## Becky Catalina Pregger Talyn October, 2022

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Highlights

##### Teaching: Formal teaching experience includes public and private Universities; large and small student body; ethnically and economically diverse. Active learning and evidence based practices.

##### Course Development: 6 disciplinary and 11 general education courses.

##### Research: 5 peer-reviewed publications in past 5 years. Most publications have cross-disciplinary and undergraduate co-authors; Evans award 2019; Some publications with 70+ citations.

##### Research Mentoring: Advisor to 33 undergraduate students, including 26 women; 9 Latinx, 2 African-American, 4 Asian-American; winning CSUSB Student Research Competition, 2018.

##### Funding: NSF IUSE grants: CSUSB, 2018-2023; CSUDH, 2020-2024; Totaling over $6 million.

##### Curriculum Development: Quarter2Semester Conversion; GE pathways (Environmental Sustainability, Social Justice); Foundation seminars; Reacting to the Past. Teaching & Learning Facilitator.

##### Education

2002-2004, Postdoc, University of California, Riverside, 50% time. Focus in Behavioral Ecology, *Drosophila* behavior, reproduction & genetics, Advisor: Daphne Fairbairn.

2000-2001, Postdoc, DePauw University, Indiana, full time during summers. Focus on Behavioral Ecology, treefrog reproductive behavior & development, Advisor: Jim Benedix.

1993-2000, Ph.D. in Biology, University of Maine, Orono, full time, 98 semester units earned, 3.84 GPA. Focus in Behavioral Ecology, *Drosophila* behavior, reproduction & genetics, Advisor: Dusty Dowse.

1991-1993, BA in Creative Studies, Biology concentration, University of California, Santa Barbara, full time, 96 quarter units earned, 3.91 GPA.

1989-1991, Castleton State College, VT, Psychology major, part time, 59 sem. units earned, 3.85 GPA.

##### Employment

Lecturer, California State University, San Bernardino (CSUSB), CA, Sep. 2002-present, part time.

Lecturer, University of California, Riverside, CA, June 2004-Sep. 2006, part time.

Instructor, University of Redlands, Redlands, CA, Aug. 2003-Dec. 2004, part time.

*Part time employment allowed reduced workload and scheduling flexibility for family and childcare.*

Assistant Professor (tenure track), Denison University, Granville, Ohio, Aug. 2001-June 2002, full time.

Assistant Professor (visiting), DePauw University, Greencastle, Indiana, Aug. 2000- June 2001, full time.

Adjunct Professor, Husson College, Bangor, Maine, August-December 1999, part time.

Instructor, Guest Lecturer & Teaching Assistant, University of Maine, Aug. 1993-June 2000, part time, allowing time for completion of Ph.D. coursework and research.

#### Courses Taught (italics courses taught since 2015)

**General Education (lecture only unless specified otherwise)** – Foundations seminar: Science, Environmental Sustainability and Social Responsibility, Anatomy & Physiology, Human Biology w/ lab, Human Sexuality, Wild Color intensive lab, Concepts in biology: sex and gender, Sustainable Agriculture, Human Reproduction and Sexual Behavior, Sexually Transmitted Diseases, Genetics & Society, Science & Technology, Environment and Human Survival (now Human Ecology), Perspectives on Gender, Natural Sciences and the Humanities Honors Seminar, Single subject teacher supervision.

**Biology** – Introductory Biology lab, General Zoology lecture & lab, Anatomy & Physiology lab, Comparative Anatomy lab, Vertebrate Anatomy lab, Cell Biology and Physiology lab, Genetics lecture & lab, Behavioral Ecology lecture & lab, Sex and Gender: A Biological Perspective lecture & lab, Human Sexuality lecture, Field Ecology lab, Disciplinary Writing in Natural Science, Senior Capstone in Biology, Directed Study in Biology, Independent Study in Chemistry & Biochemistry, Directed Research in Biology.

**Publications** (**undergraduate coauthors**, interdisciplinary collaborators\*, 1Research team lead)

**Elias, R.,** Talyn, B.1, Melchiorre, E.\* (2021). Dietary Behavior of *Drosophila melanogaster* Fed with Genetically-Modified Corn or Roundup®. *J. Xenobiot.*, 11(4), 215–227.

