



# THE Open Reading Frame

Newsletter of the  
Genetics Section of the American Fisheries Society

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## Tampa Fish

Most fish species featured throughout this issue can be found in waters near Tampa, FL - The location of our upcoming annual meeting!



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## President's Message

Welcome to the summer edition of the Genetics Section newsletter. I hope everyone is having a great and safe summer.

The Section is getting ready for the AFS annual meeting in Tampa Florida August 20-24. The theme for this year's meeting is 'Fisheries

Ecosystems: uplands to oceans'. The Genetics Section is sponsoring symposia to honor the work of the work of two distinguished researchers; Dr. John Gold and the late Dr. Tim King, and we are co-sponsoring a session with the new Imperiled Aquatic Species Section entitled 'Imperiled Aquatic Species from Headwaters to Oceans: a Genomics Perspective'.

The Section's annual meeting is scheduled for Monday August 21st at 5:00 in the Tampa Marriott Waterside Hotel and Marina (at 700 South Florida Avenue, across the road from the Convention Center) room 13 on the third floor (see map on page 4 of this newsletter). The meeting will be followed by a social. Please stay tuned for details about the location of the social. Since this year's meeting will be smaller than others, the social will be informal this year; there is no host, no tickets required and all are welcome. As always, the Section will be presenting the Wright award, the Phelps award, and the early career award at the Section meeting. Please come out to show your support for the award winners... and maybe stay to buy them a congratulatory beverage. If you have any specific items you would like to see on the agenda, please let me know. The organizers are working hard to put together a great meeting and I hope to see you there.



Dr. Wendylee Stott  
AFSGS President

# Recipients of two Genetics Section co-sponsored travel awards announced

## AFS Western Division Travel Award Recipient - Hayley Nuetzel

Hayley Nuetzel, a PhD student at UC Santa Cruz received a travel award to the WDAFS meeting held in Missoula, Montana from May 23-25th. Hayley gave an excellent presentation entitled “Parentage Based Tagging of a Natural Coho Salmon Population to Assess Hatchery Influence” during the all-day Fifty Years of Fisheries Genetics: Allozymes to Genomes symposium organized by Fred Allendorf and Ryan Kovach. Hayley is pictured with Ryan Kovach after giving her presentation. The symposium highlighted the use of genetics and genomics theory and approaches to fisheries management and was a great success.



- Dr. Andrew Whiteley  
AFSGS President-Elect

Every scientific conference I have had the opportunity to attend thus far has been a fantastic whirlwind of networking and scientific discovery, with an underlying consensus that science truly flourishes when ideas are freely exchanged. The 42nd annual meeting of the Western Division – American Fisheries Society in Missoula, MT was no exception.

As a recipient of the Genetics Section Student Travel Award, I was not only able to attend the Western Division conference, but was also given the opportunity to present in a special symposium entitled “Fifty Years of Fisheries Genetics: Allozymes to Genomes.” This symposium was unique in its focus on integrating history and current advancements to understand how genetic and genomic data will continue to inform fisheries management and conservation.

I was swept into the genetics world as an undergraduate six years ago, and consequently missed the age of the allozyme and the microsatellite renaissance. In fact, my academic experiences have been largely influenced by the continual advancement and increased accessibility to high-throughput

sequencing. However, hearing many of the speakers in the symposium convey the continued utility of the genetic tools that preceded genome technologies allowed me to realize how narrowed my understanding of genetic methods has become. Fittingly, I think one of the greatest takeaways from the symposium was a word of caution: with the continual movement into the genomic era, it is increasingly important to assess all applicable methods and utilize those that generate the most robust data, rather than defaulting to the newest tool available.

As a second year PhD student, who is currently assessing the best methods to address my study questions, this message was particularly impactful. Given that I’m broadly interested in the process of speciation and generation of diversity in marine systems, I will undoubtedly employ genomic tools, such as RAD-seq and GWAS, as they will greatly contribute to our understanding of these eco-evolutionary processes. However, my experiences at the conference have encouraged me slow down and thoroughly consider my motivating questions, as well as the potential pitfalls and benefits associated with all relevant methods. Ultimately, this deliberate approach to study design will not only allow me to identify the most utilitarian technique, but will also strengthen my contributions to the field of population genetics and genomics.

