

**PUBLICATIONS****2017**

- Blonder, B., Hypervolume concepts in niche- and trait-based ecology. *Ecography*.
- Blonder, B., Babich Morrow, C., Maitner, B., Harris, D., Lamanna, C., Violle, C., Enquist, B., Kerkhoff, A. New approaches for delineating n-dimensional hypervolumes. *Methods in Ecology and Evolution*.
- Enquist, B., Patrick Bentley, L., Shenkin, A., Maitner, B., Savage, V., Michaletz, S., Blonder, B., Buzzard, V., Espinoza, T., Farfan-Rios, W., Doughty, C., Goldsmith, G. Martin, R., Salinas, N., Silman, M., Díaz, S., Asner, G., Malhi, Y. Assessing trait-based scaling theory in tropical forests spanning a broad temperature gradient. *Global Ecology and Biogeography*.
- Blonder, B. Lamanna, C., Violle, C., Enquist, B.J. Using n-dimensional hypervolumes for species distribution modeling: a response to Qiao et al. (2016). *Global Ecology and Biogeography*.
- Shipley, B., ... Blonder, B., et al. Predicting habitat affinities of plant species using commonly measured functional traits. *Journal of Vegetation Science*.
- Stark, J., Crawford, L., Lehman, R., Enquist, B.J., Blonder, B. Does environmental heterogeneity drive functional trait variation? A test in montane and alpine meadows. *Oikos*.
- Wu, M.S., Feakins, S., Martin, R., Shenkin, A., Patrick Bentley, L., Blonder, B., Salinas, N., Asner, G., Malhi, Y. Altitude effect on leaf wax carbon isotopic composition in humid tropical forests. *Geochimica et Cosmochimica Acta*.
- Blonder, B., Salinas, N., Patrick Bentley, L., Shenkin, A., Chambi Porroa, P., Valdez Tejeira, Y., Violle, C., Fyllas, N., Goldsmith, G., Martin, R., Asner, G., Díaz, S., Enquist, B., Malhi, Y. Predicting trait-environment relationships for venation networks along an Andes-Amazon elevation gradient. *Ecology*.
- Blonder, B. Moulton, D., Blois, J., Enquist, B.J., Graae, B., Macias-Fauria, M., McGill, B., Nogué, Sandra, Ordóñez, A., Sandel, B., Svenning, J-C, Predictability in community dynamics. *Ecology Letters*.

**2016**

- Blonder, B. Pushing past boundaries for trait hypervolumes: a response to Carmona et al. *Trends in Ecology and Evolution*.
- Feakins, S.J., Peters, T., Wu, M.S., Shenkin, A., Salinas, N., Girardin, C.A.J., Bentley, L.P., Blonder, B., Enquist, B.J., Martin, R.E., Asner, G.P. & Malhi, Y. Production of leaf wax n-alkanes across a tropical forest elevation transect. *Organic Geochemistry*.
- Goldsmith, G. R., Bentley, L. P., Shenkin, A., Salinas, N., Blonder, B., Martin, R. E., Castro-Ccosco, R., Chambi-Porroa, P., Diaz, S., Enquist, B. J., Asner, G. P. and Malhi, Y. Variation in leaf wettability traits along a tropical montane elevation gradient. *New Phytologist*.
- Loranger, J., Blonder, B., Garnier, E., Shipley, B., Vile, D., Violle, C. Occupancy and overlap in trait space along a successional gradient in Mediterranean old fields. *American Journal of Botany*.
- Feakins, SJ, Bentley, LP, Salinas, N, Shenkin, A, Blonder, B., Goldsmith, GR, Ponton, C, Arvin, LJ, Wu, MS, Peters, T, Joshua West, A, Martin, RE, Enquist, BJ, Asner, GP, Malhi, Y. Plant leaf wax biomarkers capture gradients in hydrogen isotopes of precipitation from the Andes and Amazon. *Geochimica et Cosmochimica Acta*.
- Blonder, B. Do hypervolumes have holes? *The American Naturalist* 187(4): e-article.
- Blonder, B., Baldwin, B., Enquist, B., Robichaux, R. Variation and macroevolution in leaf functional traits in the Hawaiian silversword alliance (Asteraceae). *Journal of Ecology* 104(1): 219-228.

