

Published by the Retirees Association and the University of Waterloo

## **FROM OUR PRESIDENT** — Greetings to everyone!

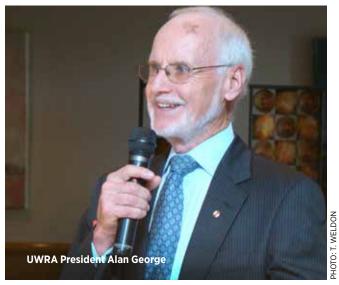
by Alan George

Greetings to everyone! By the time this reaches you spring will have arrived in force, leaves will be out, and flowers will be blooming.

As noted in the last WATtimes, a number of events planned this spring and early summer will be of interest to many of you. Details and updates can be found on the UWRA website. On April 20 an all-day event featured tours of the numerous new buildings and additions that have "arrived" on campus since many of us have retired. Between the morning and afternoon segments a delightful luncheon was provided by the University with remarks from President Hamdullaphur about the important role that the retirees have played in creating the university of today. The modest cost of this event is due to generous support from UWaterloo via Kelly McManus's Community Relations office. Our spring luncheon on April 25th was an illustrated lecture by Ken McLaughlin drawn from his extensive research on UWaterloo's history. Then, on May 17th, there will be an all-day

excursion to Brantford featuring a visit to the First Nations Woodland Cultural Centre, lunch, and a theatre presentation of 40s, 50s and 60s music. (We are immensely grateful to Terry Weldon who has, in addition to his duties as Past President,

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HIGHLIGHTS » 50 YEARS OF MATHEMATICS » JOIN THE UWRA! » REMEMBERING JIM KALBFLEISCH





## **WAT**times

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## PRESIDENT'S MESSAGE CONTINUED ...

organized our coach tour program in the absence of someone else to do these tasks.) Finally, our annual AGM will be held on May 29th. A number of Board members are coming to the end of their terms or have indicated they wish to step down, so there will be new vacancies on the Board in addition to those that are there now. Please let any of us on the Board know if you have an interest in joining us and to serve our university. In the press of other commitments I have not had time to go through the minutes and historical material about the UWRA that Terry Weldon and I retrieved last summer. However, here is what I gleaned. Generally, the first full year of the existence of the UWRA was, understandably, focussed on establishing its presence and role within the university along with bolstering its membership and establishing a governance structure. The relationship between UWRA and senior administration appears to have been very positive. Pat Robertson supported the official recognition of the UWRA as representing retirees, and provided some "seed money" to the association. He, together with then Dean of Engineering, Bill Lennox, provided office space in Engineering 2. Bill Deeks donated a desk, typewriter, sofa and chairs. Less positively, UWRA representation on the Pension and Benefits Committee initially faced some resistance, but representation was granted for a two year "probationary term" to be followed by a review. It is well established now that the UWRA has a permanent voting member on the P&B committee. Those early members of the UWRA executive deserve credit for persevering on the matter.

I look forward to seeing you at the various events planned this spring and summer.





## **SHAPED BY A SPIRIT OF INNOVATION**

# University of Waterloo celebrates 60 years of defying convention

It is said that necessity is the mother of invention. That was true of the times that inspired the University of Waterloo. In the 1950s, in the midst of the Cold War, there was tremendous concern that Canada was falling behind in engineering, science and technology. The world was moving into a new technological era, one that demanded a higher level of both knowledge and technical expertise.

The University's founders, particularly its first president Gerald Hagey, saw an opportunity to break with precedents that had been established by traditional universities, and chart a course that envisioned the country's future needs.

They created a university and a curriculum that would combine science and technology with the humanities; one that would bridge theory with technical instruction. Waterloo's co-operative education model had students doing work terms while pursuing their degrees. It was so controversial that other universities sought to block it.

The University of Waterloo is more than an academic institution, with an enterprising approach born from the entrepreneurial spirit of this community. Staff and faculty challenged convention to build an institution unlike any other — and retirees like you have remained deeply connected to Waterloo's success. You have been, and remain, crucial to our success as an institution.

The roster of the first board of governors reads like a who's who of the Waterloo Region, including Ira Needles, who had come from B.F. Goodrich Canada, Carl Pollock, of Dominion Electrohome Industries, A.R. Kaufman of the Kaufman Rubber Company, Carl Dare of the Dare Biscuit Company, A.M. Snider of the Sunshine Waterloo Company and other professional and community-minded leaders.

Over the decades, Waterloo didn't just change with the times. It anticipated the future and helped shape it. Research from the university found its way into smartphones, online security, contact lenses, connected vehicles, and even warnings on tobacco packages.

In the days when computers occupied entire rooms, Wes Graham, a highly regarded IBM computer expert joined the University's mathematics department and his leadership ensured that at Waterloo computers were not just for faculty and graduate students, but also for undergraduates in all Faculties across the University. WATFOR compilers, first developed by four undergraduate students in 1965 were used by students and professors at universities and in businesses around the world. Waterloo's reputation leapt forward.

Researchers at Waterloo who created new technologies were allowed to own their intellectual property. That wasn't the case at most other universities. This unique Waterloo culture resulted in spin-off companies such as Teledyne DALSA, OPENTEXT, Waterloo Maple (now Maplesoft) and Certicom among many others. By 2017 this list has grown exponentially and has placed Waterloo among the most innovative universities in the world.

In addition, from Kik in Waterloo to Unitron in Kitchener, some 1,000 technology companies in the region employ both its co-op students and alumni. Advanced manufacturers, such as Toyota and Com Dev in Cambridge, among scores of other companies, rely on Waterloo talent and research.

The University helped keep the community vibrant in the aftermath of global economic tsunamis. We no longer make rubber, but Google has moved its offices into the Breithaupt Block, once a rubber manufacturing facility. We no longer make leather, but Communitech and new technology startups occupy the former Lang Tanning Company building. The production of television sets shifted overseas, but the Electrohome building now houses Christie Digital Systems.

Today, another technological era is on the horizon, and it comes with new challenges.

