

GENETICS *at georgia*

Linder awarded Bishop Fellowship

Jodell Linder was named the 2008 Linton and June Bishop Graduate Fellow by the Graduate Affairs Committee. Jodie's work in Daniel Promislow's lab



focuses on host-parasite interactions and how that relates to the environment in *Drosophila*.

The fellowship, an endowment established by a generous gift from Dr. Linton and Mrs.

June Bishop, provides support for an outstanding genetics graduate student each year.

Following graduation in May 2009, Jodie will join the lab of David Schneider in the department of microbiology at Stanford University. Her postdoctoral research will examine how immune pathways and insulin pathways interact.

Alton fellow named

The Graduate Affairs Committee has awarded the 2008 Kirby and Jan Alton Graduate Fellowship to Jianing Xu. He is advised by Michael McEachern and has been focusing on studies of telomerase in the yeast, *Kluyveromyces lactis*. Jianing anticipates completing degree requirements in 2010.



The Alton fellowship, funded by a generous continuing gift from Dr. Kirby and Mrs. Jan Alton, provides full support for an outstanding fourth year graduate student.

Genetics professor Jeffrey Bennetzen named Guggenheim Fellow

By Philip Lee Williams

Jeffrey L. Bennetzen, Norman and Doris Giles Professor of Molecular Biology and Functional Genomics and Georgia Research Alliance Eminent Scholar at the University of Georgia, has been named winner of a John Simon Guggenheim Memorial Foundation Fellowship.

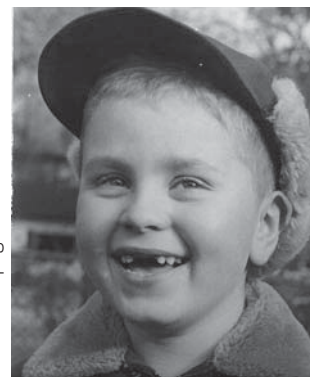
Bennetzen was the winner of one of 190 Guggenheim Fellowships given to artists, scientists and scholars, with awards totaling \$8.2 million. The successful



candidates were chosen from a group of more than 2,600 applicants. Bennetzen's Guggenheim was awarded for studies on genetic diversity and population structure in the parasitic weed *Striga* (witchweed) and its crop hosts in the landlocked West African nation of Mali.

"The Guggenheim Fellowship will allow me and my colleagues in Mali and France to investigate the host-parasite relationship between witchweed and the cereals it devastates in sub-Saharan Africa, primarily sorghum, pearl millet and maize," said Bennetzen. "We hope to identify new sources of crop resistance to this parasitic plant, which is arguably responsible for as much malnutrition and death in Africa as HIV/AIDS but has not been studied in any great depth because it is a problem only for the

answer on page 4



Guess Who?

poorest of the poor in Africa and some parts of Asia."

Bennetzen, in the department of genetics, is a pioneer in the comparative analysis of plant genomes, especially in the contribution of transposable elements as generators of genetic diversity. Among his most notable discoveries was the identification of mechanisms of genome growth and genome shrinkages in flowering plants.

see Guggenheim page 8

Genetics at georgia
Volume 5
Spring 2009

Editor's Note.....	2
Graduate News	2
Head's Note	3
Alumni Highlight	3
Alumni News.....	5
Friends of Genetics	6
Become a Friend of Genetics.....	7
Laurels	8

Department of Genetics
University of Georgia, Athens
www.genetics.uga.edu

editor's note



Welcome to the fifth edition of the *Genetics at Georgia* newsletter. It has been an exciting year here at the department. New junior faculty members have joined our department, bringing with them great energy and ideas, and we have seen many exciting scientific accomplishments by both students and faculty.

In this year's newsletter, you'll find lots of information about what has been going on around here, but of course, we are also very keen to find out what has been happening *out there!* We and your old college friends want to hear from you. So please continue to tell us about both personal and professional events in your lives, by sending news to Susan White (whites@uga.edu). Your updates will appear in the following issue.

