



ONE HUNDRED AND TWENTY-SIXTH CONVOCATION

CONVOCATION

TUESDAY
JUNE
13
2023

FACULTY OF ENVIRONMENT

Convocation Ceremony

CONVOCATION

On this day, as the University of Waterloo awards degrees and celebrates the achievements of a new generation of graduates, the members of the University and its guests share in a 900-year-old ritual called convocation.

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Message from the Chancellor

Welcome graduands, family members, and friends to the Spring 2023 convocation.

As Chancellor of the University of Waterloo, it is my honour to preside over this ceremony.

Today, we welcome representatives from our community including faculty, staff and alumni to share in and celebrate these achievements.

Convocation marks the growth of the University of Waterloo family with all of our graduates as its newest alumni members. Since the institution's inception in 1957, we have conferred nearly 242,000 degrees and certificates. Our alumni community extends to over 150 countries, and offers a network regardless of where the future takes our graduates.

The University of Waterloo is driven by a desire to uncover innovation through creativity. We are an institution founded in extraordinary times, and as a result generates extraordinary leaders.

When I look across our campuses and beyond, I see impactful innovations coming to fruition. Examples include using quantum to improve MRI capabilities, finding new methods to combat the spread of misinformation and integrating AI more seamlessly into a variety of applications – all three examples are gaining momentum because of the work being done at Waterloo.

We are a community of innovative leaders who seek out ways to solve the big problems of our time, from solar geo-engineering that mitigates global warming to miniature diabetes monitors that can detect glucose. What can't be lost is the breadth of

knowledge and imagination within our community. From best-selling poets to NASA researchers and venture capitalists, Olympians to CEOs of multi-national corporations and leading environmentalists, we are providing the world with more Waterloo, and it is making the world a better place.

Profound disruptions persist globally – economic, technological, political, and social. This creates challenges, but also opportunities like we've never seen before. The world needs our graduates to harness all their experiences to lead and shape the future. The exceptional knowledge and creativity they have honed at the University of Waterloo has prepared all of them to be the leaders the world needs.

As our graduates cross the stage, they will bear the privilege and responsibility of bringing the spirit and values of this distinguished institution with them, wherever their lives may lead. They now have an opportunity to shape a better, more equitable world through their careers and community involvement.

Congratulations to all of our graduates and thank you for continuing the Waterloo tradition of excellence.



DOMINIC BARTON
Chancellor

“FROM BEST-SELLING POETS TO NASA RESEARCHERS AND VENTURE CAPITALISTS, OLYMPIANS TO CEOs OF MULTI-NATIONAL CORPORATIONS AND LEADING ENVIRONMENTALISTS, WE ARE PROVIDING THE WORLD WITH MORE WATERLOO, AND IT IS MAKING THE WORLD A BETTER PLACE.”

Message from the President and Vice-Chancellor

Congratulations to the Class of 2023.

We are thrilled to welcome our graduates and their family, friends and supporters to celebrate this momentous occasion.

Today's ceremony recognizes the hard work and perseverance students demonstrated during their time at the University of Waterloo. The experience at Waterloo is more than the knowledge gained in the classroom or library or the research undertaken in a lab. It is about the relationships and networks forged during each student's time here. Our institution's rich history and the success of our alumni is rooted in community. As graduates transition from student to alumni, I hope each will continue to stay connected to the Waterloo community.

For the family, friends, and supporters of our graduates, thank you. Thank you for being there for our students, for supporting them and encouraging their success. And thank you for being here today – this ceremony is more meaningful as a result of everyone's participation.

At the University of Waterloo, we pride ourselves on identifying and solving big, complex challenges facing our world. This happens not only on our campuses, but across the globe through our network of alumni. As the world continues to face multiple major crises that cut across society, health, the environment, technology and the economy, each new graduate is among the future leaders and change-makers

who can help address these challenges and build a better future for humanity and our planet.

Waterloo graduates are known for integrating knowledge and problem-solving across disciplines. I look forward to hearing about the passions, the innovations and impact our graduates will have on their communities.

We all have an opportunity, and a responsibility, to positively impact those around us. Let's all work together to help shape the world for the better.

On behalf of the University of Waterloo, I wish you the best of luck in the journey ahead.



Vivek Goel

VIVEK GOEL

CM

President and Vice-Chancellor

**“AS YOU BEGIN THE NEXT CHAPTER OF YOUR JOURNEY,
I ENCOURAGE YOU TO THINK UNCONVENTIONALLY.”**

Message from the Alumni Council Chair

Congratulations Class of 2023!

On behalf of the University of Waterloo Alumni Council and your fellow alumni, congratulations on the successful completion of your degree. You demonstrated hard work, dedication and resilience. We are proud of you and delighted to welcome you as the newest members of our community.

Graduation is a significant milestone for you both personally and professionally. I encourage you to celebrate your achievement and take time to appreciate the people in your life that helped you along the way – your family, friends, classmates, and teachers.

As you look ahead to the next phase of your life, I'm confident that your time at Waterloo has prepared you well. You have the expertise, creativity and resourcefulness to tackle whatever problem you choose.

Welcome to a network of more than 242,000 alumni, connected by their experiences at Waterloo.

Throughout your career, I encourage you to stay connected to your alumni community. There are more than 242,000 of us and we are here to support you as you work towards your goals. You can contact Waterloo alumni from anywhere in the world – through our Global Ambassadors, Alumni Chapters and online groups.

I also hope you will join me in sharing your time, knowledge and passion with the University. It is rewarding to volunteer with other talented alumni and your unique perspective can benefit future graduates more than you know.

Congratulations once again on your graduation. You have much to be proud of and a very bright future ahead of you!

I wish you all the best.



A handwritten signature in black ink that reads "Diana Vangelisti".

DIANA VANGELISTI

BES '84 MA '89

Chair, University of Waterloo Alumni Council

“THERE ARE MORE THAN 242,000 OF US AND WE ARE HERE TO SUPPORT YOU AS YOU WORK TOWARDS YOUR GOALS.”

Our tradition of convocation

The ritual of convocation is a tradition that honours the roots of the University, and is, at the same time, a beginning for students who now enter a new stage in their lives.

We welcome guests on this celebratory occasion and thank you for being present to share in it.

Both the symbols and the ceremony of convocation look back far beyond the beginning of the University of Waterloo, back to the centuries of university life in Western civilization which Waterloo joined six decades ago. The founders of this University were eager from the beginning to make it part of that long tradition, although they proudly asserted that they were building a new and innovative university, with close ties to industry and an emphasis on practical knowledge for building the future.

On this day, as ancient customs mix with the use of up-to-date technology and the exuberance of a new generation, convocation connects a forward-looking university with the traditions that universities have observed as long as they have existed.

The University of Waterloo grew out of an older institution, Waterloo College. A still older one, the University of St. Jerome's College, soon became federated with it, and the College of Optometry of Ontario joined the family in 1967. Although all these institutions were newcomers compared with Oxford and Harvard and the Jagiellonian, the connection to the traditional role and style of a university remains clear.

Tradition underlies the proceedings of today's convocation, the continuity of this University with centuries of academic experience. Passion brings the proceedings to life, along with the enthusiasm with which the University recognizes new achievements and new ideas.



1960s
CONVOCATION
AT WATERLOO

A CALLING TOGETHER

Students graduate at the end of a program of study, leading to a degree with a traditional name: Bachelor, Master, or Doctor. On this day, their families and friends celebrate their success and their transition from one status in life to another. Convocation has been, for the past nine hundred years, a meeting of the whole university community at which symbols are displayed, participants wear special attire to emphasize their official roles, and speakers share their wisdom and the values that the University seeks to teach. Convocation (the name comes from Latin, which was once the chief language of higher education) is a calling together of new graduates to receive the symbols of their accomplishment, and a calling together of the older members of the university to be witnesses and join in the celebration.

CONNECTING WITH TRADITION

At Waterloo's first convocation in June 1960, the guest speaker was James J. Talman of the University of Western Ontario, who told the audience a little about the history of Waterloo County and its industry. "The greatest resource we still have is the minds of the people," Talman said, "and this resource still remains to be developed to its full potential. The people of the Grand Valley clearly appreciate this fact. As we see the success with which they developed the physical resources in the past, we can only conclude that they will be just as successful in developing the intellectual resources of the future. The University of Waterloo can look forward to a brilliant and successful future."

THE PROCESSION

The most impressive part of the ceremony may be the procession that begins it. The graduating students will come in first, and as they fill up the main body of the hall, they will give the impression that today's ceremony really is, as convocation used to be, a ceremonial meeting of the whole University community.

After the graduating students have come in, the academic procession will begin. First to enter is the ceremonial Eagle Staff, a symbolic representation of the continuous presence of Indigenous peoples of these lands, carried in by an Eagle Staff carrier. Next, a selected faculty member will carry the mace, a traditional symbol of the University's authority. Then faculty members enter, walking two by two, dressed in their academic finery.

The final party to arrive is the Chancellor's party. The Chancellor is the ceremonial head of the University of Waterloo. The Chancellor presides over convocation ceremonies every June and October and awards all degrees, diplomas and certificates, including honorary degrees. The Chancellor offers an inspirational message for the graduands – at these ceremonies.