I want to thank the Genetics Section for awarding me the Student Travel Grant, as well as the organizers of the “Fifty Years of Fisheries Genetics” symposium, Ryan Kovach and Fred Allendorf, for allowing me to participate in what was a truly invaluable learning experience.

- Hayley Nuetzel  
WDAFS Travel Award Recipient

## 13th Annual Coregonid Symposium Travel Award Recipient - Hannah LaChance

I am a 1st year Master's student at the University of Vermont studying climate change impacts on cisco egg and larval development through gene expression analysis. Before I entered my Master's program, I worked in various conservation facilities, schools, and research labs which focused on a range of topics including genetics and fatty acids. I used this time to help hone my research interests before entering a graduate program. I discovered I had a passion for wildlife research, more specifically, for research that aims to understand a problem that threatens the survival and sustainability of wildlife species AND aids in finding a solution to that problem. In addition to an interest in applied research, I also learned how fascinated I am with the interconnected web of ecosystems and how environmental factors can influence individual organisms as well as entire ecosystems.



While I continued to find lab work exciting, I felt a desire to branch into field work. After identifying my research interests, I came across an opportunity to work with Dr. Jason Stockwell on a project that would allow me to accomplish many of my research and graduate school goals. My Master's research focuses on potential impacts of climate change on cisco (*Coregonus artedii*) in Lake Superior. Cisco spawn in late fall and eggs incubate over winter before hatching in April and May. I am assessing how changes in winter environmental conditions, such as changes in underwater light and water temperature, may alter cisco egg development, hatch success, and subsequent larva survival. I am using transcriptomics to assess differences in gene expression as a function of light and temperature during incubation. Throughout my first semester I have learned a great deal about an ecosystem I previously knew very little about, added to my genetics expertise, and begun to dip my toe in field work and laboratory rearing of cisco. Over the next year and a half, I will continue to develop and strengthen my knowledge and skills in fisheries conservation research and collaborative science.

Attending the 13th International Coregonid Symposium is an excellent opportunity to meet potential collaborators, discover similar, pertinent research, and learn how I can implement my findings to help contribute to the larger goal of sustaining our diverse ecosystems. The symposium will be my first opportunity to attend an international meeting and to present my Master's research to the scientific community. Because my project has a strong genetics component, the conference will be an excellent opportunity to attend talks and meet with other professionals who have experience in coregonid genetics research. The conference is also the perfect setting to receive feedback on my pilot work prior to running my main experiments starting in December 2017. Thus far, I have connected via email and phone with Dr. Wendylee Stott, from the USGS Great Lakes Science Center. Dr. Stott has been an invaluable link to many genetics research projects in the Great Lakes region and I look forward to meeting her in person to further discuss our related projects, meet other potential collaborators from around the world, and brainstorm future projects. In addition to the research in the Great Lakes, I look forward to learning about the coregonid genetics work coming from Europe. Attending talks and meeting with these international geneticists will provide a unique and exciting opportunity for me to see alternative genetics approaches applied in lakes outside of the US. I want to thank the AFS Genetics Section for the travel award which will help me to obtain many of my scientific goals. I will forever be grateful for the wonderful opportunity.



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# AFS Annual Meeting Events

## Continuing education workshops

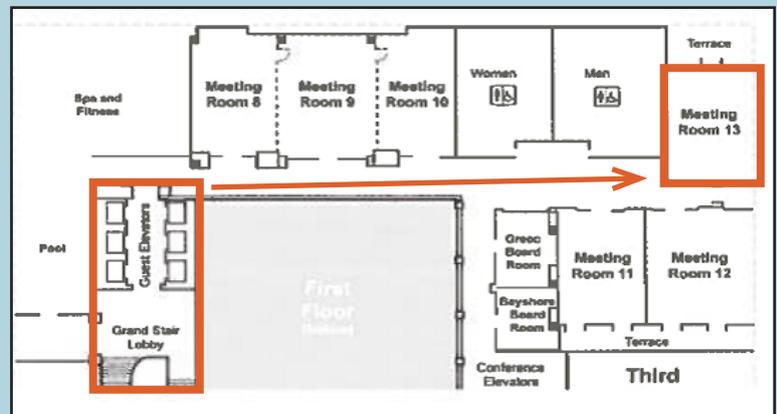
- Bayesian I: Intro to Bayesian Inference Using Gibbs Sampling (BUGS) for Fish Biologists
- Beginning/Intermediate GIS for Fisheries Scientists
- Advanced GIS for Fisheries Scientists
- Facilitation Training: Tips and Tools for Effective Stakeholder Engagement and Collaboration
- Age and Growth Analysis with R
- Human Dimensions Training: Survey Design and Implementation
- Leadership at All Levels in AFS
- Uncomfortable Conversations: Addressing Unintentional Bias in the Fisheries Profession
- Fort DeSoto Dune Habitat Rehabilitation and Overview of Tampa Bay Estuary Restoration Efforts