In last year's newsletter, we told you about our planned graduation celebration for genetics undergraduates. Well, the first event was a fantastic success, with an excellent turnout of graduating seniors and their families. We are now in the process of planning the graduation celebration for our Class of 2009, and look forward to meeting their families at this happy event.

Part of the success of our undergraduates and graduates depends on their ability not only to carry out research here, but also to take their results on the road, presenting cutting-edge results at national meetings. You can help these students with a contribution to the Genetics Alumni Student Travel Fund, or choose from the other funds that help support the goals of the department of genetics. Any level of support is truly appreciated. You can find more details on the pledge form on page 7.

Finally, special thanks to Susan White for all her help with the newsletter.

Daniel Promislow

Design: Christopher Ross, Susan White
Photographers: Katrien Devos, Carmen Rodriguez, Susan White

News | Graduate Program

The genetics graduate students have had another productive and successful year. Presentations at national, international, and regional conferences, publications in top journals, receipt of academic honors and awards, and the spirit of volunteering and community all stand as testament to the outstanding character of our current class.

To begin, we would like to congratulate our first year students, who are in the final few weeks of, arguably, their most difficult year in graduate school. So, congratulations to Louisa Carter, Ashley Currier, Joel Farkas, Kelly Keegan, Alexandra Mihala, Kristofer Mussar, Emily Peeden, and Spencer Staton. Even now, they are completing their rotations and making that all-important choice: which lab shall I join? We wish them well in the coming years and expect great things from them.

Congratulations also to second year student Elizabeth Lucht, who will be presenting a poster on some of her work at the Cold Spring Harbor Telomeres and Telomerase meeting at the end of April. We would also like to issue a heartfelt thanks to second year student Mark Fisher, who served as one of our faculty representatives this year and did a bang-up job of organizing our yearly retreat.



Elizabeth Lucht



Brunie Burgos

Third year student Brunie Burgos continues to impress us with numerous presentations and awards. Brunie won one of the highly competitive International Conference on *Arabidopsis* Research (ICAR) travel grants. This travel award completely funded her attendance and poster presentation at the 19th Annual ICAR held in Montreal, Canada last summer. In addition, Brunie won an American Society for Plant Biologist (ASPB) travel grant for both 2008 and 2009. The 2008 ASPB travel grant partly funded her presentation at the ASPB Meeting in Merida, Mexico last summer. The 2009 ASPB travel grant will partially fund her presentation at this summer's ASPB meeting in Honolulu, Hawaii. Brunie's fellow third year student, Christina Zakas, did us all a wonderful favor by organizing the graduate student seminar series this year.



Lori King-Reid

The fourth year students have kept busy this year. Lori King-Reid presented a poster at both the 19th Annual ICAR in June, and the 48th



Han Zhang

Annual Cell Biology Conference in San Francisco, California in December. Han Zhang also presented her work at an international conference—the 50th Annual Maize Genetics Conference. In addition, both Lori and Han presented their works at the 2008 Plant Center Retreat in Stone Mountain, Georgia. Lori also served as the genetics representative to UGA's Graduate Student Association. Jianing Xu was awarded the 2008 Alton Graduate Fellowship. Mark Stead deserves our thanks for serving as our co-representative to the faculty. Despite the demands of his brand new daughter, he spent a vast amount of time, liaising with faculty to organize the graduate student recruitment.

Senior graduate student Eve Basenko gave a talk and presented a poster at the Southeastern Regional Yeast Meeting. She also volunteered her time as a judge at the Georgia Regional Science and Engineering Fair. Jodie Linder won a prestigious American Association of University Women dissertation completion award, which completely funded her final year here in the genetics department, allowing her to focus her efforts on research and writing. In addition, she was named the Linton and June Bishop Fellow by the department of genetics.



