

Teah G. Burke

EDUCATION

PhD, Marine Ecology, *Deakin University*, Geelong, VIC, Australia

Jun 2025 – present

- Deakin University Postgraduate Scholarship
- Thesis: The impact of fisheries on the trophodynamics of deep-sea sharks
- Supervisors: Dr. Samantha Sherman, Dr. Lauren Meyer and Dr. Brittany Finucci

MSc, Biological Sciences, *University of Windsor*, Windsor, ON, Canada

Sep 2021 – Dec 2023

- NSERC CGS-M Research Award
- Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST) (Declined)
- University of Windsor Entrance Scholarship
- Thesis: The application of intrinsic biogeochemical markers for elucidating the population structure, ecological role, and life history of Australian white sharks (*Carcharodon carcharias*)
- Supervisor: Dr. Nigel Hussey

BSc Honours, Biological Sciences with Thesis, *University of Windsor*, Windsor, ON, Canada

May 2021

- UWindsor Research Internship Award
- Thesis: Evidence for three morphotypes among anadromous Arctic Char (*Salvelinus alpinus*) sampled in the marine environment.
- Supervisor: Dr. Nigel Hussey

PUBLICATIONS

Chan, S., Pettitt-Wade, H., Hollins, J.P.W., Pearce, T., Loseto, L., **Burke, T.G.**, Hussey, N.E. (In Review). Individual Specialization of Greenland cod (*Gadus ogac*) as a Measure of Climate Change Adaptation Potential in the Arctic. *Ecology and Evolution*.

Burke, T.G., Huveneers, C., Meyer, L., Hollins, J.P.W., Loseto, L., Werry, J., Hussey, N.E. (2025). Evidence for an ecological two population model for white sharks (*Carcharodon carcharias*) in Australian waters. *Wildlife Research*, 52, WR24132. (<https://doi.org/10.1071/WR24132>).

Burke, T.G., Pettitt-Wade, H., Hollins, J.P.W., Gallagher, C., Lea, E., Loseto, L., Hussey, N.E. (2022). Evidence for three morphotypes among anadromous Arctic Char (*Salvelinus alpinus*) sampled in the marine environment. *Journal of Fish Biology*, 101, 1441-1451. (doi: 10.1111/jfb.15214).

AWARDS AND SCHOLARSHIPS

Deakin University Postgraduate Research Scholarship (DUPRS)

Jun 2025

- AU \$35,550 per year for three years and tuition offset for four years.

University of Windsor Equity, Diversity, Inclusivity (EDI) Team Award

Mar 2023

- Team member of the University of Windsor Pride Committee representing Queer in STEM.

Canada Graduate Scholarship – Master's (CGS M) Program

Sep 2022

- Natural Sciences and Engineering Research Council of Canada (NSERC) scholarship to help develop research skills and assist in the training of highly qualified personnel by supporting students who demonstrate a high standard of achievement in undergraduate and early graduate studies.
- CAN \$17,500 over 12 months.

Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST) (Declined)

Sep 2022

- Provincial merit-based scholarship to support graduate students in research programs.
- CAN \$15,000 for three terms

University of Windsor Master's Entrance Scholarship

Sep 2021

- Admission average of 80% or above.
- CAN \$7,500 for first three terms of graduate studies. Extended for three more terms as a result of successful NSERC application.

Gold Medallion Scholar (LEAD)

Jun 2021

- Recognition for efforts within and beyond the classroom in the areas of leadership, engagement, application, and discovery (LEAD) for graduating students in the Faculty of Science.

Holder-Franklin Honours Colloquium Award

Apr 2021

- First place presentation of undergraduate thesis research.

UWindsor Research Internship Award

May 2020

- Award provided to undergraduate and graduate students to provide paid research training.
- CAN \$6,000 for 16 weeks.

U Sports Academic All-Canadian

Oct 2018

- Maintained a grade average of 80% or above while playing a varsity sport.

RESEARCH EXPERIENCE

Aquatic Invasive Species Research Intern, *Invasive Species Centre*, Sault Ste Marie, ON

Jul 2024 – Apr 2025

- Led the zooplankton diagnostics for >300 water samples collected for broad scale monitoring of aquatic invasive species in Ontario and drafted final reports for various partners including: IsampleON, Ministry of Natural Resources and Forestry, Parks Canada and Grand Treaty Council #3.
- Prepared and delivered presentations and educational materials to a range of audiences including politicians, hunters/anglers, First Nations communities, high school and elementary students.
- Created and managed the social media content for Asian Carp Canada, in addition to developing training materials for a Marbled crayfish course.

Station Assistant & Research Technician, *Tancook Islands Marine Field Station*, NS

Jun 2023 – Oct 2023

- Assisted in the establishment of the Tancook Islands Marine Field Station by creating foundational documents for station operation, generating sponsorship documents, and establishing social media pages.
- Deployed and retrieved an array of VEMCO VR2AR receivers.
- Created and presented educational activities about sharks to children ages four to twelve.
- Prepared leaders for external VEMCO acoustic tags, and Wildlife Computers miniPATs to be used on white sharks.

