A Word from the Editor

I am pretty sure for most of us that things did not turn out quite as we expected when we started our academic careers. We have lived through a period of astonishing challenges and changes, many unforeseen.

Recent research has resulted in not just an increase in knowledge, understanding and applications, but also changes in perspective, examination of the framework for our research, a critique of the values that inform it, its scope and its relationship to other stars in the academic universe. Other issues that have recently come to the fore is how our work can be shared with students and the broader public, and whether our paradigms have by their nature disadvantaged certain categories of individuals. Thus exposition and teaching have
themselves become objects of study and development.

Some time ago, I invited members of the College to reflect on how their fields evolved during their lifetime, and this issue contains the response from four of them. The invitation stands and I look forward to contributions for future issues of the Bulletin.

I would like to acknowledge the superb leadership of our retiring Principal, Harold Atwood, and Administrative Vice-President, Jim Gurd, in enhancing the effectiveness and reach of our College, as well as our Administrator Vennese Croasdaile who has conscientiously looked after all the technical requirements of keeping the ship on course.

There are new officers at the helm of the College: Principal Michael Hutcheon, Vice Principal (Administration) Janet Paterson, and Registrar John Youson. I wish them well.

Ed Barbeau, Editor

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A Message from the Principal

What a ride it’s been! Those of us from a Health Care background, and I’m sure, many others, noted with concern the ominous reports of a novel coronavirus reluctantly revealed by China at the end of last year. Oh no, we thought! Not another SARS episode!

We had absolutely no idea what was about to happen: how disruptive, not to say deadly, a true pandemic can be. Our travel plans were trashed, our social relations interrupted, and the narrative of the spreading viral toll made us feel vulnerable. We were urged to remain confined to our homes. I’ve even heard that for some this was “enforced” by their concerned children.

Now as we slowly emerge from months of isolation into a world of physical distancing, facemasks and
impeccable hand hygiene, it’s time to reflect on these months and the challenges that lie ahead for Senior College.

Even before the lockdown, as Canada began to experience the onset of infections with CoVid-19, Senior College moved to cancel its remaining Wednesday meetings and postpone the April Symposium. With everyone essentially in Toronto and shut in with reduced social contact for the foreseeable future, a general desire arose to restore some of the Senior College activities that we were missing, by going on-line.

With the invaluable tutorials of our administrator, Vennese Croasdaile, Senior Collegians adapted to the Zoom platform. Experiments in delivering Wednesday lectures were well attended and strongly endorsed. The book club, colloquia and “meet your colleagues” discussions followed. The initial success of these projects generated a full summer program of events tied together with “Coffee hours” began by Jim Gurd as a forum for Fellows to meet and talk.

While we all miss in-person live events I think most participants have been surprised by the ease and effectiveness of the move on-line. An added benefit has been that many of us have met (virtually) and chatted with people whom we hadn’t previously encountered through the Faculty Club and Senior College Centre.

So, what lies ahead? Well, it seems likely that even in the most optimistic scenario we will continue with on-line events in some fashion into the Fall. The Program, Book and Colloquia committees have planned a full schedule with a flexible format. That is, Daphne Maurer, Vice Principal Academic, has been working closely with the Faculty Club to explore how we might return safely to this site while maintaining an on-screen presence. This might allow hybrid meetings to take place, part in-person, part on-line. Our Symposium, for example, on “Ethical Challenges of the 21st Century” postponed from April may go forward in November, perhaps as such a physically distanced, hybrid event. The nature of our gatherings will be determined by the prevalence of Covid in the community and the consequent concerns for safety. We need to experiment and adapt as we go.

Whatever form the contingencies of this pandemic bring, Senior College will continue to offer a vibrant space for the exchange of ideas, academic debate, education and social camaraderie. I look forward to seeing you virtually, or with luck, in person, during our Fall season. The newly minted “Operations group” of Vice Principals Janet Paterson and Daphne Maurer and myself look forward to seeing you virtually, or with luck, in person, during our Fall season.

Michael Hutcheon, Principal

Membership as a Fellow in Senior College

Senior College was organized on May 14, 2009 and the first Council met on June 18, 2009 with Peter Russell as the Founding Principal. According to the detailed records of our Bursar, Charles Chaffey, the first fees were deposited in a bank account on June 19, 2009 and 66 individuals became Fellows between June 19 and December 26, 2009. Of these 66 Founding Fellows, there are 28 who have been able to keep participating into Senior College’s second decade, paying their 2020 Fellow’s fee by July 1, 2020. The continued support of the active Founding Fellows is greatly appreciated.
Like other organizations, including our usual venue the Faculty Club, Senior College has had to adapt to the challenging times created by the Covid-19 pandemic. While many other organizations and businesses have had to close doors or greatly reduce their activities, Senior College has actually broadened and extended activity offerings into the summer months. What we tend to forget is that we usually complete our program of talks, colloquia, book club, symposium, and excursions by the end of March or early April. In the past, the primary summer activity has been informal, lunch get-togethers for discussion. Instead this year, our group of volunteer programmers have continued our talks, colloquia, and book club and virtual coffee gatherings throughout June and July, with plans for August, using Zoom.