Talyn, B., Callori, S. J.\*, Cerwin, K.\*, Chao, M., Cousins, K. R.\*, Hood, C.\*, McGill, S. F.\*, Metcalf, A. E. & Woodney, L.\* (2021). Faculty Learning Communities Facilitated the Rapid Pivot to Online Teaching and Learning Breadcrumb. *Journal of College Science Teaching*, *51*(1).

**Muller, K.\***, **Herrera, K.\***, Talyn, B.1, & Melchiorre, E\*. (2021). Toxicological Effects of Roundup® on Drosophila melanogaster Reproduction. *Toxics*, *9*(7), 161.

Talyn, B.1, **Lemon, R.**, **Badoella, M.**, Melchiorre, D., **Villalobos, M.**, **Elias, R.**, **Muller, K.\***, **Santos, M.**, & Melchiorre, E.\* (2019). Roundup exposure, but not unsprayed Roundup-ready corn, increases mortality of *Drosophila melanogaster*. *Toxics, 7*, 1-28.

Melchiorre, E. B.\*, Sickman, J. O.\*, Talyn, B. C., & Noblet, J.\* (2018). Isotope stratigraphy: Insights on paleoclimate and formation of nitrate deposits in the Atacama Desert, Chile. *Journal of Arid Environments*, *148*, 45-53.

Melchiorre, E. B.\*, & Talyn, B. C. (2014). Nitrogen stable isotope composition and the origins of cupric nitrate mineralization. *Chemical Geology*, *388*, 1-8.

Melchiorre, E. B.\*, & Talyn, B. C. (2009). Oxygen and hydrogen stable isotope maps for meteoric groundwater in Costa Rica, excluding geothermal waters. *J. Environmental Hydrology, 17*, 1-16.

Melchiorre, E.\*, **Freeman, Z.\***, **Harris, S.\***, Talyn, B. & Noblet, J.\* (2007). Dispelling the myth of “chrome” cerussite: New data indicate other color mechanisms are responsible for yellow cerussite. *Australian Mineralogist*.

Melchiorre, E.B.\*, Williams, P.A.\*, Rose, T.\*, Talyn, B.C. (2006). Biogenic nitrogen from termite mounds and the origin of gerhardtite at the Great Australia Mine, Cloncurry, Queensland, Australia. *Canadian Mineralogist*.

Ringo, J., Talyn, B. & **Brannan, M**. (2005). Effects of Precocene and Low Protein Diet on Reproductive Behavior in *Drosophila melanogaster* (Diptera: Drosophilidae). *Annals of the Entomological Society of America*, vol. 98, pp. 601-607.

Talyn, B.1 & Dowse, H. (2004). The role of courtship song in sexual selection and species recognition by female *Drosophila melanogaster*. *Animal Behaviour*, vol. 68, pp. 1165-1180.

Davis, S.\*, Davis, R.\*, James, A.\*, and Talyn, B. (2000). Reproductive Behavior and Larval Development of *Leptodactylus fallax* in Dominica, West Indies. Herpetological Review, vol. 31, pp. 217-220.

Roche, J. P., Talyn, B. C., and Dowse, H. B. (1998). Courtship bout duration in *per* circadian period mutants in *Drosophila melanogaster*. Behavior Genetics, vol. 28, pp. 391-394.

Alt, S., Ringo, J., Talyn, B., Bray, W.\* and Dowse, H. (1998). The *period* gene controls cycles in courtship song of *Drosophila melanogaster*. Animal Behavior vol. 56, pp. 87-97.

Plus 1 published film segment, 3 non-refereed publications, 51 conference abstracts.

**Manuscripts In Preparation** (undergraduate coauthors in **bold**, interdisciplinary collaborators \*)

**Herrera, K\*.**, Talyn, B. & Melchiorre, E.\* (in prep). Glyphosate accumulation within the bodies of the non-target species, *Drosophila melanogaster*: role of exposure age, concentration, and formulation, and body segment localization. Journal of Environmental Toxicology and Pharmacology.

**Honors & Awards**

Leave Your Paw Print Community Service Award, CSUSB, 2021.

Anthony and Lois Evans Faculty Development Award, CSUSB, 2019.

Commitment and Dedication as a Mentor. CSUSB, 2019.

Outstanding Services and Support to Students award. **CSUSB, 2018.**

**Outstanding Extramural Grant Activity award. CSUSB, 2018.**

#### Grants Awarded and Pending

Talyn, B & E. Johnson, pending. Identification of Molecular Targets of Glyphosate Based Herbicides in *Drosophila*. Grant proposal to the **National Institute of Environmental Health Science (NIH)**. $146,503.

