# Jonathan Clark

# **PROFESSOR OF GENETICS**

Department of Zoology Weber State University Ogden, UT 84408-2505

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#### **PROFESSIONAL APPOINTMENTS**

Visiting Scholar (sabbatical leave) South Australian Museum, Adelaide Australia

2016 (Spring) <u>samuseum.sa.gov.au</u>

Endowed Scholar Weber State University, College of Science

2010 – 2013 <u>weber.edu/COS/</u>

Visiting Scientist (sabbatical leave) Smithsonian Institution, National Museum of Natural History

2009 (Fall) <u>entomology.si.edu/</u>

Professor Weber State University, Department of Zoology

2006 – weber.edu/zoology/

Visiting Scholar (sabbatical leave) University of Valencia (Spain), Department of Genetics

2005 (Fall) <u>uv.es/genetica</u>

Associate Professor Weber State University, Department of Zoology

2001 – 2006 weber.edu/zoology/

Director Weber State University, DNA Laboratory

1998 – 2016 The state of Utah's first genetics teaching laboratory

Assistant Professor Weber State University, Department of Zoology

1998 – 2001 weber.edu/zoology/

Scientific Member (elected) University of Arizona, Center for Insect Science

1995 – 1998 cals.arizona.edu/ento/

Senior Research Associate University of Arizona, Dept. of Ecology & Evolutionary Biology

1994 – 1998 eebweb.arizona.edu/

Postdoctoral Fellow University of Arizona, N.S.F.-Research Training Group

1992 – 1994 in the Analysis of Biological Diversification

Postdoctoral Fellow University of Arizona, Center for Insect Science

1990 – 1992 cals.arizona.edu/ento/

Graduate Research Associate Ohio State University, Department of Molecular Genetics

1985 – 1990 <u>molgen.osu.edu/</u>

Graduate Teaching Associate Ohio State University, Department of Molecular Genetics

1983 – 1985 <u>molgen.osu.edu/</u>

#### **AWARDS & RECOGNITION**

Sigma Xi Fellow, 2023. Sigma Xi, scientific research society (<a href="https://www.sigmaxi.org/members/sigma-xi-fellows">https://www.sigmaxi.org/members/sigma-xi-fellows</a>)

The Fellow of Sigma Xi distinction is awarded on a competitive basis to members who have been recognized by their peers for distinguished service to Sigma Xi and outstanding contributions to the scientific enterprise, including research, outreach, curricular innovation, mentorship, and science advocacy.

- Certificate of Recognition, 2018. Sigma Xi, scientific research society (<u>www.sigmaxi.org</u>)

  Presented by the National Board of Directors for service at the local (W.S.U.) and national level
- Outstanding Mentor, 2017. Office of Academic Affairs, Weber State University Recognition for mentoring excellence
- Certificate of Recognition, 2010. Sigma Xi, scientific research society (<u>www.sigmaxi.org</u>)

  Presented by the National Board of Directors for service at the local (W.S.U.) and national level
- Endowed Scholar, 2010–2013. College of Science, Weber State University

  The college's highest research award, the recipient is nominated by department chairs.
- George and Beth Lowe Innovative Teaching Award, 2008. Office of Academic Affairs, Weber State University Recognizes extraordinary effort to engage students inside and outside the classroom.
- Spencer L. Seager Distinguished Teaching Award, 2007. College of Science, Weber State University The college's highest teaching award, the recipient is nominated by faculty peers.
- Putting Students Through Award, Weber State University, Spring semester 2007 (nominated by student Brian Oney)

The PST Program enables WSU graduates to recognize those who have helped make their graduation possible through their personal, moral, or financial support.

- Putting Students Through Award, Weber State University, Spring semester 2001 (nominated by student Christopher Ostler)
- National Science Foundation Postdoctoral Fellowship, 1992 1994. Research Training Group in the Analysis of Biological Diversification, University of Arizona.
- John D. and Catherine T. MacArthur Foundation Postdoctoral Fellowship, 1990 1992. Center for Insect Science, University of Arizona.

### **EDUCATION**

Ph.D. – Molecular Genetics Ohio State University, Columbus, OH Dissertation: A Molecular Phylogenetic Analysis of the Intracellular Bacteria Rickettsiae.

B.S. – Biology Bowling Green State University, Bowling Green, OH

### PEER-REVIEWED PUBLICATIONS (mentored students underlined)

<u>Haney S, O Bedolla</u> and **JB Clark**. 2022. DNA barcodes for Great Salt Lake brine flies establish a baseline for monitoring changes in biodiversity. *Inland Waters*. doi.org/10.1080/20442041.2022.2144084

<u>Truong A</u>, M Sondossi and **JB Clark**. 2017. Genetic identification of *Wolbachia* from Great Salt Lake brine flies. *Symbiosis* 72:95-102.

**Clark J** and <u>S Nguyen</u>. 2014. Genetic analysis of Invertebrates from Great Salt Lake. *Acta Geologica Sinica* 88:65-68.

Llorens JV, **JB Clark**, I Martínez-Garay, S Soriano, R de Frutos and MJ Martínez-Sebastián. 2008. *Gypsy* endogenous retrovirus maintains potential infectivity in several species of Drosophilids. *BMC Evol. Biol.* 8:302-310. *[Sabbatical research]* 

JS Silva, EL Loreto and **JB Clark**. 2004. Factors that affect the horizontal transfer of transposable elements. *Curr. Issues Mol. Biol.* 6:57-72.

This paper examines the molecular and host constraints on horizontal gene transfer and provides a detailed treatment of alternative hypotheses, such as ancestral polymorphism. It also considers the ecological and temporal requirements for horizontal transfer.

**Clark JB**, JS Silva and MG Kidwell. 2002. Evidence for horizontal transfer of *P* transposable elements. In: *Horizontal Gene Transfer*, second edition. M Syvanen and C Kado, eds. pp. 161-171. Academic Press, London.

<u>Colton L</u> and **JB Clark**. 2001. Comparison of DNA isolation methods and storage conditions for successful amplification of *Drosophila* genes using PCR. *Dros. Info. Service* 84:180-182.

Lee S-H, **JB Clark** and MG Kidwell. 1999. A *P* element-homologous sequence in the house fly, *Musca domestica*. *Insect Mol. Biol.* 8:491-500.

García-Planells J, N Paricio, **JB Clark**, R de Frutos and MG Kidwell. 1998. Molecular evolution of *P* transposable elements in the genus *Drosophila*. II. The *obscura* species group. *J. Molec. Evol.* 47:282-291.

**Clark JB**, <u>P Kim</u> and MG Kidwell. 1998. Molecular evolution of *P* transposable elements in the genus *Drosophila*. III. The *melanogaster* species group. *Mol. Biol. Evol.* 15:746-755.

**Clark JB** and MG Kidwell. 1998. Evidence for horizontal transfer of the *P* transposable element between *Drosophila* species. In: *Horizontal Transfer*. M. Syvanen and C. Kado, eds. pp. 255-267. Chapman & Hall, London.