In my new duty as Registrar, I have been reminding some of our 2019 Fellows through email that their 2020 fee was requested last January, and if they wish to remain as a Fellow, External Fellow or Spousal member of Senior College and retain their Faculty Club membership, to deal with this request. I am sorry to say that some individuals used the excuse that they did not like our temporary Zoom option and wished to resign as Fellows until times are better and live attendance is once again available. I am pleased to say, however, that the huge majority remembered that we were usually semi-inactive in the summer months and really appreciated the initiative shown by our Program group since the Covid-19 lockdown began at the University of Toronto. Even though some find the Zoom get-togethers not to their liking, and crave the personal interaction, they want to support the future of Senior College through continuing as Fellows.

Despite the few resignations and the lack of response by some to at least 4 reminders of their remiss on fee payment, I am pleased to say that we have 143 fee-paying Fellows of Senior College, as I update my note on September 16, 2020. Of this total, 101 are Fellows (Professorial or Librarian retirees of U. of T.), 21 are External Fellows (retired U. of T. Senior Administrators; Academic retirees from other Universities and Colleges, and special educators), and 21 are Spouses (External Fellows who are spouses of retired U. of T. Professors or Librarians either living or deceased). Since there are another 5 individuals still on our membership list whose future intentions are not firm, but our expectations from their communications is that renewal is imminent, this brings our potential number of Fellows to 148. At the Membership Committee meeting in September, 2019 the goal was set for 150 fee-paying Fellows of Senior College based on what we felt our Faculty Club venue could handle. Even though we were not able to initiate any new U. of T. membership drives this past Spring, due to the university lockdown, our membership remains strong. We have lost a number of long-time Fellows due to death or to health issues that limit mobility and to resignations referenced above. These losses have been compensated by 22 new faces that have joined our ranks since July 1, 2019. Given our annual attrition rate, however, retention and recruitment of Fellows is a priority for Senior College.

I understand that this note is to go first to our committed membership and then to all those on the Listserv including all Professorial and Librarian retirees of the University of Toronto. I ask all committed Fellows to solicit their retired university colleagues to become Fellows, for personal invitation as a guest has been our best method of recruitment. The message to new retirees is to consider the intellectual and social stimulation provided by being a Fellow of Senior College. For further details of our offerings please go to the Senior College website (https://seniorcollege.utoronto.ca). For the process of application to become a Fellow or External Fellow please see our website under "Get Involved: (https://seniorcollege.utoronto.ca/get-involved/become-a-fellow-or-an-external-fellow-3/)

John H. Youson
Registrar
Senior College
Retrospective on my discipline: Philosophy
By Lynda Lange

In the nineteen seventies I came to Toronto to work on a doctorate in philosophy. By the time I graduated at the end of the decade, I had done the very first doctoral dissertation in feminist philosophy in Canada, and possibly in the United States as well. My dissertation was a feminist critique of the political philosophy of Jean-Jacques Rousseau. People studying literature were probably ahead of the philosophers in the early days of feminist critique. However, in academic philosophy it was a battle all the way at that time, even as women’s movement grew in impact in wider society. Philosophical education required eventual acceptance of the uniqueness, however impossible to define, of what philosophy is. I remember the beginning of a course in ethics during my master’s programme at the University of Manitoba, when the professor started with a few questions that he said were designed to see if we were good candidates for the course. One question was “Do you think that philosophy should be relevant?” Too bad for the students who said “yes”. So I spent a number of years, a lot of it actually rather enjoyable, since I loved a good argument, defending a feminist approach against the charge that it was “not philosophy”.

While a graduate student, I was scheduled to teach a course called Contemporary Social Issues. This course gave instructors liberty to choose the social issues they would discuss. Naturally I chose issues related to what we then called “the women’s movement”. A class of about forty-five students appeared the first day in a classroom at Victoria College. “The truth shall make you free” was carved in stone over the entrance, which helped me keep up my courage. When I had explained what the course would be about and invited questions, a young man spoke up to ask if it would “all be biased”? Almost all of the students dropped the course. But… when I returned for the next class (because I had to) they had all been replaced by newly registered students! The word must have gone around very quickly.

My field became “feminist philosophy” as that eventually came to be named as a field of specialization, and I still think that my discipline is philosophy. Other women and myself began with a fundamental critique of political philosophy. Although it purported to be universal, or at any rate disinterested, at the basic level of assumption it could be revealed to be actually about the experience in the public sphere of Western men of a certain social class or race. Those who unavoidably had other sorts of experiences, such as women, colonized, or racialized peoples, simply did not fit into the picture. The classic denigration of feminists back then was that they were women who wanted to be men. The hell of it was that in this canonical tradition of political philosophy going all the way back to Aristotle, only men of a certain class were viewed as full-fledged human persons. We wanted to be persons, certainly, but how, when the only model was that of a “man”?

