

GENETICS at georgia

volume I • department of genetics • www.genetics.uga.edu • university of georgia, athens

25 Years of Excellence in Teaching and Research

This year the Department of Genetics will mark its 25th Anniversary with a Silver Anniversary Symposium on April 15. A number of our distinguished graduates and former faculty will present their work, and we will celebrate Norman Giles' 90th birthday. Norm, along with several other faculty, moved to UGA from Yale University and founded the Program in Genetics, which eventually became the Department of Genetics.

The field of genetics has been at the forefront of one of the major scientific revolutions of humankind. The advent of recombinant DNA technology provided the tools to isolate, sequence, and characterize genes. In the past 25 years, a synthesis of molecular and evolutionary genetics has taken place creating the field of genomics, which promises unprecedented scientific breakthroughs in medicine and agriculture. The Department of Genetics has been a national and international leader in bringing this revolution to the state of Georgia. The Department has recruited, nurtured, and retained faculty who have led this cutting-edge research, generating \$15.8 million in extramural funding in the last 4 years alone. One remarkable testament to our success has been that, in the short 25-year history of the Department, five faculty members (Anderson, Avise, Bennetzen, Miller, and Wessler) have been elected to membership in the National Academy of Sciences, the highest national scientific honor that can be bestowed. In addition, Norman Giles came to UGA as an elected member of the National Academy of Sciences.

In spite of our success, the past several years have been financially difficult times for the Department and the University. As President Michael Adams has noted, the University has gone from a 'state-supported' to a 'state-assisted' institution with only 32.9% of its budget provided by the State of Georgia this year. The University is launching a Capital Campaign Fund in mid-April with a goal of raising a \$500 million endowment.

We are using our Silver Anniversary not only to recognize the Department's achievements in research and teaching, but also as an opportunity to build the department's endowment funds. The primary use of these funds is to recruit and support the best and brightest students from around the world. For example, income from endowment funds have been used this year to award ten one-time fellowships of \$2,000 to our top graduate applicants - five as the Lois K. Miller and five as the Georgia Genetics Alumni Graduate Fellows in Genetics. We also use these endowments to fund a cash award to a top undergraduate in Genetics each year.

The alumni and friends of our department can play a critical role in helping maintain the excellence of our graduate and undergraduate training program. On behalf of the students and faculty, I invite you to contribute to the development of our department and I thank the many of you who already have. Your help enables us to continue to serve our students in a way that lets them succeed in their future and to sustain our excellence in research. All of you are also invited to attend the Symposium that is described on our web site, www.genetics.uga.edu.

Bob Ivarie
Professor and Head



Rick O'Quinn

Fred C. Davison Life Sciences Complex

Alton Fellowship Established

Thanks to the generosity of a former student, the Kirby and Jan Alton Graduate Fellowship has been established. The fellowship will provide full non-teaching support for an outstanding senior graduate student each year. The award is funded by a generous gift from Dr. Kirby Alton, who completed his Ph.D. in Genetics at the University of Georgia in 1981. Following graduation, Dr. Alton joined Amgen where he rose to become vice-president for development. Dr. Alton is retired from his position at Amgen and now lives in Montana. He currently serves on the board of the UGA Research Foundation. 🍷

Editor's note

We take pride in the accomplishments of our alumni so we are pleased to launch the first edition of *Genetics at georgia* in conjunction with the Silver Anniversary of the Department of Genetics. Our goal is to communicate departmental and alumni news with Genetics alumni and friends. *Genetics at georgia* will be published in the spring term of each year. Please help us by sending news of your current occupation or career and personal milestones to Susan White (whites@uga.edu) for publication in next year's issue. We enjoy hearing from you and the information provided helps us document the strength of the Genetics training program to outside funding agencies, the administration at UGA, and the state legislature.

We hope you will also consider making a gift to one of the departmental endowment funds that support the research and teaching missions of the department. We use these funds to support student fellowships and to recognize outstanding undergraduate and graduate student accomplishments. In a time of diminishing state support, these funds are increasingly important to the quality of our program and we are very grateful to those who are able to make a gift. Information about how to make a gift to one of the departmental funds can be found on the inside back page of the newsletter.