Artificial intelligence using neural nets and future quantum computers will be able to mine vast amounts of complex information in ways never before possible. They will revolutionize everything from transportation to medicine. Sophisticated robots, driverless cars, new materials, nanotechnology and gene-editing tools will transform the way the way we live, commute, communicate, work and do business.

As Canada looks ahead, the faculty, staff and students of Waterloo are helping lead the way. From the Mike & Ophelia Lazaridis Quantum-Nano Centre that houses the Institute for Quantum Computing to the Waterloo Autonomous Vehicles Laboratory, we are not just reacting to the future. We are once again helping to shape it. Student groups, including the Waterloop team, have embraced this ethos. This group of 150 students — supported by our community — is competing with the best in the world to transform the future of high-speed transit.

As the country celebrates its 150th anniversary and the University its 60th, we can rightly take pride in our shared spirit of innovation to transform our community, our country and the world in the next 60 years.

We invite you to celebrate with us.

**Feridun Hamdullahpur**President and Vice-Chancellor

## Think about joining the UWaterloo Retirees Association

As part of the celebration of the 30th anniversary of the founding of the UWaterloo Retirees Association we have provided an update on the Association, including information about **membership** and a **link to our website**.

<u>uwaterloo.ca/retirees-association</u>



## **Aims and Objectives**

- To encourage retirees of the University of Waterloo to continue friendships and acquaintanceships and to foster fellowship among the members of the Association without regard to their former occupation or rank. We encourage all UWaterloo Retirees to join the Association. We especially welcome new retirees and seek their ideas as to how best to serve all of us who have been part of the University of Waterloo.
- Membership in the UWRA provides a way to keep in touch with the university and with former colleagues as well as opportunities to make new friends and acquaintances through a variety of social activities throughout the year such as a fall reception and spring and fall luncheons that include talks by invited special lecturers with expertise in specific interest areas.
- Association one of our aims has been to assist members to understand changes or improvements in pension/benefits. Officers of the University of Waterloo Retirees Association (UWRA), through liaison with the University of Waterloo administration, also seek to make all of us aware of changes in other university policies which may affect the members of our Association and to provide a forum for discussion about changes with may affect us. We need our retirees to become Members of the UWRA and to take an active role in the future of our Association and for the betterment of all of our colleagues.

- We also provide information about the Keystone Campaign and about retiree-funded bursaries and scholarships to University of Waterloo students.
- Membership offers special rates for tours, including visits to wineries, theatres, museums, boat trips, tours of historical interest, and many others.

We encourage you to take full advantage of all the Association has to offer by becoming a member (\$15 annually or \$130 for a life membership).

To become a member, visit our website to fill out the membership application and renewal form (uwaterloo.ca/retirees-association/membership-application-and-renewal-form) and mail your cheque payable to UWRA to:

Jim Marshall, Membership Co-ordinator Apt. 709-125 Lincoln Road, Waterloo, ON N2J 2N9 519-885-6279 | Email: jim.marshall@uwaterloo.ca



# Ralph Stanton and Mathematics @ UWaterloo: Surprising Beginnings

by Kenneth McLaughlin



**50 YEARS ADDS UP FOR FACULTY OF MATHEMATICS:** The Faculty of Mathematics 50th anniversary celebration kicked off on January 18 with a "first decade panel" that featured Professors **Jerry Lawless, Ian McGee, Ron Dunkley, Paul Schellenberg, Bev Marshman** and **Don Cowan**, and led by Steve Brown, telling stories about the faculty's early days from the 1960s and 1970s. PHOTO CREDIT: FACULTY OF MATHEMATICS

Sixty years ago, Gerald Hagey, the then president of a small Lutheran college in Waterloo, and its Dean of Arts, the Reverend Lloyd Schaus, hesitatingly approached the out-of-the-way garret-like office of a young Associate Professor at the University of Toronto. They were there to see if the professor was interested in coming to Waterloo College to become Head of a newly-formed Department of Mathematics. Hagey and Schaus were mesmerized by the eloquent, loquacious and highly opinionated professor who, while facing them, also wrote on the blackboard. This feat was a minor prelude to what awaited. In 1957 Ralph Stanton accepted their invitation and left Toronto

to become Head of Mathematics at an unprepossessing college in Waterloo.

Two years later and somewhat unexpectedly a newly-chartered University of Waterloo was in place. And Ralph Stanton had taken a surprising and sometimes controversial role in its establishment. Bristling with schemes and ideas Stanton soon began to push for the creation of a unique Faculty of Mathematics to be housed in a proposed Mathematics and Computer Building which would be larger than any other building on campus and with the largest computer system in Canada to be installed and listed in a provincial grant request as "furnishings." On this past

## **SURPRISE BEGINNINGS CONTINUED ...**

January18, retirees and other members of the Faculty of Mathematics gathered at the University's Federation Hall to celebrate fifty years since the founding of the Faculty and to reminisce about their days at Waterloo. Their recollections may

be found in the University Bulletin (Feb 1, 2017) along with a photo gallery posted on the events' Facebook page. It seemed an appropriate moment for WATtimes to recall Ralph Stanton's almost mythical role in charting these achievements. In later years he donated his personal papers to the UWaterloo Special Collections and Archives and participated in three separate oral history interviews. Part of his recollections, drawn from one of these interviews, an interview I conducted along with Cheryl Dietrich, a Public History M.A. student, as well as separate documentary sources, will be incorporated into the text which follows.

Stanton recalled that
President Hagey and Dean
Schaus "came to see me [at
the University of Toronto]
and they were both very
pleasant. Hagey did most
of the talking because
he was quite fluent and a
good speaker. He probably
made a better case than the

truth would have been... . And they offered me a professorship and the headship of the department, which [they suggested] was to become the university department, and it had certain attractions. They offered me a substantial increase in salary, because of course that was at the time when there hadn't been any raises in [the University of] Toronto for years and if you did get a raise of

\$50, you didn't get a promotion — promotion or raise were mutually exclusive ideas in Toronto. The challenge looked interesting so I allowed myself to be persuaded. I remember six months later after a meeting in Waterloo College, Ted Batke and I

were discussing things in the parking lot, and I think we were both much less optimistic than we had been earlier, and Ted said jokingly "well, I'm not turning down any good offers."