**2015**

- Morueta Holme, N., Blonder, B., Sandel, B., McGill, B., Peet, R., Ott, J., Violle, C., Enquist, B., Jørgensen, P., Svenning, J. A network approach for inferring species associations from co-occurrence data. *Ecography*.

- Blonder, B., Vasseur, F., Violle, C., Shipley, B., Enquist, B.J., Vile, D. Testing models for the leaf economics spectrum with leaf and whole-plant traits in *Arabidopsis thaliana*. *Annals of Botany – Plants* 7 (plv049) – **editor’s choice**.
- Blonder, B., Nogues-Bravo, D., Borregaard, M., Lessard, J.P., Violle, C., Svenning, J.C., Rahbek, C., Enquist, B. Linking environmental filtering and disequilibrium to biogeography with a community climate. *Ecology* 96(4): 972-985 – **F1000 recommended**.

## 2014

- Blonder, B., Sloat, L., Enquist, B.J., McGill, B. Separating macroecological pattern and process in ecological, economic, and geological systems. *PLoS One* 9(11): e112850.
- Blonder, B., Royer, D., Johnson, K., Wilf, P., Miller, I., Boyle, B., Enquist, B. Plant ecological strategies shift at the Cretaceous-Paleogene boundary. *PLoS Biology* 12(9): e1001949.
- Lamanna, C.A., Blonder, B. (shared first author), Violle, C., Kraft, N.J.B., Sandel, B., Simova, I., Donoghue III, J., Svenning, J.-C., McGill, B.J., Boyle, B., Buzzard, V., Dolins, S., Jørgensen, P.M., Marcuse-Kubitza, A., Morueta-Holme, N., Peet, R.K., Piel, W., Regetz, J., Schildhauer, M., Spencer, N., Thiers, B.M., Wiser, S.K., Enquist, B.J. The latitudinal gradient of tree species richness and functional trait space. *Proceedings of the National Academy of Sciences USA* 111(38): 13745-13750.
- Moles, A. T., Perkins, S. E., Laffan, S. W., Flores-Moreno, H., Awasthy, M., Tindall, M. L., Sack, L., Pitman, A., Kattge, J., Aarssen, L. W., Anand, M., Bahn, M., Blonder, B., Cavender-Bares, J., Cornelissen, J. H. C., Cornwell, W. K., Díaz, S., Dickie, J. B., Freschet, G. T., Griffiths, J. G., Gutierrez, A. G., Hemmings, F. A., Hickler, T., Hitchcock, T. D., Keighery, M., Kleyer, M., Kurokawa, H., Leishman, M. R., Liu, K., Niinemets, Ü., Onipchenko, V., Onoda, Y., Penuelas, J., Pillar, V. D., Reich, P. B., Shiodera, S., Siefert, A., Sosinski, E. E., Soudzilovskaia, N. A., Swaine, E. K., Swenson, N. G., van Bodegom, P. M., Warman, L., Weiher, E., Wright, I. J., Zhang, H., Zobel, M., Bonser, S. P. Which is a better predictor of plant traits: temperature or precipitation? *Journal of Vegetation Science* 25(5): 1167-1180.
- Blonder, B., Enquist, B. Inferring climate from angiosperm leaf venation networks. *New Phytologist* 204(1): 116-126.
- Blonder, B., Violle, C., Patrick Bentley, L., Enquist, B. Inclusion of vein traits improves predictive power for the leaf economic spectrum: a response to Sack et al. (2013). *Journal of Experimental Botany* 65(18): 5109-5114.
- Blonder, B., Lamanna, C., Enquist, B. The n-dimensional hypervolume. *Global Ecology and Biogeography* 23: 595–609.
- Lega, J., Tama, F., Blonder, B., Buxner, S. Explorations in integrated science. *Journal of College Science Teaching* 43(4): 55-60.