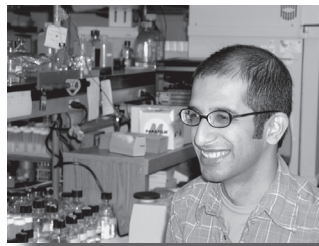
I hope that your association with the Genetics department was a good one and that you enjoy reading about the department. We are interested in your feedback on *Genetics at georgia*, which can also be sent to Susan White (whites@uga.edu).

Michael Bender

NEWS | Graduate Program

Our graduate students continue to impress us with their successes here and after graduation. Our current class includes almost fifty students from fifteen states and eleven countries outside of the US.

The talent, creativity and hard work of our graduate students have led to some wonderful discoveries in the past year. Our students continue to be our best representatives, presenting their work at national and international meetings. Here are a few examples of our students' successes. Cindy Groff-Vindman from the McEachern lab spoke about her work on the yeast *Kluyveromyces lactis* at the American Association of Cancer meeting, where she won an award for outstanding presentation. Syed (Chenoo) Askree, also a student in the McEachern lab, sought to understand the genetic factors that regulate



Chenoo Askree

telomere length in Baker's yeast, systematically looking at about 4800 gene deletion mutants. His work was published in PNAS this past year. Writing on Chenoo's results in the same issue, a commentator referred to his work as 'an admirable feat'.

Gina Baucom, a student in Rodney Mauricio's lab, published a paper in PNAS this year in which she reported on her experiment demonstrating that morning glory genotypes that were able to tolerate RoundUp® produced fewer progeny than susceptible lines in an environment that lacked the herbicide. Her work suggests that by including the fitness costs of resistance to herbicides, we might be able to limit the evolution of tolerance to important agricultural chemicals. Gina's work was featured in *The New York Times*, *Science News*. You can see a video clip of Gina and her plants at the ScienCentral website!

Many of our students have pushed back the frontiers of science on the less applied side, with equally impressive results. Judith Mank, using the most comprehensive fish phylogeny compiled to date, demonstrated that sex determination mechanisms in fish are extraordinarily labile, shifting between hermaphroditism, male heterogamety and female heterogamety with surprising frequency. Her work, which appears in the *Biological Journal of the Linnean Society*, creates the foundation for future studies on the evolutionary causes and consequences of this striking variation.



Gina Baucom

This year's crop of first-year students is settling well into life here in Athens and are already hard at work on experiments. Jodie Linder is exploring the relationship between mating and immune function in fruit flies. Continuing with this theme, Tina Bell is working in John Wares' lab on mating behavior and paternity in marine snails.



Jodie Linder

Amidst this amazing intellectual diversity, our department stands out for the amount of interaction that happens across disciplinary boundaries. The graduate students continue the tradition of weekly seminars, where one or two students present their recent work or plans for the future. In this way, over the course of a year, graduate students have a good sense of the range of topics covered by their peers

while getting the opportunity to present their data to a broad audience.

This interaction is fostered by and has helped us to maintain our NIH training grant, which is now in its 30th year! The training grant, which fully supports ten of our students

NEWS | Undergraduate Program

With over 180 current and intended majors, the Genetics undergraduate program continues to grow. We take pride in the many accomplishments of Genetics majors and in their successes after graduation. In the past year, Genetics majors were recognized in the following ways. Rebekah Rogers won a Barry M. Goldwater Scholarship, one of the nation's top academic awards for undergraduate students in the sciences. Amanda Casto won a Gates Cambridge Fellowship for graduate study at Cambridge University. Payal Nanda won a Courts International Scholarship from the Honors program to study abroad. Five Genetics students, Namrata Asuri, Charya By, Rebekah Rogers, Teerawit Supakorndej, and Cale Whitworth, were listed in the 2005 edition of Who's Who Among Students in American Universities and Colleges. Two students, Joseph Edwards and Ladson Gaddy, were First Honor Graduates in 2004, completing their undergraduate course work with perfect 4.0 averages. Finally, Adrienne Nehrling won the fifth annual Genetics Outstanding Under-

graduate Award for her exceptional academic and research performance and for her leadership role at UGA.