[Full course descriptions available here!](#)

## Genetics Section Business Meeting

Monday, August 21<sup>st</sup> at 5:00 pm

Room 13 of the third floor of the Tampa Marriott Waterside Hotel and Marina



## Socials

- Sunday, August 20 - Welcome to Tampa: Tampa Marriott Waterside
- Monday, August 21 - Tradeshow and Poster Networking Event: Tampa Convention Center
- Tuesday, August 22 - Student Networking Event: [Tampa's Lowry Park Zoo](#)
- Wednesday, August 23 - Grand Networking Event: [The Florida Aquarium](#)

## Genetics-themed Symposia

- From Headwaters to the Sea and Karyotypes to Genomes: A Symposium in Honor of John Gold
- Imperiled Aquatic Species from Headwaters to Oceans: A Genomics Perspective
- Conservation Genetics of Imperiled Fishes: a Tribute to Dr. Tim King
- Investigating the lionfish invasion: genetic comparisons of the Native and Invaded range
- Advances in On-Site DNA Testing for Species Detection and Monitoring

**Don't miss the Spawning Run and Carcass Crawl 5K**

**Wednesday August 23<sup>rd</sup> on the Tampa Riverwalk**

Sign up when you register for the conference!



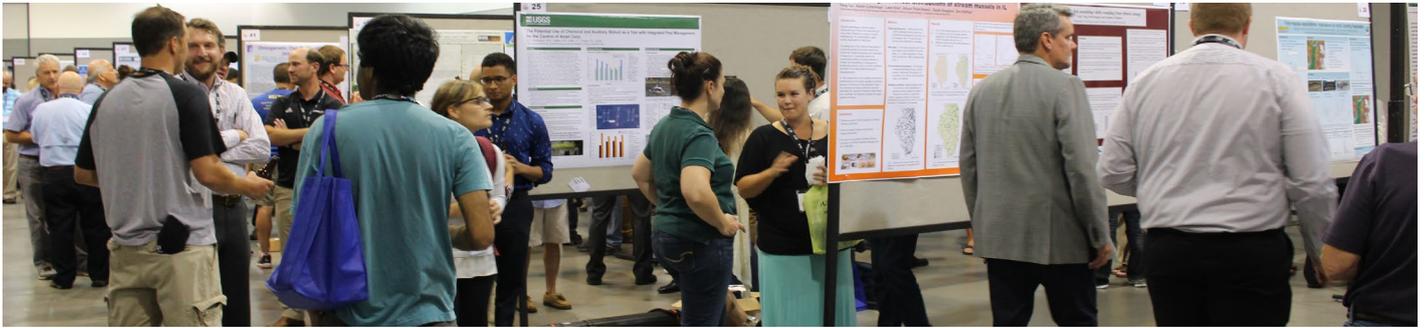


Photo by Beth Beard, AFS

# Calendar

**New! All calendar events now include clickable links!**

## **July 2017**

23rd - 27th *Meeting*: International Congress for Conservation Biology. Cartagena Colombia.

## **August 2017**

1st - *Fellowship application deadline*: Fulbright Scholars Program in Environmental Science, Biology, & Chemistry.

6th - 11th *Meeting*: Ecological Society of America Annual Meeting. Portland, Oregon.

20th - 24th *Meeting*: 147th Annual Meeting of the American Fisheries Society. Tampa, Florida.

## **September 2017**

10th - 15th *Meeting*: 13th International Coregonid Symposium. Bayfield, Wisconsin.

18th - 21st *Meeting*: ICES Annual Science Conference. Fort Lauderdale, Florida.

