David C. Tank

University of Idaho | Moscow, ID http://phylodiversity.net/dtank

Department of Biological Sciences & Stillinger Herbarium | http://www.uidaho.edu/sci/biology| http://www.uidaho.edu/herbarium Institute for Bioinformatics and Evolutionary Studies | http://www.uidaho.edu/research/ibest | http://www.uidaho.edu/cogs/bcb Tel: 208.885.7033 | dtank@uidaho.edu

	ACADEMIC EMPLOYMENT
July 2014-present	Associate Professor Department of Biological Sciences University of Idaho, Moscow, ID
July 2008-present	Director, Stillinger Herbarium University of Idaho, Moscow, ID
August 2013-June 2014	Assistant Professor Department of Biological Sciences University of Idaho, Moscow, ID
July 2008-August 2013	Assistant Professor Department of Forest, Rangeland and Fire Sciences University of Idaho, Moscow, ID
2006-2008	Postdoctoral Associate Division of Botany, Peabody Museum of Natural History Yale University, New Haven, CT Supervisor: Dr. Michael Donoghue
2007	Interim Collections Manager Division of Botany, Peabody Museum of Natural History Yale University, New Haven, CT
2007	Lecturer Department of Ecology & Evolutionary Biology Yale University, New Haven, CT
	EDUCATION
2006 lleiinae (Orobanchaceae)	PhD, Botany University of Washington, Seattle, WA Advisor: Dr. Richard Olmstead dissertation - Molecular phylogenetics of Castilleia and Castilleiinae (C

dissertation - Molecular phylogenetics of Castilleja and Castillejinae (Orobanchaceae)

MS, Botany & Plant Pathology; Specialization in Ecology, Evolutionary Biology & Behavior 2000

Michigan State University, East Lansing, MI

Advisor: Dr. Tao Sang

thesis - Evolution and phylogenetic utility of low-copy nuclear genes: examples from conifers and peonies

BS, Botany & Plant Pathology; with honors, summa cum laude

Michigan State University, East Lansing, MI

TEACHING EXPERIENCE _

University of Idaho 2008-present

Structure and Function Across the Tree of Life (2015; undergraduate lecture/lab) Advanced Field Botany (2013, 2014, 2015; 2-week intensive undergraduate/graduate summer field course at the University of Idaho McCall Field Campus), Dendrology (2008-2014; undergraduate lecture/lab), Field Botany (2011; undergraduate summer short course at the University of Idaho Taylor Wilderness Research Station), Conservation Genetics (2010, 2012; graduate lecture/lab team taught with L. Waits), Phylogenetics Reading Group (2009-present; graduate seminar)

Lecturer, Yale University 2007

Diversity of Life (undergraduate lecture; team taught with M. Wells)

Workshop Leader, Yale University 2007 & 2008

Phylogenetics & Bioinformatics (undergraduate workshop; team taught with S. Smith)

Predoctoral Lecturer, University of Washington
Plant Identification & Classification (undergraduate lecture/lab)

2004 & 2005

1998

Teaching Assistant, University of Washington

2001-2006

Departments of Botany, Zoology, & Biology (Plant Identification & Classification, Anatomy & Morphology of Land Plants, Molecular Evolution, Foundations in Evolution and Systematics, Introductory Biology)

Teaching Assistant, Michigan State University

1998-2000

Departments of Botany and Plant Pathology & Zoology (Plant Systematics, Evolution, Integrative Studies in Biology)

Undergraduate Teaching Assistant, Michigan State University

1997

Department of Botany and Plant Pathology (Environmental Plant Physiology)

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Best Seminar Speaker

2015

Rancho Santa Ana Botanic Garden Seminar Series (Spring), Claremont, CA

Teacher of the Year

2012

College of Natural Resources, University of Idaho, Moscow, ID

Hoffman Award in Teaching Excellence, Nominee

2012

University of Idaho, Moscow, ID

Excellence in Teaching Award, Nominee University of Washington, Seattle, WA

2005 & 2006

Melinda Denton Plant Systematics Dissertation Fellowship

Department of Biology, University of Washington, Seattle, WA.

2005

Ingrith Deyrup-Olsen Distinguished Teaching Award

Department of Biology, University of Washington, Seattle, WA.

2004 2004

Outstanding Biology Teaching Assistant Award

Department of Biology, University of Washington, Seattle, WA.

2003

Delzie Demaree Travel Award 50th Annual Systematics Symposium, Missouri Botanical Garden, St. Louis, MO

Molecular Phylogenetics and Systematics Graduate Fellowship

2000-2002

Department of Botany, University of Washington, Seattle, WA.

Valedictorian

1998

College of Natural Science, Michigan State University, East Lansing, MI.

Bessey Memorial Award for Outstanding Undergraduate Student

1998

Department of Botany & Plant Pathology, Michigan State University, East Lansing, MI.

Angell Foundation Biology Scholar

1993

Department of Math & Science, Northwestern Michigan College, Traverse City, MI.

GRANTS (*INDICATES STUDENT CO-PI) _

2016-2018

US Geological Survey, \$22,241 (co-Pl)

"Diet, population connectivity and adaptive differences among populations of northern Idaho ground squirrels" PI Courtney Conway (University of Idaho), co-PIs Lisette Waits (University of Idaho), Kimberly Andrews (University of Idaho).

NSF DEB, Phylogenetic Systematics, Doctoral Dissertation Improvement Grant, \$18,738

2015-2017

"Dissertation Research: How many degrees of separation? Investigating the main contributors to plant speciation in a rapidly diverging lineage in western North America" co-PI Sarah Jacobs[†].

NSF DEB, Phylogenetic Systematics, Doctoral Dissertation Improvement Grant, \$18,743

2015-2017

"Dissertation Research: Adaptive radiation and hybridization: testing the hybrid swarm origin hypothesis for adaptive radiations in a phylogenetic framework" co-PI Diego Morales-Briones[†].

NSF DEB, Phylogenetic Systematics, Systematics & Biodiversity Sciences, \$7,017

2015-2016

"REU Supplement: CAREER: Correlates of diversification and the investigation of the accumulation of evidence for speciation: phylogeny and systematics of a rapid and recent radiation"

BEACON: An NSF Center for the Study of Evolution in Action, \$30,612 (\$71,906 total)

"Evolutionary and Ecological consequences of polyploidy" co-PI Verónica Di Stilio (University of Washington).

