

The American Fisheries Society

Genetics Section Newsletter

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President's message

There has been lots of exciting activity in the section these past few months. First, thanks to Wes Larson and Kristen Gruenthal we have a great new section website! Please see the note from Kristen for more information. We also have a new list serve, moderated by Andrew Whiteley, which can be accessed by emailing afsgenetics@afsmembers.org.



Meredith Bartron, AFSGS President

And, it's already time to start planning for the upcoming annual meeting in Quebec. There will be a few genetics-focused symposium and contributed paper sessions to attend, in addition to the many concurrent sessions throughout the week. See Jeff Olsen's article for more information about the genetics symposium, and thanks to the organizers for pulling them together. Based on a request at last year's meeting, we hope to have web-conferencing capabilities for the section meeting, and we are starting to plan our section social. If you have any interest in assisting with social planning, please contact me.

Hope to see you in Quebec City.

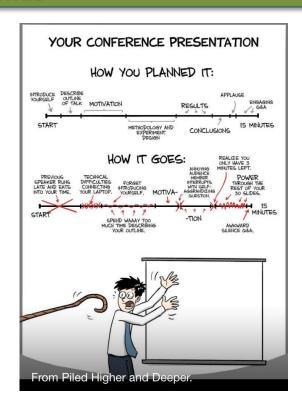
Sincerely,
Meredith Bartron

Announcements

Please Check Out the New AFS Genetics Section Website

The AFS Genetics Section website has been recently updated and can now be found http://afsgenetics.wordpress.com/. The new website is hosted by Wordpress, which allows authorized visitors to post content in a blog type format, and will be a great place to find the latest Genetics Section news and events, including upcoming meetings and award solicitations. Genetics Section members can also get access to current and past newsletters, see lists of officers and current member names, and get information on the Genetics Section mission, bylaws, and member benefits. The website was constructed and will be maintained by Kristen Gruenthal and Wesley Larson with guidance from the current Genetics Section President Meredith Bartron, the Genetics Section Executive Committee, and Lisa Seeb. Please check it out and contact Wesley Larson at wlarson1@uw.edu or Kristen Gruenthal at kristen.gruenthal@noaa.gov with any questions, comments, or suggestions.

Comic



Announcements



There is still time to submit abstracts (due March 14) for contributed oral and poster presentations at the annual AFS meeting in Quebec City, August 17-21. Please see the meeting website (http://afs2014.org/) for instruction and a link to the online submission site.

I encourage you to attend and participate in this years meeting. Over 40 symposia are planned in addition to contributed papers and posters. There will be genetics-themed symposia that focus on new frontiers and challenges in the application of genetic techniques and data to research, management and conservation of fishery and aquatic resources.

I hope to see you in Quebec,

Jeff Olsen President-elect AFS Genetics Section



Symposium announcement

2014 American Genetic Association Presidential Symposium



A lot has been written on this general theme in the last decade or so, but most people have focused on either evolution or plasticity, not both. This meeting will encourage contributions that jointly consider the range of adaptive responses populations can make to changes in their ecosystems (and what this means in a practical way to their probability of persistence), as well as contributions that look for patterns or contrasts across different taxa.

The meeting is expected to be fairly small (150-200), with a single session over 2 days, 20-24 talks of mostly 30 minutes each, and lots of posters. David Reznick from University of California, Riverside will present the Wilhelmine Key lecture as the keynote talk.

Please visit the AGA website for details and information about registration and housing: http://www.theaga.org/sample-page/aga2014/

Earlybird registration closes May 15

Student awards available

A list of invited speakers can be found at:

http://www.theaga.org/sample-page/aga2014/invited-speakers/

Because all sessions are plenary, most contributed presentations will be in the form of posters (deadline for poster abstracts is 15 April). However, I have saved a few speaker slots for contributed talks. If you are interested in being considered for a contributed talk, by **1 April** please send a 400-word abstract of the proposed talk, along with a one-paragraph explanation of how it would complement the theme of the meeting, to: robinw3@uw.edu, and put "AGA Contributed Paper" in the subject line. You will be notified by 15 April whether your talk is accepted; those not selected have the option to present a poster instead.

Robin Waples
AGA President

Workshop announcement

American Genetics Association Workshop

Escape from homeolog hell: Transmission genetics of salmonid fishes following whole genome duplication

We are organizing a two-day workshop as part of the American Genetic Association meeting in Seattle this coming June/July. The workshop will focus on understanding the transmission genetics of salmonid fishes and its application to constructing accurate genome maps of salmon, trout, char, whitefish, and grayling for use in population genomics.

Many papers are published each year on the aquacultural, population, or evolutionary genetics of salmonid fishes. This entire family underwent a whole genome duplication event some 25-50 million years ago. The meiotic behavior of duplicated chromosomes has presented many challenges to understanding the genetics of polyploid species (e.g., salmonid fishes, cotton, and wheat).

