

january 2011

New Members Take Seats on GSA Board

The GSA Board of Directors welcomes the newly elected Board members, Phil Hieter (Univ of British Columbia) as vice president and Bonnie Bartel (Rice Univ), Judith Berman (Univ of Minnesota, Minneapolis), and Jeannie T. Lee (Harvard Med Sch and Mass Gen Hosp), as directors.

"The membership has elected representatives of the model organism communities who are active and involved in their research and our continued on page two

2011 GSA Award Winners Named

The GSA Board of Directors has named the five recipients of the 2011 GSA awards. The awards are presented annually to honor members of the genetics community who have made outstanding contributions to the field.

"These awards shine a spotlight on the scientific achievements and contributions of our members. This year's awards illustrate both the power of research in genetically manipulable organisms to solve fundamental problems and our members' commitment to mentoring and teaching at all levels," said GSA Past President Scott Hawley.

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G3: Genes, Genomes, Genetics Announcing a New Journal from the Genetics Society of America

The Genetics Society of America is pleased to announce the June 2011 launch of **G3: Genes, Genomes, Genetics**, a new peer-reviewed, peeredited, fully open-access journal that emphasizes rapid time-to-publication.

Brenda Andrews, Director of the Donnelly Centre for Cellular and Biomolecular Research at the University of Toronto, has been named Editor-in-Chief. Andrews is assembling a team of expert editors for *G3*. (For more about Andrews, see p.10 of the newsletter.)

GSA, publisher of GENETICS, is creating G3 to meet the need for rapid review and publication of high-quality foundational research, particularly research that generates large-scale datasets such as genome maps, genome-wide association and QTL studies, mutant screens and advances in methods and technology, and much more. The GSA believes that rapid dissemination of these data is the necessary foundation for analysis that leads to mechanistic insights. As part of its mission, G3 will take advantage of state-of-the-art methods to integrate publication with technology that enables storage and accessibility of large data sets.

G3 builds upon the long experience of the GSA in publishing *GENETICS*. G3: Genes, Genomes, Genetics meets crucial needs that are not wholly met by current journals, including:

- Emphasis on data quality and utility, rather than on detailed mechanistic insight or subjective assessment of immediate impact
- Quick reviews and rapid publication of high-quality, large-scale datasets
- Emphasis on creating and maintaining links between the data and the associated articles, to enable future access and analyses
- Fully open access, with final publication within one month of acceptance

"Dr. Andrews, a longtime *GENETICS* Associate Editor, was recruited to lead *G3* because of the breadth and depth of her experience in genetics and genomics," says R. Scott Hawley, GSA Past President. "Brenda has been a leader in functional genomics with her lab's studies of yeast, and she has assembled and leads a worldclass team of genome scientists in Toronto. She is well-positioned to lead this innovative new journal; we are fortunate to have been able to recruit her."

"It's exciting to be able to offer authors this venue in which to publish their findings, "says Andrews. "We hope to serve the genetics community by providing a respected forum for rapid review and publication of important discoveries, particularly those based on large-scale datasets

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Society. I look forward to working with them and the energy they will bring to promoting GSA activities," said Executive Director Sherry A. Marts.

Hieter Now Vice President



Hieter will serve as vice president in 2011 and then as president in 2012. Last year he served as co-chair of the GSA-sponsored Yeast Genetics

Phil Hieter

and Molecular

Biology Meeting in Vancouver, and is a long-time GSA member who previously served on the Board of Directors (1995-97). Hieter's priorities as president will be to continue to support and broaden GSA's role in developing collaborative interactions among geneticists and with other scientific disciplines, fostering public outreach and education in genetics, raising the profile of the GENETICS journal and the new journal, G3: Genes, Genomes, Genetics, and advocating government support of genetics research. A yeast geneticist, he studies the proteins and DNA elements that control the mitotic and meiotic segregation of chromosomes in Saccharomyces cerevisiae. Understanding the mechanisms of chromosome transmission in yeast is directly relevant to an understanding of cancer chromosome transmission mechanisms.

New Directors

Also a long-time member of GSA, Bartel has been an associate editor of **GENETICS** since 2003. Bartel. an



Arabidopsis geneticist who trained as a yeast geneticist, would like to promote governmental and public understanding of the importance



of model organism research. As an educator, she is also interested in nurturing the participation of undergraduates in genetics research. Bartel's lab uses Arabidopsis to study basic processes contributing to plant development, including understanding the regulation of the plant growth hormone auxin and microRNA functions. Current research includes studying the targets of auxin action (as well as auxin itself) to better understand how auxin promotes lateral and adventitious root formation. Auxins are produced commercially and are widely used in agriculture.

Berman served on the organizing committees for several GSAsponsored Yeast Genetics and Molecular Biology meetings and has been a member of



Judith Berman

the Society for many years. Research in her lab focuses on Candida albicans, a human fungal pathogen that lives in the digestive tract of healthy humans, and diverged from the model yeast Saccharomyces cerevisiae over one hundred million years ago. Berman and her research team investigate karyotype plasticity and genome stability in C. albicans, as well as using the system to examine drug targets and evolution of drug resistance. C. albicans can result in superficial infections such as thrush, and can sometimes escalate to life threatening systemic infections with mortality as high as 40 percent among patients. As a researcher and educator, Berman supports the teaching of genetics on all educational levels and would like to provide policymakers and the public with a balanced view of issues relevant to genetics and geneticists.

Lee, whose laboratory works with the mouse as a model system, hopes continued on page eight



Paul Sternberg

New Year, New Journal, New Goals and Challenges

We face another exciting and challenging year as geneticists. We are in the midst of a new integration of all branches of genetics, including genomics and population, developmental, human, evolutionary, and quantitative genetics coming together to reach toward a deep understanding of heredity and evolution. While human genetics research is exploding, model organism research continues to flourish. With the advent of inexpensive genome and transcriptome analysis and techniques such as RNAi, even more organisms are amenable to genetic analysis. This integration opens up new possibilities for research but poses intellectual and pedantic challenges. The pace of discovery is awesome and delightful and it is likely there are more working geneticists now than at any time in history.

New Journal

Fostering communication among geneticists continues to be a priority of our Society. As we approach the 2016 centennial of publishing our journal, *GENETICS*, we have been enhancing its content and editing to raise its profile among users. At the same time,

president's message

GSA is in the midst of a bold initiative to launch a new journal, **G3: Genes, Genomes, Genetics** in June 2011. As most of you have heard, **G3** will be a peer-reviewed, peer-edited, fully open-access journal emphasizing rapid review-to-publication. Papers published in *GENETICS* on *C. elegans*,

"We must do everything to protect each new generation of geneticists."

S. cerevisiae and D. melanogaster are now linked to WormBase, SGD, and FlyBase, respectively. The electronic format of G3 will allow more facile linking of papers and data to databases and other electronic resources. G3 will focus on foundational studies, with emphasis on quality and utility of large-scale datasets, which we believe will have long-term, but not necessarily immediate impact.

