April Peterson

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Education

University of Wisconsin - Madison
PhD Candidate - Laboratory of GeneticsTraining Program - **2013-Present**
Graduate Student Committee

Lawrence University, Appleton, WI *Bachelor of Arts - Molecular and Cellular Biology* - **2006-2010**
Minor in Linguistics
• Senior Project: In silico search of novel motifs in upstream sequence of differentially expressed genes in C. elegans • Officer of LU Biology club, 2007-2009.

Research

University of Wisconsin - Madison, *Graduate Research Assistant* - **2013-Present**
Project Discription Skills

Publications

Møller, E. K., Parveen, K., Voet, T., **Peterson, A.**, Van Loo, P., Mathiesen, R.R., Fjelldal R., Grundstad J., Borgen E., Baumbusch L.O., Naume B., Børresen-Dale, A., White, K.P., Nord, S., Vessela N. Kristensen, V.N., (2013). Frontiers in oncology. Next-generation sequencing of disseminated tumor cells. DOI:10.3389/fonc.2013.00320.

Hekman, K.E., Yu, G.Y., Brown, C.D., Zhu, H., Du, X., Gervin, K., Undlien, D.E., **Peterson, A.**, Stevanin, G., Clark, H.B. and Pulst, S., Human molecular genetics. (2012). A conserved eEF2 coding variant in SCA26 leads to loss of translational fidelity and increased susceptibility to proteostatic insult. doi:10.1093/hmg/dds392.

Parveen, K.; Moller, E; Demeulemeester, J; Nord, S; Wedge, D; **Peterson, A**; Mathiesen, R; Fjelldal, R; Zamani Esteki, Masoud; Grundstad, J. (2016). Tracing the origin of disseminated tumor cells in breast cancer using single-cell sequencing,Abstract book, Genome Biology. 23-23,2016, doi:10.1186/s13059-016-1109-7 (add equal contribution to first 3)?

Stricker, T. P., Brown, C. D., Bandlamudi, C., McNerney, M., Kittler, R., Montoya, V., **Peterson, A.**, Grossman, R., White, K., P., (2017). Robust stratification of breast cancer subtypes using differential patterns of transcript isoform expression, PLoS Genetics. doi:10.1371/journal.pgen.1006589. ,13,3,e1006589,2017,Public Library of Science

meeting abstracts Møller, Elen; Kumar, Parveen; Nord, Silje; Wedge, David; van Loo, Peter; **Peterson, A.**; Mathiesen, Randi R; Fjelldal, Renathe; Esteki, Masoud Z; Grundstad, Jason A; ",Abstract LB-051: Tumor heterogeneity and dissemination in breast cancer: Deep sequencing of single disseminated cells from bone marrow compared to primary tumor and lymph node metastases,Cancer Research,75,15 Supplement,LB-051-LB-051,2015,American Association for Cancer Research.

Moller, Elen; Kumar, Parveen; Nordi, Silje; Wedge, David; van Loo, Peter; **Peterson, April**; Mathiesen, Randi R; Fjelldal, Renathe; Esteki, Masoud Z; Grundstad, Jason A; ",Tumor heterogeneity and dissemination in breast cancer: Deep sequencing of single disseminated cells from bone marrow compared to primary tumor and lymph node metastases,CANCER RESEARCH,75,2015,"AMER ASSOC CANCER RESEARCH 615 CHESTNUT ST, 17TH FLOOR, PHILADELPHIA, PA 19106-4404 USA"

Organizations

Teaching

TA - GEN 466. • TA GEN466 Spring 2015.

Oral Presentations

Peterson, A. L. Evolution of Recombination. Rebecca J. Holz series in Research Data Management. July 2017. Portland, OR. TODO: link to my slides

Stevens, S. L. R., Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., ... McMahon, K. D. Malmstrom, R. R. Tracking Microbial Populations Through Time Using Single-cell Genomes and Metagenomics. UW Center for Limnology Seminar. December 2015. Madison, WI. Link to Slides

Stevens, S. L. R., Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., ... McMahon, K. D. Malmstrom, R. R. Genome-wide and Gene-specific Selective Sweeps in Freshwater Bacterial Populations Revealed Using Metagenomics. JF Crow Institute for the Study of Evolution Seminar Series. October 2015. Madison, WI. Link to Slides

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Poster Presentations

1. "The Evolution of Sexual Dimorphism of Recombination Rate in House Mice", Peterson and Payseur. GSA, PEQG. 2016.
2. "The Evolution of Sexual Dimorphism of Recombination Rates in House Mice", April Peterson, Bret Payseur. MidWest Popgen conference. 2015.
3. "Identifying transcription factor binding motif of daf-19 in C.elegans". Peterson, AL and DeStatsio, E. Senior Research Project Presentations. Lawrence University Biology Department. 2008

Stevens, S. L. R., Garcia, S. L., ... McMahon, K. D. Contrasting Patterns fo Genome-level Diversity across Distinct Co-occurring Populations. 16th International Symposium on Microbial Ecology. August 2016. Montreal, Canada. Link to Poster

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Related Experience

Universeity of Chicago, 2010 to 2013 Title: Research Technician, IGSB
Projects: Exome library construction, characterization of transcription factor expression in breast cancer cell lines using a microwestern approach, characterization of a tumor suppressor gene in AML cell lines. • Skills: Sequencing library construction (TruSeq and custom protocols), PCR, plasmid construction, BAC construction by recombineering, data analysis with Perl and R • Other Activities: IGSB journal club, Audited Intro Stats for Genetic Analysis

R&D Systems, Summer to Fall 2009 Title: Summer Intern
Project: Optimizing production of recombinant apoptotic proteins in mammalian cells, comparison of effects of apoptosis genes in HEK 293 and CHO cells. • Skills: Cloning and designing vectors, transient transfection using polyethylenimine, mammalian cell culture maintenance, western blots, flow cytometry sample preparation.

King's College Hospital, Oct. to Dec. 2008 Title: Student Intern Project: Organizing data for clinical trails in biochemistry department • Assisting in ELISA assays and sample preparation for steroid analysis using LC-MS

Awards

1. GSA travel award
2. GSA grad student poster award, Third place

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