THE MACE

This solid silver and ebony wand was given to the University in 1965 by the family of the late Stanley F. Leavine and was designed by Toronto artist Eric Aldwinckle and crafted by silversmith Harold Stacey to symbolize the University as it was at that time. It displays lions, chevrons, and the shield of the province of Ontario, from which the University holds its charter to grant degrees.

The symbolic theme of the mace is unity amid diversity, and tension in the creative intellectual process that strives to bring forth a new individual. The design of the mace interprets this theme in the idiom of the life process: from the seeds at the base of the stave the mace grows in unity and strength until it differentiates by a four-fold separation into diverse elements.





The four-fold diversity is significant because of the four faculties existing at the time the mace was presented to the University and as well of the four church-related colleges federated and affiliated with the University. These diverse elements together form a crown, and the point of the crown, while tending toward a union, do not quite touch. They remain as individuals suspended in tension and yet engaged in deep harmony. This creative process is focused not on the traditional spherical orb of static perfection but rather on an elliptical silver ovum – the egg-shaped symbol of creativity – the marvelous potential of a new individual life.

THE COAT OF ARMS AND MOTTO

The lions and chevrons also appear on the shield that is the University's coat of arms and that is imprinted on the graduates' diplomas. Derived from traditional heraldry, it has been used since 1961 and was registered with the Court of the Lord Lyon in 1987. The shield uses the official colours of gold, black, and white, and its symbols refer to the University's base in the cities of Kitchener and Waterloo. The unusual double chevrons were borrowed from the coat of arms of Lord Kitchener of Khartoum, and the red lions are like those on the coat of arms of the Duke of Wellington, victor at the 1815 Battle of Waterloo. The lions also reflect the tough and innovative spirit of the University's founders and builders, and the black and white in the chevron are the colours of Prussia, reflecting the Germanic background of many Waterloo County settlers. Beneath the shield appears the University's motto, *Concordia cum veritate*, "In harmony with truth."

DEGREES AND HONORARY DEGREES

Presentations of earned and honorary degrees, and the speeches associated with them, take up most of the time at Convocation. Undergraduate and graduate degrees are awarded in each of our six faculties: the faculties of Arts, Engineering, Environment, Health, Mathematics and Science. Also included are students who attended our colleges, Conrad Grebel University College, Renison University College, St. Jerome's University and United College.

In addition to "earned" degrees awarded to students who have met the requirements through years of effort, the University of Waterloo confers "honorary" degrees to individuals who have been designated by the Senate, the University's academic governing body, as deserving special honour. They, too, receive hoods, lined with the colour of the faculty that nominated them or with specially designated colours for other kinds of achievement.

By tradition, public service is recognized with a Doctor of Laws degree even in a university that does not regularly teach law. The individuals receiving honorary degrees are introduced during the ceremony, and a brief citation is read to explain their various accomplishments deserving of recognition by a university. One of the honorands will address convocation after the degree has been given.

A new tradition

EAGLE STAFF

On September 22, 2022, the University of Waterloo held a Commitment Ceremony pledging action towards decolonization, Indigenization and reconciliation. The University is committed to fostering better understanding of Indigenous histories and ensuring Indigenous knowledges and ways of knowing are represented in our scholarship, in our research and in our teachings. Weaving in the knowledges, ways of knowing, and understandings of First Nation, Métis and Inuit peoples equips the Waterloo community, especially Waterloo graduates, with the tools and knowledge they need to create a better future for all. The commitment was formalized through a Pipe Ceremony, after which President and Vice-Chancellor, Vivek Goel, was given the name “Ogiima” (meaning leader) and presented with gifts of an eagle feather and two Wampum belts.

Building on the desire and responsibility to incorporate Indigenous perspectives, the University of Waterloo community came together for a ceremony on March 27, 2023, to welcome an Eagle Staff to the University.

An Eagle Staff is an important element of the Indigenous relationship to Earth and those that have protected it. It reflects the wisdom, strength and honour of those that carry it in representing different Nations across Turtle Island. By welcoming the Eagle Staff, the University acknowledges the responsibility to recognize, accept and incorporate Indigenous perspectives in the ways we teach, govern and behave as an institution. The Eagle Staff will be present at future Waterloo ceremonies and celebrations and will have a prominent place in convocation ceremonies.

The Eagle Staff honours the University’s First Nations, Métis and Inuit community members, as well as their traditions, cultures and strengths. It is a sacred item that holds a spirit within itself that is cared for by the Indigenous campus community, and that care is reciprocated by the Eagle Staff.

Waterloo Region is situated on territory traditionally shared by Anishinaabeg, Neutral (or Attawandaron), and Haudenosaunee Nations. Though many nations, including the Anishinaabeg, involve an Eagle Staff in their traditions and practices, we respectfully acknowledge that this is not the practice of all nations. With gratitude, we honour and celebrate the unique traditions of all First Nations, Métis and Inuit people, and look forward to reflecting this diversity in spirit and custom as we move forward on this path of decolonization, Indigenization, and reconciliation.



**“THE STAFF WILL SERVE AS AN IMPORTANT SYMBOL AND REMINDER OF THE
COMMITMENT WE MADE TO RECONCILIATION AND SERVE AS INSPIRATION
FOR OUR UNIVERSITY COMMUNITY TODAY AND FOR FUTURE GENERATIONS.”**

VIVEK GOEL

President and Vice-Chancellor

Honorary Doctorates

An honorary degree (*honoris causa*) is the highest honour conferred by the University. Through the conferring of honorary degrees, the University of Waterloo seeks to recognize outstanding achievement, whether academic or through service to society.



TREVOR HASTIE

PhD

Doctor of Mathematics, *honoris causa*

WEDNESDAY, JUNE 14 / AFTERNOON CEREMONY

Dr. Trevor Hastie is John A. Overdeck Professor of Mathematical Sciences at Stanford University and a member of the United States National Academy of Sciences. He has made seminal contributions to statistical computing, modelling, and machine learning, with over 200 research articles and six books. He helped develop the statistical modelling environment behind the R computing system that we all use today, invented or co-invented many important tools in modern statistics, and authored numerous highly-acclaimed statistical software. Having guided several generations of statisticians and data scientists with his work, Hastie is one of the most influential statisticians of our time.



ARLIE PETERS

PhD, Provost

Doctor of Mathematics, *honoris causa*

WEDNESDAY, JUNE 14 / EVENING CEREMONY

Dr. Arlie Petters received his PhD in mathematics from MIT in 1991. At Duke University (1998 to 2019), he was the Benjamin Powell Professor of Mathematics and a professor of Physics, Economics and Business. Since 2020, he has served as the provost at New York University Abu Dhabi. His outstanding scholarship resulted in numerous honours, including the inaugural Blackwell-Tapia Prize (2002). Petters was selected by the National Academy of Sciences to be part of a permanent Portrait Collection of Outstanding African Americans in Science, Engineering, and Medicine (2006), and named by the Queen of England to membership in the Most Excellent Order of the British Empire (2008).



SEANA BRIDGET MCKENNA

Doctor of Letters, *honoris causa*

THURSDAY, JUNE 15 / MORNING CEREMONY

Seana McKenna is a Canadian artist and director in theatre, television, and film. She has been a member of the Stratford Festival for 30 seasons, performing in over 50 roles. McKenna is a Member of the Order of Canada and is the recipient of three Dora Awards, a Jessie Award, and a Genie Award. McKenna shows great versatility in her roles and has challenged conventional Shakespearean theatre norms as one of only a few female performers to take on the roles of Richard III, Lear, and Julius Caesar. She has also received the Tyrone Guthrie Award in recognition of her contributions to mentorship.



JOHN BORROWS

BA, MA, JD, LL.M, PhD, LLD, DHL

Doctor of Letters, *honoris causa*

THURSDAY, JUNE 15 / AFTERNOON CEREMONY

Dr. John Borrows is a member of the Chippewas of Nawash First Nation in Ontario and is professor and Loveland Chair of Indigenous Law at the University of Toronto. He is an internationally recognized scholar of Indigenous legal rights. Borrows is an Officer of the Order of Canada. He is also a Fellow of the Royal Society of Canada, a Trudeau Fellow, and a Killam Prize and Molson Prize recipient. He received the Indigenous Peoples Counsel designation from the Indigenous Bar Association for honour and integrity in service to Indigenous peoples, the National Aboriginal Achievement Award in Law and Justice, and the Governor General's Innovation Award.

DEBRA PEPLER

OC, PhD, C, Psych

Doctor of Letters, *honoris causa*

THURSDAY, JUNE 15 / EVENING CEREMONY



Dr. Debra Pepler received her PhD in Psychology from the University of Waterloo and is a registered psychologist in Ontario. She is a Distinguished Research Professor in the Department of Psychology at York University and a Senior Adjunct Scientist at the Hospital for Sick Children. As a clinical and research psychologist, she has contributed to psychology through her groundbreaking work in bullying, aggression, and other forms of violence experienced by marginalized youth. Her work has changed how professionals understand the frequency, intensity, and impacts of children's experiences of aggression and violence, helping to shape and inform Canadian public policy on violence reduction within schools.