A hallmark of the Genetics major is undergraduate involvement in research. This year, UGA recognized Dr. Sidney Kushner by awarding him the 2005 Excellence in Undergraduate Research Mentoring Award. Since 1973, Dr. Kushner has supervised the research of over 100 undergraduates in his lab. Genetics majors were active in presenting their research at major national scientific meetings and in publishing their work. Steven Jocoy presented his honor's thesis work on the genetics of prohormone processing at the 45th Annual *Drosophila* Research Conference in Washington, DC. Steven was the winner of the first Karen Holbrook Biomedical Research Award from UGA and used the award to support his attendance at the meeting. Cara Altimus is a co-author of a paper submitted to PNAS titled "A genetic network for the clock of *Neurospora crassa* or what makes a biological clock tick." Cara also presented her work at the annual



Kelly Dawe with fall 3210L class

Neurospora meeting in California, at the In Silico Biology conference in Atlanta, and at the annual meeting of the ENCUR National Honors Society. Christine Bassett won the Best Undergraduate Poster Presentation at the Second Annual Southeast Ecology and Evolution Conference for her work with Drs. Yong-Kyu Kim and Wyatt Anderson. And Mariel Gonzalez presented a poster of her work in Dr. Hamrick's lab at the 2004 meetings of the Society for the Study of Evolution (SSE).

The graduating class of 2004 went on to a variety of interesting pursuits. Six students entered the working world after graduation, taking positions in teaching, the biotech industry, or in academic research labs. Five students entered medical school (Medical College of Georgia, UNC-Chapel Hill, Emory and Louisiana State University) while another entered a Ph.D. program in Biomedical Sciences at the University of Michigan. Melanie Clairry entered the Master of Bioscience degree program at the Keck Graduate Institute in Pomona, CA while Cory Gresham is pursuing a doctorate in Veterinary Medicine at UGA. Shelby Denniston and Sarah Marchand have entered Doctor of Pharmacy programs at the University of Tennessee and UGA, respectively. Finally, Amanda Casto entered a M. Phil. Program in the department of Genetics at Cambridge University. Amanda will enter a MD/PhD program at Stanford following her fellowship at Cambridge.

Kelly Dawe and Michael Bender

Departmental comings and goings

The past year brought some significant changes to the Genetics department. Genetics welcomed two new faculty members: Dr. Brian Condie is a developmental biologist whose research focuses on neuronal stem cells while Dr. John Wares studies speciation in natural populations. Sadly, Dr. Marjorie Asmussen was killed in a tragic bicycling accident in January of 2004. An appreciation of



Nancy Manley

Marjorie's life and work appears on page 5. Dr. John McDonald accepted a position at Georgia Tech where he now chairs the School of Biology. Dr. Bob Ivarie became Genetics Head in July of 2004 and is assisted by Associate Head Michael Bender. Three faculty members, Dr. Mary Bedell, Dr. Michael McEachern, and Dr. Nancy Manley, were granted tenure and promoted to Associate Professor effective Fall 2004. In the department office, Cheryl Gantt joined the staff and now coordinates scheduling and travel in addition to other duties. She replaces Ursula Butler, who is now office manager for the Drama department. Susan White joined the staff to coordinate undergraduate advising and Carmen Rodriguez was hired to assist with undergraduate laboratory courses. Finally, Christina Weidemann now works with Dr. Ivarie as Administrative Coordinator. She replaces Rose Luther, who has moved to Idaho. 🐾



John Wares



Cheryl Gantt

Marjorie A. Asmussen 1949-2004

by John C. Avise



Tori Bauer

On January 19, 2004, Marjorie Asmussen died suddenly when the bicycle she was riding was struck from behind by a pickup truck on a country road near Athens, Georgia. She was 54 years old. Marjorie had a zest for life that few of us can match. In her professional life, this enthusiasm was evidenced by her devotion, both in research and teaching, to vitalizing the oft-abstruse field of mathematical population genetics. In her personal life, Marjorie's irrepressible spirit was reflected in the unbridled joy and physical exuberance that she brought to almost every task. Marjorie died instantly, unexpectedly, while doing exactly what she loved on a warm sunny day in the normally gentle Athens countryside. She is survived by two daughters (Meg and Jenny), both in graduate school.