O'Grady PM, **JB Clark** and MG Kidwell. 1998. Phylogeny of the *Drosophila saltans* species group based on combined analysis of nuclear and mitochondrial DNA sequences. *Mol. Biol. Evol.* 15:656-664.

**Clark, JB** and MG Kidwell. 1997. A phylogenetic perspective on *P* transposable element evolution in *Drosophila. Proc. Natl. Acad. Sci. USA.* 94:11428-11433.

This paper remains one of the most comprehensive phylogenetic investigations of horizontal gene transfer and examines such events in the context of over 60 million years of Drosophila evolution.

#### PEER-REVIEWED PUBLICATIONS (mentored students underlined)

Lee S-H and JB Clark. 1997. High-yield method for isolation of lambda DNA. Biotechs. 23:598-600.

**Clark JB** and MG Kidwell. 1996. Molecular biology and evolution of *P* transposable elements. *Evol. Biol.* 9:1-36.

**Clark JB**, <u>TK Altheide</u>, <u>MJ Schlosser</u> and MG Kidwell. 1995. Molecular evolution of *P* transposable elements in the genus *Drosophila*. I. The *saltans* and *willistoni* species groups. *Mol. Biol. Evol.* 12:902-913.

**Clark JB** 1995. Evolution and molecular phylogeny of *P* transposable elements in the genus *Drosophila*. *Tsukuba* (*Japan*) *Insect Sci. Pubs.* 8:13-22. [not peer reviewed]

**Clark JB**, WP Maddison and MG Kidwell. 1994. Phylogenetic analysis supports horizontal transfer of *P* transposable elements. *Mol. Biol. Evol.* 11:40-50.

This was the first paper that explicitly used phylogenetics to examine horizontal gene transfer and alternative hypotheses. It is still widely cited (e.g., Widen et al. 2023. Science 380:1336) and is a staple of textbook considerations of horizontal transfer (e.g., Molecular Evolution, Li, 2017, pp. 374-377).

Stothard DR, **JB Clark** and PA Fuerst. 1994. The ancestral divergence of *Rickettsia bellii* from the spotted fever and typhus groups of *Rickettsia*, and the antiquity of the genus *Rickettsia*. *Inter. J. Syst. Bacteriol.* 44:798-804.

This work established, for the first time, a phylogenetic structure for the remarkable genus, Rickettsia. These endosymbiotic bacteria have undergone a severe reduction in genome size as they adapted to an obligate intracellular existence and, are now an important focus for studying the evolution of genome complexity.

Houck MA, **JB Clark**, KR Peterson and MG Kidwell. 1991. Possible horizontal transfer of *Drosophila* genes by the mite *Proctolaelaps regalis*. *Science* 253:1125-1129.



This landmark paper outlined laboratory techniques for examining horizontal gene transfer, moving the field from the theoretical to the experimental. It remains the most comprehensive investigation of the mechanism of horizontal gene transfer.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students <u>underlined</u>)

<u>Faulkner M</u> and **J Clark**. 2023. An assessment of Spider Diversity in the Great Salt Lake Ecosystem Using DNA Barcoding. International Forum on Research Excellence, Long Beach, CA, Nov. 2-5.

<u>Sorbonne M</u> and **J Clark**. 2022. DNA Barcoding of Parasites Associated with Great Salt Lake Brine Shrimp. INTERNATIONAL FORUM ON RESEARCH EXCELLENCE, Alexandria, VA, Nov. 3-6.

Madeleine was the only nationwide medal winner for her presentation in the area of ecology and evolutionary biology.

<u>Wilko T</u> and **J Clark**. 2019. DNA barcoding of economically important insects. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Madison, WI, Nov. 14-17.

<u>Haney, S</u> and **J Clark**. 2019. DNA barcoding of invertebrates from the Great Salt Lake ecosystem. ANNUAL MEETING OF AAAS-PACIFIC DIVISION, Ashland, OR, June 18-21.

**Clark J.** 2018. Genomic diversity and comparative phylogenetics of the *HeT-A* transposable element in six species of *Drosophila*. THIRD GLOBAL INVERTEBRATE GENOMICS ALLIANCE CONFERENCE, Curação, Oct. 19-21.

**Clark J**, L Mantel, P Stein and S Saha. 2018. The practice, communication and ethics of Interdisciplinary research. (A multidisciplinary symposium of four speakers). ANNUAL MEETING OF AAAS-PACIFIC DIVISION, Pomona, CA, June 12-15.

O Bedolla and J Clark. 2017. DNA Barcoding of Great Salt Lake invertebrates. 7TH INTERNATIONAL BARCODE OF LIFE CONFERENCE, Kruger National Park, South Africa, Nov. 20-24.

**Clark J**, <u>O Bedolla</u> and <u>S Haney</u>. 2017. Genetic studies of invertebrate diversity in the Great Salt Lake ecosystem. 13TH INTERNATIONAL CONFERENCE ON SALT LAKE RESEARCH, Ulan-Ude, Russia, August 21-25.

<u>Haney S</u> and J **Clark**. 2017. Invertebrate diversity in Great Salt Lake revealed by DNA barcoding. ANNUAL MEETING OF AAAS-PACIFIC DIVISION, Waimea, HI, June 19-23.

<u>Bedolla O</u> and **JB Clark**. 2016. Genetic exploration of invertebrate diversity in Great Salt Lake. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Atlanta, GA, Nov. 11-13.

Nguyen S and JB Clark. 2015. DNA barcoding of Great Salt Lake invertebrates. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Kansas City, MO, Oct. 22-25.

<u>Hunziker K</u>, S Redon, N Berthelemy and **J Clark**. 2015. Genetic characterization of parasites from Great Salt Lake brine shrimp. ANNUAL MEETING OF AAAS-PACIFIC DIVISION, San Francisco, CA, June 14-17.

<u>Hunziker K</u>, N Berthelemy and **J Clark**. 2015. Genetic identification of parasites associated with Great Salt Lake brine shrimp. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 30.

<u>Yearsley S</u>, M Sondossi and **J Clark**. 2015. Assessing Microbial Diversity of Great Salt Lake Microbes Using DNA Sequence Comparisons. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 30.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students <u>underlined</u>)

Nguyen S and JB Clark. 2014. Genetic analysis of invertebrates from Great Salt Lake, Utah. 12TH INTERNATIONAL CONFERENCE ON SALT LAKE RESEARCH, Beijing, China, July 14-18.

Nguyen S and J Clark. 2014. Genetic characterization of Great Salt Lake Invertebrates. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 31.

<u>Hill C, M Sondossi and J Clark. 2014.</u> Metagenomic characterization of Great Salt Lake microbes. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 31.

**JB Clark**, <u>K Minear</u> and <u>S Nguyen</u>. 2014. Using DNA Barcoding to Identify Great Salt Lake Invertebrates. Great Salt Lake Issues Forum, Salt Lake City, UT, May 7-9.