I am pleased that Brenda Andrews (Univ of Toronto) is heading up this new endeavor, with strong support of the *GENETICS* editorial team -- Tracey DePellegrin Connelly, Executive Editor, and Mark Johnston, *GENETICS* Editor-in-Chief, and the Publications Committee, especially its chair, Tim Schedl (Washington Univ in St. Louis).

In addition to spreading the news about G3, we can all participate in this new journal by reviewing papers, perhaps serving on the editorial board, and most importantly by submitting our own papers for publication in its "pages."

The GSA publishes journals so that we – practicing geneticists -- are setting the standards of our field. *G3* is just one example of the innovation of our journals. Another is YeastBook, a series of reviews on yeast genetics to be published in *GENETICS*, coming this spring. We hope to extend this kind of book to other organisms and subjects.

New Goals

I will work this year to help the GSA better serve a broader community of geneticists. The Society has long served particular groups of geneticists well and we would like to extend this service to the mouse, fish and human genetics communities. GSA has done a superb job of helping some research communities - notably yeast, fly, worm, fungal — put on their meetings. This year, we are assisting mouse researchers in organizing their meeting in Washington, DC, June 22-25. We also will begin planning for the 2012 Model Organism to Human Biology meeting, which GSA has been holding every other year. We need to review how this meeting fits the needs of all our membership and whether it should be expanded or held annually.

We must do everything to protect each new generation of geneticists. In particular, if you're at the beginning of your career, you face job prospects more difficult than we have seen in quite a while. The postdoctoral 'training' period has lengthened, and this is starting to impact the opportunities for new PhDs to find postdoctoral opportunities. It has also resulted in reducing slots in graduate programs. Through GSA's education program headed by Beth Ruedi and with the support of the Education Committee, chaired by Sue Lovett (Brandeis Univ), the career luncheons (formerly mentor luncheons) at GSAsponsored conferences have been enhanced to provide undergraduates, graduate students and postdocs the opportunity to discuss with senior career scientists their most pressing professional concerns. GSA membership has been broadened to include undergraduate students

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Journalism Award Winner Announced

The GSA congratulates its first recipient of its Excellence in Research Journalism Award, **Tina Hesman Saey**, the molecular biology writer with *Science News*, which is

published by the Society

Tina Hesman Saey

for Science & the Public. Saey received this award in recognition of her article, "Molecular Evolution" in the January 31, 2009 issue of the magazine and online for subscribers. The article describes different paths that bacterial evolution might take giving equal time to random chance and evolutionary constraints.

Saey has a PhD in Genetics from Washington University in St. Louis and a Master's degree in Science Journalism from Boston University. She also studied microbiology in Germany as a Fulbright scholar. She has been a science journalist fulltime professionally for 10 years and has worked for *Science News* for nearly three years. Her pathway into journalism occurred because of her "need to know" about many research problems. Journalism is a way for her to explore all of her interests in science.

"I'm really thrilled I received this award," Saey told *The GSA Reporter.* "It's a great validation for a lot of hard work that I did on this story, "she added.

The GSA review committee included Board members Doug Koshland (UC-Berkeley), Chair; Beth De Stasio (Lawrence Univ, Wisconsin), Sally Camper (Univ of Wisconsin Med Sch), Scott Hawley (Stowers Inst), and Beth Ruedi, GSA Education Program Manager. The Committee selected Saey's article because she "explained the science so well that it was a learning experience for readers, including myself," said GSA Past President Hawley. Saey clearly explained bacterial evolution by using current research, and by demonstrating how chance and constraints along with drift and environment can affect evolution.

Saey will be publicly recognized with a presentation of an award plaque at the GSA-sponsored Mouse Genetics Meeting, June 22-25, 2011 at the Omni Shoreham Hotel in Washington, DC.



Genetic Twists of Fate

Stanley Fields and Mark Johnston

"Fields and Johnston offer a wild and colorful ride through genetics, popular culture, and medicine. Where else can one learn about a murder trial, a Wimbledon final, Rita Hayworth, and gain-of function mutations? A lively, engaging read." — Alexander Johnson, University of California, San Francisco

240 pp., 45 illus., \$24.95 cloth

The Go-To Event for Fungal Biologists: The 26th Fungal Genetics Conference at Asilomar

by Linda M. Kohn, Co-chair, Scientific Program, 26th Fungal Genetics Conference and University of Toronto, Canada

An outstanding 26th biennial Fungal Genetics Conference is taking shape for March 15-20, 2011, at the Asilomar conference grounds in Pacific Grove, California. This meeting holds a unique place as the "go-to" event for the international community investigating fungal and fungal-interaction biology.

The origins of this meeting were the chalk talks on genetics and development - and the impassioned discussions - of the pioneers of fungal model systems at the Neurospora Information Conferences in the 1960s. Alumni of their laboratories have led the expansion of the meeting as new technologies have made more fungal systems tractable in medical mycology, plant pathology and symbiosis biology. As well, paradigms have shifted toward integration of evolutionary biology. At the 2011 Fungal Genetics Conference, all of the "-omics," with the integrative perspective of systems biology, move to the forefront.

The Fungal Genetics Conference is arguably the largest, most cuttingedge meeting on fungal biology. The filamentous model systems such as Neurospora and Aspergillus represent core constituents of the meeting, with breaking developments in comparative, functional and population genomics, as well as key aspects of genetics, biochemistry, and development. Plant and animal pathogens will be joined by symbionts, with breaking reports on the mechanisms of interaction and their evolutionary implications. Nearly 1000 attendees, who study more than 130 species of fungi, interacting microbes, and fungal-like organisms are expected to attend. Attendees come from over 30 countries and 40 US states. The meeting represents fungal genetics over 50 years of dynamic growth and diversification. In addition, more than 650 posters are expected, complementing four plenary sessions, 26 concurrent sessions, and about a dozen workshops on the program.

Closing night festivities will feature a retrospective talk by one of the pioneers, Salomon Bartnicki-Garcia (CICESE). There will be several awards presentations. For students, there are awards for the top poster presentations (monetary awards from GSA or journal subscriptions provided by the American Society of Microbiology) and for the best contribution by a student working on Neurospora, the Perkins Award. For more senior investigators the awards include the Metzenberg Award for outstanding contributions to Neurospora research and GSA's Elizabeth W. Jones Award for Excellence in Education.

The Fungal Genetics Conference is outstanding, not only for its content, but also for the beauty of its setting, its inclusiveness and its sense of celebration. There is the oceanfront setting and historic California Arts and Crafts buildings. There is the opportunity to meet all plenary speakers on the patio after lunch - and to meet with other attendees while sitting over coffee in the sun or walking along the beach. In the evenings, most participants mingle over refreshments in the large room where all posters are on view for the entire meeting. The final party is famous – fungal biologists can dance to the tunes of the Amplified DNA Band.

For more information see http://www.fgsc.net/26thFGC/index.htm.



The 2010 GSA Year in Review

by Sherry A. Marts, GSA Executive Director

was a busy year for GSA. As executive director, I am particularly excited by:

- the progress made on the GSA's first strategic plan;
- the development of GSA's education programs;
- our communication and outreach efforts with individual researchers and leaders in the model organism communities.

These and other activities are reviewed below.

