Dear VMD-PhD Alumni,

Fall greetings from the VMD-PhD Program! Much has happened since last spring. We’ve submitted three large NIH training grants in the past year: the MSTP grant, our NIH T35 grant that supports the summer research program, and the NIH T32 grant that supports VMD-PhD training in infectious disease-related research. Scores are back on the MSTP and T35 grants, receiving spectacular scores of 12 and 17, respectively. We’ve gone through another admissions season and two outstanding new students, Sondra Calhoun and Robyn Allen, joined the program in the Fall. Information about Robyn and Sondra are included in this newsletter. In August we hosted an International Symposium to honor Dr. Ralph Brinster to celebrate his 50 years of groundbreaking research at Penn-Vet, and his recent award of the National Medal of Science. This symposium had an amazing line-up of speakers.

We have also included some alumni and current student updates in this letter. We are proud of our alumni and current students. Finally, the annual Dinner Party at my home for current students and local alumni will be on Saturday, December 8 at 5PM. We wish you the best as 2012 comes to a close.

Michael Atchison, Ph.D.
Director, VMD-PhD Program

Alumni are Online!
Check out:
www.vet.upenn.edu/Research/ResearchTrainingOpportunities/VMDPhDProgram/OurAlumni/
Find your profile, and send us feedback or updates!
Brinster Symposium
Symposium to Honor Dr. Ralph Brinster
August 24-25, 2012

From August 24 through 25, 2012 Penn Vet hosted a fantastic international symposium to honor Dr. Ralph Brinster’s 50 year association with the University of Pennsylvania, and his winning of the National Medal of Science. The line-up of speakers was truly exceptional with many commenting that such an impressive list of scientists had never gathered at Penn for one symposium. Ralph is the first veterinarian to win the National Medal of Science and numerous prominent scientists from around the world desired to be part of this celebration. The pages that follow contain photographs of the symposium and the two-day schedule of speakers and session chairs. VMD-PhD alumnus Jamie Thomson participated in the symposium and devoted a session at the end of the symposium with current VMD-PhD students to discuss career issues.

Dr. Brinster was also the first Director of the VMD-PhD Program, initiating the program in 1969 and serving as Director for 14 years. Ralph’s contributions to the field of reproductive biology, transgenesis and stem cell biology are monumental and unique. Over the past 50 years he has consistently led the field making many pivotal contributions. He has won many National and International awards including the March of Dimes Prize in Developmental Biology, The Bower Award and Prize of Achievement, Pioneer in Reproduction Research Award from NICHD, Ernst W. Bertner Award from the University of Texas, the Wolfe Prize in Medicine, the Gairdner Foundation International Award, and recently, the National Medal of Science.
The registration desk (Samantha, Mia, Pat, Pat)

Hill Pavilion

Ralph takes a rare turn at the podium.


Dr. Jamie Thomson
Dr. Narayan Avadhani, Ralph

Dr. Atchison, Ralph, Nobel Laureate Dr. John Gurdon

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Schedule

FRIDAY, AUGUST 24TH

7:30AM – 8:30AM  BREAKFAST  HILL LOBBY

8:30AM – 8:50AM  OPENING COMMENTS

Vincent E. Price, Ph.D., Provost, Office of the Provost; Professor and Steven H. Chaffee Term Chair in Communication and Political Science

Joan Hendrick, V.M.D., Ph.D., The Gilbert S. Kahn Dean of Veterinary Medicine

Narayan Avadhani, Ph.D., Harriet Ellison Woodward Professor of Biochemistry & Chairman, Department of Animal Biology

Michael Atchison, Ph.D., Professor of Biochemistry, V.M.D./Ph.D. Program Director

8:50AM – 9:40AM  Plenary Speaker

Richard Palmiter, Ph.D., Plenary Speaker
Investigator Howard Hughes Medical Institute; Professor of Biochemistry; University of Washington School of Medicine

“An incredible journey from metallothionein to neurobiology of feeding behavior”

9:40AM – 10:10AM  Richard Behringer, Ph.D., Professor of Genetics,
The University of Texas, M.D. Anderson Cancer Center

“Reproductive organ formation, homeostasis, and regeneration”

10:10AM – 10:30AM  John Gearhart, Ph.D., James W. Effron University Professor; Director, Institute for Regenerative Medicine; Perelman School of Medicine and School of Veterinary Medicine; University of Pennsylvania

“Remembrance, Gratitude and Cell Conversations”

10:30AM – 10:50AM  COFFEE BREAK

10:50AM – 11:30AM  Plenary Speaker

Rudolf Jaenisch, M.D., Plenary Speaker
Professor of Biology, Member, Whitehead Institute for Biomedical Research, and Massachusetts Institute of Technology

“Stem cells, pluripotency and nuclear reprogramming”

11:30AM – 12:00PM  Hans Schöler, Ph.D., Professor and Director;
Department Cell and Developmental Biology;
Max Planck Institute for Molecular Biomedicine, Münster, Germany

“Induction of stem cell multi- and pluripotency”

