

CLAIRE T. O'QUIN

Non-Tenure Track Assistant Professor | Biology Program | Centre College
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EDUCATION

- 2014 Ph.D., Biology, University of Maryland.
Dissertation: "The Genetic Basis of Pigment Pattern Differentiation in Lake Malawi African Cichlids"
Advisor: Thomas D. Kocher
- 2010 M.S., Biology, The George Washington University.
Thesis: "Ontogeny of the Cypriniform Pharyngeal Jaw Apparatus and its Associated Musculature"
Advisor: Patricia Hernandez
- 2006 B.S., Biology, Concentration in Secondary Education, Louisiana State University
Research: The Effect of Nicotine on Zebrafish Motor Neuron Development
Advisor: Kurt Svoboda

OTHER EDUCATION

- 2008 Functional Morphology and Ecology of Marine Fishes, Friday Harbor Labs, University of Washington

EMPLOYMENT HISTORY

- 2020-Present Non-Tenure Track Assistant Professor of Biology, Centre College
- 2015-2019 Biology Lecturer, University of Kentucky
- 2014-2015 Postdoctoral Research Scholar, University of Kentucky
Research: Investigating the genetic basis of pigment differences in sawfly larvae
Advisor: Catherine Linnen
- 2014 Biology Adjunct Instructor, St. Bonaventure University

TEACHING EXPERIENCE

Centre College

Evolution, Ecology, & Diversity Lab	14-28 Students	Co-instructor F20-S22 Solo instructor S21 (one section); F22-Pr (all sections)
Conservation in National Parks	14 Students	SU23
Biology Senior Seminar	10 Students	S24
Directed Study Prep for Health Professions	3 Students	F24

University of Kentucky

Introductory Biology I	200-300 Students	F15, F16, F17, F18, F19
Introductory Biology II	200-300 Students	S16, S17, S18, S19, S20
General Biology Laboratory	28 Students	Lab Coordinator F15-S19; S20
Research & Writing in Biology	12 Students	F19
Seminar in Biology: Evolutionary Developmental Biology	14 Students	F17

St. Bonaventure University

Cell Biology	20 Students	S14
Principles of Genetics	18-14 Students	Guest Lecturer F13

University of Maryland

Principles of Genetics Recitation	18-24 Students	Teaching Assistant F10, F11, F12
Human Anatomy & Physiology II	18-24 Students	Teaching Assistant S10, S11
Special Topics in Biology: Genetic Research on Cichlid Fishes	12 Students	Teaching Assistant S12

George Washington University

Biology of Organisms I	18-24 Students	Teaching Assistant F06, F09
Biology of Organisms II	18-24 Students	Teaching Assistant S07, S09
Howard Hughes Summer REU Program	18-24 Students	Instructor SU07, SU08, SU09

Louisiana State University

7 th Grade Gifted and Talented Biology	18-24 Students	Student Teacher S06
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STUDENT MENTORING

Centre College

W25	Lilly Reid, Pediatric Rehab Internship (Faculty Mentor)
W25	Marisol Graves, Dental Internship (Faculty Mentor)
W25	George Ferree, Chronic Pain Management Internship (Faculty Mentor)
W25	Sophia Shannon, Nurse Practitioner and Midwife Internship (Faculty Mentor)
W25	Whitney Dollins, Dental Internship (Faculty Mentor)
F24-S25	Jack Blaess, Erin Crittenden, Vicki Kelmanson, Kasey Montgomery, Kayla

