WESTERN UNIVERSITY BIOLOGY

ALUMNI NEWSLETTER

SPRING 2025

Monarch Butterfly *(Danaus Plexippus)*
Photo credit: Daniel Giebrecht

Western Science

IN THIS ISSUE

CHAIR'S REPORT

A MESSAGE FROM DAVID COLTMAN

Welcome to the Spring 2025 Biology Alumni Newsletter! This issue is brimming with inspiring stories with a common theme – making the world a better place. It is energizing to read about how Biology alumni have built on things they have learned here – not just biology, but leadership, collaboration and communication.

Alumni Ian Willick (p. 4) and Melanie Columbus (p.10) talk about how Sheila Macfie's graduate supervision prepared them for a path to non-academic professions through building transferable skills. MSc grads Jenna Siu and Toby Thorne (p. 6) share the importance their graduate community played in their lives and in the development of their professional careers in conservation leadership. BSc grad Betty Smokovitis (p.8) reflects on the springboard that Western provided for her journey to become a truly interdisciplinary professor as a historian of biological science.

You wil read about how a team of innovative Western entrepreneur trainees (p.12) launched the Easy Snack Co., providing healthy and nutritious snacks. I have a tub of their delicious roasted vegetable dip in my fridge.

This issue also features the dedicated people who ensure student success in Biology. Staff members Brenda Beretta and Sarah Abbas (p.14) provide advising and support, with empathy, for Biology students. Jeni Duro, Winona Gadapati, Macon Coleman, Lauren Solomon, Mitch Demelo and Habe Tesfu (p.16) work tirelessly to provide students with a top-notch laboratory learning experience that I am proud of.

Finally, the contributions of the late Professors Jeremy McNeil and Keith Hobson to the ESW field station are honored through new projects (p.20) followed by a touching tribute to Jeremy's legacy of mentorship (p.22). Biology also opened the new McNeil Conference Room earlier this month in Jeremy's memory.

Unfortunately this may be the last issue of the Biology Alumni Newsletter due to increasingly limited resources. Thank you to all the contributors, and special thanks to professor emeritus Louise Milligan who led this project from the start.

David Coltman
Professor and Chair,
Department of Biology
Western University

Biology Alumni Profiles

IAN WILLICK
BSC '11, MSC '13

By Hossein Asgari, PhD Candidate

From gardening with his grandfather in Niagara Falls to leading cutting-edge agricultural research in Nova Scotia, Ian Willick has cultivated a career deeply rooted in curiosity and collaboration. Now a Research Scientist with Agriculture and Agri-Food Canada, Willick helps farmers understand how crops respond to stressors, such as cold temperature, through innovative science.

Working in Kentville, Nova Scotia, Willick's role spans a wide array of crops, including apples, strawberries, hazelnuts and winter cereals. "We're kind of a jack of all trades," he says, describing a portfolio that blends fieldwork with molecular biochemistry and even drone-based sensing. A key project involves screening hundreds of winter oat varieties to evaluate cold tolerance, critical research for Canadian growers facing unpredictable winters.

"I had no research background and Dr. Macfie taking me on changed my life."

Willick's academic journey began in biology at Western University, where he earned both a BSc and MSc. He credits Dr. Sheila Macfie for launching his scientific career by offering him a summer research position. "I had no research background and Dr. Macfie taking me on changed my life," he recalls. His undergraduate and graduate work explored how plants absorb cadmium, a toxic heavy metal, using the model plant *Arabidopsis.*

Willick went on to earn a PhD at the University of Saskatchewan, supervised by Dr. Karen Tanino, where he focused on how cold-hardy cereal crops survive freezing. His studies took him abroad to Norway and Japan, where he learned advanced microscopy and proteomics techniques to uncover how plant tissues adapt to extreme cold. These findings have since informed crop breeding strategies for improved resilience.

