



CAPSIL • JACEIP

THE CANADIAN JOURNAL OF PHARMACY STUDENTS AND INTERNS

Volume 3

March 2004

Take Care,

What a year, what a year! Thanks to you, we have more than doubled the submissions this year! This issue is full of useful information for your future, take a look into compounding, academia, and military pharmacy. Or, have you ever wondered what pharmacy life is like at other schools? Take a look and see what it takes to get in . . .and out of the pharmacy schools in Canada. In addition to pharmacy related news, take a look at the Interdisciplinary Newsletter that is featured in this issue. The newsletter details the issues facing other professions such as medicine, optometry, etc. so take a look! There are many great submissions from students across the country, so I encourage you to read up on all that is going on in this issue. I just can't believe that this is the last issue of the CAPSIL, I hope you have enjoyed it and learned from it.

I would like to thank all of the sponsors, who make this all possible. And thank you to all who submitted to the CAPSIL, you made it a wonderful and rewarding position for me.

Andria Reich
University of Toronto
CAPSIL Editor 2003-2004

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Professionalism Redux

'Mea culpa' reads the headline of a recent article in *The Globe and Mail* detailing the wrongdoings of Hollinger International executives. If you've been following the news of late, you've likely heard about the scandals that have surfaced: for Conrad Black, Martha Stewart, and Calisto Tanzi, fraud and embezzlement are the ties that bind them together. What do they have to say for their impropriety? It is impossible to know the hearts of those accused of corporate malfeasance; however, the courts are doling out their judgments. Recently, the CFO of Enron pleaded guilty to wire and securities fraud and will be sentenced to ten years in prison and forfeit 29 million dollars US. And for the first time, Canadian involvement was revealed as CIBC paid out 80 million dollars US to settle charges of aiding and abetting Enron's fraud.

That such gross misconduct should occur in the profit driven culture of business is not so far fetched. But that an abuse of power with a blind eye to all who are dependent is what truly boggles the mind. In the case of Enron, so many employees were financially devastated by the greed of executives.

It is this same neglect of fiduciary duty that underscores the debate over the cross border sales of prescription drugs. In part due to the lack of drug insurance coverage, in part due to exorbitant prices, Americans are ordering their drugs from Canadian pharmacies via the internet. The savings are so substantial that New Hampshire, Illinois, Michigan, Iowa, and Minnesota are looking to buy drugs from Canada to lower their budget expenditures despite opposition from both the FDA and the American government. Americans are being denied the right to access appropriate health care.

The American government has proposed a four hundred billion dollar plan to provide prescription coverage for Medicare beneficiaries. When put under some scrutiny though it is clear that four hundred billion dollars over ten years will be nowhere near enough to cover the estimated 1.8 trillion dollars to be spent by Medicare recipients during that time period. Nor does it address the pricing practices of the pharmaceutical industry.

It is ironic for an industry, whose products it touts will change the lives of its consumers, to prevent these products from reaching those who need it most.

Yes, sufficient profit is necessary for research and development. But there needs to be a suitable middle ground for revenue streams and pricing that must be agreed upon. To start, rather than spending billions of dollars on direct to consumer advertising, channel those funds into innovative drug research.

The fear of drug shortages in Canada, detracting from the provision of care to patients is warranted especially with companies beginning to limit sales to Canada. Yet concern for the plight of the American patient, who carries the burden of choosing between buying medications and eating meals each day, should also weigh in the minds of Canadians.

One realizes that the Canadian health care system is to a large extent what distinguishes us from our neighbours to the south. As such, regulation of drug pricing and the pillars of the Canada Health Act must be upheld and protected. What more compelling reason is there for Canadians to take an active role in the reform of the pharmaceutical industry's practices?

Granted, the multi-faceted nature of this issue and the clout and influence of the industry in the American political scene suggest ushering in reform may be difficult. The fear of losing investment, loss of pricing control, and supply shortages are reasons for Canadians to proceed with caution. However, as pharmacists who will be entering the profession amidst these controversies, it behooves us to do everything in our power to promote the trust and confidence of the patients we serve. Otherwise we may very well end up saying 'Mea culpa' as well, wondering what could have been done.

Andrew Kim
University of Toronto

Gold Club Members

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Novopharm
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Shoppers Drug Mart
Wyeth

Silver Club Members

Ratiopharm

Bronze Club Members

Bristol-Myers Squibb

CAPSI Club Members

Janssen-Ortho

Congratulations!!!!!!!!!!!!!!!

On behalf of CAPSI National and the Competition sponsors the CAPSIL would like to recognize each of the local and national competition winners for their participation and excellence.

CAPSI Student Literary Challenge

Sponsored by Apotex Inc.

NATIONAL WINNER

Violaine Masson
Universite Laval

LOCAL WINNERS

I Fan Kuo
University of British Columbia

Naomi Baker
University of Alberta

Danielle Bernstrom
University of Saskatchewan

Tracy Furst
University of Manitoba

Bethany Crossman
University of Toronto

Yvan Bao Loc Tran
Univerisite de Montreal

Alison Hakkert
Dalhousie University

Tammy Olsson
Memorial University of Newfoundland

CAPSI Patient Interview Competition

Sponsored by Apotex Inc.

NATIONAL WINNER

Kimberly Nordlund
University of Saskatchewan

LOCAL WINNERS

Anita Sabatino

University of British Columbia

Andrea Tannas

University of Alberta

Dieu Ly

University of Manitoba

Hilary Jennings

University of Toronto

Jean Francois Laroche Universite de Montreal

Caroline Sylvain

Universite Laval

Christina Barton

Dalhousie University

Tammy Olsson

Memorial University of Newfoundland

CAPSI Compounding Competition

Sponsored by The Medisca Group of Companies

NATIONAL WINNERS

Catherine Jordison, Wei Pan, Travis Titcomb, Jill Yates

University of Alberta

LOCAL WINNERS

Marisa Wan, Rosanna Yeung, Harmony Chan, Michelle Tat

University of British Columbia

Cindy Kappes, Kimberly Nordlund, Kelly Vinge, Tania Wikman

University of Saskatchewan

Jon Fine, Kevin Le, Christel Johanson, Tanis Prodniuk

University of Manitoba

Allan Braido, Mike Cavanagh, Bryan Haley, Sean Simpson

University of Toronto

Marie Cristine Anctil, Marianne Boyer, Jean-Philippe Cliché, Sophie Cuerrier

Universite de Montreal

Monic Leclerc, Eric Simard, Anne-Marie Grenier, Chantal Landry
Universite Laval

Phil Doiron, Kelly MacLean, Karli Mayo, Leah Morrison
Dalhousie University

Michelle Biles, John McIntyre, Tammy Olsson, Ryan Snelgrove
Memorial University of Newfoundland

CAPSI Pharmaceutical Care Case Presentation
Sponsored by CSHP & Merck Frosst

NATIONAL WINNERS

Elfreda Chan, Tammy Chang, Christine Yu
University of British Columbia

LOCAL WINNERS

Melissa Chung, John Greiss
University of Alberta

Sarah Cherry, Lindsey Hall
University of Saskatchewan

Allison Bell, Jennifer Buffie
University of Manitoba

Karly Hunter, Meghann Mackay, Binu Nair
University of Toronto

Jidith Marin, Thao Ngo, Jessika Truong
Universite de Montreal

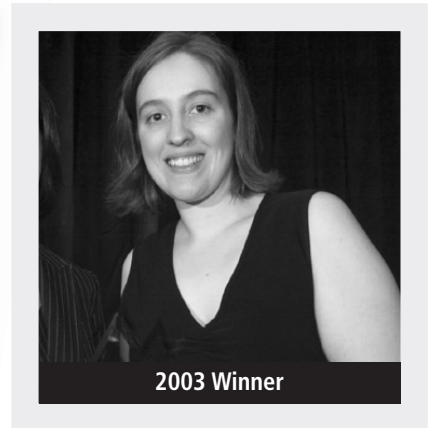
Cathy Bouchard, Manon Couture, Vincent Vandal
Universite Laval

Virgina Barbosa, Chelsea Caldwell, Fleicity Mitchell
Dalhousie University

Bryan Ludlow, Brock Noseworthy, Ryan Snelgrove
Memorial University of Newfoundland

**CONGRATULATIONS & THANK YOU
TO THE WINNERS & ALL OF THIS YEARS
LOCAL & NATIONAL COMPETITORS!**

Wow, will this look great on your resume!