## 2013

- Blonder, B., Violle, C., Enquist, B. Assessing the causes and scales of the leaf economics spectrum using venation networks in *Populus tremuloides*. *Journal of Ecology* 101(4): 981-989.
- Pérez-Harguindeguy, N., Díaz, S., Garnier, E., Lavorel, S., Poorter, H., Jaureguiberry, P., Bret-Harte, M. S., Cornwell, W. K., Craine, J. M., Gurvich, D. E., Urcelay, C., Veneklaas, E. J., Reich, P. B., Poorter, L., Wright, I. J., Ray, P., Enrico, L., Pausas, J. G., de Vos, A. C., Buchmann, N., Funes, G., Quétier, F., Hodgson, J. G., Thompson, K., Morgan, H. D., ter Steege, H., van der Heijden, M. G. A., Sack, L., Blonder, B., Poschlod, P., Vaieretti, M. V., Conti, G., Staver, A. C., Aquino, S., Cornelissen, J. H. C. New handbook for standardised measurement of plant functional traits worldwide. *Australian Journal of Botany* 61(3): 167-234.
- Charbonneau, D., Blonder, B., Dornhaus, A. Social insect networks. Chapter in *Temporal Networks* (Springer-Verlag).

## 2012

- Blonder, B., Buzzard, V., Simova, I., Sloat, L., Boyle, B., Lipson, R., Aguilar-Beaucage, B., Andrade, A., Barber, B., Barnes, C., Bushey, D., Cartagena, P., Chaney, M., Contreras, K., Cox, M., Cueto, M., Curtis, C., Fisher, M., Furst, L., Gallegos, J., Hall, R., Hauschild, A., Jerez, A., Jones, N., Klucas, A., Kono, A., Lamb, M., Matthai, J.D., McIntyre, C., McKenna, J., Mosier, N., Navabi, M., Ochoa, A.,

Pace, L., Plassmann, R., Richter, R., Russakoff, B., Aubyn, H.S., Stagg, R., Sterner, M., Stewart, E., Thompson, T.T., Thornton, J., Trujillo, P.J., Volpe, T.J., Enquist, B.J. The shrinkage effect biases estimates of paleoclimate. *American Journal of Botany* 99(11): 1756-1763.

- Blonder, B., De Carlo, F., Moore, J., Rivers, M., Enquist, B. X-ray imaging of leaf venation networks. *New Phytologist* 196(4): 1274-82.
- Blonder, B., Wey, T., Dornhaus, A., James, R., Sih, A. Temporal dynamics and network analysis. *Methods in Ecology and Evolution* 3(6): 958-972.

## 2011

- Blonder, B., Violle, C., Patrick, L., Enquist, B. Leaf venation networks and the origin of the leaf economics spectrum. *Ecology Letters* 14 (2): 91-100.
- Kattge, J., Díaz, S., Lavorel, S., Prentice, I. C., Leadley, P., Bönsch, G., Garnier, E., Westoby, M., Reich, P. B., Wright, I. J., Cornelissen, J. H. C., Violle, C., Harrison, S. P., Van Bodegom, P. M., Reichstein, M., Enquist, B. J., Soudzilovskaia, N. A., Ackerly, D. D., Anand, M., Atkin, O., Bahn, M., Baker, T. R., Baldocchi, D., Bekker, R., Blanco, C. C., Blonder, B., Bond, W. J., Bradstock, R., Bunker, D. E., Casanoves, F., Cavender-Bares, J., Chambers, J. Q., Chapin III, F. S., Chave, J., Coomes, D., Cornwell, W. K., Craine, J. M., Dobrin, B. H., Duarte, L., Durka, W., Elser, J., Esser, G., Estiarte, M., Fagan, W. F., Fang, J., Fernández-Méndez, F., Fidelis, A., Finegan, B., Flores, O., Ford, H., Frank, D., Freschet, G. T., Fyllas, N. M., Gallagher, R. V., Green, W. A., Gutierrez, A. G., Hickler, T., Higgins, S. I., Hodgson, J. G., Jalili, A., Jansen, S., Joly, C. A., Kerkhoff, A. J., Kirkup, D., Kitajima, K., Kleyer, M., Klotz, S., Knops, J. M. H., Kramer, K., Kühn, I., Kurokawa, H., Laughlin, D., Lee, T. D., Leishman, M., Lens, F., Lenz, T., Lewis, S. L., Lloyd, J., Llusià, J., Louault, F., Ma, S., Mahecha, M. D., Manning, P., Massad, T., Medlyn, B. E., Messier, J., Moles, A. T., Müller, S. C., Nadrowski, K., Naeem, S., Niinemets, Ü., Nöllert, S., Nüske, A., Ogaya, R., Oleksyn, J., Onipchenko, V. G., Onoda, Y., Ordoñez, J., Overbeck, G., Ozinga, W. A., Patiño, S., Paula, S., Pausas, J. G., Peñuelas, J., Phillips, O. L., Pillar, V., Poorter, H., Poorter, L., Poschlod, P., Prinzing, A., Proulx, R., Rammig, A., Reinsch, S., Reu, B., Sack, L., Salgado-Negret, B., Sardans, J., Shiodera, S., Shipley, B., Siefert, A., Sosinski, E., Soussana, J.-F., Swaine, E., Swenson, N., Thompson, K., Thornton, P., Waldram, M., Weiher, E., White, M., White, S., Wright, S. J., Yguel, B., Zaehle, S., Zanne, A. E., Wirth, C. TRY – a global database of plant traits. *Global Change Biology* 17(9): 2905-2935.
- Blonder, B. and Dornhaus, A. Time-ordered networks reveal limitations to information flow in ant colonies. *PLoS One* 6(5): e20298.