Post-PhD, Willick completed fellowships at the University of Saskatchewan and Michigan State University (MSU). At MSU, he researched cold acclimation in switchgrass, a potential biofuel crop, aiming to breed varieties that combine winter survival with high biomass production

In 2021, Willick transitioned from academia to a government research role, seeking both professional fulfillment and family balance. "A

lot of landing a faculty job comes down to luck," he reflects. "This role allows me to keep doing meaningful research and still have time for my family." These days, his 19-month-old son takes the lead on weekends. "Watching him discover the world, that's what life is about," Willick smiles

Looking back, Willick says one of the most important lessons from graduate school wasn't found in textbooks: diplomacy. Learning to navigate personalities, collaborate across fields and manage expectations has proven essential in his current role. His advice to students? Build good relationships. "You never know where your paths will cross again."

From Western's green campus to the global fields of agricultural innovation, Willick's journey reflects a life-long commitment to science, sustainability and supporting others.

JENNA SIU, MSC '14
TOBY THORNE, MSC '15

From Graduate School to Conservation Leadership

By Louise Milligan, Professor Emerita

Jenna Siu and Toby Thorne followed unique yet intersecting paths through the ecology and evolution graduate stream at Western University, each carving out careers rooted in their early passions. Siu with insects and conservation, and Thorne with bats and field ecology. Their stories underscore the importance of mentorship, community and adaptability in building a fulfilling career in science.

Siu, who completed her BScH at Queen's University, had an interest in landscape ecology when she began searching for a master's thesis supervisor. That search led her to Dr. Nusha Keyghobadi, whose research area and lab culture provided the right fit. Siu's MSc research focused on the behavior of swallowtail butterflies in fragmented landscapes across Southern Ontario. Siu found that the sense of community at Western extended beyond the lab. She joined the social committee and was a founding participant in the very popular Carol-grams at Christmas. She fondly recalls the Friday "Phils" seminars, an informal and lively gathering of graduate students and faculty that often transitioned into social hours at the Grad Club. It was at one such event that she first met Thorne, in the line to buy beer. Siu was buying a pitcher to share, standard practice at these gatherings, and Thorne, being from the UK and known for his puns, remarked, "I don't want a picture of beer." Siu doesn't remember if she laughed at that moment, but it marked the start of a partnership and shared academic experiences.

Thorne came to Western with a BSc from Oxford University and a fascination with bats. Drawn to North America for the opportunity to combine

travel and study, he landed at Western to work under Dr. Brock Fenton, affectionately known as "Mr. Bat Man." Thorne's thesis focused on acoustic tracking of bats around the Great Lakes. Like Siu, Thorne appreciated the vibrant, collegial environment of the ecology and evolution stream. After graduating, his first challenge was navigating the complexities of immigration. During this uncertain period, he worked at a local supermarket while pursuing freelance projects that leveraged his skills in acoustic monitoring. He credits the supportive graduate community with helping him build a professional network that proved invaluable.

Siu's career path led her through a series of conservation roles, beginning with volunteering with the Thames Talbot Land Trust during her time at Western. After graduating, she had a chance to radio-track badgers through connections she made during her MSc fieldwork. This experience evolved into working for various land conservation organizations such as Ontario Nature and the Nature Conservancy of Canada. Eventually, she joined Environment and Climate Change Canada, where she is now a Wildlife Biologist with the Canadian Wildlife Service, working in species recovery.

Meanwhile, Thorne's journey included part-time roles with the Ontario Land Trust, monitoring bats for species-at-risk initiatives. His big break came when he met the Toronto Zoo's curator of mammals at a BioBlitz event. That led to contract roles and, after eight and a half years, a full-time position as the Supervisor, Field Conservation at the Toronto Zoo.

Both Siu and Thorne reflect on the profound role their graduate community played in their lives. Whether through shared research interests or festive events like carol-grams, the network they built provided enduring professional and personal support. As Siu aptly put it, "It is about friends helping friends."

BETTY SMOCOVITIS BSC '79

By Matheus Sonita Lima, PhD Candidate

If there is a living manifestation of intersectionality, that must be Professor Vassiliki Betty Smocovitis. Born in Egypt, Smocovitis is a Greek-Canadian who has an inherent passion to tread uncharted territories and connect seemingly disconnected fields. As a Historian of Science, she lives at the intersection of the Sciences and the Humanities. She can gracefully speak to professionals in distant disciplines and unite them under their (unrealized) commonalities. Need proof? Go check out "Unifying Biology: The Evolutionary Synthesis and Evolutionary Biology", a mandatory read to anyone wanting to become a well-rounded evolutionary biologist.