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$5,008

2015-2016

"Stillinger Herbarium Expedition: The 8th annual Idaho Botanical Foray"

NSF DEB, Biodiversity Discovery & Analysis, Systematics & Biodiversity Sciences, \$622,609 (\$906.796 total) (co-Pl)

2015-2018

"Collaborative Research: A comparative phylogeographic approach to predicting cryptic diversity - the inland temperate rainforest as a model system" Pls Jack Sullivan (University of Idaho) and Bryan Carstens (Ohio State University).

National Geographic Society, \$12,385 (co-Pl)

2014-2016

"A comparative phylogeographic approach to predicting cryptic diversity: inland Northwest rainforests as a model ecosystem" PI Jack Sullivan (University of Idaho)

NSF DEB, Phylogenetic Systematics, Systematics & Biodiversity Sciences, \$800,000

2013-2018

"CAREER: Correlates of diversification and the investigation of the accumulation of evidence for speciation: phylogeny and systematics of a rapid and recent radiation"

NSF DEB, Phylogenetic Systematics, Doctoral Dissertation Improvement Grant, \$14,980

2012-2015

"Dissertation Research: Investigating the accumulation of evidence for speciation: species delimitation in a rapid and recent radiation" co-PI Simon Uribe-Convers[†].

BEACON: An NSF Center for the Study of Evolution in Action, \$81,368 (\$154,875 total)

12-201

"The genetic basis of weediness: rapid evolution of flowering time in wild radish" co-Pls James Foster (University of Idaho), Jeffrey Conner (Michigan State University), Ian Dworkin (Michigan State University), Gregory Goins (North Carolina A&T).

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$3,785

2011-2012

"Stillinger Herbarium Expedition: The first annual Stillinger Herbarium Foray and fourth annual Idaho Botanical Foray"

NSF DBI, Biological Research Collections, \$301,351 (\$1,340,000 total)

2010-20°

"Collaborative Research: The Online Consortium of Pacific Northwest Herbaria Expanded to Include Taxonomically Diverse Specimens from Large and Small Regional Collections" co-Pls Richard Olmstead (University of Washington), Aaron Liston (Oregon State University), Matt Lavin (Montana State University).

University of Idaho, Research Office Seed Grant, \$11,996

2010-2011

"Next generation sequencing of a chloroplast genomes in the paintbrushes (*Castilleja*): species-level phylogenomics in a taxonomically difficult group"

NSF OISE, International Research Experience for Students, \$144,883 (co-PI)

2010-2013

"An Interdisciplinary Team-Based International Research Experience in Biodiversity Conservation and Sustainable Community Development in the Ecuadorian Andes" PI Lisette Waits, co-PIs Stephen Mulkety, Sandra Pinel, and Janet Rachlow.

University of Idaho, Environmental Sciences FIT Grant, \$20,000 (co-PI)

2009-2010

"Establishing a long-term interdisciplinary research and education program focused on biodiversity conservation in the Ecuadorian Andes" PI Lisette Waits, co-PIs Sandra Pinel, and Janet Rachlow

NSF DEB, Doctoral Dissertation Improvement Grant, \$14,462

2004-2006

Sigma-Xi Grants in Aid of Research, \$500

2003

University of Washington Chapter, Seattle, WA.

Giles Graduate Student Award for Field Research, \$600 & \$1200

2001 & 2003

Department of Botany, University of Washington, Seattle, WA.

Society of Systematic Biologists Graduate Student Research Award, \$1,000

2001

American Society of Plant Taxonomists Graduate Student Research Award, \$700

2001

Botanical Society of America Karling Award for Graduate Student Research, \$500

2001 1999

Undergraduate Research Support Grant, \$1,000

Sigma-Xi Grants in Aid of Research, \$700

1997

College of Natural Science, Michigan State University, East Lansing, MI.

STUDENT GRANTS.

International Association for Plant Taxonomy, Research Grant Program in Plant Systematics, \$1000

Diego Morales-Briones, "Phylogeny and systematics of the genus Lachemilla (Rosaceae) in the Andes"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$10,700

2014

2014

Diego Morales-Briones, "Stillinger Herbarium Expedition: Sampling the neotropical plant genus *Lachemilla* Focke (Rydb.) in the mountains of Mexico and Central America"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$10,695

Maribeth Latvis (postdoc), co-PI Sarah Jacobs, "Stillinger Herbarium Expedition: Investigation of the accumulation of evidence for speciation: phylogeny and systematics of Castilleja (Orobanchaceae)"

American Society of Plant Taxonomists Graduate Student Research Award, \$1000

2014

2014

Sarah Jacobs, "Examining differentiation of species criteria in diversification: a comparison of two species complexes in Castilleja (Orobanchaceae)"

Society for the Study of Evolution Rosemary Grant Award for Graduate Student Research, \$2,250 2013 Hannah Marx, "Sky Islands of Idaho and a Pacific Archipelago: using phylogenetic patterns to determine dominant processes of community assembly"

Society of Systematic Biologists Graduate Student Research Award, \$2,000

2013

Hannah Marx, "Sky Islands of Idaho and a Pacific Archipelago: using phylogenetic patterns to determine dominant processes of community assembly"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$3,010

2013

Sarah Jacobs, "Stillinger Herbarium Expedition: Towards understanding species boundaries in two alliances of the genus Castilleja (Orobanchaceae)"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$2,620

2013

Hannah Marx, "Stillinger Herbarium Expedition: Sky islands of Idaho: phylogenetic community composition of alpine flora"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$10,750

2013

Simon Uribe-Convers; co-PI Diego Morales-Briones, "Stillinger Herbarium Expedition: Completing sampling of three taxonomically diverse genera in Andean South America: facilitating comparative molecular systematic research at U of I"

Botanical Society of America Graduate Student Research Award, \$500

2013

Diego Morales-Briones, "Phylogeny and systematics of the genus Lachemilla (Rosaceae) in the Andes"