Nguyen S and JB Clark. 2013. DNA barcoding of Great Salt Lake invertebrates. FIFTH INTERNATIONAL BARCODE OF LIFE CONFERENCE, Kunming, China, Oct. 27-31.

<u>Truong A</u>, M Sondossi and **JB Clark**. 2012. Comparative genetics of the *Wolbachia* endosymbiont associated with Great Salt Lake brine flies. SEVENTH INTERNATIONAL *Wolbachia* Conference, St. Pierre d'Oléron, France, June 7-12.

**Clark JB** and <u>Cox, H.</u> 2012. Expanded phylogenetic analysis of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. SOCIETY FOR MOLECULAR BIOLOGY AND EVOLUTION ANNUAL MEETING, Dublin, Ireland, July 23-26.

<u>Cox H</u> and **JB Clark**. 2012. Comparative molecular genetics of the unusual chromosome telomeres of *Drosophila*. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, Ogden, UT, March 29-31.

<u>Truong A</u>, M Sondossi and **JB Clark**. 2012. Comparative genetics of the *Wolbachia* endosymbiont associated with Great Salt Lake brine flies. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, Ogden, UT, March 29-31.

<u>Cox H</u> and **JB Clark**. 2011. Phylogenetic analysis of the unusual chromosome telomeres in *Drosophila*, a model genetic organism. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Raleigh, NC, Nov. 10-13.

<u>Cox H</u> and **JB Clark**. 2011. Comparative genetic analysis of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. SIXTH INTERNATIONAL SYMPOSIUM ON MOLECULAR INSECT SCIENCE, Amsterdam, Netherlands, Oct. 2-5.

<u>Truong A</u> and **JB Clark**. 2011. Genetic analysis of the *Wolbachia* endosymbiont associated with Great Salt Lake brine flies. Society for Molecular Biology and Evolution Annual Meeting, Kyoto, Japan, July 26-30.

Amanda was one of only ten students worldwide chosen to participate in the Undergraduate Research Mentoring Program sponsored by SMBE.

**Clark JB** and <u>BJ Oney</u>. 2011. Molecular population genetic analysis of the brine fly, *Ephydra gracilis*, from Great Salt Lake. 11th International Conference on Salt Lake Research, Córdoba, Argentina, May 9-14.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students underlined)

Sondossi M, <u>A Truong</u> and **JB Clark**. 2011. Genetic characterization of the bacterial endosymbiont, *Wolbachia*, in Shore Flies from Great Salt Lake. 11TH INTERNATIONAL CONFERENCE ON SALT LAKE RESEARCH, Córdoba, Argentina, May 9-14.

<u>Truong A</u>, M. Sondossi and **JB Clark**. 2010. Characterization of *Wolbachia* in *Cirrula hians* from Great Salt Lake. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Raleigh, NC, Nov. 11-14.

<u>Truong A</u>, M Sondossi and **JB Clark**. 2010. Genetic analysis of the *Wolbachia* endosymbiont associated with Great Salt Lake brine flies. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, Ithaca College, March 31-April 2.

**Clark JB** 2010. Molecular phylogeny of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. Society FOR MOLECULAR BIOLOGY AND EVOLUTION ANNUAL MEETING, Lyon, France, July 4-8.

Minear KJ and JB Clark. 2010. Use of nuclear and mitochondrial genes to distinguish Great Salt Lake shore flies. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, University of Montana, April 15-17.

Minear KJ and JB Clark. 2010. DNA barcoding reveals the diversity of shore flies from Great Salt Lake. Annual Undergraduate Research Symposium, Weber State University, March 29.

<u>Cottrell C</u>, M Sondossi and **JB Clark**. 2009. Metagenomic identification of bacteria associated with Great Salt Lake brine flies. Annual Undergraduate Research Symposium, Weber State University, March 23.

**Clark JB** and KJ <u>Minear</u>. 2009. DNA barcoding of shore flies from Great Salt Lake. THIRD INTERNATIONAL BARCODING OF LIFE CONFERENCE, Mexico City, Nov. 9-13.

Minear KJ and JB Clark. 2009. DNA barcoding reveals the diversity of shore flies from Great Salt Lake. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Woodlands, TX, Nov. 12-15.

Krystle was one of only two nationwide medal winners for her presentation in the area of ecology and evolutionary biology.

<u>Cottrell C</u>, M Sondossi and **JB Clark**. 2009. Metagenomic identification of bacteria associated with Great Salt Lake brine flies. SIGMA XI ANNUAL MEETING AND INTERNATIONAL RESEARCH CONFERENCE, Woodlands, TX, Nov. 12-15.

Okazaki RK, NJ Berthelemy, <u>MA Gillins</u>, <u>BJ Duerden</u>, <u>NR Record</u>, BC Trask and **JB Clark**. 2009. Molecular study on induction of stress proteins in Nermerteans. 7TH INTERNATIONAL CONFERENCE ON NEMERTEAN BIOLOGY, Santa Barbara, CA, June 29-July 3.

<u>Neilsen NJ</u> and **JB Clark**. 2009. An expanded phylogenetic view of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. SOCIETY OF SYSTEMATIC BIOLOGISTS ANNUAL MEETING, Moscow, ID June 12-16.

<u>Cotrell C</u>, M Sondossi and **JB Clark**. 2009. Preliminary metagenomic analysis of bacteria associated with Great Salt Lake brine flies. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 23.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students underlined)

<u>Neilsen N</u> and **JB Clark**. 2009. Phylogenetic analysis of the telomere-associated gene, *HeT-A*, in *Drosophila*. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 23, 2009.

**Clark JB** 2007. Extreme sequence divergence of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. Society FOR MOLECULAR BIOLOGY AND EVOLUTION ANNUAL MEETING, Halifax, NS, June 24-28.

Oney B and JB Clark. 2007. Genetic variation in natural populations of the Great Salt Lake Brine Fly, E. cinerea. Annual Undergraduate Research Symposium, Weber State University, March 26.

Oney B and J Clark. 2007. Genetic variation in natural populations of the Great Salt Lake Brine Fly, *E. cinerea*. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, Dominican University, CA, April 12-14.

<u>Suurmeyer E</u> and **JB Clark**. 2005. Genetic studies of brine fly diversification in the Great Salt Lake. SIGMA XI, ANNUAL MEETING AND STUDENT RESEARCH CONFERENCE, Seattle, WA, November 3-6.

Ellen was the sole medal winner nationwide for her presentation in the area of ecology and evolutionary biology.

<u>Lindley K, J Bambrick</u> and **JB Clark**. 2005. Molecular phylogeny of the telomere-associated transposable element, *HeT-A*, in *Drosophila*. Society of Systematic Biologists Annual Meeting, Fairbanks, AK, June 11-14.

<u>Gabrielsen EJ</u> and **JB Clark**. 2005. Initial Genetic Characterization of Brine Flies of the Great Salt Lake. COUNCIL ON UNDERGRADUATE RESEARCH, POSTERS ON THE HILL, Washington, DC. April 19.

