Remembering How the McQueen Lake Environmental Centre Began

By Milt McClaren

It was a beautiful, bright sunny late winter morning when my friend and colleague Glenn Geen, later head of the SFU Biology Department, and I were introduced to the Lac du Bois range area north of Kamloops. The rangelands were just beginning to shed their coating of snow and many small lakes along the gravel road were thawing. Our guide that day was Ralph Shaw, a school principal in the Kamloops District and former city council member. Ralph had introduced himself to us the previous evening after Glenn and I had made a public presentation on BC’s environmental challenges using an SFU-designed and developed multi-screen presentation titled “Ugh—or the Effluent Society”. It had been a lively session, with lots of questions and discussion and Ralph asked us if we’d be willing to visit the site of a potential Environmental Study Centre at McQueen Lake, a concept that was being promoted by the school district and scientists from the regional rangeland research station. He thought that the university should be involved. Since Glenn and I had a gap in our schedule the next day and we were as curious as Ralph was persuasive, we agreed and he picked us up in his truck early the next morning.

At that time the only road into the area of the proposed study centre was a very narrow, gravel, mud and dust track sometimes used actively by logging trucks. On that bright morning we bumped and lurched our way on a continuous climb across the range country. Along the way it became clear that Ralph had an intimate knowledge of every feature of the trip and deep passion for the country. As we climbed we moved from sagebrush and bunch-grass range into open fir and pine forests and eventually the road leveled off into a mature, second grown fir forest. Through the trees we caught site of a beautiful lake, McQueen Lake. We were happy to get out of the truck and join Ralph in a walk around the lake. As we walked Ralph explained the concept for creating an Environmental Study Centre in the area, a facility for the use of

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Greetings everyone. The Christmas season is over and I hope it was wonderful experience for you all. We are now in a new year and I would like to bring you up to date on some of the recent 2016 activities and plans for 2017. In the Fall we had excellent presentations from Prof. Rolf Mathewes, Prof. Steven Weldon and Ron Long. The Fall dinner was “interesting” as we watched the results of the USA election (no comments please). Our Walking Group continued to find new and interesting sites for their invigorating walks, and your Board and others (particularly Thea Hinds and Percilla Groves) worked with SFU administration to put together a second Pre-Retirees Workshop. This had to be rescheduled for Jan. 3, 2017 due to weather issues, but up to 400 attendees are expected and this is a good opportunity to seek new members. As an aside, let me mention to all that the Board has agreed we should include in our membership, those individuals who may not have retired from SFU but were associated with the University for many years and went elsewhere to continue their careers. If any of you know of such individuals who might be interested in joining, please let us know.

In terms of present actions of the Board, we are redoing the constitution which needs updating due to changes made by the Government. All recommended changes will be brought to the membership for final approval following consideration by the Board. Another item still under review is a proposed program to mentor present SFU faculty and staff on plans for their retirement. Details of this should be available soon. An important issue with the Board is the status of old photos presently being stored in Archives. Ron Long and I have met with appropriate SFU administrators on this matter and we hope this issue can become a priority with the University and an SFU fundraising matter. Archives would welcome all members to search their files for photos from the first 20 years of the University and have them taken to Archives for storage and availability to all.

We have an excellent seminar program for the Spring including Prof. John Clague, Jan. 17 to be held in the downtown campus, Prof. Marilyn Bowman, Feb. 21, and President Andrew Petter on March 21. Stay tuned for more details. Also you should be making plans to attend the coming Ides of March social on March 15 to spice up the Spring.

We are also putting together a survey that will go to all members to explore, assess and inquire about various aspects of the SFURA including activities, social program, and related issues. We need this input to make sure we are meeting the needs and wishes of all members.
teachers and students of all grades and ages as a place to develop an understanding of the biology, geology, and cultural history of the place. Ralph had already enlisted support for the concept from School District 24, the personnel of the Federal Rangeland Station, and the Kamloops Fish and Game and Rotary Clubs. A large amount of land surrounding McQueen Lake was in the tenure of the Federal Ministry of Agriculture so the Ministry’s cooperation would be needed in getting a lease agreement for the use of about 500 acres including McQueen Lake itself, from the Feds, but Ralph had at least agreement in principle from key politicians and local officials. What he needed was a partnership with a major provincial university. As he told it, he’d approached UBC with no result so he saw SFU, which was then very much the new “kid” in the university system, as a potential supporter.

At that time, neither Glenn nor I had any authority to commit SFU to such a project but after seeing the beauty and potential of the site, we both felt that we might be able to muster support from the SFU administration. I also knew that SFU’s departments of Biology and Geography had supported the creation of a Marine Station on the West Coast and that the Department of Archaeology had a reputation for its summer Field School. Additionally, wearing my Faculty of Education “hat” I had represented SFU at the signing of the lease agreement by the North Vancouver School District to create the Outdoor School at a former resort on the Chekamus River north of Squamish. Given these initiatives I was reasonably sure that we could get SFU to at least offer moral support to the Kamloops’ project. Thankfully, Glenn and I were able to follow through and by the summer of 1971, in my capacity as Director of SFU’s Division of Continuing Education and with the support of both Biology and the Faculty of Education, we were able to offer teachers an eight Semester Hour Credit Summer Institute in Environmental Education, based in Kamloops and at McQueen Lake. The Environmental Education Institutes continue to this day and have been extended to a variety of field locations. For his work Ralph was recognized with the award of the Order of Canada and continued to be an active force for environmental education until his death early this year. I consider the McQueen Lake project to be an outstanding example of the power of partnerships between SFU and its many communities, partnerships that continue to be developed and sustained to this day.

At the 25th Anniversary of McQueen, which was some years ago now, a prominent Alderwoman from Kamloops told me that they estimated, conservatively, that more than 250,000 kids had some form of field experiences at McQueen. She believed that the development of the program had made a profound difference to how the citizens of Kamloops acted towards environmental issues in general. It has also made a great difference in the lives of the many PDP students who had professional training with SFU at the McQueen site. The legacy continues.
“...these women developed rather independent lives”

Marilyn Bowman

I recently published a biography of a Scottish scholar of Chinese, and many have asked how I became interested. Trying to retrace my idea steps I uncovered a tale I had mostly forgotten. It started with my favorite book of all time - the *Tale of Genji*. My mother got this book during her early years up in northern Alberta as part of a lady’s book club there in the 1930s, and passed it along to me decades later.

