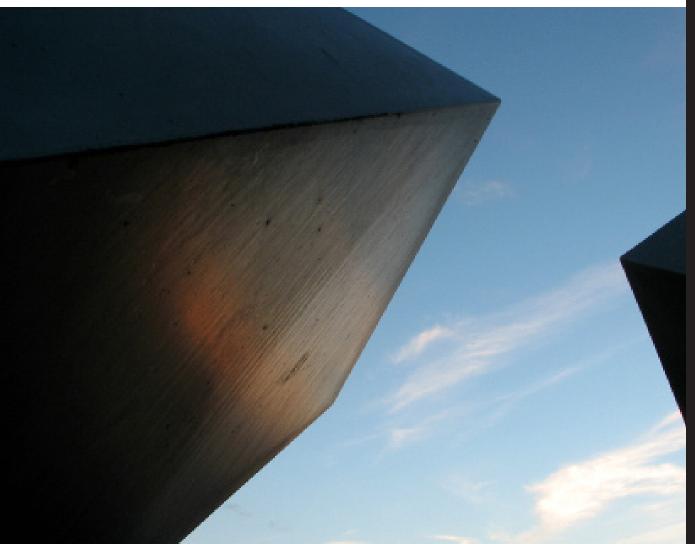


VOLUME 1 ISSUE 2 APRIL 2008



A COMPREHENSIVE APPROACH TO ORGAN DONATION IN ONTARIO

SHOCK THERAPY, INTER-PROFESSIONAL EDUCATION, MEDWAR, THE TRAVILL DEBATE, MATANGWE, AND MORE

The Queen's Medical Review would like to thank the following peer reviewers who contributed their time and expertise to the Review this year: Dr. Prakash Burra, Dr. Albert Clark, Dr. John Hoey, Dr. Waitak Kong, Dr. James Lawson, Dr. H. Onyett, Dr. Soni Pancham, Dr. Tony Sanfilippo, Dr. Ellen Tsai, Dr. Dick E. Zoutman

Queen's Medical Review gratefully acknowledges the financial support of the Queen's University Cold Beverage Exclusivity Fund, which provides a variety of funds to campus organizations each year. Queen's Medical Review received \$2300 in support of this year's publications.



Messages of thanks to Saint Joseph are displayed next to crutches abandonned by cured pilgrims. See p. 12 for more. - Julia Cameron-Vendrig

10 MEDWAR BY JULIA CAMERON-VENDRIG

12 MONTREAL'S MEDICAL HISTORY BY JULIA CAMERON-VENDRIG,
DANIEL FINNIGAN AND KEVIN LEUNG

- 14 AN EVENING FOR MATANGWE BY JESSICA LIAUW
- 16 INTER-PROFESSIONAL EDUCATION BY ASHLEY BRISSETTE AND RAED JOUNDI
- 17 THE TRAVILL DEBATE BY AISLING A. CLANCY AND MELISSA PICKLES
- 18 ARE RADICAL CHANGES REQUIRED FOR THE CANADIAN UNDERGRADUATE MEDICAL SYSTEM?

 BY ROHIT MOHINDRA
- 20 **FEATURE:** A COMPREHENSIVE APPROACH TO ORGAN DONATION IN ONTARIO BY DEREK TSANG
- 23 SHOCK VALUE BY MELISSA PICKLES
- 25 KINGSTON CASTS A NET FOR GLOBAL HEALTH
- 27 ESSAY CONTEST: FIRST PLACE
 LEARNING BEYOND THE CLASSROOM: WHAT THE
 FUTURE PHYSICIAN NEEDS TO KNOW BY GENEVIEVE DIGBY
- 28 ESSAY CONTEST: HONOURABLE MENTION UNTITLED BY PAUL UY
- 29 SKELETON OF THE HAND IN PEN AND INK BY SAMANTHA TAM
- 30 TWO PORTRAITS BY JONATHAN LEE

REGULARS

- 4 FROM THE EDITOR
- 5 NEWS IN MEDICINE Missisauga Academy, Medical Student Health, MRSA, HPV Research, and more
- 6 INTERNAL NEWS

 An update on Honours Pass Fail

 Evaluation at Queen's
- 8 ALUMNI PROFILE Dr. Vincent Paul Escanlar, Meds '06 Family Medicine
- 31 THE HUMORAL PAGE
- 32 REFLECTION
 When East meets West: How
 Western Medicine Can Benefit From
 Complimentary and Alternative
 Treatments

Cover photo by Amy Allcock www.amyallcock.com



EDITOR-IN-CHIEF Adrienne Li

SECRETARY
Aisling Clancy

TREASURER Alan Tam

EDITORIAL BOARD
Julia Cameron-Vendrig
Aisling Clancy
Dan Finnigan
Adrienne Li
Melissa Pickles
Michael Surkont
Alan Tam

INTERNAL EDITOR Melissa Pickles

EXTERNAL EDITOR Michael Surkont

LAYOUT EDITOR & DESIGN

Laura Nguyen

FACULTY ADVISOR Dr. Jackie Duffin

ILLUSTRATIONS
Andrew Mok
VISIT HTTP://DRUMOK.BLOGSPOT.COM

THE VIEWS AND OPINIONS EXPRESSED ARE OF THE ORIGINAL AUTHORS, AND ARE NOT NECESSARILY REPRESENTATIVE OF THE VIEWS OF THE QUEEN'S MEDICAL REVIEW, THE SCHOOL OF MEDICINE, OR QUEEN'S UNIVERSITY.

PLEASE ADDRESS ALL CORRESPONDENCE TO:
QUEEN'S MEDICAL REVIEW
c/o UNDERGRADUATE MEDICAL OFFICE,
68 BARRIE STREET
KINGSTON, ONTARIO, K7L 3J7.

EMAIL QUEENSMEDREVIEW@GMAIL.COM

FROM THE EDITOR

s the two interview weekends for the incoming Meds 2012 class have come and gone, I can't help but ruminate how so much has changed in just one short year. Moving to Kingston, meeting a new community, adjusting to a new curriculum format, and forming new bonds while redefining existing support systems have all been pivotal developments. The sudden moniker of "medical student" changes how people perceive us. Our acceptance into the highly esteemed profession of medicine thrusts us into a new arena of knowledge and skills with certain expectations of our current and future roles in society. As I gradually started to think of myself as a medical student, I often questioned friends and mentors, old and new, about their experiences in medical school and clinical practice. I wondered if medical school, with all the years of undergraduate study, residency, and fellowships, would be worth the sacrifices we have to make along the way. Their replies were invaluable, filled with honesty and encouragement, as they reflected on moments of joy, compassion, disappointment, and failure. However, as a new member of the medical profession, I remember yearning to participate in these experiences and to know, without a doubt, that somewhere down the road, I will not regret the path I've chosen. I've learned, though, that as much as I can appreciate the lessons and stories from my friends and mentors, I ultimately need to find my own way in medical school and clinical practice. Our undergraduate medical education, healthcare system, and society are all changing, and we need to be active participants in their evolution and constantly re-evaluate our positions. Derek Tsang's discussion of presumed consent as a way to increase organ donation asks us to consider the political nuances of our healthcare system, while Melissa Pickles' exploration of the debates surrounding the use of electroconvulsive therapy in psychiatry demonstrates how medical research can be at odds with public perception of treatment modalities. Daniel Finnigan's review of malaria prevention efforts illustrates how individuals can effect change on a global scale, and Jessica Liauw's reflection on the highly successful fundraising dinner for a health clinic in Kenya questions why we care about

communities that seem so remote from our society. Aisling Clancy and Melissa Pickles' summary of the Travill debate reviews issues surrounding the feminization of medicine, and Rohit Mohindra's response to a recent CMAJ editorial challenges us to consider the changes that are necessary for the current form of undergraduate medical education. Julia Cameron-Vendrig, Daniel Finnigan, and Kevin Leung chronicle the recent History of Medicine trip to Montreal, contemplating how past words and ideas have shaped medicine today, and Ashley Brissette and Raed Joundi's description of a national interprofessionalism conference shows how the paternalistic form of Western medicine is slowly changing. Amaka Eneh's reflection of growing up in India's healthcare system provides a stark contrast to the Western model of medicine in our society and asks if other cultures and epistemological models are really in conflict with our own. Daniel Finnigan and I had the pleasure of interviewing Vincent Paul Escanlar (Meds '06) about his experiences at Queen's and in his family medicine residency at the University of British Columbia, and he shares many pearls of wisdom. As our years of medical school fly by, friends and mentors will remain vital to our success, as support networks and sources of insight. The stories we hear from patients and teachers alike affect us, and we, in turn, will tell our stories to those who ask.

I would like to thank all the writers and reviewers who contributed to the second issue of Queen's Medical Review, and also congratulate Geneviève Digby (Meds 2010) for winning the essay contest "What is Most Important for Future Physicians to Learn?" I'd also like to thank Dr. Jackie Duffin for her continuing support and guidance as well as the Editorial staff for taking the time to work together on this issue. With their contagious enthusiasm and unwavering commitment, these friends were critical in the creation and publication of the second issue of the Queen's Medical Review.

Adrienne Li Editor-in-Chief

NEWS IN MEDICINE



BY MICHAEL SURKONT

Canadian data shows rise of methicillinresistant Staphylococcus aureus (MRSA)

A survey of 48 Canadian hospitals released in March 2008 suggests that MRSA infections in Canada have increased steadily over the past five years. Although most of infections are nosocomial, there has been a dramatic rise in community-acquired infections. Over the past five years, the MRSA infection rate in the community has doubled, leading infectious disease experts to highlight the need for increased infection control in hospitals.

Mississauga Academy to open one year later then planned

The new Mississauga campus of the U of T medical school will open one year later than planned due to difficult negotiations between U of T and the Credit Valley Hospital. The first class will consist of 26 students who are set to graduate in 2013. However, University of Toronto at Mississauga President, Dr. Ian Orchard, hopes the program will be expanded to 54 students.

Canadian researchers start HPV study with over 30,000 participants

Clinician-scientists based in Vancouver have begun a study that aims to compare the effectiveness of various HPV tests by comparing the Pap smear to virus detection testing. A massive enrollment of participants has commenced and with it comes the hope that an effective way of screening for cervical cancer risks will be established. Currently, the Pap smear, the predominant testing method, generates a false negative rate of over 5 %, according to Mayo Clinic statistics. The study is expected to last about 4 years.

Interviews begin at Windsor campus of Western's medical school

The first 24 students of the new Windsor medical school campus will be decided over the next two interview weekends. To alleviate the physician shortage, the Schulich School of Medicine has opened up a satellite campus with the first class graduating in 2012. However, it is anticipated that the program will grow to 50 students per year in the future.

Medical students malnourished, Australian study reports

An Australian nutrition professor has gathered data on the eating habits of 300 female medical students. The study released in March 2008 has revealed that as much as a third of female students were undernourished and more that one in nine had a severe iron deficiency. No data on male students was collected. One is left to wonder if the nutrition habits of Canadian medical students, both male and female, are similarly unhealthy?

CMA releases guidelines on how to say "I'm sorry"

This past week the CMA published advice to physicians about how to break the news of harms suffered from their medical care. For a long time, medical errors were a taboo topic with medical students never trained to deal with the issue. Even now, many physicians worry that apologizing to patients for adverse reactions increases their legal liability. However, statistics from the US have shown that saying "I'm sorry" after a medical complication actually decreases the chances of a lawsuit.