**Reviewer for:** American Journal of Botany, American Naturalist, Annals of Botany, Animal Behaviour, Annual Review of Ecology Evolution & Systematics, BMC Plant Biology, BMC Bioinformatics, Comisión Nacional de Investigación Científica y Tecnológica (Chile), Ecography, Ecology, Ecology & Evolution, Ecology Letters, Evolution, Global Change Biology, Global Ecology and Biogeography, International Journal of Tropical Ecology, Journal of Ecology, Journal of Plankton Research, Journal of Plant Ecology, Journal of Vegetation Science, Marsden Fund (New Zealand), National Science Foundation (USA), Nature Ecology & Evolution, New Phytologist, PLoS Biology, PLoS One, Oikos, Proceedings of the Royal Society B, Proceedings of the National Academy of Sciences USA, Scientific Reports, Strasbourg Institute of Advanced Study, Tree Physiology, Trees – Structure and Function.

## APPOINTMENTS

Arizona State University, 1/18 – present. Assistant professor in macrosystems ecology, School of Life Sciences.  
University of Oxford, 04/15 – 12/17. Natural Environment Research Council (NERC) research fellow, based at the Environmental Change Institute.

University of Oxford. 03/15 – 04/15. Postdoctoral researcher, Ecosystems group (host: Y. Malhi).

Balliol College, University of Oxford. 10/15 – 10/18. Junior research fellow.

Wolfson College, University of Oxford. 03/15 – 09/15. Junior research fellow.

## EDUCATION

University of Arizona. 2009-2014. Ph. D., ecology and evolutionary biology.

University of Idaho. 2008-2009. M. Ed candidate. Certificate in environmental education.

Swarthmore College. 2005-2008. B.A., physics, mathematics.

## VISITING POSITIONS

Norwegian University of Science and Technology. 2015-2017. Visitor, plant ecology. (host: **B. Graae**).

University of Oxford. 2014. Visitor, ecosystems group (host: **Y. Malhi**).

Aarhus University. 2013. Visitor, ecoinformatics group (host: **J.C. Svenning**).

University of Copenhagen. 2012-2013. Visitor, Center for Macroecology Evolution and Climate (host: **C. Rahbek, D. Nogués-Bravo**).

## TEACHING EXPERIENCE

University of Arizona Sky School. Mt. Lemmon, AZ. 2011 - present. Founded inquiry-based outdoor science school for Arizona K-12 students. We serve predominantly low-income public schools. Last year we reached 600+ students over 16800+ contact-hours. I am currently the science coordinator.

Miles Exploratory Learning Center. Tucson, AZ. 2011-2012. Co-taught four middle school science classes for a full school year via a NSF GK-12 program (BioME). Focused on ecology and climate curriculum. Published a peer-reviewed study with middle school co-authors.

University of Arizona. Tucson, AZ. 2010-2011. Taught courses for Integrated Science program. Led lectures, laboratory activities, and directed readings for students.