26th - 29th *Meeting*: Wild Trout Symposium XII. West Yellowstone, Montana.

## **October 2017**

1st *Grant deadline*: Sigma Xi Grants-In-Aid of Research

2nd - 4th *Meeting*: 8th International Conference on Fisheries & Aquaculture. Toronto, Ontario.

## **November 2017**

5th - 9th *Meeting*: Coastal and Estuarine Research Federation 24th Biennial Conference. Providence, Rhode Island.

6th-10th *Short course*: Landscape Genomics. Berlin, Ger.

## **January 2018**

3rd - 6th *Meeting*: Population Genetics Group. Bristol, UK.

3rd - 7th *Meeting*: The Society for Integrative and Comparative Biology Annual Meeting. San Francisco, CA.

5th - 9th *Meeting*: 150 Years of The American Naturalist. Asilomar, California.

## **February 2018**

11th - 16th *Meeting*: 2018 Ocean Sciences Meeting. Portland, Oregon.

**To find dates and information for AFS chapter meetings, visit [fisheries.org/about/units/chapters/](http://fisheries.org/about/units/chapters/)**

## *Tarpon - **Megalops atlanticus***



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# Jobs

## Graduate student positions

### **Population genetics/genomics of Gulf of Mexico Fishes. University of Southern Mississippi.**

Specific research interests include spatial genetic variation and population structure of wild stocks and the development of genomic approaches to domestication and breeding programs in aquaculture species. Current lab projects rely on the exploitation of next generation sequencing methods in particular the double digest RAD sequencing protocol. The successful applicant will be provided a 12-month full-time Research Assistantship with a tuition waiver. Candidates should possess a Bachelor's degree in a relevant field (e.g. Biology, Ecology & evolutionary biology, Fisheries science, GPA > 3.5) when applying for this position. Bioinformatics skills and experience with molecular techniques are assets. The position is available starting in spring 2018 with the possibility to work as a research assistant during the fall 2017 semester. Interested individuals should send a CV, GRE scores if available, and unofficial transcripts to: Eric Saillant, Ph.D, Associate Professor, Department of Coastal Sciences, The University of Southern Mississippi Gulf Coast Research Laboratory 703 East Beach Drive Ocean Springs, MS, 39564 Tel. (1) 228-818-8007 Fax (1) 228-872-4204 E-mail: eric.saillant@usm.edu

### **Evaluating marine biodiversity in New Zealand using environmental DNA - University of Otago, New Zealand.**

A PhD position studying marine biodiversity in New Zealand is available with Dr Michael Knapp at the University of Otago, Dunedin, New Zealand. A key to efficient, ecosystem-based management of marine resources is the availability of suitable tools to measure patterns in biodiversity. Current methods are costly, labour intensive and rely on surveys of a limited number of indicator species and sites to provide an estimate of biodiversity and ecosystem health. Consequently, their capacity for resolving the complexity of marine communities at an ecosystem level is highly compromised. This PhD project will establish, test and apply an innovative, high-throughput and cost efficient strategy for quantifying marine biodiversity using environmental DNA (eDNA) extracted from marine water samples. It will include evaluating and analysing the biodiversity in marine

protected areas around New Zealand and its implications for marine conservation efforts. This PhD project is part of a National Science Challenge funded research programme, which uses environmental DNA techniques to evaluate marine biodiversity in New Zealand. The ideal PhD student will have skills in molecular ecology, marine ecology, population genetics and/or bioinformatics and metabarcoding data analyses. The University of Otago is one of the most research-intensive Universities in New Zealand with a world-class reputation in the life sciences. It provides an environment that allows its students to undertake internationally recognised research, in a diverse and vibrant postgraduate environment and has been ranked as one of the 15 most beautiful campuses in the world. The PhD student will be hosted by the Department of Anatomy, a diverse and research-oriented department with expertise ranging from genomics to biomedical sciences. For details and instructions on how to apply, please visit: <http://www.otago.ac.nz/anatomy/study/postgraduate/opportunities/index.html> The project is listed under "Evaluating marine biodiversity in New Zealand". For further questions please contact Dr. Michael Knapp (michael.knapp@otago.ac.nz).