Saskatchewan residents have the best access to family physicians

A recently released National Physician Survey showed that almost half of family physicians in Saskatchewan are accepting new patients. Ontarians' access to a physician is among the lowest in the country, with only 14% of family doctors accepting new patients. According to Dr. Tom Gabruch, the head of the College of Family Physicians of Canada in Saskatchewan, the fact that most of Saskatchewan's doctors practice in a rural setting makes it difficult for them to reject patients.

Mental health issues troubling students

All of us have experienced the blues at some point or another. However, an alarming rise in mental-health issues on campus has campus doctors worried. For example, Queen's University has experienced a tripling of students coming in for mental health counseling over the past decade. Other universities across Canada have seen similar statistics. Experts have attributed this to increasing student stress about debt and mark expectations as well an awareness that help is available. American data has shown that every year, about a third of students become so depressed that they find themselves unable to function while a tenth reported to have "seriously" contemplated suicide.



INTERNAL NEWS

AN UPDATE ON H/P/F

BY HANNI DARWISH

at our School has recently become a central issue for students and faculty alike. Specifically, there has been considerable debate about the honours distinction and whether it should be removed from our transcripts. A lot of effort has been put into this issue, from AS council discussions to student body surveys to formal proposals to meetings with various administrative committees. This article is intended to shed light on the issues surrounding our grading system and to update students and faculty on the status of the debate.

body stands on this issue. It was found that on average 76% of students in 1st-3rd year believed that the incoming medical classes should be evaluated using a P/F system. The proposal given to the administration made it clear that there was a mandate by the students to change our grading system to P/F, but that we did not want to make any retroactive changes to marks that were already received.

The motion to remove the honours designation was approved by the Undergraduate Medical Education Committee (UMEC) in late 2007. At that time, the motion would need

ON AVERAGE 76% OF STUDENTS IN 1ST-3RD YEAR BELIEVED THAT THE INCOMING MEDICAL CLASSES SHOULD BE EVALUATED USING A P/F SYSTEM.

to be approved by two more councils before the changes were officially implemented. These councils were the School of Medicine Executive

There has been a clear progression away from numerical grades and letter grades within medical schools across Canada over the past few decades. Instead, these schools have chosen to evaluate students using a honours/pass/fail (H/P/F) system, and more recently a pass/fail (P/F) system. Literature on medical education has supported this move toward a P/F grading system (1). Currently, there are only three schools that use the H/P/F system throughout their entire curriculum: Queen's, the University of Toronto, and the University of British Columbia.

Students at Queen's have been fighting for over a year to remove honours from our evaluations. Many of the arguments for this change are summarized in Table 1, but the most compelling reasons are (a) to stop relying on a distinction that is unable to separate good students from great students or to predict success in residency and beyond, and (b) to shift the students' mindset from "How do I get honours on the finals?" to "What do I need to know in order to become a good doctor?"

Over the summer of 2007, the AS conducted a survey to get an idea of where the student

(SOME) and the Queen's Senate. On March 18th, SOME discussed the H/P/F issue, and although there were many arguments and opinions that supported the removal of honours, the council ultimately sent the motion back to UMEC to be refined. The major arguments on both sides of the debate are listed in Table 1.

The fact that our motion was tabled and sent back to UMEC is a mixed blessing for us students. On the one hand, it will stall our progress by months or even years. On the other hand, since the motion was not defeated it gives us the opportunity to address the concerns brought forth by the administration and present a better proposal that will be much more likely to garner support from students and faculty alike.

We will provide further updates as our evaluations system undergoes significant improvements and as the students refine their position on the argument. Until then, if you have any comments regarding the H/P/F debate, please contact me (Hanni Darwish – president@qmed.ca) or our Associate Dean, Dr. Sanfilippo.



Table 1. Summary of Arguments For and Against Changing to a Pass/Fail System

	Changing to P/F	Keeping H/P/F
CaRMS	Honours has very little bearing on CaRMS matching because every school has different curricula and evaluation schemes. Because of this, student marks are by and large ignored in the application process.	Honours is important in making student applications stand out, especially in competitive specialties. Otherwise every application looks the same.
Evaluations	Our current evaluation system does a poor job of distinguishing between good and great students, or predicting success in residency. One set of stressful high-stakes exams that tests insignificant minutia should not be the basis of awarding someone with an 81% an H and giving another student with 78% a P.	If our evaluations system is not working, let's make a big effort to fix it. Once we have a functional way of evaluating students, we can then decide whether it's necessary to have Honours. Getting rid of Honours now won't solve the problem.
Competition	Getting rid of Honours would decrease competition and increase cooperation among students.	There shouldn't be competition anyway because there is no limit to the number of students who receive Honours.
Other Med Schools	Every school is progressing through the transition from letter grades to H/P/F to P/F (some quicker than others) for a reason: this is a more effective way to evaluate students in med school. ¹ There are only 3 schools that still use H/P/F throughout their curriculum (Queen's, U of T, UBC).	We shouldn't change just because other schools have changed to P/F.
Recognizing Excellence	There are many ways that recognize exceptional students including academic and non-academic awards, faculty comments, and reference letters.	Without Honours, there is very little in terms of student recognition that makes it onto the Dean's letter in time for the CaRMS application process.
Student Perspective	76% of student in years 2008-2010 believe that P/F is best for future Queen's med classes. 63% of Phase I students would want to switch to P/F, even if this meant increasing the Pass cutoff.	The substantial minority of students (24%) that want to keep the Honours designation are most likely the ones to benefit from it, and it would be unfair for the other students to impose such a disadvantage.

⁽¹⁾ Godfrey RC. Undergraduate examinations--a continuing tyranny. Lancet. 1995. 345(8952): 765-7.

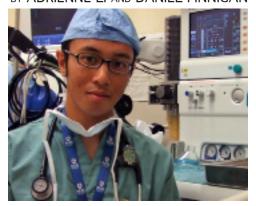
NEXT ISSUE'S POINT//COUNTERPOINT TOPIC: "THE H/P/F IS AN ANTIQUATED SYSTEM OF EVALUATION THAT NEEDS TO BE REPLACED BY P/F."

Send your response to queensmedreview@gmail.com.



ALUMNI PROFILE: DR. VINCENT F

BY ADRIENNE LI AND DANIEL FINNIGAN



A member of Meds '06, Vincent Paul Escanlar is currently finishing his family medicine residency in the Rural Military Programme at the University of British Columbia. Vince was actively involved in the School of Medicine community during his time at Queen's, serving in positions such as co-Webmaster for the AS and Meds '06 and as an Associate Editor of the Queen's Health Sciences Journal. His numerous awards (Travill Award, AMS Boyd Upper Award, and AS Award of Merit) testify to Vince's significant contributions to the School, and his more recent prizes in family medicine and resident teaching recognize his ongoing outstanding efforts and activities. His research interests are diverse, ranging from how political parties use health care to win elections to the coerciveness associated with emergency psychiatric interventions. We had the pleasure of interviewing Vince about his time at Queen's and his residency.

What are some of your best memories at Queen's?

I remember one of the big things that struck me about med school, especially after coming out of a big university for undergrad, is how much it's like high school. There's gossip, there's cliques and all that, so for people who were geeks and dorks and nerds like me in high school, med school could be a chance to "redefine" yourself and become one of the cool kids you always wish you were. Of course I didn't, not even close, but getting to help out with some of the tech and AV stuff in class and MVN was kind of being in the same old comfortable geeky niche like before.

Like high school, med school puts you into a lot of situations you've never been in, things that might be a little over your head as you're growing up; but as you're going through, you learn the "human side" of the people mentoring your way, and a little more about life in general. I remember the first time Dr. Amurawaiye (General Surgery) trusted me with the first cut opening and last suture closing up ("If you don't get this right their guts will fall out!"), as we're chatting about his career spanning from Nigeria to Oshawa. Or Dr. O'Neill (Obstetrics) handing me a baby during a C-section, to carefully ferry over to the warming table ("Don't drop it!"), then teaching me about being a father and raising his kids. It's those moments where learning about "medical life" and "real life" mix together that stand out for me.

When you graduated in 2006, were there any changes you would have liked to see at Queen's?

You finish clerkship with a handful of patients and preceptors who stand out in your mind, but you always wish you had more - so spending more time in Phase 3, with longer rotations and more contact under attendings instead of the classroom learning in Phases 1 and 2 would've been nice. A lot of us in Meds '06, and perhaps in today's classes, felt a fair bit of pressure having to figure out their careers in the short year and a half of clerkship rotations. That said, I think there was so much flexibility within the curriculum, like being able to choose rural vs urban rotations, and shuffling your cores and electives around, that you could come up with the clerkship you really wanted.

quite so exciting a read. So I wanted to look into how something as mundane as a funding agreement between provinces could inspire so much public love and become a national institution in and of itself. My first project, "MedicareTM: The rise of government advertising in Canadian public health care" tried to look into how governments "sell" their policy schemes as a "product" people can trust to look after them. I think it's something doctors need to understand, because it shapes what our patients expect from us and the system - if we can't deliver what government "advertises" on our behalf, it's us who end up holding the bag and taking the heat.

What drew you to Family Medicine?

Like I said earlier, as you go along you have patients and episodes that stand out in your mind - and when you do Family, you get to follow them along, learn the background leadup, and see what happens next in the story. I joined the military's Medical Officer Training Plan in second year, which requires you to go into Family Medicine, so I was basically committed after that - if there's anyone who'd know how important it is to have a jack/jill of all trades than a master/mistress of one when you're in a tough spot and you're on your own, it's the military. But I think I would've tried for Family anyway - despite the odd name (the old "General Practice" label is much more appropriate), you can't beat it for flexibility, for control over where you can practice and

THERE'S SOMETHING TO BE SAID FOR BEING A JACK-OF-ALL-TRADES PHYSICIAN...

Could you tell us a bit more about your research in the history of medicine?

It couldn't have happened without someone like Dr. Duffin who made it fun and socially-acceptable for history geeks like me to not only talk about the past, but to do so in public at the Royal College conference. In Canada we hear so much about the five principles of Medicare and the sanctity of public health care, but when you look at the actual legislation of the Canada Health Act, it isn't

what you can do.

There's something to be said for being a jack-of-all-trades physician, in the image of the good old do-it-all country doctor. Especially when you're in those clichéd situations on a plane and the distress call goes out, "Is there a doctor on board?" it definitely is nice knowing enough of everything to give any problem a shot. And yes, that actually happens! I was flying home from Singapore last year, in the

PAUL ESCANLAR (MEDS '06)

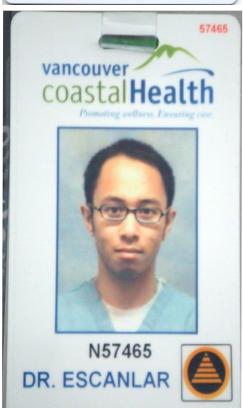


middle of R1, and sure enough, someone needed help. Being able to cast a wide differential can make the difference between nailing the diagnosis and barking up the wrong tree, and I think doing Family forces you to keep an open mind. In this case, it was a simple low blood sugar, but it could've just as easily been a PE, or a stroke, or just plain anxiety, among other things.

What challenges have you faced in your residency?

Two things stand out - getting comfortable with the added responsibility, and staying motivated to keep up. I think it depends on what kind of hospital you train at: if you're at an academic, hierarchical centre, with big teams and clear leadership from staff and senior residents, your duties are clearer, and the group environment and peer teaching (and pimping) helps you (or forces you) to





refresh your knowledge and review your medicine. But when you're in a smaller centre on your own, just you and your staff, like many rural Family Medicine programmes, it takes a while to get a sense of what you're expected to do - or rather, what the staff trusts you to take on. It's also up to you to make the time and effort to dust off the textbooks (or log on to Up-To-Date) and stay ahead - you still have the big (and expensive!) licensing exams to study for, but when they're way off in the distance and you have real patients to look after, it's easy to slip and fall behind.

