

The Vibe @

December 2010

The Graduate School of Biomedical Sciences

Happy Holidays! As we look toward a new year of opportunities, GSBS students, faculty and alumni continue to enrich our program and enhance the depth of study and discovery happening every day at UMass Medical School.

In this issue of *The Vibe*, we celebrate the success of the first two students enrolled in GSBS' unique post-baccalaureate Pathway to Graduate Study Program, which we believe is planting the seeds for an expanded program in the years ahead. We detail UMMS' recently-awarded HRSA grant to lead a national study of joint replacement surgeries. You'll meet students who have dedicated themselves to community service both on the campus and throughout Greater Worcester, raising funds for several charities, running a Thanksgiving Food Drive, and providing meaningful outreach to our neighbors. Finally, you'll read about a fellow alumnus who took a nontraditional approach to a career in science, which he has translated into creative opportunities as a science entrepreneur.

If you have news you would like to share or have suggestions for future issues of *The Vibe*, drop us a note at alumni@umassmed.edu or call the Office of Alumni Relations at 508-856-1593. We look forward to hearing from you!

Wishing you and your family a festive holiday season and a healthy New Year,

Anthony Carruthers, PhD
Dean, Graduate School of
Biomedical Sciences



Unique Post-Baccalaureate Program Springs Forward

FOR JUAHDI MONBO and Ruth Villanueva, being the first students in the GSBS Pathway to Graduate Study program is a firm step toward advanced degrees in biomedical sciences. For GSBS, the motivation, personal initiative and determined approach of these two students affirms the program's value and sets it on a long-term course for success.

"The idea for the program came out of a diversity committee of faculty members," explains Brian Lewis, PhD, associate dean for student diversity and associate professor of gene function and expression. "What is different from other post-baccalaureate programs is

that we link high performance in the program with admission into our graduate program, which will be of great benefit to us." The 10 percent diversity of the GSBS student population is markedly lower than U.S. data; strikingly, African Americans represent only .085 percent of the student population. The Pathway to Graduate Study is designed to close the overall gap and broaden the diversity of GSBS' student population.

Through the program, GSBS recruits bright young students from disadvantaged backgrounds and provides them with a year of focused

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UMMS Leading Nationwide Joint Replacement Surgery Outcomes Initiative

UNDER A \$12 MILLION GRANT from the Agency for Healthcare Research and Quality (AHRQ), UMMS is leading a multi-center research study to guide clinical care and health care policy of a procedure that is expected to grow exponentially and could improve quality of life for more than four million Americans.

Total joint replacement (TJR) surgery is becoming an increasingly important clinical and public health issue. “We expect the number of total joint replacements to increase by 600 percent in the next 20 years as the population ages and the prevalence of obesity increases,” said the study’s principal investigator, Patricia D. Franklin, MD, MBA, MPH, the Joy McCann Professor for Women in Medicine, professor of orthopedics & physical rehabilitation and family medicine & community health. Through an in-depth outcomes assessment of TJR surgery, UMMS



will establish a nationwide registry of 33,000 diverse patients treated by 130 orthopedic surgeons in various practice settings, including six high-volume centers, nationwide. Investigators will research joint replacement failure and technical or mechanical issues; the impact of the replacement on the patient’s mobility, function, pain and quality of life; the value of TJR in younger patients; and disparities in TJR use among certain

ethnic, socioeconomic or demographic groups.

UMMS’ expertise in orthopedics, data analysis, outcomes research and health policy create a firm foundation for this project. The Department of Quantitative Health Sciences will have a major role in the research, identifying areas in which TJR and patient outcomes can be improved. In addition, experts from the Center for Outcomes Research, Division of Preventive and Behavioral Medicine, and Center for Health Policy and Research

will use the data collected to help guide future clinical care and health policy regarding the procedure.

Ultimately, the researchers are focused on measuring the real human outcomes of TJR surgery for all patients—those over 65 and those who are active, working adults under 65—so that they experience successful outcomes—pain relief and increased mobility and function. ■

Unique Post-Baccalaureate *Continued from page 1*

study and guidance, enhancing their academic preparation and research experience. Students take a core curriculum of graduate courses and participate in a simultaneous year-long, mentored, research experience. Successful students are assured admission into GSBS programs for the following fall semester.

Villanueva received a bachelor’s degree in biology from Mount St. Mary’s College in Los Angeles. Monbo received a master’s degree in biotechnology from the University of Maryland at Baltimore and a bachelor’s degree in biology from Loyola University Maryland.

“It was clear from the beginning that these are two very highly motivated women, who took a lot of initiative to set up who they wanted to work with and in which labs they wanted to do their rotations,” says Dr. Lewis, who directs the Pathway to Graduate Study program. “They have integrated very well in the school curriculum and the lab. The program is already meeting its goals—to increase the diversity of the student population and to invest in students interested in joining our graduate program. If they continue their strong performance, I think they will be here in our graduate school next year.”