McCall Outdoor Science School / AmeriCorps. McCall, ID. 2008 – 2009. Taught environmental science and community/leadership skills to Idaho K-12 students through residential and outreach programs. Developed curricula and managed up to 14 instructors. Co-led summer teacher institute and Upward Bound programs for Idaho NSF EPSCoR program. Taught summer Junior Rangers ecology programs for Ponderosa State Park.

Swarthmore College. Swarthmore, PA. 2007-2008. Developed and taught credit-granting seminar on the physics of biological systems. Also led twice-weekly problem sessions and acted as a resource and liaison for introductory classes.

## AWARDS, GRANTS, AND FELLOWSHIPS

2016 Best reviewer award, 2014-2015 – *Global Ecology and Biogeography*

2015 Green 2.0 Working Group – Leadership at Work recognition

**2015 Norwegian Research Council KLIMAFORSK visiting researcher grant (139,000 NOK)**

**2015 UK NERC 5-year independent research fellowship (£250000)**

**2014 Norwegian Research Council 3-year fellowship (4,200,000 NOK; declined)**

2015 University of California President's Postdoctoral fellowship (declined)

2014 Carlsberg Foundation 2-year fellowship (1,200,000 DKK – declined)

2014 Rocky Mountain Biological Laboratory research grant (\$750)

**2014 White House 'Champion of Change' - environmental stewardship and conservation**

2013 Aarhus University CIRCE collaboration (\$3000)

2013 UA Institute for the Environment travel grant (\$500)

**2012 NSF Doctoral Dissertation Improvement Grant (\$15000)**

2012 University of Arizona graduate/professional student council travel grant (\$500)

2012 UA Institute for the Environment travel grant (\$500)

2012 ESA Physiological Ecology section travel grant (\$500)

**2012 NSF/DNRF Nordic Research Opportunity (Denmark) (\$25000)**

2012 GSA research grant (also outstanding mention award) (\$1400)

**2011-2012 University of Arizona BioME K-12 science teaching fellowship (\$30000)**

**2011-2012 National Geographic Committee on Research and Exploration research grant (\$5000)**

2011 ESA Physiological Ecology section travel grant (\$500)

2011 Rocky Mountain Biological Laboratory summer research fellowship (\$900)

2011 UA Institute for the Environment travel grant (\$500)

- 2011 University of Arizona Galileo Circle scholarship (\$1000)
- 2010 UA student showcase, President's Award and 1st prize, biological sciences division (\$250)
- 2010, 2011 Argonne National Laboratory, Advanced Photon Source beamline access
- 2010-2013 NSF graduate research fellowship (\$30000 x 3 years)**
- 2010-2011 Biosphere 2 Science and Society fellowship (\$3000)
- 2010 Sigma Xi grant-in-aid of research (\$500)
- 2010 University of Arizona graduate/professional student council travel grant (\$500)
- 2009-2010 University of Arizona graduate college fellowship (\$30000)**
- 2009 American Physical Society education mini-grant (\$500)
- 2008-2009 DeVlieg Foundation scholarship (\$1000)
- 2008 Swarthmore College William C. Elmore award (\$500)