What has been most rewarding in your residency?

Two things stand out - becoming comfortable with the added responsibility, and getting motivated to keep up. I think it's something you grow into, a role you slip into as you work with more and more patients. At first it's a bit weird, and a bit scary, being called "doctor". The first few times you hear it, you can't help but say, "well, I'm just a resident..." One of my attendings described a change that happens, when you "stop thinking like a student" and "start thinking like a doctor". It happens when what you do is based on what you know, rather than what you think the staff expects you to do (eg, "They're probably going to ask about [test], so I'd better do it"), and you start to feel comfortable and worry less when patients leave after seeing you, without being double-checked by your staff. It's definitely not an overnight change, but rather a comfort that grows unnoticed patient by patient, as you learn, until you realise in hindsight: "I solved that case - I was the doctor!"

Do you have any suggestions for students who think they might be interested in pursuing Family Medicine?

In preclerkship, do lots of observerships - in different specialties, and within Family Medicine too. Like everything in medicine, it's important to make an active, educated choice and not just "fall into" something - that goes for clinical decisions as well as career selection. There's a movement right now to try to get people to think of "Family Medicine" as a single "specialty" distinct from what used to be called "General Practice", but that ignores the variety of special interests and practices GPs can choose to focus on. There really is no one "Family Medicine", and any one observership in an office can't

give a full sense of what you can do if you pursue general practice. You might not like one particular set-up or focus, and that might turn you off; but then there might be another one that totally clicks with you, and you'd be sold on Family. So keep an open mind, and shop around.

In clerkship, do lots of different electives - if you're the "Family-type", you probably want to do a little bit of everything anyway. Clerkship electives very well may be the last time you can get a chance to do some of the specialised, hospital-based rotations, so even if you're ready to get a taste of a "real-world" Family practice experience and bread-andbutter general medicine, it might be best to stick to more-focused electives to help build your background knowledge. Sometimes people say you should do a Family elective with the programme you're most interested to match to on CaRMS, so you have an "in", but out of the people I know who got their first-choice locations, only half actually did electives there.

Do you have any tips for surviving clerkship? Residency?

One of my Family Medicine preceptors, a doit-all GP-surgeon-anaesthetist-obstetrician from South Africa, has two posters in his office. One, a big laminated sign above his desk, the first thing you see when you walk in the room: "NO WHINING". Two, the CMA Code of Ethics, framed above the bookshelf, conspicuous when you leave the room, with the first principle strikingly highlighted and starred: "Consider first the well-being of the patient." Similarly, and a little more gently, another staff mused: "No matter how well you plan your life, medicine will sometimes take over and you'll have to bend. The earlier in your career you accept that and just do what you have to, the less stress you have and the easier it'll be. Just keep calm and carry on." I try to remember those two every time something seems to "go wrong": like a call schedule forces me to double-up, or stay way past handover for another OR, or Emerg gets backed up with endless mundane spill-over from the walk-in clinic... NO WHINING

- Consider first the well-being of the patient
- Keep Calm and Carry On.



QMR MEDWARS

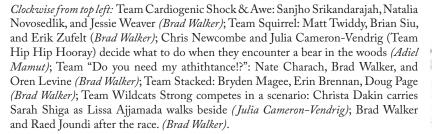
BY JULIA CAMERON-VENDRIG

N THE SATURDAY morning of March 2nd, Queen's medical students may not have asked all the FIFE questions, but they were definitely trying to provide the best quality care, given the circumstances. The setting was a sunny, just-below-zero day in the Albion Hills Conservation Area (Caledon, ON), during the 2008 MedWAR North event (Medical Wilderness Adventure Race). The race involved snowshoeing and cross-country skiing legs, with several wilderness adventure and medical stations to successfully complete along the route. There were five mandatory scenarios, including carrying a team member and a multivictim ice-climbing accident. Teams also had the option of picking up extra points by stopping at extra stations along the trail (and some well off the trail). These included orienteering, technical skills, and multiple choice questions relating to wilderness safety and medical situations. Teams also earned points for finishing the course quickly. The race was open to medical students, residents, and any other enthusiasts of wilderness medicine. Queen's entered nine teams of three medical students each, and placed first, second, and fourth. Teams prepared for MedWAR by attending a series of wilderness medicine lectures organized by Bryden Magee, Erin Brennan, Sarah Shiga, Oren Levine and Christa Dakin (all Meds '10). The five-lecture series included talks on hypothermia (Dharma McBride and Weber), high-altitude medicine (Dr. Filip Gilic), envenomation (Dr. Eric Bruder), animal attacks (Dr. Glenn Brown), and approach to a wilderness medicine scenario (Dr. Ben Comeau). There was also an orienteering session with Dr. Bruder at Little Cataraqui Creek Conservation Area.

more information about MedWAR challenges, please see http://www.medwar.org/index.htm.

























MONTREAL'S MEDICAL HISTORY

BY JULIA CAMERON-VENDRIG, DANIEL FINNIGAN AND KEVIN LEUNG

N AN EARLY Saturday morning in February, a group of first and second year medical students groggily reached over to shut off their alarms and made their way towards Botterell Hall in the blistering cold of snow-buried Kingston. Of course, what motivated them wasn't a drunken stupor or an overbearing feeling of guilt for not having attended classes; rather, it was the prospect of an inspiring weekend in Montreal that spurred their seemingly irrational behaviour. Braving a snowstorm, rumours of bedbugs, and past rumours of scabies, our troupe of dedicated adventurers boarded their bus for a history of medicine trip with Dr. Jackie Duffin and 2011's own Brenda Law as their fearless leaders. Their packed itinerary included private, guided tours of the Oratoire Saint Joseph, the Musée des Hospitalières de l'Hôtel Dieu de Montréal, the Maison de Mère Marguerite d'Youville, and the William Osler Library at McGill University. Naturally, there was also plenty of time to visit modern Montreal, with its shopping and partying districts.

As dramatic a beginning as it may seem, our dedication was quickly rewarded: upon arriving in Montreal we were greeted by the Oratorie Saint-Joseph, a striking landmark gracing the northern slope of Mount Royal. We truly experienced the grandeur of this Roman Catholic basilica when we were able to contrast the spiritual power of standing in the central nave with the humble beginnings of the man who dreamed it: Alfred Bessette. Alfred was born to a poor family of ten children and a mother soon destined to be widowed, and suffered from fragile health throughout his childhood. He did not receive formal education, and despite being physically disadvantaged and sickly, he worked in manual labour from the age of 12. Without direction, sleeping outside of a church where he often prayed, Alfred was taken under the wing of Frère André Provençal. This Brother assisted Alfred in obtaining acceptance into the church's order, an act Alfred honoured with the choice of his ecclesiastical name,

Frère André. He served humbly at Notre Dame College as a doorkeeper, but his reputation as a healer grew from the whispers in the countryside around him.

Because the college could not accommodate the hundreds of pilgrims who sought a cure by visiting Frère André, he built a chapel nearby in which he could receive the pilgrims. From early on, he showed a predilection for Saint Joseph, fittingly a Saint of the working class and of healing. The first chapel, and then the larger Oratoire, was built in honour of Saint Joseph. As he would want it told, it was not his own abilities but the prayers of Frère André to Saint Joseph that healed the sick and his spiritual faith that transfigured the slope of Mount Royal.

Frère André requested his heart preserved and displayed within the Oratoire. In 1974, it was stolen, in the futile hope that it could be ransomed for a large sum of money. It was, however, returned with no ransom paid: the thieves should have realized that no living human could pilfer the heart of Frère André from the Oratorie of Saint-Joseph.

Following this, we visited the Musée des Hospitalières de l'Hôtel Dieu de Montréal, where we learned about Jeanne Mance and Paul de Chomedey, who came from France to evangelize the Indigenous populations and established North America's first hospital, l'Hôtel Dieu de Montréal. Guided by the curator, we learned some pretty amazing facts about the role of medicine in old Montreal and its deep ties with even the French royalty.

BRAVING A S AND PAST RI DEDICATED A



After this first morning's activities, we split up into smaller groups and were let loose to explore the streets of Montreal. My group, for example, headed downtown to revel in old Montreal's Chinatown and discovered a delicious all-you-can-eat buffet. Stuffed full, we decided to head to the local convenience store nearby to 'discover' their beverage selection. Several other groups also enjoyed some of the nightlife that Montreal has to offer. With only a mid-day meeting time the next day, most of us continued the festivities for a night that we will not soon forget! The next day was a bright new day full of excitement too - this time in the shopping district, tornadoing through endless aisles of merchandise. Satisfied, we continued our voyage into history with our next great stop: the Maison de Mère d'Youville.

The Maison de Mère d'Youville was a site of a hospital and shelter run by the Sisters of Charity (also known as the Grey Nuns). Marguerite d'Youville founded this religious order and also ran the hospital, devoting herself to caring for the poor. Pope John XXIII later beatified her, calling her "the mother of universal charity." She was officially recognized as a saint in 1990, and is the only Canadian-born Catholic saint.

Our final stop in celebrating Montreal's great medical history was when we stepped into the incredible collection of historical treasures contained in the Osler Library at McGill University. Though this sanctuary was one composed entirely of words, it is hard to describe the awe that they inspired. The collection was established in 1929 to house

the 8 000 rare books William Osler had collected over his lifetime and bequeathed to McGill. It has now grown to more than 80 000 works from antiquity to modern day. When flipping through the 1493 Nuremberg Chronicle incunabulum, 500 years feels less distant and, necessarily, a lifetime likewise reduced. Also brought out for our viewing was an 8th century B.C. Assyrian clay tablet of cuneiform script describing preparation of an ophthalmic ointment, all guided by the head librarian, Mrs. Pamela Miller.

The dialogs on the solar system by Galileo Galilei, drawings of the central nervous system by Thomas Willis, dissertations of Edward Jenner on vaccination, a treatise by William Beaumont about digestion, and Joseph Lister's essays on antiseptic technique all stand among their peers. The authors appear ironically silenced as we silently examined their works, yet their words and ideas shaped the modern world. Having been invited to share in these treasures and trusted to peruse them at leisure lent our group a feeling of importance. Seemingly contradictory, it also felt humbling to stand amongst the collection, like young children who wandered into their father's office. Our time with the collection passed quickly, changing little more than patterns of dust around these edifices of history. Everything felt small as we boarded the bus for the journey home to Kingston. It was a fitting conclusion to a weekend of discovery and reflection. We were all very grateful for the unique and inspiring opportunity afforded to

SNOWSTORM, RUMOURS OF BEDBUGS, JMOURS OF SCABIES, OUR TROUPE OF ADVENTURERS BOARDED THEIR BUS...



AN EVENING FOR MATANGWE

BY JESSICA LIAUW

N MARCH 6TH, 2008, over 100 of Queen's students, faculty, and community members gathered to express solidarity with the people of Kenya, who have recently experienced violent political unrest. Specifically, this modest dinner was an effort to raise funds, support, and awareness for a health clinic in Matangwe, a rural town in Western Kenya of about 248 000 people, which was particularly hard-hit by the violence.

On December 27th, 2007, the presidential election in Kenya resulted in the re-election of president Mwai Kibaki. However, the integrity of the elections was highly criticized, with opposition candidate Raila Odinga accusing the incumbent government of "rigging" the results. The viewpoint was supported by doubts from the international community. This prompted a wave of violent unrest across the country, resulting in over 1 500 deaths and the displacement of more than 250 000 people from their homes.