When asked what gave her a keen eye for the natural curiosities of our social and biological worlds, Smocovitis was quick to highlight the importance of her environment. Her father was a physicist, which meant frequent moves and constant adaptation. Over the years, she has lived in Winnipeg, Vancouver and Windsor, along with other places shaped by her educational journey.

One of the most memorable of these was her time at Western University. She speaks of it with clear affection: "The rigour was always there. There were no breaks, you couldn't drop a class, there were massive cumulative exams at the end

of the year. You had to integrate material from beginning to end."

According to Smocovitis, choosing Western for her Bachelor of Science degree was one of the luckiest decisions she ever made. She immersed herself in a curriculum that ranged from *Biology of Organisms* to *Advanced Growth and Development.* The courses were team-taught and intentionally structured to build upon each other, layering complexity while always connecting back to the bigger picture.

Under this rigorous and integrative approach, Smocovitis gained what she describes as a lifetime's worth of knowledge. "The foundation that Western gave me is unprecedented," she reflects. Even today, decades later, she can sit in on a general biology seminar and follow along with ease, never feeling lacking or out of place. Her education, she says, gave her more than just facts; it gave her a framework to understand biology in a deep, enduring way.

Another key factor to Smocovitis's intersectional success is mentoring. The attention she received

at Western was formative and long-lasting. She is still friends with several of her former mentors, including Professor Emeritus March-André Lachance. She remembers that he was wearing the graduation hood that belonged to Theodosius Dobzhansky, the evolutionary geneticist who claimed that "nothing in Biology makes sense, except in the light of Evolution."

That strong foundation at Western launched Smocovitis into an academic career that has been anything but conventional. After completing her undergraduate degree at Western, she went on to earn a PhD at Cornell University, eventually landing a position in a traditional History Department as a historian of biological science.

But it didn't take long for Smocovitis to realize that something was missing. She had grown accustomed to the all-encompassing, interdisciplinary approach that had defined her time at Western. In response, she gradually reshaped her career, ultimately becoming cross-appointed between the Departments of Biology and History at the University of Florida, where she currently teaches and conducts research.

She is proud of the unique niche she has carved out for herself, one that straddles disciplines and defies conventional academic boundaries. And she attributes much of this success to the strong intellectual foundations laid during her undergraduate years. "Professors are perpetual students. We don't 'grow up.' You are always being renewed. Teachers are made over the years by other teachers," Smocovitis reflects.

She speaks of biology with the reverence of someone who has lived it fully: "Biology is an integrative science. By the end of my second year, I began to see how it all fit together. If you want to understand adaptation, you need to understand physiology, metabolism and ecology. You see how these areas all connect. It's very rewarding. Unquestionably, my interests were all due to Western."

Looking at a photo from a recent trip to the Arctic, Smocovitis shares how her fourth-year Honour's thesis, focused on the systematics and ecology of Ontarian mosses with Professor Dianne Fahselt, set her on a lifelong journey. That research sparked a desire to witness climate change firsthand, to see the Arctic wildlife before it vanishes.

"This all started in London, at Western," she says. "This is more than just my research. It is my life. It's how I want to spend my time."

Professor James B. Phipps and class, examining hawthorns (*Crataegus spp.*) on the way to the Bruce Trail for Plant Sciences 420a. Field Course in Experimental Biology, September 1978. *Photo credit: Professor Diane Fahselt*

MELANIE COLUMBUS PHD '13

By Hossein Asgari, PhD Candidate

Melanie Columbus is a Western University PhD graduate whose dynamic career has spanned environmental science, academic research, nonprofit leadership and health policy. Now the Managing Director of the Center for Health Policy at the O'Brien Institute for Public Health (University of Calgary), Columbus is leading collaborative efforts to bridge research and real-world decision-making, with a lasting impact on public health.

Columbus joined the Center before it officially launched, tasked with building its strategic vision and operational framework. Today, nearly three years since opening, she oversees the Center's efforts to translate research into actionable health policy, working across disciplines, institutions and communities. "We bring together people from everywhere - researchers, policymakers, community partners - to create evidence-based solutions to some of the biggest public health challenges we face," she explains. These challenges include everything from primary care access and mental health to food insecurity and homelessness.

