Physiology is the field of biology that studies life processes. Our mission is to study how life processes are integrated and function. The 32 faculty and 9 staff in the department accomplish this mission by directing research laboratories and by providing a curriculum for 60 graduate students and 1,400 majors that emphasizes both the role of physical activity in human health and function across the lifespan and the responses of different organisms to various forms of stress. Our multidisciplinary curriculum requires students to take foundational courses before engaging in the core curriculum that can be individualized to meet the career goals of each student.

This enterprise is largely managed by the nine staff (www.colorado.edu/intphys/staff/index.html) who provide accounting, advising, curricular, and operational support for the faculty and students. The two senior staff most responsible for the management of the department are Jennifer Law (left) and Marsha Cook (right). Jennifer Law began at CU-Boulder in 1994 and worked in payroll and benefits, the police department, and sponsored projects before joining our department in 2000. With an MBA and the skills she acquired in previous positions, Jennifer is responsible for managing the multimillion dollar budget of the department. Her responsibilities include supervising two accounting technicians, the animal-care manager, and the budget for the Wellness Program (story on page 3). With all these responsibilities, she is affectionately referred to as The Law.

Marsha Cook joined the department in 2004 after 25 years as a flight attendant. Her main responsibilities include administration of the graduate program, assisting the chair, creating the course schedule on the University computer system each semester, planning and facilitating departmental events (graduation ceremonies, annual recognition events, and retreats), and managing the front office in Clare Small. Marsha enjoys her job a great deal and finds that it shares many characteristics with her previous position: interactions with a variety of people, problem solving on the fly, and an ever-changing work environment. Nonetheless, she is grateful that her current position does not involve any shift work!

On behalf of the faculty and students, many thanks to all the staff for your tireless efforts to ensure the successful management of the department.
The Clinical and Translational Research Center (CTRC; formerly the General Clinical Research Center) at the University of Colorado in Boulder was established in 2000, to meet the growing needs of clinical and translational investigators on the flagship undergraduate campus of the University of Colorado system. The CTRC is funded by a grant from the National Institutes of Health and includes a Bionutrition Core, an Informatics Core, a Sample Processing Core, Integrative Physiology Core Laboratory, Pharmacy Core, and four experimental protocol rooms. The Integrative Physiology Core Laboratory provides support in four general areas of investigation: 1) autonomic nervous system/cardiovascular physiology; 2) body composition; 3) exercise testing and intervention; and 4) indirect calorimetry. In 2009 the CTRC provided support for ~20 research protocols involving 31 investigators from multiple disciplines on campus including, integrative physiology, clinical psychology and mechanical engineering. The focus of scientific protocols ranged from sleep physiology to the effects of HIV-1 on endothelial cell biology. Unique strengths of the CTRC include: on-site physician, nursing and pharmacy support for research protocols, training opportunities for translational scientists on the CU-Boulder campus, and ability to expose undergraduate and graduate students in the basic sciences to clinical translational research. Because the CU-Boulder campus and the majority of its investigators are PhD scientists, daily on-site physician and nursing coverage ensures that all protocols are performed safely with optimal medical oversight. Indeed, the unit has a comprehensive medical oversight plan and clinical staff is available at all times for medical consultation.

The central location on an undergraduate campus provides the CU-Boulder unit with a unique opportunity to expose undergraduate and graduate students to translational clinical research at the most basic stage of career development. By providing opportunities for these students to be exposed to clinical research and gain research experience, it is possible to establish an intellectual interest that will, at least for some, lead to a career in biomedical science. In this regard, undergraduate and graduate students are able to perform research training in the CTRC for academic credit through the campus independent study, laboratory rotations, and research projects course offerings. These mechanisms allow students to identify faculty investigators of interest, develop a mutually agreeable research training plan, and perform research training in the CTRC while obtaining up to 3 hours per semester of academic credit. Use of two or more of these mechanisms provides the student an opportunity to engage in a research experience over a period of 2-3 years. In 2009, 207 undergraduates, 29 graduate students, and 10 postdoctoral fellows were involved with research at the CTRC.

