Dr. Ralph L. Brinster (Rutgers School of Agriculture, Class of 1953) was named one of seven recipients of the National Medal of Science by President Obama.

According to a September 27th White House press release, Dr. Brinster was honored “for his fundamental contributions to the development and use of transgenic mice. His research has provided experimental foundations and inspiration for progress in germline genetic modification in a range of species, which has generated a revolution in biology, medicine, and agriculture.”

The National Medal of Science is the highest honor bestowed by the U.S. government on scientists, and Dr. Brinster is the first veterinarian to receive this award. He is the Richard King Mellon Professor of Reproductive Physiology at the University of Pennsylvania School of Veterinary Medicine.

While at Rutgers, Ralph Brinster was an Alpha Zeta member, President of the Poultry Science Club, 4-H Club member, and Cadet Captain in the Air Force ROTC. We salute this Rutgers alumnus who grew up on a New Jersey farm and started his prestigious career on Cook Campus.
Undergraduate News
by Daniela Sharma, Ph.D., Undergraduate Program Director

The George H. Cook Scholars presented their thesis research at the Cook Campus Center on April 19. Our department was well represented by the following 10 Animal Science majors, who presented their research results (advisors are in parentheses): Lauren Barron and Kristene Welch (Carol Bagnell; pictured on page 1, center photo); Jade Guterl, Mary Koepfinger, and Loren Riccioni (Larry Katz); Jennifer Hanke (Carey Williams); Christopher Krumm (Wendie Cohick, who also advised Jillian Boden, a Genetics major); Stephanie O’Connell (Dipak Sarkar); Jacqueline Tong (Mike Westendorf); and Laura Chen (Peter Morin). By the way, Laura (who double-majored in Animal Sciences as well as Ecology, Evolution, and Natural Resources) was one of three students in the School of Environmental and Biological Sciences (SEBS) Class of 2011 who tied for first in the class!

Three May 2011 graduates received Department of Animal Sciences Endowed Scholarship Awards in recognition of their excellence in academics, research, and/or service: Lauren Barron, Amanda Prisk, and Kristene Welch. Jenny Katz was honored with the Class of 1925 Scholarship, and Michele Zaccaro won the W. R. Hutchinson Memorial Scholarship. Felicia Kleiman was named the “Unsung Hero of 2011” by Student Life. Following the May 16th SEBS Convocation, the Society of Animal Science and our department hosted a reception in Bartlett Hall. (Pictured on page 3, bottom, are Rebekah Verdeick with her parents and Rue at the party.)

We are excited about our new courses offered during the 2011-2012 academic year! Dr. Carey Williams introduced Comparative Mammalian Anatomy this Fall to rave reviews. Animals and the Law will be taught online in Spring 2012 by Sandra Jones Esq. and Dr. Julie Fagan; and Dr. JP Advis is developing a course in Pathophysiology for this Spring as well. Due to unprecedented enrollments, we will offer two courses in the Spring that are traditionally taught only in the Fall: Animal Science and Animal Reproduction (Spring instructors will be Dr. Perri Stark and Dr. Advis, respectively). Additionally, in Spring 2012 Dr. Nicholas Bello will be teaching Integrative Physiology and Dr. Andre Pietrzykowski will teach Endocrinology.

Graduate Program Highlights
by Wendie Cohick, Ph.D., Graduate Program Director

Our interdisciplinary Graduate Program in Endocrinology and Animal Biosciences continues to grow with the addition of new faculty members with interests in endocrinology and integrated physiology. Last year we welcomed Dr. Sara Campbell from the Department of Exercise Science and Sports Studies. Her research interests include diet-induced obesity and inflammation. Our weekly graduate seminars continue to enrich the professional development of our students and faculty. Dr. Nick Bello has served as seminar series coordinator since September 2010, and we are grateful for his dedication.

Due to a large cohort of Ph.D. students admitted in Fall 2005, our program had a record number of students graduate last year. In addition to Joe Chen and Amy Frankshun (Bagnell lab), who were featured in our 2010 newsletter, four other students completed Ph.D. degrees and two received M.S. degrees.

Christine Duncan (John-Alder lab) successfully defended her Ph.D. dissertation titled “Nutritional and hormonal modulation of IGF-1 with respect to growth in sexually dimorphic lizards.” Dr. Duncan is currently a postdoctoral research associate at California State University–Fresno.