The Strategic Plan

The Strategic Planning Task Force, comprising current and past Board officers, continues to make progress in developing a concise mission statement for GSA, and identifying key strategic areas for GSA in the next two to five years. This strategic planning process includes gathering information from surveys, telephone interviews and focus groups of members and prospective members. The Strategic Planning Task Force has been meeting regularly and a Strategic Plan for Board approval is expected to be ready in time for the Spring 2011 Board meeting. The Plan will guide officers and administrators in developing GSA policies and programs to serve our membership in the next five to 10 years.

Education Programs

GSA education programs are growing to better meet the needs of

postdoctoral fellows, graduate and undergraduate students. Thanks to Beth Ruedi, GSA Education Programs Manager, several education-related programs at the GSA Conferences have expanded and new ones developed.

The GSA career lunches at the Drosophila, Yeast and Model Organism meetings proved very popular this year. At these lunches, students and postdoctoral fellows join senior scientists at topic tables to discuss all aspects of careers in and outside of academia, including work-life balance, interview skills, preparation for the tenure process, and working abroad.

Last year's Genetics 2010: Model Organisms to Human Biology (MOHB) conference marked the debut of the GSA Undergraduate Experience, a program aimed at increasing the participation of undergraduate members and meeting attendees. The program includes events for those presenting their research at the meeting, and those who are attending the conference as a class or with a faculty member.

We also added special activities, such as an education workshop and social events for conference attendees who are specifically interested in genetics education.

Communications

Efforts to communicate GSA's messages to our members, prospective members, and the wider scientific community have moved forward. We issue regular press releases and media alerts on two news services that are monitored by science media (print, online, and broadcast). These releases

cover featured articles in *GENETICS*, highlights of upcoming GSA conferences, honors and awards received by GSA members, the results of GSA Board elections, and the annual GSA awards. Our biweekly e-news has proved very popular, as is our newsletter, *The GSA Reporter*. Our revamped website is now a dynamic and crucial component of our communications program.

Also new this year is the GSA Excellence in Research Journalism Award. You can read more about it on page 4.

Our Model Organism Communities

In conjunction with MOHB last spring, we held a one-day meeting of volunteer leaders from each of the model organism communities. The meeting had a dual purpose: it served as a discussion and



Vibrant Science Expected at the Upcoming Drosophila Conference

by Daniel Barbash, Cornell University, and Co-organizer of the 52nd Annual Drosophila Research Conference

Vibrant science is expected in the sunny city of San Diego at this year's 52nd Annual Drosophila Research Conference, March 30-April 3, 2011, at the Town & Country Resort & Conference Center. The conference will feature an exciting range of plenary, platform and poster presentations. Sessions will cover the amazing breadth of contemporary research being conducted in Drosophila, from population genetics to neurobiology to chromosome biology, and additional topics in separate workshops. In addition, John Carlson, the 2011 recipient of the GSA Medal will be presented with his award. Plus, nearly 1,000 abstracts have been submitted for presentation and invited speakers are listed below.

Opening Night Presentations

The opening night will include the presentation of the Larry Sandler Award for the top PhD dissertation followed by a lecture given by the award winner. That evening will also include a historical panel discussion focusing on Drosophila behavioral research. The discussion will include circadian rhythms and sleep (Michael Rosbash, Brandeis Univ), courtship (Stephen Goodwin, Oxford Univ), learning and memory (Scott Waddell, UMass Med Sch) as well as addiction (Ulrike Heberlein, UCSF). Its historical thread will link the present with the early days of Drosophila neurogenetics, emphasizing approaches and findings with staying power that have informed our understanding of human behavior and disease.

modENCODE Project Workshop

Of particular interest will be a workshop presented by the modENCODE project (http://www. modencode.org). This workshop will describe the culmination of studies completed in the fly over the past three years including genome-wide studies of mRNA and ncRNA transcripts, transcription factor binding sites, chromatin marks and replication origins, along with data integration to define dynamic chromatin states. The important issue of data distribution to the research community will also be discussed.

Plenary Speakers

Two plenary sessions, on Thursday and Sunday morning, will include the following speakers:

Kami Ahmad (Harvard Med Sch) studies the impact of histone variants and nucleosome dynamics on chromatin function. His lab focuses on heterochromatic silencing and epigenetic regulation.

Vivian Budnik (UMass Med Sch) studies the mechanisms by which synapses are formed and modified.

Anna Dornhaus (Univ of Arizona) studies behavior and ecology in social insects, mostly ants and bumble bees. Her lab focuses on the evolution of collective problem-solving strategies, such as communication, division of labor, and spatial organization.

Paul Garrity (Brandeis Univ) studies the molecular basis of thermal and chemical sensation. His lab is currently focusing on the function of the TRPA1 cation channel as a detector of warmth and reactive chemicals.

Lawrence Goldstein (UCSD) studies how molecular motors interact with, and control the behavior of, axonal



vesicles, and relates this understanding to the molecular basis of neuronal defects.

Brian Lazzaro (Cornell Univ) studies host-pathogen interactions and the evolutionary genetics of the *D. melanogaster* immune system. Research in his lab includes population genetic and genomic analysis of the immune system, and elucidation of the quantitative genetic basis for individual variation in resistance to infection.

Eric Lai (Sloan-Kettering Inst) has had long-standing interests in the mechanism and biology of Notch signaling, as well as the biogenesis and function of short regulatory RNAs. His group combines experimental and computational approaches to study these topics in both Drosophila and mammalian systems.

Therese Markow (UCSD) studies speciation and adaptation to novel environments, mating system evolution, and Drosophila evolutionary genetics.

Linda Partridge (Max Planck Inst for Biology of Ageing, Cologne, and UCL, London) studies the biology of ageing and particularly, the roles of nutrientsensing signaling pathways and diet. Her work focuses on Drosophila and mice.

Eric Wieschaus (Princeton Univ) carried out large-scale genetic screens in the 1970s and 1980s to identify genes that control early embryonic continued on page eight

continued 7 ... Upcoming Drosophila Conference

development in Drosophila. More recent work has focused on cell biological mechanisms of shape change during gastrulation, and on quantitative biophysical measurements of morphogen gradients during development.

Patricia Wittkopp (Univ of Michigan) studies the genetic basis of phenotypic evolution. Currently, the Wittkopp lab is using a variety of Drosophila species to examine the development and evolution of pigmentation as well as using both Drosophila and yeast species to investigate the process of regulatory evolution on a genomic scale.

Igor Zhimulev (Inst of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia) studies the chromosomal organization of the D. melanogaster genome. His group uses different approaches to map the DNA elements and cytological structures to determine the precise limits of the chromosome structures, making significant contributions to our understanding of polytene chromosome structure/function and mechanisms of under-replication. They have discovered that polytene bands and interbands comprise different sets of chromosomal proteins and

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to bridge the gap between nonmammalian model organisms, which GSA has traditionally concentrated on, and mammalian genetics, which leads to the study of human

Jeannie T. Lee

genetics. In her term as a director, she hopes to boost the representation of mammalian genetics and geneticists in GSA. She also hopes to increase the visibility of research in epigenomics and noncoding RNA regulation at GSA meetings and in the journal, *GENETICS*. Her lab, which is interested in the fundamental differences between the sexes, studies the mechanisms of X-chromosome inactivation by various non-coding RNA loci, and investigates the evolutionary relationship between X-chromosome inactivation and genomic imprinting.