Eve Basenko

see *Graduate* on page 7

Restarting the clock

New study shows that important gene controls the ability of the thymus to produce disease-fighting T-cells after an organism's birth

By Philip Lee Williams

New research, just published by researchers from the University of Georgia, provides the first evidence that a key gene may be crucial to maintaining the production of the thymus and its disease-fighting T-cells after an animal's birth.

The discovery could help scientists find out how to turn the thymus back on so it could produce T-cells long after it normally shuts down most of its function, which, for humans, occurs by early adulthood. If the finding leads to further ways to manipulate the gene, the result could be a new avenue for the body to fight disease more effectively as the body ages.

The research was published in the online edition of the journal *Blood*, a publication of the American Society of Hematology.

see *Clock* on page 4

alumni | Highlight

Jessica Manning, a 2002 Honors graduate of the genetics program, decided to defer enrollment in medical school to work for an international pharmaceutical advertising agency in New York City. At the agency, she helped launch an advanced generation hemophilia therapy in North America and Europe for Baxter Global Biosciences. Later, as a consultant for IntraMed West in San Francisco, she worked on third-payer policies for hemophilia therapies for Baxter.

In January 2004, as a Rotary International Ambassadorial Scholar, Jessica moved to Wellington, New Zealand for a year of graduate school in immunology. She studied the dendritic cell vaccines for the treatment of cancer. She also became interested and involved in the launch of an ongoing meningococcal vaccine to counter the epidemic in New Zealand.

Influenced by her exposure to a socialized healthcare system and the vaccine launch in New Zealand, coupled with her freelance work on payer policies, Jessica began medical school at Emory University in 2005 very interested in public health and healthcare policy. Following her first year of medical school, Jessica moved to Washington, D.C. to begin a National Academies of Science Mirzayan Science and Technology Policy Fellowship. At the academies, she worked on the Board of Global Health at the Institute of Medicine on the congressionally mandated evaluation of the President's Emergency Plan for AIDS Relief, the largest international health initiative.

Following her fellowship, Jessica returned to her second year of medical school with a more focused interest in international public health and research. She applied for and was awarded the NIH Fogarty International Clinical Research Fellowship for a year of international research abroad in a developing country between her third and fourth years of medical school.

see *Highlight* on page 6



head's note

Overall, this has been a tough year for the department. The economic crisis and loss of state revenues led to a mandated 6% cut to the University's budget of which 3.7% was absorbed by the Franklin College of Arts and Sciences. Since all state-supported salaries were part of the budget, the remaining 2.3% amounted to nearly \$53,000 in cuts. Eliminating \$53,000 from our budget was a difficult job for the Executive Committee and me, but we did it without having to let anyone go. Currently, there is talk that 6, 8, or 10% cuts may occur during the coming year. Sadly, the cuts are likely to be permanent.

Since last July, we have welcomed two new faculty members, Chung-Jui (CJ) Tsai and Doug Menke. CJ investigates genetic and molecular mechanisms underpinning tree fitness and biomass productivity, while Doug is working on the evolution of hind limb development. Sidney Kushner was named a Distinguished Research Professor in 2008. Sidney has mentored over 100 undergraduate students in his laboratory of which two have gone on to become members of the National Academy of Sciences. Nancy Manley and Michael Bender were both promoted to full professor last year, effective July 1, 2009. Jessie Kissinger won a Creative Research Medal from UGARF and named a National Associate of the National Research Council by the Council of the National Academy of Sciences. Jeff Bennetzen won Guggenheim and Fulbright Fellowships for research with the International Crops Research Institute in Bamako, Mali last summer and fall semesters. Andy Paterson was elected an AAAS Fellow and received the Lamar Dodd Award for innovative research. Kelly Dyer has been named a Lilly Teaching Fellow, and Rodney Mauricio chairs a critical committee involved with the University's re-accreditation. Finally,

see *head's* on page 6

PLEASE VISIT OUR WEB
SITE AT
www.genetics.uga.edu

Clock...from page 3

"Such things as infectious diseases, inflammation and heart problems are all related to immune response," said Nancy Manley, an associate professor of genetics and chair of UGA's Interdepartmental Developmental Biology Group. "You don't have to think far to see how understanding the effect of this gene could affect the quality of life for older people and others as well."

