

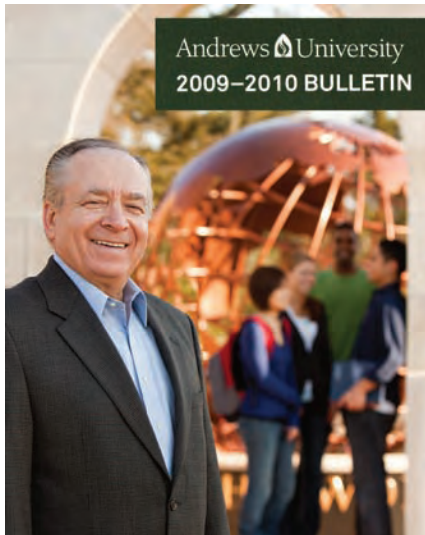


BIOFEEDBACK

Winter 2009-10

Newsletter of the Andrews University Biology Department

Chobotar - 40 years at AU



Andrews University
2009-2010 BULLETIN

Dr. Bill Chobotar, Biology Professor, on the front of this year's AU Bulletin.

BIOLOGY FACULTY HONORED

Four Biology faculty received recognition this year for outstanding service to Andrews University.



Bill Chobotar, Professor of Biology, was honored for the 40 years he has taught at Andrews. In addition to courses in Microbiology, Immunology, and Parasitology, Chobotar has provided advice to thousands of pre-medical students during his career. For many years he also has served as editor of the international journal *Parasitology Research*. He is popular around the department for the pizza he makes during Biology's annual spring pizza feed.



Tom Goodwin, Professor of Paleobiology, was awarded The Daniel A. Augsburg Excellence in Teaching Award for 2008-2009. Goodwin is a vertebrate paleontologist with particular interest in the Pleistocene biogeography and diversification of ground squirrels. In addition to courses in paleobiology, he teaches Historical and Philosophical Biology and co-teaches an Honors course entitled *Cosmos*. He has done extensive research on fossil reptiles and mammals in Wyoming, Peru, and elsewhere.

David Steen, Professor of Biology, earned the 2009 AU Student Association's Teacher of the Year Award. Steen, who chairs the Department of Biology, has taught Foundations of Biology, along with other courses, since he joined Andrews in 1986. "He is a master teacher, well-respected by both faculty and students and the ultimate embodiment of mind, heart, and soul," noted Lena Caesar who presented the award. Steen is known for his computer skills and superb craftsmanship in many areas.



Dennis Woodland, Professor of Botany, earned the University Senate's Ecology and Stewardship Award for his work in developing the Andrews University Campus Arboretum. One acre of rainforest was set aside in his name. Woodland is author of *Contemporary Plant Systematics*, now in its fourth edition (see page 6) and used around the world as a textbook in botany courses. Woodland also has been active in various conservation efforts in Berrien and Cass Counties, Michigan.



SHASTIN PURVIS ACCEPTED AT MAYO



Shastin Purvis, a senior Behavioral Neuroscience major, has been accepted into the Mayo Medical School College of Medicine. Purvis is the first Andrews student to be accepted into Mayo's high profile MD program which yearly accepts only 50 students nationwide.

"It's every freshman premed's dream to be accepted to Mayo," Purvis says, "so it's a great privilege! I feel that it's where God is leading me." At this point Purvis believes she would enjoy specializing in surgery, but she is open to other possibilities.

"Someday I'd like to do mission service," Purvis notes, and Mayo has a strong emphasis on outreach and service. A stated goal of the Mayo program is to produce physicians "who value diversity and work toward social responsibility."

"Mayo Medical School is one of the top medical schools in the U.S.," says Bill Chobotar, veteran pre-med adviser in the Department of Biology. "We've been so fortunate to have Shastin and so many other talented students in our program."

Purvis is a John Nevins Andrews Honors Scholar. Currently she is completing her honors research with Gordon Atkins, Research Professor of Biology, on phonotaxis in crickets in response to variable male calling songs.

Goldwater Scholar Libby Megna



Libby Megna, a senior Biology major, was awarded a Barry M. Goldwater Scholarship and Excellence in Education Award in April 2009. The award was established by the United States Congress in 1986 in honor of Senator Goldwater. Nationally, only 300 students majoring in the sciences, mathematics, and engineering

receive the award. The award comes with a scholarship for Megna's senior year.

