

May 14, 2018

Dr. Theresa Culley, Editor-in-Chief
University of Cincinnati
Cincinnati, OH, USA

Beth Parada, Managing Editor
Botanical Society of America, Applications in Plant Sciences
St. Louis, MO, USA

Dear Dr. Culley and Ms. Parada,

My name is Kevin Weitemier, and I'm writing in response to the APPS call for applications to the 2018-2020 Reviewing Editor Board. I earned a doctoral degree from the Botany & Plant Pathology Department at Oregon State University in 2016, and am currently working as a bioinformatician for OSU and the US Forest Service on methods of environmental DNA detection in streams. I have extensive experience with genomics and DNA sequencing techniques, and feel I would be a strong asset to the Reviewing Editor Board, particularly for Primer Notes.

I support the APPS mission to rapidly disseminate new tools and protocols under an open access format, and am proud to be an APPS author and reviewer. As a Reviewing Editor I would work to ensure that articles are not only technically sound, but are presented in a way to be most useful to readers. Articles that include appendices, supplements, and links to external databases make these considerations increasingly complex.

I would like to serve as a Reviewing Editor as a way to support the BSA and the journal, and to gain experience and insight into the editorial process. I also hope that serving as an editor will help me stay abreast of current trends in genetic and genomic techniques and applications.

I look forward to the opportunity to gain experience in a new field of academic service. I have attached my CV, and requested a letter of recommendation from my supervisor, Dr. Richard Cronn.

Sincerely,

Kevin Weitemier, Ph.D.
Research Associate (Postdoc)
Dept. of Fisheries & Wildlife
Oregon State University
Corvallis, OR, USA

Kevin A. Weitemier

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Education

Oregon State University, Ph.D., Botany & Plant Pathology 2016
Oregon State University, Graduate Certificate in College and University Teaching 2015
Portland State University, M.S., Biology 2010
Colorado College, B.A., Biology 2005

Employment

Oregon State University
Environmental DNA monitoring, Research Associate (Postdoc), *Dept. of Fisheries & Wildlife* 2017-
Bioinformatics e-Trainer, Faculty Research Asst., *Center for Genome Research & Biocomputing* 2016-
2017
Graduate Research & Herbarium Assistant, *Dept. of Botany & Plant Pathology* 2010-2016
Graduate Teaching Assistant, *Dept. of Botany & Plant Pathology* 2015-2016

Publications

Refereed Journal Articles

Muñoz-Rodríguez P, T Carruthers, JRI Wood, BRM Williams, **K Weitemier**, B Kronmiller, D Ellis, NL Anglin, L Longway, SA Harris, MD Rausher, S Kelly, A Liston, RW Scotland. 2018. Reconciling conflicting phylogenies in the origin of sweet potato and dispersal to Polynesia. *Current Biology*. 28(8):1246-1256.

Livshultz T, E Kaltenecker, SCK Straub, **K Weitemier**, E Hirsch, K Koval, L Mema, A Liston. 2018. Evolution of pyrrolizidine alkaloid biosynthesis in Apocynaceae: revisiting the defence de-escalation hypothesis. *New Phytologist* 218(2):762-773.

Schmickl R, A Liston, V Zeisek, K Oberlander, **K Weitemier**, SCK Straub, RC Cronn, LL Dreyer, J Suda. 2016. Phylogenetic marker development for target enrichment from transcriptome and genome skim data: the pipeline and its application in southern African *Oxalis* (Oxalidaceae). *Molecular Ecology Resources* 16(5):1124-1135.

Weitemier K, SCK Straub, M Fishbein, A Liston. 2015. Intragenomic polymorphisms among high-copy loci: A genus-wide study of nuclear ribosomal DNA in *Asclepias* (Apocynaceae). *PeerJ* 3:e718.

- Weitemier K**, SCK Straub, RC Cronn, M Fishbein, R Schmickl, A McDonnell, A Liston. 2014. Hyb-Seq: Combining target enrichment and genome skimming for plant phylogenomics. *Applications in Plant Science* 2(9):1400042.
- Straub SCK, M Parks, **K Weitemier**, M Fishbein, RC Cronn, A Liston. 2012. Navigating the tip of the genomic iceberg: Next-generation sequencing for plant systematics. *American Journal of Botany* 99(2):349-364.
- Straub SCK, M Fishbein, T Livschultz, Z Foster, M Parks, **K Weitemier**, RC Cronn, A Liston. 2011. Building a model: Developing genomic resources for common milkweed (*Asclepias syriaca*) with low coverage genome sequencing. *BMC Genomics* 12:211.
- Kelso S, P Beardsley, **K Weitemier**. 2009. Phylogeny and biogeography of *Primula* sect. *Parryi* (Primulaceae). *International Journal of Plant Sciences* 170(1):93-106.