The original General Clinical Research Center was established by the pioneering efforts of Professor Douglas Seals (Department of Integrative Physiology). Today, the CTRC is codirected by Professors Elizabeth Connick (Department of Medicine) and Christopher DeSouza (Department of Integrative Physiology), the Integrative Physiology Core laboratory is directed by Professor Robert Mazzeo (Department of Integrative Physiology), and the research subject advocate for the unit is Professor William Byrnes (Department of Integrative Physiology).
In 1979 Dr. Arthur Dickinson created a wellness testing and evaluation program designed to identify risk factors of lifestyle disease in persons working in highly stressful and physically demanding jobs. Thirty-one years later, Art’s program is alive and well and actively functioning as the University of Colorado Wellness Program (www.colorado.edu/intphys/UCWellness). Throughout the years, the Wellness Program has served thousands of members of the CU campus community, the local community of Boulder county, and many local fire and police departments and emergency personnel from Westminster, Longmont, Thornton, North Metro, Littleton, CU Police, and the Boulder Rural.

Throughout the program’s history, Art has mentored and advised numerous independent study and internship students – at both the graduate and undergraduate levels. He has taught courses in the clinical aspects of exercise, electrocardiography, and wellness and nutrition. From the program’s beginning in Carlson gymnasium to Clare Small to its current home in the ARCE building on East Campus, Art’s presence has been a constant.

Many clients have been involved with the Wellness Program for nearly all of Art’s tenure and still come to each visit with a big smile asking for “Doc Dickinson.”

Art’s commitment and passion for the betterment of the quality of living of others are as palpable in his handshake as they are in his words and actions. Although Art retired from his faculty position after 24 years (1967-1991) in the department, he only recently (2009) decided to step down as program director to spend time with his wife Nancy and to enjoy his retirement. From all the folks associated with the Wellness Program—we thank you, Art, for your mentorship, guidance, and friendship.
A mountain climber tries to summit Mt. Everest without oxygen tanks. At the point of severe hypoxia and total exhaustion, he sees a bar-headed goose flying effortlessly over the summit. How is this possible? A wood frog freezes solid in the winter, teetering on the edge of life and death. In the spring, it thaws and comes back to life. How does the frog do it? How does a female fish ovulate hundreds of thousands of eggs every season without its body cavity being overwhelmed by eggs? Why is it that non-human mammals never choke to death by careless swallowing?

There is one secret to how animals achieve these extraordinary feats: adaptation. Through hundreds of millions of years of evolution, animals develop extraordinary physiological and anatomical features to adapt to specific environmental challenges. These adaptations may allow them to extract more oxygen from the environment, or trap eggs within specific parts of their reproductive tract to prevent leakage into the body cavity. Animals adapt to their environment in unusual and creative ways that one could never imagine from the study of humans alone.

Beginning in the Spring 2011 semester, the department will once again offer two courses that introduce to students the physiological and anatomical adaptations that have evolved in animals. These courses are Comparative Physiology (IPHY 3450) and Comparative Anatomy (IPHY 3460). Each course is a one-semester course with a laboratory section. The comparative physiology course may be taken by IPHY majors instead of Physiology II (IPHY 3480) to meet the two-semester physiology requirement for the major. Through these courses, students will be able to compare the adaptations of diverse organisms (including humans) in the animal kingdom. Faculty have no doubt that the students will find these courses spectacular and profound!

People Updates

Jinger Gottschall (BA 1996, MS 1999, PhD 2004) finally left Boulder nearly six years ago after completing all her degrees at CU-Boulder. Her dissertation, under the direction of Professor Rodger Kram, was composed of studies focused on forward propulsion, leg swing, and hill locomotion in humans. Subsequently, Jinger completed a three-year postdoctoral research fellowship with Professor T. Richard Nichols at the Emory University School of Medicine. While in Atlanta, she focused on the role of sensory feedback in the maintenance of appropriate muscular patterns during hill walking. Currently, she is an assistant professor in the Department of Kinesiology at Pennsylvania State University. Her research continues to focus on the neuromechanics of human locomotion while she studies the gait patterns of pregnant women and older adults (http://www.biomechanics.psu.edu/nml). The photo shows her lab group, with Jinger in the back row. Her nonacademic time is spent walking and running as she explores the hills of State College with her two dogs, Penny and Pippi.
With a BA in Kinesiology (1997) in his hands, **Trevor Graham** moved to San Francisco to pursue training and work in the mental health field. After working as a mental health counselor for dually diagnosed adults for four years, Trevor eventually earned a doctorate in clinical psychology from the Wright Institute in Berkeley, CA (2005). He completed postdoctoral training at the San Francisco Psychotherapy Research Group and Training Clinic where he provided psychotherapy for adult individuals and couples. In addition, he participated in research designed to better understand the psychotherapeutic process. Trevor moved back to Boulder in 2008, and is currently lecturing for the Psychology Department at the University of Colorado. In addition, he has an active psychotherapy practice where he provides therapy for adults, adolescent individuals, and couples. Trevor is happily married to Sara and is the proud, and very busy, dad of a 19-month old son.