Megna, who grew up in Coloma, Michigan, is the first member of her family to attend college. She was homeschooled through grade twelve, and then came to Andrews University as a National Merit Finalist. She has worked many summers as a naturalist at Sarrett Nature Center, which is located near her home.

Since her freshman year, Megna has been an active member of the Seabird Ecology Team, based at Andrews. She participated in two field research seasons at Protection Island National Wildlife Refuge in Washington and plans to do her master's research with the Team. Megna is minoring in mathematics and utilizes her expertise in both biology and mathematics in her research.

"Libby is one of the most hard-working, talented, unpretentious, pleasant-to-be-around students with whom I've worked," says Jim Hayward, Research Professor of Biology and co-director of the Seabird Ecology Team. Shandelle Henson, Professor of Mathematics and the other co-director, says, "Working with Libby is like working with a Ph.D. student. She's a delight."

After completing her masters degree, Megna plans to pursue a Ph.D. in the area of behavioral ecology.

Spring Break in Cozumel for Biology Students

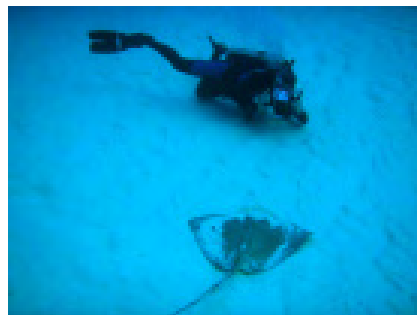


During the 2009 Spring Break, two Biology undergraduates, Ryan Williams and Michael Martins, and two Biology graduate students, Kelly McWilliams and Tori Steely, joined a trip coordinated by the Social Recreation Department to Cozumel, Mexico. Cozumel, an island off the coast of the Yucatan Peninsula, is famous for its clear, sapphire water and biologically diverse coral reefs. Students spent six days SCUBA diving among the reefs.

Although no formal biology instruction took place, each dive was a lesson in ocean ecology and a chance to experience biology in action. An island

such as Cozumel is an oasis in the comparative desert of the deep sea, protecting the coral reefs and nourishing a food chain of plankton, coral, fish, and larger sea creatures.

As Williams put it, "Diving in Cozumel was a really awesome experience and allowed me to see many neat creatures in real life. I was able to get a very close look at an octopus, sea turtles, eels, nurse sharks, and many other fish. I really enjoyed getting to see these animals up-close in their natural environment." Steely added, "Trips like this give biology students a chance to see the animals that we talk about every day in class. This trip gave us a hands-on experience of the diversity of a coral reef and God's amazing creation."



**Photos by
Tori Steely**

RETURN OF THE TOOTH SLEUTH FOR ALUMNI WEEKEND

Paul Kovalski, B.S. 1979, answers to several monikers including "Dr. Dinosaur" (as an avid fossil hunter), "The Tooth Sleuth" (as a forensic consultant), and "Dr. Kovalski" (as a practicing dentist).

For the past 22 years, Kovalski has practiced dentistry with the state of New Jersey's Department of Human Services, Division of Mental Health. In addition to working with mental health patients at Hagedorn Hospital where he is chief of dentistry, he also has worked as a forensic dental consultant to the Monmouth County Medical Examiner's Office for the past two decades.

Kovalski frequently is called on to identify bodies that have been burned beyond recognition, decayed, or washed up along the New Jersey shoreline. He says it takes a certain type of person to do this kind of work, one not squeamish about corpses or bad odors. "I don't lose sight of the fact that this is someone's mother or sister," he says. He recently was featured on "America's Most Wanted" with host John Walsh in an unsolved criminal case involving the skeletal remains of a small child.

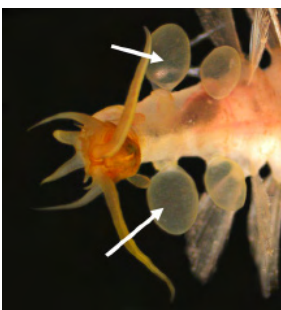
When Kovalski was a student at Andrews, he lacked direction. But Richard M. Ritland, then professor of paleontology, saw potential in Kovalski and encouraged him to pursue a biologically-related profession. Although he had been interested in nature since he was a kid, while at Andrews Kovalski developed a special interest in both botany and fossils. Marlboro Township, where he resides, contains one of the top dinosaur sites in the eastern United States, an Upper Cretaceous locality with hadrosaur bones. Kovalski has been working to preserve this site and has organized an annual Dinosaur and Environmental Awareness Day for the region.