Eric was one of only 60 students chosen nationwide to present his research to members of Congress.

<u>Gabrielsen EJ</u> and **JB Clark**. 2005. Genetic Characterization of Great Salt Lake Brine Flies. SECOND ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 28.

<u>Gabrielsen EJ</u> and **JB Clark**. 2004. Initial Genetic Characterization of Brine Flies of the Great Salt Lake. SIGMA XI ANNUAL MEETING AND STUDENT RESEARCH CONFERENCE, Montreal, Canada, November 11-14.

<u>Saxton EA, JN Sonstegard</u>, <u>CK Bauer</u>, **JB Clark** and M Sondossi. 2004. Microbial isolates from the Great Salt Lake: Initial genetic characterization and range of salt tolerance. UTAH ACADEMY OF SCIENCES ANNUAL MEETING, Cedar City, UT, April 16.

Anderson A and JB Clark. 2004. Distinguishing closely-related species of *Drosophila* using DNA Fingerprinting. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 29.

Bauer C, JN Sonstegard, EA Saxton, JB Clark and M Sondossi. 2004. Genetic characterization of microbial diversity in the Great Salt Lake. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 29.

<u>Nebeker M</u>, **JB Clark** and SI Zeveloff. 2004. Divergence within the raccoon family, Procyonidae, using mitochondrial DNA sequences. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, March 29.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students underlined)

Sonstegard JN, CK Bauer, EA Saxton, JB Clark and M Sondossi. 2004. Isolation of microbial pure cultures from the Great Salt Lake. Annual Undergraduate Research Symposium, Weber State University, March 29.

Anderson A and JB Clark. 2003. Distinguishing closely-related species of *Drosophila* using DNA Fingerprinting. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, Sept. 26.

<u>Nebeker M</u>, **JB Clark** and SI Zeveloff. 2003. Divergence within the raccoon family, Procyonidae, using mitochondrial DNA sequences. ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM, Weber State University, Sept. 26.

McKinley K, JB Clark and JF Cavitt. 2003. Seasonal variation of offspring sex ratio in starlings. NATIONAL CONFERENCE ON UNDERGRADUATE RESEARCH, Salt Lake City, UT, March 13-15.

McKinley K, JF Cavitt and JB Clark. 2002. Seasonal variation of offspring sex ratio in starlings. SIGMA XI, ANNUAL MEETING AND STUDENT RESEARCH CONFERENCE Galveston, TX, November 15-17.

<u>Bentley MJ</u>, <u>JW Wilson</u> and **JB Clark**. 2002. Molecular phylogeny of the *HeT-A* transposable element in the *melanogaster* species subgroup of *Drosophila*. Society FOR Molecular BIOLOGY AND EVOLUTION ANNUAL MEETING, Sorrento, Italy, June 13-16.

**Clark JB** 1996. Phylogenetic analysis provides insights into transposable element evolution. Phylogeny OF LIFE AND THE ACCOMPLISHMENTS OF PHYLOGENETIC BIOLOGY SYMPOSIUM, Tucson, AZ, Oct. 10-13

**Clark JB** and MG Kidwell. 1996. Evidence for horizontal transfer of the *P* transposable element between *Drosophila* species. Fallen Leaf Lake Conference on Horizontal Transfer, Lake Tahoe, CA, Sept. 12-15.

**Clark JB** and MG Kidwell. 1995. Molecular phylogeny of *P* transposable elements in *Drosophila*. Society FOR MOLECULAR BIOLOGY AND EVOLUTION ANNUAL MEETING, Tucson, AZ, June 8-11.

**Clark JB.** 1995. Evolution and molecular phylogeny of *P* transposable elements in the genus *Drosophila*. Symposium on Molecular Insect Science, Annual Meeting of the Tsukuba Institute, Tsukuba, Japan, September 1.

Kidwell MG and **JB Clark**. 1995. Horizontal transfer and the evolution of *P* elements in *Drosophila*. SYMPOSIUM ON *DROSOPHILA* EVOLUTION, Kyoto, Japan, August 28-30.

**Clark JB** and MG Kidwell. 1995. Molecular evolution of *P* transposable elements in *Drosophila*. Society for MOLECULAR BIOLOGY AND EVOLUTION, ANNUAL MEETING, Hyama, Japan, Aug. 21-25.

**Clark JB** and MG Kidwell. 1995. Evolutionary significance of horizontal transfer of transposable elements among species. Symposium on the evolution of transposable elements, AAAS ANNUAL MEETING, Atlanta, GA. Feb. 16-19.

# PEER-REVIEWED PROFESSIONAL PRESENTATIONS (mentored students <u>underlined</u>)

**Clark JB**, WP Maddison, <u>TK Altheide</u> and MG Kidwell. 1993. Molecular phylogenetic analysis of *P* transposable elements in *Drosophila*. INTERNATIONAL CONGRESS OF GENETICS. Birmingham, UK, Aug. 15-21.

**Clark JB**, W Maddison, <u>TK Altheide</u> and M. Kidwell. 1993. Molecular phylogenetic analysis of *P* transposable elements in *Drosophila*. SECOND INTERNATIONAL SYMPOSIUM ON MOLECULAR INSECT SCIENCE. Flagstaff, AZ, July 17-22.

**Clark JB**, CI Pretzman and PA Fuerst. 1988. The 16S rRNA gene sequence of *Rickettsia bellii* and the evolution of the Rickettsiae. Seventh NATIONAL MEETING, AMERICAN SOCIETY FOR RICKETTSIOLOGY AND RICKETTSIAL DISEASES. Santa Fe, NM, Apr. 14-17.

**Clark JB** and PA Fuerst. 1987. Evolutionary relationships of Rickettsiae revealed by rRNA sequence comparisons. GORDON CONFERENCE ON POPULATION BIOLOGY AND EVOLUTION OF MICROBES AND THEIR ACCESSORY ELEMENTS. Plymouth, NH, Aug. 17-21.

Total Peer-reviewed Research Presentations: 72
Number of countries: 14

## **INVITED PROFESSIONAL PRESENTATIONS**

**Clark JB**. 2016. Great Salt Lake: Genetic Studies of Biodiversity. South Australian Museum, Adelaide. (cosponsored by the University of Adelaide). March 23.