### **PhD position available at the Department of Molecular Evolution and Development - University of Vienna.**

Cephalopods (octopus, squids, cuttlefish, and nautilus) are fascinating animals to both the general public and science. The evolution of the molecular cascades specifying their complex nervous system and development remains elusive. With the recent decoding of the octopus genome, cephalopods are becoming increasingly important for molecular studies of the underlying genomic innovation. We are looking for an enthusiastic student with interdisciplinary background or interest to explore approaches in bioinformatics and experimental areas to investigate the ancient transitions in the genome architecture and function in cephalopods. The student will take part in several ongoing and future cephalopod genome-related projects, with a major aim of reconstructing the molecular basis of the ancient transitions and early diversification within the clade. Utilizing the emerging small cephalopod model species *Euprymna scolopes* (Hawaiian bobtail squid), the functional aspects of those known conserved and novel regulators can be studied during development. The work will be integrated and highly collaborative with several groups at the University of Vienna and the Center for Organismal Systems Biology (<http://www.univie.ac.at/Lebenswissenschaften/OrgSysBiol/osbiol.html>), in particular the Departments of Molecular Evolution and Development, Integrative Zoology, and Neurobiology, as well as other research institutes. Additionally, the student can be associated with either of the two Vienna Doctoral Schools "Molecules of Life" and "Cognition, Behavior and Neuroscience". Description and application procedures at the University website: <https://goo.gl/igy8gt>. (Reference number: 7549) Contact for questions: Oleg Simakov oleg.simakov@univie.ac.at

## AFS Genetics Section Job Board

For additional job postings, be sure to watch the job board on the Section website

[genetics.fisheries.org/jobs](http://genetics.fisheries.org/jobs)

## Professional positions

**Research Specialist I Position, Andolfatto Laboratory Lewis-Sigler Institute for Integrative Genomics - Princeton University.** The Andolfatto laboratory at the Lewis-Sigler Institute for Integrative Genomics seeks applicants for a research specialist position. Our group uses computational and experimental approaches to learn about genome evolution and elucidate the genetic mechanisms underlying evolutionary adaptations. Historically the lab has focused on *Drosophila* as a model system, but more recent work explores evolutionary/ecological genetics questions using a broad range of non-model organisms (e.g. butterflies and moths, freshwater fish, Milkweed-feeding insects, fireflies, amphibians and reptiles). We are looking for a highly motivated individual to carry out large-scale genomics projects and to support various lab activities. In addition to research, this technician will assist in training undergraduate students and be responsible for the day-to-day management of the lab, including maintaining equipment and the inventory of laboratory materials and supplies. The research technician may be responsible for the development and execution of research projects (which can lead to authorship on scientific publications). The ideal candidate is one who seeks professional development as a scientist and is therefore interested in reading the current scientific literature and conducting an independent research project. The candidate will take ownership of their project. The position is open and review of applications will begin immediately. The position will start as soon as possible. Salary will be commensurate with experience and will include the full Princeton benefits package. This is a one-year term position, with the possibility of renewal based on available funding and satisfactory performance. Responsibilities will include: *Drosophila* maintenance, crossing, and screening; Molecular biology including DNA/RNA preparation, PCR, qRT-PCR, next generation sequencing, plasmid vector construction, design of CRISPR-cas9 genome editing experiments; Lab organization, maintenance, and purchasing; Participation in group meetings. Essential qualifications: Bachelor's degree in biology or related field; One to three years of experience in a research laboratory working with a (broadly-defined) "model" genetic system such as *Drosophila*, *C. elegans*, mouse, *Arabidopsis*.; Experience with executing molecular biology protocols; Capacity to work both independently and collaboratively; Strong attention to detail and meticulous lab notebook keeping; Excellent communication skills; Enthusiasm for evolutionary biology and/or genetics; The final candidate will be required to complete a background check successfully. To apply, please submit an application online at Princeton University's Careers Website (Requisition No. 2017-7387) at: <https://research-princeton.icims.com/jobs/7387/research-specialist-i/job>