The book club was interesting. The women were married to the railway’s skilled technical staff (e.g. my father, a telegrapher), and they must have been a pretty interesting bunch. Because the men could get called out at any time and be gone for days dealing with train wrecks or lines brought down in that fierce, dark northern winter, these women developed rather independent lives connected strongly to each other. They had mostly been educated as teachers or nurses then not allowed to work after they married. I think that each member read their book and discussed it with the others, and I seem to remember a photo from the 1940s showing them sitting around in a living room.

The women would write Eaton’s in Edmonton each fall, explain that they were the women of the book club in McLennan, and would ask Eaton’s to “please send” them a book each, chosen by Eaton’s book staff, for their winter reading. Presto! the amazing delivery to my mother of Arthur Waley’s 1927 translation of the *Tale of Genji*. It was written by Lady Murasaki of the Japanese court in the 11th century as an amusement for her friends, and consisted of stories of the lives of the people in the court, including Prince Genji, a real person.

The stories were loosely related to the real lives they were living in a court that was every bit as artificial as anything Louis XIV ever dreamt up. The only things the Heian court people were interested in were love affairs, perfume, poetry, games, and coloured silk garments. There was nothing of the outside world, farming, roads, weather, peasants, soldiers, or even food. In fact, reading it you would think they never ate, they were so indifferent to it. Their preoccupations were totally different from my rather Bolshie concerns, but the cleverness of the writing (Murasaki often wrote poems with triple puns of meaning, which Waley would manfully try to explain in footnotes), and the delicacy and elaborately psychological intricacies of relationships were all fascinating.

The women of the Heian court were not educated so did not know how to write using the kanji (Chinese) characters that men used to write, so the women created their own phonetic alphabet and wrote using that. Today modern Japanese is written in a combination of these ‘hiragana’ slippery-looking Japanese-women phonetic-characters, interspersed with Chinese meaning-characters. There are many amazing aspects of the

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The book is huge, and my mother told me in Edmonton she had not managed to read it but knew it was special. I took it with me to graduate studies in Montreal, then to my young faculty life at Queens in Kingston, starting to read it early one winter as my bedtime book. I read very quickly and after many weeks was surprised to discover I had a long way to go to finish it. But by the time I reached the last page I wanted it never to end. I was completely entranced by this very alien, highly aesthetic culture. I soon learned that over the past 10 centuries Japanese scholars, poets, and artists have been totally obsessed with Genji, with truly thousands of books written about the book, its times, and its author.

I soon discovered there was also a wealth of books in English about the Tale of Genji, many of which I bought and read. I have two more modern translations that I am saving up for when I become an “incurable invalid”, big joke, and can read for hours without feeling guilty, a true luxury. One of the books I got is about the iconography of Genji, for across the centuries a formal canon has developed about exactly how any artist must portray each specific scene in every one of the 54 chapters. It has many illustrations showing how different artists followed this canon yet created highly individualistic paintings.

Reading many books about Genji in English, I learned that the Japanese court culture of Genji’s time was strongly influenced by Tang dynasty China, so I started to read up a storm about that, in my usual obsessed manner. Then as China started to open up I went there, first in 1985, very ‘early times’ for foreigners, and became more interested. I started taking Chinese language classes in night school, off and on for years.

My interest in James Legge came about when I was trying to track down an obscure date in Chinese history for the origins of mental testing, and came upon Legge’s translation of an ancient text that referred to these civil service exams. The book was one of many giant volumes and I soon became dazzled by his scholarship, with his Notes written in any of English, Chinese, Latin, Greek, Hebrew, and occasionally French or German, all un-translated because he assumed his readers were all fluent in those languages. I was hooked, and an obsessed 20 years later, completed the biography of a Scot who lived a rich complex life in tumultuous times in early Hong Kong. The interests of almost a lifetime just coalesced.

Marilyn Bowman has just published her book on James Legge. She has given SFURA two talks about him, and is very pleased at the handsome job her publisher has done. The book is available in hardcover, softcover, or as an eBook, all from Amazon. The easiest and least expensive way to get the book is to go online to the Friesen Press bookstore: http://www.friesenpress.com/bookstore/title/119734000032368133

L to R: James Legge portrait, Dame Jessica Rawson of Merton, Marilyn, and Sir Tim Lankester

For more images of the book launch see: http://www.sfu.ca/retirees/gallery/2016BowmanEvent/
I know, I know... it’s too late for this season. But consider an alternative form of entertainment for December, 2017. My companion (as they say in show biz, but in this case my wife, Leora) and I did something a little different for the holiday season. We had to undertake an emergency trip to South Africa this fall, and I had to reschedule and substitute a number of events that we had planned as part of our subscription to the Vancouver East Cultural Centre series. One of the events we decided to attend was something I had always looked at askance, the East Van Panto. In turned out to be a great evening.

The East Van Panto this year featured the story of Little Red Riding Hood. As they say in their promo... “Panto (another name for pantomime) is a tradition of holiday musical comedy theatre. Popularized in England in the early 19th Century, pantomime takes familiar fairy tales and injects music, contemporary references, and audience participation to create raucous, noisy entertainment that’s fun for everyone in the family. Our Panto takes inspiration from this classic form, but adds a uniquely East Van twist; “a new, local tradition you and your family are invited to make your own!” And so we did, along with full house at the York Theatre on Commercial Ave., packed with kids, parents, and seniors.

The story centres on Little Red who slips away from home (and her two dads) to ride her bike down the Adanac bike trail to see her grandmother in the Woodwards Building. When the big, bad wolf was sneaking up on Red, we all shouted “Look out behind you,” and when the nasties said “ I will ....” we yelled “No, you won’t.” On the way she has her bike wheels stolen, has to trade to get them back at the street market, gets eaten by the Wolf and finds Grandma and the Two Little Pigs (along with a Japadog and a latte) inside the Wolf’s stomach. I won’t tell you how they get out, but it’s not what you might think. This is a kids’ show, after all. And, of course, all ends happily.