The necessary second stage of feminist philosophy was the effort to get out of this catch-22 and theorize the social, economic, and political situations specific to women. Of course this area was all about sex and reproduction. These vast areas of human experience had been bracketed within notions of the (male headed) family and of a private sphere where the rules and rights and procedures held sacrosanct in the public sphere did not apply. For one example, the bodily integrity of the person that makes assault, confinement, or kidnapping very serious crimes was out the window when by definition a man could not rape his wife. Legally she was deemed to have consented once and for all by getting married. This was a bargain in which his role was supposed to be to protect her, that is, protect her from other men, since she was a kind of property for
him. And as we know, although rape outside of marriage was defined as a very serious criminal offence, the law was more honoured in the breach than in the observance, with very low rates of reporting and even lower rates of conviction. The idea of “sexual harassment” as we understand it now, as well as the term itself, simply did not exist when women’s movement began to take off in the early nineteen seventies. Rape within marriage is now in the criminal code, as is beating your children, also formerly thought to be a prerogative of (male) heads of families.

My own early work in these areas was to theorize what I called “reproductive labour”. This is the enormous amount of human effort involved in reproducing and maintaining the physical and emotional existence of each generation. Some of this work is done by people paid to work in schools, hospitals, and old age homes. However, the much larger part has always been done by women without any personal or independent remuneration, except legally they have been entitled to the basic “necessities of life” within the family. Of course this has always varied enormously with the wealth of the family and the disposition of the male “head of the family”. It was relatively easy to demonstrate how much time and effort women did (and do still) devote to this work. More fundamentally, it was necessary to argue for the theoretical point that this is actually “labour”? Since we were all leftists to one degree or another, and all had at least a nodding acquaintance with Marxism, it was critical to establish that the enormous social area virtually universally understood as “women’s work” was work (or labour), since labour is what is uniquely human and brings about historical change. Everyone readily sees that time and effort expended for pay is work. But what was the huge amount of time and effort by women who were not paid for this activity? In the canon of political philosophy, it was considered “natural”, an unchanging disposition of women more or less outside history. There is no official training or other qualification; any woman can do it. A fundamentally important effect of this has always been that when this work is paid for, it is valued very little and the pay is low. Of equal importance was the insistence that there should be much more public or collective responsibility for this labour, especially with an affordable high quality national daycare system. We were young then, with children, and took for granted the long term care facilities that were alleviating women’s age-old role in the family of caring for the elderly who cannot care for themselves.

While feminist philosophers argued about these issues in general terms, an avalanche of feminist research happened in sociology, history, and other disciplines, that documented how these things occurred in fact. With academic and other successes by women, it was declared rather precipitately along the way that feminism was dead. Feminist theory had presumably lost its cutting edge.

However, it appears that feminism was only dozing for a while. I never dreamt that more than forty years later these problems would be not only widely recognized but even central in mainstream controversy. The “me too” movement brought the problem of sexual harassment and predation roaring back to widely accepted relevance. Now the covid-19 pandemic has put a spotlight on the essential work of care done largely by women in low paid occupations. Economists have declared that what is needed is a she-covery from the economic effects of the lockdowns, since women are the largest percentage of those who have lost jobs. Not only should care work of all kinds be better paid, with better working conditions, but, according to many commentators, a national accessible day care system is essential for present economic recovery so that women in particular are able to go back to work. When this demand of women’s movement was first being made, publicly funded daycare was considered radical and too socialistic, something like free university tuition. Wait a minute. Don’t we want that too?

Sport Studies: Evolving But Not Yet Evolved
By Helen Jefferson Lenskyj
Professor Emerita
OISEUT

The field of sport studies has changed dramatically since I first entered it as a graduate student in 1980. Some readers may not be aware of its existence, although others may recall my two Senior College presentations on the Olympic industry: the first in 2014 on Sexual Diversity and the Sochi 2014 Olympics: No More Rainbows (Palgrave Pivot, 2014) and the second, in March this year, on The Olympic Games: A Critical Approach (Emerald, 2020). I joke to people who know my history that the subtitle of this book is redundant: everything I’ve written about the topic for nearly three decades has been critical.

Olympic studies is an interdisciplinary area within the subfield of sport studies. By the 1970s, a few scholars from the social sciences and humanities – sociology, history, philosophy, anthropology and political science – were turning their attention to sport and to the preeminent sport mega-event, the Olympic Games. Research in exercise sciences, on the other hand, had a much longer history, with sports medicine dating back more than 100 years. The first conference of the North American Society for the Sociology of Sport was held in Denver in 1980, and the first International Symposium for Olympic Research took place at the University of Western Ontario in 1992. My first experience of a sport studies conference was in 1982 at U of T, when one of the guest speakers, a Toronto Sun sportswriter, made a sexist joke, to the amusement of most of those present.

