The thin line between gum and gait
Student researchers connect chewing to walking speed

By Irvin B. Harrell

Ever heard the expression “You can’t walk and chew gum at the same time?”

This idiom typically refers to a person’s inability to perform two trivial tasks simultaneously. But researchers at Old Dominion University are putting the saying to the test – literally.

“Now there has been research on chewing gum,” says Endowed Professor Steven Morrison, director of research for the School of Physical Therapy and Athletic Training. “And there’s plenty of

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Dean’s Message: Interim Dean Richardean Benjamin

Many successes, many thanks

As another academic year comes to an end we like to take the time to celebrate and acknowledge the accomplishments of faculty, staff and students. We began the year kicking off the 30th Anniversary of the College of Health Sciences, highlighting just a few of the notable events of the period and recognizing those individuals who went on to do great things following their encounter with us here in the College. We salute the 30 Distinguished Alumni who have made their alma mater proud.

Faculty successes were acknowledged by service recognition, promotions and awards. Drs. Matthew Hoch and Professors Ann Bruhn and Tara Newcomb were promoted to associate professors with tenure and Dr. Barbara Kraj was awarded tenure. Additionally, faculty were recognized for years of service; Assistant Dean Debbie Bauman, 35 years, Scott Sechrist, 30 years, Karen Karlowicz, Beth Jamali and Mira Mariano for 20 years. Dr. Bonnie Van Lunen is a Virginia Outstanding Faculty Award nominee. Our annual awards and recognition luncheon announced the following awards: Ann Bruhn, Outstanding Faculty Teaching Award; Deborah Gray, Faculty Technology Teaching, Matthew Hoch, Gene W. Hirshfeld Award; Mariana Szklo-Coxe and Harry Zhang, Professional Service; Janet Azar, Adjunct Faculty Teaching award, and Jeff Doucette, Alumni Award. Dr. Shelley Mishoe was also recognized as a “Woman of Distinction” by the YWCA.

Special congratulations to the new graduates within the College who earned undergraduate and graduate degrees from the five schools and programs. Nursing major Pilar Mueller was named the Outstanding University Scholar award recipient, and the May Graduation Alumni Award winner. She named Dr. Amy Lee her most inspirational faculty member. Also, four COHS graduates were among the 41 newly commissioned officers for military service. We are truly beaming with excitement as we should for the great achievements this past academic year.

We are ever grateful to our Advisory Board members who volunteer their service to our College, their expertise is invaluable. Thanks very much for all you do to support our programs and our students.

This next academic year promises to be just as impressive as we look forward to more celebratory events. Be safe and I look forward to seeing those returning in 2017-2018, “Learning Together, Healing the World.”

Best regards,

[Signature]

Richardean Benjamin
Interim Dean
Several weeks ago, Assistant Dean Debbie Bauman asked me if I would be interested in being a “reader” for the spring commencement. Not one to shy away from trying something new, I agreed to the offer. But I had no idea what I was getting into.

Essentially, I would be responsible for what I would call about “100 magic moments.” That’s the number of names I would have to deliver with rapid-fire precision for several bachelor degree recipients. To the best of my ability I would have to call them out accurately, confidently and loudly to an audience filled with cheering family members and friends. This was an honor, but this was by no means a simple task.

You see, not everyone is named “John Smith.” In fact, quite the contrary. I had a chance just before the procession across campus to peruse the graduation list. Some of the names seemed easy enough, but some of them were more than a mouthful. I figured in the end I had a 50-50 chance of drawing the challenging ones, given I would be sharing the responsibility of calling out names with co-reader Professor Scott Sechrist. Scott is a seasoned pro at the job and he gave me a few words of encouragement. Still the butterflies continued to flutter.

I’ve been on stage plenty of times and given my share of speeches, but this experience was quite unique because of the recurring element of surprise. One by one students would ascend the steps to the stage, hand me a sheet of paper with their name, and wait for me to call it out. I would then have to wait for another name to be called out on the other side of the stage, and then it was my turn to belt out another name – this taking place in a sea of cheers from the on-looking crowd.

Nervously, I kicked things off with the first name. Then Scott went. Then I. Etcetera, etcetera. Amidst everything – the packed cheering crowd and the shuffling students – I managed to tune out all of the sounds except Scott’s voice. And in no time flat I looked off stage and noticed I had about five students left.

“Please be easy names,” I prayed. “Please.” And thankfully they were. I breathed a sigh of relief as I read the last one and carefully gathered the name cards and wrapped them in a rubber band. I handed the cards off and grabbed the bottle of water that was waiting for me on stage. Needless to say, it was still sealed.