Continuing Board Members

Paul W. Sternberg (Caltech), who served as vice president last year, is now president of the Society for 2011. Scott Hawley (Stowers Inst) is now the past president. Board Secretary Mariana F. Wolfner (Cornell Univ) and *GENETICS* Editor-in-Chief Mark Johnston (Univ of Colorado Hlth Sci Ctr) continue in their positions. Directors continuing on the Board include Utpal Banerjee (UCLA), Beth De Stasio (Lawrence Univ, Wisconsin), Jay Dunlap (Dartmouth Med Sch), Sue Jinks-Robertson (Duke Univ Med Ctr), Douglas E. Koshland, (UC-Berkeley), Thomas J. Silhavy (Princeton Univ), and Susan R. Wessler (UC- Riverside). For the list with photos of the 2011 GSA Board of Directors, please visit the GSA website at http://www.genetics-gsa.org/ pages/board.shtml.

New Treasurer

Also new to the Board of Directors is Carol S. Newlon (UMDNJ – New Jersey Med Sch), who was elected by the Board members to serve as the GSA treasurer, replacing outgoing Treasurer Trudy Mackay. A longtime member of

GSA, Newlon is the Director of Faculty Affairs at the New Jersey Medical School and Chair of the Department of Microbiology and Molecular Genetics. Her lab



Carol S. Newlon

histone modifications, contain different gene and nucleosome densities, and have different activity of P element insertions.

Early (discounted) registration rate is available until January 20. The deadline for Image Award submissions is January 30. For other deadlines, see the calendar on page 20 of this newsletter.

This year's conference is organized by Daniel Barbash (Cornell Univ), Giovanni Bosco (Univ of Arizona) and Leslie Griffith (Brandeis Univ). They look forward to seeing you in San Diego!

research focuses on the mechanism of eukaryotic chromosome replication using *Saccharomyces cervisiae* and *Cryptococcus neoforms* as model systems.

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Outgoing Board members, left to right, Treasurer Trudy Mackay, Past President Fred Winston and Board Member Sally Camper hold their farewell gitts. Missing from photo: Chuck Langley and Susan T. Lovett.

The Board is grateful for the service provided by outgoing members, including Past President Fred Winston (Harvard Med Sch), Treasurer Trudy Mackay (North Carolina State Univ), and Directors Sally A. Camper (Univ of Michigan Med Sch), Chuck Langley (UC-Davis), and Susan T. Lovett (Brandeis Univ).

Bylaws Revision Approved

In addition to voting for new Board members, the membership approved the revised bylaws, which can be found on the GSA website at http://www.genetics-gsa. org/pages/gsabylaws.shtml.

dear **abbot:**

Dear Abbot,

I am considering changing over to an e-textbook for my genetics course. What are the benefits and the drawbacks? Is this the future of textbooks?

Sincerely,

An Academic in Atlanta



Dear Academic,

In my day, books were cherished possessions, read and re-read. Our library at the Abbey, with its thousands of volumes, was a source of great pride, not to mention scholarship. Of course the Industrial Revolution modernized printing presses in my day... but all that has changed with the online world.

The price of printed textbooks has skyrocketed, and is quickly becoming prohibitive to student success. During the school year, an undergraduate student can expect to spend from \$700 to \$900 on books, and over the past 20 years, the cost of textbooks has increased by 186 percent. Because of this high price tag, universities are starting to consider requiring students to use e-textbooks, ideally saving them a great deal of money. E-books are indeed becoming more prevalent; publishers such as McGraw-Hill, Pearson, and John Wiley & Sons are offering digital alternatives to printed copies.

E-textbooks also are appealing because of their flexibility, as professors have a "build-a-book" option when choosing materials for their courses. This is available in a limited capacity for printed books, but most professors decline to use the option. Publishers think that customizing a text for a course will become much more popular if the texts enter the digital realm. McGraw-Hill has recently announced its custompublishing system, Create, and Macmillan Publishers has a similar system called DynamicBooks. Flat World Knowledge also prides itself on its customization features. Within these systems, educators can mix and match chapters from different texts, add in articles and case studies, or even include personal documents they upload themselves. One drawback to using these digital systems is that the customization is restricted to titles published by each specific publishing group. Another resource, Coursesmart, carries e-texts from multiple publishers, but does not allow customization.

Several universities have begun experimenting with electronic textbooks. For e-books to become more widespread, colleges will need to force this change by requiring students to pay a course-materials fee for purchasing e-books for all their courses. This switch will change how students acquire their texts, as the use of e-textbooks would prevent borrowing, sharing, or renting books. However, the price range for most e-books currently in use is \$20 to \$35, which is markedly lower than what many students are paying for used books or rentals.

E-textbooks may not be the wave of the future, however. Although younger generations are relying more and more on technology, a recent poll by the National Association of College Stores showed that 76 percent of students would still choose a printed textbook over an e-book. Students cite eye strain, computer crashing, and inability to highlight text and make notes as reasons for their choice (most e-books now allow highlighting and annotation). Additionally, paper texts allow for easy flipping between subjects. While most e-books have the option to print for a fee, students still prefer the look and feel of the traditional textbook. This is another indication that if professors or universities want to go the route of e-texts, they may need to force the change on their students.

If you would like to try out an e-textbook in your course, I would suggest requiring one printed text and one e-book, and assigning readings from each. Consider customizing the e-book with articles and other relevant supplemental materials, simply to try out the flexibility of the digital medium. Be sure to use a platform that allows highlighting and annotation. Poll your students throughout the course to assess their preference, and see if their feelings toward e-books change as they get used to using them. If they do not, it might be wise to stick to the paper version while you still can—I know that I will (we don't have iPads here).

Signed,

The Abbot

(a.k.a. Beth Ruedi, Genetics Society of America, eruedi@genetics-gsa.org)

For more information:

Foderaro, Lisa W. "In a digital age, students still cling to paper textbooks." The New York Times, 10/19/2010. http://www.nytimes.com/2010/10/20/ nyregion/20textbooks.html

Young, Jeffrey R. ''As textbooks go digital, will professors build their own books?'' The Chronicle of Higher Education, 10/8/2010. http:// chronicle.com/article/As-Textbooks-Go-Digital-Will/124881/

lbid. "To save students money, colleges may force a switch to e-textbooks." The Chronicle of Higher Education, 10/24/2010. http://chronicle.com/ article/The-End-of-the-Textbook-as-We/125044/

lbid. "Students remain reluctant to try e-textbooks, survey finds." The Chronicle of Higher Education, 10/26/2010. http://chronicle. com/blogs/wiredcampus/students-remain reluctant-to-try-e-textbooks-survey-finds/27866

Genetics Society of America

Introducing Brenda Andrews, Editor-in-Chief of *G3: Genes, Genomes, Genetics*

The GSA is delighted to introduce you to Brenda Andrews (Univ of Toronto), the new editor-in-chief of **G3: Genes, Genomes, Genetics.** Brenda sat down with *The GSA Reporter* and answered a few questions about herself, the new Journal, and her vision of this new GSA publication.