## INVITED PRESENTATIONS

- 03/17 "Moving beyond resilience and stability - towards predictability in community dynamics", Resistance, Recovery and Resilience in Long-term Ecological Systems workshop, Finse, Norway
- 08/16 "Community-scale implications of leaf temperature variation in subalpine and alpine meadows", Los Alamos National Laboratory
- 07/16 "Why do leaves have loops", Gordon Research Conference, multiscale vascular plant biology
- 06/16 "Towards predictive community ecology", Rocky Mountain Biological Laboratory
- 04/16 "When does a community's future depend on its past?", University of Copenhagen
- 10/15 "Learning from the past: moving beyond short-term thinking on climate change", Rhodes Trust
- 03/15 "Scaling up in ecology", Oregon State University
- 02/15 "Scaling up in ecology", Utah State University
- 02/15 "Scaling up in ecology", Arizona State University
- 02/15 "Frontiers in niche-based ecology", University of Arizona
- 12/14 "Frontiers in niche based thinking", University of California - Berkeley
- 11/14 "Niches and hypervolumes", University of Texas - Austin
- 09/14 "Why you should care about niche geometry", Norwegian University of Science and Technology
- 06/14 "Why you should care about niche geometry", University of Oxford, Martin School
- 10/13 "Assembly of communities in climate space", Charles University, Prague
- 08/13 "More is different (in ecology)", INNGE, London
- 02/13 "Niches and the n-dimensional hypervolume", University of Arizona
- 02/13 "What really happened at the end of the Cretaceous", University of Puerto Rico
- 10/12 "How to build a time machine using only leaves", University of Oxford, Center for Tropical Forests
- 09/12 "How plants respond to climate change: a functional perspective", Copenhagen University
- 09/12 "How to build a time machine using only leaves", Aarhus University
- 02/12 "Skeletons in the forest", Institute for Tropical Ecosystem Studies, University of Puerto Rico.
- 09/10 "Exploring leaf diversity", Arizona K-12 Science Teacher Symposium.
- 10/08 "Experiential science education", Serve Idaho.

## OTHER PRESENTATIONS

- 01/17 Oral: "Predictability in community dynamics", International Biogeography Society, Tucson
- 08/15 Oral: "Linking environmental filtering and disequilibrium to biogeography with a community climate framework", ESA Baltimore
- 07/14 Poster: "Niches and the n-dimensional hypervolume", Gordon Conference, Unifying Ecology
- 08/13 Oral: "Climate space assembly of communities", INTECOL, London
- 05/13 Oral: "What really happened at the end of the Cretaceous", Manú National Park, Peru
- 08/12 Oral: "Leaf venation networks and paleoclimate", ESA Portland.
- 07/12 Poster: "Leaf venation networks", Gordon Conference, Metabolic Basis of Ecology.
- 08/11 Oral: "Linking leaf venations to the leaf economics spectrum and paleoclimate", ESA Austin.
- 10/10 Poster: "Secrets of the naked leaf", University of Arizona student showcase.
- 09/10 Oral: "Secrets of the naked leaf", Biosphere 2 Science Saturdays.

- 08/10 Oral: "Ant interaction networks", IUSSI 16th International Symposium.  
 07/10 Poster: "Leaf venation networks", Gordon Conference, Metabolic Basis of Ecology.  
 03/10 Oral: "Ant social networks", UAGC symposium.  
 02/10 Poster: "Information flow in ant social networks", ASU Social Biomimicry conference.

## **MEDIA COVERAGE**

- 09/14 Print: "Meteorite that killed off dinosaurs shaped modern-day plants", Los Angeles Times  
 09/14 Print: "Asteroid that wiped out dinosaurs also 'reset plant species'", Daily Mail  
 09/14 Print: "The Meteor That Wiped Out the Dinosaurs Changed Earth's Plant Life, Too", Newsweek  
 09/14 Web: "Every leaf tells a story", The Guardian  
 03/14 Web: "Champions of Change" award (coverage by the White House, National Science Foundation, Sierra Club, AmeriCorps, Arizona Daily Star, etc.)  
 08/13 Print: "Secrets of the naked leaf", Crested Butte News  
 08/13 Radio: "All about leaves", Nature Notes, KBUT radio  
 05/13 Web: "High School Citizen Scientists' Work May Help Better Climate Models", Nature Labcoat life, Popular Science  
 03/13 Web: Winning image in BMC Ecology contest featured on The Guardian, CBS News, UK Daily Mail  
 02/13 TV: "Dry leaves make juicy science" ISTV (for local news nationwide)  
 11/12 Web: "Costa Rica figures in study to adjust fossil and ecological data", AM Costa Rica  
 11/12 Web: "Dry leaves make juicy science", Science Daily  
 09/11 Print: "Myrernes samtale", Ud og Se passagermagasin (DSB Railway, Denmark)  
 08/11 Web: "Using fossil leaf veins to reconstruct past climates", Nature newsblog  
 07/11 Web/print: 18th place winner, Nikon Small World photomicrography competition  
 06/11 TV: "Ant social networks", KVOA TV  
 06/11 Web: "Myrers springer de kedelige møder over", Videnskab  
 05/11 Web: "Ants give new evidence for interaction networks", Science Daily  
 05/11 TV: National Geographic "X-Ray Earth" documentary  
 12/10 Radio: KUAZ (Arizona Public Media) short feature on leaf networks  
 11/10 Web: "Lifeblood of leaves" - Science Daily  
 04/09 TV: "Environmental education", interviewed by KIVI news (Boise, ID)