In addition to his other activities, Kovalski is heavily involved in civic matters. He has served as a city councilman, helped save area trees, aided in the design of a 9/11 memorial for the Marlboro Recreation Community Center, and raised money for the Muscular Dystrophy Association. For the latter activity he was named "Person of the Year" by his community. At Hagedorn Hospital he sits on an infection control committee, serves as chairperson of a tobacco-free committee, and secretary-treasurer of the hospital medical staff.

During Homecoming weekend in September, Kovalski presented an illustrated seminar on his forensic work to a packed audience. The seminar was dedicated to Dr. Richard Ritland, now retired, who was in attendance.



OSBORN DISCOVERS WORMS WITH LUMINESCENT "BOMBS"



Karen Giver Osborn, B.S. 1996, with four co-authors published an article in the August 21, 2009 issue of *Science* entitled "Deep-Sea, Swimming Worms with Luminescent 'Bombs'". In it, she describes seven new species of annelid worms that swim in the deep, dark waters of the Pacific Ocean. She and her colleagues discovered the worms while exploring with remotely operated vehicles (ROVs).

Five of the seven new species "have lateral, ellipsoidal organs on anterior segments that produce brilliant green bioluminescence when autotomized." The bombs "suddenly burst into light when released by the animal, glowing intensely for many seconds then slowly diminishing." This action is thought to function as a defensive ploy, allowing the worm to escape into darkness as a predator approaches the light.

After completing her degree at Andrews, Osborn earned a master's degree at Western Washington University and a Ph.D. at the University of California, Berkeley. Currently, she is a post-doctoral fellow at Scripps Institution of Oceanography in La Jolla, California.

Pam Smith at Soapstone Prairie



Pam Smith, M.S. '06, is education specialist for the Colorado Parks Department, Ft. Collins, Colorado. She oversees the educational and interpretive programs, tours,

and management of the recently purchased 19,000+ acre (over 28 sq. mi.) pristine short grass prairie preserve known as Soapstone Prairie Natural Area. The property is rich in native prairie species, anthropology sites, and hiking and mountain biking trails. The preserve extends into the Colorado Front Range, along the Laramie Foothill Mountains on the Wyoming border on the west and north, and to the expanding limits of Ft. Collins and I-25 corridor to the south and east. Pam also is a contract field plant specialist for the U.S. Forest Service. As President of the local Colorado Native Plant Society, she organized and oversaw the society's state convention this past September. She lives on a mountainside overlooking the Rocky Mountains southwest of Ft. Collins. (Visit Soapstone Prairie Natural Area at [http://www.fcgov.com/naturalareas/finder/soapstone.](http://www.fcgov.com/naturalareas/finder/soapstone))

PRESENTATIONS AT MEETINGS

Several Biology students and faculty made presentations at professional meetings this year.

Rob Zdor, Professor of Biology, and Myrna Biswas (M.S. '09) presented talks at the Ninth International Bioherbicide Group Workshop in Orlando, Florida during February. The talks were based on their research into weed control using deleterious rhizobacterial interactions. They also discussed the genetic basis for these interactions.

Tom Goodwin, Professor of Paleontology, and Brooke Kisser (M.S. '09) presented talks at the annual meeting of the American Society of Mammalogists, Fairbanks, Alaska, in June. Goodwin's paper dealt with his research on fossil squirrels from the Great Plains. Kisser's paper featured her research on hibernation in thirteen-lined ground squirrels and how the act of hibernation is reflected in their incisor teeth.

James Hayward, Research Professor of Biology, with Shandelle Henson, Professor of Mathematics, presented a joint talk in February at the American Association for the Advancement of Science in Chicago. They discussed how they integrate mathematics and biology at the undergraduate level at Andrews University. In August, Hayward also gave a talk on dinosaur

4 Graduates Graduate



Brooke Kisser, Christina Burden, Myrna Biswas, & Kelly McWilliams at summer graduation.

TWO DEFEND THESES AT ROSARIO

This past summer two Biology graduate students defended their masters theses at the Rosario Beach Marine Laboratory, with which Andrews University is affiliated.