Win prestige, \$1,000 and a trip to Toronto
 The 2004 Commitment to Care Award for Student Leadership is open for entries



If you, or someone you know, has displayed leadership in pharmacy organizations and/or other professional activities, we want to hear about it. This category is open to all pharmacy students who were enrolled in a Canadian faculty of pharmacy as of September 2003. Entries should include evidence of strong academic performance (include copy of transcript) and a keen interest on the part of the student to remain involved in the future direction of the profession.

Entry deadline is September 20 but be one of the first 10 people to submit a complete entry by **August 20th** and you'll receive a \$50 gift certificate from Chapters. (Remember you can nominate yourself or a deserving candidate. If you nominate someone other than yourself who is deemed a winner, you'll get \$200.) For more information contact Rosalind Stefanac at rosalind.stefanac@pharmacygroup.rogers.com or (416) 764-3927, or go to www.pharmacyconnects.com.

NAME OF NOMINEE _____

NAME OF UNIVERSITY _____

ADDRESS _____

TELEPHONE _____ EMAIL: _____

If you are nominating someone other than yourself, please provide your own information:

NAME _____ TELEPHONE (HOME) _____

ADDRESS _____ EMAIL: _____

HAVE YOU INCLUDED:

- Completed entry form
- Description of efforts
- Supporting documentation

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Québec's Strict Code of Ethics: A Necessary Evil?

Québec pharmacists were shocked a few months ago by a scandal involving kickbacks given to pharmacists by pharmaceutical companies. We know that the law on such practices is especially strict in Québec. This has its advantages as well as its inconveniences. In this paper we will be trying to understand Québec's code of ethics for pharmacists by presenting the regulations, exploring their reasons and trying to discover some elements leading to possible solutions.

First of all, it seems pertinent to discuss how pharmacists relate to the industries as well as to their patients. As far as pharmaceutical companies are concerned, the law remains rather subjective and can be interpreted a number of ways. In fact, the only thing it says is that "A pharmacist must ignore any intervention by a third party which could influence the performance of his professional duties to the detriment of his patient"¹ It seems appropriate to ask whether a binder or some pencils are going to influence a pharmacist's decision to dispense one company's drugs rather than those of another. Nonetheless we know that there is sometimes only a minor difference between generic products (shape, colour, filler) and that more than one may suit a patient. So how can a pharmacist decide which product to sell if there is no real difference for the patient? The code specifies, however,

"A pharmacist must not receive, other than the remuneration to which he is entitled, any benefit, allowance or commission relative to the practice of his profession."²

It seems, therefore, that pharmacists are not allowed to accept discounts for obtaining their supplies from one particular manufacturer rather than another, nor to receive gifts for the sale of a fixed quantity of a product. We know that in Europe governments are not allowed to prohibit giving out new rebates; this would go against the European directives on competition. There is a strong contrast between this vision and the one in Québec.

As far as the relationship with patients is concerned, the Code of Ethics stipulates that pharmacists may not offer rewards of any kind to patients during the sale of medication other than the prescribed medication.³ Gifts should not be the factor influencing patients in their choice of pharmacists with which to do business, but rather the quality of care and advice they receive. We may recall Julie Boulet, the former Deputy Minister of Health, who resigned because it was discovered that she had offered her patients pills that she had received for free. It is easy to understand that this was done in the interest of serving her patient. Nonetheless the law exists and there are reasons for it.

Secondly, there are two reasons why these laws are still in effect despite pressure from the pharmaceutical industry and other pressures. First of all, it is primordial for pharmacists to maintain their professional freedom. A pharmacist who must choose which company will receive the monopoly of his business will have difficulty advising a patient who would prefer a different brand for minor reasons. If a pharmacist were to receive bonuses for selling a certain brand of product, as is the case in Europe, can we be certain that he will not be tempted to recommend that brand more often than another? In fact he will probably provide the product that gives him the greater profit. What of it? If he is able to distinguish his patient's needs and prioritize them above his own personal interest, then is it really reprehensible for him to advise the use of a product that will be to his own advantage if there is no real difference between the two, even in terms of price? The answer would seem to be no. Yet the government has made the calculation (deemed simplistic by some) that the "discounts" given out by pharmaceutical companies to pharmacists should be invested in reducing the cost of drugs. The public, which wants to pay as little as possible, would tend to be in agreement with this.

The image that the patient holds is important for the purpose of establishing a relationship of trust that is needed to advance the profession. And patients want pharmacists to maintain their independence and disinterest because they

associate these qualities with the best health care. Does professional freedom go hand in hand with the pleasure of exercising it? A priori, yes, but we must remember that everything has its price. Would the pharmacist prefer to have the advantages of a pill-counting robot, courtesy of a generic company, in exchange for a contract obliging him to obtain his supplies from this company? He will save time (therefore money) and will be able to spend his energy on more interesting and valuable tasks such as giving pharmaceutical opinions. And then, at the end of the day he still has to obtain his medical supplies from one company or another. Here is the whole question, will he insist on choosing this company even if it will penalize him financially? Does he believe that being tied to a company will compromise his professional judgement to the point of not giving patients his best treatment?

In conclusion, companies must use their imagination in promoting their products and they must respect the law. For example they can organize educational events that will respond to the needs of pharmacists while at the same time extolling their products. These must remain educational. There are also certain tax benefits recognized by the law that can be used. Pharmaceutical representatives will be able to advertise while at the same time informing pharmacists. Since the latter will be keeping in mind the well-being of their patients, they will be happier in their practice. Unfortunately they must also be careful of the image they project since it is not an untouchable one, even if it is one of the best among the professions. At this time this involves respecting the law and therefore rejecting the dispensing of any advantage in regards to the exercise of this marvellous profession.

**Violaine Masson
Laval University**

Winner of the 2003-2004 Student Literary Challenge

(Footnotes)

¹ The code of ethics for pharmacists is available on the Internet: Publications Québec, <http://publicationsduquebec.gouv.qc.ca/home.php>, Code of Ethics of Pharmacists, RRQ 1981, c P-10, r. a 3.05.02.

² Idem, a. 3.05.06

³ cf Idem a.3.05.07

LIFESTYLE FIRST, DRUGS LATER

We are fortunate to be living in a day and age when there are effective drugs available to treat many common diseases and health problems. In fact, it seems we are beginning to take this for granted. The improvement of health cannot be obtained simply by taking medication. Health is a multi-faceted state of well being, and to improve it, patients must change their diet, exercise habits and other lifestyle factors if drugs are going to be of any help.

We as future pharmacists must realize the importance of counselling our patients to improve their lives. “Eat right, exercise more, quit smoking” should be said just as often as “shake well and refrigerate”. Our goal as health care professionals is to improve the health of our patients and help them manage their diseases. This cannot be accomplished without first addressing the lifestyle factors that likely have contributed to their illnesses.