Other authors of the paper are doctoral graduate student Lizhen Chen and assistant research scientist Shiyun Xiao, also of UGA.



Nancy Manley

The thymus is an organ located in the upper part of the human chest cavity, behind the sternum. This organ is the location where important systemic infection fighters called T-cells develop. Over the past two decades, T-cell counts have become part of everyday dialogue due to their importance in monitoring HIV/AIDS and other disorders.

The thymus slowly begins to shut down early in life and becomes largely inactive by early adulthood. Still, that's fine for most people, since an entire lifetime supply of T-cells is produced in that time. But, for some people, the loss of irreplaceable T-cells through disease can lead to chronic illnesses and a shortened life.

Until recently, scientists had thought that the thymus in adults was permanently shut down because no known regulatory mechanism existed that might allow doctors to "turn back on" the thymus if a person's T-cells were compromised. There are now some treatments currently in trials that can transiently rejuvenate the thymus and increase thymic output in humans.

The problem has been, though, that the mechanisms by which all this works are poorly understood, and all current treatments have systemic effects that can cause unacceptable side effects in all but the most seriously ill, who are more willing to tolerate them in exchange for possible benefit.

Now, however, Manley and her colleagues have shown for the first time that a gene called *Foxn1* is required to maintain the postnatal thymus. Their results also suggest that changes in *Foxn1* expression in important thymic epithelial cells (TECs) during aging contribute to the slow shut-down of the thymus with age.

"While this research was done in mice, it's not far-fetched to say that this points toward possible therapies for a huge variety of illnesses, from AIDS to age-related immunodeficiency disorders," said Manley.

One clear advantage of understanding how *Foxn1* works in maintaining the thymus and T-cell production is that it could lead to narrowly targeted therapies that are less likely to cause collateral side effects in a patient.

Manley got into studying the *Foxn1* gene through her work as a developmental biologist, but the discovery of how the gene works in maintaining the postnatal thymus came as a surprise. The mouse carrying the genetically altered *Foxn1* gene was produced by happenstance rather than by design. It turns out that the engineered gene has normal fetal expression and thymus development, but after birth, the gene's expression decays much more rapidly than in normal mice, giving the scientists a way to rapidly assess just what the gene does in the growing animal.

"In effect, what happens in this model is that the gene 'ages' more rapidly than the mouse does," said Manley. "This has given us a tremendous ability to understand to a more accurate degree just what the gene is doing."

uga-cdc RESEARCH

As part of the new partnership between UGA and the Centers for Disease Control and Prevention, Jessica Kissinger, associate professor of genetics, and Venkatachalam Udhayakumar of the CDC were awarded \$50,000 per year for two years for a collaborative research project to develop simple, field-usable molecular tools for the diagnosis of malaria.



Out of 21 UGA-CDC proposals submitted in competition for funding, their project was one of the five proposals awarded funding. Awards were made to projects demonstrating the greatest scientific merit, potential to enhance UGA-CDC collaborative interactions, and promise for future funding support.

Source: Columns Vol. 36, No. 23, 2/2/2009

biofuels GRANT

Jeffrey Bennetzen, the Norman and Doris Giles/Georgia Research Alliance Professor of Molecular Genetics, was awarded a \$1.295 million grant from a program jointly funded by the U.S. Department of Agriculture and the U.S. Department of Energy. The program aims to accelerate research in biomass genomics and further the use of cellulosic plant material for bioenergy and biofuels.

The grant will fund a cooperative project with Katrien Devos, a CAES professor of crop and soil science and plant biology. They aim to develop genetic and genomic tools to study foxtail millet, a close relative of switchgrass.