Christina Burden's thesis was entitled "Variability in the Calling Song of Two Field Cricket Species (*Gryllus veletis* and *G. pennsylvanicus*)" and focused on her exploration of species recognition in crickets in relation to their calling songs. Gordon Atkins, Research Professor of Biology, served as her thesis advisor.

Brooke Kisser's thesis, entitled "The Relationship between Dental Growth Increments and Body Temperatures from Late Summer through Early Spring in Free-Ranging Thirteen-lined Ground Squirrels, *Spermophilus tridecemlineatus*", involved determining how the growth lines in ground squirrels' teeth are altered as a result of hibernation. Tom Goodwin, Professor of Paleobiology, served as her thesis advisor.



Christina



Brooke

eggshell taphonomy at the Fourth International Symposium on Dinosaur Eggs and Babies at the Museum of the Rockies, Montana State University.

Dennis Woodland, Professor of Botany, made two presentations at the Annual Meeting of the Colorado Native Plant Society in Fort Collins during September. Titles of his two lectures were "Is the Botany Profession Becoming an Endangered Species?" and "Botany in Forensics".

Christina Burden (M.S. '09) presented a talk at the J.B. Johnston Club Annual Meetings in Chicago in October. Her topic was "Beyond Species Identity: Cricket Auditory Systems Process More than Just a Stereotyped Call" based her thesis research with Gordon Atkins, Research Professor of Biology. Atkins co-authored the paper on which the talk was based. Burden and Atkin's paper was one of only ten selected from the international community for presentation at this satellite symposium meeting in conjunction with the Society for Neuroscience convention.

ZDOR TEACHES MICROBIOLOGY SHORT COURSE FOR KIDS



During October and November, Rob Zdor, Professor of Biology, taught a short course in microbiology for children, aged 9-13. Twenty-eight children attended the course, along with six parents.

Zdor covered a variety of topics including what microbes are like, how they affect other living things, and how they are controlled. He also taught the pupils how to design scientific experiments using microbes, how to culture bacteria using a Petri plate, how to stain and view bacteria using light microscopy, and how to test bacterial inhibition using a disc diffusion assay.

Practical implications were also emphasized. Students were instructed in proper hand hygiene, appropriate use of antibiotics, and safe food storage techniques.

GOODWIN AND STUDENTS STUDY MAMMALS AT UMMZ



During fall break, AU biology students Kelsey Bullock and Courtney Simons spent a long day at the University of Michigan Museum of Zoology (UMMZ) in Ann Arbor, Michigan. Working with biology professor Tom Goodwin, Kelsey and Courtney took advantage of the excellent mammal collections at UMMZ to collect data for their senior research projects. Kelsey photographed selected bones of ground-dwelling squirrels. She is recording measurements from these photos to develop a method to estimate body mass from bone dimensions with the goal to estimate body mass for an extinct giant ground squirrel. Courtney photographed lower jaws of four genera of small ground squirrels. She will record measurements from these photos as she develops a method to discriminate among these four genera based on isolated jaws.

Although most of the day was spent in the Museum of Zoology, the team spent a few minutes visiting collections in the Museum of Paleontology, where Kelsey photographed the skeleton of a giant ground squirrel. While there, they witnessed another giant under study—a 60+-ft-long skeleton of an Eocene whale, *Basilosaurus*, currently being CAT-scanned.

KELLY MCWILLIAMS - A LIFE SAVED



While pursuing a master's degree in Biology, I enjoy getting out of the Science Complex to experience my chosen field in as many ways as possible – hiking, running, cycling, swimming, climbing, and snowboarding. On July 8 of this year, I was enjoying the

beginning of an intended 30-mile bike ride when my world changed dramatically! I was hit by an SUV traveling 55 mph. I was in critical care for five days and in the hospital for another ten days, treated for injuries including a broken ankle and clavicle, fractured ribs, a concussion, partially collapsed lung, several gashes, and snapped ligaments connecting the vertebrae of my neck. I had surgery to fuse and stabilize the two cervical vertebrae and was in a C-collar for three months.

