Genetics Society of America

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From the President's desk:

The Genetics Society of America is working to improve how we serve our members. At our board of directors meeting in Chicago on March 5-6, we discussed plans for 2009 and beyond, and we recommended ways to provide more information at our website. We also discussed changes with our involvement in public policy, education, and in our journal, *GENETICS*.

Fred Winston
GSA President

The GSA is committed to increasing communication with our members. As a first step, our goal is for the GSA website to become a timely and reliable source of information on issues that relate to genetics research and teaching (more on teaching below). As I write this column, the GSA website has recent news about the availability of NIH stimulus funds (with links to NIH websites), changes in funding for stem cell research, and more. (See http://www.genetics-gsa.org.)

Communication with our members is only one step in our broader plan to serve you better. Communicating with Congress regarding funding, policy and other research issues is another part of our plan to improve services to you. The GSA advocates for public policies that advance genetics research as a member of the Coalition for Life Sciences (CLS) (http://www.jscpp.org), a group of seven scientific societies with shared goals. To quote from the CLS website, "The Coalition for the Life Sciences (CLS) is an alliance of non-profit professional organizations working together to foster public policies that advance basic biological research and its applications in medicine and other fields." CLS plays an active role in contacting members of Congress in advocacy of funding scientific research (See page 19 for related article). Among the many prominent scientists on the CLS board are GSA representatives Jim Haber, who also serves as the GSA Board Secretary, and Gerry Fink (1988 Past President). Harold Varmus, until recently the CLS chair, stepped down due to his appointment as co-chair of the President's Council of Advisors on Science and Technology. Meantime, we await word on the choice of the new CLS chair. The role of CLS will be even more important in the near future as significant changes are expected at NIH. A new NIH director has yet to be named and

"The GSA is committed to increasing communication with our members."

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17th International Meeting

Its Way to UCLA

There are exciting presentations and events being finalized for the 17th International *C. elegans* meeting to be held at UCLA from Wednesday, June 24 – Sunday, June 28, 2009. Anticipating 1650 participants and approximately 1300 presentations, the meeting organizers, David Greenstein (Univ of Minnesota) and Chris Li (City College of New York) along with the organizing committee, are anticipating a lively forum for exchanging *C. elegans* knowledge, ideas, methods and reagents.

Every day promises something interesting and fun for participants beginning with the opening session on Wednesday evening, June 24th, when Barbara Meyer (HHMI/University of California, Berkeley) will give the keynote address. On Friday, June 26th Martin Chalfie (Columbia University, NY), 2008 Nobel Laureate in chemistry will give a special presentation. Chalfie, who shared the Nobel Prize with Osamu Shimomura and Roger Y. Tsien for their discovery and development of the green fluorescent protein in *C. elegans*, uses the organism in his lab "to investigate aspects of nerve cell development and function."

As always, students will be the focus of some events, including the GSA Student-Mentor Lunch and the GSA Poster Awards. The Student-Mentor Luncheon on Friday, June 26th from 12:15 p.m. – 1:15 p.m. provides graduate students with an opportunity to discuss with faculty members how to procure a postdoctoral position. The luncheon is organized by Eleanor Maine (Syracuse Univ, NY) and other faculty members.

Once again, student poster awards will be presented by GSA. Students who are first and presenting author and who indicated at the time of abstract submission that they would like to be considered for this competition, will have their posters judged. Winners will be announced at the plenary session on Sunday, June 28th.

With the days filled with workshops and parallel and plenary sessions, the evenings, in addition to poster sessions, will include exhibits, the annual art show, social events and entertainment.

On Thursday evening, June 25, there will be a GSA Faculty Mentoring Social, designed as an informal get-together where recently hired junior faculty can meet and discuss with senior faculty members issues they need advice on.

The *C. elegans* Art Show, exposing biological images and artistic renditions of worms will be back, organized once again by Ahna Skop (Univ of Wisconsin, Madison). Awards will be presented in various categories, including "Most Humorous" and "Best in Show."

And, once again, Morris Maduro (Univ of California, Riverside) and Curtis Loer (Univ of San Diego, CA) will present their ever popular and funny Worm Comedy Show on Saturday evening, June 27.

Deadlines:

- Wednesday, May 22 -- Register at http://www.celegans.org/pages/registration.shtml before this date to receive the advance meeting registration discount. After that date the regular registration rate applies.
- Friday, June 12 – Deadline for late abstracts (http://www.genetics-gsa.org/celegans2009/). Regular abstract submission has closed. Late abstracts will not be published in the Program Book and will not be included in the online abstract search, but will be included in the Program Addendum.
- Friday June 19 – Deadline for online registration. After this date, registration must be on-site at UCLA.

Meeting tee shirts can be ordered online for $10 at http://www.cafepress.com/celegans and picked up at the registration desk. For more information about the 17th International *C. elegans* meeting, see, http://www.celegans.org/index.shtml.

Rosalind Franklin Young Investigator Award for Female Geneticists

The Genetics Society of America, the American Society of Human Genetics and the Peter and Patricia Gruber Foundation are pleased to announce the third Rosalind Franklin Young Investigator Award of the Peter and Patricia Gruber Foundation. For the first time since the inception of this award in 2004, two grants of $75,000 each, one for human and non-human mammals research and another in model organism research will be awarded in one year. Female researchers from any country worldwide may apply.

These career development research awards of $75,000, appropriated over three years, are presented to two young female geneticists within their first three years of an independent faculty-level position. This career development award may be used for any purpose that advances genetics research being done by the recipient but may not be used for salary support of the recipient herself.

The award honors the groundbreaking contributions of Rosalind Franklin in the field of genetics, whose work on the structure of DNA provided important pieces of information enabling James Watson and Francis Crick to determine how bases paired to form the double helix formation of DNA.

These awards are administered jointly by GSA and ASHG with support from the Peter and Patricia Gruber Foundation. Applications will be reviewed by a joint committee appointed by the two administering societies. Besides the application, applicants must include a C.V. and two letters of recommendation. Members of the review committee include:

Marian Carlson, PhD, Columbia University, NY
Beverly S. Emanuel, Ph.D., Children's Hospital of Philadelphia, PA
Judith E. Kimble, PhD, University of Wisconsin, Madison
Mary-Claire King, PhD, University of Washington, Seattle
Amy Pasquinelli, PhD, University of California, San Diego
Molly Przeworskii, PhD, University of Chicago, IL
Janet D. Rowley, MD, PhD, University of Chicago, IL
Trudi Schüpbach, PhD, Princeton University, NJ

The application deadline was Monday, June 8, 2009. Recipients will be notified of their award in September 2009. The recipients will be announced at the 59th ASHG Annual Meeting in Honolulu, Hawaii, on Friday, October 23, 2009 in conjunction with the Gruber award ceremony, and will be invited to present during one of the sessions at the meeting. The model organism winner will also be recognized at an appropriate GSA conference.

This is the third time the Rosalind Franklin Young Investigator Award of the Peter and Patricia Gruber Foundation will be given. In 2004, Amy Pasquinelli, assistant professor of biology at the University of California, San Diego, was the first recipient of the $75,000 award. Pasquinelli used the award "to study how the newly discovered class of miRNA genes are expressed and function, primarily using genetic and molecular approaches in *C. elegans*." In 2007, Molly Przeworski, an evolutionary geneticist and an associate professor at the University of Chicago was the second recipient of the award, which she is using to compare recombination landscapes in humans and chimpanzees in order to learn more about the constraints acting on the human recombination process.