When we asked Professor Stanton about his ideas for creating a Faculty of Mathematics, he explained that "When I came here, I don't think it was in the back of my mind, I was just intent on building up a good mathematics department, in the broadest sense of mathematics, including applied mathematics and numerical analysis. Then when the split with Waterloo College came [in 1959], it was sort of agreed, I can't say whose idea it was, it was just sort of agreed as a consensus among president Hagey and the people in science and engineering that it would be a good idea if mathematics was in the Arts Faculty ... simply because the

[University]Arts Faculty was almost nonexistent. [Stanton had previously and with considerable controversy insisted that the University create its own non-Lutheran Arts Faculty quite apart from the Arts programs offered at Waterloo College.] In a sense this gave us a separate identity from Science, which is a good thing because, in most universities across Canada [at that time], Science means



"President Hagey and Dean Schaus came to see me at the University of Toronto. They offered me a professorship and the headship of the department ... When I came here I don't think that the idea of creating a Faculty of Mathematics was in the back of my mind."



A very young **Wes Graham** illustrating the mystery of computers to undergraduate students.

Physics and Chemistry; mainly Physics.... Chemistry was sort of accepted as a side issue and nothing else much amounted to anything. So I think that I preferred being in Arts because in Arts we did have a separate identity." [Stanton and his colleagues had first voted to be in Science and it was the political desire to force the creation of a new Faculty of Arts that led them to reconsider.] How fortuitous this was cannot be overstated, although as we shall see, Ralph Stanton was a master politician. Even in universities, or perhaps especially in universities, politics can play a vital and sometimes unexpected part.

Stanton's "political skills," his unique role in the university and the rapid expansion of the Mathematics department inexorably led him to seek greater recognition for his department. His areas of mathematics also set his department apart from other Canadian universities and had a particular applicability in the rapid and extraordinary development of the University of Waterloo. With regard to the use of computers, or "computation", as he liked to describe it, the introduction to his textbook used by Waterloo's students contained the following warning against blindly accepting computers: "I have tended to treat numerical methods as a part of empirical science rather than

as a branch of pure mathematics. I am not interested in a puristic approach, but in the fact that numerical methods give actual results which can be used in practical problems... . [T]he book is addressed to an audience whose concern is with solving problems, not with talking about solving them ... [To which he added]: Although the course embodied in the book was developed from the standpoint of hand and desk-calculator techniques, it can be considered either as a study in its own right or as a first step in preparation for work with digital computers."

I found Stanton's next admonition particularly insightful: "It is my personal belief that there should be a natural progression from hand calculation to desk-calculators and then to electronic computers, according to the complexity of the problems. I cannot sympathize with the view that students should start out with their eyes on an electronic computer — that they should run before they creep. Rather, I feel that the majority of workers in science and engineering can make great use of numerical methods without perhaps ever encountering a problem of sufficient length or complexity to justify programming it for an electronic computer. Even if the problem must ultimately be put on a computer, preliminary hand computation is always of value; it gives you a feeling about the problem, and about how large the numbers involved are. Such information is always of value since, despite the popularized nomenclature of 'giant brains,' computers are best described as the most unintelligent of slaves."

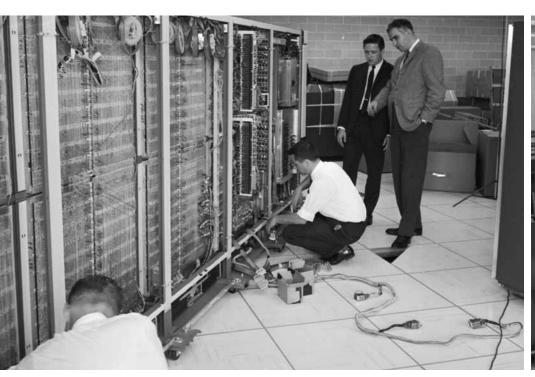
For Stanton Mathematics was as much an art as a science and his own area of expertise also led to an applied approach to the study of Mathematics. This was well suited to the new programs in Engineering which Douglas Wright, the newly-arrived and soon-to-be-appointed Dean, especially appreciated. [Wright later explained that he was attracted to

### **SURPRISE BEGINNINGS CONTINUED ...**

Waterloo partly because of Stanton's presence.] The positive relationship with Doug Wright was fortuitous for both of them and it profoundly shaped the destiny of the Mathematics Faculty and added to its reputation as a leading-edge program. Stanton recalled that "You have to remember that at that time [1959] ... most of the people in mathematics were in continuous mathematics — classical algebra and, especially, classical analysis — and classical analysts are extremely conservative mathematicians. So finite mathematics, which is of course the only type that can be done on a computer," was the focus of many of the courses taught to the burgeoning classes of Engineering students, a discipline in which Waterloo soon had the largest undergraduate enrolment in Canada.

Although it is fair to say that Stanton tentatively supported the early adoption of computing as an integral part of Waterloo's programs, fate intervened when a young executive with IBM missed his flight on the ill-fated Trans-Canada flight 810 from Vancouver

which crashed on December 9, 1956. As a result of the doomed flight 810 and impelled by a profound dislike of flying Wesley Graham was convinced to leave a promising career with IBM and to write to his former professor at the University of Toronto to ask if there was an opening in the mathematics department for him to teach statistics at Waterloo College. Stanton welcomed Graham's inquiry since Graham's primary interest was in developing a career in teaching; accordingly, Stanton arranged for him to receive a leave of absence to complete a PhD at Toronto. Frustrated by his experience at Toronto, Graham returned to Waterloo where at that time computing was mainly in the department of Electrical Engineering, directed by the department chair, Basil Myers. Graham's knowledge of computers indirectly led him to be added as a very junior member of the University's Computer Committee, but when Basil Myers left in a huff to return to the University of Illinois, Stanton and the other members of the committee pushed Graham to step into yet another fortuitously-created breach.