The human body possesses an astounding ability to put itself back together after a trauma. I was able to march, or perhaps more accurately, roll during August graduation (I was still relying on

a wheelchair to get around) with my other Biology master's student compatriots. My accident prevented me from getting that illusive piece of paper known as a degree, but I plan to graduate in May 2010. In the meantime, I am continuing to recover remarkably quickly and can run, swim, and yes, bike. I am convinced that God is in control of all of this, and I am so thankful for the gift of life. I am also thankful for the support of the whole Biology department, faculty and students, through this adventure. We'll see what God has in store for me next!



(Editor's note: It was touch-and-go for quite some time this summer after the accident, but we are all so thankful to have Kelly back with us, miraculously looking fit and healthy once again!)

IN MEMORY OF DR. LEONARD N. HARE

Following a brief illness, Dr. Leonard N. Hare, passed to his rest on Sabbath afternoon, July 25, 2009. During a memorial service held in the PMC Youth Chapel on September 26, 2008, David Steen read the following tribute.

When I accepted a faculty assignment at Andrews University arriving on the 1st of July 1986, I moved into an office, PH318, on the third floor of Price Hall. That office had just been vacated a few days earlier by Dr. Leonard N. Hare— professor extraordinair.

I sat in his chair and opened the drawers to his desk, put my ear to his telephone, unpacked boxes of my books and arranged them on his shelves. I went into the lab next door to his office and checked out his lab equipment—some of it obviously assembled from make do items—funnels, baby food jars, plastic tubing, pipe fittings, nuts and bolts from the local hardware store. I tested his microscopes using his botany slides. It took a few weeks or so to settle in. But gradually, as I took ownership and begin to understand the wealth of what I had inherited, I often wondered – who was this man? Who was Lenny Hare? I never took any classes from him. I never worked side by side with him for I picked up where he left off 24 years ago.

Oh, I had met Lenny a couple years earlier when we were both teaching at Rosario Beach for a few weeks, me from Southern, and Lenny from Andrews. Lenny's story telling reputation was widespread in Adventist circles. He had obviously inherited the gift of story telling from his famous father Eric B. Hare. Who can forget Mister Crooked Ears - Silver and the Snake—Me Me—Pip, Pip the Naughty Chicken? And there at Rosario, around the campfire on the beach I listened in rapt attention as Lenny told stories with an accent and pace that powerfully brought back memories of my childhood days around our old scratchy record player.

Though Lenny and Esther lived right here in Berrien Springs, Lenny never came back in to visit his old office or sit and reminisce about his students or his experiences. He and Esther were far too busy traveling, gardening, and spending time with family. Lenny and Esther both modeled for me the cleanest break between work and retirement that I could ever imagine. I can only remember one time when Lenny visited the department and that during one alumni event when we specially honored both the Heidtke's and Hares for their long years of faithful service to Andrews University.

Since Lenny's passing 9 weeks ago today, I have visited with his former students, his colleagues, and others who knew him well. What always rises to the top is his marvelous skill in spinning a yarn. No matter what the stories were about, they live in the memory and grab the emotions. Vivid stories became his vehicle for teaching the complexities of DNA replication, gene transcription and translation. Jim Hayward, former student and now Research Professor of Biology here at Andrews University has clear memories of protein synthesis being described as a "trolley car" (ribosome) bumping along the "track" (mRNA) picking up "passengers" (tRNA-AA) along the way. Hayward states that "These word pictures made it easy to remember how things worked and

certainly spiced up the lectures." Others report getting so engrossed and captivated by the stories that they forgot to take notes. His style of delivering lectures was his strong suit.

Lenny could turn a phrase. Brochures or handout pamphlets were called "Truth Filled Literature". Lectures that always started on time and magically ended a second before the bell were sometimes concluded with, "Come rushing back tomorrow, boys and girls, for the rest of the story". In the Hare home, the cold of Michigan winters was kept at bay with a wood stove and a neat stack of well seasoned fire wood. When Lenny needed to add wood he would say, "Time to feed Molech". It was no doubt his gift of description that made him such a good biology teacher. Biology is filled with complexity, but Dr. Hare could explain difficult concepts in clear and interesting ways. He was always available and open to students.

Another trait frequently mentioned is his intellectual brilliance cloaked in kindness and gentleness to all. He was engaging. Since Lenny and Esther grew up in Burma and India respectively, they were both filled with grace and charm that comes from the richness of living with and enjoying ethnic diversity. Lenny was obviously a man of great humility, but had the wit and whimsy of a childish prankster blended with the genius of an innovative problem solver. Teaching was his life and he was one of the best. He was a true servant teacher. He taught Foundations of Biology, Plant Physiology, Genetics, and Issues in Origins and Speciation to name a few.