The live music consisted of a number of original songs as well as re-worded tunes by Beyonce, Leonard Cohen, Johnny Cash, and George Gershwin (e.g., “Let’s Call the Whole Thing Off”) among others. Interspersed among the story were adult-oriented references such as when the wolf sings “You say Stockholm,” the pig held hostage by the wolf replies, “I say syndrome.”

How wonderful to hear a theatre full of excited children laughing and talking, and to see adults with wide grins chatting around the bar at interval. Makes a nice contrast to the intellectual musings of the music aficionados at the symphony or the opera. Good for the soul.

So, check out the Panto for next year. They’re all over the Lower Mainland. Other pantomimes offered this year included Robin Hood and Marion at the Metro Theatre in South Vancouver, Captain Hook’s Revenge at Presentation House in North Vancouver, and Aladdin at the Act in Maple Ridge.

“Oh, yes, you will!”
Remembering Fidel Castro’s Legacy

By Michael A. Lebowitz

I was in Havana–a regular haunt–at the time of Fidel Castro’s death, and I thought some people might be interested. I wrote a friend the following:

It has been an incredible time to be here, and I feel privileged for being able to see how Cuba has responded to the inevitable. The enormous respect, solemnity and dignity are really moving. It was so quiet on the day of the announcement, and the seriousness of the occasion was then marked by the cessation of alcohol sales [even the disappearance of rum from the shelves]--- an obvious indication that this was not to be life as usual. Everywhere we’ve gone, people are telling their fondest stories about Fidel and their worries about being without that compass which could be counted upon even in illness [as in the case of no favours from the empire]. The TV coverage has consolidated all those memories with wall-to-wall documentaries and interviews, and in the process, the whole has strengthened the understanding of the importance of this incredible revolutionary [something easy to forget when you only see parts].

Yesterday morning I watched the procession of people filing past the displays [ashes not there] at the Plaza--massive lines of friends, very moving, many with tears, but I saw mainly older people and thought-where are the young [that generation in dispute]? But last night, they were there--so many young people, and the queues were so long that the process was extended well beyond the official closing. So important. This morning it continues, and there are satellite locations everywhere to sign your name [we ‘ll do that at the Mella, close by, later]. This evening will be the main assembly, which will be massive. [Alvaro Garcia Linera was due to speak here at that time for our programme, but we immediately cancelled that.]

The item below is his warning in 1992 about climate change:

"Pay the ecological debt," Fidel Castro told the Rio Summit. "Eradicate hunger and not humanity."

Legendary Cuban revolutionary and former president, Fidel Castro, passed away on November 25 aged 90 (having survived hundreds of failed CIA assassination attempts). An internationalist dedicated to a fairer and sustainable planet, Castro long warned that capitalism was threatening to destroy human civilization through ecological destruction, with the poor of the global South its first victims. The Cuban Revolution has itself provided an example, with a huge shift to sustainable agriculture at first forced on the Caribbean nation by the dire economic crisis caused by the collapse of the Soviet Union in the 1990s. In 2006, Cuba was listed by the Word Wildlife Fund as the only country to achieve sustainable development.

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“An important biological species — humankind — is at risk of disappearing due to the rapid and progressive elimination of its natural habitat. We are becoming aware of this problem when it is almost too late to prevent it.

It must be said that consumer societies are chiefly responsible for this appalling environmental destruction. They were spawned by the former colonial metropolis. They are the offspring of imperial policies which, in turn, brought forth the backwardness and poverty that have become the scourge for the great majority of humankind.

With only 20% of the world’s population, they consume two-thirds of all metals and three-fourths of the energy produced worldwide. They have poisoned the seas and the rivers. They have polluted the air.

They have weakened and perforated the ozone layer. They have saturated the atmosphere with gases, altering climatic conditions with the catastrophic effects we are already beginning to suffer. The forests are disappearing. The deserts are expanding. Billions of tons of fertile soil are washed every year into the sea.

Many species are becoming extinct. Population pressures and poverty lead to desperate efforts to survive, even at the expense of nature.

Third World countries—yesterday’s colonies and today’s nations exploited and plundered by an unjust international economic order—cannot be blamed for all this.

The solution cannot be to prevent the development of those who need it the most because today, everything that contributes to underdevelopment and poverty is a flagrant rape of the environment. As a result, tens of millions of men, women and children die every year in the Third World, more than in each of the two world wars.

Unequal trade, protectionism and the foreign debt assault the ecological balance and promote the destruction of the environment.

If we want to save humanity from this self-destruction, wealth and available technologies must be distributed better throughout the planet. Less luxury and less waste in a few countries would mean less poverty and hunger in much of the world.

Stop transferring to the Third World lifestyles and consumer habits that ruin the environment. Make human life more rational. Adopt a just international economic order.

Use science to achieve sustainable development without pollution. Pay the ecological debt. Eradicate hunger and not humanity.

Now that the supposed threat of communism has disappeared and there is no more pretext to wage cold wars or continue the arms race and military spending, what is preventing these resources from going immediately to promote Third World development and fight the ecological destruction threatening the planet?

Enough of selfishness. Enough of schemes of domination. Enough of insensitivity, irresponsibility and deceit. Tomorrow will be too late to do what we should have done a long time ago.”.
Seeking South America

By Jim Boyd

I never found time to travel widely until my retirement. There were business and vacation trips around North America during my career but except for an eight week Europe trip in my 20’s, I never left North America again until I retired. Thirty-five years after that trip, I made it back to Europe with an Atlantic Ocean return cruise totaling three weeks in 2012.

I bit the bullet travelling to the Southern Hemisphere for the first time in March 2015. SFURA had kept me busy, so arrangements were left up to wife, Sharon, and daughter, Mary. The plan was six days in Santiago, a day in the port of Valparaiso followed by 18 days on a Holland America cruise ship, the Zaandam, north up the coast and through the Panama Canal to Ft. Lauderdale. Visiting numerous countries on one trip seemed the best approach to making up for lost time.