YANXIN WANG

PhD, CAS Fellow, IAGC Fellow

Doctor of Science, *honoris causa*

FRIDAY, JUNE 16 / MORNING CEREMONY



Dr. Yanxin Wang is professor of Hydrogeology and Environmental Engineering at the China University of Geosciences (CUG) in Wuhan. He is also the president of CUG and head of the State Key Laboratory of Biogeology and Environmental Geology. Wang's research has produced major advances in understanding of the sources, fate, and transport of contaminants in groundwater systems. Wang spearheaded the development of innovative remediation and management strategies that protect millions of people from contaminated drinking water. Under Wang's visionary and effective leadership, CUG has become one of China's top institutions in science and technology.

MARK WILLCOX

BSc, PhD, DSc

Doctor of Science, *honoris causa*

FRIDAY, JUNE 16 / AFTERNOON CEREMONY



Dr. Mark Willcox is a medical microbiologist and Professor in the School of Optometry and Vision Science at UNSW, Sydney, Australia. His laboratory focuses on understanding the etiology of adverse events and comfort during contact lens wear. His research includes examining mechanisms of adhesion of ocular microbes and the development of novel antimicrobial surfaces. He also studies tear film proteomics and lipidomics, their relationship to contact lens comfort and how tears may serve as biomarkers for diabetes and cancer. Recent awards include the Korb Award from the American Optometric Association (2020) and the Barry Collin Medal from Optometry Australia (2017).

CRISTINA AMON

BASc, MASc, PhD, DSc,

Order of Canada, FRSC, CAE

Doctor of Engineering, *honoris causa*

FRIDAY, JUNE 16 / EVENING CEREMONY



Dr. Cristina Amon is the Distinguished Alumni Professor and former dean at the University of Toronto's Faculty of Applied Science & Engineering. Under her visionary leadership, University of Toronto's engineering program has become a global hub for interdisciplinary research and education and a shining example of diversity and inclusion for women, People of Colour and Indigenous peoples in the engineering profession. She has been elected a fellow or honorary member of all major professional societies in her field. A pioneer in computational fluid dynamics for thermal designs subject to multidisciplinary constraints, Amon's research is in thermal transport in nanoscale semiconductors, energy systems, EV batteries and biomedical devices.

ROLA DAGHER

Doctor of Engineering, *honoris causa*

SATURDAY, JUNE 17 / MORNING CEREMONY



Rola Dagher, a leading figure in the Canadian technology sector, has made it her mission to empower those around her. Immigrating to Canada from war-torn Lebanon with an infant in the 1990s, Dagher worked as a retail sales clerk before becoming the president of Cisco Systems Canada and currently as Dell Technologies' global channel chief. Rola sees diversity as the foundation for building a high-performance workforce and is a vanguard of inclusive excellence. Dagher has been named a WXN Top 100 Most Powerful Women in Canada, the Women in Communications and Technology (WCT) Woman of the Year and is an RBC Top 25 Canadian Immigrant Award winner.

JOHN BUZACOTT

BSc, BE, MSc, PhD, DHC

Doctor of Engineering, *honoris causa*

SATURDAY, JUNE 17 / EVENING CEREMONY



Dr. John Buzacott, a former management sciences engineering professor, is a pioneering figure in production and operations management. Buzacott's work in developing a unified framework and rigorous scientific foundation of the approaches currently used in the design, planning and control of manufacturing and service systems has inspired scholars worldwide. His innovative use of stochastic models to explain many phenomena occurring in manufacturing and service organizations has also distinguished him as an exceptional researcher and educator. As a founding member of the Waterloo Management of Integrated Manufacturing Systems research group at the University of Waterloo, his contributions to manufacturing analysis and modelling work continues to be globally recognized.

Distinguished Professors Emeriti

The Distinguished Professor Emeritus designation is made to faculty members who have had a distinguished record of service in teaching and research in the University. The honorary award is granted upon, or shortly after, retirement.



KENNETH R. DAVIDSON

University Professor, PhD, FRSC, FIF, CMSF

Department of Pure Mathematics

WEDNESDAY, JUNE 14 / EVENING CEREMONY

Dr. Kenneth R. Davidson is one of the most accomplished mathematicians in Canada. After completing his undergraduate degree at Waterloo and his PhD at Berkeley, he spent two years as a Moore Instructor at MIT before returning to Waterloo as faculty in 1978. He has been awarded a substantial proportion of the research prizes available to Canadian mathematicians, beginning with the Israel Halperin Prize in Operator Algebras in 1985. This was followed by an E.W.R. Steacie Fellowship in 1988 and a Killam Research Fellowship in 1995. In 2014 he received the David Borwein Distinguished Career Award from the Canadian Mathematical Society for his “exceptional, broad, and continued contributions to Canadian mathematics.” He has been a Fellow of the Royal Society of Canada since 1992, a Fields Institute Fellow since 2006 and a Canadian Mathematical Society Fellow since 2018. Davidson is also a highly esteemed instructor and supervisor of 18 Master’s and 14 PhD students.



JOANNE WOOD

University Professor, PhD

Department of Psychology

THURSDAY, JUNE 15 / AFTERNOON CEREMONY

Dr. Joanne Wood retired as professor from the Department of Psychology after 33 years of service. Wood is recognized as one of the foremost experts in the world for understanding how personality influences relationships – particularly how self-esteem and agreeableness in one partner affect interpersonal interactions and relationship quality. She is also an expert on self-disclosure. In recognition of her work, she has received the Faculty of Arts Award for Excellence in Research and two University of Waterloo Outstanding Performance Awards. She is a Fellow of the Association for Psychological Science, the American Psychological Association – Division 8, and the Society for Personality and Social Psychology.



LORNE L. DAWSON

BA, MA, PhD

Department of Religious Studies,
Sociology and Legal Studies

THURSDAY, JUNE 15 / AFTERNOON CEREMONY

Dr. Lorne Dawson retired as professor from the departments of Religious Studies as well as Sociology and Legal Studies. During his tenure at Waterloo, he served as Chair for each department. Dawson is a Research Fellow at the Balsillie School of International Affairs and a Senior Associate at the Munk School of Global Affairs and Public Policy (University of Toronto). He is best known for his contributions to the fields of sociology of religion, and more recently, for his work on terrorism and the process of radicalization that leads to violence. In 2012, he co-founded the Canadian Network for Research on Terrorism, Security, and Society, funded by SSHRC and several government agencies.

Honorary Members of the University

The Honorary Member of the University designation is the highest honour a staff member can obtain at the University of Waterloo and is granted upon retirement. It recognizes the individual for outstanding service to the University as a whole, not limited to one department or faculty. For faculty members, it recognizes distinctive administrative service to the University.

TERRY STEWART

BA, MA

Information Systems and Technology

TUESDAY, JUNE 13 / MORNING CEREMONY



Terry Stewart's involvement with the University of Waterloo spanned nearly 50 years. He completed BA and MA degrees in Recreation and Leisure Studies in 1975 and 1976, respectively. He started his role as a research associate in the Department of Recreation and Leisure Studies in 1981, followed by microcomputer laboratory manager and coordinator of the Leisure Studies Bank in 1984. His role changed to coordinator of computing in 1991, then manager of information technology in 2005, and director of information technology in 2012. Stewart retired in 2015.

EDWIN ANDERSON

BA

Faculty of Mathematics

WEDNESDAY, JUNE 14 / EVENING CEREMONY



Edwin (Ed) Anderson's career in education began as a secondary school mathematics teacher in Wingham, ON, from 1956 until 1970, when he moved to the University of Waterloo as a lecturer in the Faculty of Mathematics, where he worked until his retirement in 1991. He helped lead the expansion of mathematics contests that now see more than 250,000 registrations annually from more than 80 countries and was integral to the success of the Mathematics/Teaching undergraduate program. For almost 30 years after his retirement, Anderson remained active in outreach activities, assisting with contests, student workshops and strategic direction.

BARBARA SCHUMACHER

MD

Campus Wellness, Health Services

TUESDAY, JUNE 13 / AFTERNOON CEREMONY



Dr. Barbara Schumacher shepherded the campus community through serious health challenges, including cases of tuberculosis and outbreaks of meningitis and Swine Flu, while championing progressive and equitable programs that enhanced the lives of thousands of students, faculty and staff during her 39 year career at the University. Promoting mental well-being, tackling sexual harassment, and establishing the Occupational Health office for staff were just a few of her initiatives. In addition, Schumacher's efforts in promoting better health went beyond Waterloo and benefitted people at universities across Ontario. And after retiring as Waterloo's medical director of Health Services in 2015, she established a fund to help refugees continue their university education.

STEVEN FURINO

PhD

Faculty of Mathematics

WEDNESDAY, JUNE 14 / EVENING CEREMONY



Dr. Steven Furino was a faculty member, first in the Department of Mathematics at St. Jerome's University and then in the Centre for Education in Mathematics and Computing at the University of Waterloo, from 1989 until 2020. Furino was an excellent teacher who won the Distinguished Teacher Award in 1989 and was a champion of online education in the Faculty of Mathematics. He was also an outstanding administrator, serving as associate dean, undergraduate and assistant dean. Furino's distinguished service also included educational work in Africa and leadership in the Faculty Association and the University's undergraduate communication initiatives.

