Our first issue of NHS Notes last Spring was well received by alumni and friends of the Division of Natural & Health Sciences and it was such a joy to hear from so many of you! We were also encouraged by your overwhelming support in an online alumni survey conducted last summer regarding a proposed BSN program in nursing at JBU. Thanks for your valuable feedback!

We are currently putting the final touches on the nursing program feasibility study that will be submitted to the Arkansas State Board of Nursing. By the end of May we should know whether we have received prerequisite approval for this program. Your prayers for this process would be greatly appreciated.

In this issue, we highlight the activities of several students who graduated with majors in our division last May. Our students continue to be successful in gaining acceptance to graduate and professional schools as well as landing good jobs in their fields.

Math Welcomes New Professor

The Department of Mathematics welcomed Mr. Gregory Varner to the Division of Natural and Health Sciences this fall. A native of Missouri, Mr. Varner earned a B.A. degree in Mathematics and a minor in Physics from Hendrix College in Conway, Arkansas. He then went on to complete an M.S. degree in Mathematics from the University of Arkansas in Fayetteville. He is currently a Ph.D. candidate in Mathematics at the University of Missouri in Columbia and plans to complete his doctoral degree during his first year of teaching at John Brown University.

Mr. Varner has had some outstanding teaching experiences, which include serving as an adjunct faculty member at the U. of A. in Fort Smith and at a community college in Missouri while simultaneously working on his graduate degrees. Mr. Varner’s research interests relate to the connection between statistical mechanics and classical and quantum mechanics.

This fall, Mr. Varner has been teaching Calculus I, Calculus I lab, and College Algebra. He will share the duties of teaching Math courses at all the levels offered at JBU – from remedial and core courses for non-majors to upper-level courses for Math and Math Education majors.

As a professor at JBU, he is looking forward to creating an increased interest in the fields of analysis. He hopes to impact students in a positive way as he works with students in a smaller classroom size.

Mr. Varner and Melissa, his wife of 5 years, welcomed their son, Gabriel on October 25th. Mr. Varner enjoys reading, watching movies, hiking, biking and spending time with his wife and new son.

Christmas Greetings from the Division

In this, we highlight the activities of several students who graduated with majors in our division last May. Our students continue to be successful in gaining acceptance to graduate and professional schools as well as landing good jobs in their fields.

We also welcome a new Math professor as we say goodbye to a beloved retiree from our division who is now in the presence of Jesus.

It has been a busy summer and Fall for faculty and students alike. And now the busyness of the holiday season is upon us. As we prepare to celebrate the birth of our Lord and Savior, we wish to express our warmest wishes to you and your family for a blessed Christmas and a happy new year.

One of three Christmas trees adorning Bell Science Hall.

Bell Science Hall is the home of most departments within the Division of Natural & Health Sciences.
Dr. Swearingen with the 2012 Chemistry Department graduates.

The Chemistry Department, under the leadership of Dr. Carla Swearingen, Dr. Susan Newton and Dr. Francis Umesiri, had five young women graduate in May, 2012.

It is highly unusual for a chemistry program to graduate all female students in one year. Dr. Swearingen is extremely proud of these women and the contributions they are making literally around the world.

Rebecca Foos (Chemistry) is currently working with nanoreactor adhesive chemistry in Dusseldorf, Germany for the international company, Henkel.

Jordan Rowe (Chemistry) is attending the Doctor of Pharmacy program at the University of Arkansas for Medical Sciences.

Suyen Espinoza Miranda (Biochemistry) is working for Centro de Biología Molecular of the University of Central America in Managua, Nicaragua.

Rebekah Henderson (Biochemistry) is currently working in a Middle Eastern nation with Project: Serve, connecting with refugees, university students, visiting medical clinics and sharing the gospel.

Amanda Hicks (Biochemistry) has made application to Colorado State’s graduate program in order to continue her studies in chemistry.

Rebecca Foos (Chemistry) is currently working with nanoreactor adhesive chemistry in Dusseldorf, Germany for the international company, Henkel.