In this era, sport was seen as a predominantly heterosexual male preserve, as reflected in the small number of female scholars involved and the limited attention paid to women’s sport in the research literature. When my own interest was evolving in 1980, I read a colleague’s statement that accurately claimed one could read all the research on women’s sport in one weekend. So I did… and then, as a Ph.D. candidate, I decided that this would be my research focus and the topic of my 1983 dissertation. The rest, as they say, is history.

As a subfield, sport studies was slow to address the underrepresentation of women and people of colour in the ranks of scholars, as well as the dearth of research on women, and on ‘race’ and racism. At the plenary session of a sport studies conference in Brisbane, Australia, in 1995, I presented figures on the very low number of female presenters and topics related to women at that event. As you might imagine, my observations were not well received, with one male organizer labelling them ‘below the belt’. At the same conference, a sportswriter (again) was one of the guest speakers, and his take on the Chinese women’s swim team was predictably sexist and racist.

While women’s issues were marginalized in sport studies, sport was similarly marginalized in women’s studies. Many feminists of that era tended to see sport as so thoroughly masculinized that efforts to redeem it were a waste of time when the bigger equality issues demanded attention. Another ‘elephant in the room’ of sport studies in the early days was the assumption that women’s sport, especially team sport, was dominated by lesbians. According to this logic, sport attracted so-called ‘masculine’ women or, alternatively, playing sport ‘masculinized’ female participants. References to ‘feminine’ soon became code for ‘heterosexually attractive’.

Sexual and homophobic harassment of female athletes posed a serious threat to their wellbeing and created a chilly climate for women of all sexual orientations. It was not until the 1990s that sport governing bodies began to address the issue, which persists today despite the strength of feminist and LGBT movements around the globe. The recent tragic case of sexual abuse experienced by hundreds of young American gymnasts at the hands of the team doctor provides ample evidence that much work still needs to be done.
Against this backdrop, most female sport scholars who addressed Olympic-related issues did so from a liberal feminist perspective. They called for greater female participation as athletes, officials and administrators, and more sports and events for women in order to level the Olympic playing field. Few asked whether women wished to join this ‘procession of men’, to borrow Virginia Woolf’s apt phrase, and if so, under what conditions? A more radical approach asks how sport needs to change so that all members of society, across genders, ethnicities, social classes and abilities, can enjoy its benefits. Some, myself included, call for the complete dismantling of the Olympic industry.

Over the last decade, a growing body of literature in Olympic studies has taken a critical approach. In 2012, my co-editor Stephen Wagg, Leeds Beckett University, and I had no difficulty assembling a 35-chapter collection, Palgrave Handbook of Olympic Studies, to which 45 international scholars contributed. Every chapter presented incisive critiques of various aspects of the Olympic Games. If we were to repeat the process today, we could readily produce a two-volume collection.

Equally significant, resistance movements around the globe are scrutinizing every aspect of the Olympics, in particular the iron rule that the International Olympic Committee (IOC) exerts over host nations. Tokyo, for example, was bound by the 2020 host city contract even in the face of the Covid pandemic, and next year’s Tokyo Olympics organizers may find themselves in a similar predicament, at the mercy of the IOC. As is the case with other global social justice movements, a number of Olympic scholars and public intellectuals are active participants in these challenges to Olympic hegemony.

There are, however, some practices that threaten the academic credibility of Olympic studies as a scholarly project. The IOC contributes to the funding of a large number of university-based centres for Olympic studies around the world, and in some cases this poses a threat to academic freedom. I have documented examples from Australian and American universities where representatives from Olympic-related organizations have attempted to prevent the publication of critical research. While I have not experienced this myself, I can definitely attest to the ostracism that Olympic critics face both inside and outside the academy.

Another problem is blurred line between academic and professional activities, evident in the practice of inviting high-profile Olympic athletes, coaches, administrators and journalists to participate as keynote speakers or panellists in sport studies conferences, whether or not they have academic credentials or research experience. Predictably, these women and men try to avoid any critique of the Olympic industry, in part because of legitimate fear of repercussions. On a more positive note, there is now greater awareness and an ever-increasing body of critical literature, grounded in empirical research, that challenges Olympic industry mystique and mythology, as well as documenting and exposing the material costs to individuals, communities, and environments.

The Expanding Universe of Astronomy
By John R. Percy
Professor Emeritus: Astronomy & Astrophysics, and Science Education
University of Toronto

What an interesting project — to encourage our members to reflect on the evolution of their discipline! I’m not a professional historian – far from it – but I’m actively interested in heritage. I lead astronomical walking tours of our campus for Heritage Toronto, and give public presentations based on the walk. I prepared the
Astronomy at U of T page in the Senior College Encyclopaedia. Toronto has a proud astronomical heritage, going back to — and beyond — the iconic 1855 Toronto Magnetic and Meteorological Observatory — now called the Stewart Observatory, and home to the U of T Student Union.