Installing early IBM computers in the Physics and Mathematics Building.

Stanton's assessment of the state of computing in Canadian universities reveals both the limitations of the time and the unique opportunity that existed at Waterloo. "It's probably true that there was in Canada at that time almost no interest in the applications of mathematics, much less finite mathematics, to the solution of practical problems simply because there basically was no contact with computational methods in most places, and where there was contact it was like the physics department at Toronto, where I mentioned, there was a certain lack of connectivity with both practical matters and mathematics." "A person like myself only knew the theoretical side of things, that is the usage procedures; Wesley knew the physical side, what computers could do, what we needed to have in order to do things, and I have always felt that he made an enormous contribution in that direction." Graham and Stanton's relationship was one of mutual respect and their friendship endured long after Stanton had left Waterloo. With Stanton and Graham and

Doug Wright as a team Waterloo's distinctive developments in computation and mathematics surged ahead of all other universities in Canada.

Stanton's unorthodox approach may also be seen in his support of Graham creating computer science days, his adoption of the high school Math contests formed under the leadership of Ron Dunkley and Ed Anderson, and in offering computing courses to undergraduate students in mathematics, science and engineering in the early 60s. In 1966 Stanton stopped Don Cowan who had completed a PhD in applied mathematics the previous year, greeting him in the hallway without preamble saying to him: "Donald, how would you like to be chairman of a Department of Computer Science?" Stanton and Graham had previously agreed that Cowan would be an excellent choice. And that was it. By 1972 the department, first called Applied Analysis and Computer Science, had 35 members and this initiative had established a leading position in a new and untried field.





## **SURPRISE BEGINNINGS CONTINUED ...**

Stanton's decision to offer Mathematics as an option to the program of Co-operative Education in 1964 also added new areas of study. Actuarial mathematics became an immediate addition to the curriculum as did an expansion of computer science. The rapid growth of mathematics and the increasing demand for its courses led to the suggestion that there should be a separate building to house the department of mathematics, an engineering, mathematics and science library and offices for Co-operative education. As the department grew, Stanton shaped its administrative structure to mirror a Faculty with its chairman as a de facto dean. In a memo to the Dean of Arts regarding increased faculty allotments, Stanton in 1964 commented, "Perhaps I should even say 'additions to a faculty [instead of department], since mathematics is now really made up of many sub-departments such as pure mathematics, applied mathematics, computer science, actuarial mathematics, logic, statistics, etc.." Stanton also reminded the dean that "Mathematics had enough students to warrant the idea of a separate Faculty structure being considered," although he conceded that this would be uncharted

territory. Not one disposed to wait, in April, 1965
Stanton approached President Hagey with a plan
for creating a Faculty of Mathematics. He conceded
that he was attempting to create something without
precedent. No other university in North America had
a Faculty of Mathematics, nor did the University have
an established protocol for considering it.

The politics are equally interesting. Members of the Arts Faculty were happy to see Mathematics move out on its own and to end Stanton's interference in their affairs. And as Stanton also recalled: "I know that within the Arts Faculty, when the faculty voted their opinion as to whether it was a good thing or not, we did win the vote, but that was largely because at least 40% of the people were in the mathematics department, which at that time was the largest segment, and we did get 100% support from all of the department heads in Arts — that was because they were all good friends of mine, like Bill Dyck, etc., who were quite willing to support us." In exchange for his earlier support of Doug Wright's desire to eliminate Engineering Physics, Stanton had support from Engineering for his ideas for a separate Faculty.



Premier John Robarts (I) and David Sprott the first Dean of Mathematics at the opening of the Mathematics and Computer Building in 1968.



Ted Batke, Douglas Wright, Norman High and in the background the hidden power broker, Ralph Stanton, at an early university convocation processing into the Seagram Gymnasium.

"Well, I've listened with interest to professor so-and-so's speech and as far as I can see he's given excellent reasons for the formation of the Faculty of Mathematics."

As Stanton told us, "When it came to a vote at Senate to create a separate Faculty of Mathematics only Science was opposed. There was never any ... the slightest doubt. I could have told you within two what the senate vote would have been because the main opposition came from the Faculty of Science. Pete McBryde, who was Dean of Science, spoke against it, although afterwards he met me in the parking lot and said, of course, he had been speaking mainly to be on the record because he knew that it was going to pass and that he was sure that we could still collaborate easily. I think that the main reason he spoke was in order to mollify [Noel Hynes] the Head of Biology, ..." McBryde and Stanton had both been at Toronto and were "old friends." From Stanton's pointof-view the "only really, I won't say eloquent, but the only really negative speech came from the Head of Biology. Pete's [McBryde's] speech was sort of saying that he was voting against it but it wasn't at all vicious or anything. And of course, the Head of Biology, in a way, was helpful because as soon as he had stopped

speaking, Archie Sherbourne [from Engineering] got up and said, "Well, I've listened with interest to professor so-and-so's speech and as far as I can see he's given excellent reasons for the formation of the Faculty of Mathematics." McBryde was a realist; he felt that we'd collaborated before and there was no reason we couldn't keep on doing that even though, as he said he knew, and he knew that I knew, that we were going to win the vote."

The somewhat hesitant visit to the University of Toronto by President Hagey and Dean Schaus shaped both Waterloo College and its then Associate Faculties in ways that no one could have anticipated. Neither institution would ever be quite the same again. I am sure that UWaterloo retirees have many more memories of those turbulent times. We hope that this short historical excerpt will lead to other submissions to the 60th Anniversary website.

[The establishment of the Faculty of Mathematics can also be found in *Out of the Shadow of Orthodoxy: Waterloo* @ 50 published in 2007].

# Celebration 2017 project will leave anniversary legacy on campus

by Kelly McManus, Senior Director, Community Relations & Events.

2017 is a tremendous year of celebrations at the University of Waterloo — not only are we marking our 60th anniversary as a University, but we are sharing in our national pride as Canada marks its 150th. The University believes that these important milestones deserve a lasting tribute, and as such we are embarking on a 2017 "legacy project" called Celebration 2017.



