Vol 5 Issue 1 | 2017

NGIG
The National Geriatrics Interest Group Publication

Revolutions in *Geriatrics*

Perspectives on the past, present, and future

Volume 5, Issue 1, 2017
The National Geriatrics Interest Group Annual Publication
NGIG is a centralized medical student-led group with the goal of bringing together individual GIGs and creating Canada-wide education initiatives in the field of aging.

Editors-in-Chief
Janice Lee
Glara Gaeun Rhee
Johnny Huang

Associate Editors
Gina Eom
Amanda Canfield
Li Yin
Charmaine Lam
Melissa Govindaraju
Eleni Levreault

Layout Design
Janice Lee
Glara Gaeun Rhee

Cover Photo
Wadi Rum, Jordan
Usman Khan

Contact Us
editor.ngigpublication@gmail.com

Website
Canadian Geriatrics Society Student Site
http://canadiangeriatrics.ca/students/

National Geriatrics Interest Group

NGIG1415

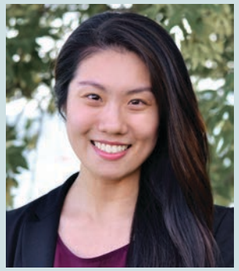
Contents

Features

COMMENTARIES

Creative

Co-Editors In Chief



Janice Lee
MD Candidate, 2017
Queen's University

Janice was a past Co-Chair of the Queen's GIG, and returns to her position as a Co-Editor in Chief for a second year. She taught herself graphic design, and has a passion for visual arts. She is very excited to start her Internal Medicine residency in Toronto next year!

Glara Gaeun Rhee
MD Candidate, 2019
University of Ottawa

Glara is a second year medical student at the University of Ottawa. She feels very fortunate to be part of NGIG to share her passion and interest in Geriatrics with NGIG publication readers.

Johnny Huang
MD Candidate, 2019
University of Ottawa

Johnny is a second-year medical student at the University of Ottawa. He enjoys various aspects of geriatric medicine, as well as being part of the NGIG team that aims to disseminate knowledge to students across the nation.

Letter from the NGIG Co-Chairs

Dear readers,

It is with great honour that we present to you the 5th Annual National Geriatrics Interest Group (NGIG) Publication. Medical students from across the country have submitted impressive articles, artwork, and photographs to be included in the year's edition. Thank you for your support of this project that showcases the talent and hard work of medical students who are passionate about improving the health of older adults in Canada.

The NGIG is a medical student run organization that aims to increase interest amongst medical students in the care of seniors. The NGIG connects the Geriatric Interest Groups (GIGs) at each medical school and unites medical students with a shared passion in providing exceptional care to older adults. We are excited to announce the expansion of GIGs across Canada this year to include a new GIG from the University of Saskatchewan. Connecting GIGs across the country allows students to discuss their common interests, implement national initiatives, and share both successes and challenges to learn with and from each other. We also strive to increase awareness of the positive aspects of aging and the career opportunities in Geriatric Medicine, Family Medicine Care of the Elderly, and Geriatric Psychiatry. We hope you enjoy reading about many of the individual events GIGs completed this year within the publication. One new national initiative this year that we are excited to introduce is a combined GIG and Resident Geriatric Interest Group (RGIG) event that allows medical students to meet and learn from Geriatric Medicine residents at their home medical school.

In addition to the GIG-run events, this year's NGIG executive has introduced further new initiatives including a video resource for medical students that will compare and contrast careers in Geriatric Medicine, Family Medicine, and Geriatric Psychiatry. We have also continued many of our previously successful initiatives including the National Geriatrics Interest Group Student Day that will be held during the Annual CGS Scientific Meeting in Toronto, the #whygeriatricswednesday initiative which is a social media campaign focused on increasing awareness of the positive aspects of aging, and a physician research database for students to utilize when looking for research supervisors.

This publication along with our many initiatives would not have been possible without the help of many individuals and organizations. We would like to thank the CGS for their continued support, Dr. Woo for her mentorship, and the RGIG for their commitment to collaboration with medical students. We would also like to thank the publication team for their dedication and hard work, as well as the GIG and NGIG leaders for their support in advertising and contributing to the publication. Last but not least, we would like to congratulate the students published here and hope that this is the start of many future contributions to publishing and the field of gerontology!

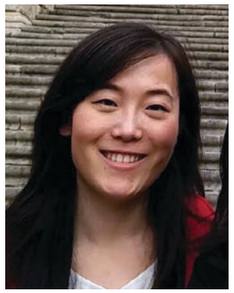
We hope you enjoy and learn from reading the publication.

Sincerely,

Amanda Canfield and Selynne Guo
NGIG Co-Chairs 2016-2017

Amanda Canfield
MD Candidate, 2017
University of Toronto

Amanda Canfield is a prior Co-Chair of the U of T GIG. She is passionate about developing a career with a focus on the care of seniors and has a particular interest in behaviours in dementia. She is looking forward to starting her residency training in Psychiatry at McMaster University this year.



Selynne Guo
MD Candidate, 2017
University of Toronto

Since first year of medical school, Selynne has been actively involved in the U of T GIG, and has been a past Co-Editor in Chief. She will be heading off to the University of Alberta for her Internal Medicine residency this summer.

Updates on Experimental Pharmacotherapy in Alzheimer's Disease

Gina DjiIn Eom

Introduction

Alzheimer's disease (AD) remains a terminal neurodegenerative condition with no effective treatment options. Cognitive enhancers such as donepezil stabilize cognition temporarily without modifying the disease course. Luckily, significant advancements have been made in the realms of pathophysiology and management of AD. Initially reported and eponymously named after the physician Alois Alzheimer in 1905, the disease is on the brink of having effective management available. After attending the 2016 Alzheimer's Association International Conference (AAIC) in Toronto, I look back on the tremendous progress we have made, and the lessons we have learned from setbacks.

Lessons from Discontinued Trials

A popular experimental treatment strategy has been to target Aβ peptides, as their impaired clearance from the brain is an early measurable abnormality in AD patients (Figure 1). Active immunization trials began in 1999-2002 (AN 1792) after a mouse study demonstrated that active immunization removed the pathological protein plaques consisting of Aβ from the brain and even improved some clinical parameters of cognition (1).

The AN1792 trial was discontinued due to side effects of aseptic meningitis in 6% of patients (2), although a key follow up study demonstrated reduction in functional decline in those who responded to the vaccine (2). Using this landmark trial as a launching pad, and equipped with the hope of fine-tuning this treatment modality to avoid side effects, there has been a continuous slurry of immunization strategies over the last 15 years (Table 1).

Table 1 highlights selected previous and ongoing immunization trials directed against Aβ over the last 4 years, 2013- February 2017. It is noteworthy that a significant number of experimental drugs seen here have been discontinued, as they failed to meet their clinical end points (that is, cognitive stabilization and improvement).

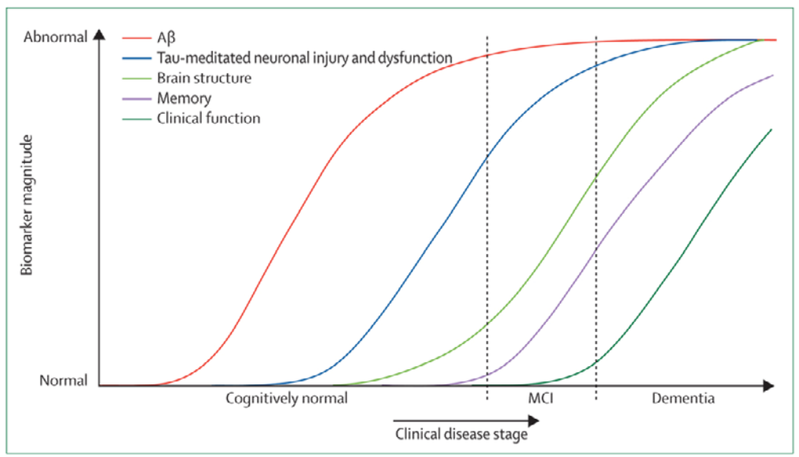


Figure 1: Model of dynamic biomarker appearance in the pathological progression in AD. Source: Jack C et al 2010 (3). MCI = mild cognitive impairment. Depiction of observed biomarkers in sequence of pathological events seen and measured in AD patients.

One modification on AN1792 was to deploy a passive immunization strategy, which allows the delivery of a controlled dose of antibodies without relying on the patients' variable B cell responses. Monoclonal antibodies were also thought to circumvent possible cellular mediators in using one isotype of immunoglobulins that avoid overactivation of effector cells (microglia and perivascular macrophages). Yet another modification strategy to AN1792 has been to target the N-terminal portion of Aβ, thought to engage B cells instead of a cellular (T cells) response.

Table 1 highlights selected previous and ongoing immunization trials directed against Aβ over the last 4 years, 2013- February 2017. It is noteworthy that a significant number of experimental drugs seen here have been discontinued, as they failed to meet their clinical end points (that is, cognitive stabilization and improvement).

There is ongoing discussion as to why targeting Aβ with antibodies has lowered plaque burden in the brain in mouse models, and yet in patients it has not ameliorated clinical parameters (i.e. cognition). Ultimately, the AD research community emphasizes that the stage at which we clinically detect the disease is well past its initial pathophysiological stage in the cascade. It is thought that the trials conducted with Aβ antibodies is "too little too late" to reverse the subsequent steps of tauopathy and neuronal death. An important emphasis then, is to detect AD earlier in order to be able to effectively alter its disease course.

