthy, Ph.D., OTR/L: "Blended Versus Traditional Learning: Comparing Achievement Based on Occupational Therapy Course Design"
- Hillarie E. Hough, O.T.D. student, and Mirtha M. Whaley, Ph.D., OTR/L: "Consumer Perception of Aging in Place: A Qualitative Study"
- Kristin S. McMillen, O.T.D. student; Jamie T. Williams, O.T.D. student; and Mirtha M. Whaley, Ph.D., OTR/L: "In Their Own Voices: Perceptions and Experiences of High School Students Who Are Blind and Preparing to Transition Out of Public High Schools in Florida"
- Shree Patel, O.T.D. student; Chelsea Bryant, O.T.D. student; Hillary Whitacre Anderson, O.T.D. student; and Ricardo C. Carrasco, Ph.D., OTR/L, FAOTA: "A Quantitative Analysis of Pediatric Occupational Therapy Practitioners' Understanding of the Distinction Between Sensory-Based Interventions from the Classical Sensory Integrative Approach"
- Stephanie M. Sylvia, O.T.D. student, and Dennis P. McCarthy, Ph.D., OTR/L: "The Relationship Between Music Therapy and Anxiety"

Physical Therapy

FORT LAUDERDALE

CHCS Hosts Dual Certification Course



From left: Frieda Menasche, adjunct professor at NSU; Susan Valdes and Valeria Bruno, D.P.T. students; and Heather Hettrick, associate professor at NSU and instructor/faculty adviser for ILWTI

In August 2015, the Department of Physical Therapy hosted the inaugural dual-certification course in lymphedema and wound care, which was a collaborative effort between the Physical Therapy Program and the International Lymphedema and Wound Training Institute (www.ilwti.com).

Of the 19 participants who attended, two are adjunct faculty members at NSU—Tammy Boudreaux, M.S., PT, CLWT, and Frieda Menasche, D.P.T., PT, CEA, CLWT—and two are current physical therapy students at the Fort Lauderdale/Davie Campus. Valeria Bruno and Susan Valdes became the first PT students to successfully complete the course and earn their Certified Lymphedema Wound Therapist (CLWT) designation.

This unique course leading to dual certification is the first to combine comprehensive lymphedema and wound care training into 65 hours of online training, followed by 6 days of hands-on intensive skills involving complete decongestive therapy and various wound management interventions. Students learned the foundational skills for managing complex forms of lymphedema, as well as chronic wounds that often afflict patients suffering from lymphedema.

Heather Hettrick, Ph.D., PT, CWS, CLT, CLWT, associate professor, has been instrumental in bringing





this dual-certification course to NSU. "Given the wide scope of comorbidities faced in day-to-day clinical practice, the critical-thinking skills facilitated in this course, and the intensive hands-on training, are paramount to equip students and clinicians to provide an advanced standard of care," explained Hettrick. "We are also very pleased that a portion of course tuitions will be donated to the Lymphatic Filariasis (LF) Clinic in Leogane, Haiti, where the ILWTI and NSU have both been a part of the startup and ongoing operations to treat Haitians suffering from lymphedema caused by LF."

"We're glad to be working with Nova Southeastern University," said Robyn Bjork, M.P.T., CWS, WCC, CLT-LANA, CLWT, founder and CEO of the ILWTI. "The CLWT course is a wonderful opportunity for faculty members, students, and licensed clinicians to advance their skills to meet the growing needs of patients with complex medical conditions, including multifactorial edemas and wounds. My passion is to train clinicians to care for patients with various forms of edema and wounds, and to provide exciting opportunities to use these skills in resource-poor areas.

"We accomplish this through our CLWT course and our nonprofit ILWTI medical missions, which are currently focused on the Bring Hope to Haiti project," Bjork added. "This project aims to help relieve the disability and pain caused by LF lymphedema in Haiti, in conjunction with the goal of elimination of LF transmission by 2020 through the efforts of the World Health Organization, Haitian Ministry of Health, University of Notre Dame, World Alliance for Wound and Lymphedema Care, and other organizations."

As the ILWTI medical missions' program director at the LF Clinic in Leogane, Hettrick works closely with the ILWTI to make these exciting opportunities a reality for students, faculty members, and NSU affiliates.

For complete information on the CLWT course, course schedule, upcoming mission trips, and to begin your comprehensive training, visit www.ILWTI.com. The dual-certification course will be offered at NSU on August 15–20, 2016. For more information on the Bring Hope to Haiti project, visit www.bringhopetohaiti.com. ■

Physical Therapy

FORT LAUDERDALE



From left: PT students Jillian Thompson and Connor Dering discuss the patient's status with nursing student Jonteria Williams.

Simulation Provides Valuable Interprofessional Experience

BY BINI LITWIN, PH.D., D.P.T., M.B.A., PT, ASSOCIATE PROFESSOR AND DIRECTOR, T-D.P.T. PROGRAM, AND SHARIRONE ADAMS, D.B.A., M.H.S.A., PT, ASSOCIATE PROFESSOR AND DIRECTOR, D.P.T. PROGRAM

The acute-care setting requires a unique set of skills for all health care providers. This setting is one that is difficult to create in an academic setting because of the unique physical environment and the collaboration that happens between various professionals in the acute-care environment. This environment is particularly challenging for faculty members to facilitate the transfer of knowledge.

With the emphasis on interprofessional education and the use of simulation in academia, the NSU College of Nursing and the CHCS' Physical Therapy Program collaborated to



Judy Mann, D.P.T., PT, OCS, adjunct professor, left, and Dixie Pennington, B.S.E., director of simulation and interactive technology, operate the mannequin from an adjacent room.

develop a learning experience that addressed both of these components. Students from both programs took part in a simulation experience that focused on an acutely ill patient who experienced adverse reactions during his care.

The nursing program's high-fidelity human simulator and hospital room set up was the setting for the experience, which included interpretation of the patient's physiological symptoms, use of teaching strategies for patient education, and therapeutic communication between all parties. Students were able to make clinical decisions concerning the best course to take in responding to adverse reactions of the patient and whether to continue in the plan of care based on patient status change.

During the experience, groups of nursing and physical therapy students rotated through a simulated-patient room to provide care to the patient, with group interaction progressing over the course of two days. Each group experienced an adverse reaction during its care, which required both professions to work together for the best outcome. Students who were not directly involved in the simulation observed the patient/clinician interaction from another room, documenting positive aspects and areas for improvement.

After all groups had been through the experience, a collaborative debriefing session guided by faculty members was conducted for PT and nursing students to provide feedback to their peers. Student comments reflected on how much they appreciated the opportunity

to work with other professionals and viewed it as an important skill to develop.

"The best part, in my opinion, was getting to work alongside the nursing students. That's something that is extremely hard to conceptualize until you're in the situation," said one D.P.T. student.

"These are things you can't really teach in the classroom, and definitely something you need to be around quite a bit in order to know your place and what's expected of you."

"It was good being able to see another section of the health care sector and what it can provide," stated a nursing student. "Everyone worked together. Nursing took the vitals, PT came in and did its part, and then we combined to come up with the best solution for the patient's problem."

Other student comments reflected the benefit of being able to watch others perform and to self-assess their own performance.

"Personally, I thoroughly enjoyed the experience and found it to be extremely beneficial in multiple ways. First of all, the fact that we were able to watch the video and critique ourselves was particularly useful," said a PT student. "I'm glad we were able to interact with the nursing students, because it was a good taste of what we'll experience in the near future as therapists ourselves. I thought the way it was structured provided each group with an opportunity to evaluate each other in a constructive manner."

The simulation experience provided valuable exposure for students in nursing and PT to gain an increased awareness of each other's roles, while encouraging an atmosphere of trust building and camaraderie. Nursing and PT faculty members also had the opportunity to foster interprofessional education through extensive collaboration in developing the scenarios used for the simulation experience. ■

Physical Therapy

FORT LAUDERDALE

D.P.T. Program Gives Back Globally

BY RACHAEL MORGANI AND MARIE NARDOZZA, FUND-RAISING
AND PHILANTHROPY COCHAIRS, D.P.T. CLASS OF 2016

Every year, the Doctor of Physical Therapy (D.P.T.) Program strives to give back to the local, national, and international communities as part of a larger effort to support those in need. As a collaborative effort among the three classes, the students have made significant contributions that will better the lives of individuals around the world.

One beneficiary of the students' efforts was Shoes 4 Kids—a nonprofit organization that donates pairs of new, brand-name shoes to underprivileged children. According to one student, "We chose this organization because it really resonated with what we are studying and learning. Having proper shoes can really make a difference in someone's physical performance."



We are extremely proud of the NSU Physical Therapy Program's efforts in these causes, and we hope our students will be able to contribute even more in the following years.

The D.P.T. program has also generously donated to the Foundation for Physical Therapy's Marquette Challenge, which is a fund-raising effort that supports PT research. More than 192 schools compete annually, and more than \$2.7 million has been raised for research since its initiation. In addition, the students created a virtual 5K where participants registered and participated in a 5K run/walk at a location of their choice. The event gave participants the freedom to complete their 5K wherever they chose, while still raising money for research.

The program has also worked with local organizations. Over the course of the academic year, the students collected more than 2,400 can tabs to donate to the Ronald McDonald House, which uses the tabs to raise funds for operating costs. In addition, canned goods were collected to replenish the food pantry at the HOPE Outreach Center, which provides services to those who are unable to make ends meet due to emergencies, disabilities, job losses, and health crises. Thanks to

the students' efforts, many families were able to enjoy a hearty Thanksgiving dinner.

The college's philanthropic efforts also addressed international needs when the students contributed to the Bring Hope to Haiti medical mission. The D.P.T. program was able to contribute by purchasing products such as anti-fungal ointments and triple antibiotic creams. All of these products are ubiquitous and standard commodities in most U.S. hospitals, but of extreme necessity in one of the world's poorest countries.