**Peggy Jarvie** and **Jeff Casello** are serving as co-chairs of a campus Steering Committee that will guide, advise, and champion a campus-wide engagement process and competition to create a lasting, physical tribute to 2017. Retiree **Sue Fraser** will be representing the Retirees Association on the Steering Committee. Drawing from the principles of the I3 Challenge from 2011-12, Celebration 2017 will engage cross-faculty student teams to submit applications that will be adjudicated by a jury and ultimately lead to the creation of a monument or gathering space on our campus that marks this milestone year.

## The Celebration 2017 Steering Committee will:

- » provide leadership and vision for the development of the legacy project;
- » provide regular updates to Executive Council;
- » advise on a comprehensive campus engagement strategy and ongoing communications to campus throughout the life of the project, ensuring transparency and momentum amongst all University of Waterloo stakeholders;
- » act as champions to ensure widespread engagement, leveraging the legacy project throughout the year as an opportunity for pride building during the 60th anniversary;
- » select a jury comprised of internal and external constituents;
- » draw on and respond to campus feedback as appropriate; and
- » solicit external feedback as appropriate.

A jury will also be selected to assist with the judging process. The winner is expected to be announced at the President's Town Hall in November, 2017.

## We remember ...

reported by Human Resources, University of Waterloo

## William Elsdon

William Elsdon December 5, 2016.

William Elsdon, one of two founders of the University's co-operative chemistry program, joined the Waterloo College Associate Faculties in October 1958 as an assistant professor in the Chemistry Department, retiring in October, 1987. For several years after retiring he continued to serve as an adjunct professor in the Chemistry Department. The department established the William Elsdon Thermodynamics Award in his honour, presented to the highest ranking Science student in second-year thermodynamics courses.

## Andrew Telegdi

Andrew Telegdi, University of Waterloo alumnus (BA Psychology '80) and longtime local politician, died on Monday, January 23.

Born in Budapest, Hungary, Telegdi and his family fled the country during the 1956 Hungarian revolution, and settled in Canada as refugees.

Telegdi attended the University of Waterloo and was active in student politics with the Federation of Students ultimately serving as its President.

Many UWaterloo retirees may recall the "Tent City" erected outside the Campus Centre to protest the shortage of student housing in Waterloo Region. There was a severe restriction in the supply of quality off-campus housing with many landlords accused of discriminating against student renters, or offering sub-standard accommodations. As many as 500 students were searching unsuccessfully for apartments in the summer of 1974. Telegdi used the "Housing '74" tent city project to temporarily house students and draw attention to the issue, and draw attention it did, with local and national media coverage. Quite a contrast is this to the superfluous nature of student housing in 2017.

In 1993, Andrew Telegdi, along with Waterloo History professor John English, became the first University of Waterloo alumni elected to Parliament. English represented the Kitchener riding and Telegdi the riding of Waterloo, which would later be renamed Kitchener-Waterloo. As the MP, Telegdi visited campus regularly and remained a familiar face at Waterloo lecturing in many courses, including a history course on the immigrant experience. He loved to recall his time as a student leader at the University of Waterloo and he took a strong interest in UWaterloo and in social justice issues including citizenship, immigration, and human rights.

## Robert Snyder

Professor Robert Snyder died September 27, 2016. He began his employment at the fledgling Waterloo College Associate Faculties (now the University of Waterloo) in 1958. As an associate professor, he taught in the Physics Department, specializing in biophysics. He also served as the first President of the Faculty Association of the University of Waterloo (FAUW). He took leave from 1965 to 1967 to teach biophysics at the medical department of the University of Western Ontario (now Western University), but in 1967 he returned to Waterloo rejoining the Physics Department where he was instrumental in creating the department's correspondence program. His wife, Mary Snyder, was an assistant professor in the Applied Mathematics department. They co-taught the first year physics calculus classes and became known as "Ma and Pa Snyder" to the students. Mary was the first woman to graduate from the University of Waterloo with a Master of Science (Applied Mathematics) degree. Robert and Mary retired together in June of 1990. Mary died in July 1996.

## Graham Gladwell

Distinguished Professor Emeritus Graham Gladwell died March 11.

A native of Sevenoaks in Kent, England, Gladwell taught at University College London, the University of the West Indies, the Massachusetts Institute of Technology and the University of Southampton before relocating his family to Elmira, Ontario in the late 60s.

Gladwell joined the University of Waterloo in 1969 as a professor in Civil Engineering. He was cross-posted to the Applied Mathematics department in 1979.

His research focuses included mathematical methods, the theory of vibration, elasticity theory, and matrix methods. He gained international recognition as a researcher, lecturer, author and editor in three areas of applied mathematics: vibration analysis, inverse problems in vibration and contact problems in elasticity theory.

He retired from Civil and Environmental Engineering in July 1999 and in 2001 was named Distinguished Professor Emeritus. His son Malcolm a noted journalist and author received an honorary degree from UWaterloo in 2007.

## Michael Sharratt

Michael (Mike) Sharratt, distinguished professor emeritus, former dean of applied health sciences and president of the Schlegel — UW Research Institute for Aging, died on Friday, December 23, 2016.

Mike joined the University of Waterloo in 1974 as assistant professor of kinesiology in the recently formed Faculty of Human Kinetics and Leisure Studies. He served as chair of the Department of Kinesiology from 1980 to 1986 and associate dean, graduate studies and research from 1991 to 1995. He was appointed dean of the Faculty of Applied Health Sciences in 1998 and re-appointed through 2005

An expert in physiology and the plasticity of aging, he built an impressive record of teaching and of service to his profession and the community. He was awarded the Distinguished Teaching Award in 2008 and inspired decades of students with his profound knowledge and passion for helping people with heart disease. He was a former president of the Canadian Association of Cardiac Rehabilitation, and of the Canadian Society for Exercise Physiology, and co-chaired the development of Health Canada's Physical Activity Guides for Children and Youth. Off-campus, Sharratt spent many years as an international wrestling official including two Olympic Games, dozens of world championships and was inducted into the Canadian Amateur Wrestling Hall of Fame in 1994.