SHARON LAMONT

BA

Library

THURSDAY, JUNE 15 / MORNING CEREMONY



A Waterloo alum, Sharon Lamont's (BA, '80) career spanned four decades, culminating in a Library senior leadership position and other noteworthy University-level achievements. During her career, Sharon's leadership and contributions to the Library, community and philanthropy advanced the University's progress toward building a culture of inclusivity and excellence. Lamont's leadership extended across campus, notably with the Waterloo Staff Association, United Way staff campaign and Joint Health and Safety Committee. One of her key achievements was leading the Library to Silver Certification from Excellence Canada. Sharon retired in May 2021 after nearly 40 years of service.

GEORGE FREEMAN

BASc, PhD

Faculty of Engineering

SATURDAY, JUNE 17 / MORNING CEREMONY



Dr. George Freeman is a retired electrical and computer engineering professor at the University of Waterloo. Freeman established a sterling reputation as an outstanding engineering educator throughout his career. He served as electrical and computer engineering's teaching and learning champion from 2018 until his retirement in 2022. Freeman's work promoted evidence-based practices for improved learning outcomes, mental health and community building. He also received the Dedicated Service Award from the Canadian Association of University Teachers for his exceptional service to their academic staff associations. Freeman's research interests include signal processing for digital communications, optimal lossless data compression algorithms, and storage and recognition applications in speech and image coding.

Guest speakers

SCOTT LEATHERDALE

PhD, FAAHB

School of Public Health Sciences

TUESDAY, JUNE 13 / MORNING CEREMONY



Dr. Scott Leatherdale is a professor in the School of Public Health Sciences. He is a Cancer Care Ontario Research Chair, a CIHR-PHAC Chair in Applied Public Health Research, and a University Research Chair at the University of Waterloo. Before coming to Waterloo, he was a Scientist at Cancer Care Ontario, responsible for leading Ontario's cancer prevention system. For the past 15 years since joining Waterloo, Leatherdale has developed and led the COMPASS System, the world's largest and most comprehensive youth-focused cancer prevention and mental health learning system. He was an inaugural winner of the Canadian Institutes of Health Research (CIHR) Trailblazer Award in Population Health Solutions and is the first (and only) Canadian researcher to be awarded Fellow status in the American Academy of Health Behavior. His proudest achievement is being the father of two fun and energetic little boys, Thomas and James.

RAPHAEL AYAMBIRE

BSc, PhD '21

TUESDAY, JUNE 13 / AFTERNOON CEREMONY



As the University of Waterloo's 2021 Caivan International Experience Postdoctoral Fellow, Dr. Raphael Ayambire brings a unique perspective to the challenge of planning and building the world's future cities. After growing up in rural Ghana supporting his parents' agricultural activities, he graduated with a BSc in development planning in Ghana, then journeyed to Canada to complete a planning PhD at Waterloo. Ayambire's lived experience and his education on two continents, has shaped his passionate vision for future cities that can respond to the climate crisis and transformative new technologies while ensuring social equity makes these communities truly sustainable. Ayambire will continue working toward this goal as an assistant professor in the University of Manitoba's Faculty of Architecture, Department of City Planning.

LISA AULTMAN-HALL

PhD

Systems Design Engineering

SATURDAY, JUNE 17 / AFTERNOON CEREMONY



Dr. Lisa Aultman-Hall is professor and chair of Systems Design Engineering. Before joining the University of Waterloo, she served as a professor of Civil Engineering at the Universities of Kentucky, Connecticut and Vermont. Aultman-Hall's research focuses on sustainable transportation systems, especially methods to collect unique databases for modelling and analysis of long-distance travel, transportation sector emissions, network resiliency, streetscape design and non-motorized transportation. A common thread in her work is the pursuit of accessibility metrics that speak to equity. She served several leadership roles at the interdisciplinary University of Vermont Transportation Research Center and as the associate director of the National Center for Sustainable Transportation with the University of California Davis.

Valedictorians

Katie Ivancic Faculty of Health
TUESDAY, JUNE 13 / MORNING CEREMONY

Bennett Paul Gallant Faculty of Environment
TUESDAY, JUNE 13 / AFTERNOON CEREMONY

Advitya Chhabra Faculty of Mathematics
WEDNESDAY, JUNE 14 / MORNING CEREMONY

Yichen Carolyn Wang Faculty of Mathematics
WEDNESDAY, JUNE 14 / AFTERNOON CEREMONY

Vincent Macri Faculty of Mathematics
WEDNESDAY, JUNE 14 / EVENING CEREMONY

Thomass Muir Faculty of Arts
THURSDAY, JUNE 15 / MORNING CEREMONY

Arjun Jain Faculty of Arts
THURSDAY, JUNE 15 / AFTERNOON CEREMONY

Ammar Kamran Faculty of Arts
THURSDAY, JUNE 15 / EVENING CEREMONY

Tyler Jing Faculty of Science
FRIDAY, JUNE 16 / MORNING CEREMONY

Ahmed Adeldader Faculty of Science
FRIDAY, JUNE 16 / AFTERNOON CEREMONY

Toluwalope Wright Faculty of Engineering
FRIDAY, JUNE 16 / EVENING CEREMONY

Maya Bishop Faculty of Engineering
SATURDAY, JUNE 17 / MORNING CEREMONY

Yonael Debebe Faculty of Engineering
SATURDAY, JUNE 17 / AFTERNOON CEREMONY

Matthew Linehan Faculty of Engineering
SATURDAY, JUNE 17 / EVENING CEREMONY

Graduate Degrees

DOCTOR OF PHILOSOPHY

Aguilar Vargas, Francisco Ignacio (Social and Ecological Sustainability)
“Transforming Electrical Energy Systems Towards Sustainability in a Complex World: The Cases of Ontario and Costa Rica”

Badewa, Emmanuel Adedamola (Social and Ecological Sustainability)
“The Impact of Biobased Residues on Soil Health and Greenhouse Gas Emissions Under a Changing Climate”

Buttazzoni, Adrian Nicholas (Planning)
“Urban and Architectural Design for the Young Mind: An Ecological Investigation of the Relationship Between Urban Form and Adolescent Mental Health”

Caceres, Renato (Geography)
“Adaptive Capacity, Collaboration, and Adaptive Governance: The Galapagos Small-Scale Fishing Sector”

Cook, Julie Linda (Sustainability Management)
“Success and Failure in Social Marketing Programs: A Qualitative Exploration”

Dhakal, Anil (Geography)
“Remittances, Household Food Security, and Entrepreneurship Development: A Case Study of Mzuzu, Malawi”

Dordi, Truzaar (Sustainability Management)
“Investing for Climate Action: The Role of Capital Markets in Enabling a Low-Carbon Transition”

Felix Martin del Campo, Francisco Xavier (Sustainability Management)
“Islands at Risk: Analyzing Resource-Use Dynamics From a Socio-Metabolic Research Perspective”

Gievski-Sidorovska, Isidora (Planning)
“Responding to COVID-19: Characteristics and Outcomes of Strategic Planning in Social-Service Nonprofits”

Giles, Richard Eugene (Social and Ecological Sustainability)
“Under the Skin: Assessing the Ideological Underpinnings and Material Reality of Cultured Meat”

Hinton, Lucy Beth (Global Governance)
“Front-of-Pack Labelling in the Caribbean Community: Power and Policy in Regional Standard Setting”

Joynt, Amanda (Geography)
“Analysis of an Urban Food System Through the Lens of Multi-Level Governance: A Case Study of Mzuzu, Malawi”

King, Fraser Dennis Murray (Geography)
“Developing a Radar-Based Machine Learning Snowfall Retrieval Algorithm”

Korsah, Percy Erasmus (Geography)
“Effects of Seismic Lines on Peatland Carbon Cycling in Boreal Alberta, Canada”

Minano, Andrea (Geography)
“Evaluating Flood Risk Governance With Geospatial Technologies”

Mohtat, Niloofar (Planning)
“Attaining Climate Justice Through the Adaptation of Urban Form to Climate Change: Flood Risks in Toronto”

Mollaei, Sadaf (Sustainability Management)
“An Analysis of Canadian Young Adults’ Eating Behaviours Towards Sustainable Food Choices”

Murfit, Justin Charles (Geography)
“Forward Modelling of Multifrequency SAR Backscatter of Snow-Covered Lake Ice: Investigating Varying Snow and Ice Properties Within a Radiative Transfer Framework”

O’Hearn, Shawna Anne (Geography)
“Place-Based Experiences in the Work Environment During the Menopausal Transition: A Case Study of Canadian Physiotherapists”

Pradhan, Sisir Kanta (Sustainability Management)
“Social-Ecological Systems Analysis of the Dried Fish Value Chain for Community Wellbeing in the Bay of Bengal Coast of Odisha and West Bengal, India”

Sanniti, Sophia Rose (Social and Ecological Sustainability)
“(Re)Organizing Toronto Households During COVID-19 Lockdown: A Case Study on an Imposed Degrowth Scenario”

Silburt, Aviva (Global Governance)
“Mapping the Complexity of Mining & Peacebuilding in Guatemala”

MASTER OF ARTS

Barcellos, Natalie Isobel DeBloeme (Planning)

Cameron, Marilyn Frances (Planning)

Moss, Dana Avery (Geography)

Scott-Frater, Charlotte Leigh (Planning)

Skidmore, Jason Robert (Planning)

Westerhof, Colin J (Planning)

Wilson, Brayden James Richard (Planning)