We are extremely proud of the NSU Physical Therapy Program's efforts in these causes, and we hope our students will be able to contribute even more in the following years. It may be difficult for students to find the time to see past studies and school events, but it is essential that future professionals are aware of their environment and contribute to greater causes. ■

Physical Therapy

TAMPA



Health and Wellness Club Serves as a Role Model

BY KEBBA SHAW, ED.D., D.P.T., PT, ASSOCIATE PROFESSOR, HYBRID D.P.T. PROGRAM

In 2012, students from the Hybrid Entry-Level Doctor of Physical Therapy (D.P.T.) Program got the idea of starting up a club that focused on health and wellness. The thought was that the beautifully equipped fitness center, as well as the expertise of on-site health care faculty members and students and their connections to community resources, were not being fully utilized.

In addition, it just seemed logical that a campus with a variety of health care professions should have a focus on promoting health and wellness in their students and faculty and staff members. With some research, consultation, and input from the Student Government Association, the student-driven NSU Tampa Health and Wellness (HNW) Club was established.

The club's founding officers were D.P.T. students Lauren Leiva (president), Sima Patel (vice president), Jackie Potter (secretary), Hai Pham (public relations and entertainment director), and cardiovascular sonography student John Cibiras



(treasurer). The current officers, who are all class of 2017 D.P.T. members, are Chantel Evanson (president), Kathleen Chavez (vice president), Robert Rojas (secretary), Rebecca Kilgore (treasurer), and Jazmin Perry (public relations and entertainment director).

"In addition to physical therapy, health and wellness have always been passions of mine," said Evanson, current HNW Club president, about why she was inspired to play a pivotal role in the club. "In 2014, I embarked on my own fitness journey, and in doing so, my existing passion for it grew even stronger. The commitment, consistency, and dedication that it took made me work even harder to be the best physical therapy tech and student I could be. I want us, as health care professionals, to take responsibility for our own health and fitness to lead others in doing the same. That is why I want to be a part of the club."

Chavez, who serves as the club's vice president, echoed Evanson's sentiments. "The objectives behind the Health and Wellness Club are to promote a healthy lifestyle, which is also the objective of the physical therapy profession," she said. "I would really like to have people more engaged and learning new ways to have fun with fitness. Moving forward, our main goal is to reach all the disciplines on campus."

Remaining true to its objectives since its inception, the HNW Club has sponsored events such as



Workout Wednesdays and Fitness Fridays that included on-campus fitness screenings by a certified personal trainer, a golf outing, and on-campus yoga and Zumba sessions for students and faculty and staff members.

Each month, the club attempts to rally participation through the use of fun and incentive-driven challenges to increase overall physical, spiritual, and emotional/mental health. For example, the club promotes increased physical activity and exercise during the month of March by challenging students and faculty and staff members to engage in an individualized event called 10 Miles or 10 Workouts. All participants were encouraged to join the HNW MapMyRun website to log their miles and activities during a specified timeframe during the month.

In April, the club challenges individuals to increase their health through the increased use of the on-campus fitness center and participation in at least one of several suggested occupational, social, financial, and spiritual health opportunities. The club has also sponsored two campus Fun Runs. Future events envisioned by the club include a biggest loser challenge encouraging healthy weight loss through exercise and proper diet, continued club-led Fun Runs, and sponsorship of guest speakers on various health and wellness topics.

The takeaway message from the HNW Club is that overall health requires individuals to be attentive to their whole being. As future health care practitioners, these students know that, as Benjamin Franklin said,

"An ounce of prevention is worth a pound of cure." Further, the club reminds us that health care practitioners should "walk the talk" and inspire others to strive for better health and fitness. ■

Physical Therapy

TAMPA



Alumna Takes the Lead on Animal-Assisted Therapy

BY MARY T. BLACKINTON, ED.D., PT, GCS, ASSOCIATE DIRECTOR, HYBRID D.P.T. PROGRAM

Imagine showing up for your physical therapy session and being introduced to a new member of the health care team who just happened to be a dog. Hybrid entry-level D.P.T. class of 2015 alumna Kantica Arora, D.P.T., presented a poster at the American Physical Therapy Association's Combined Sections Meeting in Indianapolis, Indiana, in February 2015 describing how therapists can use dogs to facilitate movement in physical therapy.

Her poster, "Innovative Use of Animal-Assisted Therapy as a Tool to Facilitate Geriatric Client Interaction," was the result of a collaboration between Ximena Tapia, PT, Arora's clinical instructor at Memorial Hospital South during her first clinical internship, and Shari Rone-Adams, D.B.A., M.H.S.A., PT, director of the D.P.T. Program in Fort Lauderdale.

The purpose of their poster was to describe the innovative use of animals to assist older patients in physical therapy at Memorial Healthcare System. What is animal-assisted therapy, and why is it so unique? Animals bring joy and happiness to billions of people; therefore, using animals therapeutically is one way to really engage people with disabilities in their physical therapy in a truly functional and meaningful way.

For example, after a stroke, some individuals tend to neglect the impaired side of their bodies. The therapist can ask the patient to walk with the dog on the impaired side, giving the patient an adorable, four-legged reason to pay attention to that side of the body. The sounds of

four paws walking alongside the patient, or the pull of the leash, are exactly the type of external cues that will help the patient look or "attend" to a neglected side. Just taking the dog for a walk gives someone in an inpatient rehabilitation setting a good reason to get out of his or her hospital bed or wheelchair.

According to Kantica Arora, D.P.T., the key ingredient for using animals to assist in therapy is for the clinicians to be creative and think outside the box.

Animals can help decrease emotional distress and assist with improving perceptual deficits, apathy or depression, low motivation, and poor initiation. They are used to address physical impairments such as ataxia, limited endurance, and poor balance.

The therapeutic dog often lives with a certified trainer, who also works in the hospital. Additionally, there are logistics involved with integrating an animal into therapy, including prescreening the patient for fears,

allergies, or other precautions and using appropriate infection control policies. According to Arora, the key ingredient for using animals to assist in therapy is for the clinicians to be creative and think outside the box.

One strategy Arora and Tapia used was to incorporate the dog in balance training. They asked a patient to brush the dog, strategically placing the dog in positions that progressively challenged the patient's balance. If you're a dog lover, you know that reaching down and forward to brush, pet, or hug a dog is a lot more fun and rewarding than picking up an inanimate object.

In her second internship, Arora designed a laminated business card for patients and caregivers describing the warning signs of autonomic dysreflexia—a life-threatening condition that impacts people with spinal-cord injuries. She also created a home exercise box filled with exercises, therapy bands, and other devices for patients being discharged from the therapy. The internship site has adopted Arora's prototype and now gives it to all patients upon discharge. ■

Physical Therapy

TAMPA

Hybrid D.P.T. Program Brings the Patient to the Classroom

BY ROBIN GALLEY, D.P.T., PT, OCS, ASSISTANT PROFESSOR, AND JOANN GALLICHO, D.S.C., M.S., PT, NCS, ASSISTANT PROFESSOR

What does spasticity feel like? What does ataxia look like? How do you examine and treat a patient with a neurological diagnosis?

These are questions physical therapy students face as they begin the neurological curriculum in the Hybrid D.P.T. (D.P.T.) program. While many students start the D.P.T. program having volunteered in outpatient clinics, few have observed individuals with stroke or neurological diagnoses. Being able to visualize and feel movement impairments is critical in neurological physical therapy. If a picture or video is worth 1,000 words, an experience with a real patient is worth 1 million words.

To demystify neurologic physical therapy, the Hybrid D.P.T. program brings the clinic, in the form of real patients, to the classroom—a concept we call integrated patient experiences (IPE). IPE were created because most students work part time or full time until they start their full-time clinical rotations in year four, making it impractical to stop work for four weeks in order to attend clinical internships in years one through three.

NSU-Tampa's IPE provides frequent exposure to patients during its weekend institutes throughout the curriculum. Full-time clinicians serve as lab assistants during these sessions to ensure close supervision and to provide timely student feedback. On-campus IPE occurs across the curriculum beginning in year one during the Exercise Physiology course, when students perform cardiovascular risk-factor screenings and assessments

with friends or family. Other on-campus experiences occur in Clinical Skills I and II, Patient/Client Management Post Amputation, Motor Control Across the Life Span, and Pediatrics.

Recognizing the importance of exposing students to practice environments like hospitals, skilled nursing facilities, and outpatient departments, the program also has off-campus integrated clinical experiences (ICE) within the didactic curriculum that take place around the weekend institutes so as not to disrupt the students' work schedules, and to avoid the cost of additional plane tickets and hotel accommodations in Tampa.

In the neurological courses, students spend 3½ half weeks in online education watching instructional videos and lectures, scoring standardized measures, and performing class assignments. During the four days on campus each month, they spend the first two days refining their skills using paper and video cases and practicing on each other, followed by IPE with real volunteers who have neurological disorders. Volunteers benefit from the experience because they receive input from seasoned faculty members and feel a sense of accomplishment by teaching students to see them as people and not a disease.

During IPE, students manage the care of volunteer patients and apply class concepts to the patients, receiving helpful feedback from faculty members. These sessions are active learning experiences, which





Cintya Aguilera, fourth-year PT student, directs Judy Praz-Vesseli to pay attention to her posture using a mirror, with Josh Courtney, fourth-year PT student.



Caitlyn Gancy, left, fourth-year PT student, looks on as Chris Rausch, fourth-year PT student, helps Veda Dwyer.

*If a picture or video
is worth 1,000 words,
an experience with
a real patient is worth
1 million words.*

is the pedagogy behind the D.P.T. program. "During these experiences, we take a medical history, get to know our patients and their families or caregivers, perform different tests and measures, and treat the deficits we find," said fourth-year student Nicole Hall. "We create obstacle courses to challenge our patients' balance and walking ability, which involves them having to walk around, over, and on different objects. We even play a card game with them to work on fine motor skills."