Drug name	Company	Type of Compound	Trial Status	Comments
CAD106	Novartis	Aβ1-6 + viruslike-particle (VLP)	Phase III ongoing	Active immunization Enrolled for API
Affitope AD02	Affiris	Mimitope Aβ1-6	Phase II discontinued	Active immunization /mimitope
UB311	United Biomedical	Aβ1-14	Phase II ongoing	Active immunization
ACC-001+QS21	Wyeth	Aβ1-7+ carrier	Phase II discontinued	Active immunization
Crenezumab AC	Immune /Genentech (Roche)	IgG4 against Aβ	Phase III ongoing	Passive immunization Enrolled for API
Gantenerumab	Roche	IgG1 against Aβ	Phase III ongoing	Passive immunization enrolled for DIAN
Solanezumab	Lilly	IgG1 against Aβ	Phase III discontinued	Passive immunization enrolled for DIAN and A4 did not meet target endpoints
Immune globulin	Instituto Grifols	IVIg	Phase III ongoing	Passive immunization
Bapineuzumab	--	IgG2a against Aβ1-16	Phase III discontinued	Passive immunization
AAB 003	Pfizer/ Janssen	IgG1 against Aβ1-6 + 3 mutations Of the heavy chain hc constant region	Phase II discontinued	Passive immunization
Adacaneumab	Biogen	IgG1 against protofilbrillar Aβ	Phase III ongoing	Passive immunization

Table 1: Selected Aβ-targeting immunotherapies in clinical trials from 2013-2017 (up to date on February 2017). Sources: Alzheimer's Association (http://www.alzforum.org/therapeutics/) and ClinicalTrials.gov

Alzheimer's Prevention Studies

In the spirit of treating AD patients earlier, clinical trials called DIAN (Dominantly Inherited Alzheimer Network) , A4, API (Alzheimer's Prevention Initiative) have commenced in recent years, as prevention trials. Familial AD (FAD) comprises about 0.5% of the AD population and it presents at an earlier age. Investigators have turned to this small subset of AD patients to look for answers. DIAN works with FAD patients on a multinational level and involves hundreds of patients per trial arm. Table 1 highlights some of the drugs used in these prevention trials. A4, yet another prevention trial, administers Aβ antibodies to one thousand healthy individuals who have signs of Aβ deposition but exhibit no signs of cognitive impairment. API works with a Colombian FAD family living around Medellin in treating them a decade before predicted onset of disease.

Conclusion

Ongoing discussions and continuous progress in the field of AD present a hopeful landscape in the realm of pharmacotherapy and overall disease modulation. Ultimately, we hope to get to a point where AD is diagnosed early, and cognition can be stabilized with medication and other treatment strategies. Each year, the field advances with new knowledge and insights, and lessons from discontinued trials have proven to be valuable springboards for managing AD effectively in the near future.

Gina DjiIn Eom
MD Candidate, Class of 2017
Queen's Univeristy

Gina Eom is in her last year of medical studies. She also has a PhD in neurosciences (dementia) which she obtained in Berlin, Germany.

References

1. Schenk D et al. Immunization with amyloid-beta attenuates Alzheimer-disease-like pathology in the PDAPP mouse. Nature. 1999 Jul 8;400(6740):173-7.

2. Vellas B, Bet al. Long-term follow-up of patients immunized with AN1792: reduced functional decline in antibody responders. Curr Alzheimer Res. 2009 Apr;6(2):144-51.

3. Jack CR et al. Hypothetical model of dynamic biomarkers of the Alzheimer's pathological cascade. Lancet Neurol. 2010 Jan;9(1):119-28.

The Challenges of Reconciling Geriatric Undergraduate Curriculum Across Canada

Jasmine Mah, Glara Gaeun Rhee, Phillip Tsang, Jacinta Peel, Adam Rocker, Daniel Weiss, Anna Byszewski, and Geneviève Lemay

The overall mission was to create fun and interactive geriatric learning opportunities at the University of Ottawa. However, our team of researchers first had to examine geriatric education at the undergraduate level by collecting information on how geriatric training is implemented at the various medical schools across Canada. Our preliminary findings suggest that undergraduate geriatric curriculum is very heterogeneous in both focus and execution. This commentary aims to provide insights on the challenges faced during the data collection of geriatric curriculum and provides learning opportunities for future research in this area.

To help standardize learning objectives nationally, the Canadian Geriatric Society (CGS) published a set of Core Competencies in the Care of Older Persons for Canadian Medical Students, which was used as a guide for this study (1). All seventeen medical schools across Canada were contacted and asked to provide a list of geriatric content delivered to their students. Two schools did not respond to our requests, one school had no dedicated geriatric curriculum and three others were undergoing a similar evaluation of their geriatric content.

We soon realized that there was no consistent faculty member who would provide the information we were looking for regarding geriatric content. Table 1 shows the variation in faculty positions from whom the data was collected. We had to network with multiple faculty members before finding an informant. Key resources included the Members of the Medical Education Committee of the CGS, the CGS website (2) and each medical school's geriatric deans and associate professors.

Geriatric Curriculum Director	3
Geriatric Program Director	2
VP Education/Director of Education	3
Geriatric Interest Group Associate	1
Administrative Assistant	2
Non-Geriatrician Physician	1
Geriatrician not otherwise specified	1
Schools who did not provide geriatric objectives	2

Table 1: Information on undergraduate geriatric curricula across Canada were gathered from these sources.

Lombok, Indonesia
Usman Khan
University of Ottawa

St. John's, Newfoundland
Selynne Guo, University of Toronto

The second challenge involved establishing parameters of what constituted geriatrics curriculum. Since many schools integrated geriatric content across multiple specialities, it was important to have a standardized definition. To build upon the work of the Survey of the Geriatrics Content of Canadian Undergraduate and Postgraduate Medical Curricula undertaken in 2005 and 2009, geriatric content was "defined as the hours of lectures, tutorials, and laboratory or clinical skills sessions that were developed by internist geriatricians, geriatric psychiatrists, or family physicians with additional care-of-the-elderly training." (3) This facilitated data retrieval for our faculty informants and helped with comparing our results to previous literature.

Given the variability in implementation of curriculum, collecting uniform metrics to compare geriatric content was challenging. A minority of schools had dedicated and discrete blocks of geriatric learning, from which we were able to extract hours, objectives, lectures and extra-curriculars. The majority of schools used only one of the mentioned outcome metrics to meet geriatric training requirements despite our researchers' efforts to conduct curriculum database searches and hand-comb through data. Inconsistency made reconciling geriatric content across Canada difficult. In future research, it would be important to identify key stakeholders in geriatric medicine from each medical school and use their connections to get the desired metric of geriatric curriculum.

Overall, the challenges faced during our geriatric curriculum study suggest little has changed in geriatric training for undergraduate medical students. In 2012, Dr. Christopher Frank, chair of the Health Care of the Elderly Program Committee at the College of Family stated, "while the academic community is generally aware of the need to ensure that medical students and physicians have skills in geriatrics, it's very inconsistently covered…[and] very variable, and in some places done superbly well and in other places with lots of work to do." (4) As advocates of geriatric medicine, we must promote high quality geriatric training, especially when medical student career choices are influenced by early exposure, undergraduate experience, and mentorship. (5) It is therefore important to develop engaging geriatric learning opportunities at the undergraduate level, if we are to promote interest in geriatric sub-specialities such as care of the elderly, geriatrics and geriatric psychiatry.

Jasmine Mah
MD Candidate, Class of 2017
Univeristy of Ottawa

Jasmine Mah is a fourth year medical student at the University of Ottawa who is passionate about the provision of healthcare to geriatric populations. Throughout her career she has had mentorship and training through the University of Ottawa's Geriatric Department, Baycrest Health Sciences Centre and Bruyère Continuing Care. She would like to thank her wonderful research team for their excellent contributions to this project.

References

1. Parmar, J. Core competencies in the care of older persons for Canadian medical students. Canadian Journal of Geriatrics. 2009;12(2)
2. The Canadian Geriatrics Society Affiliated Geriatricians by School. (n.d.)., Available from: http://canadiangeriatrics.ca/circleflip-portfolio/ [Retrieved 19th February 2017]
3. Gordon, J. Updated Survey of the Geriatrics Content of Canadian Undergraduate and Postgraduate Medical Curricula. Canadian Geriatrics Journal. 2011; 14(2)
4. Monette, M., & Hill, A. Arm-twisting medical schools for core geriatric training. CMAJ. 2012;184(10)
5. Pianosi, K., Bethune, C., & Hurley, K. Medical student career choice: a qualitative study of fourth year medical students at Memorial University, Newfoundland CMAJ Open. 2016;4(2)

The Battle Against Aging

Yiqiao (Daniel) Wang

My grandmother is almost 80 years old. Although she is living independently with my grandfather, I can see her gradually declining and fighting a daily battle with her own body. Five years ago she was involved in a car accident. She is now no longer able to lift her arms and has chronic hip pain on both sides of her body that affects her mobility. She currently takes a number of medications for various medical concerns including hypertension and hypercholesterolemia and has a large abdominal circumference. Psychologically there are also challenges. She is known to have mild cognitive decline, scoring 20/30 on a recent MoCA, which was largely attributed to memory troubles. She also has depressive-like symptoms such as a low mood but has not been formally diagnosed. "I can't do anything right," she tells me after a minor incident like misplacing her purse. These are only some of the challenges that many seniors, including my grandmother, face in their everyday lives.

In one passage of Atul Gawande's book Being Mortal, he describes poignantly "It is not death that the very old tell me they fear. It is what happens short of death – losing their hearing, their memory, their best friends, their way of life…Old age is not a battle. Old age is a massacre".(1) We can never escape old age just as we are unable to escape time. Yet I cannot help but believe life should not be as difficult as it is for many in this population. Physicians play a vital role in seniors' care and I believe that physicians can do more than they realize. Doctors need to first and foremost take time to learn about normal aging and the unique struggles that occur in this population. In addition, it is also essential to provide prompt public health interventions and appropriate support for psychological issues. If physicians work hard to relieve the elderly of their greatest fears, quality of life can be improved facilitating a smoother transition for the next world.