TGR: Can you tell us a little about yourself? What is your educational and scientific background?

I did my undergraduate degree in zoology and my initial research interest was in ecology and evolution. In my final year, I took a course in molecular genetics that inspired me to get some lab experience in the field as a summer student at Toronto's The Hospital for Sick Children in a human genetics lab.

I joined the Department of Medical Biophysics at the University of Toronto as a graduate student the following year and worked with Paul Sadowski on the FLP recombinase, which is now used for genome engineering in mammalian and other cells. I then spent a few years at the University of California, San Francisco, where I did postdoctoral work in yeast genetics with Ira Herskowitz. Ira had assembled an incredible group of people in his group. His lab was really a unique environment for learning yeast genetics.

I returned to the University of Toronto after finishing my postdoc to take a position as an assistant professor in the Department of Medical Genetics. About 10 years later, I became chair of the Department (then renamed Medical Genetics & Microbiology), a position I held for five years. I am now chair of the Banting & Best Department of Medical Research and director of the Donnelly Centre at the University of Toronto [http://www.thedonnellycentre. utoronto.ca/].

TGR: What sort of research do you do in your lab?

My lab uses yeast functional genomics to explore mechanisms of cell cycle control, cell polarity and gene regulation. We are also involved in several large collaborative projects that aim to systematically explore genetic interaction networks in yeast and other model systems.

TGR: What are your vision and plans for this new Journal, G3: Genes, Genomes, Genetics?

GSA saw a need to create a respected forum for rapid review and publication of high-quality research, particularly research that generates large-scale datasets such as genome maps, genome-wide association and QTL studies, as well as mutant screens and advances in methods and technology.

It's clear that current journals do not meet this need (and if they claim to, the peer-review and editing is typically far from optimal). This is partly due to an emphasis on insisting on significant mechanistic insight even when the study presents rigorous large-scale datasets, or other useful work based on genome sequence information, which takes a significant investment of time and effort to complete. In many cases, rapid dissemination of this information would hugely benefit the research community by allowing access to key datasets, methods and resources that are the necessary foundation for analysis that leads to mechanistic insights. You can find out more about our vision and plans by reading our Mission Statement at www.g3journal.org.

TGR: Have you named any senior editors? Can you tell us a little about them and what they'll bring to this new Journal?

Yes, we have two senior editors so far: **Steve Scherer** and **Susan Forsburg**.

Steve is the director at the Centre for Applied Genomics at The Hospital for Sick Children in Toronto. He is also professor of molecular genetics at the University of Toronto and director of the McLaughlin Centre for Molecular Medicine. His group has discovered many disease susceptibility genes, including those that contribute to autism, and he was critical in discovering the phenomena of global copy number variation (CNVs) of DNA and genes as the most abundant type of genetic variation in the human genome. He'll be the senior editor of our Networks-GWAS section.

Susan Forsburg, a distinguished professor of biology and informatics at USC, will be the senior editor of our Mutants section. Forsburg's expertise is in fission yeast genetics and she is known for her fundamental studies of replication of DNA and chromosome dynamics. Among other things, the Mutants section will report results of interesting mutant screens and functional genomics experiments in any system.

We plan to have several more senior

editors and an enthusiastic team of associate editors with broad expertise in genes, genomes and genetics.

TGR: What type of papers are you soliciting? Can you give some specifics?

We welcome interesting papers in all areas of genetics; we view G3 as a forum for meeting the critical and growing need of the genetics community for rapid review and publication of important results, with an emphasis on research issuing from the emerging style of genetics research and its increasing reliance on genome sequence information.

For example, perhaps you have some interesting population data on an emerging system or have developed a new mutant collection or other resource that would be useful to the genetics community. Or, you have done a large-scale screen describing the quantitative analysis of a cell biological phenotype. Maybe you have developed a new method or technology that will be of interest to a broad community of geneticists. We aim to publish all of these types of papers and more!

TGR: Are you ready for submissions?

Yes, we're ready for manuscript submissions and inquiries. Send us your papers at g3-gsa@andrew.cmu.edu.

TGR: When can we expect to see the first issue online?

We expect to be online during June 2011.

TGR: Any last take-home message?

G3 will provide rapid, open-access publication of important datasets, methods and technologies with an emphasis on quality and rapid dissemination, rather than on a subjective assessment of impact. There is a significant demand for this type of journal, and we think the Genetics Society of America is well-placed to meet this demand for the genetics community. I look forward to reading these papers!

continued 6 The 2010 GSA Year in Review

brainstorming session as part of our strategic planning process, and it was an opportunity for encouraging communication among leaders of the various model organism communities and between each community and the GSA.

In 2010 the Fly Board, the organizing body of the Drosophila community, working with GSA staff, produced and distributed an electronic newsletter, "Fly News: The Latest 'Buzz' from the Fly Board." The plan is to produce this newsletter quarterly to keep fly members informed about useful resources, such as stock collections, clone collections and databases, and about activities of the Fly Board.

Membership

Following the completion of the strategic plan in 2011, a member recruitment and retention plan will be developed and implemented. Currently, GSA's nearly 3800 members represent 50 countries; more than 20 percent of our membership is outside the US. Our graduate students and postdoctoral fellows represent 30 percent of our members and in 2010 we initiated an undergraduate membership category, which started with nearly 100 members.

Other Activities

The GSA Publications Committee has been busy with the very exciting launch of our new online Journal, *G3:*

Genes, Genomes, Genetics. You can read more about G3 on pages 1, 3 and 10 in this newsletter as we gear up for the June 2011 launch.

Looking Forward

With the start of 2011 I am looking forward to working with Paul Stermberg, Phil Hieter, and the rest of the GSA Board of Directors as we finalize GSA's first strategic plan, envision and implement new programs and activities, and we continue to develop existing programs for our members and the wider genetics community.

continued 1 2011 GSA Award Winners Named

The recipients and the awards they will receive are:

• James E. Haber (Brandeis Univ) is the recipient of the **Thomas Hunt Morgan Medal** for lifetime contributions in the field of genetics. This award recognizes the entire body of Haber's seminal, innovative and critical studies of DNA recombination and repair, especially as they relate to genome instability. His research with *S. cerevisiae* has provided the



foundation for researchers worldwide who work in the DNA damage response field. This award also acknowledges his distinguished record as a mentor. Haber is widely recognized in the genetics field as a superb colleague and teacher. Many of his former students and postdoctoral fellows are leaders in their respective research fields.

• John R. Carlson (Yale Univ) is being awarded the Genetics Society of America Medal for outstanding contributions to the field of genetics over the past 15 years. Carlson is a pioneer in the chemosensory field and is being recognized for this work. Using Drosophila, he has studied and identified both olfaction and gustatory genes in these insects, resulting in analysis of how these



Photo credit: Jerry Domian

genes work and how the fly encodes chemosensory information. His research in Drosophila olfaction has been extended to *Anopheles gambiae*, the mosquito which transmits malaria, with the hope of determining how to help people in Africa avoid this disease.