American Society of Plant Taxonomists Graduate Student Research Award, \$800

2013

Diego Morales-Briones, "Phylogeny and systematics of the genus Lachemilla (Rosaceae) in the Andes"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$5,437

2012

 $Hannah\ Marx,\ "Stillinger\ Herbarium\ Expedition:\ Sky\ islands\ of\ Idaho:\ phylogenetic\ community\ composition\ of\ alpine\ flora"$

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$10,965

2012

Diego Morales-Briones, co-PI Simon Uribe Convers, "Stillinger Herbarium Expedition: Increasing sampling of three taxonomically diverse genera in Andean South America: facilitating comparative molecular systematic research at U of I"

University of Idaho Student Grant Program, \$1,486

2012

Diego Morales-Briones, "Ploidy-level estimation in the genus *Lachemilla* (Rosaceae) using real-time polymerase chain reaction and single-copy nuclear genes"

University of Idaho Student Grant Program, \$4,914

201

Simon Uribe-Convers, "Inferring patterns of biodiversity in a young Andean ecosystem; developing a novel high throughput sequencing approach for phylogenetic and phylogeographic studies in *Bartsia* (Orobanchaceae)"

University of Idaho, Stillinger Trust, Herbarium Collecting Expeditions, \$6,496

201

Simon Uribe-Convers, "Stillinger Herbarium Expedition: Phylogenetic analysis of the genus *Bartsia* L. (Oroban-chaceae)"

Botanical Society of America Graduate Student Research Award, \$500

2011

Simon Uribe-Convers, "Inferring patterns of biodiversity in a young Andean ecosystem; developing a novel high throughput sequencing approach for phylogenetic and phylogeographic studies in *Bartsia* (Orobanchaceae)"

American Society of Plant Taxonomists Graduate Student Research Award, \$750

2010

Simon Uribe-Convers, "Phylogenetic analysis of the genus *Bartsia* L. (Orobanchaceae): increasing sampling of a mostly Andean genus"

Society of Systematic Biologists Graduate Student Research Award, \$1,800

2010

Simon Uribe-Convers, "Phylogenetic analysis of the genus *Bartsia* L. (Orobanchaceae): increasing sampling of a mostly Andean genus"

October 2006

September 2006

ACTIVITIES. **INVITED PRESENTATIONS:** Department of Biology, Willamette University, Salem, OR October 2015 Idaho Native Plant Society, White Pine Chapter, Moscow, ID March 2015 Rancho Santa Ana Botanic Garden, Claremont, CA February 2015 Program in Plant Biology and Conservation, Chicago Botanic Garden January 2015 & Northwestern University, Evanston, IL Department of Ecology, Evolution, and Organismal Biology, Ohio State University, October 2014 Columbus, OH 60th Annual Systematics Symposium, Missouri Botanical Garden, St. Louis, MO October 2013 Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI October 2013 Inland Northwest Genomics Symposium, IBEST, University of Idaho, Moscow, ID May 2013 Department of Botany, Smithsonian Institute, Washington, DC February 2013 Department of Biology, University of Florida, Gainesville, FL February 2013 Department of Biological Sciences, University of Idaho, Moscow, ID October 2012 Department of Ecology and Evolutionary Biology & University of Colorado Museum of March 2012 Natural History, University of Colorado, Boulder, CO Department of Biological Sciences, Washington State University, Pullman, WA March 2012 The Field Museum, A. Watson Armour Research Seminar, Chicago, IL March 2011 Palouse Ecology, Evolution, and Systematics, Moscow, ID April 2010 Idaho Native Plant Society, White Pine Chapter, Moscow, ID March 2010 Universidad Tecnica Particular de Loja, Loja, Ecuador January 2010 Biodiversity Research Center, Ilia Chavchavadze State University, Tbilisi, Georgia October 2009 Department of Botany, University of Wyoming, Laramie, WY September 2009 Department of Biological Sciences, Boise State University, Boise, ID October 2008 Yale Institute for Biospheric Studies, Yale University, New Haven, CT April 2008 College of Natural Resources, University of Idaho, Moscow, ID November 2007 November 2007 Department of Biology, Linfield College, McMinnville, OR

Presentations at professional meetings (*Indicates Student Coauthor; *Indicates presenter when not first author):

Harvard University Herbaria, Harvard University, Cambridge, MA

Department of Ecology and Evolutionary Biology, Yale University, New Haven, CT

- Martine, C, I Jordan-Thaden, M Roche, D Hayes, and **DC Tank**. Transcriptome-mined introns offer new understandings of phylogenetic relationships among Australian bush tomatoes (*Solanum*) within the context of the Old World spiny solanums. Botany meeting, Edmonton, Alberta, Canada, 2015.
- Soltis, DE*, PS Soltis*, MW Pennell, LJ Harmon, and **DC Tank**. Polyploidy, shifts in diversification and associated changes in characters in angiosperm evolution. Botany meeting, Edmonton, Alberta, Canada, 2015.
- Morales-Briones, D[†], and **DC Tank**. Divergence time estimates and historical biogeography of the neotropical genus *Lachemilla* (Rosaceae). Botany meeting, Edmonton, Alberta, Canada, 2015.
- Jacobs, SJ[†], S Torpey[†], M Latvis, and **DC Tank**. Integrated species delimitation in the *Castilleja cusickii* (Orobanchaceae) species complex. Botany meeting, Edmonton, Alberta, Canada, 2015.
- Latvis, M, SJ Jacobs[†], J McCullough[†], S Torpey[†], and **DC Tank**. Phylogenomic data and dense taxon sampling reveal repeated episodes of hybridization throughout the complex evolutionary history of *Castilleja* (Orobanchaceae). Botany meeting, Edmonton, Alberta, Canada, 2015.
- **Tank, DC**, L Widener, M Latvis, SJ Jacobs[†], K Skogen, and J Fant. Phylogeny and evolution of a historically challenging species group: mixed data types identify cryptic species and a history of gene flow in the *Castilleja latifolia* (Orobanchaceae) species alliance. Botany meeting, Edmonton, Alberta, Canada, 2015.