**Clinical Assistant Professor for Evolution, Ecology, & Behavior. SUNY Buffalo.** The initial 10 month appointment begins on August 24, 2017, and is renewable for two additional years. The successful candidate will teach courses and provide advisement and administrative duties in support of the degree programs in Evolution, Ecology & Behavior; Environmental Geosciences; and Environmental Studies. The successful candidate will take primary responsibility for teaching an undergraduate ecology course, an undergraduate laboratory course in ecological research methods and specialized courses in the areas of ecology and the environment. The instructor will also assist in the advisement of undergraduate students interested in degrees in the broad areas of ecology and environmental sciences. Other responsibilities may include, developing online curricula, supervising teaching assistants, advising graduate students, participating in on-going curricula development, and representing the department in recruitment, fundraising, and community outreach efforts. The teaching load will be four courses per semester, some of which may be duplicate sections of some courses, or equivalent advisement/administrative responsibilities. Additional teaching and salary opportunities may be available during winter and summer sessions. Minimum Qualifications: Ph.D. in a field related to ecology or environmental sciences/studies, conferred by the start of the appointment. Some experience in undergraduate teaching is required. Excellent written and oral communication skills as well as computer skills including facility with Microsoft Office (Word, Excel, Powerpoint) are needed. Preferred Qualifications: University teaching experience is preferred. Physical Demands: Light lifting; supervising outdoor laboratory exercises in local ecosystems, including walking on uneven terrain in a variety of weather conditions. All applications must be submitted via UB Jobs (<https://www.ubjobs.buffalo.edu/postings/9660>) and should include a cover letter, CV, teaching statement, and contact information for three professional references. Contact's Name: Prof Howard Contact's Email: [hasker@buffalo.edu](mailto:hasker@buffalo.edu); Contact's Phone: 716-645-4870 Posting Dates: 06/02/2017 Deadline for Applicants: Open Until Filled.

Please send information on symposia, jobs, articles, and calendar events to [jared.homola@maine.edu](mailto:jared.homola@maine.edu) to see it in the next newsletter!

# Workshops

## Landscape genetic data analysis using R - Wales, UK.

Delivered by Dr. Rodney Dyer. This course will run from 6th - 10th November 2017 at Margam Discovery Centre, Wales. The term 'landscape genetics' has been applied studies that integrate ecological context and intervening landscape into population genetic analyses of contemporary processes such as gene flow and migration. This course will cover the basics of both quantitative landscape ecology and population genetics, focusing on how we develop and evaluate spatial/genetic analyses using the R platform. Course content is as follows. Day 1: Spatial & Ecological Data; Installation & configuring R & RStudio; Acquiring spatial data, projections, and visualization; Vector and raster data. Day 2: Genetic markers and basic analyses; Genetic markers and sampling; Genetic distance, diversity, and structure; Ordination techniques based upon genetic markers. Day 3: Integrating spatial and genetic data; Barrier detection & population division; Resistance Modeling; Mantel and distance regressions; Remote sensing - LiDAR and Hyperspectral data. Day 4: Integrating spatial and genetic data; Spatial autocorrelation; Network Approaches; PCMN & Redundancy. Day 5: Adaptive Genetic Variance; Outliers & gradients; Quantitative genetics, why we should care; Chromosome walking. <https://www.prstatistics.com/course/landscape-genetic-data-analysis-using-r-Indg02/>

## Practical DNA Training Program - Thunder Bay, ON.

A two-week (9 business days) intensive laboratory-based training program designed to teach participants the fundamentals of molecular techniques including DNA extraction, amplification (using PCR), sequencing and interpretation. This training program is offered at various times throughout the year and we will work with you to find a suitable time for training. The cost of the training program is now \$2500.00. The next scheduled time for the Practical DNA Training Program is August 14-24, 2017. For more information please contact us at 807-343-8877 or email [paleodna@lakeheadu.ca](mailto:paleodna@lakeheadu.ca) or visit our website at [www.ancientdna.com](http://www.ancientdna.com) and click on 'Training Programs'.

## Reduced representation genome sequencing (RADseq) data analysis for population genetics, association studies and phylogenetics - Berlin, Germany.