Jordan Rowe (Chemistry) is attending the Doctor of Pharmacy program at the University of Arkansas for Medical Sciences.

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Professors Attend Genomics Workshops

Dr. Brian Greuel, Division Chair and Professor of Biology, and Dr. Joel Funk, Assistant Professor of Biology, attended the iPlant Faculty Workshop at Tulsa Community College in Tulsa, Oklahoma from June 20-21. The workshop focused on incorporating bioinformatics and DNA barcoding in education.

Dr. Funk was also accepted into a year-long Functional Genomics residency program sponsored by the American Society for Microbiology and the joint Genome Institute. This yearlong program began with intensive on-site training from June 24-28 at the 2012 ASM/JGI Functional Genomics Institute: Connecting Bioinformatics-Driven Hypotheses to Wet Lab Projects at Hiram College, Hiram, Ohio.

Techniques covered during the workshop included reverse genetics (gene disruption), forward genetics (transposon mutagenesis), functional complementation and protein over-expression. Highlights of the program include guidance in a supportive, virtual community, and a capstone experience during the next two years held in conjunction with the ASM Conference for Undergraduate Educators.

Dr. Greuel also participated in the 2012 Summer Workshop in Genomics sponsored by the National Human Genome Research Institute (NHGRI). This intensive one week course was offered from August 5-10 on the National Institutes of Health (NIH) campus in Bethesda, Maryland. It focused on the continuing effort to find the genetic basis of various diseases and disorders, as well as current topics on the ethical, legal and social implications of genomics.

Highlights of this course included getting updated on the latest technology for whole genome sequencing, including a tour of a lab actively engaged in sequencing human genomes. Dr. Greuel incorporated much of the material from this workshop into his molecular genetics course this Fall.

2012 Kinesiology Grads

With Mr. Todd Bowden and Dr. Danny Essary’s leadership, the department of Kinesiology graduated four students.

Bailey Barton (Exercise Studies) is employed at a Health/Fitness center and is working toward her Personal Trainer Certification.

Brittany Higgins (Sports Medicine) is attending the Doctor of Physical Therapy program at the University of Oklahoma in Tulsa.

Mitchell Hubbard (Sports Medicine) is taking this year off then plans to enter the Masters of Arts Teaching program at the University of Arkansas.

Allison Rankin (Sports Medicine) is attending the Doctor of Physical Therapy program at the University of Texas Medical Branch in Galveston, Texas.

All graduates of the division received this JBU beaker mug as a congratulatory gift.
Biology Graduates Take on New Adventures

Professors Greuel, Beers, Funk and Wakefield were very happy to see sixteen graduates from the Biology Department receive their diplomas on May 5, 2012.

Eric Engstrom is currently working on his M.D. degree at the University of Oklahoma Health Science Center.

Emily Hitzfelder is a field teacher/naturalist at the W. Alton Jones Environmental Education Center in West Greenwich, Rhode Island.

Brianna Knott is shadowing in the Dept. of Surgery in the Greenville, South Carolina Hospital system. She will apply for medical school for fall, 2013.

Gibbs Kuguru is working in Mossel Bay, South Africa studying white sharks with the Shark Warriors Program.

Kacie Larkin is attending the accelerated nursing program at Oklahoma City University.

Jessica Rollene is attending the P.A. program at Midwestern University in Downers Grove, Illinois.

Cori Van Gorkom is currently attending the M. D. program at Loma Linda University’s School of Medicine in California.

Nick Young is working as a lab tech in the Microbiology Division of the Food Safety and Research Laboratory at Tyson Foods, Inc.

Other new graduates from biology are in the process of applying to graduate or professional school and will be featured in a future newsletter.

ACS & BCCE Summer Conferences

In late August, Dr. Francis Umesiri, Assistant Professor of Chemistry attended a conference organized by the American Chemical Society entitled “Materials for Health and Medicine.” The conference gave Dr. Umesiri an appreciation for important advances being made in the field of Medicinal Chemistry. One of the important highlights was a session he attended on how to modify Organic Chemistry curriculum to meet the needs of the new MCAT taking off in 2015. The conference helped Dr. Umesiri to identify parts of the Organic Chemistry curriculum to reinforce, and a few other parts to consider modifying. Dr. Umesiri is teaching Organic Chemistry and two sections of lab this year at JBU.