	Sharkey, Ben Smith, Grace Williams, Lilly Zehnder
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
F24-S25	Trinity Kays, Izzy Smith, Greenhouse Assistants
SU24	Erin Crittenden, Wildlife Rehabilitation Internship (Faculty Mentor)
SU24	Jade Pevley, Water Quality Monitoring Internship (Faculty Mentor)
SU24	Lara Nowell, Nurse Practitioner Internship (Faculty Mentor)
S24	Lydia Rice, Physical Therapy Internship (Faculty Mentor)
S24	Riley Hodge, Natural Cosmetics Internship (Faculty Mentor)
W24	Grace Williams, Pediatric Occupational Therapy Internship (Faculty Mentor)
W24	Vicki Kelmanson, Nurse Practitioner Internship (Faculty Mentor)
W24	Kate Milward, Dental Internship (Faculty Mentor)
F23	Riley Hodge, Natural Cosmetics Internship (Faculty Mentor)
F23-S24	Kevli Sheth, Izzy Smith, Greenhouse Assistants
F23-S24	Margaret Butts, Vicki Kelmanson, Kayla Sharkey, Ben Smith, Sherice Sutherland, Emma Rose Vincent, Lilly Zehnder
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
S23	Margaret Butts, Erin Crittenden, Kelsey Jenks, Kasey Montgomery, Kayla Sharkey, Ben Smith, Sherice Sutherland, Emma Rose Vincent
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
W23	Niki Maleki, Nursing Internship (Faculty Mentor)
F22	Margaret Butts, Kelsey Jenks, Claire Melvin, Kasey Montgomery, Emma Ridener, Kayla Sharkey, Ben Smith, Sherice Sutherland, Emma Rose Vincent
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
F22-S23	Anna Impellitteri, Kevli Sheth, Greenhouse Assistants
S22-S23	Mary Gonzalez, Undergraduate Research Assistant
	Project: Phenotypic and genotypic analysis of scleral ossicles in Mexican tetra
F21-S22	Margaret Butts, Emma Ridener, Sherice Sutherland, Emma Rose Vincent
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
S21	Margaret Butts, Madison Donald, Emma Ridener, Emma Rose Vincent
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab
SU21	Hanna Montalvo, Undergraduate Research Assistant
	Project: Redesigning for Student Success: Updating the Bio 110 Labs
F20-S22	Judson Collins, Anna Impellitteri, Greenhouse Assistants
F20	Madison Donald, Amanda Flatt, Emma Ridener
	Undergraduate Lab Assistants for Evolution, Ecology, & Diversity Lab

University of Kentucky

S20	Matthew Lemke, Undergraduate Research Assistant
	Project: Investigating pigment pattern re-establishment in the regenerating tails of <i>Melanochromis auratus</i> , a sexually dimorphic African cichlid
S20	Zachary Beckner, Emily Butler, Emad Chishti, Emma Fitzgerald, Victoria Johnson, Bahar Katanbaf, Victoria Kupper, Addison Lander, Mirindi Kabangu,

	John Marcum, Graham Meek, Olivia Morini, Emily Parker, Miranda Rein, Rafael Roberts, Cameron Rostron, Amanda Shaw, Maddie Stanback, Vaargie Subramaniam, Ivan Vela, Anika Yadav, Biology Learning Center Tutors
S20	Makayla Bush, Emily Jones, Nicholas, Prather, Lauren Tranthem, Undergraduate Lab Assistants for General Biology Laboratory
S20	Addison Jennings, Matthew Lemke, Anesthesia Technician Program UK Medical School (Faculty Sponsor)
F19	Marcus Barnett, Joscelyn Fennelly, Ebtisam Mohammad A Hakami, Stephanie Inimgba-Olunwa, Meredith Krebs, Matthew Lemke, Larkin Mann, Carter Prewitt, Ashley Rauch, Spencer Russell, Shreeya Shresta, Aditya Sriram, Students in Research & Writing in Biology course Project: Investigating pigment pattern re-establishment in the regenerating tails of African cichlids
F19	Evelyn Turnbaugh, Undergraduate Research Assistant Project: Investigating pigment pattern re-establishment in the regenerating tails of <i>Melanochromis auratus</i> , a sexually dimorphic African cichlid
F19	Attaas Alvi, Anesthesia Technician Program UK Medical School (Faculty Sponsor)
S19	Ellora Amrit, Emily Butler, BiWei Chen, Emad Chishti, Ayla Deck, Victoria Johnson, Mirindi Kabangu, John Marcum, Dalton Riley, Cameron Rostron, Ivan Vela, Biology Learning Center Tutors
S19	Lisa Miller, Lauren Tranthem, Undergraduate Lab Assistants for General Biology Laboratory
S19	Katherine Goble, Governor's Office Internship (Faculty Sponsor)
2018	Kayla Mattingly and Maya Woolfolk, Undergraduate Research Assistants Project: Investigating environmental factors and color variation in red headed pine sawfly larvae (Shared mentorship with Catherine Linnen)
F18	Umair Bhutto, BiWei Chen, Emad, Chishti, Victoria Johnson, Haley Jones, Mirindi Kabangu, Sophia Mounce, Hunter Prince, Dalton Riley, Ivan Vela, Biology Learning Center Tutors
S18	BiWei Chen, Shane D'Souza, Mary Gibbs, Rebika Khanal, Meghana Kudrimoti, Alexandra Pendery, Hunter Prince, Monisha Rekhraj, Kathryn Sandum, Wenxin Zhuo, Biology Learning Center Tutors
F17	Lawrence Butros, Meghana Kudrimoti, Hannah Went, Sylvia Wilson, Biology Learning Center Tutors
SU16	Neha Patel, ScribeAmerica Internship (Faculty Sponsor)
F14-S15	Connor Sears, Undergraduate Research Assistant Project: Phenotypic and genotypic analysis of pigmentation traits in Neodiprion sawflies *Included on one publication