The trip started out with a 16 ½ hour Air Canada flight via Toronto to Santiago Chile, where we stayed in a tiny 15th floor Airbnb apt. next to a local university. In Valparaiso, we stayed in a larger Airbnb apt. in a nice suburb, Vina del Mar, after travelling through 80 kms of countryside in a nicely appointed bus for $5.00.

We walked around Santiago on our own and as part of two organized tours, one involving the usual government buildings, museums and other architectural places of historical interest. The other was a ‘back alley’ tour in out of the way markets and literally back alleys that were extremely interesting. Both tours were by donation only so $5 to $10 was the cost.

Getting around Santiago was easy with great public transit, necessary in a city of 7,000,000 in a country of 16,000,000. This city had a ‘Canadian feel’ in its look and people. A highlight was a 12 hour personal driver tour of four wineries in the Santa Clara Valley, a very pretty area two hours outside Santiago. We later visited the well-known Concho Y Toro winery with its 120-year old brick wine cellar, on the outskirts of the city.

Many ownerless but friendly dogs in Santiago act as unofficial tour guides as you wander about. Apparently, when Chile became more urbanized around 1930, rural people moved to the city bringing their animals with them. City officials tried banning them but lost the battle and residents as a whole adopted them, feeding and cleaning up after them, also giving them shelter, so they are well taken care of and seemed to adopt tourists, like us!

The lowlights of the trip! Mary and John were victims of a classic pickpocket scheme on the main subway in Santiago, losing $350 US, and their credit and debit cards that they quickly cancelled using Skype on their tablet device. So much for cheap travel! The next day in mid-afternoon on the street above the subway, Sharon was attacked by two young men who unsuccessfully tried to snatch her necklace. Local police a block away showed no interest in helping or going after the culprits.

In Valparaiso, we rode a 100 year old funicular track to the heights of the city and took a walking tour back down to port taking in the permitted “graffiti” that was everywhere, but done well. The next day we reached the port of Callao in Peru and were warned not to wear any jewelry etc.
as we taxied the half hour trip into Lima. Lima was beautiful but traffic and air pollution were terrible, however, we visited an interesting 1,600 year old collapsing pyramid (pre-Machu Picchu) in the midst of a city suburb that was being refurbished.

At a stop in Trujillo, Peru, we saw a pyramid from the Moche culture and ruins of their Sun and Moon Temples with wonderful murals and huge art work on the adobe bricks dating to 100 AD to 800 AD.

The trip to date had been discouraging due to crime and poverty issues, however, I was encouraged by our stop in Manta, Ecuador where a bus tour took us past modern townhouse projects and we learned that the country is the second most popular for both Canadian and American Ex-pats after Mexico. It seems better run than its neighbours, however, the recent earthquake will have set them back significantly.

Panama City, with its canal expansion, was very interesting with GDP running very high at 10% due to the construction. We got caught in a downpour in the old city under some restaurant umbrellas in a town square near where Noriega had been captured in 1995 by the USA.

An interesting little stop was at one of the 300 San Blas Islands that are part of Panama. Fifty are inhabited and known for their fabric handicrafts. There was a local school where kids wore uniforms and looked very happy, even though their living standards were very basic. There was a lot of western style garbage floating all around the island--the price of tourism.

Cartagena, Columbia, was our last stop and we toured the old walled city being pestered constantly by numerous street vendors. However, we saw lots of new redevelopment now the drug cartels are no longer running the country. The old city was quite beautiful and cleaner than some of the other cities.

I would return to Colombia and Ecuador and its Galapagos Islands on a future ‘bucket list’ trip, but not so much to some of the other places that I visited on this cruise.

A Pivotal Retirement Decision

By Jay Burr

As the required SFU retirement age of 65 approached, Jay Burr knew he wasn’t done yet. After the exchange of a few emails, he accepted an offer of Visiting Scientist in the Department of Nematology at UC Riverside. This turned out to be a life-changing decision that has transformed the first 14 years of his retirement.

Most of his research at SFU was on the structural dynamics of nematodes: from the mechanism of phototaxis and vision with their uniquely simple eyes, to the mechanics of locomotion. At UCR he could collaborate with three basic researchers with similar interests. With one colleague he discovered an amazing diversity of microscopic animals that hide out in the holdfasts of marine kelp. These include thousands of nematodes, including many species with interesting eyes. With another colleague he discovered phototaxis in a nematode parasite of mosquitos that lacks eye structures, raising the interesting possibility that many eyeless animals can navigate according to light direction. But his most significant retirement project began when Jim Baldwin suggested he develop a new technique for examining nematode morphology that bypasses the time-consuming and expensive process of serial sectioning and transmission electron microscopy (TEM).

For this purpose, Jay experimented with soaking nematode preparations in a fluorescent antibody that labels the boundaries of cells, specifically binding at the apical junctions that form between plasma membranes adjacent to cuticle. Using the confocal microscope he could obtain a hundred optical sections through the
array of fluorescent cell boundaries in the nematode. These provided 3D information from which the cellular morphology could be reconstructed. He tested the technique on three nematodes with morphology already known from previous studies, focusing on the cellular architecture of the pharynx. This is the tube formed of a single layer of cells that connects between the mouth opening and the gut. These cells produce, during embryogenesis, the cuticle and muscle structures used for swallowing and feeding. Different feeding strategies among nematodes are associated with an amazing diversity of cuticle and muscle structures for biting, spearng, chewing, filtering and grinding. How the architecture of the cellular tube has varied has been of great interest for several decades. The new technique has the potential to be applied to a much greater sample of nematodes than is possible with TEM and thus to provide much better evidence of how the cellular architecture has evolved.

One of the three nematodes was *C. elegans*, the model nematode that has been studied intensively by hundreds of laboratories around the world. Jay chose *C. elegans* to provide the positive control for the fluorescent antibody technique because the antibody had been isolated against proteins of that species. To his surprise, the technique not only was successful in all three species, but also showed that the currently accepted pharyngeal structure in *C. elegans* was incorrect. Checking the original TEMs of *C. elegans* made in the early 1970s confirmed that the investigators had missed an important cellular boundary that is observed in other nematodes. This error had confounded all previous attempts to explain evolution of the pharynx. TEM studies of the nematode pharynx dating back to the 1970s have included examples of every major branch of the phylogenetic tree, and Jay’s a review of this literature revealed that the same pattern is found in all branches, providing strong evidence that the same set of cells are responsible for forming the different muscle and cuticular structures in all nematodes. A project originating with modest expectations resulted in a finding of major significance to evolution.