In the 60 years since I was an undergraduate astronomy student at U of T, humans have flown in space and landed on the moon. Space probes have explored all the planets in the solar system (including the ex-planet Pluto) and many of their moons. Thousands of “exoplanets” have been discovered around other stars, including dozens of Earth-like ones. Astronomers now understand the life cycles of the sun and stars, including their bizarre end-products: white dwarfs, neutron stars, and black holes. They have shed new light on the origin and evolution of galaxies and the universe itself, and even recorded the after-glow of the universe’s birth — the so-called Big Bang. Science speculation and fiction has become science fact — in living colour.

These advances have come about through new instruments and techniques: giant telescopes on mountaintops in Chile and Hawai‘i, telescopes in space, super-sensitive electronic detectors, observations across the electromagnetic spectrum from gamma rays to radio waves, and powerful computers and software to remotely operate our telescopes, analyze the “big data” from them, and model the structure and evolution of stars, galaxies, and the universe. Canada is part of many of these projects. The costs can be high, which requires either international collaboration (e.g. the European Southern Observatory in Chile) or a rich patron (e.g. the Keck Observatory in Hawai‘i). This research also requires an increasingly interdisciplinary approach: physics, engineering, mathematics, statistics, computer science, Earth and planetary science.

As is usually the case, such advances have led to new and deeper questions. What is the “dark matter” that makes up most of the mass of the universe? What is the “dark energy” which causes the expansion of the universe to accelerate? How do supermassive black holes form at the centres of galaxies, including ours? What is the ultimate nature of matter, anyway? (Observations of the Big Bang can help.) Is there any form of life on the dozens of newly-discovered Earth-like planets? And more philosophical questions: what came before the Big Bang? So awe and wonder continue.

The number of professional astronomers and graduate students in Canada has quadrupled since the formation of the professional Canadian Astronomical Society in 1971. This is in part because of the steady growth of university enrolments, and exciting research opportunities, but also because of the popularity of astronomy courses — especially introductory courses for non-science students. At U of T, there are two such courses with enrolments of 1,500 (and waiting lists). They are taught in Con Hall by award-winning instructors, using best-practice pedagogy and technology, small-group tutorials, and a small planetarium.

There are also students in astronomy major and specialist programs, and 57 graduate students from all over the world. Most go on to academic careers, but a significant number of these “highly qualified personnel” (to use the current terminology) now apply their skill set outside academia, to high-tech fields such as data science and artificial intelligence, as well as to public education, outreach, and communication.

To accommodate this growth, we are well-advanced in planning for a new building, to be built on the site of the present 50 St. George Street. Among other things, it will include a planetarium, for students, and the public. We still lament the unnecessary closing of the ROM’s McLaughlin Planetarium.

Astronomy research in Canada is carried out in the federal Herzberg Institute of Astrophysics, based in Victoria, as well as in university departments and institutes across the country. U of T has hosted the Canadian Institute for Theoretical Astrophysics — a jewel in Canada’s science crown — since 1984. There is a Centre for Planetary Science on the Scarborough campus. In 2008, the University and the David Dunlap family established the Dunlap Institute for Astronomy and Astrophysics, funded by the sale of lands around the
Dunlap Observatory in Richmond Hill. The observatory is now owned by the municipality, and run as a public-education facility by volunteers. The Dunlap Institute’s mandate is four-fold: building state-of-the-art astronomical instruments; making innovative observations; training the next generation of astronomers; and informing and inspiring the public about astronomy in general and the U of T’s work in particular.

Training includes a strong summer undergraduate research program, short courses and workshops in the summer and throughout the year, as well as through our undergraduate and graduate programs. Defining our values, and improving our professional culture — equity, diversity, inclusivity, and sustainability — is an increasing priority for us and for astronomers across Canada. Half a century ago, for instance, most astronomers were male — one exception being my eminent colleague Helen Sawyer Hogg. Now, most of my bright young colleagues are women.

There is new attention being given to Indigenous rights and indigenous knowledge. Mauna Kea is home to a dozen major observatories, some shared by Canada. It is also sacred land for indigenous people of Hawai’i, and this has sparked local demands for “no more observatories on the sacred peak” — at least not without respectful consultation and agreement.

At the same time, universities encourage all academic units to incorporate indigenous ways of thinking and knowing in their courses, where appropriate. At U of T, this has led to a course on Indigenous Astronomy, given by an Indigenous faculty member.

