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Professional Preparation

Principia College	Elsah, IL	Environmental Science & Math	B.S.	1996
University of California	Davis, CA	Geology	M.A.	2003
University of California	Davis, CA	Ecology	Ph.D.	2007
Hokkaido University	Sapporo, Japan	Forest Ecosystem Management	Postdoc	2008

Appointments

2015-present:	Associate Professor, Washington State University, Pullman, WA
2013-2015:	Assistant Professor, Washington State University, Pullman, WA
2008-2013:	Assistant Professor, University of Idaho, Moscow, ID
2007-2008:	Postdoc Fellow & NSF EAPSI Fellow, Hokkaido University, Japan
2003-present:	Contract Research Scientist, Solutions Fremier, Moscow, ID
2000-2007:	Research Scientist, University of California, Davis, CA

Products

(i) Related Products (*Graduate Student/Post-Doc)

1. Fremier, A. K., K. M. Strickler, J. Parzych, S. Powers, and C. S. Goldberg. **2019**. Stream Transport and Retention of Environmental DNA Pulse Releases in Relation to Hydrogeomorphic Scaling Factors. *Environ. Science and Technology* 53:6640–6649.
2. Fremier, A.K., B.J. Yanites, E. M. Yager. **2018**. Sex that moves mountains: the influence of spawning fish on river profiles over geologic timescales. *Geomorphology*. 305:163-172.
3. DeClerck, F. A. J.; Jones, S. K.; Attwood, S.; Bossio, D.; Girvetz, E.; Chaplin-Kramer, B.; Enfors, E.; Fremier, A. K.; Gordon, L. J.; Kizito, F.; Lopez Noriega, I.; Matthews, N.; McCartney, M.; Meacham, M.; Noble, A.; Quintero, M.; Remans, R.; Soppe, R.; Willemen, L.; Wood, S. L. R.; Zhang, W., **2016**. Agricultural Ecosystems and Their Services: The vanguard of sustainability? *Current Opinion in Environmental Sustainability*, 23, 92-99.
4. Fremier, A. K.; Kiparsky, M.; Gmur*, S.; Aycrigg, J.; Craig, R. K.; Svancara, L. K.; Goble, D. D.; Cosens, B.; Davis, F. W.; Scott, J. M., **2015**. A riparian conservation network for ecological resilience. *Biological Conservation*, 191, 29-37.
5. Fremier, A. K.; DeClerck, F. A. J.; Bosque-Pérez, N. A.; Carmona*, N. E.; Hill, R.; Joyal*, T.; Keesecker, L.; Klos, P. Z.; Martínez-Salinas, A.; Niemeyer*, R.; Sanfiorenzo, A.; Welsh, K.; Wulforth, J. D., **2013**. Understanding spatiotemporal lags in ecosystem services to improve incentives. *BioScience*, 63 (6), 472-482.

(ii) Other Significant Products (*Graduate Student/Post-Doc)

1. Wood, S., S. Jones, J.A. Johnson, K. Brauman, R. Chaplin-Kramer, A.K. Fremier, E. Girvetz, L.J. Gordon, C. Kappel, L. Mandle, M. Mulligan, P. O'Farrell, W.K. Smith, L. Willemen, W. Zhang, F. DeClerck. **2018**. Distilling the role of ecosystem services in the Sustainable Development Goals. *Ecosystem Services*. 29, 70-82
2. Jones, S. K., Fremier, A. K., DeClerck, F. A., Smedley, D., Pieck, A. O., & Mulligan, M. **2017**. Big data and multiple methods for mapping small reservoirs: comparing accuracies for applications in agricultural landscapes. *Remote Sensing*, 9(12)
3. Abelleira Martínez*, O. J.; Fremier, A. K.; Günter, S.; Ramos Bendaña, Z.; Vierling, L.; Galbraith, S. M.; Bosque-Pérez, N. A.; Ordoñez, J. C., **2016**. Scaling up functional traits for ecosystem services with remote sensing: concepts and methods. *Ecology and Evolution*, 6 (13), 4359-4371.

4. Mejia*, F. H.; Baxter, C. V.; Berntsen, E. K.; Fremier, A. K., **2016**. Linking Groundwater – Surface Water Exchange to Food Production and Salmonid Growth. *Canadian Journal of Fisheries and Aquatic Sciences*, 73 (11), 1650-1660.
5. Strickler, K. M.; Fremier, A. K.; Goldberg, C. S., **2015**. Quantifying effects of UV, temperature, and pH on degradation rates of eDNA in an aquatic microcosm. *Biological Conservation*, 183, 85-92.

Synergistic Activities

1. 2019-present. **Fulbright Scholar – Belém, Brazil**. I am currently a Fulbright Scholar in Brazil identifying *microplastics in food webs* of the Amazon River. I am based at the Universidade Federal do Pará · Núcleo de Ecologia Aquática e Pesca da Amazônia. I work directly with undergraduates and graduates here in Brazil and the US to identify microplastics in aquatic systems and publish results.
2. 2008-present: **Mentoring Underrepresented Groups in STEM Training**. I have mentored three undergraduate students through the National Science Foundation Research for Experiences for Undergraduates (REU) Intern Program (2010-2013). I have focused on training Latin Americans in STEM through my research in the US and the Americas. I have mentored two McNair Scholars (Native American, African American) and a Doris Duke Conservation Scholar (2016-2019).
3. 2012-2018: **Social-Ecological Resilience and Law**. Resilience thinking offers an alternative way of understanding the world and managing water resources and can be used to interlink science and policy. I was part of an NSF funded National Social-Environmental Synthesis Center (SESYNC) grant on *Adaptive Governance* that integrated resilience theory and law (2013-2017). I co-led three interdisciplinary seminars focused on integrating social-ecological resilience concepts in research, natural resource management and governance (2011-2018).
4. 2010-2017: **Ecosystem Services and Resilience in Sustainable Development**. An ecosystem services and resilience approach to sustainable development aims help to improve outcomes, such as poverty alleviation, human health and ecosystem productivity. I was a lead participant on a grant to improve ecosystem services management in agricultural landscapes in the Volta Basin (CGIAR) which involved being a part of a Science for Nature and People (SNAP) working group at the National Center for Ecological Analysis and Synthesis (NCEAS) (2015-2017).
5. 2006 Summer: **NSF EAPSI – East Asia and Pacific Summer Institutes**. I participated in a three-month research study at Hokkaido University, Japan during my doctoral studies. I worked with Dr. Futoshi Nakamura and his lab. I continued research at Hokkaido University under a JSPS Post-Doctoral Fellowship (2007-2008) which led to a peer-reviewed paper in *Geomorphology*.