I wish that I could have known him better. I look forward to that time when I will get to listen to more of his stories and learn from his wealth of botanical knowledge. Until that day, on behalf of the Faculty and Staff of the Department of Biology, I wish to formally honor the memory of Dr. Leonard N. Hare. He was indeed a professor extraordinair. Further, I wish to formally thank Esther, and Penny for all that you did so that your husband, your father, could so generously give of his time and service to the students of Andrews University. In your support of him, you, too, made loving contributions through his service. And for that I thank you. May God bless you and comfort you until that day when we will all be reunited around that great white throne.

Even so come Lord Jesus.



The Hare family has requested that memorials in Lenny's name be designated for Botany projects in the Department of Biology.

HEIDTKE HONORED AT BIOLOGY CHRISTMAS PARTY



**Harold Heidtke and David Steen
(Above & Below)**



**Students Observe as
Heidtke Honored**

Harold E. Heidtke, Professor of Biology Emeritus, was honored at Biology's annual Christmas Party this year. The Biology lecture hall, Price Hall 106, was renamed the Harold E. Heidtke Amphitheater. Heidtke was one of Andrews University's longest serving faculty members.

Professor Heidtke taught Biology at Andrews from 1951 until his retirement in 1986. Following his retirement, he taught part time for yet another 11 years, a total of 46 years. He was known especially for teaching Foundations of Biology, in those days at 7:30 a.m. five days a week. The course still is called "FB" and is required of all Biology majors and all pre-medical, pre-dental, and other pre-professional students. He also taught Anatomy and Physiology.

Heidtke kept records of his students, all 7,933 of them. Some of these students took more than one course from him. Heidtke has a card catalog with a card for each student he has ever taught. Thousands of these students now serve around the world as physicians, dentists, biologists, nurses, physical therapists, and members of other professions.

"Harold, because you have given your life in service to your students, to the Department of Biology, to Andrews University, you hold a special place in our hearts," noted David Steen, Department of Biology Chair, when making the presentation. "In inscribing your name on the doors of this tangible place, we will always remember you, we honor you and we thank you for your life of seeking knowledge, affirming faith, and changing the world."

Professor Heidtke continues to reside in Berrien Springs, although his wife, Dorothy, widely known for the original wedding gowns she sewed, passed away this past August. Since "retiring" a second time in 1996, Heidtke has spent more time pursuing his hobbies of stamp collecting, photography, classical music, model railroads, and growing day lilies.

Professor Heidtke still lives in the same home in Berrien Springs. If he impacted your life, feel free to send him a Christmas card. He would certainly enjoy hearing from you. Harold Heidtke, 9176 Woodland Drive, Berrien Springs, MI 49103

AMLANER NEW VP AT KENNESAW STATE

On July 1, 2009, Charles Amlaner, BS 1974 (Biophysics), MS 1976 (Biology), assumed responsibilities as Vice President for Research and Dean of the Graduate College at Kennesaw State University. Prior to assuming the vice presidency at KSU, Amlaner was the Theodore Dreiser Distinguished Professor at Indiana State University, Terre Haute. He also served as chair of Environmental and Ecological Science, Science Education, and Life Sciences departments. Before going to Indiana State, Amlaner was chair of the Department of Zoology at the University of Arkansas.



Amlaner completed his masters' degree in Biology at Andrews under Dr. John Stout. After Andrews, he completed a D.Phil. at Oxford University where he studied animal behavior under David McDonald. He has conducted extensive research on the physiology and behavior of animal and human sleep. "KSU is everything I hoped it would be – Lots of energy for new things and a willingness to try," says Amlaner. Kennesaw State is the third largest university in Georgia with 22,000 students and growing rapidly.

Amlaner is married to Beverly Pohle Amlaner (M.MUS. 1975), a grade 3 and 4 elementary teacher in Atlanta. The Amlaners have two children, Kirsten and Sean, both of whom attended AU.

Calling Songs (Alumni Notes):

Mary Ellen Barlow, B.S. 2009, worked as office manager at Camp Wawona, inside Yosemite National Park, this past summer. She plans to attend medical school beginning in 2010-11.