He was a founding member of the Waterloo Regional Cardiac Rehabilitation Foundation Inc. (Hardy Hearts). He was instrumental in establishing the Lyle S. Hallman Institute for Health Promotion and the Manulife Wellness Centre where he was the major energy behind the development of community and clinical exercise programs including UW Fitness, UW WELL-FIT and Teens in Motion. After more than a decade of planning and lobbying, an innovative partnership spearheaded by Ronald Schlegel led to the creation of the Schlegel — UW Research Institute for Aging and Ontario's (RIA) first purpose-built teaching long-term care home on a university campus. As part of his legacy, these programs have not only changed lives but provide models and lessons to be replicated for years to come.

"Mike was a force of nature, seizing opportunities to build and develop this Faculty that he cared passionately for," says James Rush, dean of Applied Health Sciences. "His dedicated leadership of AHS was instrumental in assembling and nurturing what is now his legacy of outstanding people, programs and places. As we grieve his passing we are strengthened by his example of dedicated servant leadership. His colleagues on Dean's Council recall that Mike was incredibly fair-minded seeking the best interests of the University in the face of often conflicting interests.

# RETIREES ASSOCIATION | retirees.uwaterloo.ca

## **David Copp**

Leaving a successful career in industry, in 1965
David Copp joined the fledgling Co-operative
Education Department. David was enthusiastic about
the concept of Co-operative education and took
great pride in his relationship with students and
their employers. David also took an active role in
recording the history of these early years. An active
member of the UWaterloo Retiree's Association after
he retired in 1990 he was one of the members who
led the Retirees Association to organize and conduct
a wide-ranging oral history project which resulted in
the extensive collection now available through the
University Library's Special Collections Department.
David passed away on February 27, 2017.

**William A. Ross** passed away November 25, 2016. Bill started working at UWaterloo in December 1990 and worked as a Custodian in Plant Operations prior to retiring on May 1, 2006. Bill is survived by his spouse, Pauline.

Retiree **Glenn Yates** passed away December 4, 2016. Glenn started at UWaterloo in July 1967 and retired July 1, 1984. He was predeceased by his spouse, Mava.

**Barbara Lefcourt** passed away February 28, 2017. She was the surviving spouse of Professor Herbert Lefcourt who died in 2011

### **Patricia Bow**

Deceased: January 7, 2017 Start date: August 1, 2000

Retired: August 1, 2011 (Communications Officer,

Communications and Public Affairs) Survived by spouse, Eric Bow

## **Ida Grespan**

Deceased December 23, 2016 Start date: October 1, 1968

Retired: December 1, 1985 (Dark Room

Technician, Graphic Services)

### **David Forrest**

Deceased: January 14, 2017 Start date: September 6, 1988

Retired: January 1, 2013 (Mechanic 1, Plant Operations)

## **Professor Ronald Lambert**

February 1, 2017.

Start date: September 1, 1966

Retired: September 1, 2004 (Professor, Sociology)

Predeceased by his spouse, Marilyn

## **Irene Rickert**

Deceased: February 8, 2017 Start date: August 22, 1966

Retired: May 1, 1980 (Technician — Biology)

Predeceased by spouse Earl

## **Frank Burgess**

Deceased: February 14, 2017 Start date: August 1969

Retired: May 1, 1986 (Staff Relations Assistant —

Human Resources)

### **Grace Matthison**

Deceased: February 6, 2017 Start date: Sept 2, 1969

Retired: Oct 1, 1988 (File Clerk — Purchasing)

Predeceased by spouse George

Retiree Lydia Miller passed away February 17/17.

Start date: Sept 12, 1966

Retired: June 1, 1992 (Food Services Assistant — Village 1)

Retiree **Dorothy Busch** passed away

December 28, 2016 Start date: June 15, 1960

Retired: September 1, 1991 (Secretary/Admin.

Assistant — Registrar's Office)

**Betty Jean Collicott** passed away October 14, 2016. Betty joined UWaterloo in 1974 as a Custodian in Plant Operations. In August of 1981, she transferred over to Village One as a Housekeeper where she worked until retirement on June 1, 2007. She was predeceased by her husband, Manus in 1999.

## Remembering Provost Emeritus Jim Kalbfleisch

reported by the **University Bulletin** (April 27, 2017)



Provost Emeritus Jim Kalbfleisch died on Sunday, April 23 at his home in Waterloo.

Jim served as Vice-President Academic and Provost from 1993 to 2000 during a time of enrollment expansions and funding cuts that led to the special early retirement program (SERP) in 1996. His leadership, solid judgment and unwavering commitment to the University kept Waterloo on an even keel through a historically challenging period for the province's post-secondary sector. In his retirement Jim had been an active member of the UWaterloo's Retirees Association and continued his long commitment to improving the benefits of UWaterloo for all retirees. He was on our Board from 2001-2009; keystone campaign representative from 2002-2004; Vice-President of the Retirees

Association 2004-2005; President 2005-2006; Past-President 2006-2007 and Treasurer 2007-2009. He will be sorely missed.

Jim did his undergraduate studies at the University of Toronto. He received his Master's degree in 1964 and PhD in Mathematics in 1966 from the University of Waterloo. His PhD thesis, entitled "Chromatic Graphs and Ramsey's Theorem," was supervised by Ralph Stanton.

He joined the Department of Mathematics during a key period in its development He began teaching in the Department of Mathematics in 1964, and when the Faculty of Mathematics was formed in 1967. With David Sprott in dual roles as Dean of the Faculty and Chair of the Department of Statistics, Jim was appointed Associate Chair of the department. He took on many responsibilities in the new statistics department, and guided it through its early years as new faculty members were hired and courses were mounted. At the end of Sprott's term in 1975. Jim became Department Chair and served until 1979. During those formative years, the department developed internationally recognized programs of research and teaching in both statistics and actuarial science. Prior to serving as Vice President, Academic and Provost, Jim served as Associate Provost, Academic Affairs from 1990 to 1993, Dean of the Faculty of Mathematics from 1986 to 1989, and Chair of the Department of Statistics (now Statistics and Actuarial Science) from 1975 to 1979.