The Matangwe health clinic was initiated by Caring Partners Global, a non-governmental organization founded by Stephen and Sylvia Scott, who emigrated from Matangwe and now live in Waterloo, Ontario. Stephen and Sylvia, who serve as a teacher and a nurse respectively, collaborate with the Matangwe community to help identify their needs and carry out appropriate projects including educational programs, a feeding program, agricultural programs, water sanitation projects, home-based care, and HIV/AIDS counseling and testing. For the last few years, Queen's medical students have been involved with the Matangwe health clinic - pairs of students have traveled there each month throughout the summer to learn about health in this community and help where they could. This year, due to the violence, Queen's medical students are unable to visit the clinic. Still desiring to support this project, we invited our community together to meet the Scotts and enjoy a meal together while learning first hand about their global health experiences. We've heard stories like this before. A community that is struggling for resources faces greater need due to extenuating

circumstances and people come together behind an organization to lend support. However, this event was unique for several reasons. During the meal, Dr. Onyett discussed her experiences in Eastern Africa including Kenya, and the Scotts introduced us to Matangwe and to the work of Caring Partners Global – and what it means to them personally and to their families in Matangwe. The gathering was about people. It was about sharing experiences and about responding to each other. It was about identifying needs, and understanding, if only slightly, what these needs mean for the lives of those who identify with them. I wonder, sometimes, what it is that leads people to care about things happening thousands of kilometers away to a population we don't really know much about, leading lives that seem so different and often disconnected from our own. I wondered if people would come to this dinner, on a busy night, for lasagna and a few talks, about a subject that seems so far from our everyday lives. But people came – perhaps because they were curious, because it meant something to them, or because it meant something to a friend. Few of us were experts on Kenya, or personally afflicted by the situation, or could really demonstrate any solid proof of why we should care except that we were there to support people - and to gain from providing this support.

There is something wonderfully selfish about caring. I think it's a reason we pursue medicine, a reason we engage in social issues, and a reason the human condition matters to us. We inherently understand that by giving and by supporting each other, we will gain. We will build a world which better suits us as we exercise our freedoms to actively shape our environment. We do not sacrifice by giving - and although it is often difficult, it is not an obligation because we choose to do it. People give in many ways: to their families; to their communities; and to strangers, because even in a stranger we see a human being and in that human being, we see reflections of ourselves. Maybe that's why people came, and why we planned the event, not because we should, or even because it was a "good cause," but because we know we cannot live alone.



















INTER-PROFESSIONAL EDUCATION

BY ASHLEY BRISSETTE AND RAED JOUNDI

MAGINE THE BUSTLING environment of a hospital or a clinic. Doctors, nurses, _ physiotherapists, occupational therapists, optometrists, and speech pathologists are moving from patient to patient, using their skills to provide healthcare. What is the lubricant that allows these health professionals to work together effectively? The answer is inter-professional education (IPE). Is this just another clinical skills acronym you ask? Thankfully, no! IPE occurs when students and experts from various professions learn from, and about, each other to enhance collaboration and improve the quality of care. This method of practice encourages participants to understand the core principles and concepts of each contributing discipline, and to become familiar with their practices, mindset, and jargon. Teaching these ideas to future healthcare providers fosters a system that ensures healthcare professionals have the knowledge and training to work effectively in inter-professional collaborative teams.

Why does IPE matter? It's been shown to improve what we are all working towards: patient-centred care. Inter-professional collaborative patient-centred practice is designed to enhance communication among healthcare providers, foster mutual respect, and promote optimal input from all disciplines in the decision-making process. This approach can lead to improved patient

IPE. Formed in January 2005, NAHSSA is the first national inter-professional student association in the world. As a network of university- and college-based chapters, it strives to provide Canadian healthcare students with much needed inter-professional education and promotes the attitudes and behaviours necessary to provide interprofessional care. NaHSSA also links all the member chapters together in a synergistic way such that each chapter can learn and collaborate with others. The Queen's Health Sciences Students' Association works towards the same goals here at Queen's. By organizing academic events, high-school outreach programs, inter-professional social activities as well as promoting research and dialogue, IPE is furthered within our own university. This year, various members of QHSSA and other healthcare students travelled to London to attend the 4th annual NaHSSA conferences.

The conference began with keynote speaker Dr. Ivy Oandasan, Director of the Office of Inter-professional Education at the University of Toronto. Speaking about inter-professionalism, she emphasized its role in promoting quality, safety, and access to healthcare. Moreover, she discussed the need to move from individual-based to collaborative healthcare, which will inevitably reduce duplication and increase efficiency.

advocated an alternative to problem-based learning in healthcare, called appreciative inquiry. Appreciative inquiry focuses more on trying to amplify the positive aspects that already exist, on the premise that such amplification is more effective than working to "fix" a "problem." The conference featured many more dynamic and interesting speakers, including a patient with multiple sclerosis and cancer who shared her passion for life, a former lead speechwriter for the British Columbia Ministry of Health who taught how to improve communication, and a transplant surgeon who used leadership and interprofessionalism to turn a failing transplant program into the best in the country.

At this point in our education, we have the opportunity to network, learn, and advocate for inter-professionalism in healthcare. If we are successful in promoting IPE, we can create a patient-centered standard of care and a better environment based on trust and reliance. Consider how different our healthcare system would look if IPE were implemented. Excuses such as "Well, that's our healthcare system!" to explain away poor treatment would not be tolerated because all professionals would understand their roles and the roles of those around them, and thus how to best address gaps in care. Advancing IPE takes everyone's cooperation. As students, we have an enormous potential to affect the future of healthcare. We have created a climate for change, now let us step forward to implement, develop, and sustain this change.

On a final note, it is our pleasure to announce that we have recently won the bid to host the 2009 National Health Sciences Conference here in Kingston. That means that students will have the opportunity to attend this amazing conference on inter-professionalism right here in their own backyard! The QHSSA and Conference Executive will be working hard over the coming year to bring the best conference in NaHSSA history to Queen's University. So stay tuned and stay inter-professional!

IF WE ARE SUCCESSFUL IN PROMOTING IPE, WE CAN CREATE A PATIENTCENTERED STANDARD OF CARE AND A BETTER ENVIRONMENT BASED ON TRUST AND RELIANCE.

safety, better access to healthcare, and higher overall quality of care.

The National Health Sciences Students' Association (NaHSSA) is at the forefront of many organizations now working towards

For example, she spoke about the benefits of several healthcare professionals (physicians, occupational therapists, physiotherapists, etc.) taking a patient history together, so that the patient does not have to repeat their story several times. Lastly, Dr. Oandasan

THE TRAVILL DEBATE



BY AISLING A. CLANCY AND MELISSA PICKLES

R. A.A. "TONY" TRAVILL (1925-1996), a Professor in the Department of Anatomy and department head from 1969-1978 (1), was said to enjoy debate on political, social, and educational issues. As a result, a debate has been held each year in his honour. This year, four worthy opponents contended the statement: "The feminization of Medicine is a Hazard to the Public's Health." The passion and preparation of this year's debaters certainly made for superb audience entertainment.

Dr. Lindsay Davidson (Ortho) and Adam Szulewski (Meds '10) argued in favor of the resolution. Szuleweski maintained that his participation was a fantastic experience, saying "I would definitely encourage future students to participate in this event - one that is unique to Queen's medicine." (2)

Davidson and Szuleweski argued that the average of 48 hours per week that female physicians work in clinic (as compared to the average of 56 hours per week for males) (3) has led to increasingly crowded emergency rooms and contributed to the physician shortage in Canada. Overall, female physicians see 15% fewer patients than males, a large difference in Canada where the physician supply is "the lowest of the G8 countries" (3). In 2005, less than 4% of family physicians were accepting new patients (4) pushing access to healthcare into a crisis: five million Canadians are currently without a family physician (3).

Davidson and Szulewski also suggested that the emphasis on sympathetic and empathic communication exhibited by female physicians may also increase the incidence of burnout (5) and that the lower likelihood of females working in rural or remote regions further increases inaccessibility to healthcare in Canada.

Dr. Peter O'Neill (Ob/Gyn) and Emily Austin (Meds '11) argued against the resolution. Their main argument was that the quality of care is more important than the quantity of care; the extreme hours and boot camplike nature of residency is not good for the public's health. It seems intuitive that a tired physician is more likely to make a mistake than a rested one.

In several entertaining arguments, O'Neill noted that more women are admitted to medical school and that women have higher CaRMS match rates than their male colleagues (6). The exceptional performance of women in our medical system would suggest that there is an advantage to the way that women interview or perform medicine. In fact, women have been noted to be particularly successful at patient-centered care (7). Austin argued that women more frequently engage in collaborative practices, which were suggested to provide a more efficient and optimal care for patients. The changes brought in with the feminization of medicine have not merely benefited women, as men are also able to spend more time with their families. They suggested that this ability to split time between a personal and professional life may make better, more caring physicians, particularly in the primary care sphere, where physicians are most needed and where women are beginning to predominate. The audience ultimately voted against the resolution. Did the large number of female spectators or perhaps a bias toward particular debaters change the debate outcome? As female medical students, we would hope that the result only confirmed what we believe to be true: the addition of women to medicine has been and continues to be a good thing.

References

- (1) The Tony Travill Debate, School of Medicine Calendar, Queen's University. http://www.queensu.ca/calendars/archive/2004-05/medicine/TheTonyTravillDebate_2592. htms. Accessed March 2008.
- Personal correspondence with Adam Szuleweski (March 2008).
- Gulli, C. and K. Lunau. Canadas doctor shortage worsening. Maclean's magazine. January 14th, 2008.
- (4) The College of Physicians and Surgeons of Ontario. 2005 Survey of Ontario's Physicians: Access Challenges Ahead. June 2006. http://www.cpso.on.ca/Publications/publications.htm.
- (5) Linzer, M., McMurray, J.E., Visser, M.R.M., Oort, F.J., Smets, E.M.A. and H.C.J.M. de Haes. Sex Differences in Physician Burnout in the United States and the Netherlands. Journal of the American Medical Women's Association. 52(4): 191-193. (2005).
- (6) Baerlocher, M.O. and A.S. Detsky. Are applicants to Canadian residency programs rejected because of their sex? Canadian Medical Association Journal 173(12): 1439 -1440. (2005)
- (7) Krupat, E., Hiam, C.M., Fleming, M.Z. and P. Freeman. Patient-Centeredness and Its Correlates among First Year Medical Students. The International Journal of Psychiatry in Medicine 29(3): 347 – 356. (199)



OPINION:

ARE RADICAL CHANGES REQUIRE FOR THE CANADIAN UNDERGRAD MEDICAL SYSTEM?

BY ROHIT MOHINDRA

s the health needs of Canadians changed, so has Lundergraduate medical system that produces its doctors. In the past century, medical education has undergone a number of paradigm shifts. One of the more recent changes has been the inclusion of more problem-based or case-based learning (PBL and CBL respectively) in the curriculum. This has also facilitated the implementation of the three-year undergraduate medical program in Canada. Indeed, the programs at McMaster University and the University of Calgary have had long-term successes with PBL- and CBL-focused curriculum, and recent research that shows doctors trained with PBL or CBL are as effective as their traditionally trained colleagues (1). This has prompted the editors of the CMAJ to call for a re-evaluation of the traditional four year program. Their argument is that, given the doctor shortage within Canada, it would be prudent to expedite the process of training doctors in any way possible before a crisis strikes. As well, the editors of CMAJ question whether the exhaustive training required in the current education system is of any benefit to the publics' health (2). For both points, I applaud the editors for taking a bold stance. In a profession based heavily on tradition, it takes a certain courage to propose innovative and sometimes startling ideas that could be a catalyst for change. In fact, I propose that we take an even more extreme approach at this juncture; a change that will help to streamline the process of producing doctors during our shortage, but also an approach that maintains the rigorous standards that have helped Canada become a leader in healthcare.