University of Maryland

F12-S14	Sarah Robbins Project: QTL fine mapping of pigmentation traits in African cichlid fishes
F12-S13	Ginni LaRosa

Project: Genotypic analysis of preliminary QTL regions associated with pigmentation traits and genotype analysis of a sex determining region in African cichlid fishes

S10-S12 Aleix Drilea

Project: Phenotypic and genotypic analysis of pigmentation traits in African cichlid fishes *Included on two publications

ACADEMIC HONORS

University of Kentucky

2020 Ken Freedman Outstanding Advisor Nominee

2020 Teacher Who Made a Difference (Recognized by one student)

2019 Most Influential Faculty Member Award, Department of Biology

2019 Teaching Large Classes Award Nominee, Department of Biology, College of Arts and Sciences

2018 Teacher Who Made a Difference (Recognized by four students)

2018 Most Influential Faculty Member Nominee, Department of Biology

2018 Teaching Large Classes Award Nominee, Department of Biology, College of Arts and Sciences

2017 Teacher Who Made a Difference (Recognized by one student)

University of Maryland

2012 Department of Biology Teaching Assistant Award

George Washington University

2007 Best Student Poster Award, Division of Evolutionary Developmental Biology, Annual Meeting of the Society for Integrative and Comparative Biology

PUBLICATIONS

Under Review 2018 Grigoryan, A., B. Hammond, C.T. O'Quin, J. Troughton, K.E. O'Quin. Assessing coral ecosystem health in South Water Caye Marine Reserve, Belize. *BIOS*. Linnen, CR, **O'Quin, CT**, Shackleford, T, Sears, C, Lindstedt, C. Genetic architecture underlying larval pigmentation and color pattern in the redheaded pine sawfly (*Neodiprion lecontei*). *Genetics* 209: 291-305.

2013 **O'Quin, CT**, Drilea AC, Conte MA, Kocher TD. Pigment QTL detection using a new *Metriaclima zebra* anchored assembly. *BMC Genomics* 14:287.

2012 **O'Quin CT**, Drilea AC, Roberts RB, Kocher TD. A small number of genes underlie male pigmentation traits in Lake Malawi cichlid fishes. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution* 318:199-208.

NOTES Underlined: Undergraduate Researcher

FUNDING

Centre College

2022	Center for Global Citizenship Faculty Development Travel Grant	\$3,000
2021	Faculty Development Committee Summer Research Grant	\$5,367

University of Kentucky

2016	Alternative Textbook Grant	\$500
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University of Maryland

2013	Ann G. Wylie Dissertation Fellowship	\$10,800
2012	Howard J. Brinkley Travel Award	\$250
2012	International Conference Student Support Award	\$435
2012	Graduate Student Summer Research Fellowship	\$2,500
2011	Guy Jordan Research Fund Award, The American Cichlid Association	\$1,375

POSTERS & PRESENTATIONS

Invited Seminars

2019	O'Quin CT. From Fish to Flies: Using QTL Analysis to Investigate the Genetic Basis of Pigment Patterns. Guest Speaker via Skype, BIOL 3676 Evolution Lab, University of Iowa.
2017	O'Quin CT. From Fish to Flies: Using QTL Analysis to Investigate the Genetic Basis of Pigment Patterns. Department of Biology, Centre College
2016	O'Quin CT. Phenotypic Diversity and Adaptive Radiation: A Lesson from African Cichlids. Guest Speaker, BIO 770 Seminar, University of Kentucky