Source: Columns Vol. 36, No. 4, 8/18/2008

Answer
to Guess Who?...
Rich Meagher

see *Clock* on page 7

As director of molecular biology at 454 Life Sciences, a center of excellence of Roche Applied Science, **Todd Arnold** (PhD '92) leads a product and reagent development team responsible for emulsion PCR, shotgun and paired-end library preparation, and optimization of the microreactor used in their ultrahigh throughput DNA sequencing system, the Genome Sequencer FLX with GS FLX Titanium series reagents. In addition, his team develops ultradeep sequencing applications for investigating genomic plasticity of HIV, HBV and other pathogens.

Andrew Bosson (BS '08) is now at MIT pursuing a PhD in biology.

A lab technician and harvest cellar worker at Sanford Winery & Vineyards

in California, **Natalie Bowman** (BS '08) plans to study enology in graduate school.

Michael Brock (BS '08) is in his 1st year of medical school at MCG.

A pediatric resident at Palmetto Children's Hospital in Columbia, SC, **Ashley Chadha** (BS '03) graduated from MCG in May 2008. He is married to fellow pediatric resident, Shannon Nicole Mulligan.



Neeraj (Jay) Chugh (BS '98) teaches science at Acalanes High School in Lafayette, California where he is the department chair. Jay also lectures at Saint Mary's College in Moraga.

Currently a MS degree candidate in biomedical sciences at Tufts University School of Medicine, **Naseem Esteghamat** (BS '08) plans to pursue an MD degree.

Robert Gregerson (PhD '91) is professor and head of biology at Armstrong Atlantic State University in Savannah.

Formerly a senior editor for *Nature*, **Chris Gunter** (BS '92) is now the director of research affairs at the HudsonAlpha Institute for Biotechnology in Huntsville, Alabama. In addition, she serves as adjunct assistant professor in genetics at the University of Pennsylvania.

Joshua Hammond (BS '08) is a 1st year medical student at the University of

Virginia School of Medicine.

Associate professor of biology at Georgia Tech, **I. King Jordan** (PhD '98) investigates genomic evolution, dynamics and systems through the computational analysis of large-scale molecular data sets.

Benjamin Judd (BS '08) is currently at MCG in his 1st year of medical school. He will begin an anesthesia externship in the adult OR at the MCG hospital in March, a 3-½ year commitment.

alumni news

Christy Jurgens (BS '97) is a principal scientist for the International AIDS Vaccine Initiative, a non-profit organization dedicated to developing an effective HIV vaccine and ensuring it reaches all populations in need of an HIV vaccine. Her work focuses primarily on developing non-pathogenic negative-strand RNA viruses as vaccine vectors.

2008 was an exciting year for **Brooke Schaeffer Kaplan** (BS '03) and her husband, Justin. Their daughter, Edie, turned two, and Brooke began optometry school at the University of Alabama, Birmingham.

Kyle Kleppe (BS '08) is a 1st year medical student at MCG and plans to pursue a surgical specialty.



A postdoctoral research associate in the department of ecology and evolutionary biology at the University of Arizona, **Chih-Horng Kuo** (PhD '08) works with Howard Ochman on genome evolution in bacteria.

Sohyun Kwon (BS '08) is studying pharmacy at Mercer University.

After graduating from Tuskegee University College of Veterinary Medicine in May 2008, **Justin Lewandowski** (BS '04) now works as a veterinarian in a small animal clinic in Charleston, SC.

Jonathan Lochamy (BS '99) is now an assistant professor of biology at

Georgia Perimeter College.

A research assistant at the CDC in Atlanta, **Kathryn Lupoli** (BS '08) plans to obtain a PhD in infectious diseases and an MPH. Eventually, she would like to work for the CDC in influenza surveillance and preparedness.

Martin Moore (BS '95, PhD '03) is an assistant professor of pediatrics and infectious diseases at Emory University School of Medicine.