Nazzal, L. & B. Talyn, pending. Enhancing Creativity & Curiosity in STEM to Equitably Improve Student Success. Grant proposal to **EHR-Core (NSF)**. $499,742.

Costino, K. et al. Leveraging a Faculty Community of Practice Model of Professional Learning to Enhance Diversity, Equity and Inclusion in STEM Teaching, Learning and Leadership. NSF grant to CSU-Dominguez Hills, January 2020-December 2024. Senior Personnel & Faculty Learning Community facilitator. $2,334,801.

Dodd-Butera, T & B. Talyn, July 2022-Jan 2024. Preparedness in Families with Children with Special Healthcare Needs: Ensuring Environmental Health Equity. Senior Personnel & researcher. Asuza Pacific University, $9,997.

Costino, K. et al. *Improving Student Success in STEM by Improving Faculty Teaching*. NSF grant to CSUSB, November 2017-October 2023. Co-PI and Faculty Learning Community Facilitator. $2,979,749.

Talyn, B. Characterization and Mechanisms of Glyphosate Toxicity in *Drosophila* melanogaster. Faculty-Student Research Grants, Office of Student Research, CSUSB, 2017-2023.

Talyn, B. Student Engagement and Sense of Belonging. Student Success Initiative, CSUSB, November 2021-December 2022. $19,900.

Summer Undergraduate Student Research Program, Office of Student Research, CSUSB, June 2018, May 2021, May 2022.

Mini-Grant, Office of Research & Development, Academic Affairs, CSUSB, 2018-2019, 2020-2021.

Establishing Community Partnerships Mini-Grant, Office of Community Engagement, CSUSB, 2019-2020.

Community-Based Research Mini-Grant, Office of Community Engagement, CSUSB, 2016.

**Professional Memberships**

SACNAS 2021-present

Genetics Society of America 2020-present

Society of Toxicology, 2019-2020

Association of Environmental Science and Studies, 2019-2020

**Invited Seminars**

California State University, San Bernardino, 2021.

Keynote, International Conference on Sustainability & Managements Strategy, September 2018.

Spring 2017 Faculty Showcase, CSUSB, 2017.

University of Hawaii, Manoa, February 2009

University of California, Riverside, January 2003

California State University, San Bernardino, November 2002

Denison University, February 2001

University of New Hampshire, January 2000

DePauw University, February 2000

# Additional Information

**Professional Development at CSUSB**

Leadership Community of Practice participant, WestEd, 2022-2023.

Facilitator, Inter-Campus STEM Faculty Learning Community building collaboration among CSU and CCC campuses in Southern California to increase Diversity, Equity & Inclusion in sciences. 2020-2025.

Reading Apprenticeship participant, WestEd, 2021-2022.

Facilitator, CSUSB STEM Faculty Learning Community focusing on Culturally Responsive Teaching. 2020-2022.

Southern California Conference on Undergraduate Research planning committee, CSUSB, 2021.

High Impact Practices in Higher Education – Impactful Service Certificate, CSUSB, 2020-2021.

Mentoring and the Undergraduate Student Experience Faculty Learning Community participant, Office of Student Research, CSUSB, Spring 2021.

Facilitator, CSUSB STEM Faculty Learning Community focusing on transitioning to remote instruction while maintaining focus on How People Learn. Summer 2020.

Reacting to the Past SVTI Faculty Learning Community. Summer 2020.

Community Engagement Writing Accountability Group. Office of Community Engagement, 2019-2020.

Facilitator, CSUSB STEM Faculty Learning Community focused on large lecture classes. 2019-2020.

Diversity & Inclusion Workshop; Reacting to the Past workshop; Foundations Seminar workshop. Quarter-to Semester Conversion. 2019-2020.

Facilitator, CSUSB STEM Faculty Learning Community for Lecturers to create a community of practice that builds support for implementation of evidence based and inclusive teaching practices. 2018-2020.

Foundations Seminar workshop. Quarter-to-Semester Conversion. Summer 2019.

Donated over $500 of fresh produce, grown on Rancho de los Proyectos, my family’s organic farm, and elicited an additional $250 of donated fresh produce from other local farms, to the Obershaw Den, CSUSB, 2017-2019.

Judge, Meeting of the Minds research conference, Office of Student Research. 2019.