Lead Field Researcher, *University of Windsor*, Pond Inlet, NU

May 2023

- Delivered a presentation on current tagging and tracking research of Greenland halibut to members of the Hunters and Trappers Organization (HTO).
- Surgically implanted VEMCO V16-4H and V13-1H acoustic tags into Greenland halibut during ongoing fisheries training by community members.
- Worked alongside community members and their children, in addition to demonstrating the process of tagging and the tools used in the process.
- Organized field work and ensured all the appropriate equipment was packed.

Field Researcher, *University of Windsor*, Baffin Bay, Canada/Greenland

Sep – Oct 2022 & 2023

- Remote fieldwork experience in the Arctic, 4 weeks aboard the Kiviuq II in Baffin Bay.
- Serviced and redeployed ~150 moorings comprised of VEMCO VR2W or VR2AR, Edgetech releases and various other equipment including RBR, Soundtrap 600, ORCA, SM2M, and SM3M.
- Surgically implanted VEMCO V16-4H and V13-1H acoustic tags into Greenland Halibut.
- Collected blood and fin clip samples from Greenland Halibut for stable isotope analysis and genetics alongside identifying sex using an ibex ultrasound.

Masters Student, University of Windsor, Windsor, ON

Sep 2021 – Dec 2023

- Planned and executed an independent research project using stable isotope analysis to examine ontogenetic trophic and movement ecology of Australian white sharks.

Research Assistant, University of Windsor, Windsor, ON

May 2021 – Aug 2021

- Prepared over 700 samples of muscle, liver, fin clips, and various invertebrates from Ascension Island for stable isotope analysis.
- Developed the foundation for a new study on improving seafood metric guidelines.

Research Assistant, University of Windsor, Windsor, ON

Jan 2021 – Apr 2021

- Wrote new sections for an open access Canadian Microbiology textbook to promote diversity and inclusivity within academic resources.
- Authored passages on tuberculosis focusing on the experience of Inuit communities in Canada and scientist spotlights to illustrate the diversity of scientists and career paths in the field of microbiology.

Honours Student, University of Windsor, Windsor, ON

Sep 2020 – Apr 2021

- Carried out an independent research project conducting a morphometric analysis of anadromous Arctic char from Ulukhaktok, Northwest Territories, Canada, which was published in the Journal of Fish Biology.

Research Assistant, University of Windsor, Windsor, ON

Apr 2020 – Sep 2020

- Assisted in the development of a research project studying the influence of toxins from cyanobacterial blooms at the cellular level in fish cell lines alongside a PhD candidate.
- Awarded a UWindsor Research Internship Award.

Undergraduate Research Volunteer, University of Windsor, Windsor, ON

Sep 2018 – Aug 2020

- Analyzed the scientific literature for stomach content data of various fish species to be inputted into a Predator Database.
- Prepared liver and muscle tissue samples for lipid extraction to be used in stable isotope analysis.

PRESENTATIONS

Burke, T.G., Huveneers, C., Butcher, P., Meyer, L., Loseto, L., Werry, J., Hussey, N.E. (2023). Are we overestimating the age of immature white sharks? Oral presentation at White Sharks Global, Port Lincoln, South Australia. Runner up best student presentation.

Burke, T.G., Huveneers, C., Meyer, L., Hollins, J.P.W., Loseto, L., Werry, J., Hussey, N.E. (2023). East or West?: Ontogenetic population subdivision and specialization in Australian white sharks. Poster presentation at White Sharks Global, Port Lincoln, South Australia.

Burke, T.G., Huveneers, C., Meyer, L., Loseto, L., Hussey, N.E. (2023). Retrospective stable isotope analysis reveals ontogenetic population subdivision and specialization among Australian white sharks (*Carcharodon carcharias*). Oral presentation at 2SLGBTQ+ STEM Conference, Windsor, Ontario.

Burke, T.G., Huveneers, C., Meyer, L., Loseto, L., Hussey, N.E. (2022). Retrospective stable isotope analysis reveals ontogenetic population subdivision and specialization among Australian white sharks (*Carcharodon carcharias*). Oral presentation at IsoEcol2022, Gaming, Austria.

Burke, T.G., Huveneers, C., Meyer, L., Loseto, L., Hussey, N.E. (2022). Retrospective stable isotope analysis reveals ontogenetic population subdivision among white sharks (*Carcharodon carcharias*) from Australia. Oral presentation (2nd place) at UWill Discover, University of Windsor (Virtual).

Burke, T.G., Pettitt-Wade, H., Hollins, J.P.W., Gallagher, C., Lea, E., Loseto, L., Hussey, N.E. (2021). Evidence for Three Morphs of Arctic char (*Salvelinus Alpinus*) Present in the Marine Environment off the Coast of Ulukhaktok, Northwest Territories, Canada. Poster presentation (Finalist) at Arctic Net, Canada (Virtual).

Burke, T.G., Pettitt-Wade, H., Hollins, J.P.W., Gallagher, C., Lea, E., Loseto, L., Hussey, N.E. (2021). Evidence for Three Morphs of Arctic char (*Salvelinus Alpinus*) Present in the Marine Environment off the Coast of Ulukhaktok, Northwest Territories, Canada. Oral presentation at Ontario Biology Day, McMaster University (Virtual).