- Marx, HE[†], C Dentant, S Lavergne, and **DC Tank**. Patterns of community assembly on "sky islands" in the French Alps using mega-phylogenetic approaches. Botany meeting, Edmonton, Alberta, Canada, 2015.
- Jordan-Thaden, I, I Gilman^{†*}, S Uribe-Convers[†], S Chamala, **DC Tank**, and C Martine. Selection and validation of transcriptome-mined intronic primers for Fluidigm PCR and Illumina sequencing. Botany meeting, Edmonton, Alberta, Canada, 2015 (poster).
- Butler, A[†], M Latvis, SJ Jacobs[†], and **DC Tank**. Species delimitation in the *Castilleja pilosa* species complex. Botany meeting, Edmonton, Alberta, Canada, 2015 (poster).
- Marx, HE[†], P Weigelt, S Lavergne, and **DC Tank**. Dissecting drivers of invaded communities in a comparative phylogenetic framework. British Ecological Society and Société Française d'Ecologie, Lille, France, 2014.
- Marx, HE[†], P Weigelt, S Lavergne, and **DC Tank**. Dissecting drivers of invaded communities in a comparative phylogenetic framework. Modern Comparative Phylogenetic Methods, Seville, Spain, 2014.
- Jordon-Thaden, I, S Uribe-Convers[†], GT Godden, S Chamala, **DC Tank**, and CT Martine. A research workflow for development of single-copy nuclear loci and high-throughput targeted enrichment for two or more phylogenetic studies. Botany meeting, Boise, Idaho, 2014.
- Uribe-Convers, S[†], ML Settles, and **DC Tank**. A targeted subgenomic approach for phylogenomics based on microfluidic PCR and high throughput sequencing. Botany meeting, Boise, Idaho, 2014.
- Morales-Briones, D[†], and **DC Tank**. The role of polyploidy and hybridization in the diversification of *Lachemilla* (Rosaceae). Botany meeting, Boise, Idaho, 2014.
- Uribe-Convers, S[†] and **DC Tank**. Species-level systematics of *Bartsia* (Orobanchaceae): a multilocus approach with complete sampling and hundreds of individuals for a rapid and recent Andean radiation. Botany meeting, Boise, Idaho, 2014.
- Marx, HE[†], S Lavergne, W Thuiller, and **DC Tank**. Dissecting drivers of community assembly in a comparative phylogenetic framework. Botany meeting, Boise, Idaho, 2014.
- **Tank, DC**. Polyploidy and diversification rates: blind alleys, dead ends, and delayed drivers. Botany meeting, Boise, Idaho, 2014.
- **Tank, DC**, JM Eastman, MW Pennell, CE Hinchliff, PS Soltis, DE Soltis, and LJ Harmon*. Progressive radiations and the pulse of angiosperm diversification. Radiations conference, Institute of Systematic Botany, University of Zürich, Zürich, Switzerland, 2014.
- Zanne, AE, JM Beaulieu, WK Cornwell, and **DC Tank**. Evolution and biogeography of leaf and stem traits: consequences for carbon cycling. INTECOL, ExCel, London, UK, 2013.
- Jacobs, SJ[†], C Kristofferson[†], S Uribe-Convers[†], and **DC Tank.** Evaluating the taxonomic status of two narrowly endemic owl's clovers (*Castilleja*: Orobanchaceae). Botany meeting, New Orleans, Louisiana, 2013.
- Marx, HE[†] and **DC Tank**. Alien encounters of the floral kind: interpreting patterns of community assembly on the San Juan Islands. Botany meeting, New Orleans, Louisiana, 2013.
- Morales-Briones, DF[†], A Liston, and **DC Tank.** Phylogenomics of *Lachemilla* (Rosaceae): Coalescent-based species trees using sequence capture data. Botany meeting, New Orleans, Louisiana, 2013.
- Uribe-Convers, S[†] and **DC Tank.** Got Genome? A long PCR based method for chloroplast genome enrichment and phylogenomics in angiosperms. Botany meeting, New Orleans, Louisiana, 2013.
- Uribe-Convers, S[†] and **DC Tank.** Chloroplast phylogenomics in *Bartsia* (Orobanchaceae): a subgenomic approach using microfluidic PCR. Botany meeting, New Orleans, Louisiana, 2013.
- Jacobs, SJ[†], C Kristofferson[†], S Uribe-Convers[†], and **DC Tank**. Coalescent-based species delimitation in a recently diverged lineage: a case study using multiple methods. Evolution meeting, Snowbird, Utah, 2013.
- Marx, HE[†] and **DC Tank**. Alien encounters of the floral kind: interpreting patterns of community assembly on the San Juan Islands. Evolution meeting, Snowbird, Utah, 2013.
- **Tank, DC**, JM Eastman, MW Pennell, and LJ Harmon. Progressive radiations and the pulse of angiosperm diversification. Botany meeting, Columbus, Ohio, 2012.
- Morales-Briones, D[†], K Romoleroux, and **DC Tank**. Phylogenetic relationships of *Lachemilla* and its relatives in subtribe Alchemillinae (Rosaceae): intergeneric relationships, polyploidy, and hybridization. Botany meeting, Columbus, Ohio, 2012.