For additional information, visit the Rosalind Franklin Young Investigators Award website at http://www.ashg.org/pages/awards/rfranklin.htm or contact Phyllis Edelman at pedelman@genetics-gsa.org.

GSA Genetics Society of America

ASHG THE AMERICAN SOCIETY OF HUMAN GENETICS

GRUBER FOUNDATION

News from the Databases

Periodically *GENEtics* publishes news about the databases provided directly from their staff. Below are updates from three of these online services.

The Generic Model Organism Database

by Todd Vision, Associate Director for Informatics, US National Evolutionary Synthesis Center, http://www.nescent.org

The Generic Model Organism Database project (http://gmod.org) is a loose collection of dozens of interoperable open-source, software components that can be used for the creation and management of a genome database. Some popular components include Apollo (a genome annotation editor), Chado (a relational database), CMap (a comparative map browser) and GBrowse (a genome browser). GMOD components can be used to create a small laboratory database of genome annotations or a large web-accessible community database. Many model organism databases use one or more GMOD components, often in combination with other software.

The functionality of the toolkit expands both with new releases of existing components, and as novel components are added. Apollo, Chado, CMap, and Ergatis (a workflow manager) have all had recent releases. A new release of GBrowse has added web 2.0 features such as track sharing, dragable and collapsible tracks, and rubberbanding. Some recently introduced GMOD components include MAKER, a pipeline for annotating eukaryotic sequence data, and GBrowse_syn, a web-based comparative genomics viewer based on GBrowse.

Besides its software components, GMOD also is a highly interactive community of software developers and users with active mailing lists for all major software components. There is a centralized help desk that maintains extensive online user documentation, answers general queries and undertakes a number of educational initiatives to support new data providers from smaller research communities. Two GMOD summer schools are being offered in 2009, one in North Carolina and the other in Oxford, UK. Users are also encouraged to attend GMOD community meetings; the next one is scheduled for August 2009 in Oxford, immediately following the summer school. Please see the GMOD website (http://gmod.org) to access the community news feed and information on how to subscribe to the mailing lists.

Rat Genome Database: More Than Just A Genome Database

by Jennifer R. Smith, Scientific Curator, Rat Genome Database, Medical College of Wisconsin

The Rat Genome Database (http://rgd.mcw.edu) is a comprehensive resource for rat genetics and genomics data, comparative genomics, phenotype and disease information, and pathway data.

To make it easier to find high quality disease-related data for human, mouse and rat, RGD has created four **Disease Portals** for neurological diseases, cardiovascular diseases, obesity and metabolic syndrome, and urogenital and breast cancers. Each portal consolidates curated data from all three species into a single environment containing genes, QTL, phenotypes and pathways demonstrated to be associated with that disease category. A Genome Viewer shows disease-related genes and QTL in their genomic context and also provides cross-species comparisons. Specific rat strains used as models for these diseases are also included to help researchers find appropriate systems for new studies. Links to detailed report pages and other resources simplify access to additional valuable information.

Recent advances in systems biology have demonstrated the importance of networks and pathways and RGD provides access to **Pathway Data** through interactive diagrams and reports. For researchers unfamiliar with the pathway, each diagram presents a descriptive summary. Icons for the various components link to more complete information sources such as gene reports at RGD, molecule reports at NCBI's "PubChem Compound" database, and diagrams for related pathways.

RGD has recently updated the **Genome Browser**, **Genome Viewer** and **SNPlotyper** to form an integrated suite of tools to allow navigation from whole organism data down to the genome. To find genes or genomic regions associated with a particular disease or phenotype, researchers can use RGD's **GViewer** to display and download genes and QTL, which match their search criteria. These results can be viewed alongside known SNPs in those regions by following GViewer's links to **GBrowse** and its extensive collection of gene, QTL and SNP data. GBrowse also includes a link to the **SNPlotyper** tool, which contains over 20M SNP and microsatellite genotypes. This allows comparison of haplotype blocks across a variety of rat strains to identify strains which might be informative for genetic crosses in the region of interest. To explore this functionality and much more, visit the Rat Genome Database at http://rgd.mcw.edu.

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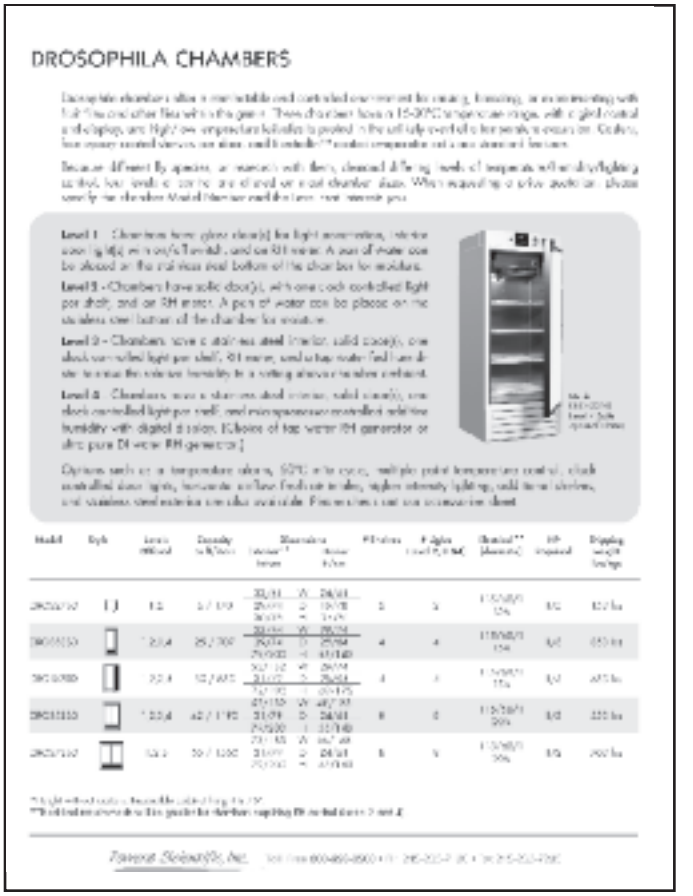
NHGRI Solicits Community Input on Its Long-Range Planning

The National Human Genome Research Institute (NHGRI) is currently engaged in a long-range planning process to assess the state of the art in genomics and where the field should be going in the next several years. The process will involve a wide range of activities through which the research and medical communities, and the public, can provide their opinions and advice to the Institute. These activities will include on-line opportunities, workshops, and other forums yet to be decided, and will take place over the next 12 to 18 months.

To begin the work, NHGRI has produced four white papers that address specific issues that have already been identified as needing broad input. We invite your review and comments regarding how best to answer the questions posed in the white papers. Input received through this white paper comment process will be used to generate topics for further planning activities and workshops, which will be held in 2009 and 2010.

For more information, please visit www.genome.gov/planning.