Marjorie was a mathematical geneticist par excellence. She received her A.B. degree in mathematics from Occidental College in 1971, graduating summa cum laude, before going on to Stanford University where she earned two M.S. degrees (in mathematics and statistics) and a Ph.D. in mathematics (working with Marcus Feldman). In 1976, she moved to the University of Georgia, where she was my friend and colleague for 28 years, first in the Zoology Department and later in the Department of Genetics. During that time we collaborated on several research projects, shared advising duties for some Ph.D. students, worked together on many committees (Marjorie was always appreciated for her conscientiousness and energy in community tasks) and enjoyed our weekly lunches with several other members of our population genetics faculty. At the Friday lunch before her death, we reminded an overworked Marjorie that Monday was the Martin Luther King Jr. holiday, to which she responded, "Oh, good. Maybe I'll have enough time for some bike-riding this weekend after all."

Marjorie's research centered on the use of mathematics to develop theoretical frameworks for population genetics and ecology. By deriving formal mathematical models and then analyzing them using combinations of analytical and numerical techniques, she sought to provide conceptual

backdrops for interpreting the kinds of empirical data on genetic polymorphisms often generated in the fields of molecular ecology and population genetics. A representative sample of the diverse topics that she addressed indicates the breadth of Marjorie's research interests: frequency-dependent selection as an evolutionary force for protecting genetic polymorphism, coevolution of gamete-recognition loci, detection and decomposition of gene flow into its underlying components, maintenance of genetic variation by regular and chaotic cycling in gene frequencies, evolution of organelle inheritance patterns, and applications of genotypic data in human genetic counseling. She is perhaps best known for her development and promotion of 'cytonuclear disequilibrium statistics' that codify and facilitate interpretation of nonrandom associations between alleles at genes in the nucleus and cytoplasm. Almost single-handedly, Marjorie's research group developed a large body of theory regarding cytonuclear genotypic associations, and this theoretical construct has been very useful for analyzing population-genetic data for haploid loci in cell organelles (e.g., mitochondria and chloroplasts) jointly with those for diploid genes in cell nuclei. Marjorie published more than 60 peer-reviewed articles during her too-short career and delivered more than 80 invited seminars. In 2002, she was formally recognized for her scientific accomplishments by election into the American Association for the Advancement of Science.

Two personal anecdotes might give some glimpse into the workings of Marjorie's mind and heart. In 1987, Marjorie published, with Jonathan Arnold and me, her seminal paper (the first in a long series) that defined and described various properties of disequilibrium statistics for associations between nuclear and cytoplasmic genotypes. As we worked closely together for several weeks drafting the text and tables, it struck me (for the first time, I recall) that different people's minds genuinely can and do work in different ways. To Marjorie, 'biological intuition' meant relatively little unless it could be mathematically formalized, whereas for a nonmathematical biologist like me, any biological 'insight' must (sadly) remain forever at the intuitive level at best. To her credit, in an intellectual context she demanded no less of her students and postdocs.

A second personal anecdote concerns Marjorie's collaboration with my lab to analyze genetic patterns in hybrid zones. Marjorie's statistical models as applied to our cytonuclear data had helped, for example, to uncover asymmetric mating patterns in a hybrid population of treefrogs, but Marjorie had never actually seen the living animals. One weekend, for the fun of it, Marjorie accompanied my ornithology class on a field trip to the Georgia coast, where we happened upon a green treefrog that I caught and handed to Marjorie. She literally squealed with unbridled delight to think that the gorgeous creature about which she had written was actually nestled there in her palm. Marjorie had a brilliant mathematical mind, but in her heart she was also a hopeless romantic in her love of the great outdoors and its inhabitants. Her incandescence was extinguished far too soon, but its lasting glow will shine on in our minds and hearts. 🐸 (Originally published in *Nature Genetics*, Vol. 36, No. 4, April 2004. Reprinted with permission.)