Early inheritance studies with allozymes in salmonids indicated that loci in the salmonid genome are inherited disomically. However, some pairs of duplicated loci show patterns of partial tetrasomic inheritance in males that can be explained only by recombination between homeologous chromosomes. Such homeologous exchanges present a conceptual and computational challenge to the construction of linkage maps. The difficulty of interpreting duplicated loci has led to these loci being excluded from many recent mapping studies and studies of population genomics. In addition, the observed excess of recombinant genotypes (so-called pseudolinkage) cannot be analyzed using any of the software programs designed to construct linkage maps in diploid species.

This two-day (30 June-1 July) workshop will meet following the two-day Presidential Symposium on Evolution and Plasticity organized by Robin Waples. Symposium details will be posted in February or early March on the AGA website (http://www.theaga.org/). We will limit participation to no more than 25-30 people at this workshop. The format will consist of a few invited overview presentations, as well as shorter presentations by other participants. Roy Danzmann, Willie Davidson, Michael Hansen, and Craig Primmer all have agreed to participate. Most of the time will be spent in open discussion.

Those who also attend the Presidential Symposium and stay in University of Washington housing can add two nights to their stay to attend the workshop. Others participants can choose from many nearby hotels in the University District including:

University Inn http://www.universityinnseattle.com/
Watertown Hotel http://www.watertownseattle.com/
College Inn h http://www.collegeinnseattle.com/
Hotel Decca http://www.hoteldeca.com/

The registration fee of \$150 will include lunches and breaks both days, as well as an evening barbecue with drinks. Please contact us as soon as possible if you are interested in participating in this workshop so we can secure your spot. More details will be provided after you contact us.

Calendar

MARCH 2014

14th Abstracts due. Annual AFS meeting. Quebec City, Quebec.

31st Abstracts due. American Society of Ichthyologists and Herpetologists (ASIH). Chattanooga, TN.

31st Abstracts due. 11th International Congress on the Biology of Fish. Edinburgh, Scotland.

APRIL 2014

7th-11th *Meeting.* Western Division of the American Fisheries Society annual meeting. Mazatlan, Mexico.

MAY 2014

15th Registration closed. American Genetics Association Presidential Symposium. Seattle, Washington

JUNE 2014

3rd-5th *Meeting.* Coastwide Salmonid Genetics. Juneau, Alaska

8th**-12**th *Meeting.* Society for Molecular Biology and Evolution (SMBE). Puerto Rico.

27th-29th Symposium. American Genetics Association Presidential Symposium. Seattle, Washington

30th- **July 1**st *Workshop.* American Genetics Association Workshop. Seattle, Washington

JULY 2014

7th-10th *Meeting.* Annual Symposium of the Fisheries Society of the British Isles: Integrated perspective on fish stock enhancement. Hull, England.

30th-Aug ^{3rd} *Meeting.* American Society of Ichthyologists and Herpetologists (ASIH). Chattanooga, TN.

AUGUST 2014

3rd-7th *Meeting.* 11th International Congress on the Biology of Fish. Edinburgh, Scotland.

17th**- 21**st *Meeting.* Annual AFS meeting. Quebec City, Quebec.

Courses

Graduate Level Field Course in Conservation Genetics

24 May- 8 June, 2014.

Las Cruces Biological Station, Costa Rica.

The course will be taught by Jim Hamrick of the University of Georgia. The course is accredited, meaning students that participate will receive 2.0 academic credits. For more information visit http://bit.ly/13AeiZC

Methods in Ecological and Evolutionary Genomics

June-July, 2014.

Mote Tropical Research Laboratory, Florida Keys. Are any of you interested in learning RNAseq, 2b-RAD, qPCR or meta-barcoding in the beautiful Florida Keys this summer? We are sending out a survey to determine which courses will gather the most interest since we can only offer three (~1 week long) courses. 1. tag-based RNA-seq 2. 2b-RAD 3. quantitative PCR 4. Meta-barcoding with amplicon sequencing If you are interested in participating in these workshops, please respond to this survey http://www.surveymonkey.com/s/5ftx7rs

2 Day qPCR Course

5-6 Dec, 2014.

University of Regensburg, Germany.