• Abby F. Dernburg (UC –Berkeley) has won the Edward

Novitski Prize for exhibiting an extraordinary level of creativity and intellectual ingenuity in solving a significant problem in genetics. Her creative and imaginative studies of chromosome behavior during meiosis have won her the honor of this award. Using the roundworm model organism, *C. elegans*, she has made gigantic steps in



elucidating the mechanisms that guide chromosome pairing in meiosis. Pairing is one of the great unsolved mysteries in chromosome biology, and reflects a central question for all of science: how does something distinguish self from nonself? In addition to her studies in *C. elegans* she also made enormous contributions to the study of meiosis in flies and is considered a leader in the field of chromosome biology.

• Joseph R. Ecker (Salk Institute) will receive the George W. Beadle Award for outstanding contributions to the community of genetics researchers in recognition of the body of work he has developed in studying *Arabidopsis thaliana*, a flowering mustard weed and a model organism. A renowned molecular biologist and plant geneticist, Ecker is a pioneer



in understanding the role of ethylene, a gaseous hormone, which regulates plant ripening, pathogen defense and germination. He was a driving force within the multinational Arabidopsis Genome Sequencing Committee, a team that sequenced the *Arabidopsis thaliana* genome three years ahead of the scheduled 10, and with colleagues has developed new gene scouting techniques.

• **Peter J. Bruns** (HHMI, retired) is the recipient of the **Elizabeth W. Jones Award for Excellence in Education** in recognition of a significant and sustained impact on genetics education. In his more than 40 years as a science educator, Bruns has fostered links between science researchers and science teachers and their students. First at Cornell University and then as the vice president for grants and



Photo credit: Paul Fetters for HHMI

special programs for the Howard Hughes Medical Institute from 2000 to 2010, Bruns brought teachers of all levels into contact with researchers through lectures, labs, field trips and other activities to improve their teaching. A creative science educator, Bruns is being recognized not only because of the work he has done to strengthen ties between teachers and their students with scientists, but also because this work has promoted increased public understanding of science and how scientists work, and has been valuable in encouraging well-educated and trained young people into the science pipeline.

For more information about each award and for a list of past recipients, please visit the GSA Awards page at http://www.genetics-gsa.org/pages/awards.shtml.





Nicolas Buchon

Xu Chen



Heather Flores



Daniel P. Kane



Yunsik Kang



Mia T. Levine



Teresa R. **O'Meara**



Soukup

Alexandra A. **Chaolong Wang**



Cornelia E. Zorca

DeLill Nasser Travel Award Winners Announced

The GSA congratulates the 10 winners of the \$1,000 January to July 2011 DeLill Nasser Awards for Professional Development in Genetics. These awards provide graduate students and postdoctoral fellows with funds to be used for travel to a meeting, conference or a laboratory course that will enhance their careers.

The awards are named in honor of DeLill Nasser (1929-2000), who was instrumental in promoting genetics research during her 22 years at the National Science Foundation as the program director in eukaryotic genetics. Nasser was particularly supportive of young scientists -- those at the beginning of their careers and those trying to open new areas of genetic inquiry.

The 10 recipients and the meetings, conferences or courses they will be attending in 2011 are:

- Nicolas Buchon, Ecole Polytechnique Federale Lausanne, who will attend the 52nd Drosophila Research Conference, San Diego, CA.
- Xu Chen, Univ of Wisconsin-Madison, who will attend the 52nd Drosophila Research Conference.
- Heather Flores, Cornell Univ, who will attend the 52nd Drosophila Research Conference.
- Daniel P. Kane, Tufts Univ, who will attend the Keystone Conference: DNA Replication and Recombination, Keystone, CO.

- Yunsik Kang, Univ of Wisconsin-Madison, who will attend the 52nd Drosophila Research Conference.
- Mia T. Levine, Fred Hutchinson Can Res Ctr, who will attend the International Conference on Drosophila Heterochromatin, Gubbio, Italy.
- Teresa R. O'Meara, Duke Univ, who will attend the 26th Fungal Genetics Conference, Pacific Grove, CA.
- Alexandra A. Soukup, Univ of Wisconsin-Madison, who will attend the 26th Fungal Genetics Conference.
- Chaolong Wang, Univ of Michigan, who will attend the 12th International Congress of Human Genetics, Montreal, Canada.
- Cornelia E. Zorca, Yale Univ, who will attend the EMBO Conference: Nuclear Structure and Dynamics, L'Isle sur la Sorge, France.

Application Now Available for July-December 2011 **Travel Grants**

Applications are now being accepted from graduate students and postdocs for DeLill Nasser travel grants to meetings, conferences and lab courses taking place from July to December 2011. If you would like to apply, see the GSA website at http://www.genetics-gsa.org/pages/delill. shtml and complete the application form. Deadline for applications is March 15, 2011.

The Academic "Leaky Pipeline": How Do Women Fare in the Biological Sciences? by Beth Ruedi, GSA Education Programs Manager

or the past few years I have been a part-time lecturer in genetics at North Carolina State University. Whenever I receive the roster for a new class, I smile. My laboratory sections are filled with women - eager young women who share a passion for science (although not necessarily for the course itself). One laboratory section on Monday afternoons had 22 women and one man. This female-biased sex ratio has not always been the case; determined women struggled to prove themselves and slowly forged the way for women in the biological sciences. I have been fortunate enough to reap the benefits of this struggle, and I owe a great thanks to those pioneers.

Venturing from the realm of undergraduate students to the realm of graduate students, the female bias dissipates somewhat. However, in terms of being a female graduate student in science, the biological sciences are a fantastic place to be. According to the Council of Graduate Schools, 50.4 percent of all PhDs are being awarded to women in the United States, compared to 42 percent of PhDs internationally. In the

biological sciences, 51 percent of doctorates in 2008-09 were awarded to women. This percentage will undoubtedly continue to increase in our discipline – the past decade has seen a 7.7 percent increase in female doctorates versus a 1.2 percent increase in male doctorates. (1) The success for female graduate students in the biological sciences is especially heartening considering the fact that in science, technology, engineering, and math (STEM) programs overall, the rate at which women finish their graduate degrees is 7 to 10 percent lower than their male peers. (2) Thus, when it comes to succeeding in graduate school, women in biology are doing exceedingly well. Why, then, is there talk of a ''leaky pipeline'' in academia?

The Gap Between Men and Women

A substantial gap still exists between men and women holding tenure-track, senior positions. Additionally, there is a gap in wages between men and women holding similar positions. Women on average make 89 cents to the dollar of what men make in comparable careers in the biological sciences. Statistical reports from the National Science Foundation show that in 2003, 44 percent of full-time junior faculty members with doctorates in the life sciences were women. Compared to all STEM fields overall, this was very promising. The major ''leak'' comes when comparing this figure to the number of senior, tenured faculty members, of which only 29 percent were women in 2003. (3)

So the academic pipeline for women in the life sciences may not be leaky in the traditional sense that women are "dropping out," but they do seem to be "dropping down," as the statistics

above demonstrate. (3) Women are still very much a presence as members of biological and biomedical societies (for instance, in GSA, 35 percent of the members who have completed demographic information are women), but there are decidedly smaller numbers of women in high-prestige positions such as associate professor, program director, dean, provost, etc. Part of this lies in the extreme pressure to meet exceptionally high expectations in academic positions. To be successful and achieve tenure as a faculty member for instance, a principle investigator must often work in excess of 50 hours per week, be awarded several large research grants, successfully mentor fledgling scientists, contribute extensively to service and teaching, and publish a steady stream of papers in high-end journals. To have a successful academic career means it may sometimes feel like one must sacrifice having any kind of life outside the lab, including having a family.