- Marx, HE[†], D Giblin, P Dunwiddie, and **DC Tank**. Community phylogenetics of the vascular flora of the San Juan Islands archipelago in Puget Sound. Botany meeting, Columbus, Ohio, 2012.
- **Tank, DC**, and JM Eastman. Diversification rates, life history shifts, and chromosomal evolution in *Castilleja* and relatives (Castillejinae, Orobanchaceae). Botany meeting, St. Louis, Missouri, 2011.
- Kisha, TJ, B Hellier, **DC Tank**, and J Hu. Comparison of *matK* sequences and TRAP molecular markers for the taxonomic characterization of six species of the *Allium* section *Cepa* (Mill.) Prokh. complex. American Society for Horticultural Science meeting, Waikoloa, Hawaii, 2011. abstract published in supplement to HortScience 46: S205.
- **Tank, DC**, J Duke[†], and S Uribe-Convers[†]. Phylogeny and diversification of the species-rich perennial *Castilleja* (Orobanchaceae) clade: parallel radiations in western North America and montane Latin America. Botany meeting, Providence, Rhode Island, 2010.
- Uribe-Convers, S[†] and **DC Tank**. Phylogenetic analysis of the genus *Bartsia* L. (Orobanchaceae): a mostly South American genus wrapped in a European clade. Botany meeting, Providence, Rhode Island, 2010.
- Clay, D⁺, **DC Tank**, JM Egger, and JF Smith. Exploring interspecific hybridization in a rare endemic species of paintbrush (*Castilleja christii*, Orobanchaceae) using molecular and morphological techniques. Botany meeting, Providence, Rhode Island, 2010.
- Olmstead, RG, Y-W Yuan, HE Marx[†], and **DC Tank**. The PPR gene family, one stop shopping for multiple, independent, nuclear gene loci for plant phylogenetics with examples from Lamiales. Botany meeting, Providence, Rhode Island, 2010.
- Soltis, DE, SA Smith, N Cellinese, M Moore, NF Refulio-Rodriguez, RG Olmstead, S Crawley, C Black, D Diouf, KW Hilu, Y-L Qiu, KJ Sytsma, K Wurdack, Z Xi, CC Davis, DC Tank, M Sanderson, MJ Donoghue, and PS Soltis. Inferring angiosperm phylogeny: 17-gene 642-taxon analyses. Botany meeting, Providence, Rhode Island, 2010.
- **Tank, DC.** Using large trees to synthesize and direct phylogenetic research in Orobanchaceae. Botany meeting, Snowbird, Utah, 2009.
- **Tank, DC** and MJ Donoghue. Phylogeny and phylogenetic nomenclature of the Campanulidae based on an expanded sample of genes and taxa. Botany meeting, Snowbird, Utah, 2009.
- Tank, DC. Using large trees to synthesize and direct phylogenetic research in Orobanchaceae. Evolution meeting, Moscow, Idaho, 2009.
- Olmstead, RG and **DC Tank**. Over-precision in molecular dating. Botany meeting, Vancouver, British Columbia, 2008.
- Olmstead, RG and **DC Tank**. Over-precision in molecular dating. Evolution meeting, Minneapolis, Minnesota, 2008.
- **Tank, DC**, RC Winkworth, J Lundberg, and MJ Donoghue. An update on Campanulid phylogeny. Botany meeting, Chicago, Illinois, 2007.
- **Tank, DC** and RG Olmstead. Evolutionary history of perennial *Castilleja* (Castillejinae, Orobanchaceae): evidence from the nuclear gene waxy. Botany meeting, Chicago, Illinois, 2007.
- Angiosperm Tree of Life Group, DE Soltis. Progress in Assembling the Angiosperm Tree of Life. Botany meeting, Chicago, Illinois, 2007.
- Olmstead, RG, PM Beardsley, and **DC Tank**. Evolution of ploidy, perenniality, and pollination in monkey flowers and paintbrushes. Evolution meeting, Christchurch, New Zealand, 2007.
- **Tank, DC** and RG Olmstead. Geographic disjunction or morphological convergence? The evolutionary origin of a second radiation of annual *Castilleja* species in South America (subtribe Castillejinae: Orobanchaceae). Botany meeting, Austin, Texas, 2005.
- **Tank, DC** and RG Olmstead. Systematics of subtribe Castillejinae (Orobanchaceae): the role of morphology in taxon delimitation. Evolution meeting, Fort Collins, Colorado, 2004.
- **Tank, DC** and RG Olmstead. Phylogenetic analysis of subtribe Castillejinae (tribe Rhinantheae: Orobanchaceae). Botany meeting, Madison, Wisconsin, 2002.
- **Tank, DC**, X-Q Wang, and T Sang. Recent transfers of cinnamyl alcohol dehydrogenase between conifers diverged 200 million years ago. Botany meeting, Albuquerque, New Mexico, 2001.
- **Tank, DC** and T Sang. The glycerol-3-phosphate acyltransferase gene in *Paeonia* (Paeoniaceae): molecular evolution and phylogenetic utility. Botany meeting, Portland, Oregon, 2000.

Wang, X-Q, **DC Tank**, and T Sang. Phylogeny and divergence times in Pinaceae: evidence from three genomes. Botany meeting, Portland, Oregon, 2000.

Tank, DC and T Sang. Evolution of the GPAT gene in *Paeonia* (Paeoniaceae). XVI International Botanical Congress, St. Louis, Missouri, 1999 (poster).

EDUCATIONAL OUTREACH:

8th Annual Idaho Botanical Foray; Nez Perce-Clearwater National Forest

June 2015

5-day collecting trip for >25 volunteers from the University of Idaho, Boise State University, and Idaho State University.

Plants Are Cool, Too! episode 2: Fossilized Forests; Guest Host & Location Producer

September 2012

http://www.youtube.com/watch?v=YfRXDbtkEi0

4th Annual Idaho Botanical Foray; Payette National Forest

June 2011

5-day collecting trip for >40 volunteers from the University of Idaho, Boise State University, College of Idaho, Idaho State University, Washington State University, and the University of Washington.

SERVICE TO THE SCIENTIFIC COMMUNITY:

Technology Committee, Chair

2015-present

Botanical Society of America

Editorial Board

2009-present

Organisms, Diversity, and Evolution

CouncilInternational Society for Phylogenetic Nomenclature

2013-present

Awards Committee

American Society of Plant Taxonomists

2014

Technology Committee

Botanical Society of America

2013-2015

Institute for Bioinformatics and Evolutionary Studies, University of Idaho

2012-2015

Committee on Phylogenetic Nomenclature, Chairperson

2011-2012

International Society for Phylogenetic Nomenclature

National Science Foundation Panelist

2010

Division of Biological Infrastructure, Biological Research Collections Panel

Governing Board, Bioinformatics and Computational Biology graduate program

Committee on Phylogenetic Nomenclature

2009-2012

International Society for Phylogenetic Nomenclature

Symposium Co-Organizer (with CP Randle and JM Morawetz)

2009

The Greatest Opportunists of All- Celebrating 40 years of Job Kuijt's *Biology of Parasitic Flowering Plants*. Botany meeting, Snowbird, Utah, 2009.