DROSOPHILA CHAMBERS

News from the Databases:

Continued from page 4

Improved Phenotype Annotation at Saccharomyces Genome Database (SGD)

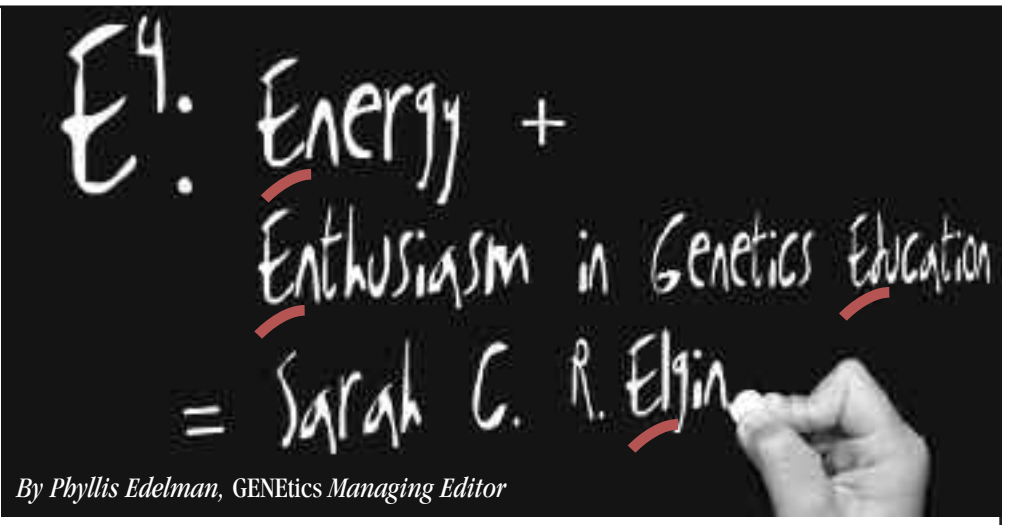
by Rob Nash, Department of Genetics, Stanford University, CA

Ever wonder which yeast genes have been implicated through mutational analysis in the regulation of lifespan, or which genes influence alternative developmental fates such as pseudohyphal growth or mating? With SGD's (http://www.yeastgenome.org/) new phenotype curation system the answers to these and many more questions are only a few clicks away. Our new system, to describe phenotypes from mutations in single genes, facilitates searching for and comparing mutant phenotypes and greatly increases the amount of detailed information that can be captured for each phenotype.

There are several ways to access phenotype data at SGD. As one example, enter 'lifespan' into the basic search located at the top of most SGD pages. When the "SGD Search Results" page appears, scroll down and click on the 'Phenotype Annotations' link. Follow this by clicking the 'Matches' link on the Phenotype Search Results Summary page to see a list of all genes annotated to this term. By clicking on one of the 'All phenotypes' links located in the far right column of the Phenotype Search Results table you can view all curated phenotypes for a gene of interest.

You can also get to this page via the 'Phenotype' tab, located on the top of each Locus Summary page. A link to an expanded phenotype search is also available on the basic search results page, providing access to matches in related data and details.

To learn more about our controlled-vocabulary based phenotype curation system please read the article entitled 'New mutant phenotype data curation system in the Saccharomyces Genome database' written by Costanzo et al., 2009, that will be published in the new journal, *Database: The Journal of Biological Databases and Curation (http://database.oxfordjournals.org/)*.



By Phyllis Edelman, GENEtics *Managing Editor*

Even over the phone the energy Sarah C. R. Elgin (Washington University of St. Louis, MO), the 2009 GSA Elizabeth W. Jones Excellence in Education Award recipient, has for science outreach and education programs is palpable. Sarah is speaking fast but crisply as she describes the numerous genetics education programs she has designed, organized and institutionalized for K-12 students, undergraduates and high school biology teachers since she began her tenure at Washington University in 1981. When you ask her how her genetics education domain developed, she answered simply, "one thing led to another."

Sarah is a Drosophila researcher interested in chromatin structure and gene regulation; her lab currently focuses on the fourth chromosome, examining issues of heterochromatin formation and gene silencing. She was a junior faculty member at Harvard for eight years before coming to Washington University where she wears many hats. She is an HHMI Professor and Viktor Hamburger Professor of Arts & Sciences in biology, with joint appointments is Education (Arts & Sciences) and Genetics and Biochemistry & Molecular Biophysics at the School of Medicine at Washington University. Over the years, as her influence has grown at the University, so have the educational programs she has developed for students not just at Washington University but for outreach in the St. Louis community and beyond.

Small Projects to Start

Sarah's outreach education projects began in 1991 as a result of her wanting to help as a science resource in her children's school. Colleagues at WUSTL and teachers in the University City School District worked together to obtain a grant from NIH which supported a joint curriculum development program whose aim was to "mainstream molecular genetics into the basic high school biology course."

That program was quickly coupled with support from the Missouri Coordinating Board of Higher Education for a summer course for high school teachers from the St. Louis area. Over the years the course has developed with support from HHMI and local sources under the Washington University Science Outreach Office (SO), which works with the local school districts. As Sarah explained, " SO ensures that the genetics activities fit with state standards and objectives and with the textbooks the teachers use."

To implement the 'Modern Genetics' program "we recruit all the high school biology teachers in one school at a time. For the first two years we supply all the lab materials, which cost us about $3 per student per year. After the first two years, they must provide the funds for the raw materials." But Elgin emphasizes that "there **must** be teacher training and access to materials for this to be a success."

Million Dollar Outreach

Collaboration, training and partnership are three words Sarah uses often to describe the science education programs she orchestrates. And it was collaboration and partnership with colleagues that resulted in the development of Bio 4342, "Research Explorations in Genomics" and in Sarah's first $1 million Professor's grant from HHMI in 2002. Sarah was one of 20 professors[1] awarded this funding to bring life science research into undergraduate and high school classrooms. Co-taught with colleagues Dr. Elaine Mardis of Washington University's Genome Sequencing Center and Dr. Jeremy Buhler of the Department of Computer Science and Engineering, students in Bio 4342 worked as a team on a large-scale sequencing project that began with sample preparation and data collection and ended with sequencing finishing and analysis.

This funding also incorporated other projects including a bioinformatics lab (Bio 3055) where students worked on another team-based project – exploring how a particular mutation affects a change in phenotype – and the development of a video to offer students the opportunity to tour the Washington University Genome Sequencing Center. The objective was to enable students (and teachers and the public) who may not be near this kind of Center to get a close-up look at the equipment and high through-put sequencing techniques used to sequence the human genome.

1 Elizabeth W. Jones, former Editor-in-chief of *GENETICS* and GSA Past President (1987), who was the first recipient of the GSA Excellence in Education Award in 2007 and for whom the award was renamed in 2008 after her death, was also a 2002 recipient of an HHMI $1 million grant.

Genomics Education Partnership Launched


Sarah C.R. Elgin

In 2006, Elgin was one of eight scientists to have her HHMI funding renewed in order to sustain and disseminate those aspects of her 2002 grant that worked best. Marrying the idea of a web-linked national community with an undergraduate genomics research class, Sarah collaborated with a group of interested college faculty to formulate the Genomics Education Partnership (GEP). "This approach provides students who may not be at institutions where a Genome Sequencing Center is around the corner, or whose school may have limited funding for a genomics lab, with an opportunity to be part of genomics research," Sarah explained. The Partnership is based on the Bio 4342 model, where students focus on improving DNA sequence quality and generating hand-curated gene models in Drosophila species. But instead of just having one class at WUSTL working on this, there are students at more than 40 colleges and universities nationwide having this genomic lab experience. The DNA sequencing for all the GEP participants is coordinated across institutions at the Washington University Genome Sequencing Center. The beauty of this partnership, Sarah explained, is that the lab experience "can be modified by the faculty partners at each of the participating institutions to fit their students' needs and scientific background. We teach the same tools, but everyone in a class tackles a different problem. There is commonality with others as students are working on segments of the same chromosome, so they help each other."