Take for example high cholesterol. The “miracle” statins, such as Lipitor, are highly effective in lowering blood cholesterol and lipids. However, they are only intended to be used if diet and exercise fails, and only then in conjunction with healthy foods and an active lifestyle. Yet, how many patients make only a half-hearted attempt to eat less fat, then get a prescription for a statin and abandon all attempts to live healthier. It is our responsibility as pharmacists to make sure these, and other drugs, are taken only when lifestyle factors are improved.

As future pharmacists, we have the power to shape the lives of our patients. This is not a responsibility that should be taken lightly. Make sure your patients are getting the most out of their drugs, and out of their lives.

**Lorie Duggan
MUN School of Pharmacy**

CAREER PAGE

Here is a chance for you to see what is in store for your future! Take a look at some of the awesome pharmacy careers that you might not hear about everyday.

Who knows, maybe something will inspire you!!

Academic Pharmacy - The Rewards and Challenges

Most pharmacy students keenly anticipate the day they are able to graduate, complete licensure requirements, and begin practicing. For many, the thought of staying in school any longer than is absolutely necessary is daunting or unpalatable. However, as many recent graduates will note, there's no greater incentive to go back to school than spending a few months working for a living. While being a student has challenges, there are also many rewards.

For many pharmacists working in universities, academic pharmacy provides a "best-of-both-worlds" blend of practice and school. Working as professors, lecturers, demonstrators, teaching assistants, or in administrative positions, pharmacists play an integral role in pharmacy education.

Many pharmacists are involved in undergraduate teaching as demonstrators and teaching assistants. In general, most universities prefer pharmacists to have had several years practice experience before working with students; generally, no advanced degree is required, although it may be preferred. Demos and TAs are an important part of the curriculum, providing real-world expertise in teaching and assessment. For most demos and TAs, the rewards of working with students are significant; as they frequently comment, it's much easier to mark than to be marked! More importantly, teaching provides an important way of keeping in touch with pharmacy students and the Faculty, and is a great way of "giving back" to one's alma mater.

Lecturers are selected by universities for their specific expertise in a particular area. Frequently, pharmacist-lecturers participate in professional practice and therapeutics courses. Many (but not all) lecturers will have advanced degrees (MSc, Pharm D, PhD), and

most will have acquired a reputation of expertise through presentations, publications or exemplary practice. Lecturers share their knowledge and experience with undergraduate students, and in turn are frequently impressed by the energy and enthusiasm of the class. In some universities, lecturers may be full-time university appointments; in most circumstances, lecturers are part-time or sessional appointments, or invited guests.

Professors at the university undertake research, teaching, and service to the community. The process of being awarded tenure varies from university to university, but frequently requires an advanced or terminal degree (a PhD or Pharm D), post-doctoral experience, and a record of scholarly achievement based on funded grants and papers published. As a result, many people are in their 30s before they gain a professorial appointment or tenure. Currently, there are expanding opportunities for pharmacists as professors, particularly in the areas of social-administrative pharmacy, pharmacy education, and pharmacy practice research. Most people are appointed as Assistant Professors for several years as they build their research program and teaching dossier. Upon successfully meeting requirements for tenure, Assistant Professors may be raised to the status of Associate Professors. Further excellence in teaching and research may result in elevation to the status of Full Professor or (in rare cases) University Professor.

Becoming a professor requires a significant sacrifice in time and work; in most cases, professors could earn more working in the private sector, but choose to work in a university because of the rewards of teaching, and the intellectual freedom of university-based research. Most professors enjoy student contact and experience a great deal of satisfaction in watching new students mature and become competent practitioners. The opportunity to pursue independent research without the constraints of industry is

also an extremely rewarding part of the job. While many Assistant Professors have difficulty with the demands and workload associated with the pre-tenure process, there are tremendous opportunities for personal and professional growth.

Academic pharmacy provides a wealth of opportunities and experiences for those interested in intellectual challenge and the opportunity to teach and learn within an educational institution. Not all positions in academic pharmacy require advanced degrees; however, greater opportunities do exist for those who are willing to undertake additional study. For most, the greatest rewards of a career in academic pharmacy involve the day-to-day connection with pharmacy students. Most would agree that pharmacy students are among the brightest, nicest, and most motivated group of students one could wish for. It is a great privilege to contribute in some small way to the development of the next generation of Canada's pharmacists.

Zubin Austin BScPhm, MBA, MIS, PhD
is Assistant Professor at the Faculty of Pharmacy,
University of Toronto

training and military rules and regulations. I repelled down walls and carried 60 pounds on my back for 13km. I learned how to run small party tasks and to yell loud. I never worked so hard in my life, slept so little or ate so fast. I didn't notice the great Toronto black-out in August because I was already out in the field camping under the stars. It's what many people would call character building. It may not sound that appealing to some, but the truth is it was very rewarding. As cheesy as it sounds, I learned a lot about myself. By the end of training I was certainly in the best shape of my life. I also had the great opportunity to meet and train with other students from across Canada.

Next summer I have six more weeks of basic training to look forward too. I'll then spend another two months perfecting my French in an effort to become bilingual. When I leave the University of Toronto in three years I may be practicing at one of the many bases in Canada or somewhere overseas. That kind of uncertainty turns some people off but it's an adventure I'm eagerly anticipating. My experiences in the military thus far have taught me that it's a lifestyle worth living. Besides, where else would you get to call Bosnia for a prescription transfer?

OCdt Natasha Hooper
University Of Toronto, Class of 0T6

Military Pharmacy

A student's perspective

Off The Beaten Path

When the majority of my fellow pharmacy classmates graduate in 2006 they will be beginning their careers in one of four main areas. Pharmacist positions in hospital, community, industry and research will benefit. When I graduate in 2006 I will be beginning my career as an officer in the Canadian Armed Forces. Every year a handful of students and graduates elect to pursue this path. Following some debate and a lengthy application process, I made my commitment last spring. The result is a subsidized education and a guaranteed job upon completion of my studies. It also means that during the summers I wander as far away from pharmacy as possible.

I spent eight weeks last summer completing my first phase of basic training. My typical day consisted of waking up at 5 o'clock to make my bed or go for a run, a quick change, a rushed breakfast and in class by 7 o'clock. By the time the day was done and my chores were completed, my lights didn't go out until 11 o'clock at night. In class, instead of pharmaceutical care or medicinal chemistry, I studied nuclear-biological-chemical defence, weapons

Military Pharmacy

A pharmacist's perspective

Military Pharmacy, A Career Path Less Traveled

I grew up in a small town in northern Alberta that had a small Canadian Forces radar station until the early 1980's. Many people think that this connection is why I joined the Canadian Forces as a Pharmacy Officer. This couldn't be further from the truth. As a child, I really had no knowledge of the radar station. I did not participate in cadets and although my grandfather was in WWII, this was never really discussed until I found a picture of him in a uniform. In fact, people from my hometown were shocked when I told them that I was going to join the military.

My plans to join the military really started in high school when a recruiter came to give a presentation on the job opportunities available in Canadian Forces. I didn't really pay that much attention to the recruiter's presentation because as a typical High School student, I didn't really think

the CF would help me to achieve all the post-secondary goals that I had, which were, attending University, becoming a professional and living happily ever after. Fortunately, my mother, who also attended the presentation picked up some information from the recruiter and brought it home. I was surprised (at first) that my mother would support a potential career in the CF for her only daughter; however, the more I read about it, the more intriguing it sounded. I thought it would be a great challenge and a worthwhile career so I filled out my paperwork and sent it in.

My career as a military pharmacist started as a student at University of Alberta when I was accepted into the BScPharm program. My

friends were still in disbelief that I was going to join the CF. Most of their concerns had to do with the loss of autonomy involved in the "obligatory service" I would incur for 5 years in exchange for sponsoring my education (and 5 years at that time seemed like a lifetime!). I have to

admit that these were my chief concerns as well, but I was willing to give the CF a try and figured that at least it was "only" 5 years of obligatory service if things didn't go as I had planned.