A career public school teacher, **Sherma Erholm** holds a bachelor's degree in speech and music from the University of Central Missouri and a master's in communication theory and psychology from CU-Boulder. Growing up on a farm in west central Missouri whetted her childhood curiosity about natural science as well as a giving her a desire to learn more about the world outside her limited horizon. A “learning junkie,” she now enjoys membership in two life-long learning institutes, Osher Life Long Learning Institute at the University of Denver, and Colorado Academy of Life-Long Learning—also serving there as a board member. In both institutes she is sometimes a student and sometimes a leader in courses of interest, researching in order to facilitate discussions in widely varying subjects in and out of her field of expertise, e.g., futurism, China, Iran, science, history, religion, the U.N., and persuasion. Other fun for her consists of travel, which emphasizes local culture, singing with the Alpine Chorale, gardening, mountaineering, paleontology, hiking, and skiing. Sherma has volunteered in the department as a research subject for several years, believing that the cooperation of those such as she can contribute to knowledge and understanding in the neurophysiology of movement. But there are personal rewards as well. She has learned a great deal profitting from conversations with the young researchers—all the way from scientific and health information to modern music, art appreciation, French pronunciation, philosophy, psychology, and on and on. The involvement has been, and will continue to be, a pleasure.

After graduating from CU-Boulder in May 2008 with a double major in integrative physiology and molecular, cellular, and developmental biology, **Stacy Romero** moved to Washington, D.C., to attend George Washington University's School of Public Health and Health Services. There she has been pursuing a master’s of public health in global health communications. While in the nation’s capital, Stacy was able to work as an intern at the Pan American Health Organization and at Population Services International. Throughout all of this, she still had a strong passion to volunteer abroad and apply her public health skills for the greater good. The School of Public Health offered a master’s international with the Peace Corps where students can fulfill graduate requirements through their service. This provided Stacy with the perfect opportunity to gain hands-on experience as a public health professional in the field while satisfying her passion for volunteering. From March 2010 to May 2012, she will be serving as a community health educator in Albania as a Peace Corps volunteer. You can follow Stacy’s adventures in Albania on her blog (http://stacyromero.blogspot.com).
Stephanie (BA 2004) and Mike Pascoe (MS 2006) currently reside in Boulder and were married in July 2009. After graduating from CU-Boulder, Stephanie earned a doctorate in physical therapy from Regis University in Denver and subsequently completed a residency in orthopedic physical therapy at the University of Wisconsin, Madison, in 2009. She is currently practicing at Coal Creek Physical Therapy in Louisville. She has continued her training to become a specialist of manual therapy by beginning a fellowship program through Evidence in Motion (January 2010). Stephanie continues to advocate for physical therapy by volunteering her time with the Professionals Section of the Colorado chapter of the American Physical Therapy Association (APTA). She also enjoys keeping up with the latest evidence-based practice by attending the annual Combined Sections meeting organized by the APTA.

Mike has extended his research training by enrolling as a PhD student in the Neurophysiology of Movement Laboratory in IPHY. His current research investigates the consequences of aging on the activation of skeletal muscle during voluntary contractions. Although these studies can be difficult, Mike finds great reward in the patience required to measure single motor unit activity from human subjects during voluntary muscle contractions. He also enjoys sharing his knowledge of various aspects of research through tutorials that he makes available on his website (http://www.mikepascoe.com). Mike plans on expanding his research skills during a postdoctoral fellowship in Australia after graduating in 2010.