Pratik Patel (BS '03) is an internal medicine resident at Rush University in Chicago.

A lab assistant in Carl Bergmann's lab at UGA's CCRC, **Shreyal Patel** (BS '08) is applying to medical schools for the 2009-2010 academic year.

Jamie Robinson (BS '08) is happily in her 1st year at Vanderbilt Medical School.

Currently at UC, Berkeley, **Sebastian Romano** (BS '08) is pursuing a PhD in molecular and cell biology with an emphasis in developmental biology.



Ashley Smith (BS '08) is at MCG pursuing a degree in dentistry.

Katie St. Germain (BS '08) is a 1st year medical student at LSU School of Medicine.

Ryan Summers (BS '07) has completed preclinical training at Emory School of Medicine and will begin clinical rotations in March.

Planning a career in public policy in scientific education and development in Southern Africa, **Seychelle Vos** (BS '08) is a PhD candidate in molecular and cell biology at UC, Berkeley.

DeEtte Walker (PhD '98) is a research scientist at Georgia Tech in the McDonald lab whose research interests are ovarian cancer and evolutionary biology.

Currently an attorney with the US Patent Trademark Department in Alexandria, VA, **Michael Zecher** (BS '02) was awarded a JD from the University of Denver and a LLM specializing in intellectual property law from the George Washington University.

Compiled by Susan White

Highlight...from page 3

Jessica is currently the Fogarty scholar at the Malaria Research and Training Center in Bamako, Mali. With most of its research agenda focused on developing an efficacious malaria vaccine, the Mali center is likely the first in Africa to purchase a DNA microarray and her project will be the first opportunity to use this technology in the developing world, according to Jessica. In general, samples are sent back to the U.S. or Europe instead of trying to transfer the technology to Africa for sustainability and capacity building.

Initially, Jessica spent five months living in the African bush (nine hours from the capitol city of Bamako) treating children with severe malaria and collecting samples for a functional genomics case-control study with severe malaria cases and simple malaria controls. In December 2008, she returned to the lab in Bamako where she will work to process the gene chips with her samples until June 2009.

"The most interesting thing about my experience here is that I have finally arrived at a point where my background in genetics is informing my interests in clinical medicine and infectious and tropical diseases," wrote Jessica.

In June or July, Jessica will return to Emory for her fourth year of medical school and begin her residency application for internal medicine with the intent to specialize in infectious and tropical diseases.

Jessica and research associate Amadou Niangaly in a field lab in Bandiagara, Mali.



head's...from page 3

in this difficult funding climate, six faculty won extramural grants in excess of \$3M in 2008.

Graduate student recognition includes the Kirby and Jan Alton Graduate Fellowship to Jianing Xu, Graduate Excellence in Teaching Award to Kate Small, Linton and June Bishop Fellowship to Jodell Linder, Outstanding Teaching Assistant Award to Tina Bell, and a Doctoral Scholars Award from the Southern Regional Education Board to Brunie Burgos. Undergraduates Muktha Natrajan won a Mid-Term Foundation Fellowship and Tulsi Patel won Honorable Mention for the Barry M. Goldwater Scholarship.

I am stepping down as head nearly a year early for health reasons. My heart stopped 10 times last August and a pacemaker was implanted. So this will be my last note from the head. A group of faculty met with Dean Stokes

to promote the possibility of seeking an external head. She did not disagree, but could not commit given the budget cuts. Jeff Bennetzen has agreed to serve for the next year and he selected Nancy Manley as associate head. We deeply appreciate Jeff's and Nancy's willingness to serve.

Our current associate head, Michael Bender, has taken spring semester off on unpaid leave working in a position at NIH as a grants administration officer. We will know in May whether he plans to return to UGA.