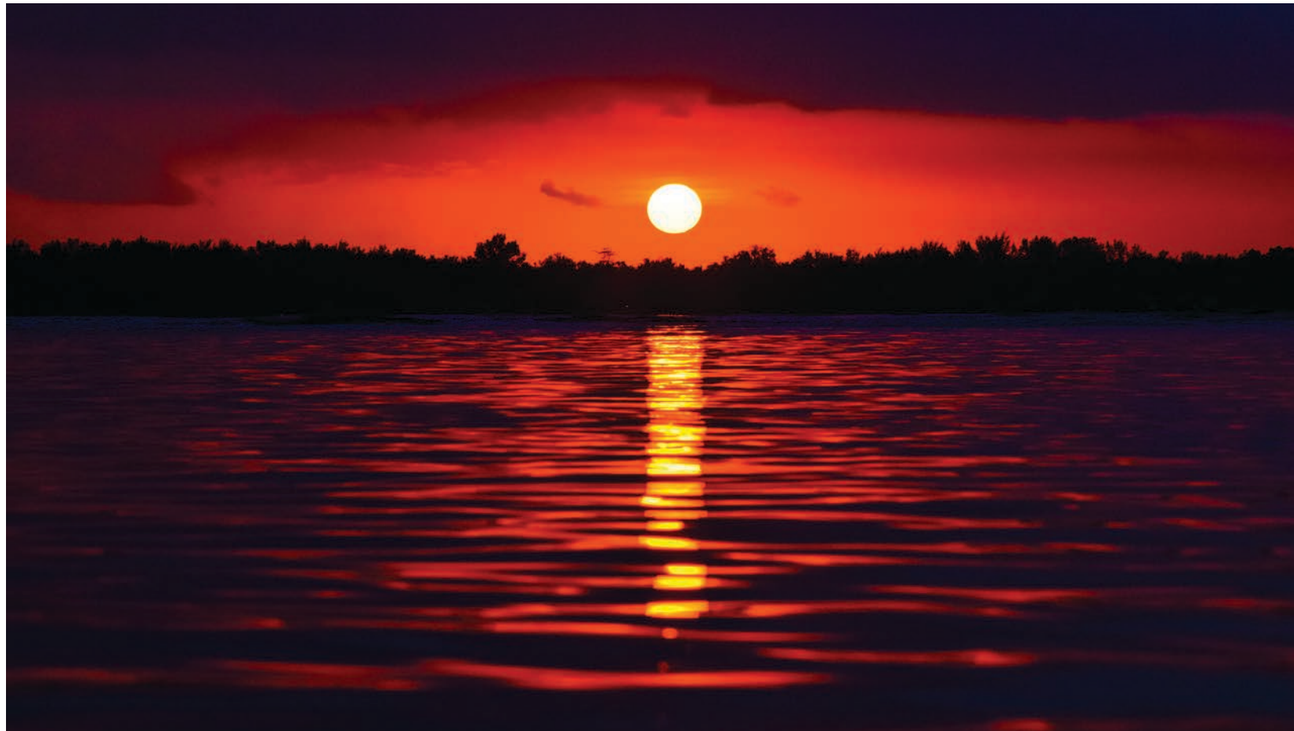
As of today, 16 percent of our population is over the age of 65, and this number will only increase in the future due to the aging of baby boomers (2). Therefore a better understanding of the elderly patient, both learning about the aging process and listening to each patient's unique history is vital for proper care. Normal aging is taught very minimally if at all in medical schools in Canada. This is not ideal, as it is impossible for physicians to care for a population if they cannot differentiate between normal physiology and pathology. For example, signs of normal aging are a slow decline of working memory, sagging skin, and a reduced capacity to fight off infectious disease (3,4). In contrast, falls are not signs of healthy aging. If doctors learn what is expected in normal versus abnormal aging, it can facilitate more prompt interventions in response to the presence of symptoms. In addition, proper history taking during communication with patients is essential for physicians to learn about their patients. This process may require a lot of patience as seniors can present with many different diseases. I understand that it can be difficult for physicians to be patient due to time constraints, however it is important to take into consideration all concerns for proper diagnosis and treatment. Lastly, physicians must be scholars through research to improve our knowledge of aging. Currently the concept of frailty, the decline of physiological systems that cause an increase in adverse outcomes, is a growing topic in geriatrics (5). Time is the greatest limitation to learning. However, the more doctors can understand and learn about this population, the better they can serve them down the road.

Currently 4.8 percent of the Canadian population is living with cardiovascular disease (6). This number however increases to 22.9 percent for individuals older than 75(6). As cardiovascular disease and other health issues are largely preventable, public health interventions should be implemented in clinics. Many common diseases in the elderly such as myocardial infarction and stroke may be prevented by an alteration of risk factors early in patients' lives such as diet and physical activity (7). Physicians must be health advocates for those who are young, which can be accomplished with the use of information pamphlets and engaging in honest discussions on future health. In addition, physicians must also take into consideration prevention of falls in the elderly, which is the main cause of serous injury in this population (8). For example, certain medications such as antidepressants, diabetes medication and anti-hypertensives may increase falls risk and should be tightly monitored(8). Understanding and reducing drug side effects and interactions before they begin is vital to provide appropriate treatment. Public health interventions in the elderly are challenging, as it is difficult for both physicians and patients to think about long-term health. However, primary prevention may be the most important factor to improving a patient's quality of life.

I will never forget the day after my grandmother's car accident when she told me in her hospital bed that she was "only a burden and did not want to live". This scenario may be an extreme, yet the rate of depression and certain psychiatric disorders such as dementia have a higher prevalence in the elderly (9). Physicians must find ways to care for those who are suffering internally and it begins with companionship and a development of rapport. We often see physicians spend little to no time with patients, when in fact, proper professional relationships can decrease the prevalence of depression related to loneliness (10). In addition to building therapeutic rapport, family physicians should learn more about the treatment of psychiatric disorders. Cognitive Behavioural Therapy (CBT) strategies should be more commonplace in our clinics, and community resources such as the Alzheimer's Society must be discussed at the time of diagnosis. If physicians can improve the mental health of seniors early on, it could extend into their physical wellbeing and even the wellbeing of their caregivers. Lastly, physicians should try to encourage a purpose to those who are reaching the end of their lives. An experiment was conducted in the 1970's where many residents in a Connecticut nursing home were given a plant (1). Some residents were assigned the job to water their plant, while others had their plants watered for them. After one year, members of the group that watered their own plant were found to be more alert and lived longer (1). Similarly, physicians can guide seniors by discussing personal goals and collaborate with them to allow these ambitions to develop. I believe with the proper care, the incidence of psychiatric disease may decrease and some seniors can acquire joy once again.

William Osler once said, "A good physician treats the disease, but a great physician treats the patient who has the disease" (11). This quote cannot be more important than in the care of the elderly as it is never a single illness physicians are treating,

Gili Air, Indonesia
Usman Khan
University of Ottawa



but a myriad of different issues all at once. If each physician makes an effort to learn about the aging population, promptly implements public health interventions and takes care to address the psychological difficulties facing the elderly, it could greatly improve the quality of life of older adults. With my grandmother, my hope is that even if I leave the city for residency, I can be confident she will receive the proper care that she deserves from her physicians. When I started my journey as a medical student, I was blinded in thinking that my grandparents would continue to slowly lose the battle with old age. At this stage in my training I now have a glimmer of hope. What if old age does not need to be a battle or a massacre as described in Gawande's book? What if peace can be achieved, with the help of physicians that take the time needed to appropriately care for this vulnerable population (1).

Yiqiao (Daniel) Wang
MD Candidate, Class of 2019
University of Ottawa

Yiqiao Wang is currently a second year medical student at the University of Ottawa. He obtained a degree in Bachelors of Health Sciences from McMaster University in 2015. During his free time, Yiqiao enjoys volunteering at the St Louis long-term care home and spends time with his grandparents who live in Ottawa with him. He would like to instil in others a heart to take care of the elderly, as our lives would not be the same without them.

References

1. Gawande A. Being Mortal. New York: Metropolitan Books; 2014.
2. Society, the Individual, and Medicine. Facts & Figures: Aging in Canada and the World [Internet]. Ottawa. Available from: https://www.med.uottawa.ca/sim/data/Aging_e.htm
3. Murman DL. The Impact of Age on Cognition. Semin Hear. 2015 Aug; 36(3): 111-21
4. Brandenberger C, Muhlfeld C. Mechanisms of lung aging. Cell Tissue Res. 2016 Oct.
5. Fairhall N, Langron C, Sherrington C, Lord SR, Kurrle SE, Lockwood K, et al. Treating frailty—a practical guide. BMC Med. 2011 Jul 6; 9:83.
6. The Conference Board of Canada. Mortality Due to Heart Disease and Stroke. [Internet]. Available from: http://www.conferenceboard.ca/hcp/provincial/health/heart.aspx
7. Padwal R, Hackam D, Khan N, Tobe S. Primary prevention of CVD: modification of diet in people with hypertension. BMJ clin Evid. 2016 Jan 5.
8. What Causes Falls in the Elderly? How can I Prevent a Fall?. Am Fam Physician. 2000 Apr 1;61(7):2173-74
9. Hornsten C, Lovheim H, Nordstrom P, Gustafson Y. The prevalence of stroke and depression and factors associated with depression in elderly people with and without stroke. BMC Geriatr. 2016 Oct 7;16(1): 174.
10. Domenech-Abella J, Lara E, Rubio-Valera M, Olaya B, Moneta MV, Rico-Uribe LA, et al. Loneliness and depression in the elderly: the role of social network. Soc Psychiatry Psychiatr Epidemiol. 2017 Feb 2.
11. Centor RM. To be a great physician, you must understand the whole story. MedGenMed. 2007 Mar 26;9(1):59

Flipping the Script

Why my positive experience in long-term care developed my passion to provide care to seniors

Pigeon Mountain
Canmore, Alberta
Amanda Canfield,
University of Toronto

Amanda Canfield

As I progress through my medical training, I have continuously reflected upon the three years I worked in a long-term care home as a student nurse's aide during high school. In fact, this part-time job in many ways has led me to my future career as a physician. I have always known that my passion to work with seniors stemmed from my previous experience, but what really drove this desire is something I never fully explored.

When I express my interest in a career focusing on the care of older adults, others often respond with sentiments of finding this area of work "depressing". At this point, I reciprocate with an explanation about how I do not relate to that concept. However, in truth, my own first exposure to the care of seniors almost dissuaded me from the field. My role in the long-term care home primarily involved assisting residents with their activities of daily living: dressing, eating, bathing, and ambulating to name a few. If you asked me about the experience today, I would tell you it was positive; but for the first week I came home each evening and cried. My feelings during that time are difficult to put into words. I cannot describe it in any other way except that the residents seemed so real. I think I had thought that the manifestations of the illnesses I saw would present in a textbook fashion and the actions of residents would be predictable, making it simple to provide quality care in a logical manner. Yet in reality the task of providing support to residents was much more challenging. Each person was unique and every resident had their own set of health and social challenges requiring care to be tailored to meet the needs of individuals. Being young and inexperienced also caused me to initially focus on the negative aspects of aging and the function many residents had lost, making me fear my own aging. However, as I became comfortable in my role I learned more about those I provided care to; I met their families, asked about their likes and dislikes, listened to stories of their pasts, and was able to relate to them on a personal level. I learned that there are many positive aspects that come with aging. I built professional relationships with the residents and realized that I could positively impact their days and even lives by being present, patient, and compassionate. When I moved to leave for university, I can genuinely say I was sad to leave my position behind.

