

Lifelines

Fall 2010



Biology/Allied Health Department

General Conference Biology Display



The Biology/Allied Health Department was well represented at the 2010 General Conference this past summer. The Southern booth was designed and built on campus using the expertise in the School of Visual Arts. This booth would have cost three times the price if an outside firm had built it for us. Due to persistence on the part of Vinita Sauder (VP for

Marketing), we secured the first booth spot that people would see when they entered the huge convention center in Atlanta. The sparkling clean design and impressive architecture drew people directly to the booth. On one side, there was an interactive wall, allowing people's shadow to reach up to the sky, be imbued with light from above, and then share with other shadows that did not have the light.

The booth featured two brilliant display cases, one for Archaeology, and one for Biology. Our case directly faced a major aisle so it was very visible. The school entitled our booth "For in six days the Lord made the heavens and the earth . . ." To make people stop and think a little, we placed a full-sized *Allosaurus* model skull on the top shelf with a brilliantly colored butterfly landing on its nose. The bottom part of the display had a multicolored coral reef scene and some information about our department and the origins hallways. We also had a pair of stuffed California Quail in their "natural" environment. This display drew a huge number of people, many to take a picture beside the case, some to just look, some

to discuss origins, some to see if they could get a free pen or sticker.

On the end-cap, five brochures on origins were available for those interested. These pamphlets were commissioned and developed by the university. These were prepared for the general public, but brought out some very thought-provoking concepts. The five titles were:

1. Creation or Evolution: Does it matter what I believe?
2. Evolution and Prophecy: What happened in 1844?
3. Evolution: Is it really about science?
4. Fossils in the Earth: Do they prove evolution or point to a flood?
5. Dinosaurs: Could God have created such beasts?

Overall, they are very well done. We still have a few left, so if you are interested, we would be happy to send you a set.

Each day, there were at least three buses bringing people to Southern from Atlanta. Many of them visited the department, and judging by the comments in our guest book, they were very impressed with our department and with the origins displays we are putting up in the hallways. Dr. Spencer and Dr. Norskov were here to help those who visited.

Many of our alumni stopped by the booth and expressed their great appreciation for the time they spent in the Biology/Allied Health Department. They felt better prepared than their peers when they went on to graduate and professional schools. All were very happy for the time spent at Southern. It was great to see so many of you in Atlanta. If you have the opportunity to stop by our department, please let us know. We would love to see you!



Power for Mind & Soul

Biology/Allied Health
Department
P.O. Box 370
Collegedale, TN 37315
Phone: 423.236.2926
Fax: 423.236.1926
biology.southern.edu

Joyce Azevedo, Ph.D.
Randy Bishop, MPT
David Ekkens, Ph.D.
Ann Foster, Ph.D.
Lucinda Hill, M.D.
Rick Norskov, M.D.
Lee Spencer, Ph.D.
Keith Snyder, Ph.D.
Debbie Strack, Office Mgr.
Ben Thornton, Ph.D.
Neville Trimm, Jr., Ph.D.

Notes From the Chair

It is an exciting time for the Biology/Allied Health Department. The fantastic weather is continuing, the leaves have fallen and the students are looking forward to Christmas break. The department numbers are continuing to rise along with the rest of the school, and plans are afoot to deal with these increases.

This year we are starting with additional faculty. Mr. Randy Bishop is a Physical Therapist and is filling the position left by Renita Klischies when she moved to full-time in retention at the university. Mr. Bishop is also teaching Anatomy and Physiology half-time. He has a great background in dealing with high-school aged kids, and is fitting in well with life here at Southern.

Lucinda Hill-Spencer, M.D. has agreed to fill in for this year until we

have a full-fledged search for a new professor. Dr. Hill is also working with Anatomy and Physiology students but will be teaching some General Biology and Human Anatomy students next semester. We are thankful for her willingness to step in during this growth period.

If you like clean water, care about the environment, and love the outdoors, please come and get to know Dr. Ben Thornton on your next visit to campus. Dr. Thornton has just finished his Ph.D. in Toxicology, and is already forging ties with the community through his exciting ecology class.

One of the most appreciated changes in the department this year is the new Biology Club. Many of our students have a professional goal such as dentistry, pharmacy, or medicine. However, there are those who are

not sure of their goals and others who want to move toward doctoral work in biology. This club is enabling them to feel connected with others who have similar goals. We have had several successful events such as vespers, a canoe trip to the bat caves, and discussion sessions. Look forward to more news in the future about the great things this club is doing.

As we look forward to the New Year, there will be continued changes. Next year we expect to have two new professors joining us, the work on the origins hallways will be completed, and we are building up our research emphasis. Thank you for your prayers and support of our department. It is making a difference in the lives of hundreds of students.