Astronomy is engaging to many members of the general public, and their interests range from the technological to the philosophical and spiritual. Astronomers respond through communication and outreach. We are greatly aided by enthusiastic amateur astronomers. In 2003, the mostly-amateur Royal Astronomical Society of Canada, founded in 1868, won the prestigious Michael Smith Award for excellence in science outreach in Canada. In 2009, professional and amateur astronomers and educators in 148 countries marked International Year of Astronomy, a celebration of the 400th anniversary of Galileo’s development and first use of the astronomical telescope. We organized over 3700 events in Canada, reaching almost two million people. There were also wildly-popular commemorative stamps, and engaging posters on buses and subway trains, and creative partnerships with new audiences — including, for me, Toronto’s Tafelmusik Baroque Orchestra, and Heritage Toronto.

The RASC archivist (a mediaevalist by training) is a national leader in preserving Canada’s astronomical heritage – both professional and amateur. This is a serious matter; as older observatories (such as the Dunlap Observatory) are “retired”, how can they and their history be preserved? How can their science be preserved for posterity when much of it is on photographic plates, or on magnetic tapes?

Skilled amateurs contribute in other ways. My own research on variable stars and stellar evolution depends critically on decades of amateurs’ visual and electronic measurements of the changing brightness of stars. Indeed, “citizen science” is a growing trend in science and society. A current example is the HowsMyFlattening project, which is giving us more and better CoVid-19 data than governments have been able to do. Sadly, most amateur astronomers in North America are graying white males (like me); we need to increase diversity.

Despite scientists’ efforts, science literacy remains low. Studies indicate that over one-third of Americans believe in astrology, space aliens, and young-Earth creationism. Canadians do a bit better – but not much. Very few people understand the cause of the seasonal changes in temperature (hint: it has nothing to do with the distance from Earth from the sun). There is a gap between scientists’ knowledge and public knowledge, which we must try harder to close.
Why fund astronomy in these difficult times? It may have no immediate practical value, but it has long-term applications and spin-offs. Public interest is high, especially among young people. This is important: for them, astronomy is now part of the school science curriculum, and it can be a gateway to STEM interests and careers. Astronomy is as old as humanity; it’s part of our shared heritage. The sky has provided a clock, calendar, and compass, and has been deeply ingrained in spirituality for cultures across the globe, and across time. Now, it deals with some of humanity’s most fundamental questions.

Teaching Human Evolution in Honolulu (Feb-March 2020)
By Becky A. Sigmon, Prof. Emeritus of Anthropology

My connection with Honolulu

Honolulu is a small city melding the features of the Orient and the West into a uniquely adaptive human blend of physical and cultural variation. It is this character that appeals to me. Honolulu’s international University is placed in the Manoa Valley at the base of ancient volcanic hills, away from and yet a distal appendage of this Pacific Island city. On four occasions I was summer term Professor in the Anthropology Department, teaching courses on Human Evolution and Physical Anthropology to students coming from all over the South Pacific as well as from Asian and Euro-American cultures. This varied human mixture makes teaching challenging and yet very interesting for a Physical Anthropologist because human variation is a major focus of our research. The fact that we are a product of our genetic as well as our environmental backgrounds is a fascinating topic to teach, and it gives the student some answers about their own unique physical features.

Honolulu has become my second residence of choice and the University of Hawaii, my second academic institution. When the opportunity arose this year (2020) for me to offer mature students a five-week course in human evolution, (February to early-March, and yes, my timing was perfect) I accepted enthusiastically. The year before, I myself attended courses in the University’s Later Life Learning Institute, and found them informative and inspiring. Noting that there were no course offerings in Physical Anthropology, I volunteered to
teach one myself. I knew the students for these courses would come largely from Hawaii’s two main sources of employment – the medical professions and the military (Oahu has bases for each of the U.S. military branches). There being no major industries other than tourism (if that can be considered an “industry”), these would be the main professions of students signing up for the course, well educated and bright, and with already half a century of specialized knowledge in their own fields. It would be a challenging audience to teach. As it turned out, the medical people quickly caught on to the biology and the military ones were faster in seeing how human variation could be practically applied.

With such a class in mind, I began an outline for a course that I named “Homo sapiens: Its Origins and Evolution.” An alternative choice was “Palaeo-Anthropology is About Us” but that title got lost in paperwork. Past experience has shown me that this topic is of special interest to the average educated person. For example, when popular publications sometimes shower us with agonizingly outrageous and inflated interpretations of newly discovered fossil hominids, I am frequently asked my opinion. My own colleagues would already have communicated with me about their incredulity of such outlandish published material, and I commiserated. I know that fossils and human evolution hold a fascination for many people. Even in Toronto I have frequently been asked to comment on flashy news reports and sometimes ridiculously exaggerated claims about a new discovery. One of my pet peeves is reading a distortion of scientific evidence about fossils and human evolution that is misleading and inaccurate.