Ten years later, I had the opportunity to participate in an interprofessional internship as a medical student at the Baycrest Centre for Learning, Research and Innovation in long-term care. One of the activities of the internship was shadowing a personal support worker (PSW) for a morning. The objective of this experience was to allow interns to understand the challenges of this profession and gain a deeper appreciation of the work of PSWs. For me, the appreciation was already there. Stepping onto the floor in a long-term care home from the perspective of a PSW was in many ways for me like going back in time. It reminded me of the joy I felt while working in the long-term care home in high school and of what sparked my passion for providing care to seniors. This time around, I felt no shock when I witnessed residents displaying the manifestations of their various illnesses but was rather impressed by the expertise of the PSW in de-escalating behaviours in dementia. The most memorable moment of my day was spending fifteen minutes sitting with a woman who reached out for my hand as I walked down the hall. She examined my two rings and commented on how beautiful they were and I complimented her on her lovely painted red nails. We shared smiles and a few words here and there, but mostly enjoyed the silent comfort of each other's company. Letting go of her hands was actually the hardest thing I did that day rather than observing the unique health and social challenges of the residents and the consequences they can have in a long-term care environment. I wish other medical students, and trainees from all health professions, could experience similar positive encounters with long-term care home residents because these experiences are what fuelled my passion and forever changed my perspective on the field.

The moral of the story is this: do not let the fear of aging or long-term care homes skew your perspective on caring for seniors or make you afraid of your own journey through life without having immersed yourself fully in the field. To paraphrase the wife of a resident with front-temporal dementia that I visited with during my time at Baycrest who said 'aging has a lot to give', there is so much more to getting old than gaining years and losing function. We must remember to appreciate the strengths of older adults and celebrate the lives they have led and continue to lead. Memories, wisdom, experience, and family, are some of the many positive aspects that come with the process of aging. I will leave you with one last story from my day of shadowing in the long-term care home. After getting an elderly lady up from bed, the nurse pulled a framed photo from the resident's window ledge. She handed it to the resident and said, "What are the names of your grandchildren?" The resident, with ease, told us the names of each child. She pointed at them one by one with a bright smile across her face. To me, these moments are the most beautiful and I have cherished the feeling of joy from moments like these for a decade of my life. So to answer those who ask if caring for seniors is "depressing": while of course there are aspects of aging that are challenging both for seniors and their caregivers, the answer for me is still a clear no.

Amanda Canfield
MD Candidate, Class of 2017
Univeristy of Toronto

Amanda is a fourth year medical student at the University of Toronto. She currently serves as Co-Chair of the National Geriatrics Interest Group and is a prior VP Media and Technology. Amanda is passionate about developing a career with a focus on the care of seniors and has a particular interest in behaviours in dementia.

Ninh Binh, Vietnam
Usman Khan
University of Ottawa

Home Advantage for the Homebound:

A Case for Home-based Primary Care

Alex Adibfar and Adrian Chan

Interprofessional education (IPE) is a recurring theme that is integrated into our curriculum at the University of Toronto. Over 1,600 students spanning eleven health science programs—from occupational therapy and social work to pharmacy and medicine—are given the opportunity to learn more about each other's roles in order to work better as team members and improve the quality of care we hope to provide to our patients in the future. One of our recent IPE learning activities had us reflect on the experiences of a patient volunteer who described her challenges managing her chronic conditions and her many interactions—both good and bad—with various healthcare teams. Thanks to her insight, we were able to better appreciate the importance of patient-centred care and effective communication across health disciplines.

Our IPE experiences prompted us to consider the limitations of our current healthcare system, particularly as they relate to our aging population. They made us ask ourselves whether those with more complex health needs would be best served by a more sophisticated healthcare model. Medical care tends to be divided into sub-specialties and is effective at treating patients with acute illnesses. However, it is less capable of managing older individuals who suffer from chronic and often comorbid conditions, such as diabetes and dementia, as well as functional decline and social frailty (1, 2). Homebound elders are particularly impacted by this shortfall: primary care provision is largely confined to physicians' offices, presenting a significant accessibility barrier for this vulnerable group. Consequently, homebound patients are often obligated to seek help in hospital emergency departments, incurring greater healthcare costs in addition to the health risks associated with hospitalization (3). This fundamental shortcoming invites the question of whether our healthcare resources are being used as effectively as possible. Indeed, the top 5% of people with the most complex needs account for 60% of Ontario's overall healthcare costs (4). This staggering finding underscores the need for innovative and sustainable models of care that challenge conventional health service delivery.

Home-based primary care (HBPC) is a model that is becoming more widely recognized. It involves physician- or nurse practitioner-led interprofessional teams who provide regular visits for homebound patients with complex chronic disease (3). These programs aim to:

- Provide ongoing access to home-based services and primary medical care;
- Maximize patient independence and quality of life by creating care plans based on initial, holistic geriatric assessments;
- Reduce emergency department, hospital, and long-term care admissions; and
- Provide after-hours availability for urgent issues (5).

High-quality evidence illustrates the benefits of HBPC in delivering comprehensive care to older adults with complex health needs (6, 7). A systematic review of nine studies pooling 46,154 homebound community-dwelling participants aged ≥ 65 reported that HBPC provision resulted in significant overall reductions in emergency department visits, hospitalizations, long-term care admissions, and hospital and long-term care bed days (8). Most of these outcomes were observed just 6 or 12 months after participants were enrolled in HBPC programmes. Furthermore, a qualitative study exploring the perspectives of frail elders receiving HBPC across seven programme sites in Ontario reported higher patient satisfaction and quality of life after enrolment (5). One explanation for this finding is that the healthcare team members were able to spend more time with their patients through regular home visits. This is an important feature of HBPC: socially isolated patients are granted the invaluable opportunity to build meaningful relationships with their interprofessional healthcare team, creating a strong sense of social support.

Homebound older adults are at increased risk for converging medical and social problems. Alternative models of healthcare provision like HBPC may be better suited for the unique needs of this marginalized group and should be expanded in order to break the vicious cycle of inadequate access to primary care and hospitalizations resulting from increased morbidity. Mounting evidence also suggests that HBPC improves the quality of life of these patients and their caregivers (5). Such models rely on an integrated team whose members work together effectively. By continuing to learn and collaborate with students from our companion health professions, we hope to develop the ability to one day empower our patients by optimizing their health and independence at home.

Alex Adibfar and Adrian Chan
MD Candidate, Class of 2020
Univeristy of Toronto

Adrian and Alex are first-year medical students and Mississauga Academy of Medicine representatives of the UofT Geriatrics Interest Group. Adrian has a keen interest in improving health outcomes for frail elders through research and health policy. Alex is passionate about brain health and the improvement of care for those living with dementia and their caregivers.

References

1. Sinha SK. Why the elderly could bankrupt Canada and how demographic imperatives will force the redesign of acute care service delivery. Healthc Pap. 2011;11(1):46-51.
2. Williams AP, Lum JM, Deber R, Montgomery R, Kuluski K, Peckham A, et al. Aging at home: integrating community-based care for older persons. Healthc Pap. 2008;10(1):8-21.
3. Stall N, Nowaczynski M, Sinha SK. Back to the future: Home-based primary care for older homebound Canadians. Part 1: Where we are now. Can Fam Physician. 2013 Mar;59(3):243-245.
4. Rosella LC, Fitzpatrick T, Wodchis WP, Calzavara A, Manson H, Goel V. High-cost health care users in Ontario, Canada: demographic, socio-economic, and health status characteristics. BMC Health Serv Res. 2014;14:532.
5. Smith-Carrier T, Sinha SK, Nowaczynski M, Akhtar S, Seddon G. It 'makes you feel more like a person than a patient': patients' experiences receiving home-based primary care (HBPC) in Ontario, Canada. Health Soc Care Community. 2016 Apr [Epub ahead of print].
6. BRIDGES – Building Bridges to Integrate Care [Internet]. 2014 [cited January 15, 2017]. Available from: http://www.building-bridges.ca/about/.
7. Smith-Carrier T, Pham TN, Akhtar S, Nowaczynski M, Seddon G, Sinha SK. "A more rounded full care model": Interprofessional team members' perceptions of home-based primary care in Ontario, Canada. Home Health Care Serv Q. 2015;34(3-4):232-251.
8. Stall N, Nowaczynski M, Sinha SK. Systematic review of outcomes from home-based primary care programs for homebound older adults. J Am Geriatr Soc. 2014 Dec;62(12):2243-2251.

HISTORY OF THE NATIONAL GERIATRICS INTEREST GROUP

Selynne Guo

Looking at the National Geriatric Interest Group (NGIG) today, it is a strong network of students and Geriatrics Interest Groups (GIGs) from thirteen Canadian medical schools. In the 2015-2016 academic year alone, members engaged more than 600 participants in approximately 65 events held across Canada. This same passion was what inspired the NGIG's founding and its growth from a humble group of seven students. Reflecting on NGIG's history, while a celebration of student achievement, will also lead to valuable lessons for its future growth.

Inception of NGIG

In 2010, a second-year medical student named Magda Lenartowicz at the University of Saskatchewan was frustrated by the common misconception that medical students were not interested in the care of older adults. She felt that medical students were not given the opportunity to nurture or express their interest in geriatrics. Students were exposed to the frustrations and challenges of caring for very sick seniors, but lacked the rewarding experience interacting with those who improve and are functionally well. Magda was raised by her great grandmother, who lived through two World Wars and played bridge every Wednesday until she died in her sleep at the age of 99. This personal experience gave Magda an impression of aging not represented in her medical training and led her to believe that geriatrics was a fulfilling specialty.

The combination of her frustration and her passion for geriatrics led Magda to approach the Canadian Geriatrics Society (CGS) in search of like-minded student leaders across Canada. As it turned out, there already existed geriatrics related clubs and activities in the medical schools of McMaster University, and the Universities of British Columbia and Alberta. Physicians from the CGS were immensely supportive of the creation of a national student group to unite and inspire GIGs across Canada.

With its first meeting on April 12, 2010, the NGIG was officially founded with representation from the four schools with established geriatric clubs, and interested students from Queen's University and Dalhousie University. The founding students bravely threw themselves into the construction of the NGIG from the ground up. They worked to create everything from a logo to a sample constitution for new GIGs. With no template, the students navigated uncharted waters with the unwavering support of the CGS. In September 2010, the CGS substantiated their support by offering $500, then later $1000, of funding for each GIG every year (1).

