BITES:

The Beta Beta Beta Club sponsored a Science Mentoring Program to help guide science majors with schedules, graduate school, and more.

On April 13-14 John Bourne, Elizabeth Bullard, and Jesse Hardval presented their senior research at the Ohio Academy of Sciences meeting at Ashland University in Ashland, Ohio.

Follow us on Facebook!

Isaac Asimov:

“There is an art to science, and a science in art; the two are not enemies, but different aspects of the whole.”

Biology Department Students Participate in Undergraduate Research and Science Week

Nine Biology Department students presented their research findings at a Poster Session as a part of the annual Undergraduate Research and Scholarship Week which is held every spring.

Each student presented their research in the form of a poster, and those presentations were then judged on a variety of criteria.

HABITAT FRAGMENTATION AND ITS EFFECTS ON THE DISTRIBUTION AND ABUNDANCE OF SALAMANDER SPECIES ON A RECLAIMED SURFACE MINE

John C. Bourne and Danny Ingold

THE EFFECT OF UV RADIATION ON TOLL-LIKE RECEPTORS IN NON-MELANOMA SKIN CANCER

Rachel Buirley

THE ABUNDANCE OF WINTER RAPTORS ON A RECLAIMED SURFACE MINE IN SOUTHEAST OHIO

Elizabeth M. Bullard and Danny J. Ingold

THE SPECIES PROFILE OF LOTIC FISH COMMUNITIES AFFECTED BY LANDSCAPE LEVEL SURFACE MINING DEGRADATION

Jesse E. Hardval

CATALASE TRANSFER FROM MELANOCYTES TO KERATINOCYTES: DEFENSE AGAINST UVR INDUCED OXIDATIVE STRESS IN HUMAN SKIN

Heather Henry

THE MOZART EFFECT: AN EEG STUDY OF NEUROLOGICAL RESPONSES AND SPATIAL REASONING

Lisa Sakal

THE EFFECT OF VARIOUS STIMULANTS ON SALIVARY TESTOSTERONE LEVELS IN FEMALE COLLEGIATE VOLLEYBALL PLAYERS

Molly Scholl

BEHAVIORAL EFFECTS OF TRANSDERMAL NICOTINE ADMINISTRATION ON THE ACTIVITY LEVELS OF FEMALE SPRAGUE DAWLEY RATS

Dalton Tracey

NEUROPROTECTIVE EFFECTS OF A-TOCOTRIENOL AS A NOVEL THERAPEUTIC STRATEGY FOR HUNTINGTON’S DISEASE

Christine Ward and Brian Bergstrom
Joy (Miller) Brown, 1945

Since graduating in 1945, Joy has raised three children, and was in professional Girl Scouting, working mostly with adults. This gave Joy the opportunity to meet and work people from all walks of life. She has been retired for many years but still values these contacts which enrich her present life.

Joy’s husband passed away twelve years ago and her children and their families live all across the country. Joy has recently celebrated her 89th birthday. She has been blessed with good health, although she is now recovering from a heart attack. Joy is planning a trip to Wisconsin in late August, and would love to see the Muskingum College campus when she occasionally returns to Cambridge, her hometown.

Thomas Smith, 1958

Thomas and his wife, Mary Anne, celebrated their 50th wedding anniversary on June 16th.

Frederick Bonkovsky, 1961

Frederick Otto Bonkovsky has touched countless lives as an ethicist, professor, and author in the United States and abroad. He earned his Muskingum Bachelor of Science degrees in chemistry and biology, his Master of Divinity degree from Yale University, and Doctor of Philosophy degree in Public Policy at Harvard University.

He is currently visiting professor of medical ethics in the School of Medicine at the University of California, San Diego. He previously served on the faculties of the University of Vienna, Harvard University, Emory University, and Columbia Theological Seminary. He has twice been a Fulbright Senior International Professor and is the recipient of National Science Foundation, Danforth, Rockefeller and other competitive fellowships. The author of five books and numerous scholarly articles, he lectures frequently in the United States, Europe, and Latin America, sharing his knowledge with international leaders and policy advisors.

While serving as Director of the Bioethics Department of the U.S. National Institute of Health, his work helped shape ethics policies of Institutional Review Boards overseeing biomedical and behavioral research involving human subjects. He has been a National Research Evaluator for the U.S. Department of Energy and an International Lecturer for the U.S. Department of State.

A leader in the Presbyterian Church USA, the Rev. Dr. Bonkovsky has pastored several congregations and served in the General Assembly. He and his wife, Elizabeth Leitch Bonkovsky, Ph.D., a member of the Muskingum Class of 1962, reside in San Diego, California. They are the parents of Joshua and Rachel, and the grandparents of two girls and three boys.