The position of provost was created in 1987 (prior to that, the job was known as Vice-President, Academic) and was described as the University's "chief operating officer," covering responsibilities that at many other institutions would be handled by an array of vice-presidents academic, administration, and finance (Indeed, after Jim

announced his retirement, some of the provost's duties were transferred to a new position of vice-president, administration and finance held by Dennis Huber).

Jim served as provost under James Downey and David Johnston, drafting budgets, presenting them to finance committees and the board of governors, and conducted meetings with staff and faculty leaders about policies and working relationships. He also prepared enrolment and construction plans and negotiated them with the provincial government, chaired the weekly dean's council meetings, and made final decisions on a multitude of business and personnel issues, all the while managing the University through salary rollbacks, massive early retirements, enrolment expansion and changes in the terms of employment for faculty members. Over his many years of service to UWaterloo Jim helped lay the groundwork for how the University accommodated its share of the "double cohort" of Ontario high school graduates in 2003 as the province phased out its fifth year of high school.

Jim retired in early 2001, having spent 26 of his 34 years as a faculty member in major administrative posts.

Among the many tributes from his colleagues in the University's administration upon his retirement was this one from then-President David Johnston: "No one has shown more dedication to the university than Jim Kalbfleisch."

Former President James Downey told the audience at Jim's retirement party that his choice of Kalbfleisch as provost in the summer of 1993 was "the crowning decision of my career as a president" at three Canadian universities.

Then-Associate Provost Catharine Scott called him "the finest man this institution has ever seen."

In recognition of his contributions to the University, he was installed as Waterloo's first Provost Emeritus at Convocation in June 2001.

In addition to his skills as a university administrator, Jim was an outstanding teacher, known for his clear exposition. He was the author of the Springer-Verlag books Probability and Statistical Inference: Volume 1: Probability and Volume 2: Statistical Inference, first published in 1979, and republished in 1985. These books developed from course notes for Math 233 (which became Stat 230 and Stat 231 when the course was divided into two terms), and were the required texts for the Department's introductory courses for many years. In the preface to these books, he points out that "the content of Volume 2" is unusual for an introductory text. The importance of the probability model is emphasized, and general techniques are presented for deriving suitable estimates, intervals, and tests from the likelihood function." He was an early advocate for using computers in the teaching of Statistics, involving APL in much of his teaching. The basic ideas in Jim's books and his upper year course notes still provide much of the foundation for undergraduate statistics as taught today at Waterloo.

Jim was elected a Fellow of the American Statistical Association in 1975, and served as President of the Statistical Society of Canada in 1984. He was an avid bridge player, an active member of the KW Weavers and Spinners Guild, and enjoyed knitting and working in stained glass.

"He was critically important in developing the University of Waterloo and in working to maintain a sense of civility during some difficult times," remembers Kenneth McLaughlin. "His was a truly extraordinary career and he was a formative influence."

There are two scholarships for incoming students that bear his name: the James G. Kalbfleisch National Scholarship in the Faculty of Mathematics, and the James Kalbfleisch Entrance Scholarship at the University level.

With files from Professors Steve Brown, Jerry Lawless and Mary Thompson, who wrote the tribute to Jim on the Mathematics website.

## New retirees

reported by Human Resources, University of Waterloo

Name	Department	Position	Hire	Retire
Heather Murphy	Research Financial Analyst	Office of Research	Aug-84	1-Jan-17
lames Chambers	Microbiology Lab Technician	Biology	Sep-81	1-Jan-17
onel Burca	Custodian I	Plant Operations	Oct-89	1-Jan-17
lohn Medley	Professor	Mechanical and Mechatronics Engineering	Nov-81	1-Jan-17
Barbara Robinson	Associate Professor	School of Optometry and Vision Science	Aug-79	1-Jan-17
Villiam Bobier	Professor	Optometry and Vision Science	Jul-86	1-Jan-17
aul Johnson	Research Technician	Earth and Environmental Sciences	Sep-77	1-Jan-17
oan Marshall	Manager, Communications	Registrar	Mar-99	1-Jan-17
ieale DeVries	Equipment Operator	Plant Operations	Jul-75	1-Jan-17
1ary Synnott,	Administrative Co-ordinator, Women's Studies and Applied Philosophy	Philosophy	Aug-79	1-Jan-17
ernard Glick	Professor	Biology	Sep-82	1-Jan-17
rank Preston	Psychophsiology & ERP Lab Technician	Psychology	Jul-12	1-Jan-17
lizabeth Harnum	Executive Assistant	Office of Research	Nov-90	1-Jan-17
rancois Pare	Professor	French Studies	Aug-03	1-Jan-17
tephen Hitchman	I.T. Computer Specialist	Mechanical and Mechatronics Engineering	Nov-88	1-Jan-17
helley Bacik	Administrative Assistant	Centre for Teaching Excellence	Jan-01	1-Feb-17
loria Pageau	Accounting Analyst	Finance	Jul-98	1-Feb-17
arol Ann Treitz	Administrative Co-ordinator & Advisor Undergrad Studies	School of Accounting and Finance	Nov-06	1-Feb-17
lay Yan	Director	Retail Services	Aug-74	1-Mar-17
andra Avey (Watsor	) Optician	Optometry Clinic	Jul-86	1-Mar-17
oger Sanderson	Lab Director, Teaching	Electrical and Computer Engineering	May-76	1-Mar-17
anet Lynn Metz	Student Advisor	Co-op Education and Career Action	Feb-70	1-Mar-1
ilda Rottine	Custodial Foreperson	Plant Operations	Jan-80	1-Mar-1
lizabeth (Betty) Gor	al Accounting Co-ordinator	St. Jerome's University	May-01	1-Mar-17
nnette Dandyk	Administrative Assistant	Library	Jul-74	1-Mar-17
avid Gloor	Controls Technologist	Plant Operations	Jul-00	1-Mar-17

PLEASE NOTE: Letitia Burca's surname was incorrectly printed in the Winter 2017 issue as Burce instead of Burca. Our apologies.