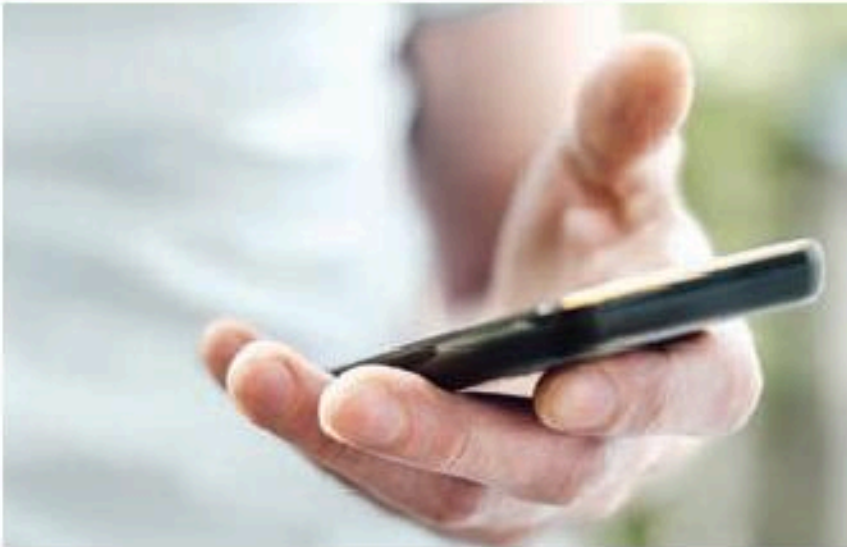
The stakes change during an IPE called Neuro Boot Camp, which is the culminating neurological experience prior to clinical internships. Neuro Boot Camp originated at the Fort Lauderdale/Davie Campus in 2006 and was designed to be an intensive physical therapy experience for participants who desired a boost in their rehabilitation program. Likewise, it is an intensive experience for the students, who provide the PT examination and interventions under the watchful eye and support of licensed physical therapy faculty members and lab assistants.

During Neuro Boot Camp, each patient volunteer receives five hours of therapy for five days. On the first day, a patient receives a thorough examination so that, by the end of the session, each group develops a specific treatment plan with the patient, caregiver, and faculty members. The remaining four days are devoted to providing interventions and developing a home exercise program. The classroom is transformed into a clinic with exercise equipment, technology to enhance rehabilitation, and functional training equipment. Students document information in the patient chart, engage in ongoing problem solving, and use their creative talents to make sessions effective and motivating.

Integrated patient experiences truly bring the clinic to the classroom. They allow students to demystify foreign concepts and go into clinical internships knowing what spasticity feels like and what ataxia looks like. "Without these experiences, I would not have the understanding, confidence, and creativeness to work effectively with the neuromuscular patient population," Hall explained. "This exposure has piqued my interest in neuromuscular rehab, and I am anxious to put all that I have learned to use in my upcoming neuro clinical rotation." ■

Physical Therapy

TAMPA



Smartphones Put to Work for the Profession

BY KATHERINE CHAVEZ, PT STUDENT; LAUREN MASULLO, PT STUDENT
AND MELISSA LAZINSKI, D.P.T., PT, OCS, ASSISTANT PROFESSOR

Recent legislative efforts from the American Physical Therapy Association (APTA) and its Florida chapter (FPTA) have aimed to tackle big issues such as the Medicare therapy cap and Florida's direct-access limitations. These legislative activities will have lasting effects on the practice of physical therapy, and the students of the Hybrid D.P.T. program in Tampa are taking notice.

One of the goals of the Tampa Student Physical Therapy Association (SPTA) is to increase student awareness of professional issues and advocacy. This is difficult, as advocacy is often pushed aside in the life of a busy student due to the time it takes to stay up on current events, make phone calls, and write emails and letters to legislators.

Advocacy keeps our profession moving forward and falls right in line with our core value of professional duty.

As our profession moves to a Doctor of Physical Therapy model, all of us—students and future students—have the accountability to not only focus on excellent care for our patients, but to make a broader impact by weighing in on issues that affect current and future patients. Our service, as SPTA leaders, is not only to the student body at NSU, but also to the physical therapy profession.

To improve the ease of advocating for the profession, the APTA has introduced the APTA Action app. As a result, the Tampa SPTA members are leading a charge to get their fellow students to use it. Through this app, users can be informed of federal issues, such as the Medicare therapy cap, and subjects specific to Florida—such as the recent Senate Bill 710, which removes barriers to care caused by the current 21-day limit on direct access.

The APTA Action app allows users to reach their legislators in less than a minute with a smartphone, which makes it a great tool for busy students and professionals. Other app features allow users to make donations to the APTA's Political Action Committee, sign up for advocacy events like PT Day on Capitol Hill, and read about talking points regarding current health care issues.

The Tampa SPTA members used their most recent on-campus weekend to get as many of their fellow students and faculty members as possible to download the app. Faculty members allowed SPTA class representatives class time to showcase the app, which many students downloaded immediately. One of the greatest legacies student leaders can leave is one of advocacy for their profession, because it helps advance health care to an ideal view for the treatment of patients. ■

Chavez serves as past vice president of the Tampa SPTA. Masullo is the past president.



Tampa Welcomes New Faculty Member

BY MARY T. BLACKINTON, ED.D., PT, GCS, ASSOCIATE DIRECTOR, HYBRID D.P.T. PROGRAM

The Tampa Campus welcomed the newest member of its team—Lynda Ross, D.H.S., M.S., PT—to the Hybrid D.P.T. program on October 12, 2015.

Why did you decide to join NSU's Hybrid D.P.T. program?

The program's teaching philosophies, core values, and goals are in alignment with my own, and I was drawn to the faculty members' dedication and commitment toward guiding their students to become successful learners. I am a strong advocate of student-centered learning founded on constructivism, where the focus is on how effective learning can be cultivated. At the heart of this pedagogy is students taking ownership of their own learning via active participation in the learning process.

NSU's Hybrid D.P.T. faculty members have developed a curriculum embedded with instructional strategies and learning activities that promote students' interaction with the content, fellow classmates, teachers, and the learning process performed in a blended learning environment. I believe this innovative approach is essential for preparing physical therapy students for autonomous practice.

You recently relocated from Chicago. Please tell us a little about yourself and your background.

I have more than 30 years of experience treating diverse patient populations, from infants to octogenarians, in a variety of



Lynda Ross, D.H.S., M.S., PT

health care environments. For the past 15 years, I owned a pediatric physical therapy practice and worked with infants and children with developmental disorders. My educational background includes a B.S. in Physical Therapy and an M.S. in Orthopedic and Neurologic Physical Therapy from Northwestern University and a Doctor of Health Science in Health Professions Education from Midwestern University.

I am currently completing the last semester of my Transition D.P.T. Program at NSU and studying for the Neurologic

Certification Specialist examination. My doctoral research focused on the reliability of the video head impulse test for children, and I recently submitted my research for publication in *Otology & Neurotology*.

My teaching experience includes working as an adjunct faculty member for the Northwestern and Midwestern physical therapy education programs and the Morton College Physical Therapy Assistant Education Program.

What are your future aspirations as an NSU faculty member?

I am passionate about contributing to the advancement of physical therapy and am excited because NSU has many opportunities for me to do this. I am interested in developing strategies to integrate interprofessional education into the curriculum and performing educational research, including instructional strategies used in hybrid physical therapy education programs. I also want to develop my teaching skills. One of my exciting new roles will be developing a plan for integrating interprofessional education within the Hybrid D.P.T. program. In doing so, I'll get to know my College of Health Care Sciences and Health Professions Division colleagues. ■

Physical Therapy

TAMPA

Ode to the Hybrid D.P.T. Charter Class

BY MARY T. BLACKINTON, ED.D., PT, GC S, ASSOCIATE DIRECTOR, HYBRID D.P.T. PROGRAM



The Hybrid D.P.T. class of 2015 holds Molly Iglesias, academic support coordinator.

Life is full of firsts—the first day of kindergarten, your first time driving, the first day of college, or even your first kiss. These firsts are forever burned in your memory.

For the faculty and staff members in the Hybrid D.P.T. program, the class of 2015 was our charter class, and thus our first graduating class.

Like the oldest child in a family, an inaugural class experiences all the trials and tribulations of having novice parents, or in this case, novice hybrid faculty members. As the faculty broke ground in the way PT education was delivered, it sometimes, inadvertently, broke the students' backs.

In the winter of their first year, the students had 36 assignments in the Medical Pathology course, but it was pared down to a mere 14 assignments. Being the first meant that the students had to navigate their own way since there were no upper classmen to act as guides or to reassure them.

This was no small feat, especially with a program designed so that students learned online for three weeks, followed by four days on campus. Despite students living all across the country, they quickly came together as a group and found ways to help one another.

Sometimes, however, being first has its advantages. In its first year, the charter class was the only class in the program and thus had the faculty members' undivided attention. These students were the first to use the labs, classrooms, and equipment and never had hand-me-downs or leftovers from previous classes.

They were trailblazers who navigated uncharted waters and set the pace for all the other classes that would follow. Sometimes, they had to overcome some initial prejudice against hybrid learning. Clinical instructors, who were admittedly leery about taking a student intern from our hybrid program, quickly changed their minds.

As of early November, 17 of the 18 graduates had passed the National Physical Therapy Examination.