Our current system is modeled after the approach proposed by Sir William Osler. After careful research and analysis of the German medical system, he proposed that medical training incorporate a residency period, where young medical students train in the hospital under the watch of more experienced doctors (3). This is a system that

continues to this day in almost all countries that practice Western medicine. I propose that we once again look to the German medical system for inspiration. Their current system allows direct entry into medical training from high school. In fact, this system is already in place in some schools in Quebec, where students can enter directly into a six-year program from CEGEP. Students are exposed to the relevant basic science courses in the first two years and the remaining four years of their undergraduate training is similar to the system that Osler proposed and perfected (4). This model serves two purposes. Firstly, it relieves the post-secondary education system of the burden of teaching important science concepts twice, once during undergraduate and then once again in medical training. Secondly, it ensures that medical students have completed training at a younger age and therefore are able to contribute productively to the healthcare system for a longer period. Both of these concepts would be quite useful for Canadian schools outside of Quebec as they would lead to a more efficient use of resources and provide a way to increase the number of physicians in practice.

Another point raised by the editors of CMAJ was that our current system may be too exhaustive and therefore inefficient. Currently, it is considered that having an undergraduate or higher level of education before enrolling in medical school promotes a breadth of education and life experiences that helps students to better prepare for medical education. As a result, medical schools have seen their enrolment statistics shift towards more mature students, many with master's degrees or considerable non-academic experiences. Even students without these qualifications tend to come from programs in the biological or health sciences. As a consequence, most students have a strong medical science background, a fact that is not reflected in the content of the curriculum (5). Therefore one is inclined to ask the question: if we need to fulfill primary care positions



D UATE

throughout the country in a timely fashion, are many applicants actually overqualified for undergraduate medical education in its current form? Since many students already have the knowledge required for the foundation of medical education, the argument can be made that curriculum resources could be better allocated in order to reduce the time required to educate more physicians with the same academic standards. This would be an important step to producing more doctors efficiently, but with the confidence that they will have the required competencies.

With both these points however, we must also consider the inertia of the medical education system. Implementing change in undergraduate medical education in Canada is, at best, an academic process fraught with oversight, administrative challenges, and an unfortunate lag behind the ever-changing demands on the medical system (6). The majority of these are, of course, checks and balances in place to ultimately protect the health and safety of the patients we treat. However, we must be willing to realize that healthcare is also a time sensitive issue. We, as professionals, have a duty to adapt to the demands placed on the practice of medicine and begin a bold new frontier of dynamic medical education. Not only would such a radical shift quickly change public perception (confidence in the healthcare system grows shakier with every year) but it would help to inspire governments, healthcare administrators, researchers, and healthcare professionals to address the looming crisis. I challenge each and every medical school, including my own, along with my peers, mentors, and the members of the healthcare profession, to start asking very serious questions about undergraduate medical education in Canada. There is no reason we can't start making these types of changes with our own education today to benefit everyone tomorrow.

This article has been peer-reviewed.

References

- Koh GC et al, "The effects of problem-based learning during medical school on physician competency: a systematic review" CMAJ. 2008 Jan 1;178(1):34-41.
- (2) Felgel KM et al, "Is it time for another medical curriculum revolution?" CMAJ. 2008 Jan 1;178(1):11, 13.
- (3) Bliss, M. "William Osler: A Life In Medicine" Oxford University Press 1999
- (4) "German Medical Education System" IFMSA European Regional Meeting Conference Proceedings 2006
- (5) Queen's University School of Medicine Admission Statistics Class of 2011
- (6) Tepper JD, "The disconnect of twin pillars: the growing rift in educational goals and methods between medical schools and the academic teaching hospitals." Healthc Pap. 2002;2(3):96-104;



A COMPREHENSIVE APPROACH TO ORGAN DONATION IN ONTARIO

BY DEREK TSANG

T ANY GIVEN point in time, there are more than 1 600 patients waiting for an organ in Ontario (1). Despite the overwhelming need for organ tissues, Canada has one of the lowest rates of organ donation in the world, at 14 donors per million people (see Figure 1) (2). In comparison, residents of Spain donate organs at rate of 35 donors per million, a statistic that is supported by a highly successful organ donation program that has made great strides in reducing waiting lists through unique policies (3).

Presumed consent and transplant teams

How has Spain managed to achieve such a high organ donation rate? There are two main reasons. Firstly, a policy of presumed consent has helped shift attitudes on organ donation, changing donation from an option to the default choice. Second, financial and logistical resources have been dedicated to "transplant support teams" to provide emotional support to bereaving families, helping decrease refusal rates.

Presumed consent may be described as "opt-out" organ donation, where everyone is assumed to be a potential donor unless noted otherwise. In Canada, all provinces have an "opt-in" approach, where prospective donors must be consulted, relatives of deceased patients must give consent, or the donor must sign an organ donation card before death (Figure 2) (4). However, "opt-in" organ donation leads to fewer donors because many people forget to sign their donor cards, may be too afraid to sign, or fear that they will not receive the same level of medical care if they are registered as an organ donor (5). Presumed consent is a solution to this problem. There are two implementations of presumed consent: a "soft" system such as the one Spain uses, where relatives may opt-out for a dying patient, or a "hard" system where

relatives may not opt-out for a dying patient. Since 1990 when "soft" presumed consent was implemented by Spain, donation rates have doubled to their current level of 35 per million. Austria's "hard" presumed consent law was passed in 1982, and since then, their donation rate has quadrupled to 25 donors per million, nearly eliminating Austria's long waiting list for kidneys (6, 7).

As impressive as presumed consent appears, simply amending organ donation laws will not solve Canada's shortage of organs. Passing legislation is only a small part of a greater shift in attitude that must occur before organ donation rates can increase. For example, in Austria, a country of eight million, only 8,000 people have opted-out of organ donation — a remarkably small number (8). Public awareness among health professionals, patients and families about issues surrounding organ donation must increase and needs to accompany any changes to organ donation laws if we are to succeed in improving Canada's dismal donor rate (9).

Spain provides an example of the emphasis placed on organ donation awareness. The

special government provides training and funding to transplant teams, whose purpose is to work with relatives and suggest organ donation to grieving families. If a patient is identified as a potential donor, the transplant coordinator and accompanying team are contacted. They immediately meet with relatives, explain the situation, and suggest organ donation (1). Like any other hospital department, the teams have a dedicated budget and are fully accountable for their performance (10). It is these teams that have made Spain a world leader in organ donation. Without such a system of education and counselling for bereaving families, a presumed consent law will fail to live up to its potential.

Presumed Consent in Ontario

As with most health policy issues, organ donation is strictly an area of provincial jurisdiction. The debate on presumed consent for organ donation is not new to Ontario. In February 2006, New Democratic Party MPP Peter Kormos tabled Bill 61 in the Ontario Legislature, which would have implemented presumed consent organ donation. At the

Organ donation: Canada's place in the world

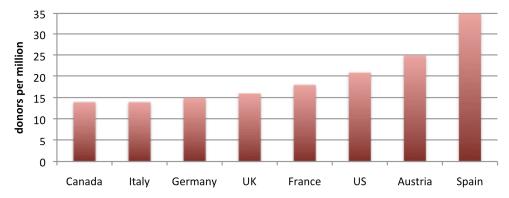


Figure 1. Organ Donatioin Rates: Cananda's place in the world.



Please keep this card with your personal identification. In the event of my death, I consent to donate the following in the hope that I may help others: ☐ any needed organs or tissue ☐ only the following organs and/or tissue (specify): DONOR'S NAME DONOR'S SIGNATURE

www.giftoflife.on.ca

1-800-263-2833

Figure 2. Organ donor card.

DATE

same time, Progressive Conservative MPP Frank Klees presented Bill 67, which would have required all drivers in the province to declare whether they would be willing to donate their organs when they renewed their licenses. Although the health minister at the time, George Smitherman, seemed to indicate government support for Bill 67, both private members' bills died on the Order Paper in the last provincial election (11, 12).

In November 2006, the Ontario government commissioned the Citizens' Panel on Increasing Organ Donations, which held public consultations across the province to determine strategies for increasing the supply of organs in the province (13). The panel's report, released in April 2007, noted that Ontarians did not support presumed consent organ donation. Since the report, there has been no legislative movement with regards to presumed consent. The government did act on some of the other recommendations of the panel, including financial support for living organ donors to cover expenses related to travel, accommodation and lost income. The government also made promises to increase public awareness of organ donation (14).

In the past, organ harvesting was only performed after neurological determination of death, or "brain death" (15). Recent progress has been made towards increasing the pool of potential organ donors through new national criteria for donation after cardiocirculatory death, such as cardiac arrest (16). Even

though these new guidelines were adopted in late 2006, organ waiting lists remain very long and more needs to be done to address this problem.

The future

WITNESS' SIGNATURE

Much remains to be done in Ontario before presumed consent can be implemented. Both physician attitudes and public attitudes need to change through increased awareness and education. Many health care professionals find it difficult to approach dying patients and their families regarding this delicate topic while remaining sensitive to the emotions surrounding death (17). However, physicians in Canada need to take responsibility for recruiting donors; there have been reports of donation rates doubling in a hospital simply because a new physician dedicated to increasing organ donation joined the intensive care unit (13). The government must also provide stable, dedicated financial support to transplant teams modelled after Spain's highly successful system. These teams are essential in building rapport and trust and provide a service that busy Intensive Care Unit physicians and nurses may not have time for.

Public understanding of the issues surrounding organ donation is essential in building a system that engenders confidence and pride, and not suspicion and doubt. There is much confusion about the meaning

BECOMING A DONOR

Until presumed consent is implemented, prospective donors should sign an organ donor card from the Ontario Trillium Gift of Life Network. Keep this card on your person at all times.

Donors may also register with the Ontario Ministry of Health and Long-Term Care and request to be added to a registry of donors. You will receive a new health card in the mail with your intentions marked on the card

Signing an organ card does not necessarily mean that your wishes for organ donation will always be followed. It is important to speak with your family and loved ones about your choice so that they are aware of your decision and can carry out your wishes in the future.

LINKS

Trillium Gift of Life Network: www. giftoflife.on.ca, 1-800-263-2833

Trillium Gift of Life donor card: www.giftoflife.on.ca/assets/pdfs/donorCardEnglish.pdf

MOHLTC registration form: www. health.gov.on.ca/english/public/pub/ohip/organdonor.html

of "presumed consent". Will relatives be able to opt-out? Will there be a central registry of non-donors? The debate around presumed consent has often been tainted with impulsive responses such as "organ-seizing ghouls" or "hands off my body." Alarmingly, some citizens are concerned that they may receive poorer medical care as a prospective organ donor. Nationally-adopted guidelines clearly state that "care of the dying patient must never be compromised by the desire to protect organs for donation or expedite death



to allow timely organ retrieval" (16). Such perpetuating myths and falsehoods, among others, must be addressed so that proper and meaningful dialogue can take place between the public, health care professionals, and our elected representatives.

Finally, there remain logistical problems surrounding the implementation of presumed consent. Canada's multicultural mosaic and wide range of religious, social, and cultural beliefs must be addressed in the broad public awareness campaign that must follow any change to organ donation laws. There will no doubt be groups who will be vehemently opposed to presumed consent, and it is the responsibility of the government, religious and cultural organizations and the health care establishment to avoid alarmist rhetoric and to maintain focus on the needs of patients and the proven benefits of organ transplantation

Ontarians will sleep soundly in knowing that should they ever need an organ, the system will be there for them.

