LAR Life after retirement

Volume 30, Number 1 Fall 2023

New President's Message to Retirees



Dr. Om Prakash MALIK

President
Retirees Association
Professor Emeritus & Faculty
of Graduate Studies (EIMPS)
University of Calgary

elcome to the Fall 2023 edition of LAR.

I hope you all had an enjoyable summer and were not adversely affected by the wildfires that have severely affected Alberta and British

Columbia. I add B. C., because I know that several of the University of Calgary retirees settled in B. C. after retiring from the U of C. As you know by now, the University of Calgary Emeritus Association changed its name to the University of Calgary Retirees Association and extended its membership to all University of Calgary retirees at the October 2022 AGM. Efforts are being made to make all retirees aware of the formation of the U of C Retirees Association and invite all retirees to become members. Unfortunately, attracting retirees to become members of the association has been slow so far, but we hope that more and more retirees will consider

joining.

Scope of the presentations at the monthly meetings of association is also being broadened to make them of more interest to all retirees. I encourage and invite all U of C retirees to become members of the U of C Retirees Association and take active part in its activities. The next AGM of the association will take place on Wednesday, October 11 at 2:00 pm and we hope to welcome many new members at the meeting.

Wishing you all the best,

Om Malik, 2023-2024

President, U of C Retirees Association.

Winter programming: A six-month review

The following represents a different approach to capturing the first half of 2023 programs.

Rather than presenting lengthy articles summarizing content, we have chosen to provide brief summaries or abstracts of content.

Summaries or abstracts courtesy of Jocelyn Lockyer. January 2023.

The James Web Space Telescope: How it works, the Canadian contribution, and what we have learned so far.



Dr. Philip LANGILL

Associate Professor Dept. of Physics and Astronomy Director of Rothney University of Calgary

he James Web Space Telescope was launched in December 2021. Since then, it has provided spectacular

pictures of the Pillars of Creation, a region in our galaxy about 1,000 light years away, where new stars are born. It has been used to detect planets, circulating around nearby, stars, and is able to analyze chemical properties, such as the presence of water or CO 2. Canada, through the Canadian Space Agency, NASA, and the European Space Agency were major contributors to the design and construction of the telescope. For example, the construction of the Fine Guidance Sensor, used to stabilize

the line-of-sight during science observations, was one of the Canadian contributions. Locally, Matt Taylor received funding to analyze the movement of stars near massive black holes in distant galaxies.

For further information about the Rothney Astrophysical Observatory and its work, see: https://science.ucalgary.ca/rothney-observatory

February 2023

New considerations for using wearable technology outside the laboratory: Is your smartwatch actually smart?



Dr. Reed FERBER Professor of Kinesiology and Nursing University of Calgary

earable sensor technology (e.g., Garmin, Fitbit, and Apple watches) are studied in the We-TRAC CREATE Training Program with the goal of discerning how this technology can be advanced, how health care can be advanced,

how urban planning can be transformed by examining people's walking and cycling behaviors and promoting active living. There are challenges with these studies, as a much as one-third of people will abandon their devices within 6 months and many companies don't do or don't publish validity studies to assess the accuracy of the devices. Nonetheless, while the accuracy of 'steps' may be questioned, GPS and heart rate measurements are likely to be more accurate. Greater accuracy is also obtained with data from middle-aged people and from those

who swing their arms when walking and wearing watches. There is clinical evidence that wearable technology can predict rehabilitation outcomes and determine who would benefit from programs.

For those interested in becoming a citizen scientist and participating in studies involving wearable technology, go to https://wetrac.ucalgary.ca.

March 2023

Walkable city design for promoting health and well-being.



Dr. Gavin McCORMACK

Associate Professor Cumming School of Medicine Dept. of Community Health Services University of Calgary

dults and children make decisions to walk, cycle, or drive depending on the **L**interplay between the connectedness of streets, proximity to recreation facilities and non-recreational destinations, land use designation, residential or population density, and traffic safety. This interplay has demonstrated an impact on obesity, depression, injuries, and self-reported quality of life. For example, more time spent in a car is associated with overweight and obesity, greater waist circumference, type 2 diabetes, pedestrian and cyclist injuries, and respiratory problems related to air pollution. Conversely, cycling and walking for transportation, such as commuting, are associated with all cause mortality, particularly lowered cardiovascular risk. Initiating physical activity even later in life (i.e., at age 50) impacts health and can increaselife expectancy by up to 3.7 years.