Wong, Man-Juk Bryan (Planning)

Zhang, BiYe (Geography)

MASTER OF CLIMATE CHANGE

Cirstet, Victor
Collins, Trudi
Fjarlie, Jess Erika
Freedberg, Hannah Dorothy
Hawz, Yasmine Waseela
Ho, Alexandra Jane
Jamal, Iqbal Badruddin
Santa Maria, Amanda
Sheikh, Bilal
Sopel, Scott
Tulipano, Stephanie Nicole

MASTER OF DEVELOPMENT PRACTICE

Beg, Aminah Fasahat
Burke, Calyssa Nikita
Chalmers, Duncan James Wade
Cheung, Sau Fong
Chow, Rebecca Wai Yi
Feng, Tiankai
Han, Yawei
Ibeanusi, Chiamaka Nkechinyere
Kane, Madina
Mbielu, Blessing Debbie
Ochana, Mary Anwar
Sada, Aisha
Sun, Zhouyuan
Tasnim, Ayesha Zerine
Tufail, Hijab
Weinberger, Mikayla Chantelle
Zaman, Tashfia Rifa

MASTER OF ECONOMIC DEVELOPMENT AND INNOVATION

Bains, Simran
Dajani, Lana
Ennin, Yaw Kwabiah
Meunier-Geoffroy, Alexandre

MASTER OF ENVIRONMENT AND BUSINESS

Corway, Samantha Laura
Gaeta, Sarah
Macdonald, Katelyn Jennifer
MacIsaac, Caileigh Deanna
Min, Jie
O'Rourke, Sarah Rose
Rogers, Samantha Leigh

MASTER OF ENVIRONMENTAL STUDIES

Ahmed, Muhammad (Sustainability Management)

Akomolafe, Bayode Andrew (Sustainability Management)

Bahari, Kimiya (Sustainability Management)

Brierley, Tatianna Marie (Sustainability Management)

Bright, Brittany (Sustainability Management)

Chen, Qi-Sheng (Geography)

Cox, Elaina (Sustainability Management)

Farley, Karen Lisa (Sustainability Management)

Gokkaya, Onurcan (Sustainability Management)

Hamilton, Shawna Amie (Geography)

Hundal, Harkirat (Social and Ecological Sustainability)

Khaniya, Bhabishya (Sustainability Management - Water)

Krueger, Rachel Judith Gold (Sustainability Management - Water)

Laidlaw, Caitlin Alyssa (Geography)

Le, Vu Quynh Trang (Social and Ecological Sustainability - Water)

Madhanaroopan, Shenali (Sustainability Management)

McCarthy, Gwenyth Grace (Planning)

Mikhail, Monika (Sustainability Management)

Mirza, Mustafa (Geography)

Neveroff, Collin Andre (Sustainability Management)

Pfeffer, Jordan Elizabeth (Social and Ecological Sustainability)

Phoenix, Jason Ian (Social and Ecological Sustainability)

Richards, Graham Anthony (Planning)

Sanchez Castillo, Juan Sebastian (Social and Ecological Sustainability)

Saunders, Mark Daniel (Social and Ecological Sustainability - Water)

Tan, Jingtian (Geography)

Timberg, Laina Isabella George (Sustainability Management - Water)

Vanderbeek, Bailey A (Sustainability Management)

Yang, Yi (Sustainability Management)

MASTER OF PLANNING

Brown, Cory
Chan, Calvin
Dagenais, Taylor Kristian
Farrell, Conor
Khan, Amanda
Morris, Michelle Nicole
Ntim, Nana
Rieu, Adam Kyle
Shackles, Kevin Raymond
Solonovich, Leonid

MASTER OF SCIENCE

Chau, Sheryl Hei Man (Geography - Water)

Fines, Robert (Geography)

Francescangeli, Brittany Ann (Geography - Water)

Mugunthan, Jaya Sree (Geography)

Nikolić, Natalija (Geography)

Noyes, Isaac William (Geography - Water)

Pegler, Stephanie Adriana (Geography - Water)

Samo, Lauren Jessica (Geography)

GRADUATE DIPLOMA

Abrha, Snit (Climate Risk Management)

Brewer, Nicholas Arthur (Climate Risk Management)

Goubanova, Svetlana (Climate Risk Management)

Guzman, Carlos (Climate Risk Management)

Jangid, Prachi (Climate Risk Management)

Leung, Leann Edith (Climate Risk Management)

Newell, Robert (Planning)

Parle, Jean-Michel (Climate Risk Management)

GRADUATE CERTIFICATE

Gievski-Sidorovska, Isidora (University Teaching)

Hill, Lowine Stella (University Teaching)

McDougall, Emma Deirdre (University Teaching)

Mollaei, Sadaf (University Teaching)

Swanson, Kayleigh Emily (University Teaching)

Tan, Weikai (University Teaching)

Undergraduate Degrees

BACHELOR OF ENVIRONMENTAL STUDIES

GENERAL GEOGRAPHY AND ENVIRONMENTAL MANAGEMENT – THREE YEAR

Agbelogode, Maxwell

Ayyappan, Aakash Varman

Coleman, Graham Ross

Dodanli, Okan

Fisher, Ethan Alexander

Hewitt, Kelsey

Lu, Jinhong

Mathew, Nevin Joseph *

Simmons, Kenneth John *

Sukhai, Sebastian Kyle (Aviation Specialization)

Valaitis, Matthew Cole

Vilensky, Michelle

Wilson, Brendan Robert (Urban Studies Minor)

Zhang, Zihao

HONOURS ENVIRONMENT AND BUSINESS

Ayisi (Economics Minor – Co-operative Program)

Aamir, Aaiman

Abdu, Tala *

Amer, Dalia (Political Science Minor – Co-operative Program)

Andreotte, Nicholas Andrew (Co-operative Program) *

Balamuraly, Visnu (International Trade Minor – Co-operative Program) *

Chen, Keying *

Chen, Meiqi (Mathematics Minor, Economics Minor)

Desai, Jahanvi Chaitanya (International Development Minor – Co-operative Program) †

Ding, Bolei *

Du, Yihang (Geography and Environmental Management Minor)

Du, Yue †

Duran, Deniz (Geography and Environmental Management Minor – Co-operative Program) *

Gallant, Bennett Paul (Economics Minor – Co-operative Program) †

Gao, Jie *

Gardijan, Aneta (Co-operative Program) *

He, Aishan

Hou, Yi Tao (Co-operative Program)

Huang, Leping (Co-operative Program)

Ishtiaq, Muhammad Haider (Co-operative Program) *

Kamath, Sanghamitra (History Minor – Co-operative Program) *

Khan, Oneeb Kabir (Co-operative Program) *

Lee, Damian Jacob (Philosophy Minor – Co-operative Program) *

Lee, Rachel Euna (Co-operative Program) *

Li, Chengzu (Environment, Resources and Sustainability Minor – Co-operative Program)

Lightfoot, Jacob Paul (Cognitive Science Minor – Co-operative Program)

Liu, Xinyu (Economics Minor)

Lou, Jingyou *

Luo, Jennifer Shijia (Co-operative Program)

Manninger, Kaitlyn Mary (Co-operative Program) *

Mao, Zi *

Mirella-Sanchez, Marc Philip (Entrepreneurship Minor – Co-operative Program)

Monhemius, Lauren Isabelle (Human Resources Management Minor – Co-operative Program) *

Muller, Carissa Tamara Lin (Urban Studies Minor, Human Resources Management Minor – Co-operative Program) †

Ni, Junying (Co-operative Program) †

Ovais, Nawal (Political Science Minor – Co-operative Program) *

Pahwa, Vaibhav (Economics Minor – Co-operative Program)

Panta Chhetri, Manisha (Co-operative Program)

Park, Eunsoo (International Trade Minor – Co-operative Program) †

Parmar, Sonali (Co-operative Program)

Phan, Anh Thao (Human Resources Management Minor)

Porter, Krista Ruth

Raitano, Ryan Alessandro (Co-operative Program) *

Raminhos, Simon Patrick Almeida (Co-operative Program)

Rehan, Samas Amir (Computing Option – Economics Minor – Co-operative Program)

Rendalkar, Pranav (Co-operative Program)

Sharma, Aarti (Legal Studies Minor – Co-operative Program)

Sharma, Aryamik (Economics Minor – Co-operative Program) *

Shukla, Aishwarya (Co-operative Program) *

Singh, Jasdeep (Economics Minor – Co-operative Program)

Slater, Sofia Somani (Theatre and Performance Minor – Co-operative Program)

Sukker, Akashdeep Singh (Co-operative Program) *

Tao, Shaoyang *

Teng, Yutong †

Thiessen, Kayla Loewen (Co-operative Program) *

Tinmouth, Thomas Joseph (Environment, Resources and Sustainability Minor – Co-operative Program) *

Tran, Philip Yves (Mathematics Minor – Co-operative Program) *

Turchan, Alexander James (Co-operative Program)