For her Ph.D. dissertation research, Nettie Liburt (McKeever lab) examined the effects of age and training on the cytokine, myokine, and endocrine regulation of glucose metabolism in Standardbred mares. Dr. Liburt is employed as an Equine Specialist/Field Nutritionist for Blue Seal Feeds, Inc.

Kristy Longpre (Katz lab) focused her research on female mate choice in the domesticated goat. Dr. Longpre is now a postdoctoral fellow in the Department of Integrative Biology and Physiology at the University of California–Los Angeles.

Tiffany Polanco (Cohick lab) studied the effect of fetal alcohol on mammary carcinogenesis, especially the role of the estrogen/IGF axis. Dr. Polanco is a postdoctoral fellow at the Cancer Institute of the University of Pittsburgh Medical Center.

Our former part-time M.S. student, James Baldassari (McKeever lab), works at Merck Research Labs in Rahway as Staff Biologist, In Vivo Pharmacology. His thesis research focused on the effects of quercetin on exercise potential and exercise-induced cytokines in the horse. Ju-Shun Cheng (Cohick lab), who received his M.S. degree in Fall 2010, is now employed as a Research Scientist with Ricerca Biosciences LLC in Bothell, Washington. His thesis investigated the molecular mechanisms of cytotoxicity induced by ribosome-inactivating proteins in mammalian cells.

The April 2011 Nutrition, Endocrinology and Animal Biosciences (NEAB) Graduate Student Conference featured keynote talks by Dr. Paul Bartell from Penn State and Dr. Timothy Moran from The Johns Hopkins University School of Medicine. Oral presentations were given by three graduate students, including Kathleen Ferio (Bagnell lab). The next annual NEAB conference is planned for April 4, 2012.

An Ag Field Day visitor meets a piglet at the Veterinary Science Club’s petting zoo.
Equine Science Center News

Hot off the press! The US Harness Writers’ Association just announced that Dr. Karyn Malinowski, Director of the Equine Science Center, will receive the LeeAnne Pooler Unsung Hero Award at a February 2012 awards dinner in Orlando, Florida. She was selected for this prestigious honor in recognition of her successful efforts in preserving horse racing in New Jersey. Karyn is pictured at right as she and Sandy Denarski presented the Equine Science Center’s annual “Spirit of the Horse Award” to Liz Durkin, a leading New Jersey attorney, at the December 8th Equine Science Update (see esc.rutgers.edu).

Pioneers in Endocrinology Workshop

“Developmental Programming of Adult Disease” was the theme of the 4th Annual Pioneers in Endocrinology Workshop, held on September 28 on the Busch Campus. Dr. David Barker, professor of Clinical Epidemiology at the University of Southampton, UK, gave a talk entitled “Chronic disease originates in the womb.” Dr. Peter Nathanielsz, professor and director of the Center for Pregnancy and Newborn Research, University of Texas Health Science Center, lectured on “Developmental programming resulting from poor and excess fetal nutrition.”

The afternoon poster session featured state-of-the-art endocrine research at Rutgers and UMDNJ-RWJMS. Pictured at the poster session (center photo) are two graduate faculty members, Dr. Rocco Carsia (UMDNJ-SOM) and Dr. Dipak Sarkar, Endocrine Program Director. This workshop was sponsored by our department and the Endocrine Program, Rutgers Cooperative Extension, New Jersey Obesity Group, and UMDNJ-RWJMS Division of Endocrinology, Metabolism, and Nutrition.

Animal Care Update

by Clint Burgher, Farm Manager

In 2011, three long-time staff retired: John Bugowski (38 yrs), Don Kniffen Jr. (37 yrs), and Karin Mezey (32 yrs). Congratulations on over a century of service to the University, faculty, and students! A retirement party for them was held in Bartlett Hall (pictured on page 4, left and right photos).

We have started to direct market our farm products. We currently have pork, firewood, and composted manure available, and we will be adding beef, goat, chicken, and lamb in the near future. Please visit our website (njaes.rutgers.edu/animalcare) for more information about the Animal Care Program.

Photo credits: Tiffany Cody, Equine Science Center (page 3, top photo); John Jarvis (page 4, center photo); K. Manger, newsletter editor (all other photos)

Please Make a Donation!