Myrna Biswas, M.S. 2009, is teaching Anatomy & Physiology at Washington Adventist University, Takoma Park, Maryland.

Christopher Borchardt, attended 1989 - 1992, M.D., M.P.H., is a major in the United States Air Force. This year he was elected as a Fellow in Aerospace Medicine by the Aerospace Medical Association. Previously he won the Air Force Materiel Command's Malcolm C. Grow Award given annually to the most outstanding flight surgeon in the Air Force. He has done extensive research on Gz induced loss of consciousness (GLOC) experienced by fighter pilots during aerial maneuvers, maneuvers that can generate forces up to nine times the pull of gravity experienced by a pilot standing on earth. During 2008, Borchardt served as Chief of Aerospace Medicine, 332d Air Expeditionary Wing, Balad Air Base, Iraq, where he provided critical care medical support during life saving medevac helicopter operations. He received high commendation for his work with an Accident Investigation Board which uncovered the cause of the first B-2 stealth bomber crash in February 2008.

Esther Jeong, B.S. 2008, is enjoying her first year as a D.D.S. student at Loma Linda University School of Dentistry.

Maria Kim, B.S. 2008, is working on a master's degree in biology at Loma Linda University.

Brooke Reiswig Kissler, M.S. 2009, has settled in Burlington, Washington, where her husband, Shaun (D.P.T, 2009) practices physical therapy.

Mindy Kutzner, B.S. 2009, is working on her master's degree in biology at Walla Walla University.

Andrija Matak, M.S. 2008, is working on a Ph.D. at the University of Graz, Austria, where his dissertation work involves cancer biology using transgenic mice. He recently became an uncle to a baby boy.

Kester Nedd, B.S. 1979, D.O., is Chairman and Chief Executive Officer of eHDL, which provides administrative and electronic transaction services to health care organizations. He also founded HealthNet in 1989, and is a recognized expert in the development and implementation of information systems with government level data processing, security, and privacy standards, including HIPAA. He is an associate professor in the Department of Neurology and Rehabilitation, University of Miami School of Medicine.

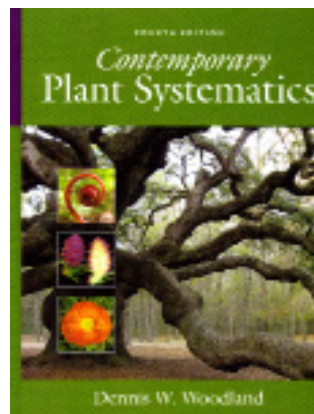
Rawle F. Philbert, B.S. 1983, D.D.S., is President of

the Medical Staff and Chairman/Program Director of Lincoln Medical Mental Health Center, Bronx, New York, where he also directs the Oral and Maxillofacial Surgery residency training program. In addition, Philbert holds academic appointments at Weil Cornell Medical School and Columbia University's College of Dental Medicine. He graduated with honors and distinctive recognition with his degree in dentistry from Howard University in 1987. He then did post-graduate residency work in oral and maxillofacial surgery at Harlem Hospital, where for three years in a row he was named "Attending Physician of the Year" for "unprecedented and committed service in the training of resident and the quality of care that was given to the patients he managed." Philbert is widely published in the peer-reviewed literature.

Benjamin J. Thornton, M.S. 2000, successfully defended his Ph.D. dissertation at the University of Nebraska's Center for Environmental Toxicology in July. His dissertation is titled "Sex dependent changes in the activity of detoxification enzymes and insecticide susceptibility induced by atrazine in *Drosophila melanogaster*." Thornton is an associate professor of biology at Union College in Lincoln, Nebraska.

WOODLAND'S TEXT IN FOURTH EDITION

Contemporary Plant Systematics by Dennis Woodland, Professor of Botany, came out this year in its fourth edition. Unlike most systematic botany texts, Woodland's takes an international perspective and it is used in botany classes around the world.



Initially published by Prentice-Hall, the book is now produced by Andrews University Press and is one of its bestsellers. The text focuses on vascular plants. An enclosed DVD contains over 8,600 photo images, and a CD-ROM is included with Interactive Keys to Vascular Plant Families of the World.

BioFeedback is the annual newsletter of the Andrews University Department of Biology

Jim Hayward, Editor
Margo Coleman, Layout & Graphic Design