## Campus Tour and Luncheon

Thursday, April 20, 2017





PHOTOS BY TERRY WELDON AND PAUL EAGLES









## UPCOMING EVENTS >> SAVE THE DATE

SAVE THE DATE for the upcoming **UWSA/UWRA Golf Tournament** to be held at Foxwood Golf Course on **Thursday, July 6, 2017**. Tee- off is confirmed for 3:30 p.m.

More information will be forthcoming on the UW Staff Association website.

## A unique UWaterloo initiative

In May 2015, **President Hamdullahpur** accepted an invitation from the UN Women's HeForShe campaign for the University of Waterloo to participate in their Impact 10x10x10 framework alongside governments, leading universities, and global businesses.

As part of this framework, we will:

- **»** Boost female student participation in STEM experiences and academic careers to build the pipeline of future female leaders in traditionally male dominated disciplines
- **»** Enhance female faculty representation to improve the campus environment today and drive towards parity in the future
- » Attract and advance female leaders into senior academic and administrative university positions



## Dinner celebrates International Women's Day at Waterloo

As part of the University of Waterloo celebration of its 60th anniversary, the 12th annual International Women's Day Dinner at Federation Hall was held on Friday March 3. In partnership with The Office of the President, University Relations, and the Women Studies program, over 350 staff, faculty, students, retirees and community leaders gathered to acknowledge the contributions that women at the University of Waterloo have made since its inception in 1957. The presence of former Deans Mary Thompson and Pat Rowe, several past members of the UWRA executive and other members of the UWRA, were highlights of the evening. The aim of the event was to raise awareness about gender equality and to recognize the University of Waterloo as a leader in striving towards this goal.

## WATCH IT!

## Anniversary video covers 60 years in 60 seconds



Each week in 2017, the Daily Bulletin will be featuring content highlighting the University of Waterloo's 60th Anniversary.

Watch video on YouTube:

www.youtube.com/watch?v=rP0kfKswqxA



« 2016-2017

## **BOARD OF DIRECTORS**

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## University Fund Representative, Scholarship and Bursary Program

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## Member-at-Large

Mary Thompson, 519-886-4393 61 Dorset Street Waterloo ON, N2L 3L9 Email: methompson@uwaterloo.ca

### Member-at-Large

Open

## **HONORARY MEMBERS**

Ester Kipp\* Kay Hill\* Harold Ellenton Marlene Miles Robin Banks\* Jim Kalbfleisch\* **Shirley Thomson Bob Norman** \* with us in spirit

## **UNIVERSITY LIAISON**

Kelly McManus Senior Director, Community Relations & Events University Relations University of Waterloo (EC3 128) 200 University Avenue West Waterloo, ON N2L 3G1 519-888-4567-31882

## MEMBERSHIP IN THE UNIVERSITY OF WATERLOO RETIREES ASSOCIATION

## MEMBERSHIP APPLICATION AND RENEWAL FORM

Date	
Amount	☐ Lifetime \$130.00 ☐ Annual (calendar year) \$15.00
Name	
Address	
Postal Co	de
Email	
Telephone	9

PLEASE NOTE: All those receiving UWaterloo pensions, including both UWaterloo retirees and survivors of UWaterloo retirees, should inform Wanda Speek, Human Resources, EC1 1128C, University of Waterloo, N2L 3G1 (wspeek@uwaterloo.ca) of any change of address or name.

If you have taken your pension out of the University and wish to ensure that you continue to receive WATtimes, please send **Jim Marshall**, UWRA Membership Co-ordinator, any change of address or name to **jim.marshall@uwaterloo.ca** or mail him at 709-125 Lincoln Rd., Waterloo, ON, N2J 2N9.

UWRA members should send email addresses or any changes to email addresses to Jim Marshall.

As a retiree, each year you will receive three issues of WATtimes, the newsletter of the University of Waterloo Retirees Association (UWRA).

All retirees, their spouse, ex-spouse, or surviving spouse plus those having had a significant association with the University are eligible for membership in UWRA. We encourage you to become a member (\$130 for a life membership or \$15 annually). Membership offers benefits and opportunities such as facilitating Pension and Benefits committee representation and publishing WATtimes, keeping in touch with the University and with former colleagues, making new friends, and enjoying a variety of social activities throughout the year at a special members' rate. Information is also available on the UWRA website, **retirees.uwaterloo.ca**.

In addition, the Board of UWRA has a comprehensive email list of all members who would like to receive additional members-only information from time to time between issues of WATtimes. Such information might include updates on pension and benefits discussions and changes, openings on bus tours, volunteer or part-time paid UWaterloo activities and other timely and relevant information as it becomes available. Joining this email list is entirely optional and does not change your membership in any way or add to the cost of membership. It is simply intended to improve communication with members who would like more current information sent directly to them as it becomes available. This email list will not be passed on to any other group or agency or used for any other purpose. The list is used occasionally as required.

To join UWRA, just fill out the form on this page and mail it, with a cheque payable to UWRA, to **Jim Marshall**, Membership & Records Co-ordinator, 709-125 Lincoln Rd., Waterloo, ON, N2J 2N9. Including your email address on your application will ensure that you receive additional information as described above. If you have any questions, please email Jim Marshall, **jim.marshall@uwaterloo.ca**.

## **MEMBERSHIP STATUS**

To determine your membership status, check the line above your name in the mailing address of WATtimes which shows your status. For example, DEC2016 means that you are an Annual Member and are paid up through December, 2016. LIFE2012 means that you took a Life Membership in 2012, and **no further fees are required**. An empty space indicates that you are not a member of UWRA.

## **RETURN UNDELIVERABLE CANADIAN ADDRESSES TO**

University of Waterloo Retirees Association University of Waterloo 200 University Avenue West Waterloo, ON N2L 3G1 Publications Mail Registration No. 40065122