"This is why I love what I do. You get to see the impact of research on real people's lives."

One recent success came in response to a high-profile *E. coli* outbreak in Calgary daycares. Her team mobilized experts from fields as diverse as veterinary medicine, paediatrics and food safety to create a comprehensive policy brief with actionable recommendations, many of which the Alberta government later adopted. "This is why I love what I do," Columbus says. "You get to see the impact of research on real people's lives."

Columbus's journey into science wasn't straightforward. Raised in Sarnia, Ontario, she was the first in her family to attend university. She began her undergraduate degree in biochemistry at Queen's University in 2003, eventually switching to biology, where she found her interests aligned more with real-world application than theory-heavy coursework. Her talent for statistics and project design quickly emerged, and by 2007 she had accepted an invitation to pursue a Master's in bioremediation, studying how plants can remove contaminants from groundwater, a project that would unexpectedly ignite her interest in project management, budgeting and industry collaboration.

In 2009, she began her PhD at Western University with Dr. Sheila Macfie, investigating how plant-microbe interactions affect toxic metal uptake. The work was complex, combining molecular biology, confocal microscopy and environmental science. But more importantly, it shaped her identity as a multi-skilled researcher and exposed her to leadership and peer-review experience and skills that would carry her far beyond the lab.

After a brief postdoc, Columbus realized academia wasn't the right fit. "I looked around

and thought, this not what I want," she reflects. Instead, she followed a new path, first working for Reforest London, a nonprofit dedicated to environmental restoration. Though short-term and modestly paid, the experience was, in her words, "healing." It reignited her passion for science and led her to roles that combined her love for research with her drive to make change.

From there, she joined the London Health Sciences Centre as a research coordinator in emergency medicine, despite having no prior experience in health care. Her broad academic toolkit helped her thrive, and she quickly became a research program manager, helping clinicians design studies, secure funding and grow their research portfolios. After moving to Calgary, she briefly worked in the university's research services office before taking on leadership roles in critical care medicine, and eventually, her current position at the O'Brien Institute.

"Take opportunities even if they don't perfectly align with your field. Skills like communication, budgeting and collaboration are the ones that carry you forward."

Columbus's path wasn't linear, and she doesn't want it to be. "The idea that you must follow a straight academic path to succeed is just false," she emphasizes. "Take opportunities even if they don't perfectly align with your field. Skills like communication, budgeting and collaboration are the ones that carry you forward."

She encourages students to step outside their comfort zones, volunteer on committees, try leadership roles and be open to detours. "None of the steps in my journey were wasted. Even minimum wage work at a nonprofit taught me things that helped get me here."

For Columbus, success lies in purpose-driven leadership, the ability to connect dots across disciplines and staying open to the unknown. From lab bench to boardroom, her story is proof that with curiosity, courage and adaptability, you really can go anywhere.

The Easy Snack Co.

SCIENTISTS TURNED ENTREPRENEURS ON A MISSION TO MAKE SNACKS HEALTHY

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Easy Snack Co.

By Joseph Butler, MSc Candidate

In Fall 2023, two scientists, inspired to lead and create innovative solutions to universal challenges felt across the world, met for the first time. Joseane M. do Nascimento, a post-doctoral associate in the Grbic Lab researching spider mite resistance to pesticides, and Chloe Jang, a PhD Candidate in Biochemistry co-supervised by Victor Han and Stephen Renaud researching placental development, were attending the WE-Empower program through Western Research.

This educational program seeks to empower innovation-minded women to develop new technologies and pursue their goals of entrepreneurship. Nascimento and Jang brainstormed, reflecting on their long lab days when they relied on easy, typically unhealthy snacks. Their research indicated people want to eat healthier, but similarly just don't have the time! Over half of all Canadians do not consume the recommended daily intake of fruits and vegetables (I know I'm one of them!). This illustrated a gap in the foods market—convenient, ready-to-go healthy snacks that provide high nutritional value and taste great! They got to work, bringing on Nascimento's lab mate Reagan Michiels, and officially launched their business, The Easy Snack Co

They developed their products from scratch, using high quality fruits and vegetables to create unique, nutritious, flavorful snacks. Their first product, the Strawberry and Banana Blend, brings together several powerhouse ingredients like fruits, vegetables, protein and fiber to create a sweet and delicious, yet healthy snack. This was no easy feat, as The Easy Snack Co. wanted its products to be free from gluten, dairy, soy and artificial preservatives. They experimented with different product blends, finding the best combination to ensure both great taste, and maintaining the nutritional variety and quality of their blends.