After graduating from CU-Boulder with a degree in integrative physiology, Julie Fast (BA 2008) found herself asking, now what? She credits the wonderful cadre of professors and courses in IPHY with encouraging her to explore an array of options. She decided that her next adventure would be to trade the comforts of modern living for a chance to milk cows and make a difference in the world. After a successful application to join the Peace Corps, four months after graduation she was on a plane bound for Peru armed with one bag, some doubt, and a lot of enthusiasm. After three months of training in Lima, she packed her bag again and headed to the rural mountains of the northern Andes in Peru. She has been living with a host family, which includes a mom, dad, two sisters, two sets of grandparents, and countless aunts, uncles and cousins. She has found the cultural immersion both rewarding and challenging and has greatly enjoyed the family gatherings when they are treated to cuy (fried guinea pig) and other traditional dishes. As a community health volunteer, she is able to work on different projects which makes day-to-day life ever changing and always interesting. Her planned projects for the coming year include a town-wide composting and recycling program and the continuation of the “Escuelas Saludables” (Healthy Schools) program. The photo shows Julie with a youth group in her adopted community. Bravo Julie!
After graduating from CU-Boulder in May of 2002 with a BA in kinesiology and applied physiology, **Dallas M. Cowan** enrolled in graduate school and completed first an MS in industrial hygiene at San Diego State University and then a PhD in toxicology from Purdue University in West Lafayette, Indiana. His master’s project examined the effect of anthropometric facial characteristics on the efficacy of disposable dust masks. His doctoral training included courses in biomarkers, exposure assessment, industrial hygiene, metals toxicology, neurotoxicology, and physiology. His dissertation focused on biomarkers of manganese exposure in humans and animals. After graduation, he returned to Boulder as a health scientist at ChemRisk, LLC. This company, which is based in San Francisco, provides consulting services in human health risk assessment, industrial hygiene, and toxicology. As a health scientist, Dallas provides technical and litigation support on various projects that involve possible health risks to workers. Dallas lives in Denver with his girlfriend, Jessen, and their yellow Labrador retriever, Dean. He enjoys playing cards, racquetball, watching baseball and traveling.

The first job that **Aaron Hersh** (BA 2007) had after graduating was as the bike mechanic at Colorado Multisport, a Boulder-based triathlon store. After seven months in this position, he was promoted to manager of the service department. While at Colorado Multisport, he wrote an online weekly product review column that was posted on InsideTriathlon.com, which is associated with Triathlon Magazine. After 18 months at Colorado Multisport, the business began to struggle and he started taking courses in mechanical engineering at CU. At the same time, he began writing Gear and Tech columns for Triathlete Magazine and was subsequently hired by the magazine as senior editor which required a move to San Diego. He also contributes to Triathlon Magazine, Competitor Magazine, and triathlon.competitor.com, which are part of the same business that owns Triathlete Magazine. In addition to his own writing, he also edits other gear and tech columns written by other employees and contractors. The articles focus on such topics as product analysis and review, coverage of cycling and triathlon industry events, evaluation of various products, and descriptions of the gear used by professional athletes. Outside the office, he races in triathlons and loves downhill skiing, hiking and camping. Now that he lives by the ocean, he is also learning to scuba dive.

**Holly Hanzel** (BA 2005) is a certified personal trainer and a certified Pilates instructor. She is an avid exercise enthusiast who believes that movement has the capacity to improve health and quality of life. She currently works at HealthLinks Clinic, a cancer rehabilitation center based in Boulder. She specializes in individualized strength conditioning and functional training with an emphasis on balance to increase agility and strength in activities of daily living. Her philosophy is that exercise can modulate the progression of cancer, and she enjoys the rewards of helping people use exercise to reduce the fatigue and pain that typically accompanies chemotherapy. Holly is an avid cyclist and skier; she has managed ~50 ski days this season. Her long-term partner, Cory, shares these passions with her. When not pursuing these sports, her interests include reading National Geographic, traveling and loving her kitties.
David Brown (PhD 2005) completed his doctoral work at CU-Boulder examining cardiac ion channels and ischemia/reperfusion injury under the supervision of Dr. Russ Moore. After graduation, he moved to Baltimore for a postdoctoral fellowship at the Johns Hopkins University School of Medicine studying mitochondrial ion channels in the heart with Dr. Brian O’Rourke. In 2008 he obtained employment as an assistant professor in the Physiology Department at the Brody School of Medicine, East Carolina University with an adjunct position in the Department of Exercise and Sport Science. He is currently researching the role of mitochondrial ion channels in the etiology of heart attacks, seeking to find new treatments that decrease the extent of injury in ischemic hearts. Dave is also teaching physiology to the medical/graduate students and trying to solicit research funds from anyone who will give him the time of day.