Josh Arcila (BS '01) of Atlanta, and his wife, Cassandra, had their first child, Nicholas Ryan, in October 2004. Josh owns two businesses, a multi-service contracting company and a retail store which he hopes to expand to four or five more in 2005.

In 2004, **Todd Arnold** (PhD '92) was promoted to international director of the Scientific Applications Support Services (SASS) group at CUNO, Inc., Meriden, Connecticut. CUNO is a world leader in fluid purification and supplies products for health care, fluid processing, and potable water markets.

Recently awarded a 3-year postdoctoral fellowship following his PhD ('03) from the University of Wisconsin, Madison, **Brandon Ason** (BS '97) works with Ronald Plasterk at the Hubrecht Laboratory in the Netherlands. His research involves teasing apart the miRNA/RNAi pathway in vertebrates with zebrafish as the predominant model system.

After receiving his PhD ('04) from Harvard's department of molecular and cellular biology, **Larry Ryan Baugh** (BS '97) is now a postdoctoral research fellow at Caltech in the laboratory of Paul Sternberg.

Joseph A. Bedell (BS '91) received his PhD in genetics from UC-Irvine. Currently, he is the director of bioinformatics at Orion Genomics, a small biotech company in St. Louis, MO, concentrating on developing technologies centered on DNA methylation.

In 2000, **Joe B. Blumer** (BS '94) received his PhD from Emory University. He is now a postdoctoral fellow in the department of pharmacology and experimental therapeutics at LSU Health Sciences Center in the laboratory of Dr. Stephen M. Lanier where he is studying G protein signaling. Joe is supported by an individual NIH postdoctoral fellowship. Joe was a finalist for the Post-doctoral Scientist Award, ASPET Division for Molecular Pharmacology at the Experimental Biology meeting in 2003.

Jason Brown (BS '94, PhD-cellular biology '01) is in his fourth year teaching in the biology department at Young Harris College in Georgia.

After completing the MD/PhD program at the Medical College of Georgia in 1999, **Ben Calhoun** (BS '92) is now a pathologist at Carolinas Medical Center in Charlotte, NC.

An assistant professor in the department of biology at Texas A&M University in College Station, **Ginger E. Carney** (BS '91, PhD '98) leads an NSF-funded research program investigating the genetic control of reproductive behaviors and nervous system development in *Drosophila*. She is married to **Adam Jones** (PhD '98) who is also an assistant professor at Texas A&M. They have two sons, and a third is due in May!

Following a PharmD at Auburn University, **Tamara Claridge** (BS '98) completed residencies in both pharmacy practice and solid organ transplant pharmacy specialty. Tamara is now a pharmacotherapy specialist in cardiothoracic transplant at Tampa General Hospital and recently achieved board certification.

Teaching and mentoring at a school and an underprivileged boys' hostel in the rural town of Buldana, India since graduation, **Nathan Copeland** (BS '04) will begin a MPH program in epidemiology with a focus on psychiatric genetics next fall.

In June 2004, **Asa Cordle** (BS '00) graduated from the Keck Graduate Institute of Applied Life Science with a MBS (master of bioscience). He is now a technology manager at The Research Triangle Institute in North Carolina where he provides technology transfer consulting services, primarily to NASA.

Michael Dodd (BS '97) is a postdoctoral fellow at the Medical College of Georgia where he received his PhD in molecular medicine in 2004.

Lei Fang (PhD '04) is a postdoctoral research associate at the Salk Institute, La Jolla, CA in the infectious disease lab of Dr. Ned Landau.

Following a PhD in biochemistry and genetics from Duke University, **Shari Freyermuth** (BS '84), nee Levensgood, did postdoctoral research with Joe Polacco on the mechanism of urease activation in

soybean at the University of Missouri. Since 1998, she has been a teaching assistant professor in the biochemistry department at the University of Missouri, Columbia. Her husband is a law professor at MU and they have two children, Jacob in 4th grade and Sarah in 2nd grade.

Laura U. Gilliland (PhD '01) is a postdoctoral research associate in the laboratory of Dean DellaPenna in Michigan State University's department of biochemistry and molecular biology. Her research project involves the identification of QTLs and underlying genes responsible for elevating the tocopherol and carotenoid antioxidants in the seed of *Arabidopsis thaliana*.