Earlier in the summer, Dr. Susan Newton and Dr. Carla Swearingen attended the Biennial Conference on Chemical Education (BCCE) at Penn State in University Park, Pennsylvania. A highlight of the conference for Dr. Newton was visiting Penn State’s Radiation Science and Engineering Center. Both Dr. Newton and Dr. Swearingen attended workshops focused on designing integrated learning courses for both general chemistry and physical chemistry.

Uganda Summer Medical Missions Trip

This summer, three current JBU Biology majors, London Smith, Morgan Reger, and Anna Lane, embarked on a mission trip to Jinja and Kamuli, Uganda. They were accompanied by two new Biology graduates, Brianna Knott and Rachel Watson, seven JBU Education majors, two Family and Human Service majors, Sarah and Brock Erdman, and University Nurse Rhonda Hostler. The biology majors focused their attention on investing time and love in the doctors, nurses, and patients of the Regional Hospitals they visited in the two cities.

While at Kamuli General Regional Hospital, London, Morgan, and Anna were exposed for the first time to the Ugandan healthcare system. Each experienced the excitement of watching live births, the difficulty of the loss of patients, and gained practical knowledge of giving injections and IV’s. Unique opportunities for assisting in surgeries and connecting with Ugandan Medical Students were the highlights of the first week in the hospital.

The last two weeks of the trip were spent in the Children’s Ward of the Jinja Regional Reference Hospital. Sick children were brought from a wide area to this hospital for immunizations, emergency care, long-term care, and HIV testing. London, Morgan, and Anna aided in all of these area of care. Each student was able to connect with a doctor or nurse in the hospital after working several days in a particular ward. In addition to learning about medical techniques, each student learned about the unique culture and needs of the Ugandan nation.

On June 17th, the students departed with broader perspectives on healthcare.
SUCCESS Students Excited to Start the New Year.

On Thursday, September 20th, SUCCESS students came together under the direction of Dr. Carla Swearingen for a time of getting to know each other. They spent the evening fellowshipping with food and participating in ice breakers. There are currently 20 students involved in this program. These students will continue to be mentored by Dr. Swearingen and Dr. Tim Wakefield to achieve their educational goals in science.

Farewell to Dr. Jim Holliday

On August 8th of this year JBU said goodbye to longtime community member, colleague and friend, Dr. Jim Holliday, who at the age of 70 passed on to be with the Lord. Dr. Holliday served JBU, for 38 years, beginning in 1970 as a full-time faculty member in physics. During his tenure at the university, he served as Division Chair (1982-86; 1997-98), Associate Dean (1986-91), Associate Vice President (1991-94), and Vice President of Academic Affairs (1996-97). He returned to the classroom until his retirement in 2008.

Dr. Holliday grew up on the JBU campus and devoted his entire professional career to the university. According to Dr. Cal Piston, who was hired by Dr. Holliday in 1978, “Jim was in a position in the 80’s and 90’s to shape the future of the university – in hiring of faculty and working through curricular issues. He was influential in creating the culture of faculty development that we now have, including a renewed emphasis on integration of faith and learning.”

Dr. Don Siemens, retired Professor of Mathematics, learned so much under Dr. Holliday that facilitated supervising science education students. According to Dr. Siemens, Dr. Holliday had an incredible ability to explain difficult topics in terms that could be understood. Dr. Siemens credits Dr. Holliday for transforming his own abilities to teach and his subsequent positive evaluations.

Dr. Holliday is survived by his wife, Marilyn of Siloam Springs; son, Brad and wife Hyokyung and sons Jaemin and John of Hawaii and daughter, Julie & husband, Buddy Reynolds with children Matthew and Anna Beth of Siloam Springs.

If you would like to donate a gift in Dr. Holliday’s memory, please send your gift to University Advancement. Your gift will be placed in the Jim & Marilyn Holliday Endowed Scholarship fund.