## **COMMUNITY AND EDUCATION WORK**

- Rocky Mountain Biological Laboratory. Gothic, CO. 2015–present. Co-organized and curated community art show integrating scientific perspectives on natural environments.  
Inspiring Connections Outdoors (Sierra Club Foundation). Tucson, AZ. 2009 - 2014. Lead outdoor trips for school and refugee groups to promote healthy lifestyles and environmental awareness.  
Biosphere 2. Oracle, AZ. 2010 - 2011. As Science and Society fellow, conducted science outreach programs, gave public lectures and teacher workshops, and developed museum displays.  
Sky Island Alliance. Tucson, AZ. 2009 - present. Field volunteer for regional conservation projects.  
Expanding Your Horizons. Swarthmore, PA and Tucson, AZ. 2006-2009. Co-led workshops for annual conference for middle school-age girls interested in science.

## **STUDENTS MENTORED**

### PhD students

Courtenay Ray (ASU)

### Masters' students

Jolanta Rieksta (Norwegian University of Science and Technology) – 2017.

Clarke Knight (University of Oxford) – 2016, main supervisor – **thesis awarded distinction**: "Influence of climate on North American pollen assemblages since the Last Glacial Maximum"

Jarome Ali (Imperial College London) – 2016, co-supervisor – **thesis awarded distinction**: "Geometry of the avian hypervolume: threatened species are morphologically distinct and functionally unique"

Andréa Davrinche (Université Pierre et Marie Curie) –2016, co-supervisor: “Herbivory and thermoregulation in a temperate deciduous forest” -

Summer undergraduate / community college research students

Marco Castaneda (East Los Angeles College) – 2017, main supervisor

Richard Forbes (Colorado College) – 2015, co-supervisor

Lake Crawford (Kansas University) – 2015, main supervisor

Sabastian Escobar (San Bernadino Valley College) – 2016, main supervisor

Dillon Sapena (Montana State University) – 2017, main supervisor

Jordan Stark (Skidmore College) – 2015, co-supervisor

Research / lab project students

Alberta Chaj (University of Arizona) - 2014

Chelsea Powers (Tucson High Magnet School) - 2010

Courtney Magness (University of Arizona) – 2011

Damian Alzua (Tucson High Magnet School) - 2010

Daniel Wolf (University of Arizona) - 2010

David Kahler (University of Arizona) - 2012

Elisabeth Bergman (University of Arizona) - 2014

Elise Boyle (University of Arizona) - 2014

Jessie Rebl (University of Arizona) - 2014

John Lacson (University of Arizona) - 2012

Katherine Quispe Huaypar (Universidad Nacional de San Antonio Abad del Cusco) - 2013

Kayla Lauger (University of Arizona) - 2010

Lindsey Parker (University of Arizona) - 2011

Matthew Belheir (University of Arizona) - 2014

Milan Curry (University of Arizona) - 2010

Nathan May (University of Arizona) - 2012

Nicolle Ioakem (University of Arizona) - 2012

Rebecca Lehman (Colorado College) - 2015

Zoe Mendoza (University of Arizona) – 2014

## **FIELD EXPERIENCE**

Gabon – Lopé National Park – 1 month – assisted with fieldwork to collect plant functional traits in two forests.

Malaysia – Sabah, Borneo – 2 months – led fieldwork temporarily for large international project on tropical forest functioning under land use change with Malaysian and Spanish speaking field team.

Peru – eastern Andes – 2 months – led leaf venation work for large international project on tropical forest carbon fluxes, and trained a Spanish-speaking field team. Primarily camping in remote areas.

Hawaii – Big Island, Maui, Kauai - 1 month – planned and led fieldwork to collect functional traits for a range of threatened and endangered Hawaiian silversword alliance species.

Costa Rica – Rio Savegre drainage - 1 months – field team member for botanical surveying expedition along an elevation gradient. Conducted tree/liana transects and collected voucher material in remote areas.