Jay’s several research projects were done during 2-3 month sojourns to Riverside, CA, every year over 11 years. Carolyn and Jay enjoyed commuting by bicycle to UCR in the consistently sunny weather, lunches in the interesting UCR Botanic Gardens and weekend birding and hiking trips with Jay’s colleagues. Typical accommodations were a room rented in a home shared with graduate students or post-docs coming from all over the world. This provided interesting experiences, although sometimes with a bit of discomfort. The second year they shared with a German nematologist and his wife on a sabbatical during which time they became very close friends. This led Carolyn and Jay to take German lessons at the West Vancouver Seniors Centre and follow up with more German lessons in Germany. There were several memorable trips through Germany with this couple and a growing number of other German friends. Jay enjoyed giving research seminars at Tübingen in Germany, Ghent in Belgium, Lund in Sweden as well as at UCR.

The research article was published earlier in 2016 just as Jay’s life was becoming busier than ever. Jay had joined the SFU Retirees Association executive as Treasurer, a new challenge, and he and Carolyn now have an amazing grandson. (Aren’t all grandchildren amazing?) It would be easy to give up science at this point, but Jay feels he is still not done! There are several more manuscripts to write on fascinating data he has accumulated. Hopefully there will be enough time in the next few years to do this along with further visits to Riverside and Germany.
Writing on the Edge

Sheila Delany

Israel: Mediterranean’s edge; bordering the vast Middle East; edgy about BDS, very worried. How worried? Enough that Prime Minister Netanyahu declared BDS “an existential threat”, while Justice Minister Shaked calls it “the new face of terrorism”. Enough that Netanyahu established a Ministry of Propaganda (“Hasbara”) to counter BDS and improve Israel’s image abroad; worried enough to spend millions on campus groups in Europe and North America to do the same; worried enough to condemn international leaders for their support to BDS. Here, Elizabeth May, Green Party Parliamentary representative, nearly resigned her party leadership because the Greens passed pro-BDS resolutions. In the US, several states have passed anti-BDS bills, banning state investment in entities supporting BDS.

What is BDS? The letters stand for **Boycott, Divest, Sanction**. Boycott asks consumers to avoid products made in Israel or in illegally seized territories, or to refuse business with companies implicated in Israeli oppression--such as the British-based G4S, which supplies technology to checkpoints. Or it may urge musicians, academics, or tourists to avoid Israel while the occupation of Palestinian territory continues. Divest urges corporations--churches, universities, unions, municipalities--to cancel investment in Israeli companies or those complicit in oppressive Israeli policies. Thus many banks worldwide have withdrawn investment from Elbit, an Israeli arms company. Sanction asks governments to impose legal penalties on the country, on specific companies or supportive groups abroad. A Canadian campaign demands that our government end the charitable tax exemption of the Jewish National Fund, a clearly political organization funding settlements and other projects (e.g., Canada Park) on illegally seized land. After Gaza massacres of 2009 and 2014, Spain and the UK froze arms sales to Israel; Norway refused to let Germany test in Norwegian waters submarines destined for Israel; Portugal refuses projects with Israeli police, etc.

The movement originated in a 2005 call from over 170 Palestinian civil society organizations, as a non-violent way to mobilize public action on their situation--"slow genocide", according to many in and outside of Israel--and pressuring Israel to comply with international law, particularly to end the occupation and blockade of Palestinian territories, and return or compensation for seized homes. It recommends no specific outcome, whether a separate Palestinian state or a unified multireligious state with equal rights for all citizens. Currently, Israeli non-Jews (Muslim, Christian, Druze, Bedouin, Bahai)--20% of the population--endure not only constant military and civilian violence and harassment but land seizure, home demolitions, heavy restrictions on commerce, apartment rental, employment, building or marriage permits; censorship, segregation, and acutely inadequate funding in education, and so much more that "apartheid" has become a common term internationally to describe Israeli society, and the f-word--"fascism"--is more and more frequent within and outside the country. For Palestinians outside of Israel it is much worse: destroyed cities and villages, blockade, the horrendous separation wall that snakes through cities, villages and farms, lack of water or arable land, inability to travel--this is the new normal. Gaza has been described as "the world's largest outdoor prison".

Questions remain even for those who strongly support Palestinian rights. Should we boycott everything from Israel, or only what comes from the occupied territories? What about Palestinian workers in those companies?
Should we refuse to attend performances by any Israeli artist, or only those funded by the state to improve the country’s image? Should we boycott an Israeli historian, journalist or activist who criticizes the country’s policies? Should we go there and speak our mind, or instead refuse to set foot there (if indeed an activist could manage to pass the notorious airport security gauntlet)? I’ve heard both sides of these questions argued within the movement. For the curious: yes, I’ve been there--twice, well before 2005--lectured at several universities, participated in an archaeological dig, published in an invitational collection. But I won't be going back any time soon.


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**FIG Seeks Help in Planning Future Offerings**

*By Marv Wideen, Tom O'Shea, Philip Mah*

Some Background and our Most Recent Seminar. For our first article of this year, we would like to begin with a brief overview of how our FIG seminars have evolved over the last ten years. As we noted in an earlier article, in May, 2008, someone on the executive circulated a memo to see if an organization on financial planning would be of interest. Several replies came from members and a meeting of interested retirees followed. During the first meeting, we assessed general interest in the topic, possible areas for discussion, and a possible schedule for meetings. Several topics were suggested such as proper investments, stock trading, reducing taxes, etc. It was agreed that we might aim for one session each semester. The rest is history.

Over the years, we have offered 30 seminars involving a range of presenters including retirees, SFU staff, and financial representatives from commercial forms. The scope has been very broad, and the seminars have evolved over time in terms of scope, complexity, and participation.