I graduated from University in 1997, and if you do the math, I have passed my obligatory service mark and still choose to be a Pharmacy Officer in the Canadian Forces. Once I started working in the military environment, I realized that there were many benefits to working in the CF that I had not considered. Since graduation, I have had many unique career opportunities in the Canadian Forces. I have had the opportunity to live in and travel to many places across Canada and the world including an operational tour in Kosovo. I have enjoyed the "military" lifestyle with focus on physical fitness and camaraderie. I have had the opportunity to participate in military sports programs and teams and take advantage of



the non-pharmacy continuing education courses provided such as second language training, field training, and leadership courses. Professionally, I have worked in many different pharmacy roles including a pharmacist in a base medical clinic, a medical equipment depot overseas, in medical headquarters supporting overseas operations, and performing product evaluations. I have also had the opportunity to complete maintenance of clinical competence in tertiary care settings to prevent my hospital skills from getting rusty.

As an organization, our pharmacy group has been very proactive in increasing the awareness of the value of pharmacists and the clinical pharmacy scope of practice. We are involved in various

drug therapy monitoring initiatives including pharmacist managed lipid clinics and prescribing of lab tests, and are viewed as an important team member in our health care team. We are active in development and overview of

many studies and have a strong belief in evidence-based medicine. There are many opportunities for sponsored continuing pharmacy education programs in addition to the opportunity to complete a sponsored Pharm D program.

As I reflect on what I have done in my 7 "working" years, I feel very fortunate for the opportunities I have had working within the CF so far... and yes, I say "so far", since I am certain that my military career will only bring more dynamic experiences and pharmacy career opportunities in the future.

For more info: http://www.recruiting.forces.gc.ca/html/careers/career_profiles/phar.html

Tanya Wrzosek
Captain
G4 Medical Materiel Management
Product Manager



COMPOUNDING



Compounding in Grand Falls–Windsor, Newfoundland

Ken Dicks is a Memorial University of Newfoundland alumnus and former CAPSI National Finance Officer (1988). In 1993, after realizing that patients' needs were not being adequately met and that "there was no way large pharmaceutical companies were in a position to respond to each individual need", he decided that there was a niche to fill in the field of pharmaceutical compounding.

He opened a pharmacy called Central Pharmacy in Grand Falls-Windsor in Central Newfoundland (see map) which specializes in compounding. He now has 3 full time pharmacists, 2 part time pharmacists, 3 dispensary technicians, 3 lab technicians and 14 other employees working at Central Pharmacy. He needs all of these people working because of the amount of orders coming in from all around North America and the world. Some of the various places that Ken gets order from include; Great Britain, Portugal, the Virgin Islands and all over North America from as far away as British Columbia.

When talking to Ken it quickly becomes clear that he truly believes in what he is doing and he is quick to point out some of the more obvious advantages of personal and customized pharmaceutical preparations. For example, some people are sensitive to some of the non-medicinal compounds in mass-produced pharmaceutical preparations. Dicks offers a variety of alternatives so that the sensitive patient no longer has to endure negative side effects caused by their sensitivity. Clearly this produces a higher level of compliance.

Dicks is also able to make his own capsules at Central Pharmacy, which allows him to formulate different dosage forms for medications such as methadone or the distasteful Oral Fleet. Another advantage of capsule making is Dicks ability to mix Dextromethorphan in with opioids; this increases the effectiveness of the opioids and therefore the patient does not have to take such large doses. Another interesting capsule that Dicks has been looking into is the use of Thalidomide to treat certain cancerous tumours. Thalidomide is evidently able to decrease tissue necrosis factor, which closes off the blood supply to the tumour.

Another huge advantage in customized compounding is the ability to provide customized doses to the patient instead of dispensing the predetermined doses determined by the pharmaceutical company. By customizing the doses and dosage forms, Dicks is able to ensure a more accurate therapy for the patient. A good example of this is in the treatment of ADHD with Methylphenidate. Sometimes a patient may only need to take 5.28 mg of the drug, however it is supplied as 10 mg. The advantages of being able to tailor the drugs to the patient should be obvious.

Dicks raises another good argument for specialized compounding by creating different dosage forms for antibiotics and other drugs that normally require an IV in the ICU. By making a Zithromycin transdermal patch Dicks is able to free up a bed in this unit for a potentially more seriously ill person.

Other clear advantages to specialty compounding include the ability to make more appropriate dosage forms. Why take Gravol in a pill when you are throwing up every 5 minutes? Try dimenhydrinate transdermally. How do you get children to take medicine everyday? Make



it into a candy or chocolate bar. This may sound trivial but consider trying to give medicine to an autistic child. Don't feel that nicotine patches or gum effectively remove the habit proportion of smoking? Ask Ken to make you a nicotine lollipop. For every compliance, dose strength, and dosage form problem there may be a better alternative.

You may be asking yourself "How did Ken become a compounding specialist?" Officially, there is no special designation for compounding pharmacists. However, Dicks is heavily involved in the compounding portion of his business. He regularly attends seminars, symposia and other educational sessions. He belongs to different compounding organizations and subscribes to specialty newsletters and journals. In keeping with this commitment to his specialty he also invests in equipment, inventory, training, staff, patient and physician education and is even involved in researching various new formulation techniques.

Unfortunately, this article only scrapes the very tip of the proverbial iceberg about Central Pharmacy. They are involved in hormone replacement compounds, nutritional, veterinary and dental preparations as well. It is really a shame that the full scope of this business cannot be outlined in this article but if you are in least bit interested in this subject I strongly urge you to visit the Central Pharmacy website at: www.centralpharmacy.nf.net.

**Written and Interviewed by Andrew Ritchie
CAPSI Jr. Rep MUN**



NEWS RELEASE

Wyeth

**Wyeth Consumer Healthcare Recognizes Pharmacy Leader
with an Endowment to UBC**

Saturday, January 17, 2004

VANCOUVER - Wyeth Consumer Healthcare Inc., maker of many popular pharmaceutical products, established the *Advil Guy Genest Award in Pharmaceutical Sciences* in the Faculty of Pharmaceutical Sciences at the University of British Columbia (UBC), with a \$20,000 donation. The award recognizes the leadership, business acumen and commitment to pharmacy education of Mr. Guy Genest, former Director of Professional Relations for Wyeth Consumer Healthcare and a role model for the industry.

"Not only is Guy Genest dedicated to the profession of pharmacy, he also works with student councils on projects designed to improve the learning experience. That is why Wyeth Consumer Healthcare Inc. is proud to honour him with this award at UBC," said Dr. Murray Brown, Vice-President, Scientific Affairs. "This contribution builds on Wyeth's past support for UBC's student programs and our continued commitment to the profession and the education of our future pharmacists."

The UBC Faculty of Pharmaceutical Sciences and the Pharmacy Undergraduate Society, in appreciation for Mr. Genest's contributions to education, provided an additional \$10,000, bringing the endowment to \$30,000. "This award will help ensure that students have access to the resources that enable them to strive for excellence, pursue their passion and fulfill their potential," said Gina Tsai, President of the Pharmacy Undergraduate Society. Dr. Robert Sindelar, Dean of Pharmaceutical Sciences, agreed. "The award recognizes leadership skills, academic excellence and commitment to community service. As a result, the *Advil Guy Genest Award in Pharmaceutical Sciences* promises to instill leadership and commitment to the profession of pharmacy, and make a lasting difference in the health care of Canadians."