When I returned to my seat, I got a tap on my shoulder from one of professors. We had spoken in the staging area before the procession to the Ted Constant Center and he had given me a few tips. “Nice job,” he said, emphasizing my ability to properly pronounce three tough names in a row at one point during the ceremony. While I don’t think my performance was flawless, I did give it my all, keeping in mind how important my role was to the families, friends, faculty and most importantly the students. My nerves were a product of gravity of my role as reader. After all, this is a once-in-a-lifetime occasion for the many who have worked hard to take their education to the next level.

My hope is that I was able to give them a proper sendoff. Debbie and Scott are already recruiting me for fall semester. And I’m leaning strongly on accepting the challenge again.

Irvin B. Harrell

Commencement ceremonies on Saturday, May 6.
BSHS prepares students for health system challenges

Since the comprehensive health care reform law was enacted, there continues to be challenges and a need for changes in health systems. One key component is “supporting innovative medical care delivery methods designed to lower the costs of health care generally.” The Bachelor of Science in Health Sciences program teaches the skills necessary to drive such efficiency in the health system. Public health and health care administration leaders administer programs that teach healthy lifestyles and prevent disease and illness.

In the Virginia Public Health Association (meeting in April, BSHS student Dustan Oberhauser won third place in his poster presentation, competing with some master’s candidates from other universities. His poster was titled “Assessing Virginia informational infrastructure to improve patient access to reduce suicide in rural Virginia, a cross-sectional approach.” His work highlighted the importance of reducing social isolation, mitigating the stigma associated with receiving mental health treatment, and the impact of limited access to mental health treatment on the overall health of the community by using technology as a facilitator to access healthcare. Dustan is graduating in May and is also an active duty Navy Corpsman.

Preparing graduates with sufficient organizational training to manage complex health systems and medical practices and public health knowledge is going to be the key focus of the BSHS program. The program with health services administration and public health majors brings together the best of both worlds and gives the students an enormous opportunity to network, promote intellectual excellence and form a life-long partnerships in either field. Also, to help our veterans and military personnel, the program offers a unique pathway to complete a full university-level bachelor’s degree in either major. The program fulfills the demands for human capital resources in civilian and military sectors of the region and the Commonwealth.

The program also builds upon, supports and contributes to the School of Community and Environmental Health vision to be the leader in improving public health in Hampton Roads, Virginia, the nation, and world through innovation, transdisciplinary approaches, teaching, research, practice, and service activities. The Bureau of Labor Statistics (BLS) projects that employment of “medical and health services managers” will increase 17 percent between 2014 and 2024.

Research Symposium

Colleen Roach, Samuel Snelgrove and Curtis Stark, with the school’s PhD program in kinesiology and rehabilitation, were among those presenting at the Student Research and Evidence for Clinical Practice Symposium on April 19 at the University Theater. The trio presented on “The Effect of Physical Therapy Combined with a Home Exercise Program on Motor Development in Pre-term Infants.”
Alan Bortnick, Virginia Beach

What do you do for a living?

I am the Senior Vice President of Finance & Corporate Controller for LifeNet Health, the world’s most trusted provider of transplant solutions and a leader in the field of regenerative medicine. I am currently responsible for the Accounting, Finance, Information Systems and Client Services functions.

What inspired you to choose your career?

I was always good with numbers and found the world of business to be intriguing, but I also really enjoyed working and strategizing with others. I knew I needed to find a major that would pull those skills and interests together. I realized that accounting was more than just numbers and columns...it’s the basic language of business. If you learn to speak it fluently, you’ve mastered a tool that could unlock all kinds of opportunities. It’s the perfect place to start if you want to explore the business world.

What sparked your interest in health care and being part of the COHS Advisory Board?

When an opportunity came to join LifeNet Health, I found a company that wanted to make a difference in the world. They passionately believed in their mission statement: Saving Lives, Restoring Health, and Giving Hope. After meeting with the executive staff, employees and even donor families and recipients of their selfless gifts, I found myself humbled and inspired. ... I find myself involved in all my company’s mission driven projects; from organ transplants to implant manufacturing, from donor family services to research and development. ... I found a way to positively impact others and do my part to help in the very best sense of the word.

What do you see as a big challenge in today’s health care, and why?

I believe that in health care today, the focus has shifted to the running of a business rather than the reason why it was first created. Rising costs, complicated reimbursements and rapidly changing technologies are making the healthcare market more and more difficult to navigate. ... I am fearful that, as the focus zeros in on the practical and the functional, the basic importance of their mission – helping people – could get lost.

What one piece of advice would you give students as they work toward building future careers in the health care industry?

I would encourage students to never lose their passion for healthcare, the drive within them that makes them work to positively impact our world, but to also take the time to understand the balance required to grow that success. They need to understand the strong bond of partnership which now exists between the discovery and innovation of science and the business world and marketplace that will propel their discoveries to help shape the entire healthcare system.