This brings us to our last session offered on November 6th of last year. Approximately 70 participants attended, including retirees and SFU staff and faculty. The session was organized for us by Misa Zivkovic and involved Sogol Onsori and Cheryl Norton from Sun Life who each made presentations. They described estate planning and how to minimize losses at death from government taxes that can claim nearly 50 % of the money one leaves behind. Sogol then described several strategies to reduce that high taxation. For example, if your surviving siblings sold your home, they would pay up to 50 % of the profit in taxes, but if you made them joint owners, they would pay no taxes at all. She also described the annuity settlement option that allows a person to control the timing of when beneficiaries receive their inheritance. Cheryl then described how we can create money for life through various programs. The session was very successful.

Future Plans. We do receive occasional suggestions for presentations from commercial financial advisors. We usually plan one or two of these each year. However, we strive to balance these with seminars led by continued on page 15...
We just received this message from the SFU Gerontology Department from Habib Chaudhury and Andrew Wister, and we join with them in congratulating Gloria Gutman:

We are honoured and delighted to hear the news that Dr. Gloria Gutman has been appointed to the Order of Canada in recognition of her career in gerontology. Created in 1967, the Order of Canada is one of Canada’s most prestigious honours bestowed on civilians, in recognition of outstanding achievement, dedication to the community and service to the nation. Gloria is one of 100 new appointees now totaling 7,000. This is a special year to receive this award as Canada turns 150. The official press release can be found at: https://www.gg.ca/document.aspx?id=16670&lan=eng.

On behalf of the SFU Gerontology community, we extend our heartiest congratulations to Gloria on this well deserved recognition. Gloria has been a trailblazer in the field of gerontology for Canada and at the global scene for many years. Her entrepreneurial spirit, passion and energy have always been an inspiration for us and many others. The Gerontology Research Centre and Gerontology Programs at SFU were born because of her vision and commitment to seniors’ issues and aging-related research and knowledge translation. We have always been deeply proud of Gloria and all her achievements. This national award of the highest order recognizes and acknowledges her as a national treasure.

We wish her many more years of productive career. Once again, Congratulations to Gloria!

Sheila Delany had a memorable trip to Guatemala in November on a small tour called “Culture and Cuisine”. The group spent time in Antigua then visited several towns on their way to Lake Atitlan. Sheila’s new book was published a few months ago; a translation of Sylvain Maréchal’s 1801 novella La femme abbé, published as The woman priest by University of Alberta Press.

Sociologist Heribert Adam and his wife Kogila Moodley just arrived in Cape Town on a three months research and lecture tour on xenophobia and comparative immigration policies.

Both James Dean and Michael Lebowitz were in Cuba during the period of mourning following the funeral of Fidel Castro who died on November 25, 2016. Michael’s account is given in another story in this Newsletter.

James Dean spent the first half of December in Cuba and shared his diary with the Newsletter staff. He has visited Cuba many times and has a number of friends there. He commented on the mourning period and some history of politics in Cuba over the years. He has seen improvements in social conditions under Raoul Castro.

James spent his two weeks with old and new friends, travelling, shopping, eating, listening to jazz, and snorkelling at the Copacabana Ocean Pool. He says the infamous Bay of Pigs is now a scuba diving paradise, the cleanest diving waters he has ever experienced.

I know that many of you are still teaching courses and I salute you. I have been enrolling in them instead, online and free with no examination trauma. They are called MOOCS, Massive Open Online Courses. My courses have all been with a company called Coursera and have included music, linguistics, art and history. The courses all have video lectures but they vary in methods of assessment; quizzes, essays, peer graded assignments, examinations or any combination of these. Although the courses are free, one can pay a fee to enrol and receive a certificate for successful completion of the course. Most
courses last from five to eight weeks. A google search of MOOCS will show various universities and companies offering online courses.


In Marilyn Bowman's column “On Reflection” on pages 5 and 6 she described how she became interested in the brilliant Scot, James Legge. In recent emails to retirees-forum she described the launch of her book in Oxford at Corpus Christi College where James Legge served as Master in his last years. Later in November she went on a painting holiday in Turkey. To see her art from the last several years, Google: Marilyn Bowman’s paintings.

And now (drum roll) Dan McDonald’s KIVA Report:

The SFU Team Kiva has made remarkable gains in 2016. It is the only SFU team competing internationally, open to participation by anyone, doing good in the world, and spreading the name of SFU internationally. There are 1800 participating universities and in that category we rank 44/1800 up from 48th during the year. We overtook Iowa State, U. Illinois, U. Colorado, and U. Wash. For more team statistics see https://www.kiva.org/team/sfu

While on the team page just click on “join the team”. It will be a great start to the New Year. Any questions, email d._mcdonald@telus.net.

There is a direct link to Kiva on our web home page; http://sfu.ca/retirees/sfu-community/Kiva Make a Small Development Loan, Make a Big Difference. Easy. http://www.kiva.org/

retirees at SFU. Thus we have two requests: first, we solicit your suggestions for future seminar topics; and second, we request your suggestions for sessions that could be offered by you or other retirees. For example, might we arrange a focus group of retirees and professional investors to deal with selected issues?

On the question of making suggestions for future seminars or raising issues, an excellent example occurred recently. Barbara McDaniel and Jay Burr raised the issue of US taxation for people with US citizenship living in Canada. Some years earlier Marilyn Cairns had shared her experience in being audited by US Taxation. But Barbara and Jay’s experience led to one session involving their experience as retirees, and a second session involving an expert on the problem. Many of us found it difficult to imagine that if a Canadian with US citizenship bought and sold a house in Canada, any profit could be taxed by the US. So, we welcome your suggestions for future areas of interest we may not be aware of.

Regarding the question of topics for seminars offered by retirees, we would like to organize at least one this year. For example, several very successful sessions were offered by retirees in recent years. Conrad Colbow described his experience with options trading and George Stuart described his approach to stock trading during his retirement. Ted Cohn dealt with financial issues emerging from the debt crisis in the US and also with the matter of withdrawing RIF funds and how it affects the tax one payments. Another faculty member who was the Vice Chair of Louisiana Federal Reserve fund dealt with the US debt crisis and quantitative easing.

We do need your ideas and support to continue this seminar program. But we would like to end on a somewhat humorous note. In the Leading Edge section of the last issue of the Investor’s Digest they included a quote from Warren Buffett which read, “Opportunities come infrequently. When it rains gold put out a bucket, not a thimble.”.