Holly Gooding (BS '00) was a research fellow at the National Human Genome Research Institute in Bethesda following graduation. There she published two papers on genetic testing for achondroplasia and participated in coordinating public relations events connected with the completion of the human genome and in Capital Hill hearings on genetic research. She then entered the UCSF-UC Berkeley Joint Medical Program and received her master's degree in public health in 2004. Currently she is completing clinical rotations for the MD at UCSF.

Awarded an NSF postdoctoral fellowship in 1998, **Michael Goodisman** (PhD '98) traveled to Australia for 2 1/2 years to study social insect genetics at La Trobe University in Melbourne and at James Cook University in Townsville. After leaving Australia, he conducted postdoctoral research on insect development at the University of Arizona. Michael is now an assistant professor in the department of biology at Georgia Tech.

Serving in the Peace Corps in Eritrea from 1997 to 1998, **Ed Green** (BS '97) is now a graduate student in the lab of Steven Brenner at the University of California, Berkeley. He has published papers about alternative splicing and nonsense-mediated mRNA decay.

In 2004, **Bob Gregerson** (PhD '91) became the Willie D. Bryan professor of biology at Lyon College, Arkansas. He

Alumni News

has been an associate professor at Lyon since 1995 after completing a post-doc at the University of Minnesota. Bob was named Arkansas Professor of the Year in 2000 and in 2003.

Working primarily in two research areas, cancer informatics and high-performance computing for epidemiological modeling, **David Hall** (PhD '99) is a research computational scientist in the Bioinformatics Group at The Research Triangle Institute, North Carolina. Coincidentally, his supervisor, **Jamie Cuticchia** (PhD '92), is also a Genetics alumnus.

Amy F. MacRae (PhD '88) is a research assistant professor in the department of biochemistry and molecular biology at the Saint Louis University Medical School. Her research is conducted in the laboratory of Dr. William Sly and she is working on genetic diseases and their enzyme replacement therapies, in humans and in mouse models, particularly therapies for genetic lysosomal storage diseases.

A post-doc in the laboratory of Dr. Michael Bender at UGA, **Paul Mack** (PhD '01) is researching the effect of mating on gene expression in the lower reproductive tract of female *Drosophila*. The work is being done in collaboration with Dr. Yael Heifetz of the Hebrew University of Jerusalem. They are supported by a grant from the Binational Agricultural Research and Development Fund.

Dhea Maloney (BS '99) of Berkeley, CA, is working at Kaiser Permanente, a health management company, doing code management.

Anna Manlapat (BS '01) is in her final year of the PhD program in molecular immunology at the Medical College of Georgia. She received an Excellence in Research award from MCG in 2004, and an honorable mention for excellence in research by the Inflammation Research Association during their 12th international conference.

A postdoctoral research fellow in the laboratory of Stokes Peebles at Vanderbilt Medical School, **Martin Moore** (BS-pre-medicine '95, PhD '03) studies the pathogenesis of respiratory syncytial virus (RSV), the chief cause of lower

respiratory tract disease and respiratory failure in infants.

Katy Morris (BS '04) is currently in her second semester of medical school at Louisiana State University in New Orleans.

Currently an intern in small animal medicine and surgery at the UGA Veterinary Teaching Hospital, **Rebecca Frankhauser Morris** (BS '96) graduated from UGA with a DVM in May 2004. Prior to vet school, Rebecca worked at the CDC in the Viral Gastroenteritis Section performing molecular biological research and diagnostics on human caliciviruses for 4 years. While at the CDC, she published several papers on the molecular epidemiology of these viruses and on detection of viral outbreaks.

Ivan W. Mott (PhD '03) is a research geneticist for the USDA Agricultural Research Service—Forage and Range Research Laboratory in Logan, UT. He is investigating genes and genetic markers associated with salt-tolerance in wheat.

Following graduation, **David Newsome** (BS '88) spent one year in graduate school at MIT. He then spent five years working at Dana Farber Cancer Institute in Boston and obtained his MS in biology from Northeastern University. For the last ten-plus years, David has worked in the biology department at Vertex Pharmaceuticals, Cambridge, doing such work as target validation and compound screening.