Football coach Vince Lombardi's quote applies to this class: "I firmly believe that any man's finest hour, the greatest fulfillment of all that he holds dear, is that moment when he has worked his heart out in a good cause and lies exhausted on the field of battle—victorious." While not on a battlefield, each of our 18 graduates fought many odds to become a member of the physical therapy profession. ■

INAUGURAL HYBRID D.P.T. PROGRAM GRADUATES

Joshua Adlam, D.P.T.
Fort Meade, Florida

Kantica Arora, D.P.T.
Pembroke Pines, Florida

Nicdie Boswell, D.P.T.
Savannah, Georgia

Amanda Bourdon, D.P.T.
Muskegon, Michigan

Randy Bittner, D.P.T.
Rochester, New York

Amy Casteel, D.P.T.
Pittsburgh, Pennsylvania

Jennifer Clarkson, D.P.T.
Sarasota, Florida

Jessica Estrada, D.P.T.
Brandon, Florida

Lauren Goforth, D.P.T.
Tampa, Florida

William Goumas, D.P.T.
West Palm Beach, Florida

Jocelyn Hall, D.P.T.
Bowie, Maryland

John Lam, D.P.T.
Chicago, Illinois

Daniel Lazo, D.P.T.
Miami Lakes, Florida

Katherine Leon, D.P.T.
Tampa, Florida

Justin Rowley, D.P.T.
Birmingham, Alabama

Michael Selvaggi, D.P.T.
Tampa, Florida

William Siesel, D.P.T.
Largo, Florida

Carolyn Tremblay, D.P.T.
Winter Park, Florida

"I was surprised at how quickly I was able to acclimate to the fast-paced, acute-care environment."

—Amy Casteel, D.P.T.

"I didn't anticipate developing a close-knit group of friends in a hybrid program where we met once a month, but I feel like I developed meaningful relationships with my classmates and instructors that will continue on for years to come."

—Jennifer Clarkson, D.P.T.

"Being in a hybrid program influenced me in that it has tremendously strengthened my work ethic and determination to succeed as a working health care professional. Working hard to stay on track with assignments, and dedicating a significant amount of time to studying and practicing hands-on techniques, played a significant role in my success."

—Jocelyn Hall, D.P.T.

"The thing that surprised me about the hybrid program was the amount of quality, hands-on training during our on-campus time, especially the opportunity to work with community members who represented our potential patient population. As a result, I felt prepared for clinical internships and comfortable in moving on to that portion of my education."

—Carolyn Tremblay, D.P.T.

Physician Assistant

FORT LAUDERDALE



NSU's Alpha Eta Society Inducts, Honors Members

BY MELISSA J. COFFMAN, ED.D., PA-C, CHAPTER PRESIDENT

In August 2015, the Nu Sigma Upsilon (NSU) Chapter of the Alpha Eta Society inducted 61 new members in conjunction with commencement activities. These new members join the rest of the chapter in promoting and recognizing significant scholarship, leadership, and contributions to the allied health professions.



The induction ceremony marks the beginning of their affiliation with the national honor society and serves as recognition of their achievements and firm commitment to future achievements and contributions to health care delivery. NSU Alpha Eta Executive Council members issued honor cords, membership certificates, and lapel pins to the inductees.

In addition, the NSU Alpha Eta Chapter recognized two outstanding current members who have demonstrated outstanding achievement in leadership, scholarship, and service. The Richard E. Davis Alpha Eta Awards were created in 2013 to recognize current Alpha Eta members who display the attitude and philosophy of a leader, along with behaviors demonstrating sincerity, integrity, and candor in all actions in their field of expertise. In 2015, the award recipients were Stanley Wilson, Ed.D., PT, CEAS, and Jessica Bolduc, D.O.T.

Wilson, who has served as CHCS dean since September 2013, was chosen for his outstanding achievement in the area of leadership. Over the years, he has been very effective in providing guidance and leadership to the college's department chairs, program directors, and faculty members. Wilson, who was inducted into the NSU chapter of the Alpha Eta Society in 2009 and was integral in its development, served as the chapter's inaugural president in 2009–2010. He also serves as current president of the National Alpha Eta Society.

Bolduc, who graduated from the NSU Doctor of Occupational Therapy Program in August 2013, has been working as a mentor, clinical fieldwork educator,

and adjunct professor in the CHCS Occupational Therapy Program. She has influenced community health far beyond the realm of her clinical practice and is actively involved in a range of organizations and projects, including the Maine Occupational Therapy Association, United Way's Day of Caring, and Partners for World Health. Based on her obvious dedication to providing assistance to the community, Bolduc was awarded the Richard E. Davis Award for service. ■



Melissa Coffman, Ed.D., PA-C, presents Stanley Wilson, Ed.D., PT, CEAS, with the Richard E. Davis Award for Leadership.

Physician Assistant

FORT LAUDERDALE



"[Calvin Finley] is compassionate, energetic, and very enthusiastic about helping others and making a significant difference in our college."

— Alicia Bolden, M.P.A.S.,
PA-C, assistant professor

Professor Celebrates 20 Years of Service

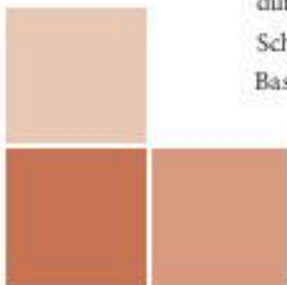
BY PAMELA JAFFEY, M.D., FCAAP, ASSOCIATE PROFESSOR

The Physician Assistant (PA) Program is proud to pay tribute to Calvin Finley, Ed.D., PA-C, associate professor, who will be retiring in July 2016. In 2015, he earned significant recognition, receiving the CHCS Outstanding Faculty Service Award in Scholarship in August and the CHCS Professor of the Year Award in October. His achievements are due, in large part, to excellent leadership and collaborative skills, along with a selfless desire to serve others.

Finley began his clinical career as a PA while on active duty in the U.S. Air Force, having graduated from the School of Health Care Sciences at Sheppard Air Force Base in Texas with a Bachelor of Science as a Physician

Associate. He served as a PA in the Air Force for 10 years, retiring in 1992 at the rank of captain, and then worked as a locum tenens PA for the next four years.

In 1996, Finley joined the NSU PA program in Fort Lauderdale/Davie. He has held many important leadership roles in the program, initially as assistant clinical director, followed by assistant academic director, academic director, and associate program director. Until recently, Finley served as academic director and still serves as associate director of the PA Program. Over the years, he has chaired various committees that have been integral to the program, such as admissions, student progress, and curriculum.





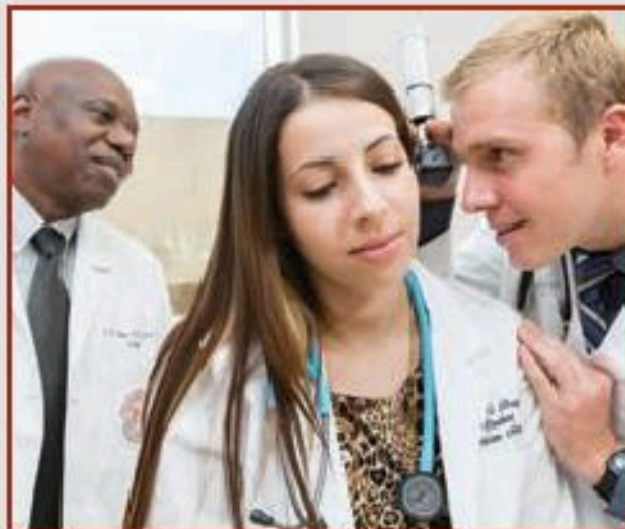
Class of 2017 physician assistant students Zineb El Bougrini, left, and Tandi Tyrantai review an X-ray with Calvin Finley, Ed.D., PA-C, a associate professor.

Below, Finley supervises an ear exam performed on Zineb El Bougrini by Brian Layton, physician assistant class of 2017.

As Curriculum Committee chair, he was a major guidepost in the development of a curriculum that is at the core of our nationally recognized and continuously accredited PA program. Finley has been committed not only to the academic training of the PA students, but to their professional development as well. As chair of the Student Progress Committee, he maintained policies that hold PA students to a high standard of professional behavior, which will serve them well as future clinicians.

He has also played a very active role in hands-on teaching in the PA program. He served as director of the interpretation of the Medical Literature course and delivers lectures in the Clinical Medicine, Surgery, and Physical Diagnosis courses. Finley, who has a good sense of humor and readily establishes a rapport with the students, enjoys assisting them in various labs.

In December 2006, Finley completed a Doctor of Education in Instructional Technology and Distance Education at NSU's Fischler College of Education. His strength in these areas has allowed him to implement technological changes that have been very beneficial to the educational curriculum. As a result, he has eased students and faculty and staff



members into these changes by effectively addressing all questions and concerns.

Finley has been a go-to person not only with regard to technological questions, but by readily administering assistance to any who seek it. He has also been a mentor to new faculty members, aiding them with the transition from clinical practice to academia. "Dr. Finley selflessly

volunteers to assist any new faculty members in acclimating them to the program," said Alicia Bolden, M.P.A.S., PA-C, assistant professor.

"He is compassionate, energetic, and very enthusiastic about helping others and making a significant difference in our college."

Outside of the PA program, Finley has

been actively involved with an ongoing review of policies and procedures involving the CHCS and the university as a whole. He serves as CHCS chair of college-wide appeals and as a member of the Curriculum Committee and the Continuing Contract Review Committee. He also serves as a member of the Parking Appeals Board for the NSU Division of Parking Enforcement.

Bill Marquardt, M.A., PA, DFAAPA, associate dean, summarizes Finley's contributions by saying, "Dr. Finley's service to the college has been notable while providing clinical instruction in a variety of CHCS departments over a span of several years. His efforts in support of these programs have not only benefitted the other allied health programs in promoting interprofessional collaboration, but also the physician assistant profession by serving as an ambassador." ■

Physician Assistant

FORT LAUDERDALE

Outreach Trip Provides Dual Blessings

BY BECKS URRUTIA, B.S., CLASS OF 2016

On August 9–14, 2015, I, along with 16 other physician assistant students from the Fort Lauderdale/Davie Campus and 9 PA students from the Jacksonville Campus, embarked on a week-long medical outreach trip to the Dominican Republic just before the start of our clinical rotations.

We teamed up with the nonprofit organization Global Medical Training to provide free medical exams to impoverished villages throughout the country. On the first day, we traveled to a village two hours away to set up our health care clinic, which was to be in a small, one-room building with no air conditioning or private rooms.