**Clark JB**. 2014. DNA Barcoding Reveals the Diversity of Great Salt Lake Invertebrates. Graduate Interdisciplinary Program in Genetics, University of Arizona, Tucson. Nov. 15

#### **COMPETITIVE RESEARCH GRANTS**

#### 2023

Weber State University, Ashely Austin Research Endowment. DNA sequencing in undergraduate research. \$1800. (J Clark, Project Director)

#### 2022

Weber State University, Office of Undergraduate Research. Travel to the Annual Meeting of Sigma Xi. \$1781. (J Clark, Project Director)

#### 2022

Weber State University, Academic Resources and Computing Committee. Quantitative Genetic Analysis for Teaching and Research Laboratories. \$27,729. (J Clark, E Sandquist and B Trask, Project Directors)

#### 2020

Weber State University, Academic Resources and Computing Committee. Digital Imaging System for Cell Biology and Genetics \$3,300. (J Clark and E Sandquist, Project Directors)

#### 2019

Weber State University, Hemingway Faculty Vitality grant. Metagenomics of Great Salt Lake Invertebrates. \$3035. (J Clark, Project Director)

#### 2019

Weber State University, Office of Undergraduate Research. Travel to the Annual Meeting of Sigma Xi. \$1350. (J Clark, Project Director)

#### 2017

Weber State University, Office of Undergraduate Research. Travel to the Annual Meeting of AAAS. \$1909. (J Clark, Project Director)

#### 2017

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the 7th International Barcoding of Life conference. \$1000. (J Clark, Project Director)

#### 2015

Weber State University, Academic Resources and Computing Committee. Molecular imaging system for teaching and research. \$10,890. (J Clark and M Skopec, Project Directors)

#### 2015

Weber State University, Hemingway Vitality Award. Presentation of a Paper at the 96<sup>th</sup> Annual Meeting of AAAS. \$1412 (J Clark, Project Director)

#### 2014

Weber State University, Hemingway Vitality Award. Travel to the 12th International Conference on Salt Lake Research. \$1466. (J Clark, Project Director)

# 2014

Weber State University, Hemingway Collaborative Research Award. Genetic analysis of *Artemia* parasites. \$2800. (N Berthelemy, **J Clark** and J Fritzler, Project Directors)

### **COMPETITIVE RESEARCH GRANTS** (continued)

### 2012

Weber State University, Hemingway Collaborative Research Award. Assessing Great Salt Lake microbial diversity. \$6025. (J Clark and M Sondossi, Project Directors)

#### 2011

Dee Family Technology Grant. Computing and imaging systems for genetic analysis. \$2346. (**J Clark**, Project Director)

#### 2011

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the 11th International Conference on Salt Lake Research. \$2415. (J Clark, Project Director)

#### 2010

Weber State University, Research, Scholarship and Professional Growth Committee. Analysis of chromosome telomeres in the model organism, *Drosophila*. \$2238. (J Clark, Project Director)

### 2009

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the Third International Barcoding of Life conference. \$1400. (J Clark, Project Director)

## 2009

Dee Family Technology Grant. DNA sequence editing and phylogenetic analysis station. \$5958. (J Marshall and J Clark, Project Directors)

#### 2009

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the annual meeting of the Society of Systematic Biologists. \$1378. (J Clark, Project Director)

# 2008

Weber State University, Office of the Provost. Analysis of gene expression using RealTime PCR. \$33,500. (J Clark, B Trask and M Skopec)

#### 2008

Weber State University, Hemingway Collaborative Research Award. Metagenomic analysis of Great Salt Lake brine flies. \$6100. (J Clark and M Sondossi, Project Directors)

# 2007

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the annual meeting of the Society for Molecular Biology and Evolution. \$1595. (J Clark, Project Director)

#### 2006

Weber State University, Hemingway Collaborative Research Award. Isolation and genetic characterization of microorganisms with the capability to metabolize selected aromatic compounds. \$5177. (M Sondossi and J Clark, Project Directors)

#### 2005

Weber State University, Research, Scholarship and Professional Growth Committee. Travel to the annual meeting of the Society of Systematic Biologists. \$1480. (J Clark, Project Director)

### **COMPETITIVE RESEARCH GRANTS** (continued)

### 2002

Weber State University, Research, Scholarship and Professional Growth Committee. Localization of genes associated with chromosome ends in *Drosophila*. \$2645. (J Clark, Project Director)

#### 2001

Weber State University, Academic Resources and Computing Committee. Computing and imaging technologies for molecular genetics. \$9830. (J Clark, Project Director)

#### 1999

Weber State University, Research, Scholarship and Professional Growth Committee. Characterization of chromosome ends in *Drosophila* and related organisms. \$2859 (**J Clark**, Project Director)

#### 1992-1994

National Science Foundation, Population Biology, #DEB-9119349. Evolution of *P* transposable elements in *Drosophila*. \$343,641 (MG Kidwell and **J Clark**)

Total career research funding: \$496,859

#### **COMPETITIVE TEACHING GRANTS**

#### 2016

Dee Family Technology Grant. Instructional research technology improvement for genetics. \$2504. (J Clark)

#### 2005

Idaho Technology. DNA thermocycler for genetics and cell biology. \$4000. (J Clark and B Trask)

#### 2004

W.S.U. Academic Resource and Computing Committee. Projection systems for zoology classrooms. \$4414. (D Bernal, J Clark, R Okazaki and B Trask)

#### 2003

W.S.U. Academic Resource and Computing Committee. Color laser printer for zoology faculty instruction. \$2300. (D Bernal, **J Clark**, J Mull and R Okazaki)

# 2002

Willard L. Eccles Charitable Foundation. Enhanced laboratories for cell biology and genetics. \$50,000. (J Clark, R Okazaki, K Van De Graaff and S Zeveloff)

#### 2002

W.S.U. Academic Resources and Computing Committee. Laptop computer and projection system for zoology teaching. \$5000. (J Cavitt, **J Clark**, R Meyers and R Okazaki)

#### 2000

W.S.U. Academic Resource and Computing Committee. Notebook computers for teaching and student research \$2249. (J Clark and R Okazaki)

Total funding to support teaching: \$71,267

# **UNDERGRADUATE RESEARCH MENTORING**

# Weber State University

| Student                                    | Accomplishments [all awards competitive]   |  |  |
|--|--|--|--|
| [32] <b>MEGAN FAULKNER</b> 6/21 – 12/23    | one national meeting presentation  |  |  |
| [31] <b>MADELEINE SORBONNE</b> 9/20 – 5/23 | <ul> <li>Research Fellows Program (weber.edu/OUR/fellows)</li> <li>elected to Sigma Xi</li> <li>national research award, Sigma Xi</li> <li>one national meeting presentation</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$1314</li> </ul>  |  |  |
| [30] <b>TAYLOR WILKO</b> 9/18 – 5/19       | <ul> <li>one national meeting presentation</li> <li>Research Fellowship, Ralph S. Nye Charitable Foundation, \$3497</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$1053</li> </ul>   |  |  |
| Subsequent Position                        | Compliant Specialist, Becton-Dickinson Co  |  |  |
| [29] <b>SABRINA HANEY</b> 5/16 – 5/19      | <ul> <li>one peer-reviewed journal publication</li> <li>two national meeting presentations</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$1705</li> </ul>  |  |  |
| Subsequent Position                        | Ph.D. program, Washington State University   |  |  |
| [28] <b>OSCAR BEDOLLA</b> 5/16 – 5/17      | <ul> <li>one peer-reviewed journal publication</li> <li>one national meeting presentation</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$1003</li> </ul>   |  |  |
| Subsequent Position                        | M.D. (2022) University of Utah   |  |  |
| [27] <b>SON NGUYEN</b><br>5/13 – 5/15      | <ul> <li>elected to Sigma Xi</li> <li>three international meeting presentations</li> <li>Paul and Carolyn Thompson Research Scholarship, \$2500 (2)</li> <li>Research Fellowship, Ralph S. Nye Charitable Foundation, \$3259</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$931</li> </ul> |  |  |
| Subsequent Position                        | M.D. (2021) University of Utah   |  |  |
| [26] <b>KELSEY HUNZIKER</b><br>5/14 – 5/15 | <ul> <li>elected to Sigma Xi</li> <li>one national meeting presentation</li> <li>Dept. of Zoology Laboratory Research Award, 2015</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$882</li> </ul>  |  |  |
| Subsequent Position                        | M.S. (2018) University of Edinburgh, Scotland  |  |  |
| [25] <b>CHRISTOPHER HILL</b> 5/13 – 5/14   | <ul> <li>Leon and Frances Staciokis Scholarship, \$2500</li> <li>Research Fellowship, Denkers Family Foundation, \$3494</li> </ul>   |  |  |
| Subsequent Position                        | M.D. (2018) Penn State University  |  |  |