In April of 2009, Dave married Trisha which has helped him to become a much more responsible member of our community. They spend their free time with the nucleus of the family, their dog Leroy, and enjoy frequent trips to the beaches of North Carolina. Dave still enjoys playing music, mountain biking, Frisbee golf, and drinking beer. He also likes reading the IPHY Newsletter to keep informed about developments in the department and the achievements of our alumni.

Teresa Foley (Concurrent BA/MS 2004, PhD 2009) is currently a science teaching fellow in the Department of Integrative Physiology. After completing her graduate training under Dr. Monika Fleshner, Teresa began her postdoctoral work for CU-Boulder’s Science Education Initiative, a five-year, $5M investment directed by Nobel Laureate Carl Wieman to catalyze and support sustainable improvements in undergraduate science education. As a science teaching fellow, Teresa helps IPHY faculty develop teaching methods that promote a deeper understanding of physiological concepts, long-term retention of material, and advanced critical thinking skills in science. Using a three-step scientific approach to course reform, Teresa helps determine what students should learn, what students are actually learning, and adopts and disseminates teaching methods that improve student learning. Teresa is currently working with several IPHY courses including Human Physiology I and II, Endocrinology, Cell Physiology, and Neurophysiology. Down the road, Teresa would like to use her skills as a science teaching fellow to become a full-time instructor in a physiology department. When she’s not on campus, you will find Teresa training for triathlons or searching for the best chai tea in Boulder.
Benjamin Greenwood, PhD was appointed as an assistant research professor in the Department of Integrative Physiology. His current research, which is funded by the National Institute of Mental Health, examines the neurobiological mechanisms by which physical activity status impacts cognitive and behavioral responses to stress, focusing primarily on learning and memory, depression, and anxiety-related behaviors in rodents. Dr. Greenwood completed undergraduate and graduate degrees at the University of Colorado at Boulder with a double major (1999) in psychology and kinesiology, an MS (2001) in kinesiology and applied physiology, and a PhD (2005) in integrative physiology and neuroscience. His postdoctoral training at CU-Boulder included a project that was funded by the American Foundation for Suicide Prevention. His long-term goals are to identify the neurobiological mechanisms by which physical activity increases resistance against stress-related psychiatric disorders.

Professor Thomas Johnson, received one of the 2010 Boulder Faculty Awards for Excellence in Research, Scholarly, and Creative Work. The award is given annually to faculty whose scholarship is exemplary. Dr. Johnson has conducted pioneering, integrative, and multidisciplinary work in biogerontology. For example, he was the first person to establish that a single gene, which is called age-1, can influence the lifespan. More recent studies, which have been equally innovative, have established that random environmental influences can also modulate lifespan. Together, this work demonstrates that longevity depends on both genetic and environmental factors. He has also performed novel and influential work on the pathophysiology of alcohol abuse, with implications for such clinical conditions as fetal alcohol syndrome. This body of work was rated as among the most outstanding of that performed on the Boulder campus.

Professor Monika Fleshner was elected to a two-year term as president of the International Society for Exercise Immunology (http://www.isei.dk). The Society provides a forum for the exchange of ideas among researchers interested in exercise and immunology and its members include biochemists, exercise physiologists, hematologists, immunologists, neuroscientists, physicians and traumatologists. The Society organizes a biennial convention and the next meeting will occur on July 11-13, 2011 in Oxford, England.
After about a decade at CU-Boulder for Anthony Donato (BA 1998, MS 2001, postdoctoral fellow since 2005) and four years for Lisa Lesniewski (postdoctoral fellow since 2005), they are leaving to assume positions as assistant professors in the Division of Geriatrics/VA Salt Lake City Geriatric Research, Education and Clinical Center at the University of Utah School of Medicine. As postdoctoral fellows with Prof. Doug Seals, both Lisa and Tony gained an incredible array of skills and contributed significantly to the development of cellular and molecular approaches to study vascular dysfunction in aging animals. Due to the mentorship of Prof. Seals, they will both take extramural funding with them to Utah, and they have other applications under review at NIH. Lisa plans to develop a research program to examine the susceptibility for high-fat diets to exacerbate both vascular and metabolic dysfunction in older animals and humans. Tony intends to focus on characterizing the cellular and molecular mechanisms underlying the impairment of vascular function in older humans. They expect to miss the camaraderie of the Seals’ laboratory, and especially the Friday afternoon journal club!