What, specifically are students doing? "Students are improving the sequence and carefully annotating the dot [Mueller F element] chromosomes from different species of Drosophila, starting with AAA data. The chromosome is subdivided into fosmids – a chunk of DNA – that has ambiguities or gaps that they must identify and resolve using Consed software," Sarah explained. Designing primers to generate additional sequencing reactions (carried out at WUSTL's Genome Sequencing Center), students generate data to determine the sequence in the gaps to polish their fosmid. Students then generate detailed gene models using comparison to *D. melanogaster* and other evidence, and analyze repeat density and chromosome organization. Pooled results are being used for a scientific publication.

The class, as is indicated by the number of partners in the GEP, is wildly successful. Why? It all comes down to "responsibility," said Sarah. "There is an added sense of responsibility because the information students generate will go back to GenBank, FlyBase and other databases. Students realize they're building on something that already exists and that has standards that their work has to live up to." In other words, annotating or sequencing a chunk of DNA isn't just an exercise for a class grade. It's a real genomics problem that researchers world-wide are working on to which the students are contributing.

Of course the collaborative element isn't just among the diverse group of participating schools that range from big city schools like San Francisco State University in California to small schools like Macalester College in St. Paul, MN. The collaborative element includes providing training for the faculty and their teaching assistants for the course. Washington University TA's are upper-class students who have already been through the class and have mastered the process of sequence improvement and annotation and understand how to use the computer software. WU TA's, who receive a small stipend, help at a one-week summer workshop for faculty who wish to join the GEP and learn how to use the software along with teaching tools. It was, Sarah said, "a stroke of genius to have the workshops for faculty taught [in part] by students so they could show the faculty what they're doing." In addition, new partner school TAs have a separate one-week workshop to learn the skills they'll need to assist students.

Again, said Sarah, it's the training and collaboration which ensures the success of the GEP. "New participants get training, access to materials, communication and support. You must have support if you want everything to work smoothly. We now have a great cadre of experienced faculty who share their expertise on our website, as well as key staff members Wilson Leung and Chris Shaffer at WU."

But the real achievement of the GEP said Sarah "is the process." For undergraduate students, particularly those who are interested in science, it is "so important for them to understand how new knowledge is created in the field." By participating in the GEP students have a Web-based research experience that is part of the professional arena.

Future Visions

Sarah, who is "honored" to receive the Elizabeth W. Jones Award for Excellence in Education, has too much energy and too many ideas to rest on her laurels. She's already working on future funding to sustain and grow the partnerships. Using the GEP as a model, "there is the potential for the GEP to group with other student-scientist partnerships using different model systems. Genomics can be a cost-effective research tool for the faculty. And, by having students engaged, they get the benefit of the intellectual challenges that students provide," Sarah added.

In addition, as a long-time member of GSA, Sarah has a recommendation for the Society "to build up opportunities for undergrads. I would urge the GSA Board to have a workshop and poster session on education, and programming for undergrads at their meetings. I

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THE AMERICAN SOCIETY FOR CELL BIOLOGY

49th ANNUAL MEETING

December 5–9, 2009

San Diego Convention Center
San Diego, CA

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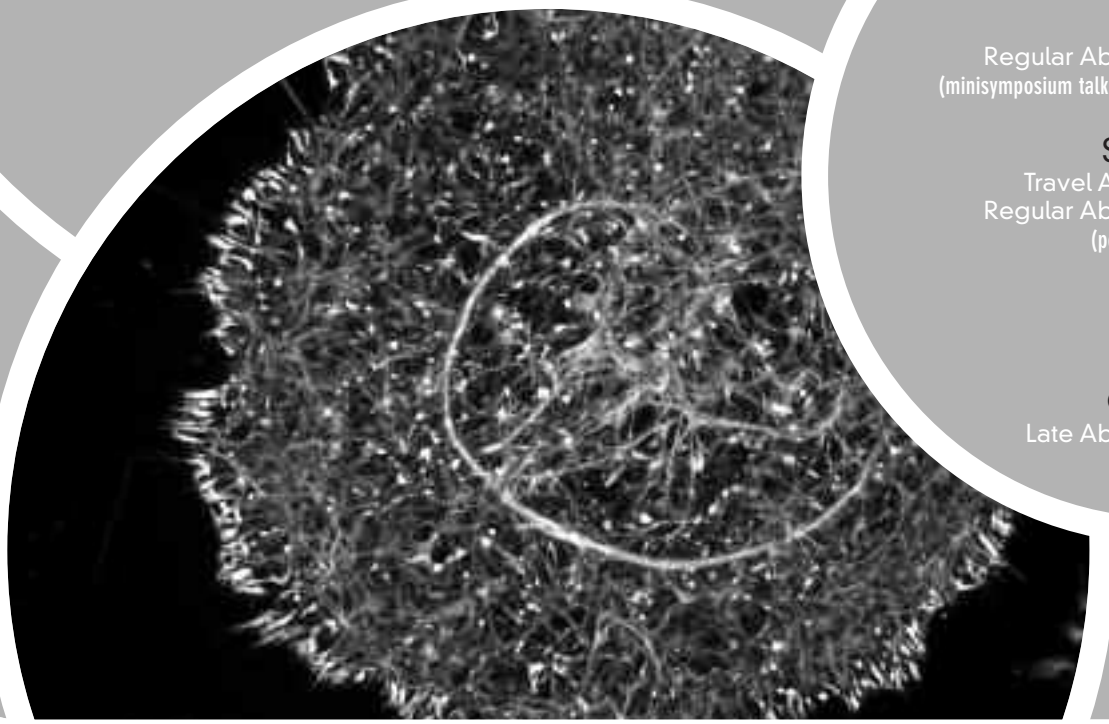

IMPORTANT DEADLINES

JULY 30
Regular Abstract Submission
(minisymposium talk or poster consideration)

SEPTEMBER 1
Travel Award Application
Regular Abstract Submission
(poster consideration only)

OCTOBER 1
Early Registration

OCTOBER 15
Late Abstract Submission

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The Genetics Society of America extends its thanks to the nearly 100 members who have made a financial contribution to the Society from December 2008 to March 2009. These donations help the Society support travel grants and educational opportunities for graduate students and postdoctoral fellows at GSA-sponsored meetings.

Please join your colleagues in supporting the next generation of geneticists by making a donation to GSA with a check made payable to "The Genetics Society of America" with "donation" written in the memo. Or, donate online at the GSA website, www.genetics-gsa.org/pages/donate_gsa.shtml. We thank you in advance for your consideration.

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Katsuhiko Shirahige, Toyko Inst of Tech, Yokohama City, Japan
Lyudmila Sidorenko, Univ of Arizona, Tucson
Leslie Stevens, Univ of Texas at Austin
Barbara J. Taylor, Oregon State Univ, Corvallis
Emily Ann Whiston, Univ of California, Berkeley
Mariana F. Wolfner, Cornell Univ, Ithaca, NY
Stephan G. Zweifel, Carleton College, Northfield, MN

Fungal Genetics Celebrates Silver Jubilee

by Francine Govers, Co-chair, Scientific Program, 25th Fungal Genetics Conference and Wageningen University, Wageningen, The Netherlands.