Therefore, it seemed to me that a course that provides the scientific framework that would give students the background enabling them to judge questionable matter in popular literature, would be desirable as well as beneficial for the discipline. If people understand how the scientist works in studying fossils, then they themselves can judge the validity of publications. I felt that five classes could provide that scientific background for this goal. My challenging job would be choosing and compressing the right knowledge into five meetings, and presenting it in the right way to maintain the class’s attention and interest.

How did I do it, and how did it work out?

I decided to begin the course by providing a framework that represents a general scientific consensus for interpreting the evidence, fossil and otherwise, of 5 million years of human evolution, with major features of each stage including its time of known existence. This would make it easier for students to fit into one or another of these stages, all the names of fossils that were known (of which there are multitudes), and would help clarify much of their confusion about where a particular fossil or group of fossils fit in an evolutionary scheme.

My outline for the five 2-hour classes included what I had carefully considered would represent a broad but brief summary of each of these evolutionary stages. The first lecture introduced to the class the significance of the single most important feature—upright bipedal posture and locomotion—that characterizes the entire taxonomic family Hominidae that includes fossil and extant species. This feature would be the first step (literally an upright bipedal one) into becoming human and it first evolved in a group of fossils called australopithecines. I suggested students compare themselves with quadrupedal animals to see obvious advantages.

Who were australopithecines? This was my second lecture with a very abbreviated summary of the fossil evidence, and naturally leading me into the third topic on the geology and origins of fossils. How do we know where to look? How do Palaeontologists organize their expeditions, and what are their methods of finding and interpreting fossils when discovered? For this lecture, I used my personal experience in the field and my involvement with the International Afar Expedition in Ethiopia at the location where the famous “Lucy” was discovered, and where subsequent work uncovered the “First Family,” a large group of fossils representing a
band that had died a sudden death probably from a flood that had buried and left them undisturbed for 3 million years. The class responded enthusiastically as they vicariously experienced what it is like to be a palaeoanthropologist.

In order to keep up class interest, I chose for my fourth lecture a review of the mysterious loss of original fossils of Homo erectus, the next evolutionary stage following australopithecines. One of the major scientific losses in China during the Second World War was the collection of fossils found at Choukoutien, near Peking, in the 1930s, and lost during the Japanese invasion of China in December, 1941. Because of the historical interest of the Pearl Harbour bombing, this was a particularly appropriate topic for a Hawaiian audience. I even considered it possible that someone in the class might know somebody who could give us further information about the missing fossils. Unfortunately, this didn’t happen.

My last lecture was the most challenging to write. I wanted it to be a brief review of Epigenetics (non-genetic effects of embryological environmental influences) and the resurrection of the evolutionary theory of the inheritance of acquired traits that offers an explanation of why species appear to be well adapted to their environment. Lamarckism, named after the proposer of this theory (1801), had been rejected by “science” in favour of Darwinism and natural selection (1859). It was also excluded from mid-20th century’s “Evolutionary Synthesis” that emphasized Darwinian theory and “evolutionary genetics” and regarded environmental effects as just useless “noise.”

Scientific papers reviving epigenetics were beginning to appear in the literature in the late 20th century. Evidence for the inheritance of environmentally influenced traits was being documented, especially by researchers in medical sciences. Biologists have been slow to appreciate the evolutionary implications. As epigenetic research emerges in science, it is becoming apparent that evolutionary theory must include the role of environment and inheritance of environmentally influenced traits. There has to be room on the evolutionary stage for both a genetic and an epigenetic explanation. How could I include all I wanted to say into one class period?

The weekend before this last lecture, I pondered over how to present this material. I drew diagram after diagram, redrew them, redrew them again, as I tried to summarize evolutionary biological history in the making! The last weekend before the last lecture was pretty sleepless for me as my mind kept going over how to present a review of this evolutionary shift in thinking. The day before the class I finally saw a way to show it in a single diagram, on just one page. There wasn’t time to print it out, so I hand wrote it, and made photocopies to pass out in class. The diagram formed the text of my last lecture. In it I was able to show how the 3 disciplines of fossil studies, genetics, and epigenetics had historically developed and were now being incorporated into a 21st century New Evolutionary Synthesis.

The class ended after 20 minutes overtime, and we all applauded. To me it was gratefulness to the class that motivated me to work out a way to explain how to fit together fossils, evolutionary theory, genetics, and environment! To the class, I think they felt the excitement, but to be honest, their favorite lecture was the Ethiopian palaeontological field expedition and what it is like to be a Palaeoanthropologist!

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Announcement
Deanne Bogdan, Department of Social Justice Education, OISE/UT is featured in conversation with CBC producer Sean Foley in two one-hour episodes on the Northrop Frye's 1962 Massey Lectures, published in 1963 as The Educated Imagination. Both programs were presented on CBC's Radio 1 "IDEAS." The first episode, "Northrop Frye: Return to The Educated Imagination," aired on May 27, 2020. You can access the full episode

How Northrop Frye's 'literary cosmos' can help us reimagine life in 2020

What good is the study of literature? Northrop Frye's 1962 CBC Massey Lectures were his attempt to answer that age-old question. Frye scholar and friend Deanne Bogdan revisits the lectures and helps us map Northrop Fryes expansive vision of literature, life, and human nature.