Panama – Barro Colorado Island - 2 months – field team member for NSF macrosystems project. Set up permanent plots, collected functional traits, managed data.

Puerto Rico – El Yunque - 2 months – field team member for NSF macrosystems project. Set up permanent plots, collected functional traits, managed data.

Norway – Dovre mountains - 1 month – seedling surveys and carbon flux measurements in subalpine meadows.

Colorado - high Rockies - 6 summers – led fieldwork in montane systems. Conducted carbon fluxes, plant censuses, functional trait collection. Extensive backcountry camping in alpine areas.

Oregon – Andrews Forest - 2 months – surveyed woody debris and fish populations in streams.

Arizona – various locations - 5 years – extensive hiking and botanizing.

## **LANGUAGES**

*Spoken:* English (native), Spanish (advanced), French (beginner), Mandarin Chinese (beginner), Danish (beginner-intermediate), Norwegian (beginner), Malay (limited phrases)

*Computer:* R, MATLAB, C, C++, Objective-C, Java, Python

## **POPULAR SCIENCE PHOTOGRAPHY**

- 12/15 *Journal of Ecology* – journal cover image
- 11/15 British Ecology Society photo contest – highly commended
- 11/14 British Ecology Society photo contest – overall-runner up
- 07/14 *BMC Ecology* image competition – winner, landscape ecology section
- 03/13 *UA Eye on the Environment* competition – people’s choice and best student award.
- 12/13 *Ecology Letters* – journal cover image
- 11/13 AIBS / *BioScience* magazine – Faces of Biology contest, 2nd place
- 09/13 Colorado Native Plant Society: 1<sup>st</sup> prize, native plant photography competition
- 09/13 UA Institute of the Environment annual report – cover image
- 08/13 Colorado Native Plant Society – winner, 2013 photo contest
- 03/13 Rocky Mountain Biological Laboratory - spring newsletter cover image
- 02/13 *BMC Ecology* image competition - overall runner-up + 3 highly commended images
- 12/12 *Methods in Ecology and Evolution* – journal cover image
- 08/12 Image featured in The Sierra Club Foundation's annual report (2011)
- 08/12 ESA EcoVision competition - 2nd place
- 07/12 Rocky Mountain Biological Laboratory - summer e-newsletter cover image
- 10/11 Rocky Mountain Biological Laboratory - fall newsletter cover image
- 09/11 Nikon *Small World* photomicrography competition - 18th place
- 04/11 *UA Eye on the Environment* competition - Science for Society award.

## **POPULAR SCIENCE WRITING**

Blonder, B. Volcanes e islas en el cielo. *Mundo Nuestro* (2014).

Blonder, B. Next generation of environmental conservationists. [www.whitehouse.gov/champions](http://www.whitehouse.gov/champions) (2014).

Blonder, B., Morueta-Holme, N. En skov - eller bare et træ? *Vilde evolutionshistorier* - [www.evolution.dk](http://www.evolution.dk) (2011).

Blonder, B. Teaching K-12 fluid dynamics: the physics of flow. *APS Forum on Education Newsletter* (Summer 2009).

Blonder, B. Natural curiosities. [bblonder.wordpress.com](http://bblonder.wordpress.com) (2010 - present; updated weekly)

## **OTHER RESEARCH EXPERIENCE**

Eco-Informatics Summer Institute, H.J. Andrews LTER. 2008. Field survey and analysis for stream ecology project studying the effect of woody debris on channel morphology and fish habitat.

The Ecosystems Center, Marine Biological Laboratory. Woods Hole, MA. 2008-2009. Climate modeling and biogeochemical cycling externship.

Swarthmore College Department of Physics. Swarthmore, PA. 2007. Built a confocal microscope used for fluorescence correlation spectroscopy. Investigated fluidity of biological membranes.

REU, Mellon Institute, Carnegie Mellon University. Pittsburgh, PA. 2006. Studied dye-binding antibodies as fluorescent biolabels.

REU, Rowland Institute, Harvard University. Cambridge, MA. 2005. Investigated surface plasmon resonance-based biosensors with novel geometries and surface enhancements.