Wang, Xiaojie †

Williamson, Elizabeth Katherin (Co-operative Program) *

Wood, Elizabeth Mae (Co-operative Program) *

Wu, Jingzhi †

Wu, Yubo *

Xi, Jiayan *

Xia, Jiyu (Economics Minor – Co-operative Program) *

Xu, Lujin †

* – Distinction

† – Dean's Honours

Xu, Qianyi †
Xue, Chenyue *
Yan, Yuhan *
Yang, Lu *
Ye, Zhou †
Yee, Krystal Jing Ing (Human Resources Management Minor, Event Management Minor – Co-operative Program) *
Yeh, Tzu-Tung (Legal Studies Minor, Economics Minor, Human Resources Management Minor – Co-operative Program)
Young, Matthew Ka Chun (Co-operative Program) *
Zhang, Chuang
Zhao, Baizhou (Economics Minor – Co-operative Program)
Zhou, Bo (Economics Minor)
Zhou, Qinyi †
Zhou, Yilin *
Zhu, Haonan †

HONOURS ENVIRONMENT, RESOURCES AND SUSTAINABILITY

Agbey, Joel Mawuena (Co-operative Program)
Aikens, Jacey Augusta (Peace and Conflict Studies Minor – Co-operative Program)
Al-khasawneh, Haneen Mohanad (Urban Studies Minor, Geography and Environmental Management Minor – Co-operative Program) *
Ate, Sharon Benita
Ayu, Msendoo Osinimu (Fine Arts Studio Minor)
Bauman, Justin Nicholas (Sociology Minor)
Bowers, Isabel (Co-operative Program) *
Brown, Whistler (Parks Minor)
Cameron, Katana Marie (Political Science Minor) †
Cha, Alexander Jae-hyun †
Chute, Simon Selig (Environment, Resources and Sustainability & Joint Honours Biology – Co-operative Program) †
Clarke, Alison Carol-Lynn (Geography and Environmental Management Minor – Co-operative Program) †
Dang, Matthew *
Davis, Evan Thomas James (Geography and Environmental Management Minor – Co-operative Program)

Dela Paz, Asher Legaspi (Geography and Environmental Management Minor – Co-operative Program) *
Dela Paz, Noah Legaspi (Geography and Environmental Management Minor – Co-operative Program) †
Dresser, Elle Anne (Geography and Environmental Management Minor, Peace and Conflict Studies Minor) *
Elliott, Natalie Paige *
Eves, Erika Lynn (Geography and Environmental Management Minor – Co-operative Program) *
Fatile, Favour Damilola (Urban Studies Minor – Co-operative Program) †
Frisella, Abigale Victoria (Geography and Environmental Management Minor)
Garby, Olivia Mary (Parks Minor) †
Guzmán Pichogagón, Yuly Patricia (Geography and Environmental Management Minor) *
Hunter, William Jacob Wayne (Parks Minor – Co-operative Program) †
Hussey, Holly Grace †
James, Victoria Tica Carolyn (Biology Minor – Co-operative Program)
Johnson, Trisa Rachelle Kalli (Political Science Minor, Legal Studies Minor) †
Johnston, Ethan Patrick (Co-operative Program)
Khan, Aalia Irshad (Environment, Resources and Sustainability & Joint Honours Biology) *
Kirkwood, Andrew Yekyaw Aung
Kumbhkarni, Mehika (Business Option – Co-operative Program)
Kwiatkowski, Claudia (Geography and Environmental Management Minor – Co-operative Program)
Landon, Grace Margaret (Parks Minor)
Lawrence, Zoë Jade (Co-operative Program)
Lee, Tegan Bethany (Co-operative Program)
Leiher, Ethan Christopher (Geography and Environmental Management Minor)
Li, Reuben (Geography and Environmental Management Minor)
Lukic, Nikola
Macchiusi, Brett Stefano (Geography and Environmental Management Minor, Parks Minor – Co-operative Program) †

Makaroff, Christine May *
McColeman, KayThi Grace (Geography and Environmental Management Minor) *
Muhammad, Roaha (Co-operative Program)
Naday, Baxter Mannix (Co-operative Program) *
Paxton, Shelby (Biology Minor – Co-operative Program) *
Petersen, Anne Ellen
Pleskina, Stephen James (History Minor)
Praveen, Sneha (Geography and Environmental Management Minor – Co-operative Program) *
Price, Samantha Anne (Co-operative Program) *
Ramos, Vanessa Judith (Co-operative Program) *
Reed, Bronwyn Tilbe Ember (Business Option – Geography and Environmental Management Minor) *
Rumer, Caroline Vandusen (Gender and Social Justice Minor) †
Self, Erin Cassidy (Economics Minor – Co-operative Program)
Shelley, Rebecca Lee (Geography and Environmental Management Minor) †
Succar, Justin Chukri (Geography and Environmental Management Minor, Entrepreneurship Minor – Co-operative Program) *
Suthar, Dharti (Geography and Environmental Management Minor – Co-operative Program)
Sutton, Brendan (Geography and Environmental Management Minor – Co-operative Program) †
Thompson, Caitlin Margaret (Geography and Environmental Management Minor – Co-operative Program) †
Tibbett, Jade Patricia (Parks Minor) *
Van Veen, Sarah Maaie (Co-operative Program) †
Vandendries, Emma Suzanne (Legal Studies Minor – Co-operative Program) †
Vuillier-Devillers, Clara Marie (Psychology Minor, Parks Minor – Co-operative Program) *
Wu, Kathryn Rebeccah (Classical Studies Minor – Co-operative Program) *

* – Distinction
† – Dean's Honours

HONOURS GEOGRAPHY AND AVIATION

Aravind, Tridha (Climate Change and Environment Specialization) †

Brown-Hozjan, Elena Claire (Climate Change and Environment Specialization) †

Crawford, Andrew Ross (Geomatics Specialization) *

Cummins, John James

D'Amico, Adam Daniel *

Dunne, Kyle Thomas †

El Shaboury, Eslam Abdou (Climate Change and Environment Specialization)

Farrell, Casey Kevin

Galushka, Anthony Daniel

Harwood, Johnathan Garrett (Geomatics Specialization) *

Maddick, Garrett Jeffrey *

Mouland, Benjamin Andrew †

Shaheen, Ahmed Hesham

Skorzewski, Samuel Antony *

Taylor, Ryan Trent †

To, Giao Hoang Phuong (Geomatics Specialization) †

Yu, Hoi Chun Sam †

HONOURS GEOGRAPHY AND ENVIRONMENTAL MANAGEMENT

Allan, Jessica Irene Audrey (Biology Minor – Co-operative Program)

Carpenter, Aidan (Public Policy and Administration Minor) †

Cheng, Xuhan

Croft, James Rex (Climate Change and Environment Specialization – Urban Studies Minor – Co-operative Program)

DeFreitas, Breanna Nicole (Climate Change and Environment Specialization – Co-operative Program) †

Drummond, Isabel Margaret (Economy & Society Specialization)

Du, Yun Yi (Earth Systems Science Specialization – East Asian Studies Minor – Co-operative Program)

Gallagher, Peter James (Climate Change and Environment Specialization) †

Hellreich, Kaleb Kolt

Ingosi, Gerrit (Geomatics Specialization – Co-operative Program)

Jiang, Yijie

Li, Leroy (Climate Change and Environment Specialization – Co-operative Program) †

Manocha, Simran (Aviation Specialization – Psychology Minor – Co-operative Program)

Marasigan, Warren Daniel (Co-operative Program)

Marnika, Nicholas Zvonimir (Aviation Specialization) *

Mecitoglu, Salih (Aviation Specialization – Management Studies Minor) †

Meyer, Marcus Ronald Angelo (Geomatics Specialization) †

Muller, Benjamin Cole (Co-operative Program) †

Poblete, Pia Colynn (Geomatics Specialization – Co-operative Program) †

Santia, Veronica (Earth Systems Science Specialization – Classical Studies Minor – Co-operative Program) †

Savarimuthu, Joshua Travis (Co-operative Program)

Scotland, Shania Tiffany Wonder (Co-operative Program) †

Sequeira, Christopher Anthony (Geomatics Specialization – Co-operative Program) *

Sun, Letong (Earth Systems Science Specialization – Co-operative Program) *

Van Caulart, Joycelin Adele (Earth Systems Science Specialization – Religious Studies Minor – Co-operative Program) †

Vicario, Kale Jade (Earth Systems Science Specialization) *

Yeung, Yuki Ching Yee (Climate Change and Environment Specialization – Psychology Minor – Co-operative Program) †

Zander, Carly Roseanne †

Zhang, Shijia (Earth Systems Science Specialization)

Zhu, Rui (Economy & Society Specialization) *

HONOURS GEOMATICS

Bailie, Ethan Alexander (Computing Minor – Co-operative Program)

Cameron, Noah Timothy (Computing Minor – Co-operative Program) †

Chow, Earl (Computing Minor – Co-operative Program) *

Coossa, India (Geomatics & Joint Honours English–Literature and Rhetoric – Creative Writing Specialization – Computing Option) *

Díaz Garduño, Ana Paula (Computing Minor – Co-operative Program) †

Diniz, Gabriel Sun (Computing Minor – Co-operative Program) †

Goyal, Siddhant (Aviation Specialization – Management Studies Minor – Co-operative Program)

Kim, Hamin (Computing Minor – Co-operative Program)

Lam, Erica (Computing Minor – Co-operative Program) *

Lau, Lucas (Computing Option – Co-operative Program)