Keith Snyder

Randy Bishop Joins the Biology/Allied Health Department



This academic school year (Fall 2010) Southern's Biology/Allied Health Department has been most fortunate to have two teachers join its faculty. As Southern developed its new First Year Experience Program, Renita Klischies was asked to give up her half-time position as the Allied Health Programs Advisor to work as the full-time First Year Experience Program Coordinator. To fill the vacancy in the department,

Randy Bishop was invited to be the new Allied Health Programs Advisor and a half-time professor.

Mr. Bishop is no stranger to Southern. He attended here as an undergraduate student and graduated with a BBA Business Management degree. After completing a Master's in Physical Therapy at Andrews University, Randy Bishop headed to Highland Academy (his alma mater) where he taught for seven years. His work as Allied Health Programs Advisor puts him in charge of about 170 Allied Health students who have career goals as varied as Physical Therapy, Nutrition & Dietetics, Occupational Therapy, Radiography Technology, and Medical Laboratory Science—just to name a few. In addition to his responsibilities as the Allied Health Advisor, Mr. Bishop teaches Anatomy & Physiology and Southern Connections as an Assistant Professor in the department.

In his free time, Mr. Bishop enjoys outdoor activities like hiking and

camping. When the opportunity arises, he likes to participate in overseas missions. He has been to the Philippines and Costa Rica, and worked with ACTS (Adventist Community Team Services) in Mississippi after Hurricane Katrina.

He looks forward to spending time with students in extracurricular activities—whether required or not—as a means of inspiring them. He will have ample opportunity to do so as the Allied Health Club Sponsor.

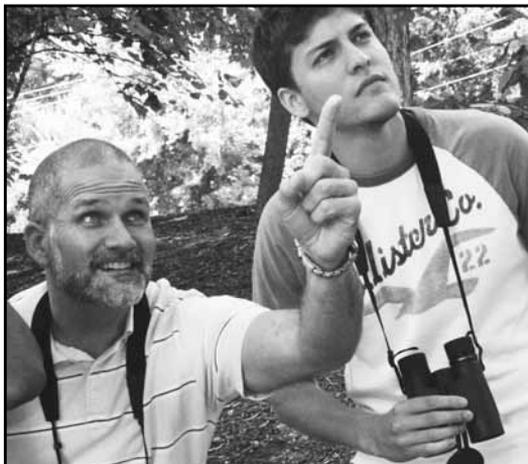
Randy sees his role in strengthening the Biology/Allied Health Department as “giving students the tools needed to succeed in their career choices within the context of a Christian worldview, making them effective witnesses for Christ in their fields.”

God has led him to this place, and, as he walks these halls, may his positive influence on students change their lives and better prepare them for God's work.

Another New Professor - Benjamin Thornton

Dr. Benjamin Thornton recently joined the Biology/Allied Health Department from Union College. Dr. Thornton, a 1994 graduate of Southwestern Adventist University, started teaching at Southern in August 2010.

Following graduation from Southwestern, he taught for nine years in three different academies and earned a Masters of Arts degree in biology from Andrews University. While working on his doctorate at the University of Nebraska-Lincoln, he taught seven years at Union College and received his Ph.D. in toxicology in 2009. Dr. Thornton's research for



his doctorate involved detoxification enzymes in fruit flies.

He grew up in Maine and Texas

and spent two years in Malawi before marrying Belinda. They have two teenage daughters who are homeschooled.

We are happy to have Dr. Thornton on our staff. The students appreciate his enthusiasm and love of biology. His ecology students are out studying the ecology of our local creeks and monitoring water quality. Some of his teaching interests are developing undergraduate research opportunities in environmental toxicology and conducting field biology courses for non-science majors.



Alumni News Corner

Jon Gabbard (2003) is currently working toward his Ph.D. in infectious diseases at the University of Georgia in the laboratory of S. Mark Tompkins, Ph.D. While he has had his hand in a wide array of projects, most deal with the study of influenza and are centered upon the theme of viral immunology. Jon's main dissertation project focuses on the matrix protein 2 (M2) of influenza A viruses and the development of a novel antibody-based therapy recognizing its highly conserved extracellular domain (M2e). His lab is utilizing a unique single-chain antibody molecule termed a minibody which contains the humanized variable regions from an M2e-specific murine monoclonal antibody. Currently, Jon is involved with a study testing the immunogenicity of adenovirus constructs expressing M2 and the nucleoprotein of influenza and their ability to confer rapid protection against influenza virus

challenge after vaccination. Another interesting project deals with attempting to identify unique CD8+ T-cell responses during influenza virus infection and determining the potential epitopes involved which could eventually lead to the discovery of a new influenza vaccine. Perhaps the work that he is most excited to be involved with deals with working in biosafety level 3 (BSL3) containment with a strain of the highly-pathogenic H5N1 avian influenza virus.