MODERATOR
John Gearhart, Ph.D., James W. Effron University Professor; Director, Institute for Regenerative Medicine

MODERATOR
Marisa Bartolomei, Ph.D., Professor of Cell and Developmental Biology, and HHMI Investigator
Schedule
FRIDAY, AUGUST 24\textsuperscript{TH} (continued)

12:00 PM – 1:00 PM  
LUNCH

1:00 PM – 1:45 PM  
John Gurdon, Kt, DPhil, DSc, FRS, Plenary Speaker, Emeritus Professor; University of Cambridge  
“Nuclear transfer to eggs and oocytes: the stabilization and reversal of cell differentiation”

1:45 PM – 2:15 PM  
Allan Bradley, Ph.D., FRS, Director Emeritus and Senior Group Leader; Wellcome Trust Sanger Institute  
“Genetic screens in embryonic stem cells”

2:15 PM – 2:45 PM  
Robert Hammer, Ph.D., Graydon Heartsill Professorship in Medical Science; Professor in Biochemistry; University of Texas Southwestern Medical Center  
“Ribosomopathies, altered tissue homeostasis and cancer—Insights from mice”

2:30 PM – 2:50 PM  
COFFEE BREAK

2:50 PM – 3:30 PM  
Katherine A. High, M.D., William H. Bennett Professor of Pediatrics; Investigator, Howard Hughes Medical Institute; and Director of the Center for Cellular and Molecular Therapeutics, Children’s Hospital of Philadelphia  
“Genome editing as an approach to treating genetic disease”

3:30 PM – 4:00 PM  
Kenneth Zaret, M.D., Ph.D., Joseph Leidy Professor of Cell and Developmental Biology, Perelman School of Medicine, University of Pennsylvania  
“Programming and reprogramming mammalian cell fates”

4:00 PM – 5:00 PM  
KEYNOTE ADDRESS  
Michael S. Brown, M.D., W.A. (Monty) Moncief Distinguished Chair in Cholesterol and Arteriosclerosis Research; Regental Professor, Paul J. Thomas Chair in Medicine; University of Texas Southwestern Medical School  
“Genetically Engineered Mouse Strains (GEMS): Models for Human Disease”

5:00 PM  
Steven Fluharty, Ph.D., Senior Vice Provost for Research; Professor of Pharmacology, Psychology, and Neuroscience; School of Veterinary Medicine: Presentation to Dr. Ralph Brinster

5:30 PM – 7:30 PM  
RECEPTION  
HILL LOBBY

MODERATOR  
Phil Scott, Ph.D., Associate Dean for Research; Professor of Microbiology and Immunology, Department of Pathobiology

MODERATOR  
Christopher Hunter, Ph.D., Chairman and Professor, Department of Pathobiology

INTRODUCTION  
Michael Atchison, Ph.D.
Schedule

SATURDAY, AUGUST 25TH

8:00AM – 9:00AM  BREAKFAST  HILL LOBBY

9:00AM – 9:50AM  James A Thomson, V.M.D., Ph.D., Plenary
                  Speaker, John D. MacArthur Professorship, Jim
                  Kress Endowed Chair, Director of Regenerative
                  Biology at the Morgridge Institute for Research and
                  Professor of Cell and Regenerative Biology at the
                  University of Wisconsin
                  “Human pluripotent stem cells”

9:50AM – 10:30AM  Ina Dobrinski, Dr.med.vet., M.V.Sc., Ph.D.,
                  DACT, Professor; Department Head, Comparative
                  Biology & Experimental Medicine; University of
                  Calgary Veterinary Medicine
                  “Of mice, pigs and monkeys: Using transplantation
                  to study germine stem cells and spermatogenesis”

10:30AM – 10:50AM  COFFEE BREAK

10:50AM – 11:30AM  Richard Schultz, Ph.D., Charles and William I.
                   Day Distinguished Professor of Biology, University
                   of Pennsylvania
                   “From egg to embryo: a peripatetic journey”

11:30AM – 12:00PM  Marisa Bartolomei, Ph.D., Professor of Cell
                    and Developmental Biology; Perelman School of
                    Medicine; University of Pennsylvania, and HHMI
                    Investigator
                    “Epigenetic regulation of genomic imprinting”

12:00PM – 1:00PM  LUNCH

1:00PM – 1:45PM  Janet Rossant, Ph.D., FRS, FRSC, Plenary
                 Speaker, Senior Scientist; Developmental & Stem
                 Cell Biology; Chief of Research, Research Institute;
                 The Hospital of Sick Children, Toronto
                 “Stem cells & blastocyst development”

1:45PM – 2:15PM  Takashi Shinohara, M.D., Ph.D.,
                 Professor; Department of Molecular Genetics;
                 Kyoto University
                 “Reconstruction of germline niche in vitro”

2:15PM – 2:45PM  CLOSING COMMENTS
                 Ralph Brinster, VMD, PhD, Richard King Mellon
                 Professor of Reproductive Physiology
                 “A 25 Minute Summary of 50 Years - Past and Present”
Incoming VMD-PHD Students
Two new students entered the VMD-PhD program this fall.