We are deeply grateful for your gifts, which have strengthened our research and teaching programs. Jan and Kirby Alton continued to support their graduate fellowship and we are extremely grateful for their commitment. Dr. Linton and Mrs. June Bishop added another \$50,000 to their Graduate Student Fellowship fund. This is also the year that we hope to finish off the Mary E. Case Lectureship

Friends of Genetics

We proudly recognize alumni and friends who have supported our academic programs from March 24, 2008 to date. We are grateful for the generosity of all of our donors. If your name is listed incorrectly or is missing, please email whites@uga.edu so that we may properly acknowledge your generosity. To make a gift to the department, please refer to the gift form on page 7.

Anonymous (1)

Janice M. and N. Kirby Alton

Michael and Alice Bender

Jeffrey L. Bennetzen

Linton Hines Bishop, Jr.

and June Bishop

Annette and Arnold Brown

Benjamin C. Calhoun

Lowell and Douglas Combs

Shari Freyermuth

Mark G. Goldstein

David Hall

Evelyn and Emmett Hiatt

Ross Huff

Janet and Robert Inkrot

Deena and Sidney Kushner

Richard Meagher and

Valerie Maples

Alchron Jones Rhodes III

Ella Kay and N. William Scholz

Somasekar Seshagiri

Joseph H. Williams, Jr.

fund. Mary was Norm Giles' long time collaborator, a founding member of the department, and a pioneer for women in science. These gifts contribute in very real ways to the many accomplishments of our students and faculty, some of which we have highlighted in this newsletter. Have a great year.

Bob Ivarie

Clock...from page 4

The irony that the new discovery may find its best uses in dealing with issues of aging and that Manley is a development biologist hasn't been lost on her.

"The truth is that aging and development aren't really different things," she said. "They're part of a continuum. The young thymus is like a turned-on spigot pumping out a diversity of T-cell types, and T-cells live a long time. Even after the spigot turns off, we don't really see any major changes in them for most people until they reach about 60 years of age. Then the rates of things like rheumatoid arthritis and cancer go up substantially. And, as we all know, older people get sick more often."

If, however, physicians were able selectively to turn T-cell production back on, then many diseases that currently afflict older people could become manageable if not, in cases, entirely absent. So if "60 is the new 40," as some people now say, that could theoretically change to "75 is the new 40." And that first number of the pair could be even higher.

"Would turning Foxn1 back on allow us to regenerate an aged thymus?" Manley asks. "We just don't know yet. But we are getting evidence now to say that it would allow it, and we will be working on that to see how it can happen. If we could delay when the thymus shuts off or have it work at a low level our entire lives, it has the potential to make a huge difference in so many health-related issues."

While the mouse model doesn't precisely mimic human response, it is close enough so that biologists and geneticists can often draw conclusions from mouse trials on how humans will respond.

Though the ability of science to manipulate this gene and potentially the production of T-cells isn't going to happen next week, it may not be that far down the road, either. Under best circumstances, the researchers should know within five to 10 years whether the therapeutic ability to turn back on the production of T-cells is possible.

Condensed and reprinted by permission

Graduate...

from page 2

Jodie published some of her work in the new journal *Fly*. Monica Poelchau presented her work at the Association for Tropical Biology and Conservation meeting and the



Monica Poelchau

Southeastern Population Ecology and Evolutionary Genetics meeting. Qiaozhi Wei ("Georgia" to those who know and love her) also presented a poster at the 48th Annual Cell Biology Conference in San Francisco. We'd also like to say "break-a-leg" to Kate Small, who will be defending her dissertation in April.



Georgia Wei

To end, we salute and bid a fond farewell to our fellow students who have graduated this year: Lizhen Chen, Jeanne Rhea (who is still with us, albeit as a postdoctoral researcher), and Jodie Linder.

Lori King-Reid

BECOME A FRIEND OF GENETICS

Your gift helps build on 26 years of excellence in teaching and research at the University of Georgia. Our accomplishments are made possible by your support, so please consider giving to genetics today, via credit card or check.