Mandate and structural organization

In February 2011, the NGIG's mandate was finalized. It featured 5 sections as summarized below:

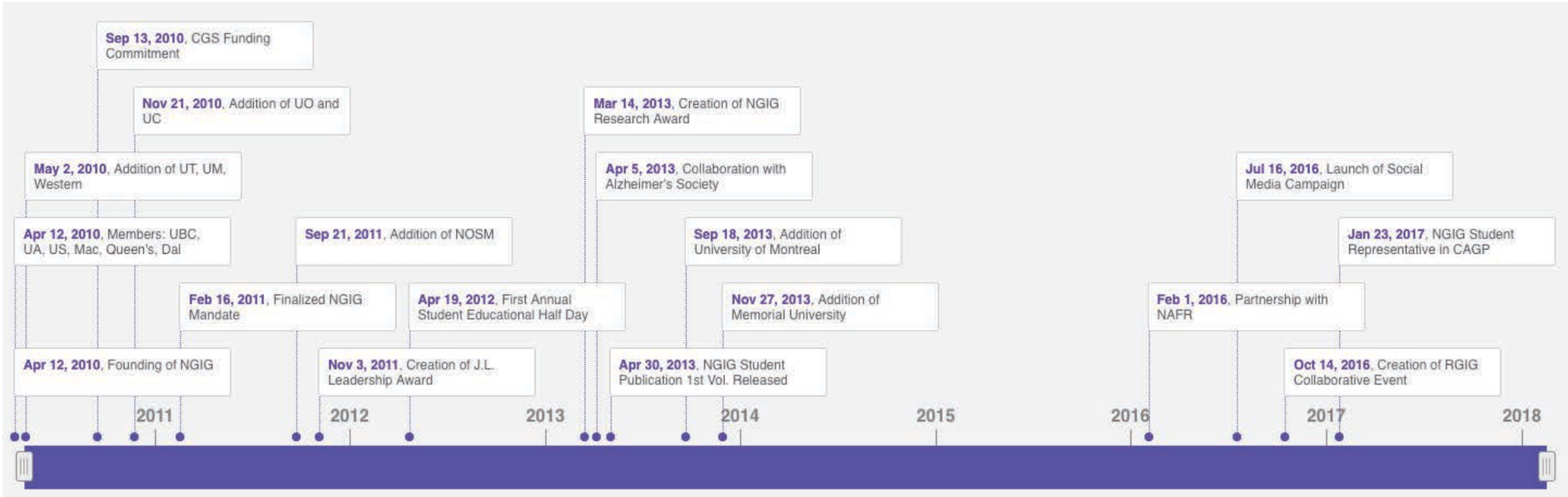
1. Help develop, implement, and insure the ongoing maintenance of geriatric curriculum in Canada (2)
2. Provide mentorship to students interested in a career in geriatric medicine (2)
3. Ongoing assessment of the effectiveness of geriatric core learning competencies (2)
4. Support medical student groups interested in promoting geriatric education to their peers (2)
5. Establish a National Geriatric Interest Group Conference (2)

During the same academic year, the NGIG also clarified its executive positions and the funding system for member GIGs (2), effectively creating a stable structure for the organization. This enabled the focus to shift to the development of specific programming. As a student group, NGIG's leadership changed from yearly with the graduation of previous leaders. With this annual change, fresh ideas are introduced each year but sustainability was a challenge for certain initiatives. Still many successful initiatives were maintained over the seven years.

The first of these initiatives was Geriatrics Skills Day, an engaging event designed to deliver supplemental clinical teaching. The GIG at McMaster University, the creator of this event, created a guide to help other schools in hosting their own Skills Days. Since 2012, eight medical schools have hosted their own annual Skills Days, teaching medical and other interdisciplinary students key topics, i.e. polypharmacy, in the care of elderly patients (1,3,4,5,6).

The Student Educational Half Days at the CGS Annual Meeting and the NGIG Student Publication are two other successful initiatives continued from the early 2010s. The first annual Student Half Day occurred in spring 2012 (2) with a session on delirium. Although the student price has increased from the original $30, the content of student half days has also expand-

Timeline of Key Events in NGIG History



Legend: NGIG – National Geriatric Interest Group, UBC – University of British Columbia, UA – University of Alberta, US – University of Saskatchewan, Mac – McMaster University, Queen's – Queen's University, Dal – Dalhousie University, UT – University of Toronto, UM – University of Manitoba, Western – Western University, CGS – Canadian Geriatric Society, UO – University of Ottawa, UC – University of Calgary, NOSM – Northern Ontario School of Medicine, NAFR – National Association of Federal Retirees, RGIG – Residents Geriatric Interest Group, CAGP – Canadian Academy of Geriatric Psychiatry. *Time line made with Timetoast timelines (website).

ed to include multiple sessions led by residents and staff physicians. The NGIG Student Publication was launched in spring 2013 and has had 4 excellent volumes showcasing a wide variety of student work in geriatrics, including primary research, articles, creative writing, artwork and photographs (3,4,5,6). The CGS Annual Meeting in Toronto this April, will see both the sixth annual Student Half Day and the fifth volume of the NGIG Publication.

Expansion of NGIG programs

In fall 2013, NGIG launched two new educational events that were promoted to local GIGs, a collaborative Alzheimer Society event and the Patient Outreach Program. The former allowed GIGs to contact their local Alzheimer Society branches to host educational events, often involving a patient or a patient caregiver presentation on the impact of dementia and information about the Alzheimer Society services (3). These events often received great feedback, and continues to held in most medical schools (3,4,5,6). In contrast, the Patient Outreach Program, aimed at providing students opportunities to gain communication skills by facilitating exposure to the elderly population, was difficult to plan in many schools (3,4,5,6). It was eventually discontinued in fall 2016.

With the creation of NGIG, Magda envisioned not only the creation of a common platform for promotion of geriatric education but also opportunities for student leadership. To recognize the latter, Magda created the J.L. Leadership Award in 2011, in honor of her mother (2). In 2013, the Research Award was also created to recognize outstanding research in the field of geriatrics (3). Although obtaining sponsorship can be a challenge, these awards continue to recognize deserving medical students each year and are presented at the CGS Annual Meeting.

NGIG's collaborations have been key to its successes. First, its intimate relation with the CGS led to its conception and its continued prosperity. The Residents Geriatrics Interest Group (RGIG) are enthusiastically involved with the Student Half Day (1,3,4,5,6) and a new collaborative event connecting medical students with local residents to enhance networking and mentorship. NGIG has also pursued partnerships with the Canadian Academy of Geriatric Psychiatrists (CAGP), from sponsorship of the NGIG Publication (4) to a new NGIG Student position on the CAGP Trainee Committee. With this partnership, NGIG is hoping to diversify mentors in various careers involved in caring for elders. Outreach to other physician groups are currently underway.

Also, NGIG has sought to establish partnerships with non-physician groups, the most successful of which has been the Alzheimer Society partnership. NGIG has also benefited from generous donations from the Canadian Association of Retired Persons (4) and Geriatric Education & Research in Aging Sciences Centre (5). In a recent partnership, NGIG contributes a health column in the National Association of Federal Retirees' quarterly magazine, Sage (6).

Still, NGIG struggled with the implementation of two key initiatives. In 2011, NGIG executives proposed an educational project to liaise with researchers and act as a resource for key clinical content. This initiative stalled and was never officially launched (2). In 2017, this is a focus for the Vice President of Research and Knowledge Translation. In addition, limited work has been done in the third section of the mandate to evaluate the effectiveness of geriatric core learning competencies. This is a logistically difficult mandate to fulfill. This year, the NGIG Co-Chairs started the process for a survey of NGIG alumni to assess the influence of NGIG activities on their career choices. This promises to be an interesting evaluation of the effects of NGIG on student career choices.

The growth of NGIG over the last seven years is a testament to the motivation and strength of Canadian medical students. Students are passionate about geriatrics. With the right mentorship, students have a great capacity to overcome obstacles and achieve seemingly lofty goals. While celebrating NGIG's achievements, the organization's leadership should continue pursuing all sections of the mandate, perhaps through annual evaluations of initiatives, to continue organizational improvement and avoid complacency. In addition, the sustainability of initiatives in an organization with frequent changes in leadership requires extra effort in transitional documents to highlight current progress, resources and challenges. If NGIG maintains the current trajectory of growth and innovation, one can only imagine the impact it will have in another seven years.

Sylenne Guo
MD Candidate, Class of 2017
Univeristy of Toronto

Selynne is a fourth year medical student studying at the University of Toronto. A volunteering opportunity in a long term care centre ignited her interest in geriatrics. Since first year of medical school, she has been actively involved in the U of T Geriatrics Interest Group as well as the National Geriatrics Interest Group. As one of the acting NGIG Co-Chairs, Selynne found the research and formulation of this article very inspiring and instructive for the future leadership of NGIG.

References:

1. National Geriatric Interest Group. NGIG Report to the CGS Education Committee. Canada: NGIG; 2012
2. Lenartowicz, M. Report to the CGS Education Committee. Canada: NGIG; 2011
3. National Geriatric Interest Group. 2013 CGS Education Committee Report. Canada: NGIG; 2013
4. National Geriatric Interest Group. 2014 CGS Education Committee Report. Canada: NGIG; 2014
5. National Geriatric Interest Group. 2015 CGS Education Committee Report. Canada: NGIG; 2015
6. National Geriatric Interest Group. CGS Education Committee Report. Canada: NGIG; 2016

Appendix A: The National Geriatrics Interest Group (NGIG) Mandate

Overarching Goal
The National Geriatric Interest Group seeks to improve the medical care of older Canadians through the promotion of geriatric education in Canadian medical schools, and by providing financial and mentorship resources to Canadian medical students interested in the care of older adults.

Section 1: Geriatric Education in Canadian Medical Schools
Core geriatric competencies for Canadian medical students have been established by the Canadian Geriatric Society (CGS) and the National Initiative for the Care of the Elderly (NICE). By partnering with these organizations, Canadian medical schools and Canadian medical students this organization will help develop, implement, and insure the ongoing maintenance of geriatric curriculum in Canada.

- Our organization should have a representative on the CGS Educational Committee, and the NICE Educational Committee
- Our organization should have a representative at each of the 15 medical schools in Canada. This representative will work closely with curriculum planners to ensure core learning competencies are achieved practical and effective manner
- By ensuring that all medical students in Canada are trained in the care of older adults, it is hoped that this will improve the care of older adults in Canada

Section 2: Provide Mentorship to students interested in a career in Geriatric Medicine
Canada has a shortage of Geriatricians and Care of the Elderly Physicians. Many medical students have never been exposed to a career in geriatrics. Our organization hopes to recruit physician representatives at each of the 15 Canadian Medical Schools who are willing to partner with student representatives to promote a career in geriatrics to incoming medical students. This can be done in many unique and creative ways, one of which is by offering and promoting to medical students pre-clerkship and clerkship electives in geriatrics.