After eight years at CU-Boulder, Adam Hayes (MS 2004) is leaving the department. He entered our graduate program in August 2002 and spent two years as a master’s student studying in the Applied Exercise Science laboratory that is directed by Prof. William Byrnes. Subsequently, he was hired by the department as a full-time instructor to teach and coordinate the laboratory experiences associated with human anatomy and physiology. In 2007 he assumed the responsibility of directing the CU-Boulder Wellness Program, which is described earlier in the newsletter. Among his off-campus activities, Adam coaches youth soccer and recently accepted a position as a full-time coach with the Boulder County Force Soccer Club. He will begin this new position in July 2010, and we wish him every success with this new endeavor.
May/August 2010 Graduating Students

PhD, MS, BA/MS

Lida A. Benison, MS
Mark W. Blilime, MS
Zakeih Chaker, BA/MS
Brian P. Duffell, BA/MS
Andrew G. Edwards, PhD

Jeffrey Gould, MS
Brian D. Hickey, MS
Erich J. Kushner, PhD
Katherine A. Magerko, MS

Rachel R. Markwald, PhD
Kurt D. Marshall, MS
Tristan McClure-Begley, PhD
Owen J. MacEneaney, PhD

Bachelor of Arts

Kaitlyn Achtermann
Lauren Agett
Emily Armantrout
Michael Arnsberg
Alex Athanasopoulos
Delia Bakeman
Amber Banducci
Molly Barfield
Molly Barlow
Matthew Batliner
Michelle Benson
Andrew Benson
Laura Berglund
Lauren Berry
Grace Bettge
Nathanael Billington
Kristin Bishop
Davlyn Black
Brittney Blackledge
Lindsey Book
Heather Bosman
Connor Botkin
Michael Britt
Madina Buhendwa
Brian Burghart
Amy Cabrera
Nicole Camp
William Capps
Michelle Cashdollar
Russell Chagolla
Zakeih Chaker
Kayla Cheek
Frances Cheng
Kathryn Childs
Caleb Choi
Justin Chosich
Nadia Claassen
Christina Clarissa
Matthew Cole
Rachel Collins
David Collins
Robert Coslick
Andrew Cote
Meghan Cromie
Jacqueline Crowley
Amanda Cusworth
Cheryl D Epagnier
Allie Dashiell
Jim Do
Amy Docktor
Jason Doll
Erik Dow
Trevor Doyle
Kayla Emmons
Timothy Endyk
Glenn Engelmann
Christopher Etges
Ashlee Evans
Julianne Fair
Christopher Feese
Lindsay Fetherman
Ariel Fletcher
Sean Forrester
Elizabeth Foster
Nichelle Francavilla
Eric Fransen
Stephanie Frazer
Brady Frazier
Elizabeth Funk
Erica Garcia
Candace Geоловos
Rachael Ghent
Mohammad Ghasiy
Patrick Gonzales
Matthew Goodstein
Jamie Gordon
Matthew Gorski
Tracy Gray
Anna Grimm
Dicle Guneydin
Anthony Gurule
Brandon Guthrie
Jennifer Hagedorn
Andrew Hagemann
Francis Hall
Jaimeni Halliburton
Jeremy Hauck
Erik Hauswald
Crystal Hedger
Megan Henning
Michael Hoffman
Graham Hogrefe
Jennifer Hooper
Theresa Horsch
Meaghan Howe
Joshua Huston
Hannah Jacobs
Caroline John
In Jung
Leslie Kadeg
Doug Katein-Taylor
Cody Katen
Kimberly Keffler
Nicole Keller
Brian Kim
Laura Kintzer
Christopher Kliekamp
Emily Kliner
Brittany Kling
Joshua Klingenberg
Kristie Kokeny
Adam Kolnik
Kyle Kubes
Ryan Lackman
Aaron Lam
Hara Lam
Crystal Lapp
Thuyn Le
Tony Le
Zachary Leonard
Rachel Lieberman
Jessica Lilly
Kara Linder
Logan Loeb
Maxine Lorenzenza
Alisha Lowry
David Lucero
Zachary Luere
William Luers
Jeremy Hauck
Erik Hauswald
Crystal Hedger
Megan Henning
Michael Hoffman
Graham Hogrefe
Jennifer Hooper
Theresa Horsch
Meaghan Howe
Joshua Huston
Hannah Jacobs
Caroline John
In Jung
Leslie Kadeg
Doug Katein-Taylor
Cody Katen
Kimberly Keffler
Nicole Keller
Brian Kim
Laura Kintzer
Christopher Kliekamp
Emily Kliner