Reacting to the Past Regional Conference, CSU Northridge, 2019.

Writing Interest Group, Faculty Center for Excellence, CSUSB. 2019.

Environmental Sustainability Pathway, Food Pathway, Diversity Pathway, and Big Ideas Pathway development; 6 courses proposed. Quarter-to-Semester Conversion, 2017-2018.

Grant Reviewer, Office of Student Research. 2017-2018.

Project-Based Learning workshop. Application of PBL to large classes. 2017.

Developing Writing-Intensive Courses Summer Institute. Disciplinary writing science course. 2017.

Faculty Showcase Presentation. CIL Solves Some of the Challenges of a Science Capstone Course. 2017.

Critical Information Literacy Teaching Workshop. 2016.

Writing in the Disciplines Assessment Development Team. 2014-15.

Writing in the Disciplines Institute. 2014.

Non-Refereed Publications

**Print**

Talyn, B. and Dowse, H. 2003. FORTRAN program generates effective artificial courtship song. *Drosophila* Information Service, 2003. Originally published in Animal Behavior Society Newsletter, Vol. 46, No. 4, November 2001.

Talyn, B. November 2002. Land Use Effects On Water Chemistry And Gray Treefrog Habitat Choice In Rural Ohio. Proceedings of the Third Annual Conference of the Water Research Institute, California State University, San Bernardino, CA.

Talyn, B., Dowse, H. and Ringo, J. Factors affecting primary receptivity of female *Drosophila*. American Zoologist 38 (5) 1998. 168A.

**Film Publication**

Talyn, B., Dowse, H. and Tyler, M., 1996. The male’s love song. In Fly Cycle: The Lives of a Fly, a movie by M. Tyler and J. Schnetzer. Sinauer Associates: Sunderland.

Conference Papers & Abstracts – Oral Presentations

Hood C.\*, Talyn B., Nazzal L.\*, Cousins K.\*, Callori S.\* Improving Student Success through Faculty Learning, Creating Cultural Change through Communities of Practice. AAC&U Conference on Transforming STEM Higher Education; November 2022; Washington, DC, United States.

Nazzal L.\*, Talyn B. Student Perceptions of Math Creativity in a General Education Math Course. In: Chamberlin SA, editor. Proceedings of the 12th International Conference on Mathematical Creativity and Giftedness. 12th International Group for Mathematical Creativity and Giftedness Conference; September 2022; Las Vegas, NV, United States of America. Munster: Verlag fur wissenschaftliche Texte und Medien; c2022.

Zarzana, L.*,* Graham, M., Lee, S. & Talyn, B. Read to Learn: OER Text-Based Activities for STEM. CAL OER 2022. Virtual, August 2022.

**K. Winston**, **A. Dubuque** & B. Talyn. Mechanisms of Toxicity of Glyphosate-Based Herbicides. Summer Student Research Conference, San Bernardino, August, 2022.

**Roddam, N.**, **Winston, K.**, Talyn, B. What Ingredients Contribute to the Toxicity of Glyphosate-Based Herbicides, in a *Drosophila melanogaster* model? Meeting of the Minds, San Bernardino, CA, April 2022.

**Santos, M.**, Talyn, B. Hormonal effects of glyphosate based herbicides on *Drosophila melanogaster*. Meeting of the Minds, San Bernardino, CA, April 2022.

**Santos, M, Roddam, N.**, Talyn, B. Exposure and action of glyphosate-based herbicides in an animal model. Summer Student Research Conference, San Bernardino, CA, August, 2021.

**Herrera, K.\*,** Talyn, B., Melchiorre, E.B.\* Localization of accumulation of glyphosate herbicide within the body of *Drosophila melanogaster*, a non-target animal. Meeting of the Minds, San Bernardino, CA, May, 2019.

**Muller, K.\***, Talyn, B., Melchiorre, E.B.\* Toxicologic effects of Roundup® on *Drosophila melanogaster* reproductive function. Meeting of the Minds, San Bernardino, CA, May, 2019.

Talyn, B. C., **Lemon, R.**, Melchiorre, D., Melchiorre, E. B.\* Invited Keynote: Agricultural Sustainability: GMOs and Glyphosate. International Conference on Sustainability & Management Strategy, September 2018.

**Elias, R.**, Talyn, B. C., Melchiorre, E. B.\* *Drosophila melanogaster*’s developmental dietary behavior with Round-up based sucrose. Meeting of the Minds, San Bernardino, CA, May 2018. Won best undergraduate presentation award.