- Recruit Geriatricians and Care of the Elderly Physicians at each of the 15 medical schools who are willing to advocate for geriatric education at their medical school
- Consider creating a 2-week or 4-week Geriatric Bootcamp Clerkship elective where students are exposed to various avenues of geriatric care: Geriatrician, Nursing Home care, Physical Medicine and Rehabilitation, etc.
- These representatives should be open teaching students from across Canada and should be willing to make their contact information open to Canadian Medical Students

Section 3: Ongoing Assessment of the Effectiveness of Geriatric Core Learning competencies
Our organization financially and intellectually supports its members and outside parties in the assessment of the efficacy of initiatives designed to implement the core geriatric learning competencies. We will also support research aimed at assessing attitudes and skills required to provide care for older adults.

- Develop resources to help interested individuals achieve funding for research purposes
- Develop a funding allocation structure, and a method for interested parties to apply
- Develop a network of expert advisors in the field of geriatrics or gerontology who are willing to provide intellectual support

Section 4: Support Medical Student Groups interested in promoting geriatric education to their peers
Geriatric Interest Groups exist at several medical schools in Canada. Our vision is that all Canadian medical schools will have a Geriatric Interest Group. These groups provide learning opportunities for their peers to develop the geriatric core competencies. These groups may also promote interprofessional geriatric practice and include members from various allied health professions. Our organization helps these groups secure funds for their events, and also provide a forum for the sharing of event ideas between schools.

- Establish an online forum or resource document for students to consult regarding ideas for events
- Develop a funding allocation structure, and a method for interested parties to apply
- Provide intellectual support to individuals interested in starting an interest group at their school

Section 5: Establish a National Geriatric Interest Group Conference
Our organization hopes to provide an avenue for students across Canada to learn about and develop the skills required in core competencies of geriatric medicine. This event will also be a forum for medical students interested in geriatrics to socialize with colleagues with similar interest and share ideas and opinions on how to improve the quality of medical education in Canada.

- This conference would be held yearly in a different area of Canada each year. Several students from each of the 15 medical schools will be invited.
- Funding must be secured for student travel and to cover the conference expenses

The John and Jennifer Ruddy Geriatric Day Hospital Program:

Paving the Path for Improvement in Geriatrics Care and Geriatrics Patient Safety

Glara Gaeun Rhee
and Ryan Yuan-Yi Dong

Introduction:

The John and Jennifer Ruddy Geriatric Day hospital located at the Bruyère Hospital was founded on the mission of optimizing the health, function, and safety of geriatric patients to promote independent living at home for as long as possible (1). An interprofessional team develops personalized therapeutic goals for each patient that focus on improving the patient's independence and activities of daily living. For example, a patient with cognitive impairment is evaluated for the extent of cognitive impairment along with its impact on their function, while simultaneously addressing caregiver's stress in the same visit. In this interview, we spoke to Dr. Veronique French-Merkley, the chief of Care of the Elderly program at the Bruyère Continuing Care Hospital in Ottawa. She was joined by Dr. Anne Monanhan and Dr. Maggie Thomson, two other geriatric physicians at the Bruyère Hospital. They provided an overview of the day hospital program and shared their valuable experiences in patient safety and quality improvement.

Q: Tell us about yourself, your career path, and your background in the care of the elderly.

Dr. Monahan: "I came into medicine a bit late in my educational journey in that I pursued a Master's and PhD in history before switching my course to medicine. I eventually trained in family medicine. I was always interested in the geriatric population, specifically in their stories and unique medical conditions. Therefore, I did an extra year of training in Care of the Elderly Program. I was originally from Ottawa and I have worked at the Bruyère hospital since 2004."

Dr. Thomson: "I am a fairly new graduate of the Care of the Elderly Program. I have been in practice for about two and a half years now. I completed my medical school at the University of Ottawa, my family medicine residency at Queen's University, and the Care of the Elderly Program here in Ottawa. My professional interests include ambulatory geriatric medicine and emergency geriatric medicine at the Montfort hospital. I also work at a rural geriatric program in Cornwall. Finally, I am the education coordinator here at Bruyère, which gives me a chance to work with students."

Dr. Merkley: "I am the chief of Care of the Elderly Program and a physician on the Geriatric Rehabilitation inpatient unit and at the Geriatric Day Hospital in Bruyère Continuing Care. I am also an assistant professor of Medicine at the University of Ottawa."

Q: Can you talk about "The John and Jenifer Ruddy Geriatric Day Hospital" program you run at the Bruyère hospital?

Dr. Monahan: "The most common geriatric issues tend to revolve around mobility, falls risk, cognitive impairment and psychological well-being. Our program is designed to assess the patient's physical, psychological, and cognitive functions for their safety. Based on our assessment, we give recommendations to our patients and their caregivers."

Dr. Thomson: "It's essentially a 10-week program for most geriatric patients. They attend appointments typically twice a week, for about 2-2.5 hours. The patients get to see a variety of healthcare professionals including physicians, physiotherapists, occupational therapists, social workers, neuropsychologists, nurses, and recreational therapists. We have a fantastic team here and depending on our patients' needs, they can see some or all of these professionals."

Q: How has geriatric patient safety evolved and improved over time?

Dr. Monahan: "Over the years, the ideas of patient safety and quality have appeared on the priority dashboard of the hospital. Especially in the recent years, we have been focusing on improving geriatric patients' safety. It is a constantly evolving set of processes. Speaking more broadly, the patient demographics are changing. We are seeing more of the frail and older geriatrics patients who are at higher risks of falls and adverse medication effects. In addition, there is growing development of pharmaceutical companies over the past few decades. We are becoming increasingly aware of the risks of medications than ever before. For example, we are spearheading a movement of "de-prescribing" at the national level, to mitigate the adverse effects of over-prescribing medications to older people. We aim to take away medications that are not needed, or at the very least we try to lower the doses."

Dr. Thomson: "We also do a good job liaising with the family physician right from the get-go. This is important because the patients will eventually be followed by their family physicians. I try to send imaging and test results to family physicians right when I get them. New prescriptions or de-prescriptions also immediately get forwarded to family physicians so they stay up-to-date. On discharge, any additional imaging and lab work also get forwarded. This helps to ensure continuity of care for our patients."

Q: What are your personal goals in regards improving patient safety?

Dr. Merkley: "As the department chief, I am responsible for the safety and care of both the day hospital patients and those on the geriatric rehabilitation unit. Needless to say, patient safety is something I think about a lot. One of my goals is to keep the patients at the center of everything that we do. We need to strive to keep patients safe, but also understand that everyone has the right to live with risk as well. Part of it is empowering the patients with the information that they need in order to make a decision. We may have an opinion to what we think is best, but at the end of the day, we are working with the patients and they are the ones who have the final say."

Dr. Thomson: "An example of how we balance patient-centered care with our de-prescription campaign can be seen with patients taking common high risk medications such as benzodiazepines. We know there are established risks of prolonged benzodiazepines use, however they do provide some patients with significant relief. Patients often decide to continue them, having acknowledged the possible adverse events of benzodiazepines. In these cases, we may suggest a lower dose, but we are not always able to convince patients to stop the medications completely. This is a common example on how a patient's perspective can come into conflict with our thoughts on de-prescribing."

Q: What are the major patient safety concerns and challenges right now for you?

Dr. Monahan: "The element of communication greatly contributes to improving patient outcomes. This includes communication with the patient, different healthcare professionals, and others involved in the patient's care. There is still much work that could be done on that front."

Dr. Merkley: "Another area we could work on is to encourage a culture where people feel comfortable to come forward with things that have not gone well so that problems can be solved right away. Debriefing is very important to help us learn from our mistakes and provide better care to the next patient that comes through the door. There is a movement towards viewing medicine with a quality improvement mindset and vigilance about patient safety."

Q: Do you have any advice for medical students who are interested in contributing to improving patient safety?

Dr. Thomson: "I would encourage students to actively seek out opportunities to improve patient safety. For example, they could work with Anne here at the Geriatrics Day Hospital and observe one of our quality improvement committee meetings. These experiences would give them some tools to move forward, and show them what quality improvement looks like. Working in a team environment is also helpful when it comes to learning about patient safety."

Dr. Monahan: "Patient safety issues are somewhat different in terms of inpatient versus outpatient care. I believe medical students mostly get exposed to inpatient settings, where the concerns around patient safety are quite well defined. In the outpatient setting, however, sometimes it requires more brainstorming and improvisation to figure out how we tackle patient safety issues. Some exposures to both types of settings would be helpful for medical students."

Concluding remarks:

We thank Dr. Veronique French-Merkley, Dr. Anne Monanhan, and Dr. Maggie Thomson for their time in this interview. The John and Jennifer Ruddy Geriatric Day Hospital at the Bruyère Hospital is but one of the growing number of geriatric day hospitals across country that are tackling pervasive issues of geriatric care in an interdisciplinary model. We encourage students, residents, and physicians to advocate for patient safety in geriatric care and learn more about how we can help keep our elderly patients happy, healthy, and safe at home.

Glara Gaeun Rhee and Ryan Dong
MD Candidates, Class of 2019
University of Ottawa

Glara Gaeun Rhee is a second year medical student at the University of Ottawa. Her future aspirations are deeply embedded within her undergraduate experiences, which heavily involve interactions with elderly patients. Here at the University of Ottawa, she loves her diverse exposure to various initiatives, including diverse talks, electives and research related to Geriatrics. Her passion and interest in Geriatrics have led her to become one of the leaders in Ottawa and National Geriatrics interest group this year.

Ryan is currently a second year medical student studying at the University of Ottawa. Prior to starting medical school Ryan completed a Bachelor of Health Sciences degree at McMaster University

References

1. Bruyère - John and Jennifer Ruddy Geriatric Day Hospital [Internet]. Bruyere.org. 2017 [cited 15 February 2017]. Available from: http://www.bruyere.org/en/geriatric-day-hospital

Medical Student Perspective on Geriatrics Attitudes

Szu-Yu Tina Chen

Walking from booth to booth at the annual clubs fair as a first-year medical student, flashbacks of a high school cafeteria resurfaced. The eager newly matriculated students swarmed around the popular clubs, leaving the less popular clubs deserted. When skimming across the room, the Geriatrics Interest Group stood out to me as having very low attendance. It is often taken for granted that elderly care is not very popular, but as my interest in the population grew, so did my curiosity as to why this was the case. As I progressed through each year of my studies, I was surprised as to how commonplace phrases including "too many issues," "unreliable history," or even "no point in treating" are still being used to discuss the elderly.