What do you do for fun?

I enjoy golf, cooking and gardening, including making my own Bonsai.
The ODU School of Dental Hygiene held its annual Awards and Pinning Ceremony on April 22 at the Webb Center. During the event senior dental hygiene students and master’s degree students were presented awards for academic, clinical, service, teaching and research achievements. Additionally, each of the 37 senior dental hygiene students received the ODU Dental Hygiene profession pin presented by Tracey Martin alumna and president of the Tidewater Dental Hygienists’ Association and Dr. Denise Claiborne, a school faculty member. Evelyn Thompson, one of the College of Health Sciences’ 30 Distinguished Alumni, received the outstanding alumni award.

A list of the award winners

- **Academic Achievement:** Jamie Curley
- **Colgate Student Total Achievement Recognition:** Emily Schmid
- **Hu-Friedy Golden Scaler Award:** Neiya Speller
- **Achievement in Community Dentistry and Public Health Award:** Ann Wildroutd
- **John Donahue Memorial Award:** Jessica Klucznik
- **Virginia Dental Hygienists’ Association:** Amario Daniel
- **Excellence in Dental Hygiene for Degree Completion Program:** Jean Conover
- **Gene Hirschfeld Excellence Award for Master’s Degree Program:** Kathryn Search
- **Outstanding Dental Hygiene Alumna Award:** Evelyn Thomson
- **Sigma Phi Alpha Dental Hygiene National Honor Society Inductees:** Students Jamie Curley, Taylor Cain, Ashley deTreville, Elaina Simpson and faculty member Tara Newcomb
research on walking. But what happens when you chew and walk? There’s nothing on it.”

Two graduate students – one studying physical therapy and the other speech pathology – are conducting the research. Thus far, their early findings are enlightening and potentially therapeutic.

“Everyone walks quicker when they chew,” Morrison says. “You tend to chew at a rate that is faster than your gait. When you begin to chew, you take off.”

But it doesn’t stop there. So what happens when you try to chew at the same rate as your gait?

“According to our early findings, a person’s preferred walking speed is still slower than they can walk chewing gum slowly,” Morrison says.

The gum/gait project is the latest in fascinating research projects in which Morrison has taken part. When you spend your life studying human motor control, you never know where it may take you, he says.

“You go into work every day thinking you know what you’re going to see and the direction it’s going to go and it usually doesn’t go that way,” he says. “Then you have to realign your thought process. It’s like a jigsaw puzzle.”

Changing directions is nothing new to Morrison. That’s what landed him, his wife and son in Norfolk.

Morrison was born in Scotland. He moved to New Zealand as a child. He received much of his early education in motor control and biomechanics at Otago University in New Zealand before spending a couple years in Boston and earning his PhD in Motor Control at Penn State University in 1997. He then spent about seven years in Australia as a faculty member in the School of Physiotherapy and Exercise Science at Griffith University in Queensland.

While interviewing for a job in Vermont in April 2007, Morrison came across a posting at ODU. He applied. Soon after he was offered an interview, then a job, and it’s been

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good times since, he says. He has taken the lead at the College of Health Sciences in falls prevention research.

The focus of his teaching and research is closely examining how injury, disease and aging all contribute to a decline in flexibility and variability of motor function. One of the keys is finding innovative ways to mitigate this decline.

In the case of the gum/gait research, if chewing gum can speed up your gait, “think about the implications for rehabilitation,” Morrison says. “This could be a very easy therapeutic intervention down the road.”

Researchers have targeted three groups for their study: young people, healthy adults and clinical populations. Participants are given reaction time tests, which involve clicking a mouse when seeing a red light flash. “This is a commonly used metric in determining falls risks as well,” Morrison says.

The participants then are fitted with a tracking device on their cheeks to track chewing at different speeds and devices on their legs and waists to track them walking and chewing at the same time. All of the data is collected and compared.

Morrison’s research portfolio is expansive, focusing on debilitating conditions such as Type 2 diabetes, multiple sclerosis (MS), neurological diseases and tremors.

He has been involved in a collaborative research project with the diabetes center at Eastern Virginia Medical School (EVMS). Many with diabetes deal with aging, neuropathy (losing foot sensation), hypertension, muscle weakness and multiple medications. While EVMS provided medical screening for 81 participants, Morrison and his researchers screen them for falls risk, gait, balance and strength. The participants were divided into two groups: those who received supervised training and those who trained at home using Wii balance boards.

While there were higher dropout rates for the Wii users, both groups showed improvements, Morrison says. “We know that exercise works; the key is to get them to do it. We’re trying to illicit a behavioral change.”

With MS, Morrison has been working with a colleague at the University of Illinois who had a MS population that he could screen for falls prevention.