**Elias, R.**, **Muller, K.\***, **Hernandez, M.**, **Badoella, M.**, Talyn, B. C. (presented by Elias & Hernandez). Effects of glyphosate-based herbicide Roundup on *Drosophila melanogaster*. California State University System-wide Student Research Competition, Sacramento, CA, May 2018.

**Lemon, R.**, Talyn, B. C., Melchiorre, E. B.\* Glyphosate effects on *Drosophila melanogaster* courtship behavior. Meeting of the Minds, San Bernardino, CA, May 2017.

**Elias, R.**, Talyn, B. C., Melchiorre, E. B.\*. *Drosophila*’s corn source attraction/avoidance. Southern California Conference on Undergraduate Research, Riverside, CA, November 2016.

Talyn, B. C., Melchiorre, E.\*, Williams, P.\*, Rose, T.\* Sex, Death, Eusociality and Biomineralization: Nitrogen from termite mounds and the origin of gerhardite at the Great Australia Mine, Cloncurry, Queensland, Australia. Animal Behavior Society, Snowbird, UT, August 2006.

Talyn, B. C., Melchiorre, E.\*, Williams, P.\*, Rose, T.\* Nitrogen from termite mounds and the origin of gerhardite at the Great Australia Mine, Cloncurry, Queensland, Australia.Joint Meetings of the Mineralogical Societies of Australia, Paramatta, June 2006.

Talyn, B., **Hancock, M. S., Tracey, M.** and Melchiorre, E.\* Behavioral responses of treefrogs (*Hyla chrysoscelis*, *H. regilla* and *H. cadaverina*) to aquatic nitrate and atrazine contamination under field and laboratory conditions. Animal Behavior Society, Snowbird, UT, August 2005.

Talyn, B, **Tracy, M., Hancock, M.S.** & Melchiorre, E.\* The effects of sublethal nitrate exposure on the behavior and distribution of treefrogs. Southern California Animal Behavior Society, Riverside, CA, February 2005.

Talyn, B. Three Sibling Species in the *Drosophila melanogaster* Subgroup Differ in the Importance of Courtship Song. Animal Behavior Society, Oaxaca, Mexico, June 2004.

Talyn, B., **Reinacker, K**. and Benedix, J. Mate choice for good genes in gray treefrogs. Animal Behavior Society, Corvallis, OR, July 2001.

Talyn, B. Female *Drosophila melanogaster* prefer more energetic pulse song. Sometimes. Animal Behavior Society, Atlanta, GA, August 2000 and Evolution, Bloomington, IN, June 2000.

Talyn, B. Functional analysis of *Drosophila melanogaster* courtship song. Animal Behavior Society, Lewisburg, PA, July 1999.

Talyn, B. What Sweet Nothings Do Fruitflies Whisper: Functional analysis of *Drosophila* love song. Maine Biological and Biomedical Sciences Symposium, Bar Harbor, ME, May 1999.

Talyn, B., Dowse, H. and Ringo, J. Factors affecting primary receptivity in *Drosophila melanogaster*. Society for Integrative and Comparative Biology, Denver, CO, January 1999.

Talyn, B., Ringo, J., Talyn, R., Dowse, H. Stimulatory effect of male *Drosophila* courtship song on female mating propensity. Animal Behavior Society, College Park, MD, July 1997.

Pregger (Talyn), B., Ringo, J., Dowse, H. Components of *Drosophila* mating Song. Maine Biological and Medical Sciences Symposium, Bar Harbor, ME, June 1995.

**Conference Papers & Abstracts – Posters**

Nazzal L.\*, Talyn B. Student Perceptions of Math Creativity in a General Education Math Course. AAC&U Conference on Transforming STEM Higher Education; November 2022; Washington, DC.

**Roddam, N.**, **Winston, K.**, Talyn, B., Melchiorre, E. What Ingredients are Contributing to the Toxicity of Glyphosate-Based Herbicides, in a *Drosophila melanogaster* model? 63rd Annual *Drosophila* Research Conference, San Diego, CA, 2022.

**Santos, M.**, Talyn, B., Melchiorre, E.\* Endocrine Disruption by Glyphosate in *Drosophila melanogaster*. 63rd Annual *Drosophila* Research Conference, San Diego, CA, 2022.