After finishing his degree, Jon plans to continue working in the field of viral immunology, more specifically, focusing on the immune response following infection as well as discovering new potential vaccines and therapeutics. He most certainly wishes to continue working with BSL3 pathogens. Of course, never far from his mind, is the idea of one day returning to Southern to join the faculty in the Biology Department. He said, "Our time at Southern (mine and my wife Shannon) was one of the best times in our lives. We both developed a deep relationship with God, established a wonderful network of friends, and we found each other. We both would love to eventually return and be able to raise our son Tyler in such a wonderful environment."



“Biology Club is Sprouting”



Canoeing out to the Bat Cave on Nickajack Lake.

“Wow! I can’t believe there are so many of them.” “Oh, look over there! This is so cool.” Those are just a couple of examples of the exclamations heard as students (and faculty) gathered as near as possible to the mouth of the cave. This was a canoe trip on a portion of Nickajack Lake leading to the twilight observation of thousands of grey bats leaving the cave for their nightly excursion.

This was the first trip designed to promote interest and awareness of the newly-forming Biology Club.

This club is primarily designed for Biology majors and minors, although students in other disciplines



who have a keen interest in the outdoors and studying God’s second “Book of Nature” up close are certainly welcome to join.



Friday evening bonfire vespers at Dr. Azevedo’s house.

“YES, CREATION!”

During the General Conference Session in Atlanta, Lee Spencer, Ph.D., one of our Biology professors, gave two presentations for the “Yes, Creation!” seminar. During this week-long seminar, 25 scientists, pastors, laypersons, theologians and graduate students from different parts of the world were invited to discuss theological and scientific information about Biblical creation.

Dr. Spencer was asked to address the question of “How Many Dinosaurs Were On The Ark?” He pointed out that some Christians do not believe dinosaurs are real or that they were created by Satan, while others do not know how to integrate their belief in the Biblical account of creation with scientific interpretations of dinosaurs. Dr. Spencer noted that in the fossil record, dinosaurs are found in complex communities and occupy all of the niches which

are filled by mammals in our modern world. (After the entrance of sin, we have large and small herbivores and carnivores.) If God could create mammal communities that include large predators such as grizzly bears or lions, He certainly could have created dinosaurs. And while we don’t know if any were on the ark, it is possible that some species could have been and became extinct after the flood.

In his second lecture, “Paleontology and the Bible: Science in Action,” Dr. Spencer presented two research projects in which he has been involved. In the Dinosaur Project in northeastern Wyoming, he has worked with Art Chadwick, Ph.D. from Southwestern Adventist University in using cutting edge GPS technology to study a large deposit of dinosaur bones. These fossils show evidence of having been

swept to their present location and then buried rapidly.

In 2009, Dr. Spencer organized a research expedition to Banks Island in the Arctic Ocean where fossil spruce cones were collected from the permafrost. These specimens are currently being analyzed here at Southern to determine whether or not they contain ancient plant DNA.

Dr. Spencer’s “Yes, Creation!” presentations are available online at <http://www.audioverse.org/sermons/series/297/yes-creation-.html>

His views about dinosaurs are also available online in one of Southern’s “Origins Papers” that were distributed at the General Conference <https://www.southern.edu/faithand-science/creationoncampus/Pages/gcsessionexhibit2010.aspx>

by Lucinda Hill

Lucinda Hill



Dr. Lucinda Hill is no stranger to college students and teaching. Not only was she a favorite adjunct professor for Southern’s biology department in the winter semester of 2010, she has also taught in other countries including Pakistan and Indonesia. Dr. Hill holds a degree from Loma Linda University in Medicine and also earned a Masters in Public Health with an international emphasis. Countries in which she has pre-

sented health lectures include Cuba, Ecuador, Greece, Philippines, Russia, Romania, and Ukraine. She has practiced emergency and urgent care medicine for a number of years and now is focusing more on the teaching profession.

She has a personable way of talking with students but is very passionate about her subject, bringing many stories to the classroom. This semester, she is teaching Anatomy and Physiology and will be teaching General Biology labs and Human Anatomy next semester to pre-professional students.

Dr. Hill has a special interest and years of experience in studying creation and has also participated in the Southwestern Adventist University’s Dino Dig several times. This past summer she presented a paper entitled “Evolution, Spiritualism and

the Authority of Scripture” at the Adventist Theological Society Symposium in Keene, Texas. She also was lead author of the creation/evolution brochures that Southern presented at the General Conference meetings in Atlanta this past summer. She has an effective way of integrating the story of God’s creation into all her classes. A typical question on an exam she gave was “What has been the most interesting/exciting fact to you that we have studied in Chapters 1 & 3? What does it tell you about God?”

Dr. Hill is married to Dr. Lee Spencer who is also a professor at Southern. They live at the “Spencer Ranch” in the mountains of north Georgia and have previously had students over for a camping retreat.

Snapshots



Learning salamander hunting techniques from Dr. Ekkens.



Waiting for birds at Whigg's Meadow.



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