This article has been peer-reviewed.

References

- (1) Waiting List 10-Year History. Trillium Gift of Life Network. http://www.giftoflife.on.ca/page.cfm?id=1E2F9FDA-31F1-406F-9197-83CAF65CF010>.
- (2) Organ Donation in Canada. Health Canada. April 2001. http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/2001/2001_36bk1_e.html>.
- (3) How the Spanish donor system works. BBC News Online. 13 January 2008. http://news.bbc.co.uk/2/hi/health/7183798.stm.
- (4) Trillium Gift of Life Network Act. RSO 1990, Ch. H20. eLaws Service Ontario. http://www.e-laws.gov.on.ca/ html/statutes/english/elaws_statutes_90h20_e.htm>.
- (5) The gift of life. CBC News Online. 22 March 2005. http://www.cbc.ca/news/background/health/organ_transplants.html.
- (6) J Trauma. 2003;54:995-999. doi: 10.1097/01. TA.0000022461.76930.4E
- (7) Everyone 'should donate organs'. BBC News Online. 17 July 2007. http://news.bbc.co.uk/2/hi/health/6902519.stm>.
- (8) Presumed consent not the reason for Austria's high donor rate, head of transplant committee says. BNET Online. 11 July 2003. http://findarticles.com/p/articles/mi_m0YUG/is_13_13/ai_n18616293>.
- (9) BMJ 2007;334:1088. doi:10.1136/bmj.39199.475301.AD
- (10) Am J Transplant, 3(10), 1189-1196. doi:10.1046/j.1600-6143.2003.00198.x
- (11) Legislative Assembly of Ontario. http://www.ontla.on.ca/web/bills/bills_all.do?locale=en.
- (12) 'Presumed consent' option for organ donations sparks debate. CBC News Online. 16 February 2006. http://www.cbc.ca/health/story/2006/02/16/organ-donation060216.html>.
- (13) McGuinty Government Creates Citizen Panel to Help Increase Organ Donation. Ministry of Health and Long-Term Care News Release. Ontario Government. 24 November 2006. http://www.health.gov.on.ca/english/media/news_releases/archives/nr_06/nov/nr_112406.html.
- (14) Boosting Organ Donations, Saving Lives. Office of the Premier News Release. Ontario Government. 3 August 2007. http://www.premier.gov.on.ca/news/Product.asp?ProductID=1570>.
- (15) CMAJ 2006;174(6), S1-S24. doi:10.1503/cmaj.045142
- (16) CMAJ 2006;175(8), S1-S30. doi:10.1503/cmaj.060895
- (17) Transplant Proceedings. 38(9), 2006, 2751-2755. doi:10.1016/j.transproceed.2006.08.155
- (18) Can Fam Physician 2005;51:1094-1099.

MORE THAN A HUNDRED CANADIANS DIE EVERY YEAR WHILE WAITING FOR AN ORGAN TO BECOME AVAILABLE.

for an increasing number of usually fatal diseases.

Throughout all the debates, consultations, discussions, and town hall meetings, we must keep in mind that more than a hundred Canadians die every year while waiting for an organ to become available (2). In comparison, there have been only nine deaths per year between 2001-2005 attributable to West Nile Virus (18), an infectious disease that has received disproportionate public and media attention. The current Ontario government has taken steps in the right direction with a pledge to support organ donation programs (14). The urgency of waiting lists for organ transplant is real, however, and more needs to be done. The government needs to take charge with organ donation: increase public awareness, provide strong financial support to organ donation teams, implement presumed consent, and evaluate the program so that all

SHOCK VALUE



BY MELISSA PICKLES

After recently reading a Maclean's article on electroconvulsive therapy (ECT), I was shocked (no pun intended) that it is presently recommended as a frontline treatment for major depression (1). As I am interested in psychiatry, I arranged to do an observership at an ECT lab, to see for myself what the treatment was like. I found that the procedure was actually fairly comparable to any short, anaesthetized procedure in terms of patient experience. The procedure was done while the patient was fully anaesthetized and under a general nerve block. The seizure was induced by a small dose of electricity - a fraction of that used in cardiac resuscitation- and lasted approximately 30 seconds. From start to finish, the procedure was only twenty minutes long. Most patients require 8-12 such sessions over about a month. This experience was completely contradictory to the negative image I had been presented within pop culture, which inspired me to probe deeper into the origins of ECT's bad reputation, and whether or not it was justified.

HE IDEA OF electroconvulsive therapy (ECT) often conjures up negative images, most frequently derived from movies such as One Flew over the Cuckoo's Nest and Requiem for a Dream. Characters are given painful, terrifying and excessive jolts of electricity, and are left to cope with brain damage and amnesia. It is not surprising, then, that the general public might perceive ECT to be outdated and barbaric, a black mark on psychiatry's past.

Yet as recently as 2003, the Lancet published a study determining ECT to be a more effective treatment for depression than current pharmaceuticals such as selective serotonin reuptake inhibitor (SSRIs) (1). In 2004, the World Psychiatric Association determined ECT to be a first-line treatment for major depressive disorder (1). Many claim that ECT is merely misrepresented and misunderstood (1).

The first steps towards the birth of ECT were taken in the 1930's when it was found that injections of camphor could induce a convulsion and that this convulsion

triggered an amelioration of the symptoms of major depression, bipolar disorder, and schizophrenia. Subsequently, insulin was used to induce this convulsion through its hypoglycemic effects. Difficulties in the predictability and control of the metabolic effects of insulin led to the use of electricity as a convulsive agent. It is believed that the seizure may induce the reorganization of serotonin and dopamine receptors in the

brain, but this has not been proven (1). There is, however, research that does support the view that ECT can reduce depression in both major depressive and bipolar disorders (2). ECT remained almost the only effective treatment for depression until the discovery of anti-depressant pharmaceuticals in the 1950's. Instances of ECT occasionally being used to subdue unruly patients, as well as negative portrayals of ECT in popular culture



Andrew Mok



damaged its reputation and led to the decline of its use (3).

ECT's negative reputation seems to have persisted to the present day. A Swiss study in 2005 found that only 1.2% of people surveyed were in favour of ECT (4). Are these perceptions justified? Formerly, uncontrolled side effects, such as muscle convulsions leading to long bone fractures, are now mitigated by administering succinylcholine, a nerve block agent, during treatment. The treatment itself has also become much more refined: there are now many different types of currents that can be delivered at more refined quantities, resulting in patients receiving much lower doses of electricity. Retrograde and anteretrograde amnesia, an inability to remember past events and an inability to form new memories, respectively, remain known side effects of ECT (5). Research indicates that retrograde amnesia is usually resolved within several months, although some patients may never remember the weeks prior to or during treatment (6). Some patients may continue to complain of memory loss after this period. Objective studies, however, have shown that memory and new learning recovers completely. It is important to also remember that some patients may have experienced memory loss prior to treatment as a result of their disorder (7). ECT does not result in structural brain damage (8), although the possibility remains that ECT may result in permanent brain damage or dysfunction in a minority of patients (9). This remains a controversial topic amongst researchers.

A more recent study found that ECT can routinely cause impaired cognitive functioning and memory loss for extended periods of time (2). It has also been found that while ECT can end a particular major depressive episode, it may not prevent future episodes, and follow up treatment with an anti-depressant is often recommended (9). It is important to remember that even if the side effects are temporary, they, and the experience of ECT itself may represent a major disruption to the patient's life for that time period.

When evaluating the costs and benefits of ECT, one must not forget that in order to justify the use of a treatment ethically, the patient must feel that the benefits have outweighed the costs. Measuring patient satisfaction with ECT represents a major challenge. While the Royal College of Psychiatrists in Britain claim that 80% of depressed ECT patients respond well to treatment, there is some evidence to the contrary. A recent systematic review of patient satisfaction studies found that patient responses could vary widely depending on the length of time between ECT treatment and the study, and whether the study was patientconducted (10). It was found that there were lower levels of reported satisfaction when the study was conducted by patients or took place at longer intervals from the treatment. It can be concluded that elements of ECT, such as the proportion of individuals who are satisfied with their treatment, are still controversial within and between professional and patient groups. (10)

A more general debate has arisen from the negative portrayal of ECT in the popular to what degree should public opinion determine which treatments are recommended? The National Institute for Health and Clinical Excellence in Britain has recently been criticized for "pandering to the public" by recommending talk-based therapy over ECT or SSRI's. Critics argue that clinical efficacy alone should determine what is used as a first line treatment (11). It is important to remember that "efficacy" may have a different meaning from the patient's perspective, and that public opinion will affect the willingness of a patient to consent to a specific treatment. On the other hand, many psychiatrists currently refrain from recommending ECT until anti-depressant pharmaceuticals have been shown to be ineffective, even when it is felt by the psychiatrist that a specific case will not respond to pharmaceuticals, a decision which is influenced by public perception. As a result, not only are patients subjected to months of excruciating depression before receiving effective treatment, they are also subjected to the many potential side effects

of SSRIs.

The issues surrounding the use of ECT are many and complicated. It is important to remember that ECT is not used to treat minor depression; the indications for its use include psychoses and catatonia. It is often difficult to balance the pros and cons for a treatment which can ameliorate such acute suffering when the potential side effects can be so debilitating. Yet while these debates are conducted within the public and medical spheres, it is, nevertheless, likely that ECT will remain a key therapeutic modality for treating major depression.

This article has been peer-reviewed.

References

- (1) Bethune B. A Shocking Truth. Maclean's. 2007.
- McCall WV, Prudic J, Olfson M, Sackeim H. Healthrelated quality of life following ECT in a large community sample. J Affect Disord. 2006 Feb; 90(2-3):269-274.
- Goode E. Federal Report Praising Electroshock Stirs Uproar. The New York Times 1999.
- (4) Lauber C, Nordt C, Falcato L, Rössler W. Can a seizure help? the public's attitude toward electroconvulsive therapy. Psychiatry Res. 2005; 15(134):205-209.
- (5) Benbow S. Adverse effects of ECT. In: the ECT Handbook. Second ed. London: The Royal College of Psychiatrists, 2004:170-174.
- (6) Squire L. Retrograde amnesia and bilateral electroconvulsive therapy:Long-term follow up. Archives of General Psychiatry. 1981; 38:89-95.
- (7) Fink M. Complaints of loss of personal memories after electroconvulsive therapy: Evidence of a somatoform disorder? Psychosomatics. 2007; 48(4):290-293.
- (8) Surgeon General U. http://www.surgeongeneral.gov/library/mentalhealth/chapter4/sec3_1.html.
- Andrew Reisner. The electroconvulsive therapy controversy: Evidence and ethics. Neuropsychology Review. 2003; 13(4):199-219.
- (10) Rose, Diana senior researcher1, Fleischmann Pr, Wykes Tp, Leese Ms, Bindman, Jonathan senior lecturer3. Patients' perspectives on electroconvulsive therapy: Systematic review. British Medical Journal. 2003; 326(7403):1363.
- (11) Boseley S. Electric shock treatment "best response for depression". The Guardian Unlimited 2006; Sect. Health.



KINGSTON CASTS A NET FOR GLOBAL HEALTH

BY DANIEL FINNIGAN

T IS A characteristic of human nature that we are rendered unresponsive to what Leve are exposed to on a daily basis, no matter how incredible it may be. We walk the streets of Kingston with homeless individuals to whom many of us turn either a blind eye, or maybe an ephemeral compassionate thought. But Debra, on a visit to Uganda, could not ignore eight-year-old David. She encountered the writhing, convulsing body of a young boy dying of malaria. She was instructed by her guide, Olive, to leave him for his mother to care for him. It was not that Olive was cold; it was just that for her, David is that homeless person we ignore walking through downtown. To the Ugandans, death from malaria is a fact of every day life. In the afflicted countries of the world, every 30 seconds a child dies of malaria (1). Debra, a registered nurse from Kingston and a mother, made a decision to do something about it.