Preprints

- Weitemier K**, SCK Straub, M Fishbein, CD Bailey, RC Cronn, A Liston. 2018. The genome and transcriptome of common milkweed (*Asclepias syriaca*): resources for evolutionary, ecological, and molecular studies in milkweeds and Apocynaceae. *PeerJ Preprints* 6:e26488v1.

Other Publications

- Weitemier, K**. 2011. First Steps of Diversification? Relationships Among the Many Varieties of Pacific Lupine. *Douglasia* 35(3):1-3.
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Presentations

Invited Presentation

- Weitemier K**. Targeting genomic regions of interest in non-model organisms. Microarray - Planning a successful target enrichment project [Teaching workshop]. Plant & Animal Genome XXIV. San Diego, CA. 2016.

Public Presentation

- Keynote Address: Sleuthing species splits and spreads. Native Plant Society of Oregon Annual Meeting. Roseburg, OR. 2017.

Workshops

- Co-organized and instructed "An Introduction to Next Generation Sequencing" at the annual Botany meeting. 2012-2016.

Papers[§] and Posters⁺ (*Presenting authors)

- §**Weitemier K***, L Hauck, T Garcia, B Penaluna, R Cronn. Stream samples to species lists: Multi-species detection with environmental DNA and high-throughput sequencing. Oregon Chapter American Fisheries Society. Eugene, OR. 2018.
- §**Weitemier K***, A Liston. Genome-enabled phylogeography in the Great Basin milkweed, *Asclepias cryptoceras* (Apocynaceae). Botany 2016. Savannah, GA. 2016.
- §**Weitemier K***, SCK Straub, M Fishbein, A Liston. Intragenomic polymorphisms among high-copy loci: a genus-wide study of nuclear ribosomal DNA in *Asclepias* (Apocynaceae). Botany 2015. Edmonton, AB. 2015.
- §Liston A, **K Weitemier**, B Kronmiller, M Zarrei, T Dickinson*. Using Hyb-Seq data to test phylogenetic hypotheses in hawthorns (*Crataegus*, Rosaceae). Botany 2015, Edmonton, AB. 2015.
- +Jennings T*, R Cronn, B Burgess, S Jogdeo, A Liston, **K Weitemier**, B Kinder. The Oxford Nanopore Minion: A tool for combating illegal logging of white oaks? Plant & Animal Genome XXIII. San Diego, CA. 2015.
- +Schmickl R*, A Liston, K Oberlander, **K Weitemier**, V Zeisek, S Straub, R Cronn, L Dreyer, J Suda. The combination of target enrichment and genome skimming (Hyb-Seq) for phylogenetic reconstruction of South African Oxalis (Oxalidaceae). Plant & Animal Genome XXIII. San Diego, CA. 2015.
- +**Weitemier K***, S Straub, M Fishbein, A Liston. Intragenomic polymorphisms among high-copy loci: A genus-wide study of nuclear ribosomal DNA in *Asclepias*. Botany 2014, Boise, ID. 2014.
- §**Weitemier K***, S Straub, M Fishbein, R Cronn, A Liston. Genome-enabled phylogeography in *Asclepias cryptoceras*. Botany 2013, New Orleans, LA. 2013.
- +**Weitemier K***, S Straub, M Fishbein, R Cronn, A Liston. Genome-enabled phylogeography in *Asclepias cryptoceras*. American Genetic Association Symposium 2013, Ithaca, NY. 2013.
- §**Weitemier K***, S Straub, M Parks, R Cronn, M Fishbein, A Liston. Challenges and utility of heterozygous genome assembly: *Asclepias syriaca*. Botany 2012, Columbus, OH. 2012.
- +**Weitemier K***, S Straub, M Parks, R Cronn, M Fishbein, A Liston. Intra-genomic rDNA sequence diversity across the milkweed genus, *Asclepias* (Apocynaceae). Evolution 2011, Norman, OK. 2011.
- +**Weitemier K***, S Straub, M Parks, R Cronn, M Fishbein, A Liston. Intra-genomic rDNA sequence diversity among 84 milkweeds (*Asclepias*, Apocynaceae). Plant & Animal Genome XIX. San Diego, CA. 2011.
- §**Weitemier K***. Phylogenetic and phylogeographic analysis of *Lupinus lepidus*. Evolution 2010. Portland, OR. 2010.
- +**Weitemier K***. Phylogenetic patterns and intervarietal relationships within *Lupinus lepidus*. EVO-WIBO. Port Townsend, WA. 2010.
- §**Weitemier K***. Phylogenetic relationships among varieties of *Lupinus lepidus* (Fabaceae). Botany 2009. Snowbird, UT. 2009.