Li, Meixuan *

Lin, Jingzhe (Business Option) *

Meng, Xinran *

Ng, Joshua Chi Lai (Co-operative Program) *

Nguyen, David Khoa (Computing Minor – Co-operative Program)

Parekh, Krishna Dharmeshkumar (Computing Minor)

Patel, Hetanshi Chintan (Business Option – Co-operative Program)

Pourdeilami, Siavash (Computing Minor – Co-operative Program)

Singh, Gagandeep (Climate Change and Environment Specialization – Computing Minor – Co-operative Program) *

Singh, Paramvir (Climate Change and Environment Specialization – Computing Minor – Co-operative Program) †

Sleeth, Joshua James (Computing Minor)

Song, Jiahe

Tamayo, Monique (Co-operative Program)

Tuen, Tsz Ying Belle (Climate Change and Environment Specialization – Computing Minor – Co-operative Program) *

Wang, Leqi (Co-operative Program)

Xiong, Yajing (Co-operative Program) *

Yan, Victor ChangJing (Climate Change and Environment Specialization – Computing Minor – Co-operative Program)

Yang, Justin Jacky (Computing Minor – Co-operative Program)

Zheng, Yufan (Co-operative Program)

* – Distinction

† – Dean's Honours

HONOURS INTERNATIONAL DEVELOPMENT

Bonsma, Jannelle Erinne (Research Specialization – Urban Studies Minor) *

Rasheed, Samreen (Research Specialization/Business Option)

HONOURS PLANNING

Aliu, Adrian (Economics Minor – Co-operative Program) †

Ao, Yushi (Philosophy Minor – Co-operative Program) *

Boyes, Noah James (Environmental Planning and Management Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Brar, Jasdeep Kaur (Land Development Planning Specialization – Co-operative Program) *

Budiwarman, Ray Nathan (Co-operative Program)

Burnett, Alexander Edward (Environmental Planning and Management Specialization & Land Development Planning Specialization – Co-operative Program) *

Calabrese, Emily Catherine (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program)

Campbell, Scott Craig Keith (Geography and Environmental Management Minor – Co-operative Program)

Chan, Sabrina (Urban Studies Minor – Co-operative Program)

Chee, Adrian (Decision Support and Geographical Information Systems Specialization & Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Chen, Amber (Co-operative Program) *

Chen, Weiye (Geography and Environmental Management Minor – Co-operative Program)

Cheung, Pak Yin (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Cheung, Sze Jet (Co-operative Program)

Chiu, Taylor Shawn (Geography and Environmental Management Minor – Co-operative Program) *

Clarkson, Emily Jean (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Cook, Noah Samuel (Co-operative Program)

Dalpati, Reeya Chetan (Land Development Planning Specialization & Urban Design Specialization – Co-operative Program) *

Dawan, Nyan (Urban Design Specialization – Co-operative Program)

D’Cruze, Elizabeth Victoria (Urban Design Specialization – Legal Studies Minor – Co-operative Program) *

Dhanani, Mika’il Arif Hassanali (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Dieleman, Andrew James (Decision Support and Geographical Information Systems Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Donaldson, Andrew James (Co-operative Program)

Fluit, Katrina Marie (Environmental Planning and Management Specialization – Co-operative Program) †

Garrard, Garrett Charles (Land Development Planning Specialization – Co-operative Program)

Gonsalves, Meaghan Angelina (Environmental Planning and Management Specialization – Environment, Resources and Sustainability Minor – Co-operative Program)

Greco, Melissa Jade (Decision Support and Geographical Information Systems Specialization & Urban Design Specialization – Co-operative Program) †

Guo, Jianbang (Urban Design Specialization – Co-operative Program) *

Halum, Danica Morgia (Co-operative Program) *

Hao, Ruohong (Urban Studies Minor, Geography and Environmental Management Minor – Co-operative Program)

Ho, Natalie Ka-Li (Urban Design Specialization – East Asian Studies Minor – Co-operative Program) *

Horn, Penelope Kathleen (Co-operative Program) †

Ilagan, Isabelle Georgia (Land Development Planning Specialization – Co-operative Program) †

Jay, Matthew (Co-operative Program) †

Johnson-Campbell, Tyson Boyd (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Khan, Amna (Land Development Planning Specialization – Co-operative Program) *

Khan, Musharraf (Land Development Planning Specialization, Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Khwaja, Hamza Imran (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Kim, Andrew (Decision Support and Geographical Information Systems Specialization, Land Development Planning Specialization – Co-operative Program) *

Kim, Doehyun (Urban Design Specialization – Co-operative Program) †

Kim, Ryan Dohee (Decision Support and Geographical Information Systems Specialization – Co-operative Program)

Kim, Yerim (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program)

LaMarre, Claire Catherine (Co-operative Program)

Lee, Julian (Environmental Planning and Management Specialization – Co-operative Program) †

Lee, Meaghan Jordan Valentini (Decision Support and Geographical Information Systems Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Leung, Hoi Yan Florence (Land Development Planning Specialization – Co-operative Program) *

Li, Jiaxin (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) *

* – Distinction

† – Dean’s Honours

Li, Trevor Julian (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Liang, Yueying (Land Development Planning Specialization, Urban Design Specialization – Co-operative Program) *

Lo, Emily (Environmental Planning and Management Specialization – Public Policy and Administration Minor – Co-operative Program) †

Ma, Alisha (Co-operative Program) †

Ma, Kathy (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Martin, William Stephen (Geography and Environmental Management Minor – Co-operative Program)

McCarthy, Caitlyn Avery Hogan (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) †

McGregor, Evan Ene (Co-operative Program)

Miller, Grace-Ann Elisa (Co-operative Program) *

Mittelstaedt, Maya Rose (Environmental Planning and Management Specialization – Environment, Resources and Sustainability Minor – Co-operative Program) *

Mo, Anthony Kai Kit (Geography and Environmental Management Minor – Co-operative Program) *

Nair, Ritika (Co-operative Program) †

Nix, Emily Bernadette (Co-operative Program)

O'Neill, Lexi Michaela (Land Development Planning Specialization – Co-operative Program) †

Owen, Michelle Jennifer (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Patel, Ayush (Land Development Planning Specialization, Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program)

Payne, Steven Joseph (Environment, Resources and Sustainability Minor – Co-operative Program) *

Rashid, Zoha (Co-operative Program) *

Razee, Abrar Jawad-Al (Urban Design Specialization – Co-operative Program)

Rosatone, Stefano Domenico (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Salyajivin-James, Tayvin Christopher (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program) *

Secnik, Janey (Environmental Planning and Management Specialization, Land Development Planning Specialization – Co-operative Program) †

Sluga, Owen William (Urban Design Specialization – Co-operative Program) *

Soldo, Alyssa Marie (Land Development Planning Specialization – Geography and Environmental Management Minor – Co-operative Program) †

Spencer, Nolan Lawrence (Urban Design Specialization – Co-operative Program) *

Su, Simmy (Geography and Environmental Management Minor – Co-operative Program)

Switzer, Samuel Jonathan (Environmental Planning and Management Specialization – Urban Studies Minor – Co-operative Program)

Syed, Ahasar Asghar (Urban Design Specialization – Co-operative Program) *

Tam, Michael James (History Minor – Co-operative Program) †

Tasnádi, Melinda (Land Development Planning Specialization – Co-operative Program) †

Thokchom, Pikru Singh (Geography and Environmental Management Minor – Co-operative Program) *

Vandermeulen, Peter Edward (Urban Design Specialization – Co-operative Program)

Vegter, Jared Aeric (Land Development Planning Specialization – Co-operative Program)

Willock, Samantha Grace (Land Development Planning Specialization – Environment, Resources and Sustainability Minor – Co-operative Program) *

Woodward-Caradonna, Rebecca Mary Josephine (Land Development Planning Specialization – Co-operative Program) *

Xue, Danny (Land Development Planning Specialization – Co-operative Program) †

Yong, Brendon (Co-operative Program)

Young, Rachel Mary (Geography and Environmental Management Minor – Co-operative Program) †

Yu, Matthew (Geography and Environmental Management Minor – Co-operative Program) †

Zhao, Linda Jiahui (Land Development Planning Specialization, Urban Design Specialization – Music Minor, Geography and Environmental Management Minor – Co-operative Program) †

Zhou, Jianqiao (Co-operative Program) *

Zigante, Adam Dejan (Urban Design Specialization – Geography and Environmental Management Minor – Co-operative Program)

BACHELOR OF KNOWLEDGE INTEGRATION

HONOURS PROGRAM

Andratis, Alexandra Xelaju (Collaborative Design Specialization, Science, Technology & Society Specialization – Environment, Resources and Sustainability Minor) †

Betel Miri, Setareh (Environment, Resources and Sustainability Minor)

Brubacher, Ashley Marie (Psychology Minor) †

Dale, Meghan Elizabeth (Science, Technology & Society Specialization – Anthropology Minor, Mathematics Minor) †

Daugavietis, Julie Kathryn (International Development Minor)

Faulkner, Sam Jones (Psychology Minor, Philosophy Minor) †

Fieguth, Anya (Peace and Conflict Studies Minor, Psychology Minor) †

Hannides Rajapakse, Alexander (Knowledge Integration & Joint Honours Mathematics) *