Wyeth Consumer Healthcare is a leader in the research, development, manufacturing and marketing of a broad range of consumer health care products, operating in over 65 countries. With 2002 sales of \$2.2 billion, Wyeth Consumer Healthcare is the third-largest over-the-counter (OTC) health care products company in the world. Of the thousands of products in the nonprescription market today, Wyeth brands, Advil®, Robitussin®, and Centrum® are among the top dozen selling consumer health care brands in the world.

The Faculty of Pharmaceutical Sciences at the University of British Columbia serves an international community of students, patients, healthcare professionals and the public. The Faculty is dedicated to continuously improving standards of professionalism in pharmacy practice, teaching and research.

For further information:

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Dr. Murray Brown
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E-mail: brownmu@wyeth.com

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Faculty Facts

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Here it is, all the fun little facts your wanted to know about the other faculties across Canada. Take a look, you may be suprised at what you find out!!

University of British Columbia

Name of faculty: Faculty of Pharmaceutical Sciences

How long is the program: 4 years

Requirements to get in: PCAT, 1 year prerequisites, essay and interview

What is the largest class size: 141

When do you do rotations: with the new curriculum implemented Sept 2003, there's one practicum after 2nd year and 3rd year, and then throughout 2nd term of 4th year

Where can you complete your rotations: possibly anywhere in Canada during 2nd and 3rd year, but the 4th year rotations must be completed in BC

Ratio of male to female: 3:7 (at least that's what it seems like)

Any interesting facts:

In Sept 2003, we launched a new curriculum which focuses on completing science prerequisites (eg. Anatomy, physiology) in the 1st year, and more clinically-based pharmacy courses through all 4 years of pharmacy

Our new Dean, Robert Sindelar, joined us a year ago from Mississippi

We have a Starbucks, liquor store and Staples on campus

We offer one of the only two post-grad Pharm D programs in Canada

Our faculty is renowned for research in pharmaceutical sciences and has developed the Summer Student Research Program to get students involved in research during their undergraduate years

BC hospital residents are the highest paid in Canada - 85% of an HSA grade 1 pharmacist

salary

Our undergrad student leadership organizations include: Pharmacy Undergraduate Society (PhUS), Canadian Association of Pharmacy Students and Interns (CAPSI), the student-faculty relations LINK committee, Lambda Kappa Sigma (LKS) and Kappa Psi.

University of Alberta

Name of faculty: Faculty of Pharmacy and Pharmaceutical Sciences

How long is the program: 4 years + 1 Preprofessional year

Requirements to get in: Essay describing why you want to be a pharmacist

What is the largest class size: 120

When do you do rotations (SPEP): Half of the 4th year students go during the first semester and the 2nd half during the 2nd semester (6 weeks in hospital and then 6 weeks in community)

Where can you complete your rotations: Preferably Alberta but exceptions can be made, including a site in California

Ratio of male to female: 1:2.5

University of Saskatchewan

Name of faculty: College of Pharmacy and Nutrition

How long is the program: 4years

Requirements to get in: good grades and an exam - written interview and critical thinking essay

What is the largest class size: 84

When do you do rotations: volunteer 60 hours during first year; 4 weeks in a community pharmacy during the summer of 2nd year; 4weeks in a hospital pharmacy in the summer of 3rd year and three 5 week rotations in the

second semester of 4th year, including one rotation in hospital, one rotation in community and one rotation in a specialty site Eg. research or a cancer clinic...

Where can you complete your rotations: anywhere in Canada but usually in Saskatchewan

Ratio of male to female : 1:4

Any interesting facts: We are the only college that has two programs, ie the pharmacy and the nutrition program.

University of Toronto

Name of faculty: Leslie L. Dan Faculty of Pharmacy

How long is the program: 4 years

Requirements to get in: entrance exam- an essay component, and a personal question component

What is the largest class size: 190

When do you do rotations: second semester in 4th year. 8 weeks in community and 8 weeks in hospital.

Where can you complete your rotations: only in Ontario

Ratio of male to female: 2:5

Any interesting facts:

We will be getting a new building in 2006

The Leslie L. Dan is the founder of Novopharm

We are one of two faculties that have a Pharm D. Program

University of Montreal

Name of faculty: Faculté de pharmacie de l'université de Montréal

How long is the program: 4 years

Requirements to get in: acceptance is based upon the interview and marks

What is the largest class size: 170

When do you do rotations:

Stage of l'Ordre des pharmaciens du Québec (OPQ)

First year :120 hours in a community pharmacy

Second year :120 hours, in a community pharmacy or an hospital

Third year :120 hours in a community pharmacy, an hospital or in industry

Fourth year :600 hours, half in a community pharmacy, and half in hospital

We also have rotations hold by University

7 weeks (full time) in hospital and 7 weeks (full time) in community pharmacy

Where can you complete your rotations: within Québec or somewhere else if the OPQ give a special authorization

Ratio of male to female: approximately 1:3

Any interesting facts:

In 2005 we are going to have a new pharmacy pavilion called: Pavilion Jean Coutu. The class size will growth to 200 students. In 2006, the bachelor program will change for the PharmD program.

We have an association like CAPSI, yet it is larger, it is called AEPUM (Ass. des étudiants de pharmacie de l'université de Montréal) with around 26 members on the council.

Laval University

Name of faculty: Faculté de pharmacie de l'université Laval

Length of program for B.Sc. Pharm: 4 years

Requirements to get in: Good grades. Maybe in few years we will have an interview, but for now, it still the grades from the CEGEP (between high school and university)

What is the largest class size: 155 in first year, all other classes are 140

When are the Rotations: 1st or 2nd semester in 4th year. 1 month in community and 2 months in hospital. If you have your rotations the 1st semester, you will have your "cours a options" during the 2nd semester. (vice-versa). We have the possibility to do the rotations during the summer (between 3rd and 4th year) if you go for an exchange during the 4th year.

Where can you complete your rotations: only in Quebec

Ratio male:female: About 1:5

Other interesting facts: At Laval, we have another pharmacy student association, it's called AGEF. CAPSI and l'AGEF work together for the students. They host parties, conferences, sports, concours, etc

Also, the students can do an exchange during the 4th year. We can go to FRANCE and also in Edmonton. In a couple of years we may be able to go to the USA or even Spain.

Dalhousie University

Name of faculty: George A Burbidge College of Pharmacy

How long is the program: 4 years

Requirements to get in: an interview is granted based upon your marks from your first year of university and your most recent year of schooling, then acceptance is based upon the interview and marks

What is the largest class size: 90

When do you do rotations: 2 weeks of hospital and 2 weeks of community after second year, 4 weeks of community after third year, and 6 weeks of each during the second semester of fourth year.

Where can you complete your rotations: within Canada

Ratio of male to female: approximately 1:3

Any interesting facts:

Our curriculum is based upon a problem-based learning approach. Much of it is self-taught upon information we gather from cases. It has its pros and cons, as does anything.

Memorial University of Newfoundland

Name of faculty: Memorial University of Newfoundland School of Pharmacy

How long is the program: 2 years pre-requisite, 3 years pharmacy

Requirements to get in: Application and interview

What is the largest class size: 36

When do you do rotations: last semester of 3rd year (all clinical, I think)

Where can you complete your rotations: as far as I know everywhere but Quebec

Ratio of male to female: 1:3.5

Any interesting facts:

In first year we are all required to complete a course in Public Speaking (Toastmasters) as part of our Orientation to Pharmacy course. We have 12 week studentships each summer and a final studentship of 8 weeks after completion of our third year rotation.

Next year we are changing to a 1 year pre-requisite and 4 year program. So the upcoming year is to be one of excitement and change.

In 2nd and 3rd year, each student is required to put on a seminar (~10 min) about a

medical condition/issue in front of the entire School of Pharmacy including all faculty members. The students must know a lot about their subjects because the entire body is allotted time to burn the presenters with questions and some from the faculty (and occasionally the students) are quite tricky!