Next, they produced a delicious, savoury Roasted Vegetable Dip – Brilliant Beet. This dip pairs great with crackers, pita chips and crostini to name a few! I was lucky to try it, which I was very excited about since beets are one of my favorite vegetables. This blend of roasted vegetables, protein and fiber comes together in a tasty, creamy dip filled with flavor, which I personally paired with bagel chips. It's packed with nutrients, including vitamin B which supports focus and energy, fuelling your body and mind.

This was just the beginning, and these three scientists still had lots of hurdles to overcome as first-time entrepreneurs. These products took a lot of time and experimentation to develop from scratch before The Easy Snack Co. landed on their great blends! However, they found that many of the skills they picked up as scientists, including persevering through failed experiments in the lab, translated directly to their innovative journey and gave them confidence to keep pushing to develop a great product that fits the market gap. The co-founders also found that the old adage, "it takes a village", really does apply in entrepreneurship! After winning a spot in the Ivey Morrissette Institute for Entrepreneurship's Western Accelerator program, the co-founders had the opportunity to gain mentorship, build new skills through workshops to help build and expand their business, secure funding and gain access to a large community network.

This empowered The Easy Snack Co. to expand on their digital marketing, engage with local businesses to increase their point of sales, and partner with business development groups to help product optimization. One example includes The Grove at the Western Fair District, which provides a commercial kitchen for innovators to refine their products and scale up production. Additionally, The Easy Snack Co. is working with Fanshawe College students in the Food Processing-Operational Leadership program to develop large-scale production techniques for their products.

Overall, the power of community has made a powerful impact on the business, inspiring the co-founders to keep persevering and grow The Easy Snack Co. into a successful, sustainable company. The support of family and friends, community partners and campus collaborators has been invaluable to their development and success. In the near future, The Easy Snack Co. hopes to innovate new products through experimenting with unique flavors and seasonal recipes, and optimize their production and packaging to extend shelf-life and product convenience.

Through networking with local businesses, The Easy Snack Co. now sells their products at farmers markets, including at the Komoka Community Market. Orders can also be placed online at their website, theeasysnack.com, with delivery serving the local London community as well as free pickup.

easy snack

Meet Brenda and Sarah

THE HEART OF BIOLOGY'S STUDENT SUPPORT

By Carson Mitchell, PhD Candidate

Whether you're figuring out your module requirements, preparing to graduate, booking your thesis defense or choosing a supervisor, chances are you've crossed paths with Brenda Beretta or Sarah Abbas, two dedicated staff members in Western's Biology Department. Their guidance is central to undergraduate and graduate student success, and they take pride in seeing students thrive.

Beretta has been part of the Western community since 1988. While working full-time in Alumni Affairs, she was a part-time student, volunteer and parent. That experience gave her a deep empathy for the pressures students face. Now, as an academic advisor, she draws on her creativity and compassion to help undergraduates navigate challenges. Beretta is known for offering practical, supportive options, whether a student is struggling in class, missing prerequisites, off-

Brenda Beretta, Academic Advising Assistant

track for graduation or torn between parental expectations and personal goals. Helping students find their way and witnessing their graduation joy and heartfelt thank-you notes makes her work rewarding.

Abbas joined Western in 2021, shortly after immigrating from Lebanon. She began as an administrative assistant and, six months later, transitioned into her current role in graduate student affairs. As a graduate student, Abbas knows firsthand the ups and downs of academic life. Juggling work, studies and family gives her a unique insight into the pressures graduate students face. She finds joy in being part of their journey, especially in booking thesis defenses, often thinking, "That will be me soon!". Abbas is proud to be part of such a welcoming community that feels like home. Having experienced the hardships of moving far from her home country, she's thrilled to extend the same warmth and support to all students, especially international ones who have left so much behind.