Each patient room was simply a group of plastic chairs in a circle, with no privacy whatsoever.

Essentially, our one-room office had six individual patient rooms or

chair clusters where a patient could see a few PA students working as a team, along with a translator. The PA students took a medical history, performed a physical exam, and determined a treatment plan for each patient. We would then consult with one of the volunteering medical doctors to confirm our diagnosis and treatment.

We saw approximately 200 patients each day, each one with a unique story to tell. There was an 83-year-old man who had never seen a doctor, a 40-year-old man who was paralyzed from the waist down after being brutally stabbed, and an elderly woman with a large mass on her abdomen that looked like cancer. For five consecutive days, we traveled to some of the poorest communities to set up makeshift clinics and provide basic health care with the other mission volunteers.

We were exhausted, covered in mosquito bites, and drenched in sweat, but at the end of a long day, we would leave the village and return to our air-conditioned hotel and plush mattresses. The patients we saw during the day, however, would go back to their one-bedroom houses that had dirt floors, no running water, and flimsy thatched roofs.

While we educated these poverty-stricken people on diseases and preventive health care, they taught us even more by opening our eyes to the world around us. It was there, in the Dominican Republic, amid the sweltering heat and incessant mosquitos, where we were reminded why we set out to study medicine in the first place. We brought the blessing of health care to underprivileged communities and, in turn, we blessed ourselves. ■





Olivia Kester, B.S., class of 2016 PA student, takes the blood pressure of a patient in the Dominican Republic.

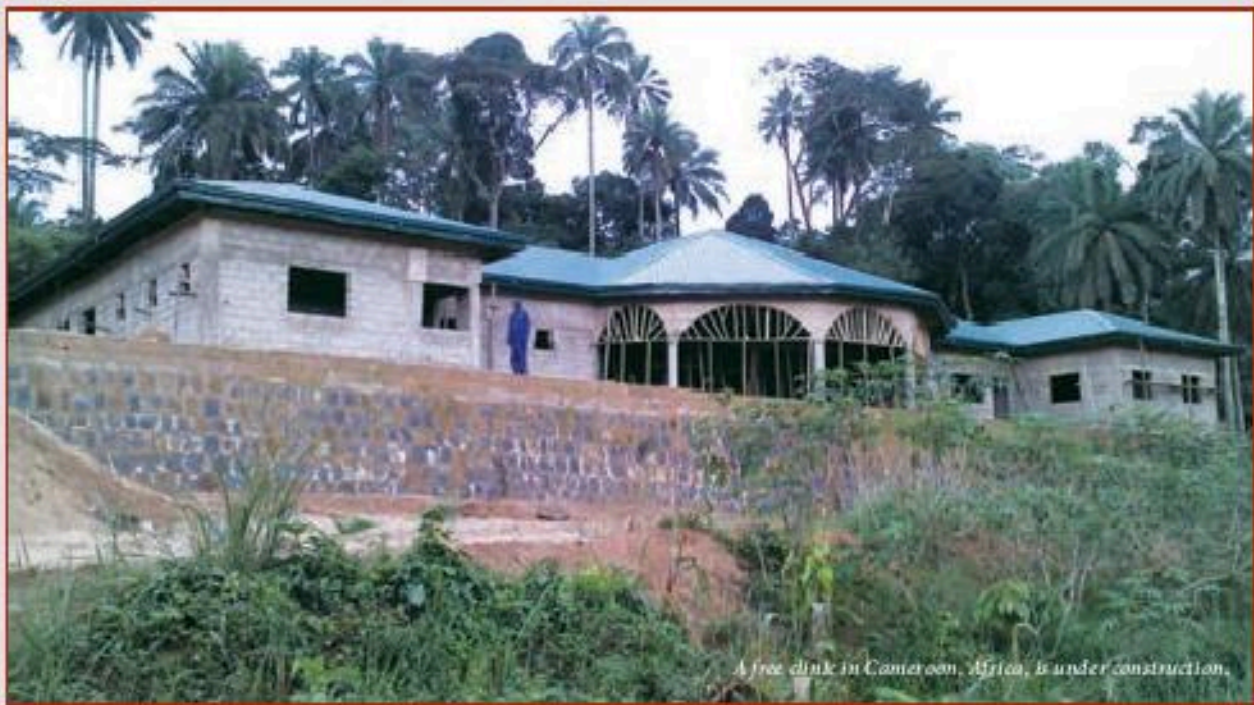


Physician Assistant

FORT MYERS

Program Provides Aid in Cameroon

BY JANET SPARKER M.S., PA-C, ASSISTANT PROFESSOR



A free clinic in Cameroon, Africa, is under construction.

Fort Myers PA students have had the unique experience of learning about the lives of physician assistant students in Cameroon, Africa, from John Hibbert, M.D., M.P.H., a board-certified general surgeon, and his wife Omelda Hibbert, B.S.N., R.N., of Punta Gorda, Florida.

The Hibberts have been involved in taking medicine to this nation in western Africa for 15 years and have established a free medical/dental clinic and physician assistant school in Barmenda—the capital of the northwest region. Because they have successfully trained eight classes of young Cameroonians, the graduates are now

independently operating clinics in remote villages and providing urgently needed medical and surgical care.

There are 50 students currently enrolled in the couple's Cameroonian PA school, called Open Door Medical Development. The school specifically caters to students who would not otherwise be able to afford an education. The program takes three years to complete and allows students the unique opportunity of interning at various hospitals in Cameroon.

During a recent visit to the Fort Myers Campus, the Hibberts discussed their faith-based school, which



has a goal of changing lives through the word of God and the provision of medical care. To assist the school, CHCS Fort Myers students and faculty members have collected textbooks, crutches, scrubs, and lab coats to send to Cameroon. In past years, the Fort Myers program has

shared curricular material with the Hibberts as they successfully launched their PA school. Students from both programs hope to initiate a pen-pal arrangement in the near future to learn more about each other's experiences in PA school. The couple's future goals include the completion of a 15,000-square-foot clinic, as well as the construction of a new school and residence for the students to allow training of more vitally needed physician assistants. For additional information about the Cameroon school, please contact the Hibberts at opendoormedical@aol.com. ■

Fort Myers Welcomes New Program Director

Kyrus Patch, D.H.Sc., M.S.P.A.S., PA-C, who has been a physician assistant since 1977, was named program director of the Fort Myers PA Program in July 2015. After graduating with a B.S. in Medical Science from Alderson-Broaddus College in Philippi, West Virginia, she began her medical career in rural Ohio, where she treated patients in an outpatient facility and made house calls on a routine basis.

Patch returned to the mountains of West Virginia as the senior medical officer at Snowshoe Ski Resort 1980–1985 and spent the offseason working in the cardiology department of Memorial General Hospital in nearby Elkins. After tiring of the subzero winter climate, she moved to Orlando, Florida, and worked for Walt Disney World, making house calls to guests throughout the complex.



Kyrus Patch

A subsequent move to Naples, Florida, resulted in her working as a physician assistant in an urgent care/family practice setting from 1988 to 2007. After earning

her Master of Science in Physician Assistant Studies in 2007 from her alma mater, she became an assistant professor at NSU's Fort Myers Campus. She subsequently earned her doctorate in health science in June 2015. Prior to being named program director, Patch served as the course director for Physical Diagnosis I, II, and III and for Clinical Pharmacology and as the program's academic director and associate program director.

After 30 years of clinical practice as a physician assistant, Patch hopes to teach a new generation of physician assistants what it means to be a knowledgeable, compassionate, and professional health care provider. ■

Physician Assistant

FORT MYERS



Students were victims and rescuers in the mass-casualty disaster drill.

Students Participate in Airport Disaster Drill

BY ROBERT HAYNES, B.A., EMT-P, CLASS OF 2017 PRESIDENT

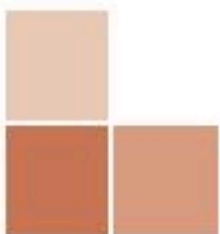
On October 22, 2015, first-year PA students participated in a mass-casualty disaster drill at the Southwest Florida International Airport. The Medical Reserve Corps (MRC) orchestrates the full-scale drill every five years as an important part of the airport's emergency preparedness plan. Forty organizations and more than 400 individuals participated in the exercise, which allowed NSU's physician assistant students to act as both victims and responders.

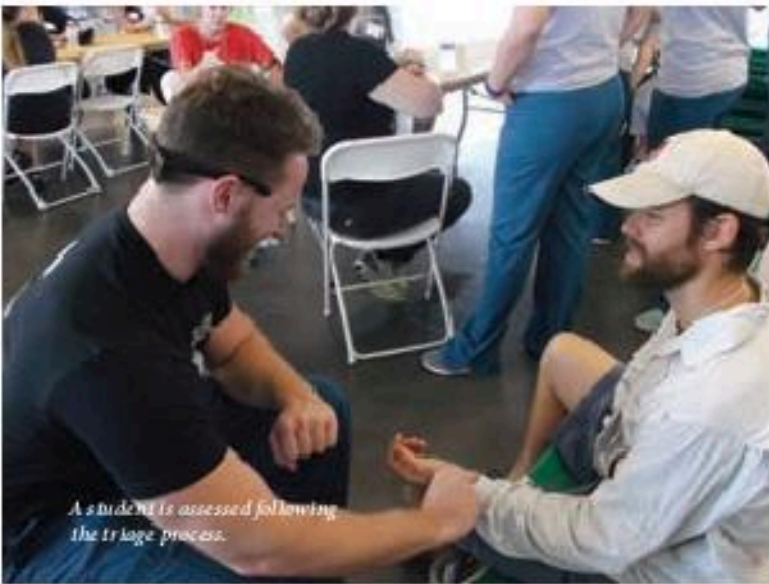
The class attended a one-hour drill overview at the airport on September 17. It was led by Lisa LeBlanc-Hutchings of the Lee County Port Authority, who provided information about the role of the airport in the drill, and Kevin Kirkwood, M.P.H., from the Lee County Health Department, who informed the group

about the Medical Reserve Corps. They were then photographed for their official MRC badges, which would allow them entry into the drill.