Debra Lefebvre has a background in community health, nursing administration, and worked as a health consultant to the First Nations in Manitoba before she became active on an international level. After returning from Uganda in 2004, she felt an unwavering

compulsion to make a difference. It was this conviction that led her to found the charitable organization Buy-A-Net (BAN) Malaria Prevention Group. She researched malaria, met with NGOs, and studied the current processes and best practice for effective interventions before she chose the use of malaria nets

as an intervention. She describes the plan as "simply unfolding," connecting advocacy and fundraising in Canada to community groups in Uganda with the infrastructure to develop education modules on malaria prevention and to distribute the nets to those in need.

Malaria is caused by a bite from an Anopheles mosquito infected with one of four species of

the parasite Plasmodium: falciparum, vivax, malariae, and ovale. The most common and deadly species in Uganda is P. falciparum (1). Currently, 40% of the world's population at risk. There are 500 million cases of clinical malaria annually. More than one million of these individuals will die, accounting for 9% of all deaths in Africa. It is the leading cause of mortality in children under 5 years of age and pregnant women (1). In sub-Saharan Africa, malaria is the leading cause of morbidity and mortality, followed by HIV/AIDS and TB. Between 20-40% of clinical visits and 10-15% of hospital admissions in Africa are for malaria. In some areas, malaria can account for up to 50% of clinical visits during the rainy season (4). In addition to the human suffering, the socio-economic impact of the disease on the poverty-stricken countries of Africa is estimated to be \$12 billion dollars a year in healthcare cost and lost productivity (3). The average life expectancy in Africa is 35-45 years, compared to Canada, where it is 75 years for men and 83 years for women.

To reduce the morbidity and mortality caused by malaria, global health initiatives are focused on prevention, early diagnosis, and

developing. The reintroduction of DDT for spraying outside the home is being considered because of the extent of the problem.

Early diagnosis and immediate treatment are critical to reduce the burden of disease. Development of resistance of the Plasmodium sp. to current inexpensive malaria therapies is an increasing problem: cost of secondline drugs limit access. As a result of government programs to increase access to these medicines, including artemisininbased combination therapies (ACTs), the drug-resistance of the parasite is expected to increase. The only current intervention that does not have the potential for resistance to develop is the use of LLINs. Since the vast majority of transmission occurs at night, protecting vulnerable individuals during this time is critical. As a benefit, since there are no known animal reservoirs for human malaria (2), the parasite load of the mosquitoes will be decreased due to a lack of access to infected hosts. Buy-A-Net has already seen the benefits of this in the villages in Uganda that they have netted, where the rates of death from malaria has been decreased by 95%.

EVERY 30 SECONDS A CHILD DIES OF MALARIA.

treatment. Prevention is preferred, through vector control targeting Anopheles. The two interventions related to this currently in use are indoor residual spraying (IRS) with long-acting insecticides and long-lasting insecticide-treated nets (LLINs). Other methods also include larval control and environmental management, but resistance to pesticides by the Anopheles mosquito is

Debra visits Uganda at least once a year. Recognizing the necessity of education, monitoring, and evaluation, BAN maintains representatives within the country for long durations of time. Debra also emphasizes the importance of developing trusting relationships within the communities. Upon random evaluations of villages in the program, the nets are in good shape and proper use. The



success is visible in the data, where illness and deaths have been reduced in the over 80,000 people whom have been protected. Debra describes that she can feel the success, in the form of mothers, fathers, and grandparents, who hug her affectionately and tell her their children have no fevers, thanks to the nets. "Simply put, they want for their children what we want for ours," is how Debra poignantly expresses the relevance of their plight. When asked what advice she would offer Queen's medical students interested in global health she suggests: "Respect the culture, listen carefully to those you are there to help, take the lessons learned home with you, and do what you can to advocate and raise awareness to make the life better for those you leave behind." These simple words of advice are more solemn from someone who forges belief into action.

Malaria bed nets are an elegant, simple, and non-medical solution that can prevent most cases of the disease, without the challenge of resistance developing against them. While the academic debates continue surrounding the use of DDT, IRS, and development of a vaccine, BAN is distributing nets to save lives, starting the night they are hung. It costs just \$6 to provide a net that can protect a family of four, and since BAN runs no administrative costs, every dollar donated is converted into nets. In the interests of raising awareness for BAN, students from Queen's University, led by Meredith Davidson and working with Nancy Stevens from BAN, are hosting a fundraising gala at the Radisson Hotel in Kingston entitled "Night Under A Net" on April 12th. The students at Queen's, with financial and administrative support from the University, will make a difference internationally.

Further information and online donating is available through the BAN website at http://www.buyanet.ca. For more information on malaria and current international projects visit http://www.cdc.gov/malaria/ and http://www.rbm.who.int.

This article has been peer-reviewed.

References

- WHO. World Health Organization Malaria Fact Sheet. 2007. http://www.who.int.proxy.queensu.ca/mediacentre/factsheets/fs094/en/index.html. Accessed 3/11, 2008.
- (2) Tierney LM, McPhee SJ, Papadakis MA editors. Current

Medical Diagnosis and Treatment. 45th ed.: McGraw-Hill; 2006. p.1487-1502

- (3) Todd CW, Udhayakumar V, Escalante AA, Lal AA. Malaria Vaccines. In: Tibayrenc M, editor. Encyclopedia of Infectious Diseases, Modern Methodologies: Wiley-Liss; 2007. p. 137.
- (4) Asante FA, Aseno-Okyere K. Economic Burden of Malaria in Ghana. 2003. November, 2003.

Advertisement

Financial Services for Student Professionals



A lifetime of financial opportunities.

Scotia Professional Student Plan

Whether you're an undergraduate entering professional studies, finishing your accreditation, or have recently graduated, we know your professional and personal goals will change over time calling for effective strategies to meet your evolving needs. Scotia Professional Student Plan is a comprehensive package of the best financial solutions designed specifically to meet the unique financial needs and goals of professional students. We can help you:

- Brett Patterson
- Manager Professional Banking

Main Branch

168 Wellington Street

Kingston, Ontario

613-544-5573

- Finance your education
- Manage your cash flow and establish your credit rating
- Repay your student debt comfortably

For relevant financial solutions, service and advice, speak to your Scotiabank Small Business Banker.

Scotia Professional Plan



6 Registered trademark of The Bank of Nova Scotia. "* Trademark of The Bank of Nova Scotia.

ESSAY CONTEST: FIRST PLACE



LEARNING BEYOND THE CLASSROOM: WHAT THE FUTURE PHYSICIAN NEEDS TO KNOW

BY GENEVIEVE DIGBY

ESSAY TOPIC:
"WHAT IS MOST
IMPORTANT FOR FUTURE
PHYSICIANS TO LEARN?"

WE WOULD LIKE TO THANK EVERYONE WHO SUBMITTED AN ESSAY TO THE CONTEST. IT WAS AN EXTREMELY DIFFICULT DECISION, AND WE WOULD LIKE TO EXTEND OUR GRATITUDE TO OUR PANEL OF JUDGES, DR. TONY SANFILIPPO, DR. LEWIS TOMALTY, AND DR. JACKIE DUFFIN. THANK YOU ALSO TO THE QUEEN'S CAMPUS BOOKSTORE FOR DONATING A GIFT CERTIFICATE OF \$50 TO THE WINNER, GENEVIEVE DIGBY.

ODERN MEDICAL EDUCATION is filled with a plethora of facts, details, and skills to be memorized and regurgitated by keen and avid learners. Yet, despite hours with flash cards and study notes, most of this acquired knowledge will be forgotten, whether as a result of lack of use, limited neurological encoding space, or a form of pseudo-Wernicke-Korsakoff syndrome induced by repetitive episodes of binge-drinking, a common extracurricular among some medical students. Of all the knowledge and wisdom gained during our training, what is the most important thing for the future physician to learn? Is it the triad of asthma, nasal polyposis, and ASA intolerance, or maybe the tetrad of debt management, napping, caffeine, and FIFE? Perhaps the most important thing to learn isn't grounded in knowledge or skill but is the wisdom that comes with accepting one's own limitations. Even beyond acknowledging imperfection, the ability to let go of the need to be perfect is probably at once the best skill a physician could develop and the toughest piece of wisdom to gain and apply to one's life.

The medical student body has long been known to consist largely of ambitious and perfectionist Type-A keeners. They are the recipients of hundreds of awards and possess an insatiable need for academic success; they belong to a population that believes that the first letter of the alphabet is pronounced "A-plus." Without a doubt, striving to be the best is an admirable quality and medical school is an environment where this ambition is nurtured. Yet, this setting where outstanding brilliance is now standard and commonplace - can also lead many to feel overwhelmed by opportunities and overshadowed by other medical personalities. As important as it is to strive to reach one's full potential, it is also equally important not

to define oneself solely by one's successes.

Accepting, and even embracing, one's own limitations can help in every aspect of the future physician's career and life. Patient care is improved when a physician can relate to the individual on a human level as opposed to being a steadfast, diagnostic computer. Accepting one's own imperfection means admitting the limits of one's knowledge and actively seeking enhanced understanding. It means being open and receptive to new and alternative ideas and techniques. It means accepting that someone can be more knowledgeable than oneself and viewing that individual as a resource as opposed to a competitor. It means working as a team instead of as a multitude of perfectionist individuals, each striving for their own personal glory. It is seeing that the whole is greater than the sum of its parts.

But the true learning and growth comes with the wisdom of knowing that working to reach one's own potential is enough - there is no need to be perfect. Abolishing that need means developing the ability to be happy with oneself - successes and failures, abilities and limitations. By spending less energy resenting one's imperfections and making a commitment to pursuing self-happiness, an individual can allow their assets to flow freely and unhindered and suddenly so much more is achievable. In addition, this wisdom will positively influence those with whom one shares ties with, by being a source of inspiration and releasing others of the pressures to be perfect. In the end, all will have made mistakes. But the physicians who end up on top - in life and their careers - will have been the ones who learned to accept them as a manifestation of their imperfection, quickly recover, and learn from their experiences.



UNTITLED

BY PAUL UY

THANKS TO EXAMS, it's painfully obvious that a great deal of medicine involves learning. This makes it hard to choose a single lesson as essential. Of all the obscure but life-saving facts that a doctor learns in medical school, residency and beyond, which could be the most important? Could a Latin name or a precise statistic be more important than the steps to take with the trust given to a doctor? What's more important - knowing how to debride an open fracture, or knowing how to tell a young father that he has cancer? The most important thing a physician can begin to learn in medicine is something he/ she must learn and renew over and over again - the enduring passion required to learn each scientific craft and humanistic art of medicine genuinely. It is to learn how to ask how things connect, to appreciate the complexity inherent in our vocation. In searching for connections and complexity, we not only affirm the ideals that drew us to medicine, but also live up to the value of our lives.

Complexity is a big word for a sense of humility about everything around us - the things we know, the people we affect, the people we are. Developing a sense of complexity and refining a sense of humility for knowledge can be hard, especially when our lives right now are voluntarily defined facts and figures, PowerPoint handouts, and podcasts. For me, a significant aspect of medical school is learning how to deal with the truth that most of the facts that we are learning will at some point be obsolete, disproven, forgotten. This can only be accomplished with a sense of constant authorship over tenuous knowledge: to recognize oneself as a contributor and an arbiter of the connections and incongruities between the findings before us and the facts we learn. By actively wondering how consistent our experience is with the concepts that we've learned, we maintain a steady vigilance towards new knowledge and allow ourselves to improve our care.