Beretta and Abbas exemplify what it means to support students with empathy, expertise and a genuine love for their work. Whether you're an undergraduate or a graduate student, it's reassuring to know that someone is always in your corner.

Sarah Abbas, Biology Graduate Affairs Assistant

Front row, L to R: Jeni Duro, Lauren Solomon, Winona Gadapati
Back row, L to R: Mitchele Demelo, Haben Tefsu, Macon Coleman

The People Behind the Scenes

BIOLOGY 1001A/1002B AND 2290

Each year, more than 2,000 students pass through the biology labs in the North Campus Building (NCB), participating in first-year biology lab sessions and the stand-alone course, Biology 2290. Behind these hands-on learning experiences is a dedicated team of professionals who work tirelessly to ensure everything runs smoothly. Although much of their work happens behind the scenes, we're excited to shine a light on the people who make these vital learning opportunities possible.

Jeni Duro (Biology 2290)

I have had the privilege of working at Western University's Department of Biology for the past 26 years, and my experience has been nothing short of extraordinary. As an immigrant, finding meaningful work and genuinely enjoying it is incredibly fulfilling, and I have been fortunate to experience both here at Western.

Transitioning from a background in finance to a career in science was one of the best decisions I've made. I have always had a passion for science, and working in the field has brought me a deep sense of purpose. Each day, I came to work with a smile, eager to learn and contribute — feeling as though I was learning science by doing science.

Throughout my career, I have felt deeply valued by both the faculty and the department, particularly for my role in supporting thousands of students each academic year and in helping to troubleshoot and develop new experiments during the summer months. Collaborating with faculty to create clear, step-by-step experimental procedures that enhance students' hands-on learning in the lab has been one of my proudest contributions.

One of the most rewarding moments has been seeing the joy and pride on students' faces as they present their research posters — often acknowledging my support. These moments reaffirm that my work has made a meaningful impact.

Working alongside a diverse team of part-time and full-time staff members has also been a highly rewarding experience. It gave me the opportunity to apply and grow my cross-cultural and interpersonal skills, which I consider essential in a collaborative academic environment.

I am truly grateful that the department recognized my strengths and supported my personal and professional growth over the years. It has been an incredible journey — one that I will always cherish.

Winona Gadapati (Biology 1001A/1002B)

Over the past two decades, I've been fortunate to contribute to several enhancements in core courses offered in NCB, working closely with faculty who view staff as an integral part of the instructional support team. I've had the privilege of collaborating with some of Canada's most

innovative, award-winning educators — truly a rewarding experience.

One of the most meaningful shifts has been the move from a traditional teaching model to a learning-centered approach, focused on creating connections between lecture content and experiential learning for over 2,000 students annually. This transformation was made possible through the adoption of technology, the flipped classroom model and advancements in laboratory techniques.

First-year biology labs, for example, have been reimagined as skill-building sessions grounded in four key pillars: hypothesis testing, information literacy, communication and collaboration. The teams at NCB have consistently embraced change and pursued innovation, particularly in the post-COVID era, which saw the introduction of new modules on CRISPR and climate change.

What truly sets this department apart is the shared commitment, by both faculty and staff, to student success. There is a strong sense of camaraderie, with everyone willing to go the extra mile to support one another and foster innovation. Even when challenges arise, the department consistently demonstrates a culture of appreciation and support.

Jeni Duro exemplifies this spirit. She brings a dynamic presence to her work every day and never hesitates to turn challenges into opportunities. Her ability to identify and articulate issues, while fostering solutions, benefits everyone — from the dean to her colleagues. Her genuine care for both students and team members is one of her greatest strengths and a quality we deeply value.

Macon Coleman (Biology 2290)

After a decade of working in research laboratories on campus, I joined the Department of Biology in 2019 as a member of a team which supports undergraduate teaching labs. The transition from research to teaching was an adjustment: exacting precision was eschewed for robustness and reliability; success was measured not by publications or grants, but by student engagement and comprehension.