Brittany Kling
Joshua Klingenberg
Kristie Kokeny
Adam Kolnik
Kyle Kubes
Ryan Lackman
Aaron Lam
Hara Lam
Crystal Lapp
Thuyn Le
Tony Le
Zachary Leonard
Rachel Lieberman
Jessica Lilly
Kara Linder
Logan Loeb
Maxine Lorenzenza
Alisha Lowry
David Lucero
Zachary Luere
William Luers
Samantha Lynne
Gregory Manista
Jake Mantanona
Molly Manweiler
Rosio Martinez
Stephen Matthews
Sarah Mc Fadden
Brittney Mc Neal
Margaret McInnes
Ashley Meredith
Alex Messersmith
Keith Meyers
Nicholas Miles
Kirsten Miller
Stacey Miller
Molly Monnet
Lauren Montgomery
Christian Montoya
Chelsea Moore
Hannah Moran
Lucia Muniz
Nicholas Nagaki
Jennifer Nash
Natasha Neil
Amanda Nemeroff
Christine Nguyen
Trieu Nguyen
Thanh Thao Nguyen
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Kathryn Ollom
Jacob Olson
Adrian Olson
Matthew Orobona
Grace Oviatt
Jennifer Ovington
Christina Owen
Laura Paulstis
Miranda Payan
Garrett Peltonen
Jackie Pevey
Katie Plunkett
Satej Pradhan
D. Pylewski
Daniel Raab
Cortney Ragatz
Adele Rancis
Carrie Reed
Emily Reeves
April Rhoades
Jenna Richlie
Lucas Robertson
Michelle Roll
Stacey Ross
Carrie Rummell
Elizabeth Sadighian
Vanessa Sanchez
Carina Santi
Derek Sarchet
Christina Schaffer
Cole Schindler
Kathryn Schneebeck
Cassandra Scott
Claudia Shadler
Alice Shaller
Pranab Sharma
Nora Shaughnessy
Philip Siebler
Melissa Smith
Blair Snyder
Irmak Sagic
Benjamin Spiegel
Deanna Spracher
Adrienne Stanley
Aaron Stecker
Bryan Stengel
Patrick Stoltman
Reece Swartz
Brooke Tata
Kate Thompson
Daniel Thousand
Shar Thummalapally
Annie Tieu
Christopher Troeger
Timothy Ung
Mckenzie Valentine
Alicia Vallejos
Jennifer Vien
Cole Wadhams
Paul Walden
Meredith Walker
Daniel Wallis
Mandy Weiss
Claire Werthan
Elliott Whiteway
Ellen Wilcoxen
Kelsey Wolfe
Rebecca Wood
Joshua Wong
Jake Woodard
Danielle Yager
Diana Yu
We Want To Hear From You

We ask that you forward to us any news to be included in upcoming newsletters. Also, contact us with your new email address. Please forward this information to marsha.cook@colorado.edu. Thanks!!!

Name____________________________________________________________________________________________

Email Address______________________________________________________________________________________

Mailing Address______________________________________________________________________________________

CU Degree (s) and date (s)____________________________________________________________________________

Major Profession____________________________________________________________________________________

Recent Degrees_____________________________________________________________________________________

Present position, employer, location____________________________________________________________________

Awards, honors, fellowships, publications _______________________________________________________________

Many Thanks

The faculty and students greatly appreciate recent donations to the CU Foundation on behalf of the Department of Integrative Physiology by:

Alaa Ahmed  Thomas Johnson  David Norris
William Byrnes  Rodger Kram  Douglas Seals
Marissa Ehringer  Chris Lowry  David Sherwood
Roger Enoka  Dale Mood  Pei-San Tsai
Robert Hermanson  Mary Murphy  Kenneth Wright Jr.
Steven Hobbs  Owen Murphy

Mrs. Mary Murphy presents the Fred Murphy Award to Bela Mohapatra.

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