It goes without saying that the elderly population is increasing. The estimated global population of persons over 60 years of age will reach 2 billion by 2050 (1), bringing with it an increasing need for physicians trained in geriatrics care. In fact, the majority of physicians, particularly general practitioners, encounter many older adults during their daily practice. It is estimated that we require 1.5 geriatricians for every 10,000 individuals to provide standard care, but Canada currently only has a ratio of 0.57 per 10,000 (2). In addition, 40% of the geriatrics medicine subspecialty match remained unfilled after the first iteration in 2016 (3). It is evident that to increase the number of specialists, newly graduated physicians need to be interested in working with the elderly population. In other words, to ensure high quality care, we have to secure geriatrics interest.

Unfortunately, negative attitudes toward aging among health-care professionals correlate with an unwillingness to care for the elderly (4), a decrease in quality of care (5), and a general stigma with serving the elderly population. One of the reasons behind the lack of interest is a discriminative attitude towards elderly people. In fact, ageism has been shown to be the strongest bias among the various social biases (6). Social discrimination is a culturally and historically manipulated construct that influences how older adults see themselves and other elderly, changes their cognitive and physical recovery from disease, alters their desire to seek medical assistance, and affects how we treat them as a society (7). In other words, negative attitudes toward aging directly impact the patient's health, with increased incidents of troublesome personal perceptions and poorly treated symptoms, as well as effects on longevity (8).

A student-centered approach to altering bias would provide a floor for discussion and demonstrate the integral relevance of geriatric medicine in all specialties. Interventions such as sustained intergenerational contact have been shown to increase positive attitudes toward the elderly (9). In addition, sustained contacts provide positive experiences that change the perceptions that students have previously formed on a specific group of people. In line with positive experiences, positive word utilization also assists with formation of attitudes. Such a strategy includes focusing on the positive aspect of aging: "healthy," "wealthy," and "wise" instead of the negative: "forgetful," "bingo," and "boring." (10). Educators can provide positive mentorship and emphasize that bias-reduction strategies be integrated into the curriculum. We have made significant gains in battling sexism and racism, so why not ageism? Let us work together to change attitudes, behavior, and professional interest in working with elderly patients. Maybe then, we can bring geriatrics to the popular table.

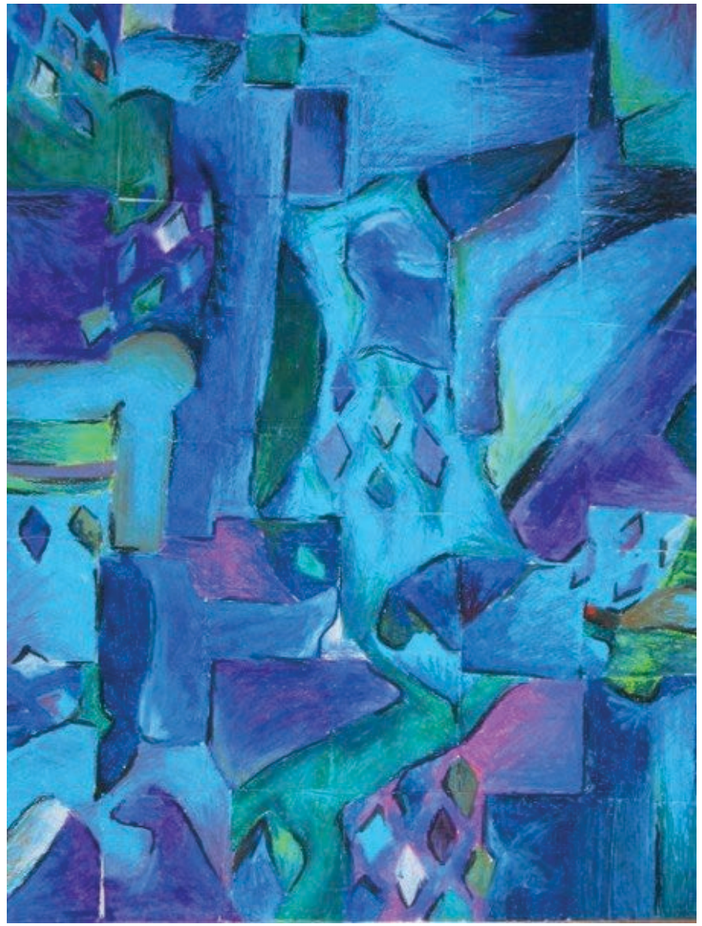
Szu-Yu Tina Chen
MD Candidate, Class of 2018
University of British Columbia

Tina is currently a third year medical student at University of British Columbia. She currently serves as one of the VP Externals of the National Geriatrics Interest Group and formerly worked with the UBC Geriatrics Interest Group. Tina loves her experiences with geriatrics patients and looks forward to sharing her experiences.

References

1. World Health Organization. (2012). Interesting facts about ageing. Geneva: World Health Organization.
2. Hogan, D. B., Beattie, B. L., Bergman, H., Dalziel, W. B., Goldlist, B., MacKnight, C., ... & Rockwood, K. (2002). Submission of the Canadian Geriatrics Society to the commission on the future of health care in Canada. Geriatrics Today, 5, 7-12.
3. MSM reports 2016: Number of matched applicants by first choice discipline and quotas [Internet]. Ottawa (ON): CaRMS; [updated 2016 Jul; cited 2016 Dec 15]; Available from: http://www.carms.ca/en/data-and-reports/msm/
4. Fitzgerald, J. T., Wray, L. A., Halter, J. B., Williams, B. C., & Supiano, M. A. (2003). Relating medical students' knowledge, attitudes, and experience to an interest in geriatric medicine. The Gerontologist, 43(6), 849-855.
5. Liu, Y. E., Norman, I. J., & While, A. E. (2013). Nurses' attitudes towards older people: A systematic review. International Journal of Nursing Studies, 50(9), 1271-1282.
6. Butler, R. N. (2009). Combating ageism. International Psychogeriatrics, 21(02), 211-211.
7. Robbins, T. D., Crocker-Buque, T., Forrester-Paton, C., Cantlay, A., Gladman, J. R., & Gordon, A. L. (2011). Geriatrics is rewarding but lacks earning potential and prestige: responses from the national medical student survey of attitudes to and perceptions of geriatric medicine. Age and ageing, 40(3), 405-408.
8. Levy, B. R., Slade, M. D., & Kasl, S. V. (2002). Longitudinal benefit of positive self-perceptions of aging on functional health. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57(5), P409-P417.
9. Christian, J., Turner, R., Holt, N., Larkin, M., & Cotler, J. H. (2014). Does intergenerational contact reduce Ageism: When and How Contact Interventions Actually Work?. Journal of Arts and Humanities, 3(1), 1.
10. Dionigi, R. A. (2015). Stereotypes of aging: their effects on the health of older adults. Journal of Geriatrics, 2015.

Memory Deconstructed



It was once a coherent memory.
As years pass, details begin to fade and the framework is lost. What remains is the time spent with loved ones and the vivid emotions that were shared.

Barbara Pedrycz
MD Candidate, Class of 2018
Univeristy of Alberta

Barbara Pedrycz is a third-year medical student at the University of Alberta who is interested in serving the aging population in a primary care setting. She enjoys creative expression through art, music, and dance.

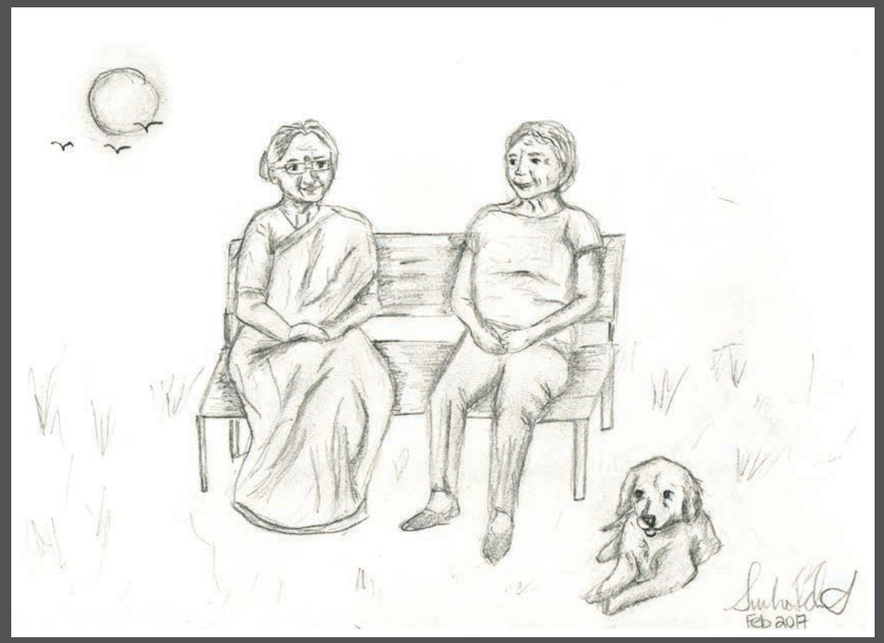
Lois

"The Queen will see you now."

This is a pencil portrait of a palliative patient in Halifax whom I have come to know very well. The crow perched on her wrist, a symbol of death, is a friend of hers; Lois lives harmoniously, graciously with the reality of her imminent death. Her crown emphasizes her regal grace; to know and to serve this woman is a privilege.

Anastasia McCarvil
MD Candidate, Class of 2019
Dalhousie University

Anastasia McCarvill is a second year medical student at Dalhousie University. She has a keen interest in understanding human experience and connection.



Happy Aging

Sucheta Sinha
MD Candidate, Class of 2017
University of Toronto

Sucheta is a fourth year medical student at the University of Toronto. She is passionate about geriatrics, primary care, art, books, and Thai food.

Nostalgia

Reminiscing the scenic parts of downtown Kingston in watercolour.

Janice Lee
MD Candidate, Class of 2017
Queen's University

Janice's most recent obsession is watercolour landscapes. She can of be found travelling around with a sketchbook in hand. She will miss the beautiful scenes of Kingston when she graduates this year.