The program is currently limited to two students, but GSBS hopes to add a third student for the 2011-2012 academic year. A GSBS faculty member has generously offered to contribute one-half the funds needed for a third student, with the remaining funds coming from the GSBS Alumni Fund. Once the first few students move successfully into graduate studies, GSBS plans to apply for NIH funding.

“We are now recruiting our students for next year,” Dr. Lewis says. “I sincerely hope we can increase the program for a third student next year!” ■

Students “Give, Serve, Build through Science!”

IF COMMUNITY OUTREACH were measured in pounds, it would weigh at least a ton. That’s how much food GSBS’ Cares collected in one of its food drives alone—just one of dozens of events the student service group undertakes to support the greater Worcester community.

Part of the Graduate Student Body Committee, the group gathers volunteers from the School of Medicine, Graduate School of Nursing and GSBS, who execute projects that impact thousands of lives and extend UMMS’ outreach. “Four years ago, [founder] GSBS student Cara

Weismann saw a need for giving back to the community that we all live in and work in,” explains GSBS Cares co-chair Jennifer Ziegenfuss. She and co-chair Carina Clingman lead a core group of active members who have created a track record of meaningful events, from the annual food drive to educational outreach, fundraisers for UMass and local charities and a Valentine’s Day blood drive.

For these students, the work is about giving back to the community and involving the general student population and faculty in projects that enhance the UMMS role within the greater Worcester area. “We

really like students to step up into organizational roles for each project,” says Clingman. Their commitment has resulted in highly successful Thanksgiving Food Drives for the Worcester County Food Bank, Special Olympics participation, science fair judging and high school



▲ Students prepare collection boxes for the Fourth Annual Thanksgiving Food Drive to benefit the Worcester County Food Bank.

science mentoring, the annual UMass Walk to Cure Cancer (a top 10 fundraising team) and the Walk for Cystic Fibrosis, as well as Habitat for Humanity participation.

Faculty join in some good-natured fundraisers—a spring dunk tank with professors and photos with “Santa Deans”—that also serve to strengthen the campus, while GSBS Cares works to achieve good for the larger community. ■

THE POWER OF PARTICIPATION

Leaders, educators, caregivers, collaborators, discoverers, mentors....you are the alumni of the University of Massachusetts Medical School. From past to present and future, annual giving links you together. When you participate, you join forces to support world-class education for those following in your footsteps.

Alumni support is critical to enhancing the student experience and leads directly to exceptional patient care and research. Participation is on the rise and we hope you partner with us on a continued trajectory of success. Just three years ago, alumni participation was at 1% and last year alumni participation reached 11%. We strive for consistent growth on an annual basis. Help us keep the momentum going. It is through the power of participation that you demonstrate that making a difference starts with you—our alumni.

Participate. Every gift has impact. Make a difference.

Leave a Legacy to UMass Medical School....

The Heritage Society recognizes donors who support UMass Medical School through bequests, life-income gifts, retirement plans, life insurance policies, and other estate intentions. Please let us know if you have included UMass Medical School in your estate plans. We would like to welcome you as a member of our Heritage Society and thank you for your support.

You may make an online gift at <http://w3.umassmed.edu/OnlineDonation> or send your contribution to UMass Medical School Development Office, 333 South Street, Shrewsbury, MA 01545.■



“Life’s Work” Draws Researchers, Students Together

Researchers-in-training shopped for two-or three-month laboratory rotations among more than 60 posters presented at an event in September, while investigators discussed their life’s work and searched to fill laboratory openings. The event drew together first-year GSBS students, who must commit to a laboratory and begin focusing on a dissertation area by the end of the spring semester, as well as undergraduates from WPI and Clark University, who may be interested in completing senior research projects in conjunction with UMMS researchers.



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Alumni Profile | Brian Thomas Bennett, PhD



Program: Biochemistry and
Molecular Pharmacology

Year of Graduation: 2006

GOING FROM AUTO BODY MECHANIC at age 31, to college student, to PhD and entrepreneur in just over 10 years is not a typical pathway to success in the world of science. It is, however, the indirect route that has brought Brian Thomas Bennett, PhD '06 to his position as chief scientific officer of Victor Advanced Research Initiative, which is poised to change biomedical researchers' access to the nuts and bolts of their work. "I had to work my way in to school and fight for everything since," he says. He passionately describes Dean Carruthers and Kendall Knight, PhD, as two of the most important people in his life for admitting him to the doctoral program and allowing him the freedom to explore and to approach research from his own sense of creativity.

Dr. Bennett's 10-year odyssey includes extreme professional and personal highs and lows, but at his core he is committed to fueling research and science education. "I want kids to love science, to think it's cool and creative, and to understand that science is all about working with your hands," he explains. "I really want to support and give back to UMass Medical School. I want to hire people from the UMass talent pool and to keep making financial donations, because the people there gave me the freedom to succeed." ■

Anyone with news to share is encouraged to send their class notes to alumni@umassmed.edu. You may also submit notes by visiting the UMass Alumni Online Community at www.NetworkUMass.com/Medical and click on "Class Notes."