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SENIOR SCHOLARS ANNUAL

SENIOR

SCHOLARS

ANNUAL

2019

This compilation presents a sample of the ongoing scholarly activities of Fellows, External Fellows, and members of Senior College, which is comprised mainly of retired faculty and librarians at the University of Toronto.

Information was collected in 2020 by the Senior College Centre under the guidance of
Professor Mary Jane Ashley. Contributors are listed in alphabetical order by surname and items date from January 1, 2019 to December 31, 2019.

The variety of citation styles reflects standard practice for each discipline. This document and previous publications will remain available on the website of the Senior College. (https://seniorcollege.utoronto.ca/publications/senior-scholars-annual/)
The College gratefully acknowledges the contributions of Dr. Moyra Mackinnon to the preparation of this compendium.

A Call for Submissions for the 2020 Senior Scholars Annual will be issued early in 2021 for items dating from January 1 to December 31, 2020. For website version and back issues see our website under ‘Publications’

In Memoriam, 2020

James Francis Sidney Bendell (March, 1926 - January, 2020) Professor of Forestry

Donald "Digger" Gorman (1922-April, 2020 Earth sciences (then Geology) in the Faculty of Arts & Science. https://www.utoronto.ca/news/memoriam-donald-digger-gorman-beloved-u-t-earth-sciences-professor?utm_source=U+of+T+News+&+Published+Today&utm_campaign=9a22cf0e3c-EMAIL_CAMPAIGN_2018_01-10_COPY_01&utm_medium=email&utm_term=0_075647550f-9a22cf0e3c-109882817

David MacLennan (July 3, 1937 - June 23, 2020) University Professor, Banting and Best Department of Medical Research
https://www.cdnmedhall.org/inductees/davidmaclennan

Keith Leon Moore (October 5, 1925 - November 25, 2019) Professor and Chair of Anatomy, Division of Surgery; Associate Dean, Basic Medical Sciences https://www.peacefultransition.ca/obituary/707282/

William (Bill) H. Nelson (November 3, 1923 - January 3, 2020) Professor of History; UTFA

Peter Nesselroth (March 1, 1935 - May 31, 2020) Professor of French and Comparative Literature https://complit.utoronto.ca/in-memoriam-professor-peter-w-nesselroth/

Sylvia Ostry (June 1927-May, 2020) Munk School of Global Affairs and Public Policy
https://munkschool.utoronto.ca/feature/remembering-dr-sylvia-ostry-cc-om-frsc/?utm_source=The+Bulletin+Brief&utm_campaign=bfef281105a-
Mario J. Valdez (January 28, 1934 - April 26, 2020) Professor of Spanish and Comparative Literature  
https://complit.utoronto.ca/in-memoriam-professor-mario-j-valdes/

John Valleau (d May 17, 2020) 88 years old. Professor of Chemistry; a founding director of Science for Peace  

Mel Watkins (May 15, 1932 - April 2, 2020) Professor of Political Economy  


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**Retiring Registrar, Edna Hajnal**

Edna was appointed Registrar of Senior College during Peter Russell's term as Principal and officially completed her service in June 2020. The Registrar is one of six senior officers named in our Constitution, and is responsible for maintaining records of who we are and who we have been.

Edna fulfilled her responsibilities conscientiously and her contributions are appreciated by the officers and fellows of Senior College. She took care to present up-to-date information on the number of active Fellows at every meeting of Council and Senate, and conferred with the Bursar to ensure that the financial data on Fellows' fees were accurate. At the Senate meeting of June 2020, she was succeeded as Registrar by John Youson.

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**Weekly Programs**

One of the College's most popular activities has been a series of weekly talks held at the Faculty Club during the academic year. The presenters are often Fellows reporting on their recent work, but outside speakers are also invited.

The program for fall 2020 is: https://seniorcollege.utoronto.ca/fall-2020-program/
Save the date for Senior College's 15th Annual Symposium.

Rescheduled Date: Monday, November 30th

Topic: “Ethical Challenges of the 21st Century”.

Speakers include:

- Michael Szego, The Brave New World of Genomics
- Sheila McIlraith, Artificial Intelligence: Promise and Peril for Humanity
- Lorraine Ferris, What Do I need to Know about Predatory/Deceptive Journals
- Jamil Ammar, Deadly but not Offensive: Jihadist Groups and the New Face of Online Terrorism
- Walter Dorn, Weapons for War and Peace: The Scientist’s Dilemma Representative of Provincial Ministry, The Results of Freedom of Speech Legislation on Ontario Campuses

Location: Online via Zoom.

More information will be provided in the coming weeks.