Medical director and obstetrician/gynecologist at St. Luke's Hospital, **Laura Norrell** (BS '87) also serves on the clinical faculty at UC-San Francisco. She is a fellow of the American College of Obstetrics and Gynecology. Laura has two daughters, Eva three and Alice one.

Gautham Pandiyan (BS '04) is a PhD candidate in the molecular cancer biology program at Duke University.

A postdoctoral researcher at Carolinas Medical Center, **Lowell Rayburn** (PhD '04) is teasing out the pathogenesis of Angelman Syndrome and Prader-Willi Syndrome using both patient samples and a mouse model.

A resident in pathology at Brigham and Women's Hospital in Boston, **Jason H. Smouse** (BS '96) graduated in 2002 from the Medical College of Wisconsin

Friends of Genetics

We proudly recognize the following alumni and friends who have supported our academic programs over the current fiscal year (July 1, 2004 - June 30, 2005) to date. We are most grateful for the generosity of all of our donors. If your name is missing or is listed incorrectly, please contact the Genetics office at (706) 542-1127 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

Drs. Wyatt and Margaret Anderson

Dr. Norris Armstrong

Dr. Todd E. Arnold

Dr. Kirby Alton

Dr. John Avise

Mr. Joseph Alan Bedell

Dr. Michael and Mrs. Alice Bender

Dr. Jeffrey L. Bennetzen

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Drs. John and Jennifer Wares

Dr. Joseph H. Williams

Ms. Yeh Lin Teresa Yang



in Milwaukee. He plans on specializing in cytopathology and possibly doing research in implementing molecular techniques to aid in cancer diagnosis and prognosis.

Now a postdoctoral fellow in zoology at the University of British Columbia, **Chrissy Spencer** (PhD '03) studies the processes that create and maintain

diversity in microbial model systems.

Eric K. Steffe (BS '86, MS '89) went on to study patent law at George Mason University. He is currently a partner in the intellectual property law firm of Sterne, Kessler, Goldstein & Fox in Washington, D.C.

Becky Steinichen Hobbs (BS '97) is a general dentist in Savannah, GA.

Following his PhD from UC-San Diego, **Travis Stracker** (BS '96) is a postdoctoral research associate in the lab of John Petrini at Sloan-Kettering Institute for Cancer Research. He uses mice to model human genetic instability disorders resulting from deficient Mre11 complex function and to analyze the genetics of tumor predisposition in mice. Travis's research is supported by an individual NIH postdoctoral fellowship.

James Voltz (BS '97) received his PhD from Duke University and will be starting a postdoctoral research position at the National Institute of Environmental and Health Sciences. He will be working with Drs. Darryl Zeldin and Ken Korach studying the role of the estrogen receptor on cardio-vascular and pulmonary physiology. James is married and lives with his wife in Raleigh, NC.

Graduating cum laude from Emory

Medical School in 2001, **Drew Wade** (BS '97) went on to the University of Hawaii for his medical internship, followed by his now third of four years of radiology training at Massachusetts General Hospital. Drew and his wife, Julie, have a 13-month-old son and are expecting a daughter in April.

A third year PhD candidate at UC-Berkeley, **Alice Watson's** (BS '99) research focuses on vertebrate neural development in the lab of Richard Harland. Prior to graduate school, Alice worked for two years in the lab of Judy Fridovich-Keil at Emory.

Since August 2003, **Joe Williams** (PhD '00) has been an assistant professor at the University of Tennessee, Knoxville. Formerly of the department of botany, he is now affiliated with the department of ecology and evolutionary biology.

Mark Williams (BS '86, MST '88) is currently a doctoral candidate in

curriculum and instruction at Iowa State University. Mark and his wife, Susan, have a 5-year-old son, Joshua Williams, and an 18-year-old daughter, Heather McMichen. 🐾

Graduate news...

from page 2

each year, is one of the longest-running NIH training grants in the country.

This year, members of the Graduate Affairs Committee began meeting once a month with all of the graduate students immediately following the weekly student seminar. In these discussions, students have come up with all kinds of ideas to strengthen not just the graduate program, but the entire Genetics Department.