- . Entire qPCR workflow covered in two days
- Focus on gene expression (including microRNA)
- •.Theoretical background and practical hands-on data-analysis
- •. Complemented with training on Biogazelle¢s qbase+ software
- •. Focus on experiment design and data-analysis
- •. Attention for validation and quality control

For more information email: mariana.mondragon@biologie.uni-regensburg.de

Jobs

Graduate positions

Studentship: MS Graduate Research **Assistant Opportunity.** Agency: University of Alasks, Fairbanks, Alaska. Description: This project will explore ecological and evolutionary responses by sockeye salmon to climate change in the Kvichak River watershed of southwest Alaska. Responsibilities: The successful applicant will conduct analyses of historical long-term temperature and spawn timing data, spend time and work at remote field camps, and oversee a laboratory experiment to assess responses of incubating salmon embryos to varying temperature regimes. Closing date: Open until filled. Contact Person: Dr. Faulke and Dr. Westley. Contact email: Jefferey.Falke@alaska.edu pwestley@alaska.edu

PhD Studentship in Evolutionary Ecology of Arctic charr in Iceland. Agency: Hólar University College. Location: Iceland. Description: An ideal candidate has solid knowledge and interest in evolution, development and genetics and experience of fieldwork. The student has to be able to work independently, as well as a part of a larger group both in the laboratory and in the field. A M.Sc. degree is mandatory. The working language is English. Closing date: 1 May 2014. For further information contact Dr. Bjarni K. Kristjánsson, Professor and Head of Department of Aquaculture and Fish Biology Hólar University College. Contact email: bjakk@holar.is

PhD position on sturgeon. Agency: Lab. of Fish Genetics in Libechov, Dept. of Zoology, Charles University, Prague. Description: Gene expression analysis in highly polyploid and hybrid sturgeons in the Laboratory of Fish Genetics, Institute of Animal Physiology and Genetics (Libichov), Czech Academy of Sciences, Charles University (Prague), Department of Zoology and Laboratory of Molecular, Cellular and Quantitative Genetics, Faculty of Fisheries and Protection of Water, University of South Bohemia

(È.Budìjovice). For more information, visit: http://www.iapg.cas.cz/uzfg/index.php?p=3Dsekce&s ite=3Ddefault&id=3D12 or email symonova@natur.cuni.cz. Starting date: Oct 2014. Contact person: Mgr. Radka Symonová, Ph.D. E-mail: radka.symonova@natur.cuni.cz

Postdocs

The Royal Belgian Museum for Natural Sciences is looking for a: Post doctoral researcher April 2014 -February **2018.** Location: Brussels. Description: The successful candidate will work in the framework of a 4 year project financed by the Belgian Belspo Brain project: science policy, Belspo. "Behavioral and genomic aspects of cichlid **GENBAS** and **GFNetic** Basis speciation; Speciation". The proposal has two main objectives are to characterize the genomic differentiation that drives the speciation process, and to verify whether/and to what extent the same genomic changes are involved in to maintain the integrity of the gene pools of the resulting sister species.. Salaryaccording to experience. Closing date: 17 Mar 2014. Contact person: Erik Verheyen and Koen De Gelas. Contact email:

Erik.verheyen@natuurwetenschappen.be Koen.DeGelas@bio.kuleuven.be

Please send information on symposia, jobs, articles, and calendar events to Joy.Young@myfwc.com to see it published in the next newsletter!



Jobs continued

Professional

Fisheries Technician 1. Agency: Pacific States Marine Fisheries Commission. Location: North Coast, Fort Bragg, Bay Area, Monterey Bay, San Luis Obispo, South Coast, CA. Description: Identification of Pacific salmon to species Collecting fish lengths and biological data Performing frequent reconnaissance via visual observation, phone call or personal contact to determine fishing effort levels Collecting, transporting, or processing salmon snouts and/or heads in addition to biological samples such as scales and tissue samples Recording field data; reviewing, editing and submitting data, by mail and electronically, to field supervisor in a timely manner. Interacting with and responding to public questions about fishing regulations, fish identification, and other topics while in the field using material provided by the Department. Assisting with other project functions as needed, including data entry, data data cleanup, and equipment management, maintenance. Assisting other projects as needed, including collection of other fishery-dependent data. Closing date: 31 May 2014. Salary: \$12.11+/hr depending on port location.

Biometrician I/II. Agency: AK Dept of Fish & Game. Location: Waimanalo, Hawaii. Description: ADF&G is seeking a Biometrician to take a leading role analyzing biological data collected from stock and fishery assessment projects relating to Chinook salmon under the purview of the Pacific Salmon Treaty. This position works in cooperation with a team of international scientists on the U.S./Canada Chinook Technical Committee. Responsible for analyzing Chinook catch, escapement, coded-wire tag, and genetic stock identification data, and involved in writing computer code for statistical analyses. This position is based in Juneau and involves frequent travel. Salary: \$4505.00-\$5191.00/monthly. Closing date: 13 March 2014. Contact email: dani.evenson@alaska.gov. For more information http://agency.governmentjobs.com/alaska/default.cf

http://agency.governmentjobs.com/alaska/default.cf m?action=jobbulletin&JobID=805377

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