During the overview, the group was educated about the START (simple triage and rapid treatment) process by which large numbers of injured people are prioritized based on the severity of their injuries. The START process utilizes the criteria of respirations, perfusion, and mental status to classify individuals as black, red, yellow, or green.

A black-tagged victim is deemed dead or non-salvageable. Red victims are unstable and require immediate treatment and transport to a hospital. Yellow victims are those who need hospital care, but not immediately, while green-tagged individuals are the walking wounded who





A student is assessed following the triage process.

would be provided delayed transport to an emergency room or an urgent care center.

Captain Doug Higgins of the Lee County Division of Emergency Medical Services (EMS) provided START training and copies of the triage tags used by the local EMS and fire departments. Students also became official MRC volunteers during their tenure in the CHCS Fort Myers Physician Assistant Program so they could be called on should a real large-scale disaster occur in their area.

On October 14, Kirkwood, LeBlanc-Hutchings, and Higgins visited the class to distribute badges and explain the students' roles as responders or victims. Many of the victims would be local EMS students, because the Lee County Port Authority is interested in feedback from them regarding how the victims are treated by the rescuers.

The majority of the class was designated as victims and assigned to the site of a mock plane crash on the tarmac. The rest of the students were assigned to triage at the rescue and fire station on the airport grounds.

Students arrived at the assembly area early in the morning on the day of the drill at staggered times for moulage application. Makeup experts applied simulated bruises, bleeding lacerations, and even fake imbedded glass fragments using amazing techniques. Students had to wear clothes they were not interested in ever wearing again, as fake blood and simulated injuries, including fabric tears, ruin garments.

The providers arrived a few hours later at the airport fire station, simulating an MRC activation requesting



A student checks a tag displaying vital signs.

providers to respond to a real emergency. The walking wounded were transported to the airport fire station, where they were reevaluated by some of the students to ensure they did not deteriorate. Later, victims were transported to local hospitals once the more seriously wounded were removed from the scene. While awaiting transport, or for those who were not hurt, food, drinks, and cots were provided. Airport officials were also present to help reunite victims with their loved ones.

NSU's participation in the drill went off without a hitch as the volunteers successfully triaged about 160 victims. Some students were even tagged black. They were assigned to fall on the ground and play dead. An airplane and several school buses were placed on the tarmac to represent aircraft fuselages and increase the event's realism.

As much fun as it was to wear moulage, students were not allowed to leave the grounds with their wounds to avoid creating a safety incident. Additionally, since the airport remained open during the drill, any real incident that occurred would stop the drill immediately. Consequently, the students were given a code word in the event that a real emergency were to occur during the drill.

Local officials will examine the drill results to see where their plans are sufficient and where deficiencies may exist. ■

Physician Assistant

JACKSONVILLE

Burn Simulation Proves Riveting

BY KERRY WHITAKER, D.H.S.C., PA-C, CHAIR, PROGRAM DIRECTOR AND ASSISTANT PROFESSOR, AND BARBARA MORRISON, ADMINISTRATIVE COORDINATOR

At 9:30 a.m. on September 28, 2015, a phone rang.

"911...What is your emergency?" In a panicked voice, the woman on the other end exclaimed, "The grill blew up and my husband is burned badly. I need help!"

The accident site resembled a scene out of a war zone. The barbecue grill was ripped apart, with chunks of it lying on the ground and spread out in all directions. A portion was even embedded in the side of a tree close by. Also on the ground was the badly burned body of the caller's husband lying flat on his back.

His skin, in the front from his face down to just below his knees, was a hideous shade of dark red with black-charred streaks and blotches from the burns he sustained in the accident. His wife could be seen kneeling next to his body with her hands covering her face—emotionally distraught over the accident and the appearance of her husband.

The shriek of an emergency vehicle sounded off from a short distance down the road. As the ambulance came into view, the woman stood and started jumping up and down, waving her arms, and yelling, "Over here! We're over here! Please hurry! My husband needs medical attention NOW!"

The Saint Johns River State College paramedic students emerged from the ambulance with a stretcher in tow



and immediately started obtaining the man's vital signs while questioning the woman about what happened. She explained that her husband was getting ready to grill steaks and was bent over the gas grill while trying to light it. The next thing she knew, there was an extremely loud explosion, lots of flames, and then her husband was airborne, landing on his back about 15 to 20 feet from where the grill used to sit.

The emergency crew quickly assessed the patient, loaded him into the ambulance, and headed off to the closest medical facility while alerting the hospital of its impending arrival with the trauma patient. Upon arriving at the hospital, the paramedic students rolled the stretcher through the mock emergency department doors with the man's wife walking beside it, crying hysterically.





Students Participate in Photo Competition

October 6–12 marked the celebration of National Physician Assistant (PA) Week, which was established to bring recognition to how valuable PAs are in the medical field and spotlight the capabilities of PAs to the public. The class of 2017 showcased its PA pride by participating in the annual American Academy of Physician Assistants photo competition, which included themes, such as My View/Where I Practice, My Health Care Colleagues, Throw-back Thursday, My PA Program, White Coat or Scrubs, and My PA Inspiration.

From left: Physician assistant students Phillip Woessner, Karle Lotz (as NSU mascot Razor the Shark), Anna Pfaff, Nicole Rohberg, Elizabeth Bettis, James Curnayn, and Kim-My Nguyen demonstrate key physical exam techniques for National Physician Assistant Week.

The doors opened to a group of approximately 15 students, all dressed in white coats or blue scrubs. As the wife calmed down, the paramedic students gave their patient report of the accident to the receiving teams, including the burn victim's vital signs and the brief medical history that was obtained.

As if on cue, the wife looked over to one of the paramedic students, grinned, winked, and said, "Was that a good acting job or what?" She was one of three staff members from the NSU Jacksonville PA Program who volunteered to assist in the simulated scenario.

At this point, three groups, consisting of a five-member medical team, were ushered into three separate but identically equipped rooms that contained a high-fidelity simulator that was moulaged to look like the burn victim just delivered. The students had 20 minutes to work as a team to diagnose and recommend treatment of their patient. The students were then debriefed at

the end of the scenario, focusing on their ability to communicate and work together as a health care team.

The event's main objective was for students from different professional programs to work and learn together in teams like they would if practicing in their respective professions after graduation. The event took place on the campus of St. Johns River State College with nursing, paramedic, and respiratory care students from St. John's allied health care programs and students from the NSU Jacksonville Physician Assistant Program.

The scenario was replayed six times to allow all students from both colleges the interprofessional education opportunity to work in teams as they would in the clinical setting. The coming together of these two colleges—a mix of both private and public—required quite a bit of hard work and collaboration to make it so successful. ■

Physician Assistant

ORLANDO

FAPA TIMES

BY JENNIFER CARDENAS, SGA FAPA REPRESENTATIVE, CLASS OF 2017

READ ALL ABOUT IT!

Promoting the Profession

One of the most important things a profession can have is proper representation in its state. Physician assistants in the state of Florida are lucky to have an outstanding organization known as the Florida Academy of Physician Assistants (FAPA) representing the profession.

FAPA is an organization that promotes the PA profession and is recognized by all the major organized professional medical and health care groups in the state. As FAPA representative of the Student Government Association at NSU's Orlando Campus, it is my job to promote all the breaking news the academy has to offer my classmates.

I wanted a forum where I could highlight important FAPA news, events, and education with easy online accessibility, so I developed a newsletter called the *FAPA Times* to inform classmates about current events.

There are many benefits to being a FAPA member as both a PA student and a PA-C. The academy hosts two nationally respected continuing medical education (CME) conferences each year that provide all CME needs for state licensure and National Commission on Certification of Physician Assistants' certification and recertification.



Orlando PA students (from left) Jennifer Cardenas, Jade Ramadan, and Margaret Klusman take a stand regarding the importance of students playing an integral role in the FAPA.

These conferences are not just for licensed PAs, but also physician assistant students and undergraduates who are interested in the profession. This past August, five of my classmates and I attended the FAPA 2015 Summer Symposium at the historic Boca Raton Resort & Club. We had just finished our first semester of PA school and were excited to see the information we had studied come to life in the speakers' presentations. We were able to further our medical knowledge by participating in

**To join or learn more about the FAPA and the AAPA,
visit www.fapaonline.org and www.aapa.org.**

lectures on topics about emergency room medicine, surgery, dermatology, and orthopedics and were surprised that we were already familiar with medical terminology the speakers were using.

At the winter symposium, FAPA offers lectures designed just for students, as well as workshops such as suturing and casting. For students who enjoy competition, there is an opportunity to showcase their knowledge at the FAPA Challenge Bowl. This event is similar to a game show, where all Florida-accredited PA programs compete against one another to answer questions about various medical topics.

Another aspect of my position as the FAPA representative is boosting FAPA membership among my classmates. As stated on the FAPA website, "PAs should support both the state and national organizations that represent our profession and protect your rights legislatively both on a state and national level."

As students, we are able to have a reduced membership fee of \$60 that not only helps contribute to our future profession, but also covers our membership for our entire education period and includes reduced rates for both conferences. In addition to providing networking opportunities with physician assistants around the state, the academy also supports a full-time lobbyist team in Tallahassee that works year-round to protect our profession.

The lobbyist team works hard to help pass legislation that promotes the physician/PA team concept and protects the health of Florida citizens. One of the current issues the lobbyists are pushing for is passing a bill that would permit physician assistants to prescribe



From left: Margaret Kusman, Meghna Patel, Jennifer Cardenas, Jade Ramadan, Kunj Shroff, and Monique Medina represent NSU at the Summer Symposium.

controlled substances in Florida. As students, we are able to make our voices heard and help in the effort of passing this bill through our membership in FAPA and by educating representatives and senators locally about the PA profession.