Harrington, Abby Grace (Environment, Resources and Sustainability Minor) †

Jinargyros, Spiro (Business Option) *

Martin, Kathleen Emily (Knowledge Integration & Joint Honours Psychology) †

Mather, Sarah Katherine (Collaborative Design Specialization – Psychology Minor) *

Miedema, Ian (Peace and Conflict Studies Minor)

* – Distinction

† – Dean's Honours

Moore, Zoe Gale (Science, Technology & Society Specialization – Human Resources Management Minor, Management Studies Minor) †

Oka, Zoe Clara Sachiko (Psychology Minor)

Paolini, Hannah Marie (Legal Studies Minor) *

Richardson, Sophia Marie Florence (Science, Technology & Society Specialization – Environment, Resources and Sustainability Minor) †

Saeed, Imaan Fatima (Cognitive Science Minor, Psychology Minor, Philosophy Minor) *

Tywonek, Stephanie Jillianne (Science, Technology & Society Specialization – Philosophy Minor) *

DIPLOMA IN CHINESE LANGUAGE I

Amer, Dalia

DIPLOMA IN ECOLOGICAL RESTORATION AND REHABILITATION

Harrington, Abby Grace
Johnson, Trisa Rachelle Kalli
Khan, Aalia Irshad
Lawrence, Zoë Jade
Naday, Baxter Mannix
Price, Samantha Anne
Wu, Kathryn Rebeccah

DIPLOMA IN ENGLISH FOR MULTILINGUAL SPEAKERS

Guzmán Pichogagón, Yuly Patricia

DIPLOMA IN ENVIRONMENTAL ASSESSMENT

Al-khasawneh, Haneen Mohanad
Ayu, Msendoo Osinimu
Bauman, Justin Nicholas
Bonsma, Jannelle Erinne
Boyes, Noah James
Brar, Jasdeep Kaur
Brown, Whistler
Chen, Keying
Clarke, Alison Carol-Lynn
Elliott, Natalie Paige
Eves, Erika Lynn
Gallant, Bennett Paul
Garby, Olivia Mary
Gonsalves, Meaghan Angelina
Guzmán Pichogagón, Yuly Patricia
Hou, Yi Tao
Huang, Leping
Johnston, Ethan Patrick
Khan, Aalia Irshad
Khan, Amna
Kim, Doehyun
Kumbhkarni, Mehika

Lee, Damian Jacob
Lee, Julian
Li, Chengzu
Li, Reuben
Lightfoot, Jacob Paul
Lukic, Nikola
Mittelstaedt, Maya Rose
Muller, Carissa Tamara Lin
Naday, Baxter Mannix
Pahwa, Vaibhav
Payne, Steven Joseph
Raitano, Ryan Alessandro
Ramos, Vanessa Judith
Rashid, Zoha
Rendalkar, Pranav
Singh, Jasdeep
Slater, Sofia Somani
Sluga, Owen William
Succar, Justin Chukri
Sukker, Akashdeep Singh
Suthar, Dharti
Vandendries, Emma Suzanne
Williamson, Elizabeth Katherin
Willock, Samantha Grace
Wood, Elizabeth Mae
Young, Matthew Ka Chun
Young, Rachel Mary
Zhou, Bo

DIPLOMA IN FRENCH LANGUAGE II

Poblete, Pia Colynn
Slater, Sofia Somani
Williamson, Elizabeth Katherin

DIPLOMA IN FUTURE CITIES

Tywonek, Stephanie Jillianne

DIPLOMA IN SPANISH LANGUAGE I

Andratis, Alexandra Xelaju

DIPLOMA IN SUSTAINABILITY

Dalpati, Reeya Chetan
Johnson, Trisa Rachelle Kalli
Ramos, Vanessa Judith
Santia, Veronica
Solimano, Franco
Wood, Elizabeth Mae

DIPLOMA OF EXCELLENCE IN GEOGRAPHIC INFORMATION SYSTEMS

Ao, Yushi
Chapman, Dorothy Lynn
Diniz, Gabriel Sun
Goyal, Siddhant
Kim, Hamin
Meyer, Marcus Ronald Angelo
Singh, Paramvir
Yeung, Yuki Ching Yee
Zhao, Linda Jiahui

CERTIFICATE IN EXPERIENTIAL EDUCATION

Andratis, Alexandra Xelaju
Daugavietis, Julie Kathryn
Rasheed, Samreen
To, Giao Hoang Phuong

CERTIFICATE IN GLOBAL EXPERIENCE

Slater, Sofia Somani

* – Distinction

† – Dean's Honours

Outstanding Achievements

MEDALS AND AWARDS

UNIVERSITY FINALIST FOR THE GOVERNOR GENERAL'S GOLD MEDAL

Doctoral

Fraser Dennis Murray King

UNIVERSITY FINALIST FOR THE GOVERNOR GENERAL'S GOLD MEDAL

Master's

Tatianna Marie Brierley

GOVERNOR GENERAL'S ACADEMIC SILVER MEDAL

Highest standing in an undergraduate degree program

Carly Roseanne Zander

THE UNIVERSITY OF WATERLOO ALUMNI GOLD MEDAL

Outstanding academic achievement

Paramvir Singh

DEPARTMENTAL AWARDS

Distinguished Academic Achievement

Environment and Business –

Qinyi Zhou

Environment, Resources and

Sustainability – **Sharah Valentina**

Francis Gallego Meneses

Geography and Aviation –

Giao Hoang Phuong To

Geography and

Environmental Management –

Yuki Ching Yee Yeung

Geomatics – **Paramvir Singh**

Knowledge Integration –

Alexandra Xelaju Andratis

Planning – **Pak Yin Cheung**

Waterloo brings home the gold

Alumni Gold Medal recipients share in the pursuit of discovery, so we created a lasting symbol to honour their achievements.

Since 1970, Alumni Gold Medals have graced the convocation gowns of our top undergraduate and graduate students. The Royal Canadian Mint produced these medals in the past – but in the true spirit of Waterloo, we've decided to make them ourselves.

Carefully crafted on campus in state-of-the-art labs, each medal is created out of nickel superalloy using a 3D printer. The surface is finished by hand to produce a brilliant shine. Through the process of electroplating, the medal is then coated in 24-carat gold. The result is a tribute to Waterloo's most accomplished graduates, made for each proud recipient by members of the University community.



GO INSIDE THE LAB AT
uwaterloo.ca/impact-stories/new-gold-medals

**CONGRATULATIONS TO THIS YEAR'S ALUMNI GOLD MEDAL RECIPIENTS!
YOU HAVE MUCH TO CELEBRATE, AND EVEN MORE TO ANTICIPATE
IN YOUR FUTURE AS UNIVERSITY OF WATERLOO ALUMNI.**

Our tradition of regalia

THE GOWN

At the University of Waterloo, as at most universities, academic robes are worn only on these special occasions. In the Middle Ages, robes were everyday clothing, and some students were so poor they had nothing else to wear. The black wrapper now called a “gown” served them as jacket, coat and sometimes bedclothes. Stone college buildings of the Middle Ages were unheated and the colourful “hood” could be pulled up to help keep out the cold wind. Today, the officers of the University, faculty members and graduating students all wear garments that are symbolic, not functional.

The scholars and students in long-ago universities were generally monks and other members of church orders. Over time, their vestments came to identify their universities. There are many variations, and the exact hood, gown or hat worn by an individual are determined by the university where they qualified. The array of colours and styles demonstrates the worldwide range of universities from which Waterloo’s faculty have come.

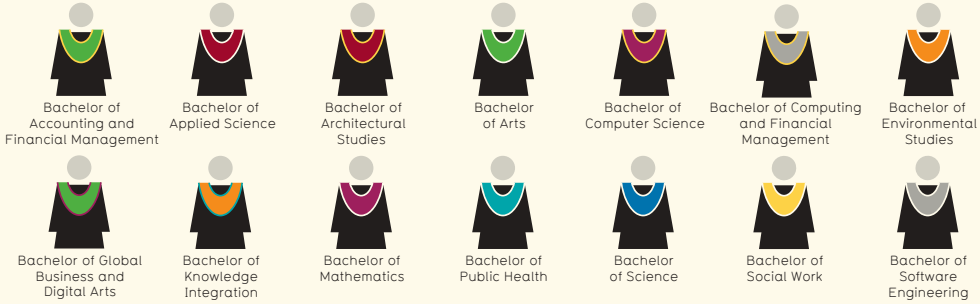
THE HOOD

Hoods are unique in design and colour to each degree and each university. The academic dress chosen for Waterloo is patterned after that of Oxford, the world’s oldest English-speaking university. The chief officers on the convocation platform – the Chancellor (the ceremonial head of the University) and the president (who is also Vice-Chancellor) – wear gowns of the Oxford cut and trim, each with its own distinctive colour. The gowns worn by recipients of honorary degrees have the same design, as do the black gowns worn by candidates for regular degrees, and the red-and-green gowns which are Waterloo’s regalia for Doctor of Philosophy degrees.

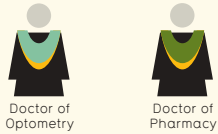
The ritual at convocation reflects the old custom that anyone in a university could wear a gown, but a hood was the symbol for a degree.

Academic Dress

BACHELOR'S



PROFESSIONAL DOCTORATE



MASTER'S



DOCTORAL



CONVOGATION



uwaterloo.ca

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