Finally, after a hiatus, the graduate students of Genetics and Biochemistry have resurrected our Second Friday tradition. The first gathering was held in January, with food and beverages, and a fantastic turnout of graduate students, post-docs and faculty. Former graduate students who used to organize Second Fridays will be pleased to know that the organizers were able to recoup all their costs!

Daniel Promislow

I proudly support The Franklin College Department of Genetics

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

Georgia Genetics Fund :: This fund supports the ongoing work of the department in teaching and research.

Lois K. Miller Genetics Fund :: Established in honor of Lois K. Miller, a long-serving professor and distinguished scholar in genetics, this fund supports genetics graduate fellowships.

Norman and Doris Giles Genetics Endowment :: Established by and named after an eminent scholar and founding member of the department of genetics, the purpose of this fund is to support academic and research endeavors within the department, such as graduate student fellowships, student travel, honoraria and other expenses.

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GENETICS RESEARCHER NAMED TO NATIONAL ACADEMY OF SCIENCES

Jeffrey L. Bennetzen, the Norman and Doris Giles/Georgia Research Alliance Professor of Molecular Genetics at the university, was elected to membership in the prestigious National Academy of Sciences last April at the Academy's annual meeting in Washington, D.C.



Rick O'Quinn

Election to the National Academy represents the summit of career achievements for scientists and engineers in the United States, and only a small fraction of working scientists are elected to the group. New members and foreign associates are elected annually.

Bennetzen is the first UGA faculty member named to the NAS since Susan Wessler was elected in 1998. Bennetzen joins a small group of scientists at UGA who are NAS members: Wyatt Anderson, John Avise and Norman Giles (now retired), genetics; Norman Allinger, chemistry; Brent Berlin, anthropology; Susan Wessler, plant biology; and Glenn Burton, agronomy. The late Eugene Odum of ecology and Lois Miller of the departments of entomology and genetics were also members.

"It's a pleasure to be elected to the Academy by my fellow scientists," says Bennetzen. "The students and other colleagues in my lab over the years deserve to share in this honor, as their inspiration and hard work were largely responsible for

what we have accomplished."

Bennetzen is a pioneer in the comparative analysis of plant genomes, especially the contribution of transposable elements as generators of diversity. Among his most notable discoveries was the identification of mechanisms of genome growth in grasses.

A professor at Purdue University for two decades, Bennetzen received his bachelor's degree in biology from the University of California at San Diego in 1974 and his doctoral degree in biochemistry from the University of Washington in 1980. He served as a postdoctoral fellow at Washington University, Stanford University and the University of California at Berkeley. He was a research scientist at the International Plant Research Institute in San Carlos, California.

Phil Williams, Franklin College
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In praise of...

- ◆ Dr. Jan Westpheling for election to the advisory board of the National Academy of Engineering
- ◆ Dr. Sidney Kushner for selection as mentor of the year by the Southern Regional Education Board. Dr. Kushner was nominated for this honor by his doctoral student, Nikkii DuBose.
- ◆ Dr. Rodney Mauricio for selection as a recipient of the Richard B. Russell award for outstanding teaching from the University of Georgia.
- ◆ Dr. Sue Wessler for election to the governing council of the National Academy of Sciences
- ◆ Dr. Richard Meagher, named one of America's "Best and Brightest" by *Esquire*
- ◆ Monica Poelchau for winning a National Science Foundation Pre-doctoral Fellowship
- ◆ Kate Reifsnider and Jeremy DeBarry for recognition as Outstanding Teaching Assistants by the University of Georgia
- ◆ Nikkii DuBose for receiving a Southern Regional Educational Board Pre-doctoral Fellowship
- ◆ Shilpa Iyer for winning the American Association for Cancer Research–AFLAC "Scholar in training" Award
- ◆ Nandita Mullapudi for winning the Best Presentation Prize at the Molecular Parasitology conference
- ◆ Rebekah Rogers for winning a Barry M. Goldwater Scholarship
- ◆ Amanda Casto for winning a Gates Cambridge Fellowship