Our Orlando PA class of 2017, with more than 80 percent FAPA membership, hopes our large membership contingent will help FAPA make an impact during FAPA Legislative Days when this bill is presented in Tallahassee.

As a student, FAPA is our stethoscope, amplifying and making clear any questions or concerns we may have about the PA profession. Through our membership and support, we can not only make a difference around the state, but nationally. I encourage all students and PA-Cs to join FAPA and the American Academy of Physician Assistants (AAPA) to help make a difference in moving the PA profession forward. ■

Physician Assistant

ORLANDO

Students Recognized for Altruism

BY MARGARET KLUSMAN, SGA VICE PRESIDENT, CLASS OF 2017

The Orlando Physician Assistant Program has much to be proud of regarding the class of 2017, which had 100 percent student retention from the summer to fall semester. Much of this retention success can be attributed to outstanding students like Rachel Stein and Caroline Northup, who help harbor a community of success in the class.

Stein was nominated by overwhelming majority to be October's Shark of the Month, which is an award created by the Orlando Campus' Student Government Association (SGA) to recognize outstanding students. The SGA polls a different degree program each month to select a student who embodies exemplary academic, professional, and personal qualities. The selected student is awarded the title Shark of the Month and is recognized campus-wide.

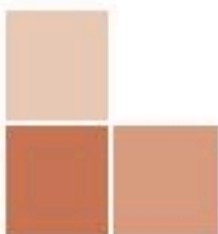
Her selfless acts of kindness and giving demeanor are unparalleled and greatly appreciated by her 63 classmates. Although she does not hold an official student governing position, Stein has taken it upon herself to build camaraderie among her peers. She has organized class outings, potluck meals, and a campus bible study group and even gives cards and gifts to the faculty members. The PA program may be rigorous, but Stein takes each day in stride and constantly looks for new



Caroline Northup, left, and Rachel Stein were recognized for exemplary achievements.

ways to boost class morale. One of her classmates stated, "She makes me want to be a better person and serve others more."

Another outstanding PA student is Northup, the unsung hero in the class. She quietly excels in school and is enthusiastic about class activities, but few people know about her exemplary achievements and commitment to service. For example, she is the first recipient of the



National Health Service Corps Scholarship Award in NSU Orlando Physician Assistant Program history.

The scholarship is granted to students who demonstrate a passion for working in medically underserved populations in primary care. In return for full tuition and a stipend, Northup will work for three years in an underserved community. Out of 5,100 applicants, she was one of only 196 chosen recipients. She has also volunteered in medically destitute regions of Panama and Nicaragua, as well as at clinics in Tampa, that serve disadvantaged populations.

Northup hopes to dedicate her mind, body, and spirit to the primary health care of underserved communities once she becomes a PA-C. She is especially interested in catering to the needs of Hispanic populations because she feels her ability to communicate in Spanish will help build a deeper, more individualized rapport with her patients.

While every student in the class of 2017 brings unique strengths to the group, Stein and Northup are exemplary pillars of strength and integrity. They show their peers, faculty members, and community what it means to be an ideal NSU physician assistant student. ■

Alumna Named Inaugural Scholarship Recipient

BY WILLIAM H. MARQUARDT, M.A., PA, DFAAPA, ASSOCIATE DEAN

Rachel Macalua, PA-C, is the first recipient of the College of Health Care Sciences' Community Health—Collaborative Service Scholarship. A 2015 graduate of the Orlando Physician Assistant Program, Macalua was recognized for her lifelong dedication to community service and caring for those in need.

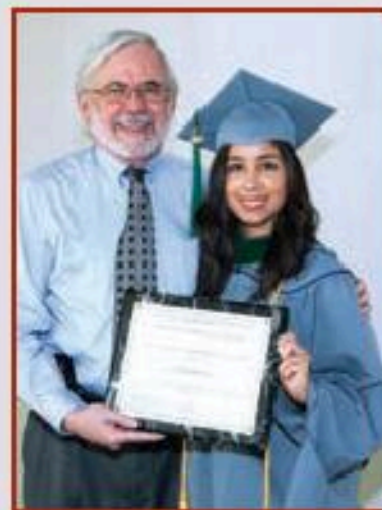
With initial motivation from her parents while still a child, she routinely visited local nursing homes and served breakfast to the homeless. Her hospital visits and interactions continued after moving to Orlando to attend Florida Hospital College of Health Sciences in 2008.

Her active involvement in community service continued in 2011 in Central Florida when she worked with Service and Love Together, which provides services ranging from feeding the homeless and youth programs in low-income housing facilities to health screenings and counseling for families.

Macalua's clinical experiences in the PA program were highlighted by her mentor in her family medicine rotation, whose compassion for the families he cares for further cemented her motivation to practice primary care

medicine, with emphasis on emotional and spiritual well-being. She rounded out her clinical training with an additional elective experience in a primary care setting.

The Community Health—Collaborative Service Initiative is an endowed scholarship fund created in 2015 to recognize NSU PA students nearing completion of their training who possess a commitment to providing primary and preventive health care services, coupled with a further commitment to community service for those in need. The initiative also recognizes and promotes NSU PA graduates in the community who not only have a similar commitment to primary/preventive health care delivery, but have also given back to the university by mentoring students during their learning. ■



William H. Marquardt presents the inaugural CHCS Community Health—Collaborative Service Scholarship to Rachel Macalua.

Physician Assistant

ORLANDO



Tansyla Nicholson, seated in front, and student volunteers participate in health screenings at City of Life Christian Academy.

Students Assist with School Physicals

BY BRIANNA FARNELL, CLASS OF 2017

It can be challenging for students to maintain the goal of helping others during the didactic year of PA studies, where most of the learning is done inside the classroom. Thanks to the Orlando PA program's recent faculty addition, Tansyla Nicholson, M.D., who is a board-certified pediatrician, first-year students were able to get hands-on experience immediately after finishing their first semester.

“These events give students a chance to apply what they are learning in the classroom to an actual patient ... It helps motivate students and get them excited about medicine.”

—Tansyla Nicholson, M.D.

Students were given the chance to participate in community outreach through Nicholson’s practice — Sandcastle Pediatrics—by assisting in two events: discounted back-to-school sports physicals on August 21 and school health screenings on October 2. She has participated in many free community health screenings and was excited to get students involved.

“These events give students a chance to apply what they are learning in the classroom to an actual patient,” said Nicholson. “It helps give them perspective on why they are learning the things they are. It helps motivate students and get them excited about medicine.”

During the first event, students took vitals, height, weight, and tested eyesight. They were even able to practice their history-taking skills and conduct their first real physical under supervision. Sandcastle Pediatrics offered these sports physicals at a discounted price to students attending Bellalago Academy in nearby Kissimmee and surrounding schools.

In the second event, students tested visual acuity, measured weight and height to calculate body-mass index, and tested the older children for scoliosis at City of Life Christian Academy in Kissimmee. The event was conducted during National PA Week, which also inspired students to take the opportunity to explain what a PA is to the children and help them gain an interest in the profession at a young age.



First-year student Taylor Holtshouser conducts an eye exam during a school health screening.

Nicholson graduated from Baylor University in 1996 with her Bachelor of Science in Economics/Premed and attained her M.D. degree at the University of Arkansas in 2001. She completed her residency training at Orange Children Hospital in Orange, California, and has practiced in Florida since 2008. She began educating CHCS students as a guest lecturer in 2009 in Pediatrics and Physical Exam Labs and was hired as a full-time professor in the fall of 2015.

“It is so rewarding to educate students who might take care of my family one day,” said Nicholson, who continues to work part time at Sandcastle Pediatrics. “In fact, one of my past students actually directly helped in the treatment and surgery of one of my sons.”

Her encouragement inspires students to always work hard and do their best, while her wealth of knowledge, community outreach, and passion for medicine will help the NSU Orlando PA Program continue to grow for years to come. ■

Speech-Language Pathology

FORT LAUDERDALE

Voice-Resonance Evaluation and Treatment

BY HÉLÈNE R. FISHER, SLPD., CCC, ASSOCIATE PROFESSOR



Do you know someone with a hoarse or raspy voice, a singer or teacher with vocal nodules, or someone with throat cancer who has lost his or her voice? How about a child who was born with a cleft palate?

The Voice-Resonance Lab at the CHCS Speech-Language Pathology (SLP) Clinic is a teaching clinic that provides academic and clinical opportunities for M.S. in Speech-Language Pathology students to evaluate and treat patients of all ages with voice-resonance disorders and craniofacial anomalies.

Our team consists of Robert Contrucci, D.O., PA, and SLP specialists Tambi Braun, SLP.D., CCC, Nancy Gauvin, M.S., CCC-SLP, Lea Kaploun, Ph.D., CCC-SLP, Jocelyn Slater, M.S., CCC-SLP, and me.

Our clinic receives referrals for diagnosis and treatment of a variety of disorders. Diseases of the larynx (voice box) include medical conditions ranging from complex laryngeal web, progressive neurological disorders with concomitant swallowing and breathing problems, and complications from radiation and laryngeal cancer to chronic reflux. Vocal abuse, misuse, and overuse are commonly seen in professional voice users such as teachers, singers, actors, and performers.

Diagnoses that affect the structures of the face and head (craniofacial anomalies), such as cleft palate, can cause hypernasality (sound coming through the nose), articulation, feeding, and hearing problems. These are evaluated and treated in collaboration with craniofacial centers statewide.