Burke, T.G., Pettitt-Wade, H., Hollins, J.P.W., Gallagher, C., Lea, E., Loseto, L., Hussey, N.E. (2021). Evidence for Three Morphs of Arctic char (*Salvelinus Alpinus*) Present in the Marine Environment off the Coast of Ulukhaktok, Northwest Territories, Canada. Oral presentation at UWill Discover, University of Windsor (Virtual).

TEACHING EXPERIENCE

Graduate Teaching Assistant, University of Windsor, Windsor, ON Jan 2022 – May 2023

- Created quiz, midterm and exam questions for the *BIOL 3250 Population and Community Ecology* course composed of 100 students.
- Mentored 13 groups of students tasked with writing a miniature literature review and developing a research study.

Graduate Teaching Assistant, University of Windsor, Windsor, ON Sep 2021 – Dec 2022

- Taught a laboratory section of over 20 students for *BIOL 2071 Introductory Microbiology and Techniques*.
- Duties included teaching laboratory techniques both in person and online, as well as marking.

WORKSHOPS

Synthesizing Global White Shark Satellite Telemetry Studies, White Sharks Global, Australia Nov 2023

- Prepared content and assisted in presenting the workshop “*Synthesising global white shark telemetry studies to establish research priorities*” at the international White Sharks Global conference in Port Lincoln, Australia.

LGBTQIA2S+ Inclusion in STEM, University of Windsor, Windsor ON Dec 2022

- Administered a workshop for the Faculty of Science EDI Taskforce on behalf of Queer in STEM, “*LGBTQIA2S+ Inclusion in STEM: A Student-oriented Workshop*”.

Integrative Biology Graduate School, University of Windsor, Windsor ON Oct 2022

- Led a workshop for new graduate students, “*Graduate Student Survival Workshop: Questions and Answers about Making the Most of Your Grad School Experience*”.

OUTREACH

2SLGBTQIA+ in STEM Conference, Windsor ON May 2023

- Lead organizer for the third 2SLGBTQIA+ STEM Conference.
- Fundraised over \$16,000 to ensure a free and accessible conference for 90 attendees.
- Managed the budget, created the schedule, and maintained communication with invited speakers and sponsors.

Windsor Regional Science, Technology and Engineering Fair, Windsor ON Mar 2023

- Judged seven high school science fair projects for scientific thought, originality/creativity, and communication.

Integrative Biology High School Tour, University of Windsor, Windsor ON Nov 2022

- Delivered an interactive presentation on my masters research to a group of high school biology students.

University of Windsor Open House Volunteer, University of Windsor, Windsor ON May 2022

- Spoke with prospective high school students and parents about the Integrative Biology program in the Faculty of Science at the University of Windsor.

Youreka Windsor Research Symposium, University of Windsor, Windsor ON May 2022

- Judged data based research projects capturing the theme of vaccines.
- 10-week long research program for high school students supported by the Faculty of Science.

Virtual Undergraduate Thesis Colloquium Judge, University of Windsor, Windsor ON Apr 2022

- Judged final year undergraduate thesis projects/presentations for the Department of Integrative Biology.

Queer in STEM, President, *University of Windsor*, Windsor, ON 2021- 2023

- Co-founded a new student group at the University of Windsor for LGBTQIA2S+ identifying graduate and undergraduate students in STEM. Group aimed at providing a safe space to connect, network and attend events.

Department of Biology Graduate Student Association, *University of Windsor*, Windsor, ON 2021-2022

- Vice-President, Outreach and External Affairs.

Skype a Scientist, *Grand Rapids*, Michigan Oct 2021

- Delivered a presentation on marine biology to fourth grade students from two classrooms at West Oakview Elementary School.

SKILLS

- Ability to safely carry out biological procedures, take samples, keep detailed records, handle animals, equipment and chemicals in a lab or field setting.
- Knowledge and ability to complete statistical analysis relevant to biological data and computer programs used to accomplish this such as R, Excel, MorphoJ, tpsDIG.
- Ability to engage with diverse audiences including academia, and the public to communicate/present biological information.
- Stable Isotopes Mixing Models Course (SIBER, SIAR, MixSIAR) 2021, PR Statistics

CERTIFICATIONS

Small Vessel Operator Proficiency (SVOP), *Western Maritime Institute*, Leamington, ON Apr 2023

Small Domestic Vessel – Basic Safety (SDV-BS), *Western Maritime Institute*, Leamington, ON Apr 2023

Marine Basic First Aid CPR/AED Level C, *Bluewater First Aid Training Centre*, Sarnia, ON Feb 2023

PADI Rescue Diver, *Benthic Scuba*, Windsor, ON Jun 2022

- Nitrox, Drysuit, and Equipment Specialist training.

Standard First Aid & CPR/AED Level C, *Windsor/Essex CPR & First Aid Training* Nov 2020

Restricted Maritime Operator Certificate (ROC-M), *London Power & Sails Squadron* Dec 2020

Pleasure Craft Operators Card 2018