Talyn, B., Melchiorre, G., Melchiorre, E. Determining critical period of herbicide sensitivity in the fruit fly, *Drosophila melanogaster*. 63rd Annual *Drosophila* Research Conference, San Diego, CA, 2022.

Melchiorre, G.,Talyn, B., Melchiorre, E.\* Critical period for toxicity of three herbicides in the model animal *Drosophila melanogaster.* Southern California Conference for Undergraduate Research, San Bernardino, CA 2021.

**Roddam, N., Winston, K.** & Talyn, B. What Ingredients are Contributing to the Toxicity of Glyphosate-Based Herbicides?Southern California Conference for Undergraduate Research, San Bernardino, CA 2021.

**Santos, M.**, Talyn, B. Endocrine Disrupting Effects of Glyphosate on *Drosophila melanogaster.* Southern California Conference for Undergraduate Research, San Bernardino, CA 2021.

**Roddam, N., Santos, M.**, Talyn, B. Movement And Metabolism Of The Agrotoxin Glyphosate Through The Human Food Chain, A Pilot Study. Meeting of the Minds, San Bernardino, CA 2021.

**Muller, K.**, Talyn, B., Melchiorre, E.\* Toxicological Effects of Roundup® on *Drosophila melanogaster* Reproduction. 62nd Annual *Drosophila* Research Conference, 2021.

Talyn, B., **Herrera, K.\***, **Muller, K\*, Elias, R.**, Melchiorre, E.\* *Drosophila* as a non-target model system to understand glyphosate toxicology. 62nd Annual *Drosophila* Research Conference, 2021.

**Herrera, K.**, Talyn, B. Localization of Accumulation of Glyphosate, an agricultural herbicide, within the body of *D. melanogaster*, a non-target animal. Meeting of the Minds, San Bernardino, CA, 2020.

**Herrera, K.**, Talyn, B., Melchiorre, E.\* Localization of Accumulation of Glyphosate, an agricultural herbicide, within the body of *D. melanogaster*, a non-target animal. Soc. of Toxicology, 2020.

**Muller, K.**, Talyn, B., Melchiorre, E.\* Toxicologic Effects of Roundup® on *Drosophila melanogaster* Reproductive Anatomy. Assn. for Environmental Science and Studies, Orlando, FL, 2019.

**Santos, M.**, Talyn, B., Melchiorre, E.\* Multigenerational Effects of Glyphosate on *Drosophila melanogaster*. Assn. for Environmental Science and Studies, Orlando, FL, 2019.

**Badoella, M.**, Talyn, B. Mortality in *Drosophila melanogaster* when reared with different herbicides. Meeting of the Minds, San Bernardino, CA, 2019.

**Kingston, E.**, Talyn, B. The accumulation, reproductive effects, and survival effects of glyphosate-based herbicide on *Drosophila melanogaster* larvae compared to adult *Drosophila*. Meeting of the Minds, San Bernardino, CA, 2019.

**Santos, M.**, Talyn, B. Multi-generational effects of glyphosate on *Drosophila melanogaster*. Meeting of the Minds, San Bernardino, CA, 2019.

Fischman, D.\*, Hood, C\*, Talyn, B. C., Costino, K.\*, Cousins, K.\*, Fleming, K.\*, Metcalf, A., Polcyn, D., & Woodney, L.\* (presented by Fischman, Hood & Talyn) Investigating student success using evidenced-based strategies – expanded. Graduation Initiative 2025 Conference, San Bernardino, CA, May 2018.

**Hernandez, M.**, Talyn, B. C. & Melchiorre, E. B.\* Genetic variation in Round-up induced mortality in *Drosophila melanogaster*. Meeting of the Minds, San Bernardino, CA, May 2018.

**Muller, K.**, Talyn, B. C., Melchiorre, E. B.\* Toxicologic effects of the glyphosate-based herbicide Roundup on Canton-S *Drosophila melanogaster* reproductive function. Meeting of the Minds, San Bernardino, CA, May 2018.

**Badoella, M. S.**, Talyn, B. C., Melchiorre, E. B.\* *Drosophila melanogaster*’s mortality reared with herbicides. Meeting of the Minds, San Bernardino, CA, May 2018.

**Elias, R.**, Talyn, B. C., Melchiorre, E. B.\* *Drosophila*’s corn source attraction/avoidance. Meeting of the Minds, San Bernardino, CA March 2017.