CAPSI's Position on the Implementation of the Entry Level Pharm D Program in Canada: A Synopsis

Part of the role of CAPSI is to act as the voice for pharmacy students across Canada. The following is a synopsis of the voice of the students regarding the implementation of the Entry Level Pharm D program in Canada, based on the comments of the National Symposia regarding the topic in the spring of 2003. The full article will be published in the spring issue of the CPJ.

Despite the numerous articles written to support the benefits to practicing pharmaceutical care, many pharmacists still do not practice according to the work of Charles Hepler and Linda Strand. Many now think that this problem may begin at the centers of education across Canada. So, the question arises: Is there a need for a change in Canada's pharmacy programs in order to meet the increasing demands on expanding scope of practice and increased roles in patient care? If so, is there a need to change the currently existing programs to a more clinical based Entry Level Pharm. D?

To answer this question, CAPSI held a symposia presentation comprised of an introductory presentation to the definition and history of the Entry Level Pharm D. program, as well as arguments for and against the implementation of the program. At the end of the presentation, students were involved in a discussion, where they could voice their questions and concerns. At the end of the discussion, students then filled out a questionnaire consisting of two closed ended questions and a comments section: (1) Should the Entry Level Pharm D be adopted in Canada? Why? (2) Is the Entry Level Pharm. D. program necessary in Canada? Why?

The comments and the voting results were compiled

by the Senior and Junior CAPSI representatives at each faculty. Each school was then provided with a for or against vote, which was presented before National council. In the event that votes were not overwhelmingly for or against, the faculty then abstained from the vote.

The results of the survey showed the majority of faculties were against the implementation of the Entry Level Pharm. D. program in Canada, while few faculties did support the change. Faculties which voted against the implementation included the University of British Columbia, University of Alberta, University of Saskatchewan, Dalhousie University and Memorial University of Newfoundland. The Faculties which voted for the implementation were Université de Montréal and l'Université Laval. The University of Toronto abstained from the vote because it did not achieve a statistically significant vote for or against the implementation. The University of Manitoba did not hold a formal vote.

The most common argument against the change was that a doctorate degree/title will not influence pharmacists to practice pharmaceutical care. Students believed that the barriers to practicing pharmaceutical care lie in the pharmacist shortage as well as inconsistent use of technician, rather than their current educational programs. Students also believed that changing programs may lead to an increased pharmacist shortage in the future. This shortage could be due to possible changes in requirements for acceptance into the program (may require a minimum of two years of an undergraduate degree rather than the current one year prerequisite), possible changes in the length of the program (four year BSc (pharm) compared to a possible template of a five year Entry Level Pharm. D.), as well as possible restructuring of accreditation of pharmacy programs in Canada.

Students who agreed with the change to the Entry Level Pharm. D. from the BSc (pharm) believe that increasing clinical experience would be more beneficial than didactic or PBL type learning in improving patient outcomes. They also believe that changing to the Entry Level Pharm. D. would remove the stigma that programs in the United States are of a higher standard than those in Canada. The change would place Canadian programs on an equal footing with those of the United States.

From the previous statements, CAPSI believes that the current curriculum is sufficient to supply the students with the proper tools to practice pharmaceutical care. They believe that the problem lies not in the program, but in other sources as mentioned above. Future research will need to be conducted to further confirm the exact source of the problem and to the true benefits of the Entry Level Pharm D program.

*Respectfully Submitted,
D. Stephen Smith
CAPSI President 2003-2004*

The CAPSIL Winners

These are the people that have educated and informed you over this past year. They will receive \$50 as their prize for best submission.

September Issue: Kevin Nielson

December Issue: Hilary Jennings

March Issue: Andrew Kim

Thank you all for your submissions and I look forward to reading your submissions next year.

"I want to speak to the gentleman in the white coat"

This is what you might hear if you work in a pharmacy. What does the patient think of the "gentleman/lady in the white coat"? or our profession in general, how do they perceive themselves and what do they think of the pharmacy?

ratiopharm has conducted a study that answers these questions. Take a look at what their research came up with and I think you will be surprised.

How loyal are pharmacy shoppers?

Shop at whatever pharmacy is most convenient	14%
2-3 different pharmacies	20%
Same pharmacy for all pharmacy needs	65%

How do customers perceive themselves?

Customer	46%
Client	37%
Patient	16%

How many times do consumers consult the following resources? (12 months)

Doctor	5.4
Pharmacist	5.2
Health Website	2.4
Nurse	2.2
Homeopath	0.3
Health Tele	0.2

What are consumers' attitudes towards Technicians and Pharmacists?

I usually have difficulty knowing which person behind the pharmacy counter is the pharmacist	34%
If the pharmacist is busy, I'd rather talk to the pharmacy technician about my health situation than wait	43%
Pharmacists/pharmacy technicians are equally qualified to provide advice about my medications	52%

Data was submitted by the Program Manager:

*Hao Nguyen, B.Sc. Pharm
Professional Services Manager*

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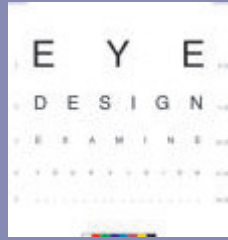
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The Canadian Interdisciplinary Newsletter

Volume 1

March 2004

INTRODUCTION

The definition of “interdisciplinary” is the overlapping of interests in the fields of medicine and science. The idea of interdisciplinarity is not a new one, but one of growing awareness. The idea of single practitioner health care is a notion of the past. The future will behold health care offered by a team of health care professionals. The only problem that I foresee is how we are to work as a team if we do not even know who the other team members are and what skills they possess? Well, hope to answer this question by shedding some light on our “team members”.

I would like to welcome you to the first National Interdisciplinary Newsletter. This first issue is dedicated to informing the reader of the various health professions that are out there. In doing so, we hope to enlighten you regarding the overlapping areas between the professions, as well as what is unique to each profession’s scope of practice. By increasing your knowledge about each health profession, you increase your ability to interact efficiently with other health care professions in a team setting.

In future issues, we hope to address more specific issues in relation to each health profession. I hope that you, the reader, enjoy this first edition of the Interdisciplinary Newsletter and look forward to future issues.

Thank you,
Shelly Low (Editor)
VP Interdisciplinary Affairs
CAPSI 2003-2004

AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY

Audiology and speech-language pathology (SLP) are two completely different health professions, but they do share one common characteristic, and that is the lack of awareness the public has in regard to their individual contributions to the health care team. This article is being written so as to increase your knowledge about both audiology and speech-language pathology. There are some similarities between the two professions, such as sharing some national associations, however they both contribute independently to providing optimal health care to the public.

Firstly, I would like to provide some background on the education of audiologists and speech-language pathologists. Audiology is normally a two to three year program that is offered at five universities across Canada. These universities include 3 English-speaking schools (i.e., University of British Columbia, University of Western Ontario, and Dalhousie University) and two French-speaking schools (i.e., Université d’Ottawa and Université de Montréal). SLP is also a two to three year program and is offered at nine

universities in Canada. These universities include six English-speaking institutions (i.e., University of British Columbia, University of Alberta, University of Western Ontario, University of Toronto, McGill University, and Dalhousie University) and three French-speaking institutions (i.e., Université de Laval, Université d'Ottawa, and Université de Montréal). For both disciplines, some of the universities offer a combined degree including research and clinical experiences, while others only offer a degree in research or clinical experience.