# **UNDERGRADUATE RESEARCH MENTORING** (continued)

| Student   | Accomplishments [all awards competitive]  |  |  |
|---|---|--|--|
| [24] <b>HAYLIE COX</b><br>1/11 – 5/12                                 | <ul> <li>elected to Sigma Xi</li> <li>three national/international meeting presentations</li> <li>Research Fellowship, Kem and Carolyn Gardner Foundation, \$2802</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$1036</li> </ul>  |  |  |
| Subsequent Position   | M.S. (2014) Weber State University  |  |  |
| [23] <b>MICHAL MATYJASIK</b><br>1/11 – 5/12                           | • one peer-reviewed publication (research conducted at University of Alabama)   |  |  |
| Subsequent Position   | Ph. D. (2019) University of Colorado  |  |  |
| [22] <b>AMANDA TRUONG</b><br>6/09 – 5/12                              | <ul> <li>elected to Sigma Xi</li> <li>four national/international meeting presentations</li> <li>one peer-reviewed journal publication</li> <li>Dept. of Zoology Laboratory Research Award, 2011</li> <li>Research Fellowship, Kem and Carolyn Gardner Foundation, \$2777</li> <li>Cyrus McKell Research Fellowship, \$5000</li> <li>travel to disseminate grants (two), W.S.U. Office of Undergraduate Research, \$1000; \$978</li> <li>Society for Molecular Biology &amp; Evolution, Undergraduate Mentoring and Diversity awardee, \$2500 – one of only ten students worldwide</li> </ul> |  |  |
| Subsequent Position   | M.D./Ph.D. (2021) University of Utah  |  |  |
| [21] KRYSTLE MINEAR<br>6/09 – 5/10                                    | <ul> <li>elected to Sigma Xi</li> <li>national research award, Sigma Xi annual meeting</li> <li>one local and three national/international meeting presentations</li> <li>Research Fellowship, Ralph Nye Charitable Foundation, \$2300</li> <li>travel to disseminate grants (two), W.S.U. Office of Undergraduate Research, \$660; \$540.</li> <li>Dept. of Zoology Laboratory Research Award, 2010</li> <li>Senior Thesis, Department of Zoology</li> </ul>   |  |  |
| Subsequent Position   | M.B.A. (2013) University of Utah  |  |  |
| [20] CHRISTY COTTRELL<br>(co-advised with M. Sondossi)<br>5/08 – 5/10 | <ul> <li>elected to Sigma Xi</li> <li>three local and one national/international meeting presentation</li> <li>Doyle Stephens research scholarship – Friends of Great Salt Lake, \$750</li> <li>travel to disseminate grant, W.S.U. Office of Undergraduate Research, \$660</li> </ul>  |  |  |
| Subsequent Position   | Research Technician, Applied Biosciences Corp.  |  |  |
| [19] NATASHA NEILSEN<br>6/08 – 5/09                                   | <ul><li>elected to Sigma Xi</li><li>one local and two national/international meeting presentations</li></ul>  |  |  |
| Subsequent Position   | Research Technician, Myriad Genetics  |  |  |

# **UNDERGRADUATE RESEARCH MENTORING (continued)**

| Student   | Accomplishments [all awards competitive]  |  |
|---|---|--|
| [18] <b>BRIAN ONEY</b><br>6/06 – 5/07                               | <ul> <li>Research Fellowship, Eccles Foundation, \$2100</li> <li>Dept. of Zoology Laboratory Research Award, 2007</li> <li>one local and two national/international meeting presentation</li> <li>Senior Thesis, Department of Zoology</li> </ul> |  |
| Subsequent Position   | M.S. (2011) University of Bayreuth, Germany<br>Ph.D. (2016) ETH Zurich, Switzerland   |  |
| [17] <b>ELLEN SUURMEYER</b> 5/05 – 8/05                             | <ul> <li>Fellowship, N.S.F. – Research Experience for Undergraduates</li> <li>elected to Sigma Xi</li> <li>one national/international meeting presentation</li> </ul>   |  |
| Subsequent Position   | Ph.D. (2011) University of Arizona  |  |
| [16] <b>DON ERICSON</b> (co-advised with B. Trask) 5/04 – 5/05      | <ul> <li>W.S.U. Undergraduate Research Fellow Award, \$2400</li> <li>Dept. of Zoology Laboratory Research Award, 2003</li> <li>one local meeting presentation</li> </ul>  |  |
| Subsequent Position   | M.D. (2009) University of Utah medical school   |  |
| [15] <b>ERIC GABRIELSEN</b> 5/04 – 5/05                             | <ul> <li>Fellowship, N.S.F. – Research Experience for Undergraduates</li> <li>selected for Council on Undergraduate's "Posters on the Hill"</li> <li>one local and one national/international meeting presentation</li> </ul>                     |  |
| Subsequent Position   | D.D.S. (2009) Ohio State University dental school   |  |
| [14] <b>KENNETH LINDLEY</b><br>9/03 – 5/04                          | • national/international meeting presentation   |  |
| Subsequent Position   | M.D. (2008) Ohio State University medical school  |  |
| [13] <b>CARRIE BAUER</b> (co-advised with M. Sondossi) 9/03 – 5/04  | <ul> <li>two local and one regional meeting presentations</li> <li>Sigma Xi undergraduate research award, 2004</li> </ul>   |  |
| Subsequent Position   | Research Technician, Applied Biosystems   |  |
| [12] <b>AARON ANDERSON</b> 5/03 – 9/03                              | <ul> <li>Summer Undergraduate Research Experience in Biology (W.S.U.)</li> <li>two local meeting presentations</li> </ul>   |  |
| Subsequent Position   | M.D. (2007), University of Cincinnati medical school  |  |
| [11] KRISTINA MCKINLEY<br>(co-advised with J Cavitt)<br>6/01 – 5/03 | <ul> <li>Dept. of Zoology Laboratory Research Award, 2003</li> <li>elected to Sigma Xi</li> <li>two national/international meeting presentations</li> <li>Senior Thesis, Department of Zoology</li> </ul>   |  |
| Subsequent Position   | M.D. (2007) University of Utah  |  |
| [10] <b>JUSTIN WILSON</b> 5/01 – 5/02                               | national/international meeting presentation   |  |
| Subsequent Position   | M.D. (2006) Penn State University   |  |