We welcome your comments.
Dementia: What It Is and How to Deal with It

Parveen Bawa

We humans take great pride in the wonderful things our brains have been able to achieve. The highly evolved outer layer of the brain, the cerebral cortex, is what makes the human brain exceptional; it has enabled us to have mental abilities which other animals do not have, such as writing poetry, navigating big ships, and designing buildings. However, the piecemeal way the cortex has evolved makes it more prone to diseases of higher functions, one of these being impaired cognition. In simple words we can think of cognition as intelligence; it includes perception and intuition of things around us; acquisition of knowledge and memory; and the capacity to reason and make judgments. Ageing is associated with decline in many aspects of cognition and may also be associated with dementia. The only deeper region of the brain involved in cognition is the hippocampus associated with memory and spatial navigation. Dementia is a disease of the brain in which there is a disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment. However, consciousness is not clouded. At advanced stages of dementia, the person can have some or all of the following symptoms: profound memory deficits, minimal verbal abilities, inability to ambulate independently, inability to perform activities of daily living, as well as urinary and fecal incontinence.

Dementia can be reversible or progressive. Reversible dementias can be caused by factors such as vitamin B deficiency, hypothyroidism and depression. Irreversible or progressive dementias such as Alzheimer’s Disease (AD), vascular dementia, and frontotemporal dementia result from damage to specific areas of the brain. Memory loss is most characteristic of Alzheimer’s disease but not of the other progressive dementias. Hippocampi, the most important structures in the brain responsible for memory, are damaged in AD. On the other hand, in vascular dementia damage can occur in any region where there is a problem with blood supply to the brain. Depending on which part(s) of the brain have been affected, one could see symptoms which include visual problems, muscle weakness, stuttering speech, clumsiness, incontinence, etc., while intellectually the person may be least affected. In fronto temporal dementia there is thinning of the cortical layer in the frontal and temporal lobes of the brain; these regions are essential for social and emotional control. In early stages of this disease, memory is affected very little but the person may become reckless, inconsiderate and impulsive. It can be confused with a psychiatric problem, but the symptoms are really due to damage to the brain rather than problems with attitude. Recognizing signs of early dementia can be challenging because preclinical pathological changes can go on for years while one might just mistake them for ageing. More sensitive tests are being developed but we are not there yet.

Risk Factors: Ageing is the biggest risk factor for developing symptoms of dementia. The brain does not have reserves of energy, it depends on a constant supply of oxygen and glucose. In
healthy young brains there is a blood-brain barrier that prevents viruses, toxins and other harmful substances from passing from the blood to brain tissue. But as the brain ages and structural changes occur in major blood vessels and capillaries, the barrier becomes a bit leaky; harmful substances can pass through and cause inflammation of the brain. A decrease in blood flow starves neurons, leads to build up of waste products which causes inflammation of the brain. Starved or dead neurons and inflammation leads to progressive physical and functional degeneration of the brain.

There are risk factors which we can reduce by modifying our habits or getting treatment for problems such as—depression, diabetes, midlife hypertension, midlife obesity, smoking, alcohol abuse, high cholesterol, coronary heart disease, renal dysfunction, low unsaturated fat intake and inflammation. When these factors are taken care of, the risk of dementia decreases. The use of some medications, both prescription (like Ativan, Valium, Zopiclone) and some over the counter drugs (sleeping aids), are considered modifiable risk factors.

**PREVENTION:** Many animals and humans do not develop age related cognitive decline. In the UK, recent studies have shown a decreased incidence of dementia likely due to improved life style and better public health measures. Studies on ageing have shown that loss of neurons in the brain up to the age of 80 is minimal; there is a loss in the number of synapses (connections in the brain) but that loss is reversible. The brain, at any age, is plastic, which means that it is capable of learning new things by generating new neurons, making new connections, and strengthening existing connections. The persistence of plasticity during ageing may prevent cognitive decline in older adults. There are a few things that all of us can do to optimize the health of our brains. One of the most consistent findings about brain health is that aerobic exercise improves memory and executive function (decision making). **Aerobic exercise** (such as cycling, hiking, and dancing which keeps your heart rate up continuously for approximately 30 minutes at least three times a week) leads to an increase in growth-hormone like chemical that helps to strengthen connections in the hippocampus, as well as generate new connections and new neurons thereby improving memory, learning and executive function. Stress, a common problem in old age, releases stress hormones, which damage the hippocampi, thus affecting memory. The negative effects of stress can be averted by physical exercise. Strengthening exercise is also essential to minimize muscle loss. Being immersed in **virtual reality** leads to general brain arousal. It requires a constant visual tracking in the three dimensional space which can improve memory. However, it has been shown that brain stimulation alone does not improve memory because it does not lead to generation of new neurons. But the combination of immersion in a 3-D virtual reality environment with exercise on a bike, produced cognitive benefits, which were more than with the bike alone. **Mindful body movement** has been used to improve mental skills such as concentration and self-control. Studies have shown that Tai-Chi, meditation or just sitting still
can improve attention, cognitive control, skill learning, and lessen mind wandering. Yoga, which involves both mental and physical activities, improves cognitive ability. Loss of Spatial memory can be an early sign of dementia. As we age, our capability for rote learning and recall declines. Moving people to care homes worsens the problem. People who use maps and memorize their routes maintain their sense of direction better than people using GPS. In London it was shown that learning the layout of streets of London increased hippocampal volume of taxi drivers. We all know that diet plays a role in our mental and physical health. Beans, green leafy vegetables, nuts, berries, whole grains, fish, and poultry are all good while red meat, processed foods, pastries and other sweets should be avoided. Besides types of foods, quantity of food is important as well. With age we need to minimize our caloric intake. Don’t forget to avoid concussions.