Balancing Family and Career

If a young scientist (man or woman) wants a career in academia, there are many obstacles to overcome while striving for success and several obstacles are sited repeatedly by women. The biggest challenge seems to be balancing academic and family life – more female faculty are divorced (9.6 percent) than male faculty (4.5 percent). Additionally, 58 percent of women who are full professors do not have children, compared to 50 percent of men. (4) For the 42 percent of women that do have children, they've had to juggle issues with timing in order to get to where they are. Although it is not clear if these family pressures are the root cause of

the "leaky pipeline," they are clearly a contributing factor.

Common lore among women in academia is that the best time to have children is during a postdoc. However, graduate students and postdocs often do not have the support that they need from their academic institutions. Only 13 percent of schools in the Association of American Universities (AAU) offer maternity leave to graduate students and postdocs. Faculty, on the other hand, are granted at least six weeks of paid maternity leave in 58 percent of AAU institutions. (3) Still, if a woman chooses to start a family during a tenure track faculty position, any time off can be detrimental to her success. Most academic institutions have started to allow faculty to stop the tenure clock, and several have the option of part-time tenure track positions. Unfortunately, there is a great deal of variation among institutions in the implementation and interpretation of these policies.

Female faculty who have successfully started their families run into another obstacle while trying to raise their children - who takes care of the kids? Ninety percent of the spouses of female faculty members also have full-time jobs, while only 50 percent of the spouses of male faculty have full-time positions. A study by the National Research Council of the National Academy of Sciences found that faculty without stay-at-home spousal support are at a major disadvantage in terms of their success and their ability to advance to higher-prestige positions. With less spousal support for female faculty, women have to consider the cost of daycare, and the toll that time spent with family might have on their success in achieving tenure. According to the National Academy of Sciences, in the life sciences only 14 percent of full professors at top research universities are women. (3)

Implicit Biases

Aside from obstacles related to family life, women also struggle with implicit bias, where individuals make decisions based on prejudices they do not know they have. A study examining awardees in seven scientific societies found that women are being recognized for their teaching and their service, but not for their research or scholarship. Between the two types of awards, there is a 50 percent drop in the number of female awardees. Researchers also believe that implicit bias contributes to the wage gap, as there is still an unexplained portion of the gap after considering differences in experience, training, education, and individual characteristics. Additionally, although women receive more grant awards than men at the start of their careers, when they are faculty the numbers drop significantly. Women hold 25 percent of grants at the National Institutes of Health and 23 percent at NSF, and have a lower grant renewal success rate than men. (3)

Supportive Resources

With more awareness of the "leaky pipeline'' comes more resources for women in academia. The NSF Advancement of Women in Academic Science and Engineering Careers (ADVANCE) program strives to close the funding gap between men and women in academia. ADVANCE also supports counseling and mentoring, which is one of the most effective methods of stopping the leak in the pipeline. The NIH Office of Research on Women's Health (ORWH) also offers workshops designed to help women navigate the academic world. (3) Recently, Arizona State University announced the release of a new resource, CareerWise, designed to help retain women in STEM programs and assist them during their career. (2) And, celebrating its 40th year, The Association for Women in Science (AWIS) has many resources to help women in academia.

Academia, of course, is not the only route a recent graduate can take. Many men and women alike are finding a great deal of success and happiness in non-academic careers (me included. More will be written about alternative career paths in another issue of The GSA Reporter.) The crucial message here is that for women who desire an academic career, awareness, concern, attentiveness, and action on their part, and on the part of universities, research institutions, and professional societies, will go far to close the gap between men and women in the field of biological sciences.

Resources:

NSF ADVANCE: http://www.nsf.gov/ crssprgm/advance/index.jsp

NIH Office of Research on Women's Health: http://orwh.od.nih.gov/

CareerWise: http://careerwise.asu. edu/

AWIS: http://www.awis.org/

Works Cited

1. Jaschik, Scott. Women Lead in Doctorates. *Inside Higher Ed.* 2010.

2. Terrill, Marshall. Online resource offers training for women in STEM fields. *ASU News*. 2010.

3. Dublin, Matthew. Lessons of the Leaky Pipeline. *GenomeWeb*. 2010.

4. Burrelli, Joan. *NSF-Thirty-Three Years of Women in S&E Faculty Positions*. s.l. : NSF Science Resource Statistics, 2008.



The Future of Genetics is Here

The Genetics Society of American Upcoming Conferences

2

26th Fungal Genetics Conference March 15 – 20 • Pacific Grove, California

52nd Annual Drosophila Research Conference March 30 – April 2 • San Diego, California

18th International *C. elegans* Meeting June 22 – 26 • UCLA, Los Angeles, California

Mouse Genetics 2011 June 22 – 25 • Washington D.C.

for additional information: genetics-gsa.org/conferences discover. understand. inform.

Thank You to Our Donors GSA Fund Donors: Aug-Nov 2010

The Genetics Society of America acknowledges and thanks the 124 members who have given general fund donations to the Society from August to November 2010. These donations support numerous ongoing programs and activities of the Society, including student poster awards at the GSA Conferences, public policy activities, media and public outreach, and educational activities.

Boosters (\$100+)

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DeLill Nasser Fund 2011

The DeLill Nasser Award for Professional Development in Genetics program has recently been expanded. Up to 25 \$1,000 travel awards will be given to students and postdoctoral fellows to attend a meeting, conference or course in genetics that will significantly enhance their careers. Approximately half of these awards are given out for events from January to June, with the other half of the awards for conferences, meetings or courses held from July to December. (See page 13 for the January-June 2011 DeLill Nasser Award recipients.)

President's Circle (\$500+)

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How to Donate

Join your colleagues in supporting GSA programs and the next generation of geneticists by giving generously. Donations to GSA's general fund and the DeLill Nasser fund can be given online at http://www.genetics-gsa.org/ pages/donate_gsa.shtml. In addition, contributors can mail checks to:

Sherry Marts Excutive Director Genetics Society of America 9650 Rockville Pike Bethesda, MD 20814-3998

Please make your check out to ''Genetics Society of America'' and note the name of the fund you are contributing to in the lower left memo.

The GSA Reporter

and more educational activities for undergrads, grads and postdocs are planned. Future issues of *The GSA Reporter* and e-News will elaborate.

In addition, we need to foster geneticists at all career stages. There are strong economic forces at work and it looks like funding for research will not continue to grow significantly. The onus is on us to keep our headway as we are tossed about in this tempest. We must continue to maintain fundamental research as a priority while taking advantage of opportunities to apply our discoveries to major problems in agriculture, human health, and other areas. Evolutionary genetics is a crucial component to our science and we must continue to advocate for research and education in evolution. And we must work at increasing out international presence by being more inclusive of our international colleagues (including those among our membership) in our

activities.