# **UNDERGRADUATE RESEARCH MENTORING (continued)**

| Student                                     | Accomplishments [all awards competitive]  |  |  |  |
|---|---|--|--|--|
| [9] <b>MELISSA BENTLEY</b> 1/01 – 5/02      | <ul> <li>elected to Sigma Xi</li> <li>national/international meeting presentation</li> <li>Senior Thesis, Department of Zoology</li> </ul>  |  |  |  |
| Subsequent Position                         | M.D. (2006) University of Utah  |  |  |  |
| [8] <b>OLGA FREIDEKIND</b> 5/01 – 7/01      | <ul> <li>Diplomate thesis, University of Heidelberg, Germany (research<br/>conducted at W.S.U.)</li> </ul>  |  |  |  |
| Subsequent Position                         | Ph.D. (2008) University of Heidelberg, Germany  |  |  |  |
| [7] <b>LEAH COLTON</b> 6/00 – 12/01         | <ul> <li>Dept. of Zoology Laboratory Research Award, 2002</li> <li>elected to Sigma Xi</li> <li>one peer-reviewed publication</li> <li>EID postgraduate training fellowship, U.S. Centers for Disease Control and Prevention</li> </ul> |  |  |  |
| Subsequent Position                         | Ph.D. (2009) Colorado State University  |  |  |  |
| [6] <b>CHRISTOPHER OSTLER</b> 1/00 – 12/00  | <ul> <li>Dept. of Zoology Laboratory Research Award, 2001</li> <li>Senior Thesis, Department of Zoology</li> </ul>  |  |  |  |
| Subsequent Position                         | M.S. (2005) (technology transfer), Westminster College  |  |  |  |
| [5] <b>JED POLL</b> 6/99 – 12/99            | • Dept. of Zoology Laboratory Research Award, 2000  |  |  |  |
| Subsequent Position                         | M.D. (2004) Medical College of Wisconsin  |  |  |  |
| University of Arizona                       |   |  |  |  |
| Student                                     | Accomplishments [all awards competitive]  |  |  |  |
| [4] <b>Z</b> AC <b>F</b> ORSMAN 6/94 – 2/96 | BRAVO undergraduate fellowship for research at Tsukuba Institute, Japan (funded by the Howard Hughes Medical Institute)   |  |  |  |
| Subsequent Position                         | Ph.D. (2004) University of Houston  |  |  |  |
| [3] <b>PYONG KIM</b> 6/94 – 6/95            | one peer-reviewed publication   |  |  |  |
| Subsequent Position                         | M.D. (1999) University of Arizona   |  |  |  |
| [2] <b>TASHA ALTHEIDE</b> 8/93 – 12/95      | <ul> <li>NSF pre-doctoral fellowship</li> <li>two national/international meeting presentations</li> <li>one peer-reviewed publication</li> </ul>  |  |  |  |
| Subsequent Position                         | Ph.D. (2002) University of Arizona  |  |  |  |
| [1] <b>MICHAEL SCHLOSSER</b> 6/92 – 8/94    | <ul><li>Howard Hughes Medical Institute research fellowship</li><li>one peer-reviewed publication</li></ul>   |  |  |  |
| Subsequent Position                         | M.D. (1998) Yale University   |  |  |  |

# **UNDERGRADUATE MENTORING SUMMARY**

(1992 - 2023)

- 26 of 32 students completed post-graduate training:
   1 M.D/Ph.D.; 12 M.D. degrees; 8 Ph.D. degrees; 1 D.D.S. degree; 4 M.S. degrees
- Ten peer-reviewed publications with student co-authors
- 24 peer-reviewed presentations by students at national and international meetings
- Six undergraduate and one Master's theses based on work done at W.S.U.
- \$51,491 in competitive fellowships and grants written by students
- Five national research awards
- 13 students elected to Sigma Xi on the basis of research accomplishments
- W.S.U. Department of Zoology Laboratory Research Awards in 2000, 2001, 2002, 2003, 2005, 2007, 2010, 2011, 2015, 2017, 2018, 2023

#### SIGNIFICANT PROFESSIONAL SERVICE

### **National & International Service**

Member Board of Directors, International Society for Salt Lake Research

5/18 - 5/21 (<u>isslr.org</u>)

• One of 11 members of the international Board and the only member from the U.S.

- Developed programs to promote the study, management and conservation of saline lakes
- · Organized triennial international research conference, including location, scientific program, and logistics

*Director* Northwest Region, Sigma Xi Scientific Research Society (<u>sigmaxi.org</u>) 4/15 – 5/18

- Directed recruitment and chapter activities of 32 regional chapters in North America
- Reviewed chapter annual reports
- Organized regional group delegate meetings for the 2015, 2016, 2017 annual meetings

Member Board of Directors, Sigma Xi Scientific Research Society 4/15 – 5/18 (www.sigmaxi.org/about/leadership/board)

- One of 15 members of the international Board
- Prioritized programs and initiatives for the 60,000-member international organization
- Reviewed and approved \$5,037,572 (FY14) annual budget
- Made strategic plans for maintaining and using \$12,980,699 (FY14) endowment

Director Comprehensive Colleges & Universities Constituency Group, 11/08 – 12/10 Sigma Xi Scientific Research Society (sigmaxi.org)

- Directed recruitment and chapter activities of 130 constituency chapters in North America
- Reviewed 130 chapter annual reports
- Organized constituency group delegate meetings for the 2009 and 2010 annual meetings

Member Board of Directors, Sigma Xi Scientific Research Society 11/08 – 12/10 (www.sigmaxi.org/about/leadership/board)

- One of 15 members of the international Board
- Prioritized programs and initiatives for the 60,000-member international organization
- Reviewed and approved \$5,448,276 (FY09) annual budget
- Made strategic plans for maintaining and using \$8,796,883 (FY09) endowment
- Attended three Board of Directors meetings and participated in eight Board teleconferences

Associate Director Comprehensive Colleges & Universities Constituency Group, 12/07 – 11/08 Sigma Xi Scientific Research Society (sigmaxi.org)

- Reviewed 128 chapter annual reports
- Assisted Director in organizing 2008 annual meeting activities

Each of the above positions was via a national or international election.