**Lemon, R.**, Talyn, B. C., Melchiorre, E. B.\* Glyphosate effects *Drosophila melanogaster* courtship behavior. Southern California Conference on Undergraduate Research, Riverside, November 2016.

**Tracey, M**., Talyn, B. & Melchiorre, E.\* Non-adaptive responses of treefrogs to bioactive concentrations of nitrate. Southern California Conference on Undergraduate Research, Whittier, CA, November, 2004; Animal Behavior Society, Snowbird, UT, August 2005.

**Regales, A**., Talyn, B. & Fairbairn, D. Courtship song in *Drosophila melanogaster* contains information about male condition produced through manipulated diet. Southern California Undergraduate Research Conference, Whittier, CA, November, 2004; Southern California Animal Behavior Society, UC Riverside, February 2005.

Talyn, B., **Hancock, M**. & Melchiorre, E.\* Involving High School Students, Undergraduates and the Community in Research: Gray treefrog habitat choice in rural Ohio. Education Session, Animal Behavior Society, Boise, ID, July 2003.

Talyn, B. Lessons from Costa Rican Treefrogs: Integrating Biology and Society. American Institute of Biological Science, Washington, DC, March 2002; Animal Behavior Society, Bloomington, IN, July 2002.

Talyn, B. New uses for the traditional macaroni model for teaching the evolution of behavior. Invited Poster Session on Animal Behavior Education, Animal Behavior Society, Corvallis, OR, July 2001.

Talyn, B. Using Computer Generated Songs in Functional Analysis of Courtship Song. Biological Acoustics Workshop, St. Andrews, UK, March 1999.

Talyn, B., Ringo, J. and Dowse, H. Genetic variation in courtship behavior by *D. melanogaster* males towards other species of females. Drosophila Research Conference, Washington DC, March 1998.

Talyn, B., Ringo, J. and Dowse, H. Sexual Isolation and Courtship in the *Drosophila* *melanogaster* subgroup. Animal Behavior Society, Flagstaff, August 1996.

Roche, J. and Pregger (Talyn), B. Courtship duration in circadian *period* mutants of *Drosophila melanogaster*. Northeast Regional Animal Behavior Meeting, Amherst, MA, November 1995.

**Undergraduate Research Advising and Mentoring**

Faculty-Student Collaborative Research. Students: Megan Tracey, Rachel Lemon, Raquel Elias, Maryori Hernandez, Kelly Muller, Maggie Santos, Maryam Badoella, Lema Pashtunyar, Karina Herrera, Emily Kingston, Ashley Antonissen, Noelle Rodman, Kalinah Winston, Ashley Dubuque, Cindy Mercado, Katherine Bartels, Angel Zarobinski, Bryan Gonzalez. CSUSB, 2002-present.

Senior Research Project co-advisor, Effect of Salton Sea waters on *Drosophila melanogaster* mortality. Student: Diego Centeno (with Dr. Erik Melchiorre). CSUSB, 2019-2020.

Senior Research Project co-advisor, Effect of Salton Sea soils on *Drosophila melanogaster* mortality. Student: Tracy Roberts (with Dr. Erik Melchiorre). CSUSB, 2019-2020.

Faculty-Student Collaborative Research. Students: Dema Sabha and Ashley Regales. University of California, Riverside, 2004-2005.

Co-Project advisor, Hydrology laboratory project. Students: Austin Marshall and Kenny Lautner (with Dr. Erik Melchiorre). CSUSB, 2004.

Faculty-Student Collaborative Research Co-advisor. Students: Samantha Harris and Zach Freeman (with Dr. Erik Melchiorre). CSUSB, 2003.

Faculty-Student Collaborative Research Project. Students: Lisa Bucci, Suzanne DeLiima, and Shane Hancock. Denison University, 2002.

Senior Research advisor. Student: Nicole Gebhart. Denison University, 2001-2002.

Faculty Student Collaborative Research Project. Students: Kristi Reinacker, Natecia Williams, and Andrew Beardsley (with Dr. Jim Benedix). Summer Research Fellows, DePauw University, 2000-2001.

Upward Bound Regional Math-Science Summer Program. Mentor and research project advisor for high school students. University of Maine, 1995, 1996, 1999.

Conference presenter, Expanding Your Horizons. Exposes high school age women to presentations by women scientists. University of Maine, 1996-1999.

Project advisor. Student: Lisa Kean. University of Maine, 1996-1997.