This year's Fungal Genetics Conference held March 17–22, 2009, at the Asilomar Conference Grounds in Pacific Grove, California was a double milestone. First, because it celebrated the silver anniversary of this biennial conference and second, because it had the largest number of participants ever; nearly 950 participants from 33 countries and 40 US states attended.

Previously, the conference center capacity limited the number of participants to 750. This year, adjustments were made to accommodate a larger crowd by broadcasting plenary sessions to Chapel, the second largest meeting hall at Asilomar. With more comfortable chairs and two excellent projection screens, many participants felt that Chapel was the place to be and the wish of many fungal geneticists, to increase in size but stay at the same location, was fulfilled.

The Fungal Genetics Meeting began as the *Neurospora* Information Conference in 1961 under the auspices of the National Academy of Sciences and the National Research Council. In the 1980's the conference grew by accretion with the inclusion of other fungal model systems and morphed permanently in 1986 into the Fungal Genetics Conference with a permanent venue at the Asilomar Conference Grounds.

In the previous issue of *GENEtics* co-chair, Jay C. Dunlap, announced this meeting as "something for everyone." Indeed, the 20 plenary talks distributed over four topics (Genome Evolution and Dynamics, Gene Regulation and Metabolism, Signaling, Development and Sex, and Pathogenic and Symbiotic Interactions) covered a wide diversity of fungi and fungal look-alikes with a variety of habitats – saprophytes, pathogens of plants, humans and insects, mycorrhiza's, industrial fungi, etc. – and studied at various integration levels. In the afternoons, the 27 concurrent sessions with 215 talks offered even more diversity. Sessions centered around specific taxonomic groups of fungi (e.g., Zygomycetes, Dothiomycetes), technology (e.g., metabolics and proteomics, cool tools), model systems for biological processes (e.g., circadian rhythms, cell architecture, RNA silencing), evolution, industrial applications (e.g., biofuels, secondary metabolites), effectors and pathogenesis. And with nearly 675 posters on display, the evening poster sessions offered lively discussions.

This year instead of the traditional after-dinner banquet talk, there were pre-dinner drinks in Merrill Hall and Chapel followed by the awards ceremony and the first Perkins-Metzenberg or PM lecture. For outstanding posters, 10 GSA Poster Awards and more than 20 Eukaryotic Cell Young Investigator's Poster Awards were given to students, who reflected the international diversity of this conference. The Perkins Awards to Keyur K. Adhvaryu, Kristina M. Smith and William Alexander for best contributions by students/postdocs working on Neurospora was announced and the 2009 Metzenberg Award for outstanding contributions to Neurospora research was presented in absentia to Prof. Hirokazu Inoue (Saitama University, Japan). This recognized his lifetime achievements studying DNA repair and his description of strains that promote homologous integrations, a discovery that has benefited so many in the fungal genetics community.

Last but not least, Jay C. Dunlap (Dartmouth Medical School, Hanover, NH, and GSA board member) was honored with the George W. Beadle Medal from the GSA for outstanding contributions to the community of genetics researchers. He is a driving force within the *Neurospora* community and his research on circadian rhythms in *Neurospora* has impact on organisms other than just fungi.

The first PM lecture by Prof. Claudio Scazzocchio (Université de Paris-Sud, France) provided an entertaining historical overview of fungal genetics that started with the fall of the Greek philosopher Aristotle and featured the Morris and Timberlake schools next to his own Cambridge gang.

Unfortunately, the Amplified DNA Band was unavailable to grace the traditional closing dance party but thanks to Anne Marie Mahoney (GSA Meetings Manager) there was a terrific alternative that kept three generations on the dance floor past midnight.

The scientific program for the 25th FGC was organized in collaboration with the Fungal Genetics Policy Committee (FGPC) and the Fungal Genetics Stock Center (FGSC). The FGPC included: Jim Kronstad (chair), Michelle Momany, Anne Osbourne, Kathy Borkovich, John Taylor, Barbara Howlett, Barbara S. Valent, Neil Gow, Nicholas J. Talbot, Marc Orbach, Mike Plamann, and Kevin McCluskey. At the meeting three new FGPC members were elected to replace Michelle Momany, Anne Osbourne and Jim Kronstad: Barry Scott, Eric Selker and Francine Govers. Kathy Borkovich is the new FGPC chair. The full meeting program with abstracts can be accessed via the FGSC at http://www.fgsc.net/25thFGC/FGC25.htm.

Linda Kohn (University of Toronto, Mississauga) and Steve Osmani (Ohio State Univ, Columbus) will be the scientific program chairs for the 26th FGC in March 2011.

1 L to R: Francine Govers (Wageningen Univ, The Netherlands) and Jay Dunlap (Dartmouth Medical School, Hanover, NH and GSA Board member), the Scientific Co-chairs of the 25th Fungal meeting. **2** Sherry Marts, GSA Executive Director (L), talking with Deborah Bell-Pedersen (Texas A&M Univ, College Station) and Katherine Borkovich (UC-Riverside) **3** Jim Kronstad (Univ of British Columbia, Vancouver, Canada), chair, Fungal Genetics Policy Committee during a break. **4** From L to R: Neil Gow (Univ of Aberdeen, UK), Michelle Momany (Univ of Georgia, Athens), and Ted White (Seattle Biomed Res Inst, Washington) during a coffee break. **5** L to R: Matt Sachs (Texas A&M Univ) and Martha Merrow (Univ of Groningen, Haren, The Netherlands) **6** William Alexander (Univ or Missouri, Columbia), winner of the Perkins Award, being presented by Yi Liu (Univ of Texas SW Med Ctr, Dallas) with a Fungal Genetics t-shirt in addition to the Perkins Award. **7** Claudio Scazzocchio (Univ de Paris-Sud, Orsay, France), the presenter of the first Perkins-Metzenberg lecture. **8** L to R: Yi Liu (Univ of Texas SW Med Ctr.) presenting the Robert Metzenberg Award to Shuuitsu Tanaka (Saitama Univ, Japan) on behalf of Hirokazu Inoue (Saitama Univ, Japan), winner of the 2009 award. **9** L to R: Joan Bennett (Rutgers Univ) with Matt Sachs, (Texas A&M Univ, College Station). **10** Gloria Turner (UCLA) presenting at the meeting. **11** Mark Orbach (Univ of Ariz, Tucson) (L), and Sherry Marts, GSA Executive Director (2nd from R) with three of the GSA Poster Awardees. **12** From L to R: GSA Meetings Organizer Anne Marie Mahoney with Jennifer Loros (Darmouth Med Sch, Hanover, NH). **13** Sherry Marts, GSA Executive Director with Kathy Borkovich (UC-Riverside), incoming FGCP chair and Debbie Bell-Pederson (Texas A&M Univ, College Station) presenting Jay Dunlap, co-chair of the 25th Fungal Meeting and GSA Board Member, with the 2009 GSA George W. Beadle Medal. **14** L to R: Stuart Brody (UCSD) and Eric Selker (Univ of Oregon, Eugene) during a break in the sessions. Photos by Matt Sachs ©2009.