# SIGNIFICANT PROFESSIONAL SERVICE (continued)

## **University Service**

Member W.S.U., Office of Academic Affairs, High-impact Programs, 9/22 – 11/22 Office of Undergraduate Research director search committee

(weber.edu/academicaffairs/)

- Contributed to position description document
- Reviewed candidate files and conducted in-person interviews
- Completed successful hire of OUR Director

# *Chair* Department of Zoology, neurosciences faculty search committee 9/17 – 3/18

- Wrote position justification and job description
- Contributed to position request document (7 pages)
- Submitted position description to online job postings
- Reviewed 35 applications for this tenure-track position
- Conducted phone interviews with nine candidates
- Organized campus visits for four candidates
- Completed successful hire of Dr. Elizabeth Sandquist

# *Director* W.S.U., College of Science DNA Laboratory 9/99 – 5/16

- Coordinated faculty and student research activities in this multi-department facility
- Obtained \$151,740 in funding for research equipment, including imaging and computing
- Supervised student research projects
- Regularly hosted high school and junior high student groups and designed activities to elucidate the process of science

#### Member

9/14 – 5/15 W.S.U., Personnel Relations Committee

weber.edu/ppm/Policies/3-31\_StaffEmpGrievances.html

• Reviewed cases of grievances filed by non-faculty employees

Chair W.S.U., College of Science Tenure Review Committee 12/12 – 5/15 (weber.edu/facultyandstaffresources/Post\_Tenure.html)

- Developed a revised the tenure document used by the College of Science
- · Served as liaison between the Dean and college faculty in deliberations regarding tenure decision policies
- Prepared, submitted and presented the documents for review by the Academic, Promotion, Academic Freedom, and Tenure Committee
- Prepared and submitted documents to the Faculty Senate
- For the first time ever, established the criteria and procedures by which faculty in the college are evaluated post-tenure
- Conducted "town-hall" meeting with college faculty to discuss implications of post-tenure review
- Prepared, submitted and presented the documents for review by the Academic, Promotion, Academic Freedom, and Tenure Committee (approved 4/12/2013)
- Prepared and submitted documents to the Faculty Senate (approved 4/19/2013)

# SIGNIFICANT PROFESSIONAL SERVICE (continued)

# **University Service**

Member W.S.U., Faculty Board of Review

9/11 – 6/12 (weber.edu/ppm/Policies/1-13 FacSenBylaws.html)

Reviewed cases of academic due process with regard to granting of tenure/promotion, salary, work conditions and other
pertinent matters of faculty concern

Chair Department of Zoology, genetics faculty search committee

9/07 - 4/08

- Reviewed 29 applications for this tenure-track position
- Submitted position description to online job postings
- Conducted phone interviews with five candidates
- Organized campus visits for three candidates
- Completed successful hire of Dr. Jon Marshall

*Chair* W.S.U., College of Science Ranking & Tenure Committee 10/06 – 5/08

- Evaluated a total of 17 candidates for promotion or tenure
- Reviewed the performance evaluation of the College Dean and worked with the Provost to formulate his final report

Chair W.S.U., Office of Academic Affairs, Science General Education

9/02 – 9/07 Assessment Task Force (<a href="https://weber.edu/gened">https://weber.edu/gened</a>)

- For the first time ever, wrote a Mission Statement that encompasses both the life sciences and physical sciences
- Identified Learning Outcomes for each general education course in the sciences and articulated outcomes with the curriculum grid
- Established and implemented an assessment plan across four colleges
- Administered and compiled the first ever results of science general education assessment
- Completed a self-study of science general education for 2004 Northwest Accreditation review
- Prepared formal Science Gen Ed proposal, which subsequently received unanimous approval from the Faculty Senate

*President* W.S.U. chapter, Sigma Xi Scientific Research Society 9/01 – 9/08

- Successfully completed and submitted seven annual reports, which are required for maintaining the chapter in good standing
- Recruited and nominated 38 students for membership in the WSU chapter of Sigma Xi
- Organized 22 on-campus seminars, including local, national, and international speakers
- Served as official chapter delegate to the 2002, 2004, 2007 and 2008 national meetings of Sigma Xi
- Served as official teller at the 2004 annual meeting of Sigma Xi

*Chair* Department of Zoology, cell biology faculty search committee 9/02 – 4/03

- Submitted position description to online job postings
- Reviewed 31 applications for this tenure-track position
- Conducted phone interviews with six candidates
- Organized campus visits for three candidates
- Completed successful hire of Dr. Barb Trask

# SIGNIFICANT PROFESSIONAL SERVICE (continued)

# **University Service**

Member W.S.U., Office of Academic Affairs, Institutional Review

9/00 – 12/01 Board for Human Subjects (<u>www.weber.edu/IRB</u>)

• Reviewed 112 proposals from W.S.U. faculty and students for compliance with national and institutional IRB standards

Chair Department of Zoology, Outcomes Assessment Committee

9/00 - 12/03

• Wrote department mission statement and identified learning outcomes

- Articulated learning objectives with the zoology curriculum
- Established and implemented the department's assessment plan
- Reported assessment results to the university's assessment committee

*Chair* W.S.U., College of Science Curriculum Committee 9/99 – 9/05

- Completed the successful review of 11 program proposals and 32 course proposals
- Streamlined the submission process to include electronic submission of all documents to the committee

### **SUMMARY OF SIGNIFICANT SERVICE**

(1992 - 2023)

- Significant service activities 23 of 25 years at W.S.U.
- Chair of seven different college and university committees
- Nine years of international service positions

| <u>TENURE</u> | POSITION        | <u>LEVEL</u>  | COMMITTEE / ENTITY (*international election)      |
|---------------|-----------------|---------------|---|
| 1998 – 2016   | Director        | College       | DNA Laboratory                                    |
| 1999 – 2005   | Chair           | College       | Curriculum Committee                              |
| 2000 – 2003   | Chair           | Department    | Outcomes Assessment Committee                     |
| 2001 – 2008   | Chair           | College       | W.S.U. Chapter of Sigma Xi                        |
| 2002 – 2003   | Chair           | Department    | Cell Biology Faculty Search                       |
| 2002 – 2007   | Chair           | University    | Science General Education Assessment Task Force   |
| 2006 – 2008   | Chair           | College       | Ranking and Tenure Committee                      |
| 2007 – 2008   | Chair           | Department    | Genetics Faculty Search                           |
| 2007 – 2008   | Assoc. Director | National      | Sigma Xi, Comprehensive Colleges & Universities * |
| 2008 - 2010   | Director        | National      | Sigma Xi, Comprehensive Colleges & Universities * |
| 2012 – 2013   | Chair           | College       | Post-Tenure Policy Committee                      |
| 2014 – 2016   | Chair           | College       | Tenure Document Review Committee                  |
| 2015 – 2018   | Director        | National      | Sigma Xi, Northwest Region *                      |
| 2017 – 2018   | Chair           | Department    | Neurosciences Faculty Search                      |
| 2018 – 2021   | Member          | International | ISSLR, International Board of Directors *         |
|               |                 |               |   |