Calgary has three prominent types of

design: a grid design (found in the areas closesttodowntowndevelopedpriorto 1950), warped grid (hybrid design) and a curvilinear design (Further from downtown in newer neighbourhoods with few accesses points off of major arteries). Grid designs afford the greatest walkability/cyclability to shops, jobs, entertainment and access to frequent public transportation. Conversely curvilinear designs provide built support for people to walk and cycle, although they may have more green space. People living in high walkable areas (e.g.,griddesign) undertake more walking and cycling regardless of their age, sex, education, income, or access to a vehicle.



Dr. Alexandre de BARROS

Professor of Civil Engineering University of Calgary

autonomous (self-driving vehicles such as Tesla) and connected vehicles (i.e., vehicles that can engage in bi-directional communication with other vehicles, mobile devices, and city intersections) provide opportunities to consider road

safety. Drivers, multiple types of vehicles, pedestrians, cyclists, and road conditions and ensuring the technology is robust enough to consider current and future variables all need to be accommodated. Current examples include software for autonomous vehicles requiring drivers to be awake and have their hands close to the wheel with requests that drivers nudge the wheel every two minutes. Cruise control technology has also been adapted to enable drivers to maintain appropriate distance between vehicles. Future development will require that autonomous vehicles can stop instantly and draw on data from other vehicles on the road as well as road conditions.

Air travel safety, in part, depends on air traffic controllers who manage specific air space using ground radar and aircraft. The routings, which relay on established travel routs (e.g., great circle route) don't necessarily result in the greatest efficiencies. In future, work on automatic dependent surveillance broadcast systems will enable GPS to determine the shortest routes and enable communication through digital data displaying information about surrounding traffic on-board to the pilot. In turn this will enable air traffic controllers to manage more planes effectively increasing the numbers of planes.

April 2023

Alberta Politics



Dr. Lisa YOUNGProfessor
Dept. of Political Science
University of Calgary

I t was going to be a close election as Dr. Young noted, sx weeks prior to the election. There were many dynamic forces at play with the attention on Danielle Smith, United Conservative Party, who ultimately was elected Premier and Rachel Notley, New Democratic Party. In the end, Smith received overwhelming support from rural areas, Notley from Edmonton, and Calgary was mixed resulting in 49 UCPMLAs and 38 NDPMLAs.

There were interesting forces at work during the election period. The demographic composition of the province has changed; Calgary is more ethnically diverse with 25% of its population from visible minorities. There increasingly urbanization with a 2.7% reduction in rural population from 2016 to 2021. The opposition has been effective as Rachel Notley and several of the NDP candidates formed a previous government and are aware of government's inner workings.



Internally the UCP has not been particularly stable in its leadership. COVID has also played a role in de-stabilizing workplaces, the health system and education. There were differences in the approaches taken to the election. The UCP valued freedom, private over public ventures, cost control, oil, and gas as well as "Albertanism" (a belief that Alberta has superior capacity to deliver on public services in contrast to the federal government). Conversely, the NDP can be

described as pragmatic, supporting public over private ventures, balancing oil and gas with renewables, having a focus on equity and inclusion. They also support public delivery of health services and legislated standards in the public sector. For those interested in following Lisa Young and Alberta politics, check out https://lisayoung.substack.com/

May 2023

Development of advanced aerial and multilegged robotic systems for urban search and rescueoperations inside confined spaces

Dr. Alejandro RAMIREZ-SERRANO



Professor
Dept. of Mechanical and
Engineering
Director pf Roboratorium UVS
Laboratory
University of Calgary

Rescue Robots can be sent into a range of natural disasters (e.g., collapsed buildings, earthquakes, floods, and fires) before sending in highly skilled first responders. Unmanned vehicle systems (UVS)—both the multi-legged ground and aerial systems—collect information and

send back data. Current research focuses on developing equipment that is high-speed allowing the UVS to move into dynamic environments; enables work in challenging, restricted and hazardous spaces to remove humans from entering confined spaces where hazardous and life-threatening conditions exist (e.g., repair of storage tanks, refineries, and sewer maintenance); and offers full autonomy sothat UVS equipment is configured to operate in environments that have internal and external disturbances (e.g., landing on moving vessels in rough waters, sloped surfaces). Research focuses on highly maneuverable Unmanned

Ariel Vehicles (UAVs), aerial manipulators, transitional UAVs, supersonic UAVs, acrobatic maneuvers for humanoid robots, multi-contact locomotion for multi-legged robots, control of reconfigurable hybrid robots and design and control of highly maneuverable UAVs.

For those interested in following this research, go to the Robortaium Laboratory https://www.uvs-robotarium-lab.ca/ and 4FRONT Robotics https://www.4frontrobotics.com/

Membership Application / Renewal Form



NOTE: **Membership year begins September 1.** if this is a renewal and there have been no changes (address, phone, email, etc) then it is not necessary to fill in the form. Simply indicate "No Changes."