Hirokazu Inoue (Saitama Univ, Japan) holding the Robert Metzenberg Award plaque at home in Japan. Photo courtesy of Hirokazu Inoue.

Ten Grad Students Receive GSA Poster Awards at Fungal Meeting

Ten graduate students, representing universities on four continents were recipients of GSA poster awards at the 25th Fungal Genetics Conference on March 17-22, 2009. Their posters were chosen from among more than 600 posters submitted and the award was based on the outstanding quality of their scientific research reflected on their posters and in discussions with judges. Each student received $100 (U.S.) award from the Genetics Society of America.

The recipients, their institution, and the title of their research abstract and principal investigator or adviser are as follows:

Angelique C. Franken

Dervla Isaac

Sali Atanga Ndindeng

Pallavi A. Phatale

Manjinder Singh Cheema, Simon Fraser University, Burnaby, British Columbia, Canada. "Naturally occurring variation in virulence in *Aspergillus nidulans* (565)." Cheema's adviser is Julian Christians.

Angelique C. Franken, Leiden University, The Netherlands. "The heme biosynthetic pathway in *Aspergillus niger* (380)." The Principal Investigator on this project with Franken was C. A. M. J. J. van den Hondel.

Sonja H. Frieser, Philipps-University Marburg, Germany. "Cdc24-induced Rac1 GDP/GTP cycling is required for establishing cell polarity in *Ustilago maydis* (314)." Michael Boelker is the Principal Investigator on this project.

Dervla Isaac, University of California, San Francisco. "*Histoplasma capsulatum* actively triggers host cell lysis during macrophage infection (664)." Anita Sil is Isaac's adviser on this project.

Anne Jeziorowski, University of Melbourne, Victoria, Australia. "The role of TOS9 domain proteins during growth and morphogenesis in the dimorphic human pathogen *Penicillium marneffei* (227)." Jeziorowski's adviser was Alex Andrianopoulos.

Shiv Dutt Kale, Virginia Bioinformatics Institute, Virginia Polytechnic Institute and State University, Blacksburg. "Cell-entry motifs of effectors from three eukaryotic kingdoms bind a common receptor family (506)." Brett M. Tyler is the Principal Investigator on this project.

Sali Atanga Ndindeng, Hokkaido University, Sapporo, Japan. "DNA homologous recombinational repair genes are involved in growth and pathogenicity of *Magnaporthe oryzae* (514)." Teruo Sone serves as Ndindeng's adviser on this project.

Laura H. Okagaki, University of Minnesota, Twin Cities. "Morphogenesis and in vivo pheromone signaling in fungal pathogen *Cryptococcus neoformans var. grubii* (547)." Kirsten Nielsen was Okagaki's Principal Investigator on this project.

Pallavi A. Phatale, Oregon State University, Corvallis. "Signatures of adaptive evolution in centromere proteins of filamentous fungi (261)." Phatale's advisor on this project was Michael Freitag.

William Rittenour, University of Nebraska-Lincoln. "Cell surface organization in the wheat pathogen *Fusarium graminearum* (326)." Rittenour's adviser is Steven D. Harris.

The abstracts of the titles listed above can be found beginning on page 87 at: http://www.fgsc.net/25thFGC/25thFGCabstracts.pdf . Abstract numbers are in parentheses following the title.

Manjinder Singh Cheema

Sonja H. Frieser

Shiv Dutt Kale

Laura H. Okagaki

William Rittenour

2010 Millennium Technology Prize Applications Available

Nominations are being accepted for the 2010 Millennium Technology Prize, a biannual award of €1 million "given to a groundbreaking innovation that promotes people's quality of life, contributes toward the realization of humane values and encourages sustainable development." The prize, awarded by the Technology Academy Foundation, an independent fund established by Finnish industry and the country of Finland, welcomes candidates from all over the world who are in all fields of technology.

To learn about past award recipients and for information about the 2010 Millennium Technology Prize, the nomination process, and an online application, please see the website, www.millenniumprize.fi.

The application deadline is Thursday, October 1, 2009.

History Highlights Drosophila Golden Anniversary

by John Carlson, Lynn Cooley & Rick Fehon, 2009 Drosophila Organizing Committee.

A major milestone was celebrated by the Drosophila community this year: the 50th Annual Drosophila meeting. More than 1500 Drosophila researchers convened in Chicago from March 4-8, 2009, and the occasion was marked with a special historical panel discussion. The panel, featuring prominent members of the Drosophila community – Mel Green (UC Davis), Dan Lindsley (UC San Diego), Tony Mahowald (University of Chicago), Thom Kaufmann (Indiana University), and Ruth Lehmann (NYU/Skirball Institute) – was set up as a late night talk show, with couches for guests/speakers and a desk and chair for R. Scott Hawley (Stowers Institute), GSA Vice President who served as host/moderator. There was much good humor as well as recognition of the long history of sharing and collaboration that was established at the meeting 50 years ago and that has characterized the field. And the audience heard about the very first fly meeting, held 50 years earlier, directly from one of its five attendees – Dan Lindsley! In addition, a special T-shirt commemorating the 50th anniversary was distributed to all attendees.

Numerous awards were presented at this meeting, including the Larry Sandler Memorial Award, presented each year for the most outstanding Ph.D. thesis in an area of Drosophila research. This year, Tim Weil of Princeton University, whose advisor was Liz Gavis, gave the Sandler Lecture opening lecture. He described his elegant analysis of *bicoid* mRNA transport and localization in live oocytes.

1 Poster presenter Maria Florencia Tevy (Fondazione Telethon) with colleagues during a poster session.

2 Mitchell S. Dushay (Illinois Inst of Tech), R, talking with a colleague at a poster session.

3 From L to R: Ruth Steward (Waksman Inst, Piscataway, NJ) with Indira Paddibhatia (City College of New York), Chiyedza N. Small (CUNY) and Marta E. Kalamarz (CUNY).

4 Antonio Marco (Ariz State Univ, Tempe) discussing a poster with another participant.

5 During the Opening Historical Session, from L to R: Mel Green (UC-Davis), Dan Lindsley (UCSD), Thom Kaufman (Indiana Univ, Bloomington), Tony Mahowald (Univ of Chicago, IL) , Ruth Lehmann (HHMI/NYU) and Scott Hawley (Stowers Institute).

Two Drosophila researchers were recipients of prestigious GSA awards this year, and the presentation of these awards was another highlight of the opening session. Sarah C. R. Elgin (Washington University, St. Louis) received the Elizabeth W. Jones Award for Excellence in Education, and Kent Golic (University of Utah, Salt Lake City) was awarded the 2009 Edward Novitski Prize, (which he shares with Rodney J. Rothstein, Columbia University, New York City,) for his technological innovations that have transformed Drosophila research.

Organized by Lynn Cooley (Yale University), John Carlson (Yale University), and Rick Fehon (University of Chicago), the meeting featured a full complement of plenary sessions, platform talks, poster sessions, workshops, demonstrations, social sessions, exhibits, and networking. There was also a special presentation from the Coalition for the Life Sciences on how genetic researchers can advocate for governmental support for basic research.

More than 850 posters were presented, and during the final session on Sunday, GSA Poster Awards were presented to three graduate students and three postdocs (See page 16).