In relation to a national association, audiology and SLP students share a common association called the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA). At each university, students elect an audiology and a SLP CASLPA student representative. In addition, CASLPA has an elected position for a National Student Advisor, which can be either an audiology or SLP student. CASLPA also provides many benefits to its students, one of which is the financial support that is given each year to the student societies. Each society is then able to use this money to host guest speakers and provide refreshments. Any additional remaining money goes back to CASLPA into a fund that students can apply to in order to receive financial assistance for their research projects. In addition, CASLPA student members are now eligible for a 50% discount on full membership fees the first year after graduation. Audiology students are also able to hold memberships with two other professional associations: the Canadian Acoustical Association and the Canadian Academy of Audiology. These associations have student representatives from each university who are elected by respective school's student bodies. Students may also hold membership with their respective provincial/territorial association. For example, students in Nova Scotia may belong to the Speech and Hearing Association of Nova Scotia (SHANS).

Now, to discuss a little about the work that audiologists do. Audiologists assess the extent of hearing loss, balance, and related disorders and then recommend appropriate treatment. They provide services to people who are deaf or hard of hearing and persons at risk of hearing loss due to noise exposure, genetic causes, middle ear infections, and exposure to certain drugs. Audiologists work with both adults and children who need aural (re)habilitation, including hearing aids and FM systems, for example. Another important duty is to educate consumers or other professionals on the prevention of hearing loss (CASLPA website). Audiologists are able to work in hospitals settings, dispensaries, or private practices.

They can specialize within audiology by becoming an industrial consultant or a balance specialist.

Speech-language pathologists, on the other hand, help individuals to overcome and prevent communication problems in speech, language, voice, and fluency. These difficulties may be caused by accidents, genetic disorders, delayed development, or be idiopathic in nature. While SLPs can help people of all ages, the preschool years are the most critical for speech and language development. Family doctors, public health nurses, infant development specialists, preschool teachers, or social workers (among others) make referrals to SLPs. Self-referrals can also be made. (CASLPA website). SLPs are also able to specialize their practice by focusing on a specific area within the discipline, such as fluency, swallowing, or voice/resonance disorders. Similarly to audiologists, SLPs are able to practice in a multitude of settings, such as clinics, hospitals, or in private practice.

One of the newest issues facing the profession of audiology is the controversy over whether or not Canadian programs should move to a doctoral degree in audiology. CASLPA is expected to publish a position paper on this topic in 2004. In the world of SLP, a current area of interest is evidence-based practice. This theme was evident and recurrent at the recent American Speech, Language, and Hearing Association (ASHA) conference.

Finally, CASLPA has an Agreement for Mutual Recognition of Certification Programs in Audiology and in SLP with ASHA. A reciprocity agreement also exists for practice in provinces and territories within Canada (CASLPA web site). Currently in development is an International Mutual Recognition Agreement with the United Kingdom. These agreements are of great significance considering that there is great demand for audiologists and SLPs in Canada and abroad, a trend that will only increase as the world's population continues to age.

*Jennifer O'Donnell
Siobhann Lowney
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Representative - Audiology
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School of Human Communication
Disorders
Dalhousie University*

CASLPA web site. Retrieved on December 13, 2003 from www.caslpa.ca

Medicine

Medicine is one of the most commonly known and established profession, but it is still a health profession immersed in change and expansion. As one of the interdisciplinary representatives from medicine, I hope to give some insight into the education of medical students as well as the profession of medicine.

Medical students can attend any of 16 universities across Canada including 3 French-speaking schools in Quebec. Most schools have a minimum entry level requirement of 2 years of prerequisite courses, however the vast majority of students who are accepted into medicine have completed at least four year of post secondary education. For example, in the class of 2005 at the University of Calgary, of 100 people who made up the class at the time of admission, only 1 had 2 years of post secondary education, 12 had 3 years, 81 had Bachelor degrees, and furthermore 18 had Masters, 9 PhDs, and one Dentistry degree. As you can see students are faced with stiff competition and high standards in areas such as academic, personal, and professional performance, if they want to enter into medicine.

Upon graduation, medical students enter into a residency program that must be completed before an MD can practice on their own. There are three general residency areas that graduates split into: surgery, family medicine, or specialities. Each of these disciplines has vastly different duties, spectrum of knowledge and practice. For example, about 60% of residency positions are in the area of "specialities" which includes Surgery (which is further split into General Surgery, Orthopedics, Plastics, Cardiac, Vascular, Thoracic, Urology, and Ears/Nose/Throat), Emergency Medicine, Dermatology, Anaesthesiology, Pathology, Radiology and Cardiology amongst others. The remaining 40% of positions are dedicated to Family Medicine.

The residency program is actually the focus of new developments that are occurring within this profession. The first major issue is that there is a lack of residency spots compared to medical students. For the first time ever, this year there is a 1:1 ratio of students to residency spots. The Canadian Medical Association (CMA) and the

Canadian Medical Forum (CMF) recommend a ratio of 1.2 residency spots for every one medical graduate. In October the Canadian Federation of Medical Students (CFMS) launched a major campaign to raise awareness and lobby the powers that be to increase residency positions for this year's match. So far we have been very successful and the number of positions is increasing steadily. The second issue that is facing the profession of medicine is the lack of students wanting to enter into Family Medicine in addition to the lack of family physicians in general. This lack of family physicians is an even greater concern in rural areas across the country. Currently there are major initiatives in the pipeline that will help to address this problem. So please stay tuned for further updates.

As I mentioned above, our national student organization is the Canadian Federation of Medical Students (CFMS). Our council is composed of 13 executive positions in addition to 2 representatives from each school. We also have a number officer positions on council such as Officer of Underrepresented Minorities and Accessibility Officer. These officer positions are non-voting members of council. Similar to the set up of pharmacy, the CFMS also liaises with students from the IFMSA (International Federation of Medical Student's Association) and IHP (International Health Program). There are three pillars of the CFMS which stand for service, communication and representation. The services section is dedicated to providing our members with affordable and practical services such as discounts on books, equipment, travel and disability insurance. Representation of Canadian medical students to external organizations such as the CMA and CMF as well as the media and public in general is important when issues facing medical students or the health care profession in general arise. Finally, the CFMS strives to improve and ensure communication amongst our members. One example is the newly unveiled CFMS website which can be checked out at: www.cfms.org.

I would just like to finish up with a quick note in regard to the most common misconception that medical students and physicians face. I think that perhaps it is that other health care professionals find physicians arrogant or unwilling to accept information and/or criticisms from

others. Although every individual is different, I can say that from my experience people in my class and the class before and after me are all very open and have big hearts. I think that most people who go into medicine do so because they sincerely want to help people and always have the concerns of others at the forefront of their thoughts. Physicians are also under a lot of pressure and perhaps things can be misinterpreted in certain high stress situations.

I would like to add that I think the Interdisciplinary Forum is a great way to find out about other health care disciplines and start new relationships that will be valuable when we are all out in the workforce working together.

Lanette Prediger
CFMS Sr Rep U of C
CFMS Western Regional Rep
Class of 2005
University of Calgary

SCHOOL of OPTOMETRY

University of Waterloo

The role of optometrists, opticians, and ophthalmologists are sometimes confused. Opticians are licensed craftspeople who fabricate and dispense lenses and frames; they do not examine eyes or prescribe treatment. Ophthalmologists are licensed physicians who provide medical and surgical care of the eyes.

Optometrists examine eyes and prescribe corrective lenses or treatment to protect and improve vision. They diagnose vision problems, eye diseases, or other abnormal conditions. They are licensed to prescribe corrective lenses, contact lenses and other optical aids. They also prescribe treatment such as vision therapy to preserve, restore, and improve vision. Some optometrists specialize in one area such as contact lenses, sports vision, or vision therapy. Some specialize in working with children or the elderly. Optometrists play an integral part in pre and post-operative care such as cataract, and LASIK surgeries.