The years that followed brought new challenges: transitioning a practical skills course for online delivery during COVID, and significant curriculum updates upon our return to in-person class. Fortunately, with the help and support of my colleagues — both past and present — this was not something I had to face alone. I am grateful to work with such an amazing team, and particularly Jeni Duro, who has been a wonderful supervisor, mentor and friend since my first day.

While the time we share with our students is limited to a few short months, I am always surprised at the lasting impacts of our interactions. Seeing students excited to learn and helping them to succeed has been among the most fulfilling aspects of this work, and it has been gratifying to play even a small role in shaping the next generation of young scientists and great thinkers.

Lauren Solomon (Biology 2290)

I have had the pleasure of working with the 2290 team for four years and it has been a wonderful experience. I joined in 2021 when delivery was partially online, and our supervisor Jeni rapidly got me up to speed on various protocols and procedures so I could prepare content for the students attending virtually. Since then, the course has been re-building and I have been

fortunate to be involved in developing and testing new experiments for the labs.

Working with the prep-room team under Jeni's supervision has been a wonderful experience. Experiments can and will fail in any laboratory environment, but this is especially true in the biological sciences. Working in 2290 has taught me to be gentle and fail-positive, to do my best but accept when things go wrong. We cannot always control how biological processes can turn out, but we can control how we react and how we move forward.

The team's primary goal has always been to deliver course materials in timely manner, but the real strength of our team is the overall organization and careful planning so everything is as straight-forward and repeatable as possible. I have learned so much about teamwork since joining, and hope to maintain a helpful and friendly atmosphere here in NCB that Jeni has worked so hard to foster.

Mitchele Demelo and Haben Tesfu (Biology 1001A/1002B)

Mitchele Demelo and Haben Tesfu joined the department in 2023, both serving as lab technicians for the NCB biology team. They arrived during a period of post-pandemic rebuilding, which saw many undergraduate courses being updated to accommodate the return to in-person learning. The "boyz" have described this period as both exciting and challenging and are very thankful to the entire NCB team for their kindness and expertise. They especially would like to thank department veterans Winona and Jeni for their guidance, warmth and strong leadership. They are very proud of the team's ability to deliver engaging, lab-based education to large volumes of students. They have also enjoyed participating in numerous science outreach events, including the Science Olympics where they helped to create a wholly original cell biology-themed escape room!

Environmental Sciences Western Field Station

A TRIBUTE TO KEITH HOBSON AND JEREMY MCNEIL

By Garth Casbourn, PhD Candidate

Situated on Wonderland Road just north of London's municipal boundary, the Environmental Sciences Western field station (ESW) is a 35-hectare square in the checkerboard of southwestern Ontario's rural landscape. It is a patchwork of woodland, field, hedgerow and research structures, managed by a cross-section of Western researchers. Two of the station's strongest proponents were the late Professors Jeremy McNeil and Keith Hobson. Longtime friends and colleagues, we lost both to cancer this past year, in a blow to the University and to the broader scientific community.

McNeil and Hobson's impact on their respective fields, on public appreciation of science and on Western as an institution, is difficult to overstate. At ESW, they supervised graduate student projects that not only broke new ground in their research spaces but also yielded long-term additions to the station's function and sustainability. Studies on animals sourced from the station have yielded such novel findings as the first direct evidence of a migratory population of the true armyworm moth (a major agricultural pest). McNeil adopted a managerial approach to harvesting insects from ESW. His ethos for species, like the monarch butterfly, was that there should always be a surplus in the balance of animals taken from, and released to, ESW. This approach of combining research efforts with sustainability practices was important to both McNeil and Hobson. Nest boxes that were installed to establish an experimental population of inland tree swallows continue to be maintained

and provide nesting habitat to swallows as well as bluebirds. Plantings of milkweed on the property have successfully attracted migratory monarchs.

Another key to the potential the two men saw in ESW lies in its proximity to Western's main campus. Potential trainees are close to hand. One of Hobson's last major undertakings as a professor was to spearhead a successful proposal to the Western Sustainability Impact Fund to study biodiversity at ESW. This proposal included creating a species inventory and establishing a small bird-banding station. The station's inaugural season in fall 2024 was very successful, collecting data on 343 birds from 43 different species. One of the most notable records involved a gray-cheeked thrush. Caught at ESW on September 27, this bird was fitted with a small radiotransmitter; its signal was detected by a receiver in Cuba's National Botanical Garden on October 16. It's amazing that the bird flew within range of one of what were only two receiving towers in Cuba at the time. Even more amazing was that Hobson himself assisted Cuban colleagues in putting up that tower the year prior.