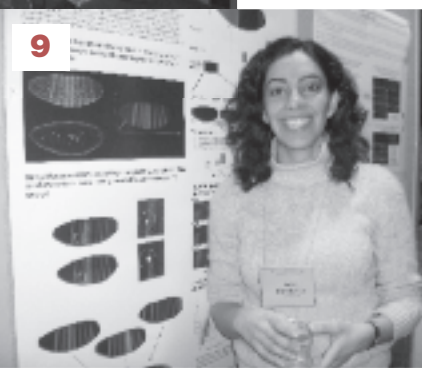
Three remarkable visual images were honored. The winner of the 2009 Image Award was Amy McMahon for her work published in "Two-photon microscopy and analysis of Histone2A-GFP expressing embryos captures key events in gastrulation" by McMahon, Supatto, Fraser, Stathopoulos in *Science* 322, 1546 (2008). Two awards to runners-up were also presented. To see these winning images and those of the eight finalists, visit http://www.drosophila-images.org/2009.shtml.

Some of the highlights of the meeting are illustrated on the following pages of photographs. Additional photographs can be seen at the GSA website, www.drosophila.conf.org/2009/photos/.

Mark your calendar now for the 51st Annual Drosophila Meeting to be held in Washington, D.C., April 7-11, 2010.

8 Mel Green with students at the 50th Drosophila Meeting.

9 Zeba Wunderlich (Harvard Med Sch, Boston, MA) at her poster.



10 From L to R: Scott Hawley, GSA Vice-President (Stowers Institute of Medical Research, Kansas City, MO) presenting the 2009 Novitski Prize to Rodney J. Rothstein (Columbia Univ Med Ctr , NYC), co-recipient of the award.

11 During a break, participants chatting and working on their laptops.

12 Students and mentors at the Student-Mentor Luncheon.

6 From L to R: Sherry Marts, GSA Executive Director and Scott Hawley present the 2009 Elizabeth W. Jones Award for Excellence in Education to Sarah C. R. Elgin (HHMI/Washington Univ, St. Louis, MO).

7 Right, Esther Verheyen (Simon Fraser Univ, Burnaby, BC, Canada) with students at the Student-Mentor Luncheon.

Grad Students & Post Docs Receive GSA Poster Awards at Dros Meeting

Three graduate students and three postdoctoral fellows received poster awards from GSA at the 50th Annual Drosophila Research Conference, March 4-8, 2009. The students and postdoctoral fellows received these awards based on the outstanding quality of the scientific research reflected on these posters and in discussions with a team of judges. First awards are for $500, second are $300 and third are $200.

The recipients, their institution and the title of their research abstract are as follows:

First Award

- **Frederick Ling**, graduate student, Yale University, New Haven, Connecticut. "Functional and molecular analysis of tarsal gustatory sensilla" (617B). Ling's advisor is John Carlson from the Yale department of Molecular, Cellular and Developmental Biology.

- **Stefan L. Ameres**, postdoctoral fellow, University of Massachusetts Medical School, Worcester, Massachusetts. "Small RNA-target RNA interactions determine the stability of small silencing RNAs in Drosophila" (801C). Phillip D. Zamore was the Principal Investigator on this project.

Frederick Ling

Stefan L. Ameres

Second Award

- **C. Nien**, graduate student, New York University, New York, New York. "The Zinc-finger protein Zelda is a key activator of the early zygotic genome in *Drosophila*" (678C). Christine Rushlow is Nien's adviser.

- **Elena Lucchetta**, postdoctoral fellow, The University of Chicago, Illinois. "Microfluidcs to Determine Mechanisms of Cell Cycle and Patterning Compensation Due to Environmental Perturbations" (904A). Rustem F. Ismagilov served as Lucchetta's advisor on this project.

C. Nien

Elena Lucchetta

Third Award

- **Mathew Logan Johnson**, graduate student, Case Western Reserve University, Cleveland, Ohio. "PPS is co-transciptional contributor to *Sex-lethal* alternative splicing regulation" (810C). Johnson's advisor on this project was Helen K. Salz.

- **Kevin Legent**, postdoctoral fellow, New York University Medical Center, New York, New York. "A mosaic screen for X-linked mutations affecting photoreceptor differentiation" (248B). Legent worked in the Jessica Treisman lab at the Skirball Institute of Biomolecular Medicine.

Mathew Logan Johnson

Kevin Legent

The abstracts of the titles listed here can be found at: http://www.drosophila-conf.org/2009/abstracts/search.html. Search by abstract number in parenthesis.

From the June Issue of *GENETICS*

Genetic architecture of tameness in a rat model of animal domestication, pp. 541–554

Authors: Frank W. Albert, Örjan Carlborg, Irina Z. Plyusnina, Francois Besnier, Daniela Hedwig, Susann Lautenschläger, Doreen Lorenz, Jenny McIntosh, Christof Neumann, Henning Richter, Claudia Zeising, Rimma Kozhemyakina, Olesya Shchepina, Jürgen Kratzsch, Lyudmila Trut, Daniel Teupser, Joachim Thiery, Torsten Schöneberg, Leif Andersson and Svante Pääbo

Using two lines of rats bred for tameness and aggression towards humans, these investigators map the genetic basis of those traits. They identify a network of five interacting genomic regions underlying tameness and aggression. They also find other regions of the genome that influence behavioral, anatomical and physiological traits. These regions provide starting points for identifying genes underlying tameness.

Segmental duplications contribute to gene expression differences between humans and chimpanzees, pp. 627–630

Authors: Ran Blekhman, Alicia Oshlack and Yoav Gilad

These investigators find that species-specific segmental duplications are enriched with genes that are differentially expressed between humans and chimpanzees. Their observations suggest that the expression level of genes lying within species-specific segmental duplications is affected by different proximal *cis*-regulatory elements compared to the orthologous genes in their original genomic location.

Reciprocal silencing, transcriptional bias and functional divergence of homeologs in polyploid cotton (Gossypium), pp. 503–517

Authors: Bhupendra Chaudhary, Lex Flagel, Robert M. Stupar, Joshua A. Udall, Neetu Verma, Nathan M. Springer and Jonathan F. Wendel

These investigators seek to understand how genome merger and doubling (polyploidy) have impacted evolution of gene expression in natural and synthetic cotton allopolyploids and in an F_1 hybrid. These plants contain two genomes that evolved in isolation for millions of years but are now reunited in a common nucleus. The pace of expression evolution is estimated by measuring the relative contributions of the two genomes to the transcriptome. This reveals tissue-specific, biased expression patterns, gene silencing, and significant expression perturbation caused by hybridization and allopolyploidization. Notably, silencing and biased expression of some gene pairs is suggestive of transcriptional subfunctionalization and neofunctionalization.

Coordinated regulation of heterochromatic genes in *Drosophila melanogaster* males, pp. 481–491

Authors: Xinxian Deng, S. Kiran Koya, Ying Kong and Victoria H. Meller

Highly differentiated sex chromosomes pose some tricky problems. One is the difference in gene copy number in males and females. Male flies address this problem using a complex of proteins and RNA that modifies the X chromosome to increase its transcription. Unexpectedly, some (but not all) members of this complex also influence expression of heterochromatic regions in male flies. The authors propose that this reveals a system that accommodates the large, heterochromatic Y chromosome. While the differentiated Y chromosome is known to influence other heterochromatic regions, this is the first indication of a system to counteract its effect.