Presentations

2019	Linnen C., Bagley RK., O'Quin CT. , Lindstedt-Kareksela C. Genetics and ecology of warning coloration in pine sawfly larvae. Society for the Study of Evolution, Providence, Rhode Island.
2009	O'Quin, CT and Hernandez, LP. Development of a functional complex: Ontogeny of the zebrafish pharyngeal jaw apparatus. Society for Integrative and Comparative Biology, Boston, MA.
2007	Hernandez, LP, Bird, NC., Staab, KL., and O'Quin, CT. Using zebrafish to investigate the origin and evolution of morphological novelty. <i>Talk</i> . International Congress of Vertebrate Morphology, Paris, France

Posters

- 2023 Gonzalez M, **O'Quin CT**, O'Quin KE. Inheritance of Scleral Width in Mexican Tetra. Research Internships Creative Endeavors (RICE) Symposium, Centre College, Danville, KY
- 2019 Woolfok M., Mattingly K., **O'Quin C.**, Linnen C. Environmental correlates of melanin spotting intensity in geographically variable redheaded pine-sawfly larvae. Annual Biomedical Research Conference for Minority Students, Anaheim, California.
- 2018 Woolfolk M., Mattingly K., **O'Quin C.**, Linnen C. Environmental correlates of melanin spotting intensity in geographically variable redheaded pine-sawfly larvae. University of Kentucky Showcase of Undergraduate Scholars, Lexington, KY
- 2012 **O'Quin, CT**, Drilea, AC, Conte, MA, O'Quin, KE, and Kocher, TD. Identification of pigment QTL in African cichlids from Lake Malawi. Society for Molecular Biology and Evolution, Dublin, Ireland.
- 2008 **O'Quin, CT**. Developing a basis for convergence: Ontogeny of the zebrafish pharyngeal jaw apparatus. American Society of Ichthyologists and Herpetologists, Montreal, Canada.
- 2008 **O'Quin, CT**, Oberg, FL, and Hernandez, LP. Ontogeny of the pharyngeal jaw apparatus in the zebrafish. Society for Integrative and Comparative Biology, San Antonio, TX.
- 2007 **O'Quin, CT** and Hernández, LP. The role of hedgehog signaling during craniofacial development in larval zebrafish. *Poster*. Society for Integrative and Comparative Biology, Phoenix, AZ.

NOTES Underlined: Undergraduate Researcher

COLLEGE SERVICE

Centre College

- F24-Pr Ad hoc Faculty Advising Committee
- F24-Pr Biology Program Double Search Committee
- F24-Pr Faculty co-liaison for Women's Lacrosse
- SU24 Faculty Retreat Planning Committee
- F23-Pr Pre-Occupational Therapy Advisor
- F23-Pr Division III Safety Committee
- F22-Pr IACUC Committee
- SU22-F22 Faculty Panelist, Front and Centre Friday Admissions Open House
- S22-Pr Health Professions Advisory Committee
- S22-Pr Pre-Nursing Advisor
- F21 Women in STEM Panelist, Centre Feminist sponsored event
- F21-S23 Sexual Misconduct Prevention and Response Committee
- F21-Pr Advisor of TriBeta Biological Honors Society
- F21 Biology Program Search Committee
- F21-SU23 Greenhouse Committee
- F21-Pr First Year Advising

S21-Pr Biology Program Majors Advisor

University of Kentucky

S19-S20 Biology Department Event Supervisor, Kentucky Science Olympiad State Tournament
S19-S20 Inter-Professional Test Preparation Program, Genetics Session Leader
F18-S20 Tutor Advisory Board Member
F18-S20 Director of the Biology Learning Center
F18-S20 Assist with Department of Biology promotion and undergraduate recruitment events
F18 Faculty panel member for UK 101 class, University of Kentucky
S18 Member of the Wildcat Foundations Faculty Dimension Committee and chaired subcommittee on Importance of the First Year, University of Kentucky
F17-S20 Biology Majors advisor
F17-S20 Undergraduate Affairs Committee, Department of Biology
F17-F18 Faculty Merit Evaluation Report Committee, Department of Biology
F16-S20 Co-Advisor of TriBeta
F16 Identified open-source images for all Introductory Biology I instructors for the transition to becoming a textbook free course
F16 Participant in Biology Department TA orientation