Nominations Committee 2007-2010

International Society for Phylogenetic Nomenclature

Manuscript Reviews 2002-present

Acta Horticulturae (2006); American Journal of Botany (2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015); Applications in Plant Sciences (2014); BMC Evolutionary Biology (2009, 2010, 2013, 2015); Botanical Journal of the Linnaean Society (2012, 2013); Evolution (2014); Flora of North America (2015); Folia Geobotanica (2009); International Journal of Plant Sciences (2011, 2012, 2013); Journal of Ecology (2014, 2015); Journal of Systematics and Evolution (2010, 2011); Molecular Phylogenetics and Evolution (2002, 2004, 2006, 2007, 2008, 2009, 2011, 2012, 2013, 2014, 2015); New Phytologist (2014); Phylonyms: A Companion to the Phylocode (2009, 2010, 2011); Phytotaxa (2012, 2013); Plant Physiology (2007); Plant Systematics and Evolution (2007); Systematic Botany (2010, 2011, 2012, 2013, 2014, 2015); Taxon (2006, 2009)

Grant Proposal Reviews

Panel service: National Science Foundation, Collections in Support of Biological Research (2010); National Science Foundation, Graduate Research Fellowship Program (2015); National Science Foundation, Systematics and Biodiversity Sciences (2015).

Ad hoc reviews: National Geographic Society (2008); National Science Foundation, Systematics and Biodiversity Sciences (2008, 2009, 2013)

Memberships in Professional Associations (current)

Society for Systematic Biology, Society for the Study of Evolution, Botanical Society of America, American Society of Plant Taxonomists, International Society for Phylogenetic Nomenclature, Sigma-Xi, Society of Herbarium Curators, Idaho Native Plant Society

Advising

Graduate students: *completed* - Simon Uribe-Convers (PhD, 2009-2014); *in progress* - Hannah E Marx (PhD, 2011), Diego Morales-Briones (PhD, 2012), Sarah Jacobs (PhD, 2012), Ian Gilman (MS, 2015), Megan Ruffley (PhD, 2015; co-advised with J Sullivan)

Postdoctoral scholars: *current* - Maribeth Latvis (2013), Anahi Espindola (2015; co-advised with J Sullivan); *former* - Jonathan Eastman (2012-2013; co-advised with LJ Harmon)

Student committees: completed - Brice Sarver (University of Idaho, PhD, 2014), Mare Nazaire (Washington State University, PhD, 2013), Rachel Hutchinson (University of Idaho, MS, 2013), Danielle Clay (Boise State University, MS, 2011); in progress - Sara Ashiglar (University of Idaho, MS), Daniel Caetano (University of Idaho, PhD), Tyler Gulliksen (University of Idaho, MS), Joshua Miller (University of Idaho, MS), Megan Riley (University of Idaho, MS), Katie Peterson (University of Idaho, PhD), Andre Sanfiorezno (University of Idaho, PhD), Maria Paulina Viteri (University of Idaho, PhD)

PUBLICATIONS (*INDICATES STUDENT COAUTHOR) -

IN REVIEW/REVISION:

- Uribe-Convers, S[†] and **DC Tank**. *in revision*. Phylogenetic revision of the genus *Bartsia* (Orobanchaceae): disjunct distributions correlate to independent lineages. *submitted to Systematic Botany*.
- Uribe-Convers, S[†], ML Settles, and **DC Tank**. *in revision*. A targeted subgenomic approach for phylogenomics based on microfluidic PCR and high throughput sequencing. *submitted to PLOS ONE*.

PRE-PRINTS:

- Uribe-Convers, S[†], ML Settles, and **DC Tank**. 2015. A targeted subgenomic approach for phylogenomics based on microfluidic PCR and high throughput sequencing. bioRxiv: 021246. doi: 10.1101/021246.
- Uribe-Convers, S[†] and **DC Tank**. 2015. Shifts in diversification rates linked to biogeographic movement into new areas: An example of a recent radiation in the Andes. bioRxiv: 019554. doi: 10.1101/019554.

PEER REVIEWED PAPERS PUBLISHED OR IN PRESS:

- Marx, HE[†], DE Giblin, PW Dunwiddie, and **DC Tank**. *in press [early view online]*. Deconstructing Darwin's Naturalization Conundrum in the San Juan Islands using community phylogenetics and functional traits. Diversity and Distributions. doi: 10.1111/ddi.12401.
- Uribe-Convers, S[†] and **DC Tank**. 2015. Shifts in diversification rates linked to biogeographic movement into new areas: An example of a recent radiation in the Andes. American Journal of Botany 102: 1854-1869. doi: 10.3732/ajb.1500229.
- **Tank, DC**, JM Eastman, MW Pennell, PS Soltis, DE Soltis, CE Hinchliff, JW Brown, EB Sessa, and LJ Harmon. 2015. Nested radiations and the pulse of angiosperm diversification: increased diversification rates often follow whole genome duplications. New Phytologist 207: 454-467. doi: 10.1111/nph.13491.
- Zanne, AE, DC Tank, WK Cornwell, JM Eastman, SA Smith, RG FitzJohn, DJ McGlinn, BC O'Meara, AT Moles, DL Royer, IJ Wright, L Aarssen, RI Bertin, A Calaminus, R Govaerts, F Hemmings, MR Leishman, J Oleksyn, PB Reich, DE Soltis, PS Soltis, PF Stevens, NG Swenson, L Warman, M Westoby, and JM Beaulieu. 2015. Zanne et al. reply [to E. J. Edwards, J. M. de Vos & M. J. Donoghue Nature 521: E5-E6]. Nature 521: E6-E7. doi: 10.1038/nature14394.
- Zanne, AE, **DC Tank**, WK Cornwell, JM Eastman, SA Smith, RG FitzJohn, DJ McGlinn, BC O'Meara, AT Moles, DL Royer, IJ Wright, L Aarssen, RI Bertin, A Calaminus, R Govaerts, F Hemmings, MR Leishman, J Oleksyn, PB Reich, DE Soltis, PS Soltis, PF Stevens, NG Swenson, L Warman, M Westoby, and JM Beaulieu. 2015. Corrigendum: Three keys to the radiation of angiosperms into freezing environments. Nature 521: 380. doi: 10.1038/nature14371.
- Nürk, NM, S Uribe-Convers[†], B Gehrke, **DC Tank**, and FR Blattner. 2015. Oligocene niche shift, Miocene diversification–cold tolerance and accelerated speciation rates in the St. John's Worts (*Hypericum*, Hypericaceae). BMC Evolutionary Biology 15: 80. doi: 10.1186/s12862-015-0359-4.