- +**Weitemier K***. Focusing on blurry lines: A coalescent approach to a perennial lupine species complex. *Evolution* 2009. University of Idaho, Moscow, ID. 2009.
- +**Weitemier K***. Phylogenetic analysis of the *Lupinus lepidus* species complex from noncoding cpDNA sequence data. *Botany* 2008. University of British Columbia, Vancouver, BC. 2008.
- +Kelso S, P Beardsley, **K Weitemier***. Phylogenetic perspectives on speciation and biogeography of *Primula* Section *Parryi*, endemic to western North America. *Botany* 2008. Vancouver, BC. 2008.
- +Kelso S*, **K Weitemier***, M Bilodeau, P Beardsley. Phylogeny of *Primula* sect. *Parryi* in the Intermountain and Rocky Mountain West: Perspectives from ITS, ETS, cpDNA, and AFLP sequences. *Botany* 2006. Chico, CA. 2006.
- §**Weitemier K***. Phylogenetic Relationships Within *Primula* section *Parryi*: an AFLP Analysis. Colorado Springs Undergraduate Research Forum. United States Air Force Academy, Colorado Springs, CO. 2005.

Awarded Grants

Hybrid Course Development, OSU center for Teaching & Learning	2017
Portland Garden Club	2015, 2014
Gottlieb Award for Plant Evolutionary Biology, Oregon State University	2014
Botanical Society of America, Genetics Section	2014
Botanical Society of America	2014
Templeton Award for Plant Systematics, Oregon State University	2013
Moldenke Fund for Plant Systematics, Oregon State University	2012, 2011
American Society for Plant Taxonomists	2009
Society of Systematic Biologists	2008
Washington Native Plant Society	2008
Forbes-Lea Award, Portland State University	2008
Native Plant Society of Oregon	2008

Awards & Honors

Oregon Lottery Graduate Scholarship	2013
Honorable Mention: NSF Graduate Research Fellowship Program	2009, 2008

Professional & University Service

Reviewer, American Society of Plant Taxonomists - Graduate Student Research Award 2018
Student Promotion & Tenure Committee, Oregon State University, Dept. Botany & Plant Pathology
2013-2014
Graduate Studies Committee, Oregon State University, Dept. Botany & Plant Pathology 2013
Faculty Liaison, Portland State University Biology Association of Graduate Students 2009

Community Outreach & Leadership

Board Member-at-Large: Native Plant Society of Oregon 2014-2016
Online Science Mentor: PlantingScience.org 2009-2016
Science fair judge: Intel Northwest Science Expo 2010-2016
OSU Ag Days: Botany activity for "at risk" high school students 2015
Invited guest: Inspiration Dissemination: Radio program discussing graduate student research
and paths to graduate school 2014
President: Native Plant Society of Oregon, Corvallis Chapter 2012-2014
Youth outreach: Winter Wonderings, teaching elementary students evolution 2012
Youth outreach: Discovery Days, Oregon State University 2010-2011

Professional Affiliations

American Society of Plant Taxonomists
Botanical Society of America
Society of Systematic Biologists



United States
Department of
Agriculture

Forest
Service

Genetics Team
Pacific Northwest Research Station

3200 SW Jefferson Way
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Dr. Theresa Culley, Editor-in-Chief
University of Cincinnati, Cincinnati, Ohio, USA

Beth Parada, Managing Editor
Botanical Society of America | *APPS*, St. Louis, MO, USA

May 14, 2018

Dear Theresa and Beth,

I'm writing this letter of recommendation for Dr. Kevin Weitemier, as Kevin has an interest in serving on the Reviewing Editorial Board of Applications in Plant Sciences (*APPS*).

Kevin completed his Ph.D. at Oregon State University in 2017, and his focus was on developing and applying methods for gathering genome-scale data for plant population and phylogenetic analysis. During his graduate tenure, Kevin developed extensive field, laboratory, and computational expertise in areas relevant to *APPS* readers, and he authored and co-authored papers that are widely cited in *APPS* and related journals like *American Journal of Botany*. Kevin is well-versed in modern approaches for data and tool sharing (e.g., repositories like NCBI SRA for sequence data, or GitHub for scripts and programs), and has strengths in UNIX and R programming. He is one of the pioneers of 'target enrichment' methods, and has worked closely with commercial companies (New England Biolabs; Arbor Biosciences) to validate new products prior to their public release.

Kevin is currently working as a post-doctoral scholar at Oregon State in the field of environmental metagenomics, and he is applying his knowledge of genomics and taxonomy to classifying DNA sequences from complex media. This is giving him exposure to a new class of 'genomics tools', as well as classification methods that are important in the new world of data mining (e.g., random forests).

My impression is that Kevin would be an excellent addition to the *APPS* editorial board. Kevin has very good English writing skills, and he is an excellent communicator in person and in writing. Kevin is also well-organized, self-motivated, and prompt; I think these are essential traits for a successful editor at *APPS*. Finally, Kevin is courteous and conducts himself as a professional – he can enforce the high standards required by *APPS*, and provide rejections (when needed) in a diplomatic manner.

If you have questions about Kevin's qualifications, please feel free to give me a call or send an email, as I'd be happy to provide more information.

Sincerely,

Rich Cronn
PNW Research Station, USDA Forest Service, Corvallis, OR
Email: rcronn@fs.fed.us | phone: 541-750-7291



Caring for the Land and Serving People