To make a secure credit card contribution, click on the "make a gift" link at www.genetics.uga.edu.

To make a gift by check, mail this form with your check made out to The Arch Foundation to:

The Department of Genetics, Fred C. Davison Life Sciences Complex

The University of Georgia, Athens, Georgia 30602-7223

Name _____

Address _____

(as you wish it to appear on the gift recognition list)

Email _____ Phone _____

City, State, Zip _____

☐ I would like my gift to be anonymous.

AFASGEN209

Enclosed is my one-time gift of \$_____ to the following fund (check one):

___ Genetics Department Fund :: Supports the ongoing work of the department in teaching and research.

___ Genetics Alumni Student Travel Fund :: Supports graduate and undergraduate travel to national and international research conferences.

___ Genetics Alumni Graduate Support Fund :: Supports graduate fellowships.

If you would like to make a pledge gift, please contact Linda Bachman at lbachman@franklin.uga.edu or (706) 542-4658.



Department of Genetics
Fred C. Davison Life Sciences Complex
University of Georgia
Athens, Georgia 30602-7223

Nonprofit Org.
U.S. Postage
PAID
Permit No. 165
Athens, GA

Laurels to

...**Norris Armstrong** for promotion to associate professor and approval of tenure.

...**Tina Bell** who earned a Certificate of Recognition as a recipient of the University of Georgia Graduate School's teaching portfolio program.

...**Michael Bender** and **Nancy Manley** for promotion to full professor.

...**Jeffrey Bennetzen** who received a 2008-2009 Fulbright Scholar grant for research with the International Crops Research Institute for the Semi-Arid Tropics and the Rural Economy Institute, in Bamako, Mali, from August to November.

...**Brunie Burgos** for being selected as one of six awardees for minority funding to the 19th International Conference on *Arabidopsis* Research.

...**Kelly Dyer** who has been named a Lilly Teaching Fellow.

...**Muthugapatti Kandasamy** for promotion to senior research scientist.

...**Jessica Kissinger** who was awarded a Creative Research Medal and was named a National Associate of the National Research Council by the Council of the National Academy of Sciences in recognition of extraordinary service to the NRC and the Institute of Medicine.

...**Jodie Linder** who was awarded an American Association of University Women Fellowship and the Linton & June Bishop Graduate Fellowship.

...**Rodney Mauricio** who was named chair of the Quality Enhancement Plan Team, a key committee that will work on preparations for reaffirmation of UGA's accreditation by the Southern Association of Colleges and Schools.

...**Muktha Natrajan** who won a Mid-Term Foundation Fellowship.

...**Tulsi Patel** who was a 2008 Barry M. Goldwater Scholarship Honorable Mention.

Paterson elected AAAS Fellow

Andrew H. Paterson, Distinguished Research Professor, crop and soil science/plant biology/genetics, has been named a Fellow of the American Association for the Advancement of Science. Election as a Fellow is an honor bestowed upon AAAS members by their peers.

The AAAS honored Paterson for "distinguished contributions to the agricultural sciences, particularly for revealing the evolution and organization of plant genomes and genetic determinants of productivity and quality."



Peter Frey

Guggenheim...from page 4

"My lab is interested in plant genome structure and evolution, especially the nature of chromosomal rearrangements and the contributions of transposable elements," said Bennetzen. "We also study the relationship between evolved genome structure and gene function. We have long-standing interests in genetic diversity and its use in under-utilized crops of the developing world, the rapid evolution of complex disease resistance loci in plants, and the co-evolution of plant/microbe and plant/parasite interactions, primarily in the soil."

The author of dozens of publications in peer-reviewed journals, Bennetzen has won numerous awards, including a Presidential Young Investigator Award, a Fulbright Award and the Pandit Jawaharlal Nehru Centenary Professorship at the University of Hyderabad in 2002. He was named to the National Academy of Sciences in 2004 and as a fellow of the American Association for the Advancement of Science in 2005.

Condensed by permission