It requires human drive as deep as caring for others to inspire us to refine our care over our careers. I've been told many times that you learn best through your patients you understand blindness with depth by watching a child adapt to losing her sight, you know the names of lymphoma through the patients you treat. But our connection to our patients should not be limited to precedents and pattern recognition. If we might be healers, we are certainly witnesses. Asking how we are connected to another person's suffering prompts not only a consideration of symptoms, predisposing factors and prognosis, but also of inequity, responsibility, and change. Examining the ways in which we are connected to our patients teaches us the degree to which we all depend and affect each other. From this, we find a sense of agency, one that helps us understand how to confront both illness and injustice.

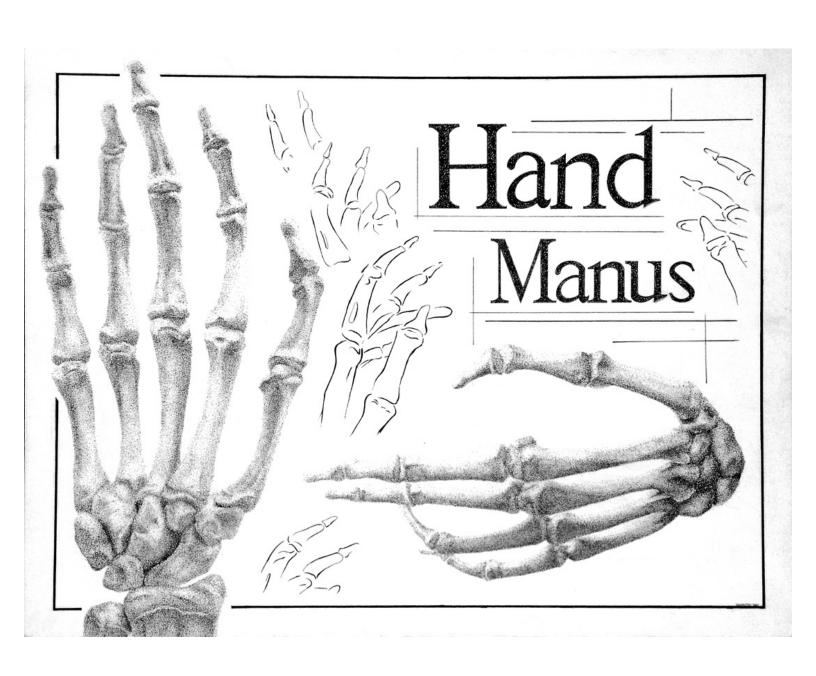
Medicine is a profession that is measured by progress and its expertise and stake is human life itself. The unending potential for knowledge and the unyielding need for care can consume a life with ease. That we aspire to ideas and creeds of knowledge, awareness, and agency makes utterly essential our ability to recognize who we are to others and ourselves. To be able to bear a sense of complexity means to include yourself within it. Asking how everything connects involves necessarily wondering what each experience, concept, and person means to you. To examine what things mean to you requires you to define yourself, learn about yourself, remember yourself, and grow into a meaningful and satisfying life.

I do not suggest that we navel gaze ourselves out of medical school - though that might be tempting before exams. I believe, however, that developing a sense of complexity in our lives is the most important lesson we have before us. We are a profession of life - the most complex entity and process we know. Learning how our knowledge, our patients, and our very sense of self connect to each other defends against arrogance, inspires a dedicated kindness, and keeps at the fore our imperfect and invaluable humanity.



SKELETON OF THE QMR HAND IN PEN AND INK

BY SAMANTHA TAM





QMR TWO PORTRAITS

BY JONATHAN LEE

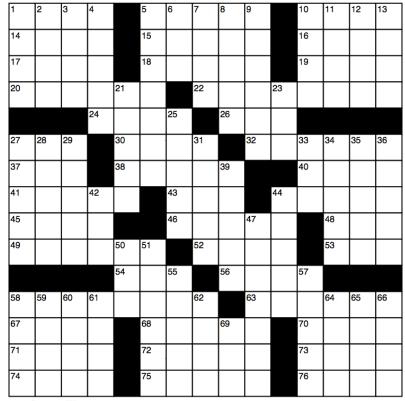




THE HUMORAL END QM



MEDICAL MUMBO JUMBO



www.CrosswordWeaver.com

ACROSS

- 1 Bang down
- 5 Sensitive Technologies and European Public Ethics acronym
- 10 Butterfly's cousin
- 14 Zeus'wife
- 15 Weight unit
- 16 Burn treatment
- 17 Sinister
- 18 Imitative
- 19 Monk's room 20 He vanished into _
- 22 First director of WHO
- 24 Invitation abbreviaton
- 26 Inhibitor for BP
- 27 New Jersey's neighbor
- 30 Dregs
- 32 The stirrup
- 37 North American Indian
- 38 Star 40 Super_
- 41 Abyss
- 43 Wrath
- 44 Painting prop
- 45 Parasite
- 46 Warm
- 48 Compass point
- 49 Separation
- 52 Incidence, in epidemiology
- 53 Short-term memory
- 54 Essential for looking around

- 56 Sweet potatoes
- 58 Any of various gourds
- 63 Soap up
- 67 Organization of Petroleum
- **Exporting Countries**
- 68 Saudi Arabian citizen
- 70 Wound can do this
- 71 Baseball glove
- 72 _ bullet
- 73 Distort
- 74 Big party
- 75 Hurts
- 76 Time periods

DOWN

- 1 House of God author, pseudonym
- 2 Israel's son
- 3 Dry
- 4 Rash, seen with SLE
- 5 Boas
- 6 Percuss
- 7 Little Mermaid's love
- 8 High ranking man- used
- formerly
- 9 Morals
- 10 Speed 11 Margarine
- 12 _-like receptor

- 13 Steering gear
- 21 Large religion
- 23 Done with a displaced
- fracture
- 25 Chromosome arm
- 27 Endocrine glands lack
- 28 Moral principles
- 29 Results in nutrient-poor soil
- 31 Dried or withered, archaic
- 33 Lupus confirm
- 34 Models
- 35 Cardiac-
- 36 State capital
- 39 Give back all of the money
- 42 Slide on snow
- 44 Swelling
- 47 Species name is always this
- 50 Sibling
- 51 Noxious vapor
- 55 Hit in the head by an apple,
- 57 First Canadian female doctor
- 58 Disentangle
- 59 Capital of Western Samoa
- 60 Allows
- 61 Cushing's consideration
- 62 Mr. Downs of 60 minutes
- 64 Frost
- 65 Jewish scribe
- 66 Sell drugs, legally
- 69 Patient may do this



REFLECTION:

WHEN EAST MEETS WEST

HOW WESTERN MEDICINE CAN BENEFIT FROM COMPLEMENTARY AND ALTERNATIVE THERAPIES

BY AMAKA ENEH

т is нако for people born and raised in Canada to fully appreciate what it means to have a universal healthcare system. I was born in a place where the annual physical check-up was unheard of, where people only saw a doctor when they were really sick, and where a heart attack almost always resulted in death. In India, a well-to-do family such as mine could afford the best hospitals and the most brilliant doctors. But those with little or no money could only seek care from underfunded government hospitals and charitable organizations. Even amongst middle-class families, a serious medical condition like cancer or heart disease could lead to financial devastation. In India, if you become seriously ill, the value of your life seems to be equivalent to how much you can afford to pay to keep

The problems facing India's healthcare system are extensive. For example, in the 1980'-s and 90'-s, drug plans in India were best described with one word - nonexistent. Even hospitalized patients were expected to pay for their own drugs. In addition, blood banks, where they existed, did not come close to meeting the demands of the evergrowing population. Patients and families were obliged to arrange for their own blood donors. The day my brother was born, my mother brought a large amount of cash with her to the hospital. While she was in labour, my father arranged for friends with compatible blood groups to stand by in case she suffered a severe bleed and needed blood. Ever since then, I've always wondered about the fate of accident victims and about people who need emergency procedures.

As counterintuitive as it may sound, the absence of an effective publicly funded healthcare system did bring about some good. It taught people that minor, non lifethreatening illnesses are a natural part of life and often do not require pharmaceuticals or even a physician. Often, home-made remedies represented the first-line defence against many common ailments. My grandmother, for instance, routinely treated colds, sore

throats, and inflammation in her children and grandchildren. When I contracted chicken pox at age nine, she used the leaves of a certain tree to relieve my symptoms. After her daughters gave birth, she guided them through intensive ninety-day recovery programs which included a special diet that encouraged recovery from the fatigue of labour, gentle exercise to strengthen the abdominal wall, and time to bond with the child. My grandmother, with little formal education, learned her form of medicine from observing her own mother and grandmother. At the time, there were no randomized controlled trials conducted to confirm the efficacy of her treatments, and she could not easily explain the technical aspects of why her methods work.

Western medical practitioners may be uncomfortable with approaches that involve traditional rather than research-based validation. Whenever possible, we like to understand the mechanisms of action of our drugs and treatments. We justifiably pride ourselves on our excellence in research, innovation, and evidence-based treatments. But we can still learn from the medical practices of other cultures. For instance, if North Americans suffered financial burdens for poor management of their health, they might be motivated to take more steps to prevent disease. Consequently, our universal healthcare system might be seen as more of a safety net should our preventative efforts fail. This attitude might lead to more justification for people to quit smoking, exercise more, and follow a healthy diet.

Another way in which other cultures can enrich Western medicine is in the realm of alternative therapy. Antibiotics, for instance, are over-prescribed to children in North America (1), because parents often demand them for infections that are not bacterially mediated (2). These parents may be simply unaware of more effective alternatives which can be found in complementary and alternative medicines. Undoubtedly, given that most of these treatments have not been verified through the scientific method, it is necessary to run randomized controlled

trials to establish their safety and efficacy (3). In Canada, the Canadian Interdisciplinary Network for Complementary and Alternative Medicine Research is already moving in this direction. There is already some evidence to indicate that acupuncture can be effectively used to treat nausea (4), and that extracts from the Ginko biloba tree are superior to placebo in treating intermittent claudication (5)

Furthermore, it could also be argued that certain traditional forms of medical practice merit validation because they have been tried, tested, and refined over several centuries by practitioners who were just as passionate as we are about treating and possibly curing diseases. After all, acetylsalicylic acid, quinine, digitalis, atropine, and other medications in common use today all share a common heritage of traditional use.

In today's world, globalization and immigration have brought the East and West in very close contact with each other. We are becoming increasingly interconnected and interdependent. This presents us with a great opportunity to share many areas of knowledge. The quest for good health is a common theme in all cultures, making the realm of medical knowledge an area which could bring disparate cultures closer together.

This article has been peer-reviewed.

References

- (1) Antibiotic Prescribing Patterns in a Community Arch Pediatr Adolesc Med. 2004;158:577-583.
- Palmer DA, Bauchner H. Parents' and Physicians' Views on Antibiotics. Pediatrics. 6 June 1997, 99 (6): e6 (doi:10.1542/peds.99.6.e6)
- Ernst E. The role of complementary and alternative medicine. BMJ, Nov 2000; 321: 1133 - 1135
- (4) Lee A, Done ML. The use of nonpharmacologic techniques to prevent postoperative nausea and vomiting: a metaanalysis. Anesth Analg 1999;88:13629.
- (5) Pittler MH, Ernst E. Ginkgo biloba extract for the treatment of intermittent claudication: a metaanalysis of randomized trials. Am J Med 2000;108:22681.