The Distinguished Service Award is the highest alumni award that Muskingum bestows and is in recognition of those who have achieved distinction in a field involving full use of an individual’s creative powers, both intellectually and aesthetically, and keeping in mind that their accomplishments should reflect significant service to mankind so as to accentuate the values associated with Muskingum.

Fred was nominated by a Muskingum alumnus and was unanimously selected by the alumni council.

Robert F. Douglass, 1966

Robert has had a change in his consulting assignment. He left Johnson and Johnson in April, 2012, McNeil OTC Consumer Division as Strategic Sourcing Manager for all API’s and chemicals for the $15 billion sales division. Robert is now a supply chain consultant who specializes in chemical procurement globally along with global contract manufacturing and demand planning. Should there be any needs for his services just let him know at Douglass1111@aol.com or 732-331-9001 (cell).

Mary Ellen MacVay Koser, 1966

Mary Ellen is still enjoying retirement from teaching and living in Florida. She spends most of her time as the president of the Vero Beach Art Club and creating a painting or two.

Brian Sittler, 1975

“Enjoying retirement!”

Beth Taylor Smith, 1977

Beth was appointed to the Ohio Board of Nursing’s Advisory Group on Nursing Education starting in March 2012 for the next two years. She is the Long Term Care advisor on the board.

Biology Faculty in Print

Brian Bergstrom


Danny Ingold
Mark Preslan, 1979

Mark Preslan is Regional Director for Asia-Pacific/Middle East/Europe, in the International Services Department of the American Red Cross, based in Washington, DC. Mark has been with International Services since 1996. American Red Cross International Services helps vulnerable people and communities around the world prepare for, respond to, and recover from natural disasters, humanitarian crises, and health emergencies, through mobilizing the power of the International Red Cross and Red Crescent Movement. As regional director, Mark coordinates American Red Cross participation with Red Cross and Red Crescent Societies in the Asia-Pacific/Middle East/Europe region in their priority programs and activities. Currently these include Health and Disaster Management and Response projects in Russia, the Ukraine, Central Asia, Nepal, Bangladesh, Vietnam, Indonesia, China, and Japan. Mark has over twenty five years experience in International Humanitarian Programs. He has spent half of those years living and working in Asia. He speaks one South Asian and one Southeast Asian language. Immediately before joining ARC, he worked as manager of the U.S. refugee training program in Thailand, working with refugees from Laos, Cambodia and Vietnam. Mark started his career (right after graduation from Muskingum) as a Peace Corps volunteer in Nepal. He holds a Masters Degree in Public Administration from the Kennedy School of Government at Harvard University.

Heidi Ball, 1997

Heidi is a veterinarian at Woodside Vet Hospital in Marysville, Ohio. She has two children, Kennedy, 6, and Charlotte, 2.

Kristen McLane, 2001

Kristen is currently Market Research Manager at Abbott Nutrition, located in Columbus, Ohio.

Nichole Prescott, 2002

Nichole graduated with a BS in biology in 2002 as Nichole Chandler. This year she accepted a position as the Supervisor of the Tissue Biospecimen Resource Center at the Cleveland Clinic. It is a newly created, centralized biorepository that banks human tissue for research use. Nichole also got engaged on her birthday, March 29, to her fiancé, Ryan Fewell. The couple will be getting married on September 22, 2012, in Cleveland.

Corina O. Bondi, 2003

Corina is a postdoctoral associate in the Neuroscience Department at the University of Pittsburgh, PA. She is engaged in behavioral and electrophysiological studies aimed at understanding the role of dopamine neurons in regulating the adverse effects of dietary omega-3 deficiencies on brain function. She has also been serving on various administrative committees for the International Behavioral Neuroscience Society. Corina is married and has a two year old daughter, Bianca.

Justin Bowdish, 2004

Justin graduated from The Ohio State University Dental College on June 3, 2012. He is now going through the U.S Army’s basic training for medical personnel at Fort Sam Houston, Texas. He will be a dentist for the Army the next four years.

Amy McKinney, 2005

Amy is currently at the University of Maryland, Rocky Mountain Biological Field Station. She co-authored a paper that was published in Ecology and was written up in NSF weekly email. To view Amy’s paper click the link below.


Molly (Hoover) Grassman, 2009

After graduating from Muskingum, Molly went on to get a master’s degree in PA studies from Midwestern University in Phoenix, AZ. She now works as a physician’s assistant at an urgent care in Del Rio, Texas. Molly was married to her high school sweetheart in November of 2011 and they are expecting their first child in September.