PROFESSIONAL DEVELOPMENT

2025 Pedagogy Lunch: Teaching with Confidence: A conversation with faculty, reflecting on teaching, Centre College
2024 Pedagogy Lunch: What Does Bloom's do for Your Pedagogy, Centre College
2024 Using Pear Deck in the Classroom, Centre College
2024 Pedagogy Lunch: Effective and Equity-Minded Teaching Strategies, Centre College
2024 Attending to Racialized and Identity Based Trauma, Centre College
2024 Pedagogy Lunch: (Re)norming Attendance Policies to be More Inclusive, Centre College
2024 Introduction to Student Support Training, Centre College
2024 QPR Gatekeeper Training, Centre College
2023 Ped Talk: Senior Seminars, Centre College
2023 QT+ Training, Centre College
2023 Pedagogy Lunch: From Career Competencies to Centre Competencies: A Faculty-Driven Approach, Centre College
2023 Book Discussion Group: College Students' Sense of Belonging, Centre College
2023 Workshop: Let's Talk about ChatGPT and Generative AI, Centre College
2023 Workshop: Career Readiness, What We've Learned and Where We're Headed, Centre College
2023 Workshop: Mental Health and Well Being of Centre's International Students, Centre College
2023 Title IX Training, Centre College

2023	Centre College Women's Leadership Conference, Centre College
2023	Workshop: Mentoring Undergraduates: A DEI Approach, Centre College
2022	Pedagogy Lunch: Any Course Can be Anti-racist, Centre College
2022	Pedagogy Lunch: The Secret Sauce of Student Support: Strategies, Resources, & Best Practices for Faculty and Staff, Centre College
2022	Workshop: Faculty Community and Identity, Centre College
2022	Workshop: "Mental Health Days": Balancing Student Needs and Curricular Demands, Centre College
2021	Workshop: Life as and Underrepresented STEM Student at Centre College, Building Bridges and Community Day, Centre College
2021	How Can We Support Our Student's Well-Being and Mental Health, Centre College
2021	Pedagogy Lunch: Finding Our Way (back) to the Joy of Teaching, Centre College
2021	Workshop: Crafting More Inclusive Learning-Centered Syllabi, Centre College
2021	Workshop: Sustainability in the Gen Ed, Centre College
2021	Workshop: Unteaching Racism, Centre College
2021	Workshop: Effective and Equitable Mentorship of Student Researchers, Centre College
2021	Workshop: Implementing Undergraduate Research in General Education and Major Courses, Centre College
2020	Workshop: Teaching Remote/Hybrid Labs, Centre College
2019	Workshop: Teaching ESL/ELL Writers Across the Curriculum, University of Kentucky
2019	Workshop/Conference: Pedagogicon: Transparency in Teaching and Learning, Eastern Kentucky University
2019	Workshop: Engaging Students and Making Classrooms Fair and Inclusive: Cross-Disciplinary Tools, Insights, and Strategies to Promote Student Success, University of Kentucky
2019	Workshop: Helping STEM Students Thrive, University of Kentucky
2019	Workshop: Science of Learning, University of Kentucky
2018	Workshop: STEM Successes: Sharing Teaching Ideas, University of Kentucky
2018	Gulf Coast Summer Institute on Scientific Teaching, Louisiana State University
2018	Workshop/Conference: Pedagogicon: Student Centered Teaching and Learning, Eastern Kentucky University
2018	Workshop: Promoting Cross-Disciplinary Self-Regulation, University of Kentucky
2018	Webinar: Working with Underprepared Students, HHMI Summer Institutes on Scientific Teaching
2018	Student Success Summit, University of Kentucky
2017	Workshop: Open Education Resources, University of Kentucky
2017	First Year Student Symposium, University of Kentucky
2016	Lunch and Learn Series: Department of Biology, University of Kentucky
2016	Workshop: UK-wide STEM Teaching Enhancement Workshop and Scholarly Forum, University of Kentucky
2015	Workshop: Writing Good Multiple-Choice Questions and Using the Item Analysis Information, University of Kentucky