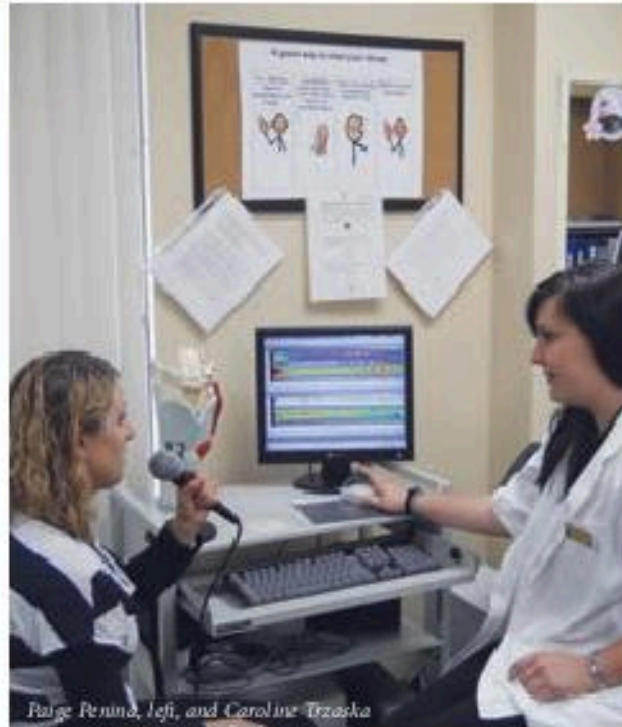


Instrumentation

Students are taught to take thorough case histories and administer perceptual assessments. They appreciate the subjectivity of the data and learn to supplement the information with objective measurements.

Machines with computerized acoustic software, such as the Visi-Pitch IV, are used to measure and analyze the voice in terms of sound physics. The voice is analyzed at both the source level (glottal spectrum) and as it travels through the vocal tract (supraglottal resonance). These acoustic measurements provide objective, quantitative data and allow for assessment of the integrity of the vocal folds.

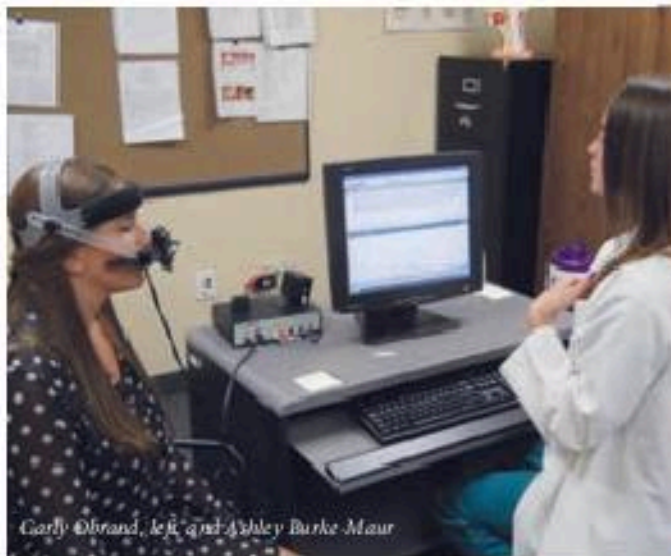
Clinicians can use the Visi-Pitch to view visual tracings and listen to recordings of clients' vocal productions for additional acoustic and perceptual information. These feedback capabilities also provide the client with immediate visual biofeedback and delayed auditory biofeedback for therapeutic purposes. For younger clients, motivational games can be used to provide visual biofeedback during voice therapy.



Paige Penina, left, and Caroline Trzaska

Spectrography (Visi-Pitch IV)

The photo above has two former graduate students demonstrating the use of spectrography—an acoustic program of the Visi-Pitch IV software—which analyzes how the voice is shaped, through resonance, in the vocal tract. With its visual and auditory biofeedback capabilities, spectrography can facilitate the achievement of rich timbre in the voice.



Carly O'Brann, left, and Ashley Burke-Maur

Nasometry (Nasometer II)

At left, two former graduate students are demonstrating nasometry, which is an acoustic tool in the clinic that provides quantitative data in the diagnosis of hypernasality (too much sound coming out of the nose) versus denasality (not enough sounds resonating in the nasal cavities). Hypernasality is commonly perceived in individuals with craniofacial anomalies, such as velopharyngeal dysfunction, unrepaired cleft palate, and/or fissures in the palate (palatal fistulae). Denasality may be a sign of overly large adenoids.

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Speech-Language Pathology

FORT LAUDERDALE



Caroline Trzaska, left,
and Paige Penina

Oral Rigid Scope Endoscopy with Stroboscopy (Kay-Pentax)

Robert Contrucci, who is the team otolaryngologist, along with an SLP voice-resonance team of specialists, conduct flexible fiberoptic videonasoscopy to examine nasopharyngeal and laryngeal structures, function, and pathophysiology. Oral rigid scope endoscopy with stroboscopy is administered to yield more sensitive laryngeal findings, particularly as they pertain to the characteristics of vocal-fold vibration. The otolaryngologist makes the medical diagnosis, while the SLP formulates the phonatory diagnosis.

In the photo above, two former graduate students demonstrate oral rigid scope endoscopy with stroboscopy. As part of the procedure, there is a review of the recorded DVD in slow motion, which is used to analyze the characteristics of the vocal folds during vibration.

Pedagogy—Theory and Practice

The students undergoing clinical rotations in voice-resonance diagnostics and treatment are required to apply their coursework knowledge and to use critical thinking. Students are taught how to interpret complex acoustic data generated from the various acoustic measurements, apply their knowledge of disease processes to avoid false positives or false negative conclusions, and develop best-practice management plans. They are trained in evidence-based therapeutic techniques, dynamic assessment skills, and clinical report writing.

Community

The CHCS Speech-Language Pathology Clinic's Voice-Resonance Lab continues to grow in the number of referrals, diversity of disorders treated, and variety of referral sources. Students benefit from a wide range of clinical experiences while participating in a multidisciplinary team serving the surrounding communities.



From left: Kelly Meehan Doig, Tambi Braun, SLP.D., CCC, who serves as the college's NSSLHA chapter adviser; and Samantha Cutler

Students Receive National Awards

BY WREN S. NEWMAN, SLP.D., CHAIR

Samantha Cutler and Kelly Meehan Doig recently received significant recognition for their various accomplishments as students in the M.S. in Speech-Language Pathology (SLP) Program during the National Student Speech-Language-Hearing Association (NSSLHA) Honors Ceremony at the 2015 American Speech-Language-Hearing Association (ASHA) Convention held last November in Denver, Colorado.

Cutler earned Member Honors from the NSSLHA. These honors are awarded "on the basis of scholastic achievement, service to the academic unit, professional conduct, and service to the NSSLHA." She received a certificate of honor, complimentary registration to attend the ASHA Convention, and recognition in various NSSLHA print and electronic communications.

Doig was the second-place winner of the 2015 Student Ethics Essay Award (SEEA) for her article titled,

"Confidentiality in the Social Media Age." In the essay, she addressed the question of how students can or cannot share information about working with patients/clients without infringing upon the confidentiality of those with whom they work. The SEEA is awarded as a part of the ASHA's goal to provide ethics education to students and members. Doig received a \$500 award, a certificate of achievement, and a one-year national NSSLHA membership.

Cutler is a past president of NSU's NSSLHA chapter, while Doig serves as the current president. The chapter provides each student in the college's SLP program with enriched professional, academic, and social experiences. Each year, the NSSLHA hosts educational workshops, coordinates numerous fund-raising and social events, and conducts a number of community service projects. ■

NSU News of Note



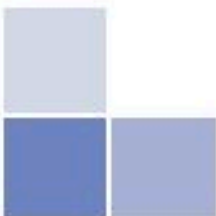
*Oscar Padilla, D.D.S.,
an associate professor
(left), and Sirisha
Gioviandala, D.D.S.,
pediatric dental
resident (right), treat
pediatric patient
Silas Golubchik.*

CDM Gets Nearly \$3.4-Million Autism Grant for ASD Training

Dentists and other health care providers who treat patients with autism spectrum disorder (ASD) require special training to understand the skills and techniques needed to care for this growing population. To assist in this effort, NSU's College of Dental Medicine (CDM) received a \$3,398,452 grant from the Health Resources and Services Administration of the U.S. Department of Health and Human Services to provide training to pediatric dentistry and advanced education in general dentistry residents over a five-year period.

The program will include the development of a curriculum addressing the transition of children and adolescents with ASD to adult dental care and aims to increase access to dental care for children and adolescents with special health care needs such as ASD. Currently, NSU's College of Dental Medicine has pediatric special needs dental clinics at NSU's Mailman Segal Center for Human Development in Davie, NSU Dental Care at Kids In Distress in Fort Lauderdale, and Joe DiMaggio Children's Hospital in Hollywood, along with an adult special needs dental clinic in North Miami Beach. ■

This project is 100% financed by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number D88HP20126 and Postdoctoral Training in General, Pediatric and Public Health Dentistry and Dental Hygiene for \$3,398,452. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.



NSU Researcher Discovers a New Deep-Sea Fish Species

An NSU research specialist from the Halmos College of Natural Sciences and Oceanography recently discovered a never-before-seen anglerfish species from the deep waters of the northern Gulf of Mexico. The three female specimens found ranged in size from 30 to 95 millimeters in length.

Because of the ocean's depth where this species was found, there is no sunlight, which means the only available radiance emanates from creatures that produce bioluminescence (generate their own light source). Additionally, because the fight for food is incessant, they have developed a unique way of attracting prey—from an appendage at the top of their heads that resembles a fishing pole. Like its human counterparts, this fish dangles the appendage until an unsuspecting fish swims up thinking it has found a meal—only to quickly learn that it has become the actual meal. ■




NSU Now Available on Google Maps Street View

Earlier this year, there were strange things occurring on NSU's Fort Lauderdale/Davie Campus, which became evident when students and faculty and staff members reported seeing people wielding odd-looking contraptions and riding around in bizarre-looking vehicles.

spent several days at NSU to record nearly every square foot for Street View, which means visitors or those interested in taking a virtual tour can now use their cell phones or computers to navigate their way around the campus. ■

The strange sightings turned out to be a team from Google that was mapping NSU's campus to be part of its popular Street View program. To capture the needed footage, a Google Trekker





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