Alumni News Briefs: Where They Are Now

Christina Gious. 2003: Indiana University Optometry School
Paul Gledhill. 2003: Ohio EPA, modeling water pollution
Crystal Kozora. 2004: Case Western Reserve
Carrie Padro, 2007: Ohio State University
John Treasure, 2007: University of Idaho and Idaho Fish and Game
Nick Hess, 2008: Graduated May 12, 2012 from Ohio University Medical Center; Residency in Dayton, Ohio
David Shahbodaghi, 2010: West Virginia University Medical School
Jeff Storz, 2011: Smuckers, Quality Control
Nikkie Wiard, 2011: Central Crossing High School, Grove City, Ohio
Biology Students were winners in the Poster Session during Undergraduate Research and Scholarship Week!

1st Place Poster Session: Heather Henry, Molecular Biology

CATALASE TRANSFER FROM MELANOCYTES TO KERATINOCYTES: DEFENSE AGAINST UVR INDUCED OXIDATIVE STRESS IN HUMAN SKIN

Honorable Mention: John Bourne, Biology
Habitat Fragmentation and Its Effects on the Distribution and Abundance of Salamander Species on a Reclaimed Surface Mine

(Awards funded by the Carolyn and Glenn Hodges Research and Awards Fund)

Biology Department Student Is Winner in the James Bradford Colloquium!

3rd Place Presenter: John Bourne, Biology
“Habitat Fragmentation and Its Effects on the Distribution and Abundance of Salamander Species on a Reclaimed Surface Mine”

Many recent studies have focused on habitat fragmentation as a result of agriculture and its impacts on salamander diversity. However, relatively little is known about the effects of habitat fragmentation on salamander diversity on a reclaimed surface mine. The objective of this research was to survey the fragmented landscape of The Wilds, a reclaimed surface mine in Southeastern Ohio for salamander diversity.

NanoDrop

The Biology Department now has a NanoDrop Spectrophotometer. A NanoDrop is a spectrophotometer which passes a beam of narrow-band (near-monochromatic) light through a droplet of water and measures the intensity of light transmitted through the sample. More traditional spectrophotometers use cuvettes to contain the sample and generally require considerably more volume of the analyte solution. The advantage of the NanoDrop system is that by using only a drop of analyte solution, it conserves sample. It can be used to quantify the concentration of DNA or RNA in a solution.

According to Dr. Amy Santas “it is very impressive for an institution of our size to have a NanoDrop.”
Helen Briggs, 1992

Helen and her husband, Scott (’92), went to Haiti again over Thanksgiving of 2011 with their church.

Below are the items that we were able to accomplish:

We were able to serve more than double the amount of people this year versus last year!

- Raised the money and assisted in building a home for a gentleman right outside of Jacmel, Haiti. He has put off getting married since the earthquake because he did not have a home for his future wife. The wedding will take place in January. The home was built in 2 ½ days!!
- A guesthouse is currently being built behind the Lutheran Church. Our team went to “Home Depot” to purchase lumber to make shelves.
- We collected enough health supplies to put together and distribute over 300 health kits containing: washcloths, soap, shampoo, toothbrushes, toothpaste, floss, band-aids, and a cross necklace (we began seeing these crosses everywhere we went around town!),
- We delivered antibiotics to the Medical Clinic next door to the Lutheran Church (antibiotics to treat cholera for a guestimated 200-300 people),
- We were able to serve 359 people with eyeglasses which is more than double from last year. We conducted 4 eyeglass clinics, one from the Lutheran Church in Jacmel, one from the tent city of Bourdine right down the road from the church, and two clinics in the rural town of Raymond (pronounced Rah-moh),
- Visited a hospital outside of Raymond to evaluate how to bring needed supplies (X-ray films, surgical dental supplies, orthopedic rods and plates, etc.) on future mission trips,
- Distributed over 300 pairs of flip-flops to the people of Bourdine,
- Performed puppet shows, sang songs, and did crafts at the public school in Raymond and held a Vacation Bible School for the children of Bourdine,
- Held two movie nights at the Lutheran Church in Jacmel where we showed the “Story of Jesus” in Creole to the children,
- Visited the Paz-a-Paz School for the deaf where a couple of our members were able to sign with the students,
- Several youth soccer teams in the Cleveland area donated their used jerseys to suit up enough kids for four soccer teams at Bourdine, and
- Donated several suitcases of clothing.