**Robyn Allen**
Robyn graduated from the St. Mary’s College of Maryland in May 2011 and joined the VMD-PhD program after completing a year of Vet School. Her first research experiences were at the National Institute of Health. She first worked as a Summer Research Intern in the lab of Dr. Robert E. Donahue working on hematopoietic stem cell research for three summers. During a fourth summer at NIH, she worked in the lab of Dr. Denis Hickstein on a gene therapy project involving primates. She also worked in the lab of Dr. Karen Crawford at St. Mary’s College studying vertebrate limb regeneration and cell positional memory for her senior thesis titled “Cellular Contributions During Affinophoresis in Ambystoma mexicanum.” Her most recent research experience was in the lab of Dr. Brett Kaufman at the University of Pennsylvania, School of Veterinary Medicine as a NIH-Merial Summer Research Program scholar. Her work in the Kaufman laboratory was entitled, “Mitochondrial DNA as a Determinant of Outcomes after Heart Attack and a Possible Target for Improving Reperfusion Therapy.” She also volunteered at the Second Chance Wildlife Center and also at a vet clinic. Robyn plans to work in research with the goal of participating in translational research.

**Sondra Calhoun**
Sondra graduated from Harvard University in May 2010. Her first research experience at Harvard involved the mating behavior of butterflies. After a summer with the Audubon Nature Institute caring for laboratory and exotic animals, she worked with Drs. Matthew Klooster and Charles Davis at Harvard on population ecology of rafflesiaae for a year and a half. She independently raised grant funds for her thesis research on the population ecology and breeding system of threatened Rafflesiaaceae plants. This work focused on the genetics of individual plants, identification of levels of genetic diversity, and determination of whether the plants exhibit monoecy or dioecy. Sondra’s research work was nominated for a Thomas T. Hooper prize for outstanding research or scholarly work. Her most recent research experience was at the Dana-Farber Cancer Institute with Dr. Bruce Spiegelman working on diabetes and metabolic disease. Sondra would like to go into a career in academia where she can teach and participate in research after graduating.
Current Student Honors and Awards

Laurel Redding
Congratulations go to Laurel Redding who received a Sigma Delta Epsilon/Graduate Women in Science, Nell Mondy Fellowship for her dissertation research.

Richard Jimenez
Congratulations to Richard Jimenez who was awarded 3rd Prize in the Trainee Research Award Poster Competition at the Society for the Study of Reproduction’s 45th Annual Meeting, August of 2012. Richard was also selected for the Predoctoral Training Grant in Genetics.

Alumni Awards, Accomplishments, and Honors
Congratulations go out to all of our alumni listed below

Kim Blackwell Professor, George Mason University VMD/PhD (1988)
Two new publications:


LaTasha Crawford Pathology Post-Doctoral Fellow, Johns Hopkins University VMD/PhD (2011)
Contributing author in a book:

Cinemeducation: Using Film and Other Visual Media in Graduate and Medical Education, Volume 2 Editors Matthew Alexander, Patricia Lenahan and Anna Pavlov Radcliffe Medical Press LTD, 2012

www.vet.upenn.edu/research/programs/vmstp
Dara Kraitchman Professor in Radiology, Johns Hopkins VMD/PhD (1996)

Congratulations to Dr. Dara Kraitchman who has been promoted to Full Professor in Radiology at Johns Hopkins University. She also has two new publications:


Jenny Punt Associate Dean of Student Research, Columbia University VMD/PhD (1991)

Congratulations to Dr. Jennifer Punt who accepted a new position as Associate Dean of Student Research at Columbia University’s School of Medicine. Dr. Punt will also have a faculty position in Pathology and will co-run a lab focused on hematopoietic stem cell (and thymocyte) development with her husband, Dr. Stephen Emerson (who is director of the Irving Comprehensive Cancer Center at the medical school at Columbia). Dr. Punt is currently splitting her time between Haverford College and Columbia, but will start at Columbia full time in 2013.

Todd Strochlic Postdoctoral Associate, Fox Chase Cancer Center VMD/PhD (2008)
Theresa Alenghat, Instructor in Microbiology, University of Pennsylvania VMD/PhD (2007)

Congratulations to Dr. Todd Strochlic and Dr. Theresa Alenghat who won first and second place, respectively in the AVMA/AVMF Young Investigator Award. Todd and Theresa were selected from over 60 applicants, five of whom where chosen to give oral presentations at the Merial Veterinary Scholars Symposium in August 20-12 in Colorado. Our Penn alumni took the top two out of three prizes.

We want to know....
New position, promotion, patent, publication, etc.? Please share your news!
vmstp@vet.upenn.edu

www.vet.upenn.edu/research/programs/vmstp
Student Publications
2011-2012


Upcoming Events

• VMD-PhD Student Meeting “Applying for grant funding” November 29, 2012 4:30pm in room 131 Hill.
• Director’s Holiday Party December 8, 2012 at 5PM.

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