In addition to general practice, there are many other areas in which optometrists can specialize such as geriatrics, pediatrics, sports vision, low vision, contact lenses, occupational vision and vision therapy. Optometrists may also choose to conduct scientific research or enter optometric education. The mission

of Optometry at University of Waterloo-Ontario is to promote and implement a comprehensive range of preventative, diagnostic, therapeutic and rehabilitation vision services in Canada. This is accomplished by training competent professional optometric practitioners, by conducting significant fundamental and applied research, by cultivating and training Vision Science graduate students, by providing continuing education and post-graduate training, and perhaps most importantly, by providing exemplary clinical services.

Over 75% of optometrists are self-employed. Many beginning optometrists enter into associate practice with another optometrist or health care professional, while others may purchase an established practice. Some take salaried positions to obtain experience and the necessary funds to enter their own practice. They work in clinics, hospitals, government agencies, the military, educational institutions, and commercial settings such as retail chain stores.

Optometry is facing some new changes in the near future. Presently optometrists in Ontario are challenging for the right to use-TPAs (Therapeutic Pharmaceutical Agents) in their practice to provide more competent care for our patients. Currently, most Canadian provinces have this right or are also negotiating for it. In addition Optometry is rapidly growing as a profession as the University of Waterloo will be increasing their enrolment of students' from 60 to 90 over the next 5 years.

Across Canada, Optometry is opposing the rights for Opticians to refract patients. There is a large concern for the health and safety of patients who see Opticians for refractive eye exams. Optometric services are de-insured in some provinces and may become fully de-insured across the country in the future. Lastly, the profession is looking at the practice gradients that exist country-wide. There is a high number of practitioners in some provinces, while very low in others.

As optometry students, we are currently faced with the challenges of TPA training, lack of placement sites to practice TPA knowledge, increase in admission numbers with only one English speaking school and Expansion of the Optometry building at U of Waterloo.

These new anticipated changes to our profession will hopefully strengthen our profession and increase

awareness of Optometry.

Within the profession of Optometry we have an English Canadian student association known as CAOS (Canadian Association of Optometry Students). CAOS is a Liaison to Optometry students and optometrists in Canada, as well as to fellow Canadians studying or practicing outside of Canada (mainly United States). Our counterpart for practicing members is CAO (Canadian Association of Optometrists) and their role is to aid in the evolution and advancement of the profession.

The structure of CAOS is as follows:

President/ Elect

Treasurer/ Elect

Secretary/ Elect

Reps: Social, Merchandise, Canadian Reps (for different provinces), US Rep, Interdisciplinary Reps, etc.

We have many activities and events co-ordinated throughout the year including:

-Mentor Program: placement of Optometry students with local professionals to visit successful practices and to have a local mentor

-Provincial President Forum: an evening where students have the chance of meeting with the presidents of the Optometry Associations of all Canadians Provinces and learn about the profession and the jurisdiction in those provinces

-Vision Awareness Week: visit local elementary schools and high schools to promote the importance of sight.

-Interview Day: a day where graduating students can meet with optometrists looking to hire an associate

-Canadian Handbook: a handy book with statistics and jurisdictions relevant to our profession for all the provinces in Canada

-Merchandise: clothing items, clipboards, pens, etc. promoting optometry as well as our organization

-CAOS National congresses in Montreal and Waterloo: Optometry student members of the association get a chance to visit the two Canadian Schools of Optometry. The trip to visit the School of Optometry at the University of Montreal; Montreal, Quebec occurs in November; and the visit to the School of Optometry of the University of Waterloo;

Waterloo, Ontario occurs in March. During this time, visiting students get to explore the new city and mingle with fellow Optometry students from the host school.

We are pleased to be a part of the Interdisciplinary Association and are excited to see where this new organization will take us.

Alisa and Rosita
University of Waterloo, Ontario
School of Optometry

PHARMACY

Pharmacy in Canada is an ever-changing profession and one that is commonly misconceived or overlooked. I hope to share with you some insight into the profession of pharmacy, its education and some of the common misconceptions associated with it.

Currently there are 9 pharmacy schools across Canada (including 2 in Quebec) and each program usually consists of 5 academic years. Of the 5-year program, one year is completed in general sciences followed by 4 years in the faculty/school of pharmacy. The only exception to this is at Memorial University where the students complete 2 years of general science before entering into pharmacy school. Once graduated, our students receive a Bachelor of Science Degree in Pharmacy. In addition, class sizes between the various universities differ greatly. Class sizes can range from approximately 60 people all the way up to 180 people per class per year. The recent trend is that class sizes are increasing as there is currently a shortage of pharmacists and the demand is high.

Upon graduating, pharmacy students like other health professionals have to complete a series of exams to become licensed to practice in Canada. Currently each province has its own jurisprudence exam that students graduating or pharmacists coming into that province must write. Then there is a standardized exam that combines written and practical skills called the PEBC/OSCE that must be completed by all students with the exception of those from Quebec. After graduation, new grads have a multitude of options ahead of them including advancing their education. There is a national hospital residency program that students may apply to, but positions are few and competition fierce. Furthermore, students

can choose whether or not to complete a Pharm-D (become a doctor of pharmacy) at one of two universities (University of Toronto or University of British Columbia). The degree takes approximately 2 years to complete and includes both practical experience and classroom knowledge. The advantage to students completing a Pharm-D is that they will receive an increase in clinical experience while completing rotations with doctors and pharmacists in specialized areas of practice. Also some career options are becoming much more difficult to obtain without a Pharm-D

Two of the more common areas of practice for pharmacists are hospital and community; yet there are many other areas in which you will find pharmacists, eg. Military, industry, academia, research, etc. The role of the pharmacist in hospital or community is that of a responsibility for safe and accurate dispensing of medications, aiding patients in the selection of self-care products as well as patient and health professional education in relation to medications and disease management. Basically, what this means is that pharmacists are not only responsible for ensuring that patients receive the correct medications but also the correct dose of it. Pharmacists have an abundance of knowledge that allows them to monitor patients taking certain medications or with certain disease states. They provide counselling and education to patients on lifestyle modifications, disease states and correct usage of medications.

As the world of health and disease changes, so is that of pharmacy. Because there are always new medications being discovered, new treatments being tested and new knowledge of diseases, pharmacists must be kept up-to-date with the ever changing world of health. Pharmacists keep up-to-date by attending continuing education seminars on various disease states. Most provinces require their practicing pharmacists to complete a predetermined number of educational credits per year. In addition, courses are available for pharmacists to take, which allows them to specialize in areas of interest. Pharmacists may become asthma educators or even diabetes specialists.

Currently pharmacists are trying to expand their role in the health care team by lobbying for prescribing rights. The British Columbia and Alberta are among the first provinces to lobby for this right. Currently in BC, pharmacists can become licensed to prescribe the ECP (morning after pill). In addition, pharmacists

are also working towards having their services covered under the Canada Health Act. This will hopefully lead eventually to pharmacists' services being covered by third party payers.

As you can see from what we have said above, that pharmacists are not just pill counters as many thought. It is all right if you were one of these people, but I hope now after reading this you will change your opinion. It is a common misconception of people that all pharmacists do is lick, stick and pour. This misconception is very dominant and one that pharmacists are constantly battling against. So please remember the next your prescription takes longer than 5 minutes to fill that there is a lot more to the job of a pharmacist than counting pills.

We would just like to finish this article by providing a little bit of background on our national student organization. The Canadian Association of Pharmacy Students and Interns or CAPSI is a council comprised of 9 executive positions and 18 general council members. There are 2 representatives from each province that make up the general council. Each year, CAPSI works towards providing its members with educational seminars, symposia, and a national conference. At the national conference students from the various universities across the country gather to attend educational talks, participate in various competitions and attend social events.

We hope that through this article that you have increased your knowledge in regard to the profession of pharmacy.

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