Selection for chaperone-like mediated genetic robustness at low mutation rate: Impact of drift, epistasis and complexity, pp. 555–564

Authors: Pierre-Alexis Gros and Olivier Tenaillon

How can we explain that most organisms are unaffected by most mutations? Current theory predicts that such genetic robustness can be selected only in organisms having high mutation rate and population size, such as RNA virus. The authors show that genetic drift, *i.e.*, stochastic variations of reproductive success, can be a sufficient force for robustness selection, even when the mutation rate becomes vanishingly small. This process, enhanced by phenotypic complexity and small population size, should be universal, as illustrated by computer simulations and endosymbionts evolution.

Precise gene-dose alleles for chemical genetics, pp. 623–626

Authors: Zhun Yan, Nicolas M. Berbenetz, Guri Giaever and Corey Nislow

Chemicals (*i.e.*, small molecule probes) can be employed as proxies for conditional mutations. For this study, the authors devise a strategy to combine chemical and other perturbations to turn yeast cells into phenotypic potentiometers. Specifically, they create sets of alleles of budding yeast and dialed-down gene dose to show that the gene-dose response of these alleles behaves exactly as one would expect for a drug-dose response.

From the President's desk:

Continued from page 1

there is the strong prospect of increased NIH funding, an issue of importance to many of us. There has been active discussion in the research community on the value of large-scale NIH Roadmap projects versus RO1-based, investigator-initiated research. (For example, see letters regarding the NIH Epigenomics Roadmap in Science **322**: 43 and Science **322**: 853.) In addition to CLS' advocacy, the GSA board of directors believes that GSA should directly advocate for funding genetics research. Therefore, we plan to communicate with the appropriate NIH institute directors about the direction of this funding during 2009. To make your voices heard and to keep science funding and policy issues at the forefront of the congressional debate, we urge GSA members to work with us by joining the Congressional Liaison Committee of the CLS at http://www.coalitionforlifesciences.org/clc.cfm.

At our board meeting, the GSA also set new education goals, particularly in the area of undergraduate education. These goals include providing resource links at the GSA website for teaching key concepts in genetics and for faculty development in genetics education. Sue Lovett, GSA Board Member and chair of the GSA Education Committee, outlined the first step toward achieving our undergraduate education goals is to find people who will commit their time and expertise in helping us with this outreach. Toward this end, the GSA Board voted to add two new members to the Education Committee this year and two more in 2010, recruiting GSA members who have both experience and interest in undergraduate genetics education. We welcome your recommendations of suitable individuals to take their place on the GSA Education Committee (e-mail smarts@genetics-gsa.org with names of qualified individuals). Other plans call for increased education features at the GSA website and in this newsletter. To increase ties between the GSA and undergraduates, the board voted to create a new undergraduate membership category with a low rate of $25/year.

As always, at the board meeting there was much information and discussion about our journal, *GENETICS*. As emphasized by Editor-in-chief Mark Johnston in his February editorial, *GENETICS* is peer-edited, ensuring fair and rapid review of manuscripts. The new editorial structure at *GENETICS*, with a board of senior editors, has resulted in much more rapid review. *GENETICS* Executive Editor Tracey DePellegrin Connelly reported that since the new editorial structure has been implemented, the average time from manuscript submission to first decision has shrunk dramatically, to 31.6 days. Thus, turnaround time at *GENETICS* is now better than at many other journals. There are other significant changes at *GENETICS*, including a new Perspectives section, edited by Adam Wilkins, former editor of Bioessays, and a new section for papers about novel methods or resources. Additional changes will be reported later this year. Our goal is to produce a journal that attracts the best work in genetics.

Finally, the GSA continues to play a prominent role in the sponsorship of meetings. Plans are underway for the 2010 GSA meeting, "Genetic Analysis: Model Organisms to Human Biology," to be held in Boston on June 12-15, 2010. More announcements will be coming over the next few months about what promises to be an exciting meeting.

Having just read about the recent changes and future plans for the GSA, please send me your feedback and thoughts. The Board and I welcome your participation in our continuously evolving society.

Best regards,

Fred Winston
President
society@genetics-gsa.org

Happy Birthday Gregor Mendel

JULY 20, 1822

Public Policy Update:

Continued from page 20

Coalition for the Life Sciences Launches New Website

GSA members are invited to visit our new website at http://www.coalitionforlifesciences.org/. Look Under "Be An Advocate" on the CLS homepage and see how just 10 minutes of your time can help make a difference in science policy. Sign up to be on the Congressional Liaison Committee, a free internet service of the CLS, to receive legislative alerts on issues affecting biomedical research.

Congressional Biomedical Research Caucus Presentations

From time-to-time the Congressional Biomedical Research Caucus (CBRC) provides presentations to broaden the support and knowledge of basic and clinical biomedical research issues throughout the Congress in a bipartisan manner. The CBRC is a bipartisan, bicameral Caucus and takes no dues from its members. Seventy-five members of the House of Representatives and nine members of the Senate comprise the Caucus membership with Brian Bilbray (R-CA), Michael Castle (R-DE), and Rush Holt (D-NJ) serving as co-chairs.

Among the most recent presentations were Dr. Leslie Vosshall of Rockefeller University who spoke on "New Approaches to Preventing Epidemics Transmitted by Mosquitoes" on May 13th and Nobel Laureate and GSA member, Dr. Martin Chalfie who discussed his cutting-edge research in a presentation entitled "Molecules to Spy on Cells," on May 20th. Videos of some of the past Caucus presentations can be seen on the Coalition for the Life Sciences website at http://www.coalitionforlifesciences.org/cbrc.

The Coalition for the Life Sciences (CLS) sponsors the Congressional Biomedical Research briefings. If you plan to be in Washington when a Caucus is scheduled and are interested in attending, please contact Lynn Marquis of the CLS at lmarquis@jscpp.org.

E4: Energy + Enthusiasm in Genetics Education = Sarah C.R. Elgin

Continued from page 7

would love to see this for every GSA meeting."

"I don't know what the GEP will look like in the next go around," Sarah said. "There may be alumni workshops in the summer so students/faculty can work on articles for publication." And she added, "We've encouraged participating faculty to develop ideas for their own campus." But whatever iteration the next phase of her genomics project morphs into Sarah will surely provide the energy and enthusiasm to ensure training, collaboration and partnership in the program.

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Public Policy Update

by Lynn Marquis, Director, Coalition for Life Sciences

Obama's Nominee for Secretary of the Department of Health and Human Services Confirmed

Kansas Gov. Kathleen Sebelius, President Obama's choice to lead the Department of Health and Human Services (DHHS), was confirmed by the Senate on April 28, 2009. There was a push to get Sebelius confirmed as Secretary of DHHS prior to the Senate adjourning for a two-week district work period, but the Senate left town before finalizing her confirmation.

The DHHS was the last unfilled cabinet-level secretary position in part because Obama's first choice for HHS chief, former Senate Majority Leader Tom Daschle (D-S.D.), withdrew from consideration Feb. 3 amid controversy over tens of thousands of dollars in federal income taxes that he failed to pay on time.

DHHS is arguably one of the more important departments in the federal government. The DHHS critical mission includes protecting our nation's health and providing essential human services. In addition, it oversees such agencies as the Food and Drug Administration, Centers for Disease Control, Centers for Medicare and Medicaid Services, and of course the National Institutes of Health.

Kathleen Sebelius

Continued on page 19