Several new and forthcoming ESW projects are designed to honour McNeil and Hobson's legacy by continuing their research, outreach and conservation efforts. In 2022, a pollinator garden was planted to the south of the laneway leading into the station. An extension was added in 2024 with native plants donated by Western's Friends of Gardens (FOGs) group and the garden is now dedicated to McNeil's memory. The mix of native flowering plants will support a host of different pollinator insects. At a naturalized area near the property's eastern border, 35 trees and shrubs will be planted in Hobson's honour this spring.

With an emphasis on native species, these will provide food, shelter and nesting habitat to a variety of birds. Finally, FOGs commissioned two aluminum benches, one dedicated to each man, which will sit side-by-side under a spruce near the main buildings. A sitter looks over the pollinator garden and beyond and is invited to contemplate the living legacies of these two great scientists.

Keith Hobson

Jeremy McNeil

A Tribute to Bug Man, Jeremy McNeil

By Cailyn McKay, PhD Candidate

If Jeremy McNeil was a bug, a behavioural ecologist would see how his behavior and interactions with his environment demonstrated his deep commitment to science and mentorship. Observing the actions of bug McNeil would have shown a love for insects, an omnivorous diet and a high capacity for dispersal to far flung places around the globe. He was a highly social insect and formed lasting bonds with others, creating a welcoming environment for all.

McNeil's greatest legacy, however, lay in his mentorship. He supervised countless students, offering guidance not just academically but personally. His door was always open to staff, students and colleagues, providing support through challenges and fostering a community of thoughtful, independent thinkers. McNeil was known for teaching students how to think critically, giving them the tools to find answers on their own. He prioritized student development over personal gain, believing that helping students become capable scientists was more important than publishing results.

McNeil's mentorship extended beyond academic advising. He was a source of motivation, sharing his own journey from a "delinquent" youth to a successful scientist, reminding students that effort mattered more than grades. His influence also reached broader audiences through his science outreach efforts, inspiring people worldwide to care about insects, science and the environment.

A key part of McNeil's character was his advocacy for the vulnerable, whether they were individuals, animals or the environment. He

defended native species, advocated for science policy and always stood up for what he believed was right.

McNeil's legacy lives on in all the people he influenced. Even in his absence, his impact is still felt. His ability to inspire and challenge others to think like he did is a testament to his lasting influence. McNeil was irreplaceable, but his legacy encourages us to ask ourselves: **How can we be a little more like McNeil?**

Make a Difference

ALUMNI, YOU CAN SUPPORT THE GREAT WORK HAPPENING IN BIOLOGY

Memories are powerful. They can transport us to the places, people and moments that shaped who we are—reminding us of the paths we've taken and the communities that supported us along the way. For so many, Western Biology is one of those places.

Within these pages, you have found stories of sparked curiosity, seized opportunities, and launched careers. You've seen how the foundation built in lecture halls, labs and field stations continues to shape lives far beyond graduation. Whether through groundbreaking research, meaningful mentorship or time spent learning in the field, the experiences students gain here leave a lasting impression.

Field courses, in particular, offer transformative learning—bringing biology to life in real-world settings like forests, coral reefs and conservation sites. They deepen understanding, build confidence and help students develop the skills today's employers and researchers value most. But for many, the cost of these opportunities can be a barrier.

As you reflect on the memories and opportunities Western Biology gave you, we invite you to consider paying it forward. A gift to our field schools—or any of our priority areas, like the Western Science Fund—can help ensure that students have the chance to gain the same formative experiences you may remember so fondly.

If you'd like to learn more or explore ways to stay connected, please visit our website—or feel free to reach out any time.

Warm regards,

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CANADA

SAVE THE DATE

WESTERN SCIENCE HOMECOMING BBQ FT. RICK MCGHIE

Saturday, September 27