“It’s surprising how little research has been done on this population,” he says. “In Virginia there are about 40,000 people with MS.”

Morrison is seeking funding from the National Institutes of Health for research looking at people between the ages of 40 and 70 over a five-year period – their falls risk, strength, diet and focus on motor function. “I’d like to develop a longitudinal view of what happens in this age range,” he says. He expects to collaborate with Sentara and EVMS on the project.

While he awaits answer on his funding request, the gum/gait study is on the front burner. Researchers plan to have data on the first group collected by summer, he says, and they will be writing an abstract on the research for a neuroscience conference in November.
The School of Nursing held one of its 50th Anniversary celebrations at Virginia Beach’s Topgolf, one of Hampton Roads’ hottest entertainment venues. The celebration included three hours of unlimited playing time and a private buffet reception. The event, on April 27, had an attendance of 136 alumni, faculty, students and friends. Among the event’s sponsors were Sentara, Associates Dermatology Inc., Bayview Physicians Group, Children’s Hospital of The King’s Daughters, Laerdal, Mereidys and Kaplan.
ODU’s Center for Global Health has endeavored to improve people’s health and quality of life on both local and global scales by leveraging Hampton Roads’ unique strengths in education (Certificate Program), research, and outreach. We have also collaborated with experts inside and outside Old Dominion University (ODU) on various research projects.

In spring 2017, the Center for Global Health began the service learning opportunity for students from the public health programs at ODU and Eastern Virginia Medical School (EVMS) and other public health programs in the United States. Four students from EVMS/ODU MPH program have had the opportunity to conduct their practicums at Healthy Chesapeake, which is one of the community programs sponsored by the Chesapeake Health Department. The students worked on projects such as the development of volunteer management policies, fiscal management policies, and fundraising policies under the supervision of Dr. Michele Kekeh from Center for Global Health. Oluwaseun Adesina, a senior in the Bachelor of Sciences in Health Sciences program, presented a project on obesity in Virginia at the Virginia Public Health Association (VAPHA) meeting in April. This partnership allows students to connect the theories learned in the classroom with practical public health activities in the community.

This is an exciting time for the Center for Global Health. We are also pleased to announce our outreach in May for substance use prevention education for the teens at Ghent Montessori School. The purpose of this project is to educate teens about the harmful effects of substance abuse. We are also preparing to start the second phase of our Vector Control project, which is a summer project designed to allow students to participate in environmental processes aimed at preventing and reducing vector-related diseases in Norfolk.

If you are interested in volunteering for any of these events, please contact us at centerforglobalhealth@odu.edu. Also, visit our Facebook page at https://www.facebook.com/ODUcenterforglobalhealth/. At the Center for Global Health, we are committed to continuously pushing research, outreach, and education projects to advance the vision of the Center.
APPRECIATING OUR MILITARY

For our men and women in uniform

HM3 Monica Mateo (BS Environmental Health), Ensign Lakesa Williams (RN, BSN), HM2 Dustan Oberhauser (BSHS Health Sciences Administration), and Commander Emil Espiritu were among the speakers at the Military Appreciation Luncheon on April 10.

Cadet with the right stuff

Cadet Jorden Burd, far right, a senior nursing student, receives the 2016-2017 Outstanding Nursing Cadet award from Assistant Dean Debbie Bauman at the U.S. Army Cadet Command President's Review and Awards Ceremony. The annual ceremony was held April 13 on the Williamsburg Lawn.
The YWCA’s 29th Annual Women of Distinction Awards honored former Dean Shelley C. Mishoe. Dr. Mishoe served as the fourth dean for the College of Health Sciences. She is now a professor with the School of Community and Environmental Health.

Dr. Mishoe is active in the community, serving on several boards including Bon Secours Hampton Roads Health System, Physician for Peace, Virginia Beach Department of Public Health MAPP Steering Committee and the ODU Women’s Initiative Network.

The Health Sciences Advising Center won Best in Show for the 2017 Majors Fair on March 14. The annual Majors Fair event was sponsored by Academic Affairs, SEES and SGA, and provided students with an opportunity to explore majors and minors, find career opportunities in their selected major, and seek advice regarding registration. The event had a Star Wars theme and our academic advisors were equal to the task.
Upcoming Events

**May 2017**

- May 26: End of Maymester and Exams for Maymester classes
- May 29: Memorial Day Holiday (University Closed)

**June 2017**

- June 6: Last day to withdraw from Session 1 classes
- June 22: Last day to withdraw from semester-long Session 3 classes
- June 23-24: Session 1 exams for classes that meet MTWRF
- June 26: Session 2 classes begin

**July 2017**

- July 3-4: Independence Day Holiday (No classes)