4-8 December 2017. <https://www.physalia-courses.org/courses/course16/> INSTRUCTORS: Dr. Naiara Rodriguez-Ezpeleta <https://www.physalia-courses.org/instructors/t19/> (Senior Researcher, Marine Research Division, AZTI, Spain <https://www.physalia-courses.org/instructors/t19/> Dr. Josephine Paris <https://www.physalia-courses.org/instructors/t21/> (University of Exeter, UK) <https://www.physalia-courses.org/instructors/t21/> COURSE OVERVIEW: Reduced representation genome sequencing methods are revolutionizing evolutionary analyses of non-model organisms. Several data generation and data analysis protocols have been developed to generate thousands of sequence variants in hundreds of individuals at relative low cost and speed. In this course, we will introduce the different approaches for obtaining reduced representation genome sequencing data and will specially focus on the data analysis. We will cover all necessary steps to obtain genome variants from short read data that are informative for population genetics, phylogenetic and association studies. WORKSHOP FORMAT: The workshop will be delivered over the course of five days. Each day will include an introductory lecture with class discussion of key concepts. The remainder of each day will consist of practical hands-on sessions. These sessions will involve a combination of both mirroring exercises with the instructor to demonstrate a skill as well as applying these skills on your own to complete individual exercises. After and during each exercise, interpretation of results will be discussed as a group. WHO SHOULD ATTEND: This workshop is aimed at researchers and technical workers who are generating and/or analyzing reduced representation genome sequencing data (RAD-seq, ddRAD, 2bRAD, GBS, ). Examples demonstrated in this course will involve primarily non-model organisms and examples of applications of this data type for different purposes will be covered. REQUIREMENTS: Attendees should have a background in biology. We will dedicate one session to some basic and advanced Linux concepts. Attendees should have also some familiarity with genomic data such as that arising from NGS sequencers. Curriculum can be found at: <http://www.physalia-courses.org/>.

## Spotted seatrout - *Cynoscion nebulosus*

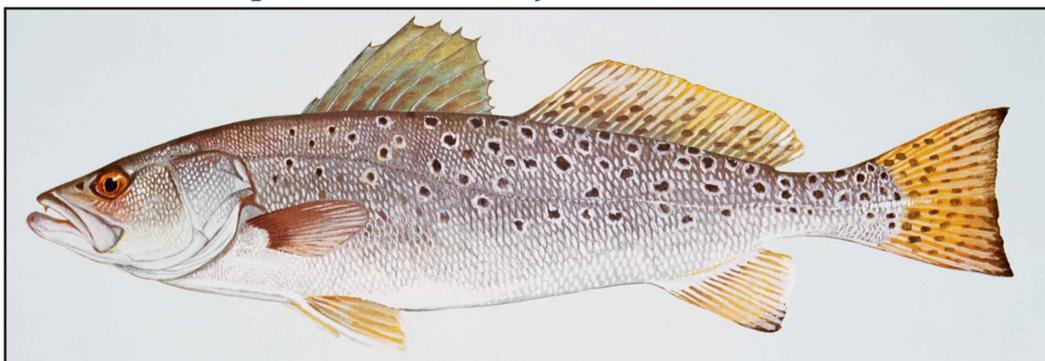


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# Comic

Summer's almost over!  
Time to check...

## YOUR SUMMER TO DO LIST

THAT ONE THING YOU DID AT THE BEGINNING OF SUMMER.

- Submit reimbursement claim for last year's conference.
- Clean up desk area
- Calibrate instrument

STUFF YOU COULD HAVE DONE... BUT DIDN'T.

- Sort reference papers
- Finish draft of chapter
- Work on seminar presentation
- Resubmit rejected paper(s)
- Start class notes

STUFF YOU FORGOT YOU HAD TO DO.

- Literature review
- Design new data analysis

STUFF YOU WOULD HAVE DONE IF YOU HADN'T TAKEN UP A NEW HOBBY THIS SUMMER.

- Roam around and click on things on the internet

STUFF YOU DIDN'T REALLY WANT TO DO.

- Scrap old lab equipment
- Install new operating system

STUFF YOU HAD NO CHANCE OF GETTING DONE.

- Eat well, sleep
- Become more organized
- Investigate jobs outside academia
- Learn LaTeX/SAS/Python
- ~~Graduate~~

STUFF THAT IS NOW IN YOUR FALL TO DO LIST.

JORGE CHAM © 2012

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## Section officers, committees, and representatives

### Section Officers

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### Committees

#### Hall of Excellence

Robin Waples

#### James Wright Award

Amy Welsh  
Andrea Schreier  
Carol Stepien

#### Early Career Award

Helen Neville

#### Stevan Phelps Award

Ken Currens

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