Our Executive Director, Sherry Marts, has initiated a strategic planning process that is evaluating GSA's organizational strengths and weaknesses, and the needs and potential of our membership and the broader community of geneticists. Stay tuned for more on this as the process unfolds.

New Challenges

More than ever, we need to pull together and promote our science. As this year starts, please remember that we are *all* the GSA. The current elected leadership and staff are committed to serving the broad community of geneticists. We need to encourage our students and colleagues to join the GSA, not only for our journals or meetings (and these are indeed excellent reasons to join), but also to participate in community activities crucial to our science: education, advocacy, and communication of our discoveries. We can do this informally in our daily conversations and communications with students, family, friends and the general public. And we can do this formally, by joining the GSA so we can foster genetics and speak in a single, loud and mellifluous voice to make our case for the importance of genetics.

Please send me any suggestions for new initiatives, comments or your willingness to help to pws@caltech.edu.

Sincerely yours,

Paul W. Sternberg

continued 19 Policy Update

member to vote on the legislative issue of concern to you.

The CLC allows your voice to be heard in Washington, DC. The CLC is organized around the schedules of busy scientists. CLC members:

- write letters to their members of Congress;
- author opinion pieces for the local news media;
- build local support for biomedical research by meeting with community groups;
- visit their representatives and/or staff in local districts or Washington, DC.

For our part, the CLC:

 alerts you to issues, and provides the names and addresses of policy makers to contact;

- writes sample letters and provides talking points for relevant issues;
- organizes visits to Washington, DC, for scientists to meet with their member of Congress and offers travel assistance to help offset those costs;
- arranges for you to visit your member of Congress in your local congressional district;
- provides staff support on an individual basis to facilitate your involvement.

It's free to join the CLC. Please take a moment to complete the registration found online at www. coalitionforlifesciences.org/clc.htm.

continued 1 G3: Genes, Genomes, Genetics

and genome sequence information. Rapid publication will hugely benefit the researchers by allowing access to key datasets, methods and genetic resources."

Stay tuned for more details about G3! Manuscripts can be submitted now; contact Brenda Andrews or Tracey DePellegrin Connelly if you are interested in submitting a manuscript for our inaugural issue, or send e-mail to the G3 Editorial Office at g3-gsa@ andrew.cmu.edu. See www.g3journal. org for more information and the full journal scope.







Court Allows US Funded Human Embryonic Stem Cell Research to Continue – For Now.

Since August, the scientific community and the thousands of people who strongly support this research have been paying close attention to the lawsuit filed to halt research on human embryonic stem cells (hESC). The lawsuit, Sherley v. Sebelius, is currently in the Court of Appeals. All the briefs have been filed and the court heard oral arguments on December 6, 2010. The Coalition for the Advancement of Medical Research (CAMR), which the Coalition for the Life Sciences (CLS) is a member of, has submitted amicus briefs in support of the US Justice Department position in the case. You can read all the briefs filed on this case on the CAMR website at www. camradvocacy.org.

While this lawsuit is being closely watched by scientists directly involved in hESC research, all scientists should pay attention to the outcome of the decision. The lawsuit has the potential to challenge the peer review process

and scientific decision-making and scientific freedom, since it could establish a precedent for lawsuits to halt the funding of peer reviewed research proposals. In addition, a reinvigorated Dickey-Wicker provision, reinterpreted by the current lawsuit, could directly affect the fields of embryology, developmental biology, evolutionary biology, and clinical IVF research.

The CLS, along with CAMR, has been working with hESC supporters in Congress to pass legislation during its lame duck session in November and December 2010. Legislation was introduced in both the House and Senate that would, essentially, exempt federally funded hESC research from Dickey-Wicker. H.R. 4808, introduced by Rep. Diana DeGette (D-CO), currently codifies President Obama's Executive Order but could be amended to include a Dickey-Wicker exemption. Senator Arlen Specter (D-PA) has also introduced S. 3766 that includes a specific exemption.

At the time this article went to press, it was generally believed that the Court of Appeals would not rule before the end of the lame duck session. As a result, any legislation that will be voted on will take place in the new Congress—which will be sworn-in this month.

Fiscal Conservatives Now in Congress

A new year always brings changes and new experiences. In Washington, we are gearing up to face a new, more fiscally conservative Congress. Many of the new Republicans in the US House of Representatives and Senate were elected with a clear mandate: keep government small and lower federal spending.

The new Republican majority in the House is reinvigorated and ready to make a real impact on the way Washington operates. One of the

proposals under discussion is a plan to cut the budgets of federal agencies to 2008 levels. If this were enacted, based on FY2010 final appropriations levels, the National Institutes of Health (NIH) and the National Science Foundation (NSF) would experience decreases in their budgets from 6.4 percent to 13 percent respectfully.

These types of cuts could devastate the research community. Since the end of the doubling of the NIH budget in 2003, funding for biomedical research has been erratic - resulting in a real decline in the amount of funding that is available to support medical breakthroughs and a new generation of scientists.

The research community has a strong supporter in the White House. In a press conference on November 3, the day after the election, President Barack Obama said he was opposed to cuts in research and development. "I don't think we should be cutting back on research and development, because if we can develop new technologies in areas like clean energy, that could make all the difference in terms of job creation here at home," President Obama said. This is a sign that the White House is likely to oppose draconian actions by Republicans.

Join the CLC

It's that time of year again when the Coalition for the Life Sciences (CLS) asks you to join the Congressional Liaison Committee (CLC), the grassroots arm of the CLS.

Many new members of Congress, who will be sworn-in in January 2011, will need to be educated on the importance of research and discovery in their home district. No voice is more convincing to a member of Congress than a credible, concerned voter from his/her own home district. That you have taken the time to communicate as a constituent will carry considerable weight when it comes time for the

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Genetics Society of America

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GSA 2011 – JANUARY-MAY CALENDAR MARCH

JANUARY

52nd Drosophila Conference Late Abstract Submissions Deadline; Early (Discounted) Conference Registration Deadline

20

MOUSE Genetics 2011 Abstract Submission Site & Registration Open

41 DROS Image Award Submission Deadline

APRIL

12 MOUSE Early (Discounted) Registration Deadline

FEBRUARY

15 18th International C. elegans Conference Abstract Submission Site Opens

22 C. elegans Registration Site Opens

MAY

C. elegans Financial Aid Application Deadline

20 C. elegans Registration Deadline; Housing Reservation Deadline

25 MOUSE Hotel Reservation Deadline

DROS Hotel Reservations Deadline MOUSE Abstract Submission Deadline DeLill Nasser Travel Grant Deadline, July-Dec. 2011 Meetings 15-20 26th Fungal Genetics Conference at Asilomar C. elegans Housing Site Opens DROS Advance Registration Deadline 22 C. elegans Abstract Submission Deadline C. elegans Abstract Revision Deadline; Abstract Withdrawal Deadline 30-April 3 52nd Annual Drosophila Conference, San Diego