Name	Telephone:
Home address	Telephone:
	Fax:
	E-mail:
Faculty/Department affiliation	Year of Retirement:

Amount of payment - \$25.00 (\$15.00 if you live out of Calgary) – for a complete fee structure, see the website: http://retirees.ucalgary.ca/fees

Mail Membership Application/Renewal together with a cheque, payable to Emeritus Association, to:

Dr. Arvi Rauk, Emeritus Association Treasurer/Membership 5287, Dalcroft Cr. N.W. Calgary, AB T3A 1N6

NOTE: by applying for or renewing your membership, you agree to receive occasional emails from the Emeritus Association

Payment may also be made on-line by Interac e-transfer

NOTE: if payment is by **Interac**, please fill out this form, convert to PDF format, and attach to an email to: emeritus@ucalgary.ca

NOTE: if this is a renewal and there have been no changes (address, phone, email, etc) then it is not necessary to fill in the form. Simply indicate "No Changes" in the Interac message box.

Interac (www.interac.ca): (see description at http://www.theglobeandmail.com/globe-investor/personal-finance/e-mail-money-transfer-is-the-better-way/article4190103/)]

If you do not have it already, get access to your bank accounts on-line through your bank (the example here is for First Calgary Financial)

[1] under Transfers, find and click <u>Send INTERAC® e-Transfer</u>

Choose Add New Recipient (This only needs to be done once)

Name: Emeritus Association Email: <u>retirees@ucalgary.ca</u> Preferred Language: En Send Transfers by: Email

Security Question: What is this payment for?

Answer: membership

You will be asked the amount of payment - enter 25.00 (15.00 if you live out of Calgary)

You will have the opportunity to send a message - say "Membership for EA"

Depending on your bank and type of account, you may be charged a transfer fee of \$1.50.

Suggested wording for payment of Luncheon tickets and membership payments

Payment may be made in three ways:

- 1) In cash
- 2) By personal cheque payable to Emeritus Association, or
- 3) By Interac email transfer to Emeritus Association, email: retirees@ucalgary.ca

Retirees Association - The University of Calgary

President's Luncheon, Carriage House Inn, 14 June 2023









(L. To R.): Glen and Cheryl Campbell, Nan and Andrew Pernal.







(L. To R.): Ron Murch, Mary Valentick Gerol Krigo, No. 1 - FALL 2023)



September – December 2023 Monthly Activities and Presentations

SEPTEMBER 20 | AT2:30 P.M. Location: St Andrews Anglican Church, 1611 St. Andrew's Place NW. Mostly Broadway Trio. Presenting After All These Years. Performers will be Rihard Hayman, Professor Emeritus, Werklund School of Education, Kathryne Perri Edwards, and Malcom Edwards, Professor Emeritus, School of Performing Arts.

OCTOBER 11 | 2:00 P.M.-3:30 P.M. Annual General Meeting. Followed by **Dr. Yvonne Poitras Pratt**, Associate Professor and University of Calgary Research Excellence Chair, Werklund School of Education. **Topic:** Metis Matters: Then and Now, at Engineering. **Location:** D Block, 2nd Floor, Room ENG 207.

NOVEMBER 8 [2:00 P.M.-3:30 P.M. Dr. Sara Hastings Simon, Associate Professor, Department of Geosciences, Faculty of Science, and Assistant Professor, School of Public Policy. **Topic:** Understanding the energy transition at the intersection of policy, business, and technology. **Location:** Engineering, G Block, 2nd Floor, Room ENG 207.

DECEMBER | Christmas Luncheon: Information about this event to be announced later.





Executive Committee 2022 / 2023

PRESIDENT Om Malik **PROGRAM CHAIR** Jocelyn Lockyer LAR DIRECTOR (EDITOR) **Andrew Pernal PAST PRESIDENT** John Latter Om Malik VICE-PRESIDENT / PRESIDENT-ELECT Sheila Evans **WEBMASTER** KEEPINGINTOUCH/SOCIAL **SECRETARY** Gary Krivy Elaine McKiel **E-NEWSLETTER** TREASURER / MEMBERSHIP Tom Flanagan Arvi Rauk **MEMBER ATLARGE** Tom Swaddle **CURAC REP AND MEMBER-AT-LARGE** Carole-Lynne Le Navenec

If any members have additional ideas about how to enhance the role of our Association, please don't hesitate to contact us. **THE RETIREES ASSOCIATION OF THE UNIVERSITY OF CALGARY**

Art Building 615, University of Calgary, 2500 University Drive NW, Calgary AB Canada T2N 1N4