**INTERVENTIONS:** Once dementia (reversible or irreversible) is diagnosed several cognitive, physical, nutritional and drug interventions are used. It should be noted that at present none of the interventions can cure or even slow down progressive dementia, but some measures can improve every day function. **Physical activity** done alone or with other people has been demonstrated to improve cognitive function at all levels of dementia. **Memory compensation** is a strategy used by people when they perceive a decline in memory/cognition. The aim is to maintain a certain level of functioning despite the presence of cognitive decline. It involves taking notes, repeating information, placing things in known and obvious places, and doing a task in a different easier way. Right at the start of the diagnosis of dementia, the patient should be told that they can use other people as their external memory while their internal memory is declining. **Cognitive training** means specific mental exercises for specific parts of the brain, and is generally used in early stages of dementia, but these have not yet found to be very useful. Using email, Facebook or other social media communications are certainly helpful. There are newer trans cranial brain stimulation techniques which use very small currents to stimulate the brain; these techniques have been shown to be quite safe with no side effects; but the machines used are not ready for home therapy yet. These techniques are totally different from the notorious Electroconvulsive Therapy (ECT), which uses strong, long duration currents to reset the circuits of the brain. There are plenty of nutritional supplements people have used such as vitamins, omega-3 fatty acids, and other natural products. Ginkgo biloba extracts in high doses have been found to result in improved daily functional activities. Souvenaid, a medical nutritional drink, is a combination of vitamins, minerals and fatty acids, and it has been shown to improve every day living and memory. However, none of these supplements prevent progression of dementia. Similarly, drugs available at present do not cure or decrease the pathology of the brain, but they can to some extent improve daily function. There are two types available at this time:
acetyl-cholin-esterase inhibitors (AChEi) used for mild to moderate Alzheimer’s, and memantine has generally been used for moderate to severe AD or when a patient cannot take AChEi.

**LIVING WITH DEMENTIA**: At present, the anti-dementia drugs do not stop or repair the damage to the brain. They only improve the communication between the nerve cells which are still functional; however, the responses to these drugs are small. Therefore, patients and the support people have to learn to cope with the disease.

When certain parts of the brain are damaged, the surviving connected regions frequently misinterpret the incoming information. It may appear that the patient is being manipulative, but the fact is that their reality has changed. Even when he/she is not able to express big and complex ideas, one should note that all their feelings are still there because the deeper parts of the brain are mostly intact. They know whether they are being treated well or badly. They still have the capacity to feel happy or sad. It is important for people without dementia to ensure that the person with dementia feels safe, respected and loved. Before the state of advanced dementia (memory loss, difficulty with complex tasks, cannot dress/bathe, has vocabulary of limited number of words, cannot ambulate independently, cannot sit up independently, cannot hold up head independently, urine and bowel incontinence), make sure that everything is done according to the patient’s wishes. Eating problems are the most common problem. Smaller frequent meals, with altered texture and high energy supplements are recommended for weight gain, however, these do not prolong life. A patient enjoys hand feeding and it provides interaction with caregivers. Tube feeding may be substituted during palliative care, but generally is discouraged in advanced dementia. Infections are common; in cases where a simple infection is causing sudden marked change in behavior such as delirium and confusion, antibiotics can help treat the infection and bring the patient back to their previous baseline. However, in general, there is no proof that antibiotics help with the relief of symptoms in patients with advanced dementia. Palliative care is the best preference for comfort. But if prolongation of life is the goal for some reason, then antibiotics may be considered. **Hospitalization**: In the last few months of life, when one is bound to have infections, extreme osteoporosis, and other problems, hospitalization rarely serves any purpose except it may prolong life. If prolonging life is not the goal, then hospitalization, tube feeding, anti dementia drugs, and antibiotics are not useful; keeping the patient comfortable should be the primary goal. For this reason, everyone (caregivers and patients) should be well informed when they give their Advanced Directives.

**Support for family**: Close family caregivers of dementia patients suffer more and longer than caregivers for most other diseases. They see a loved one lose physical and cognitive abilities. They have to take on responsibility of physical and financial care, and are under constant stress. Giving support to caregivers is absolutely essential.

*It is very important that everyone writes a detailed living will so that if and when a patient cannot make decisions for themselves concerning drugs, hospitalization, aggressiveness of treatments, etc., then family, friends and healthcare people can act according to the wishes of the patient.*
My world got smaller again last month when long time friend and colleague, Gary Phillips, was finally overcome with the creeping lava of dementia at his home on Bainbridge Island. Loss is rampant in my life. Our high school basketball captain and my friend is on the locked floor of a hospital and will never leave it again. Alan Wale, who enabled me to have an exhibition of carvings in Sydney, Australia, and shared his family with me as well as his exceptional cabinet-making skills, died two months ago. My friend David Cregan, playwright for the Royal Court Theatre and teacher at the grammar school in England that I was sent to on the exchange-teaching program, died from Parkinson’s last year. And the friend I have known the longest, since grade two at Pauline Johnson Elementary, has just been told by the medical magicians that they have no more tricks to try and stop the ravages of cancer raging now throughout his body. And these are just current: I saw an old picture of our rugby team recently, for example, and there are only five of us left alive.

Loss of old friends is a double torment: we grieve for their loss in dying, and for our loss of them as friends and companions. Gary and I worked together, shared a commitment to self-directed learning, started a company together, and even after he retired to Bainbridge, near Seattle, we continued to meet, sometimes there and other times up here, but often we met at the Post Office in Mount Vernon, our choice of a half-way spot to meet. From there we went on “wanders”—drive to the end of the block and then decide, “left or right?” We ended up by rivers, on mountaintops, at a very old nine-hole golf course, and a strange ranch with huge Clydesdale horses. When Gary’s dementia made it difficult to find the Post Office and then Mount Vernon, his wife Mary drove him there and waited in the library until we found our way back to town. He finally slipped away from me, and I will never know his like again. That his life is over, is one sad thing; that he is an irreplaceable loss in my life is quite another.

So, what do we do as we age and lose those we care about most? I intend to keep Gary and others I loved very alive in my heart, enriched by photos and notes in my journal. I try harder now to make sure that those I care about know that I care about them; I fight the tendency to hole up in my lair and struggle to reach out to others. I’m getting old; things decline, but maybe the decline is just showing us where we have to fight the hardest. The first half of life seems to be striving to fulfill opportunities; maybe the latter is in part striving to maintain the gains we achieved. Giving up doesn’t seem like a very desirable option.