- Zanne, AE, DC Tank, WK Cornwell, JM Eastman, SA Smith, RG FitzJohn, DJ McGlinn, BC O'Meara, AT Moles, DL Royer, IJ Wright, L Aarssen, RI Bertin, A Calaminus, R Govaerts, F Hemmings, MR Leishman, J Oleksyn, PB Reich, DE Soltis, PS Soltis, PF Stevens, NG Swenson, L Warman, M Westoby, and JM Beaulieu. 2014. Corrigendum: Three keys to the radiation of angiosperms into freezing environments. Nature 514: 394. doi: 10.1038/nature13842.
- FitzJohn, RG, MW Pennell, AE Zanne, P. Stevens, **DC Tank**, and WK Cornwell. 2014. How much of the world is woody? Journal of Ecology 102: 1266-1272.
- Cornwell, WK, M Westoby, DS Falster, RG FitzJohn, BC O'Meara, DJ McGlinn, JM Eastman, AT Moles, PB Reich, **DC Tank**, I Wright, L Aarssen, JM Beaulieu, RM Kooyman, MR Leishman, Ü Niinements, J Oleksyn, A Ordonez, MW Pennell, DL Royer, SA Smith, PF Stevens, NG Swenson, L Warman, P Wilf, H Maherali, ET Miller, EA Wheeler, and AE Zanne. 2014. Functional distinctiveness of major plant lineages. Journal of Ecology 102: 345-356. doi: 10.1111/1365-2745.12208.
- Uribe-Convers, S[†], J Duke[†], MJ Moore, and **DC Tank**. 2014. A long PCR–based approach for DNA enrichment prior to next-generation sequencing for systematic studies. Applications in Plant Sciences: 2(1). doi: 10.3732/apps.1300063.
- Zanne, AE, DC Tank, WK Cornwell, JM Eastman, SA Smith, RG FitzJohn, DJ McGlinn, BC O'Meara, AT Moles, DL Royer, IJ Wright, L Aarssen, RI Bertin, A Calaminus, R Govaerts, F Hemmings, MR Leishman, J Oleksyn, PB Reich, DE Soltis, PF Stevens, NG Swenson, L Warman, M Westoby, and JM Beaulieu. 2014. Three keys to the radiation of angiosperms into freezing environments. Nature 506: 89-92. doi:10.1038/nature12872.
- Carstens, BC, RS Brennan, V Chua, CV Duffie, MG Harvey, RA Koch, CD McMahan, BJ Nelson, CE Newman, JD Satler, G Seeholzer, K Posbic, **DC Tank**, and J Sullivan. 2013. Model selection as a tool for phylogeographic inference: An example from the willow *Salix melanopsis*. Molecular Ecology 22: 4014-4028. doi: 10.1111/mec.12347.
- Fant, JB, H Weinberg-Wolf, **DC Tank**, KA Skogen. 2013. Microsatellite primers in *Castilleja sessiliflora* (Orobanchaceae), a perennial forb of the shortgrass prairie. Applications in Plant Sciences 1(6). doi: 10.3732/apps.1200564.
- Beauileu, JM, **DC Tank**, and MJ Donoghue. 2013. A Southern Hemisphere origin for campanulid angiosperms and traces of the break-up of Gondwana. BMC Evolutionary Biology 13: 80. doi:10.1186/1471-2148-13-80.
- Eastman, JM, LJ Harmon, and **DC Tank**. 2013. Congruification: support for time scaling large phylogenetic trees. Methods in Ecology and Evolution 4: 688-691. doi: 10.1111/2041-210X.12051
- Raghavendra, AKH, G Newcombe, A Shipunov, M Baynes, and **DC Tank**. 2013. Exclusionary interactions among diverse fungi infecting developing seeds of *Centaurea stoebe*. FEMS Microbiology Ecology 84: 143-153. doi: 10.1111/1574-6941.12045.
- Clay, D, SJ Novak, MD Serpe, **DC Tank**, and JF Smith. 2012. Homoploid hybrid speciation in a rare endemic *Castilleja* from Idaho (*Castilleja christii*, Orobanchaceae). American Journal of Botany 99:1976-1990. doi: 10.3732/ajb.1200326.
- Egger, JM, JA Ruygt, and **DC Tank**. 2012. *Castilleja ambigua* var. *meadii* (Orobanchaceae): A new variety from Napa County, California. Phytoneuron 2012-68: 1–12.
- Goldberg, CS, **DC Tank**, S Uribe-Convers[†], WR Bosworth, HE Marx[†], and LP Waits. 2012. Species designation of the Bruneau tiger beetle (*Cicindela waynei*) is supported by phylogenetic analysis of mitochondrial DNA sequence data. Conservation Genetics 13: 372-380.
- Soltis, DE, SA Smith, N Cellinese, KJ Wurdack, **DC Tank**, SF Brockington, NF Refulio-Rodriguez, JB Walker, MJ Moore, BS Carlsward, CD Bell, M Latvis, S Crawley, C Black, D Diouf, Z Xi, MA Gitzendanner, KJ Sytsma, Y-L Qiu, KW Hilu, CC Davis, MJ Sanderson, RG Olmstead, WS Judd, MJ Donoghue, PS Soltis. 2011. Angiosperm phylogeny: 17 genes, 640 taxa. American Journal of Botany 98: 704-730.
- Marx, HE[†], N O'Leary, Y-W Yuan, P Lu-Irving, **DC Tank**, ME Mulgura and RG Olmstead. 2010. A molecular phylogeny and classification of Verbenaceae. American Journal of Botany 97:1647-1663.
- **Tank, DC** and MJ Donoghue. 2010. Phylogeny and phylogenetic nomenclature of the Campanulidae based on an expanded sample of genes and taxa. Systematic Botany 35: 425-441.
- Angiosperm Phylogeny Group (B Bremer, K Bremer, MW Chase, MF Fay, JL Reveal, DE Soltis, PS Soltis, and PF Stevens, who were equally responsible and listed here in alphabetical order only, with contributions from AA Anderberg, MJ Moore, RG Olmstead, PJ Rudall, KJ Sytsma, **DC Tank**, K Wurdack, Q-Y Xiang, and S Zmarzty, in alphabetical order). 2009. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. Botanical Journal of the Linnean Society 161: 105-121.

