



HCGS

Hubbard Center for Genome Studies

November 2015
Issue 11



NEWSLETTER

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We want to remind everyone of our next speaker in the **Sidore Series**:
Dr. Michael Snyder from Stanford University will be here on December 7th, 2015. He is the Director, Stanford Center for Genomics and Personalized Medicine. We are very excited to have him participate at our Saul O Sidore seminar series. All are welcome to attend.



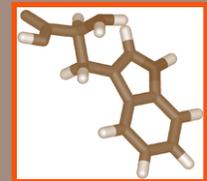
Public Lecture:
December 7, 2015 at 3:10 PM
UNH Memorial Union
Building Theater I
***“Personalized Medicine:
Using Omics and Big Data
to Understand Disease and
Manage Health”***

Research Seminar:
December 8, 2015 at 2:10 PM
Kingsbury N101
***“Analyzing Complex Disease and Health
Using Integrative Omics Technologies”***

The HCGS will be collecting non-perishable food items and monetary donations for the Cornucopia food pantry starting 11-01-2015 and continuing throughout the semester. There will be a box setup outside Room 409 Gregg Hall. For more information about Cornucopia please visit:
<http://www.cornucopia.unh.edu/>
Thanks!



Fun Fact



With Thanksgiving right around the corner, tryptophan will soon be on the menu for turkey lovers. For those wanting to hunt down the tRNA for this most soporific of amino acids, we have a useful tool on our servers called ARAGORN. This tool comes in useful for annotating tRNA in genomes, and instructions can be found by typing aragorn -h while on one of our servers.

For the web-based version, you may also access ARAGORN through the following link:
<http://mbio-serv2.mbioekol.lu.se/ARAGORN/>
For citation and further information, you can refer to the publication at:
<http://nar.oxfordjournals.org/content/32/1/11.long>



\$38 Million Awarded to Study Effects of Oil on Gulf of Mexico: Gulf of Mexico Research Initiative funds 22 new research grants

November 13, 2015

RESTON, VA – The Gulf of Mexico Research Initiative (GoMRI) Research Board announced today that it will award nearly \$38 million to individuals and teams studying the effects of oil on the Gulf of Mexico ecosystem and public health. A total of 22 research proposals are being funded under this most recent GoMRI program. “The Research Board was impressed with the quality of the 288 applications received,” said Dr. Rita Colwell, Chairman of the GoMRI Research Board. “As is our practice, all proposals underwent a rigorous merit review process like that used by the National Science Foundation. This process has served us well, as demonstrated by the impressive array of research findings published in scientific journals by those researchers GoMRI has already funded. We are gaining an important understanding of how the Gulf of Mexico functions as an ecosystem and responds to large-scale environmental stresses like that caused by the tragic Macondo wellhead blowout.” The researchers funded today submitted research proposals in response to GoMRI’s fifth request for proposals (RFP-V). This program was designed to support research by individual investigators or by collaborative teams during 2016-2018. GoMRI also supports research by large, multi-institutional consortia that are funded under another GoMRI program. The GoMRI is an independent, 10-year research program established with a \$500 million commitment from BP following the Deepwater Horizon incident. Twenty experts comprise a Research Board responsible for designing research programs, making funding decisions, and providing research and budget oversight.

For more see: <http://gulfresearchinitiative.org/38-million-awarded-to-study-effects-of-oil-on-gulf-of-mexico/>

The research team lead by the HCGS was one of the 22 proposals that successfully competed for funding in this round of proposals. Lori Wright did a fantastic write-up for media relations, which can be viewed at: <http://www.unh.edu/news/releases/2015/11/lw24deepwater.cfm>



Publications:

Borowiec M.L., Lee E.K., Chiu J.C. and Plachetzki D.C. Extracting phylogenetic signal and accounting for bias in whole-genome data sets supports the Ctenophora as sister to remaining Metazoa. *BMC Genomics* 2015, **16**:987 doi:10.1186/s12864-015-2146-4

Farmer? Gold Miner? Cowboy? Hermit? Master? Servant? Jailer? A Field Guide To Genomics Research—Bild et al. 2014

This article is a great primer for those just beginning to dip their toes in the pool of genomics research, and includes overviews of questions to consider during experimental design, interpretation, and dissemination of data. Excerpts from the citation include:

From Box 2

- * Stay true to your original experimental design
- * Develop and implement negative and positive control experiments
- * “Taken together, what do the data and analyses tell you?”
- * Understand how statistical and computational methods should be applied
- * Perform *in silico* and/or mechanistic validations



The Farmer

“Let’s harvest a and design fancy tools, and then we’ll figure out what to do with them.”



The Gold Miner

“If we keep digging, eventually we will find what we are looking for.”

Citation: Bild AH, Chang JT, Johnson WE, Piccolo SR (2014) A Field Guide to Genomics Research. *PLoS Biol* 12(1): e1001744. doi:10.1371/journal.pbio.1001744