☐ Yes, I wish to support the continued excellence of the Department of Animal Sciences and Graduate Program in Endocrinology and Animal Biosciences with a gift of:

☐ $10,000 ☐ $5,000 ☐ $1,000 ☐ $500 ☐ $100 ☐ Other _______________

Please use my support for:

☐ Department of Animal Sciences Academic Excellence Fund  ☐ Department of Animal Sciences Undergraduate and Graduate Student Award

Name: ___________________________________ Phone: ____________________________

Email: ________________________________________________

Address: ____________________________________________

Please send your check payable to The Rutgers University Foundation to:

Dr. Carol Bagnell, Department of Animal Sciences
School of Environmental and Biological Sciences
84 Lipman Drive-Bartlett Hall 106
Rutgers, the State University of New Jersey
New Brunswick, NJ 08901-8525
Animal Science Update
The Department of Animal Sciences

Newsletter  Winter 2011/2012

Proud of Its 2011 Awards, Rutgers Team Is Gearing Up for NESA 2012

Each February, Animal Science undergraduates from universities from Maine to Maryland gather near one of the campuses to judge livestock, participate in quiz bowls, and present original research and review papers in a friendly but fierce competition sponsored by the Northeast Student Affiliate (NESA) of the American Society of Animal Science and American Dairy Science Association.

About 240 students participated in NESA 2011. Each of the ten schools was allowed to nominate one student for the “Outstanding Senior Award” and our Amanda Prisk won! Kristene Welch earned 1st place in Original Research Presentations with a discussion of her G.H. Cook honors thesis research! Emily Huber placed 6th in Paper Presentations and Kelly Steimle placed 9th in that category. Competing against 59 other teams in Livestock Judging, one Rutgers team, Sara Omar, Michele Zaccaro, Dale Levitt, and Mia Lombardo, won 9th place. Thanks to the hard work of all our students – as well as coaches Dr. Barry Jesse, Dr. Carey Williams, and Danielle Smarsh – the Rutgers NESA team ranked 5th overall.

Animal Science majors and other SEBS students are currently meeting weekly to prepare for the 2012 NESA competition, which will be held at the University of Maine. Hopefully our Rutgers team can surpass last year’s outstanding results!

In Memoriam

We offer sincere condolences to the families and colleagues of those individuals who passed away during 2011, including Professor Emeritus John Bezpa (87), a Rutgers alumnus and retired Poultry Science Extension Specialist; Dr. Stephen P. Dey II (74), an equine veterinarian and president of the Rutgers NJAES Board of Managers; and Dr. Dmitry Govorko (47), Research Associate in our department.

John Bezpa won the Pfizer Extension Teaching Award in 1974. A Cornell colleague, Dr. O. F. Johndrew, Jr., wrote the following in a letter supporting John Bezpa’s nomination for that award: “Besides the strong, excellent program he has developed and activated in his own state he has been a real initiator and innovator in regional and national extension programs.” Reflecting on John Bezpa’s leadership during the first outbreak of Avian influenza in the mid-1980s, Karyn Malinowski remembers how he manned the telephone in collaboration with University of Delaware colleagues to advise producers.

In an email to the Cook Community, Executive Dean Bob Goodman wrote that “Doc Dey” was “a loyal advocate for Rutgers and agriculture in the state of New Jersey” and “brought his trademark charm and collaborative leadership to an energized board.” Dr. Dey was also a strong supporter of the Equine Science Center in his role as vice-chair of the Rutgers University Board for Equine Advancement. His pet project was the Ryders Lane Environmental Best Management Practices Demonstration Horse Farm.

Dmitry Govorko has been an integral part of the Sarkar lab since 2008. Ryan Logan, now a Postdoctoral Fellow at The Jackson Laboratory in Bar Harbor, writes that he learned from Dmitry to “always put things in perspective and learn to appreciate life by cherishing family.” As reported in last year’s newsletter, Dr. Govorko received an award from the International Society for Biomedical Research on Alcoholism for best research work in 2010 by a postdoctoral scientist.

Acknowledgments: Information about Dr. Ralph Brinster and John Bezpa was obtained courtesy of Special Collections and University Archives, Rutgers University Libraries. Special thanks to Laura Gladney for her assistance in producing this issue.