- **Tank, DC** and RG Olmstead. 2009. The evolutionary origin of a second radiation of annual *Castilleja* species in South America: the role of long-distance dispersal and allopolyploidy. American Journal of Botany 96: 1907-1921.
- **Tank, DC**, JM Egger, and RG Olmstead. 2009. Phylogenetic classification of subtribe Castillejinae (Orobanchaceae). Systematic Botany 34: 182-197.
- Smith SA, **DC Tank**, L-A Boulanger, CA Bascom-Slack, K Eisenman, et al. 2008. Bioactive endophytes warrant intensified exploration and conservation. PLOS ONE 3(8): e3052.
- **Tank, DC** and RG Olmstead. 2008. From annuals to perennials: phylogeny of subtribe Castillejinae (Orobanchaceae). American Journal of Botany 95: 608-625.
- Tank, DC, PM Beardsley, SA Kelchner, and RG Olmstead. 2006. L.A.S. Johnson Review No. 7. Review of the systematics of Scrophulariaceae s.l. and its current disposition. Australian Systematic Botany 19: 289-307.
- **Tank, DC** and T Sang. 2001. Phylogenetic utility of the glycerol-3-phosphate acyltransferase gene: evolution and implications in *Paeonia* (Paeoniaceae). Molecular Phylogenetics and Evolution 19: 421-429.
- Wang, X-Q, **DC Tank** and T Sang. 2000. Phylogeny and divergence times in Pinaceae: evidence from three genomes. Molecular Biology and Evolution 17: 773-781.

TAXONOMIC TREATMENTS:

- Tank, DC, AD Wolfe, S Mathews and RG Olmstead. *in press*. Orobanchaceae. In K de Queiroz, PD Cantino and J Gauthier (eds), Phylonyms: A Companion to the Phylocode. University of California Press, Berkeley.
- Olmstead, RG and **DC Tank**. Lamiales. *in press*. In K de Queiroz, PD Cantino and J Gauthier (eds), Phylonyms: A Companion to the Phylocode. University of California Press, Berkeley.
- Wetherwax, M and **DC Tank**. 2012. *Chloropyron*. In BG Baldwin et al. (eds), The Jepson Manual: Vascular Plants of California. University of California Press, Berkeley.
- Wetherwax, M and **DC Tank**. 2012. *Cordylanthus*. In BG Baldwin et al. (eds), The Jepson Manual: Vascular Plants of California. University of California Press, Berkeley.
- Wetherwax, M and **DC Tank**. 2012. *Dicranostegia*. In BG Baldwin et al. (eds), The Jepson Manual: Vascular Plants of California. University of California Press, Berkeley.

DATASETS:

- Marx, HE[†], DE Giblin, PW Dunwiddie, and **DC Tank**. Data from: Deconstructing Darwin's naturalization conundrum in the San Juan Islands using community phylogenetics and functional traits. Dryad Digital Repository. doi: 10.5061/dryad.m88g7.
- Uribe-Convers, S[†] and **DC Tank**. Data from: Shifts in diversification rates linked to biogeographic movement into new areas: an example of a recent radiation in the Andes. 2015. Dryad Digital Repository. doi: 10.5061/dryad.7v1f8.
- Nürk, NM, S Uribe-Convers[†], B Gehrke, **DC Tank**, and FR Blattner. 2015. Data from: Oligocene niche shift, Miocene diversification cold tolerance and accelerated speciation rates in the St. John's Worts (*Hypericum*, Hypericaceae). Dryad Digital Repository. doi: 10.5061/dryad.4tm8j.
- FitzJohn, RG, MW Pennell, AE Zanne, PF Stevens, **DC Tank**, and WK Cornwell. Data from: How much of the world is woody? 2014. Dryad Digital Repository. doi:10.5061/dryad.v7m14.2.
- **Tank, DC**, JM Eastman, JM Beaulieu, and SA Smith. 2014. Phylogenetic resources. Data from: Three keys to the radiation of angiosperms into freezing environments. Dryad Digital Repository. doi:10.5061/dryad. 63q27.2/3.1.
- **Tank, DC**, JM Eastman, JM Beaulieu, WK Cornwell, PF Stevens, and AE Zanne. 2014. Taxonomic lookup table containing clade-level mappings for 15,363 genera of Spermatophyta. Data from: Three keys to the radiation of angiosperms into freezing environments. Dryad Digital Repository. doi:10.5061/dryad.63q27.2/1.1.
- Uribe-Convers, S[†], JR Duke, MJ Moore, and **DC Tank**. 2014. Data from: A long PCR based approach for DNA enrichment prior to next-generation sequencing for systematic studies. Dryad Digital Repository. doi: 10.5061/dryad.kc75n.
- Carstens, BC, RS Brennan, V Chua, CV Duffie, MG Harvey, RA Koch, CD McMahan, BJ Nelson, CE Newman, JD Satler, G Seeholzer, K Posbic, **DC Tank**, and J Sullivan. 2013. Data from: Model selection as a tool for phylogeographic inference: An example from the willow *Salix melanopsis*. Dryad Digital Repository. doi: 10.5061/dryad.sm635.

OTHER (NOT PEER REVIEWED):

Latvis, M and **DC Tank**. 2015. The 8th Annual Idaho Botanical Foray. Idaho Native Plant Society, Sage Notes 37 (4): 8-9 http://idahonativeplants.org/wp-content/uploads/2015/12/SageNotesDec2015.pdf.

Legler, B and **DC Tank**. 2012. Digitizing herbarium specimens at the University of Idaho Stillinger Herbarium and the Consortium of Pacific Northwest Herbaria. Idaho Native Plant Society, Sage Notes 34 (2): 10-12 http://www.idahonativeplants.org/news/SageNotesMay2012.pdf.