Confederation Park and Engine 1095

Confederation Basin Marina

Battery Park

National Geriatrics Interest Group Team

Co-Chairs
Amanda Canfield (Toronto)
Selynne Guo (Toronto)

VP Internal Communications
Laura Suterland (Manitoba)

Publication Editors-in-Chief
Glara Gaeun Rhee (Ottawa)
Janice Lee (Queen's)
Johnny Huang (Ottawa)

VP External Communications
Paula Horsley (Ottawa)
Szu-Yu Tina Chen (UBC)

VP Events
Guillame Limfat (Queen's)

VP Research, Knowledge & Translation
Michael Prodanuk (Saskatchewan)

VP Media & Technology
Annie Cheung (Ottawa)
Beth Deveaux (Ottawa)

VP Finance
Aakanksha Sharma (Manitoba)

Conference Chair
Bonnie Cheung (Toronto)
Amanda Chen (Toronto)

Local Geriatrics Interest Group Updates

University of British Columbia

The UBC GIG has expanded to 10 executive members this year! Our events are open to all UBC medical students and include: Geriatric Careers Night, Geriatric OSCE Workshop, Sexual Health in the Elderly Seminar, and an Alzheimer's Society collaboration event. Through these events, students are able to interact with geriatric residents and doctors and learn more about elderly care. We also offer a volunteering program called Grandpal Penpals, which allows students to work for 8 months with a group of nursing home residents and elementary students. We also strive to connect students with NGIG publications, conferences and scholarships.

University of Alberta

The 2016-2017 University of Alberta Geriatrics Club is excited to be engaging medical students in their pre-clerkship years in this lesser-known field with great potential. This year we have hosted an 'Intro to Geriatrics' lunch lecture and collaborated on a Quality Improvement in Geriatrics lecture with the Edmonton Health Improvement Network, another student-lead club. We have arranged for a representative from the Alzheimer's Society of Alberta to come speak, to coincide with our Neurology block. In the works, we have a film screening of Still Alice with an expert to comment on the accuracy of the disease portrayal. Finally, we constructed a 'Geriatrics Shadow-base' with the contact information of physicians and allied healthcare professionals willing to be shadowed to allow pre-clerks to get a better idea of working in the field.

University of Saskatchewan

The 2016-2017 U of S GIG is excited as it kicks off its inaugural year! So far, one event has been hosted, a speaker event titled "Strength Training in Older Adults" by Dr. Scotty Butcher. This lecture focused on how strength training can be used to manage and prevent the development of chronic conditions in the elderly. The event was an absolute success and provided medical students a lot of insight on how to speak to older patients about exercise and how it can improve their quality of life. Future events will include Geriatric Skills Day hosted by U of S residents, community volunteering events within Saskatoon and Regina sites, and much more. Overall, the U of S Geriatrics Society is committed to helping students identify the ongoing needs of older adults throughout Saskatchewan as well as build partnerships between health care providers, organizations and the public in the promotion of age-friendly practices.

University of Manitoba

The University of Manitoba GIG has held several events this year thus far including: Geriatrics and the Challenges Faced in the LGBTTQ* Community, Alzheimer's Disease -- The Care Givers Perspective (an event held in partnership with the Alzheimer's Society), and our Geriatrics and Valentines day event (held in collaboration with Misecordia Place). Events yet to come include Clinical pearls in Geriatrics (a skills night), The Two streams of Geriatrics (a talk delivered by two residents -- one in the family medicine plus one in care of the elderly stream and the other in the internal medicine geriatrics stream), and finally promoting and participating in the Alzheimer's Society walk this summer!

Western Univeristy

The 2016-2017 UWO GIG has been working to promote Geriatric Medicine to medical students in the 2019 and 2020 classes. This year's events already include an introduction to Geriatric Medicine lunch talk by a Geriatrician, Care of the Elderly certified Family Physician and a Geriatric Psychiatrist, and an Aging Simulation workshop done in collaboration with Alzheimer's Society that allowed students to experience the lived experiences of elderly patients. Other events for this year include a seminar about the aging demographics in North America and the annual Intergenerational Gala in collaboration with Grandwood Park. Through these events, the GIG hopes to promote awareness of the need for future Geriatricians among medical students and attract more talents into this profession.

McMaster University

The 2016-2017 McMaster GIG has been continuing to support geriatric-focused students in the MD, PT, OT, Nursing and PA programs at McMaster University. Events held so far this year include: a geriatrics themed movie night social, an outreach holiday crafting event at a long term care facility, an Interdisciplinary Panel on Falls, Fall Prevention and Care Coordination, as well as the Virtual Dementia Experience in partnership with the Alzheimer's Society of Canada.

An upcoming event, our biggest of the year, is our annual Geriatric Skills Day, a full-day interprofessional workshop that will address caring for people with behavioural and psychiatric symptoms of dementia. The day has drawn the interest of over 100 students. We also plan to host a resident-undergraduate get together for improved peer mentorship. This year's executive committee has continued to strive to provide students with informative and fun events in order to increase exposure to and interest in the field of geriatrics.

University of Toronto

The UofT GIG has been off to a great start in 2016-17! We launched the academic year with a career panel for pre-clerkship students to hear from a variety of specialists about opportunities in geriatric care, including geriatric psychiatry, family medicine, emergency medicine, and geriatric medicine. In November 2016, we held our annual interprofessional education (IPE) event, Geriatric Experience Day, where students from 14 health departments at the University of Toronto learned about collaborative healthcare from a geriatric perspective. Students were joined by a pharmacist, a social worker, a geriatrician and a team of SLPs, who delivered interactive workshops highlighting the importance of each field's role in geriatric care. Our next IPE event, Geriatric Clinical Day, is scheduled for April 2017. We also had a fascinating panel discussion in January about medical assistance in dying (MAiD) that generated a constructive discussion on the role of physicians working with geriatric patients.

Northern Ontario School of Medicine

The Northern Ontario School of Medicine Geriatric Interest Group has planned multiple events for the MD student body for the 2016-2017 year. In line with our school's mandate, our focus is on geriatric medicine in the rural and Northern context. This entails providing students with the opportunity to interact with and learn from key players in the interdisciplinary Northern geriatric health workforce. We hosted Dr. Kevin Miller in November for a talk about the scope of palliative medicine and current hot topics in this field such as MAID. In March the NOSM GIG will host our annual skills night, during which we will learn from a geriatrician, a Care for the Elderly specialist, and a physiotherapist who has worked extensively with the geriatric population.

Queen's University

At our first talk Dr. Frank, a Care of Elderly physician, introduced Geriatrics and caring for Geriatric patients. During our second talk, Dr. Gibson, a Care of the Elderly physician, shared the powerful story of Yvonne Dowlen, who exemplified successful aging and is featured in our Why Geriatrics Wednesday submission. Our upcoming events for the remainder of the year include a Mobility Workshop with the PT and the Elderly Fellow Dr. Adler and Geriatric Psychiatry Fellow Dr. Ducic; a Senior Friendly Community talk with Geriatrician Dr. Puxty; a Geriatric Skills Night; a Sexuality in Aging talk with Dr. Frank; a Career in Geriatrics Talk featuring a Geriatric Psychiatrist, Geriatrician and Care of the Elderly physician; and an Alzhiemer's and Memory Test talk with Dr. Frank, and (hopefully) an Alzhiemer's patient and their caregiver.

University of Ottawa

UOttawa GIG focuses on promoting the field of geriatrics through educating students about its scope and relevance. First, we hosted an introductory panel facilitated by a geriatrician, geriatric psychiatrist, care of the elderly physician and a palliative care physician. Our next event was a Meet and Greet designed to connect pre-clerkship students with residents and fellows from geriatrics, care of the elderly and internal medicine. In the winter term, we hosted a talk that focused on the challenges associated with being a caregiver for a family member with dementia and why specialized geriatric care is crucial. Speakers included three caregivers from "Mind the Gap" (a local group of caregivers) as well as an Advance Practice nurse who specializes in geriatric care. Our final events include a geriatrics skills clinical workshop as well as a movie screening of "Forgetful Not Forgotten" as a fundraiser for the Alzheimer's Society.

Dalhousie University

The Geriatrics Interest Group at Dalhousie has set out to increase awareness of and interest in the field of geriatrics among Dalhousie medical students. We have held one event so far this year (a lecture on physician assisted dying). We have three events planned for the remainder of the year, including an event held in conjunction with the Alzheimer Society of Nova Scotia, during which a gentleman with dementia and his spouse/caregiver will speak to students about their lived experience with dementia. A representative from the Alzheimer Society will also be speaking about how medical students can best connect with and care for these individuals. In addition, we are planning a geriatrics lifestyles night where geriatrics residents and attending geriatricians will speak about their practice and answer questions students may have about geriatrics. Finally, we are planning to have a talk on polypharmacy.

Sponsors and Special Thanks

Dr. Tricia Woo, MD, MSc, FRCP(C)
Associate Professor, Division of Geriatric Medicine, Department of Medicine
McMaster University

Cindy Worron
Administrative Assistant
for Dr. Tricia Woo

RESIDENT GIG GERIATRIC INTEREST GROUP

Alzheimer Society CANADA

GERAS CENTRE Innovation & Education that Transforms Senior's Lives

cagp | acgp
CANADIAN ACADEMY OF GERIATRIC PSYCHIATRY | ACADÉMIE CANADIENNE DE GÉRONTOPSYCHIATRIE

Association for Elderly Medicine Education

National Association of Federal Retirees | Association nationale des retraités fédéraux

The NGIG would like to warmly thank the CGS for their ongoing support of our local and national initiatives.

We encourage all physicians with an interest in geriatrics and other allied health care professionals, medical students, residents, and fellows to join the Society. We also invite researchers in the field of aging to join our organization.

Membership Criteria:

1) Regular — $325.00 per year (Open to all Health Professionals licensed to practice in Canada)
2) Associate — $50.00 (Open to Full-Time Residents/Fellows, Including MSc and PhD students)
3) Students — No Charge (Open to Full-Time Undergraduate Medical and Health Professional Students)

Benefits of Membership:

The annual membership fee of $325 provides members access to the following services:

1. Updates from 2 CGS journals: Canadian Geriatric Journal (Research) and Continuing Medical Education Journal.
2. Involvement in advocacy to improve seniors care
3. Professional secretariat office
4. Reduced rate to attend the Annual General meeting
5. Reduced fees to key conferences and other members-only resource

Become a member or renew your membership!

Visit https://thecanadiangeriatricssociety.wildapricot.org/membership

NGIG

The National Geriatrics Interest Group Publication