Spring 2009

CAPSI • ACEIP

CANADIAN ASSOCIATION OF PHARMACY STUDENTS AND INTERNS LETTERS

CAPSIL - JACEIP

LE JOURNAL DE L'ASSOCIATION CANADIENNE DES ETUDIANTS ET DES INTERNES EN PHARMACIE

Medicinal Ingredients

Pharmacy students on the move and giving back

..... pgs. 13-19

The CAPSIL
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CAPSI is a national student organization that promotes and represents the interests of Canadian pharmacy students. Visit www.capsi.ca for more information and to view old issues of the CAPSIL.

All published articles reflect the opinions of the authors and are not necessarily the opinions of CAPSIL, CAPSI or its sponsors.

ALL COMMENTS AND ARTICLES ARE WELCOMED AND ENCOURAGED!

These wonderful submissions can be emailed to **capsil@capsi.ca**

The talented contributors to this issue:

Kayleigh Gordon, Gigi Wong, April Chan, Brittany Churchill, Jill Angus and Kyle Wilby, Vincent Ho, Carrie Roth, Marie-Pier B.-Dallaire, Rachel Neumann, Krista Adams, Patrick Gear, Kristjana Gunmundson, Sara Rosaline Lavoratore

Beyond the Borders

Jennifer Day
CAPSIL Editor
4th year, University of British Columbia

Another school year has come and almost gone, leaving those of us in fourth year ready to buckle down and join the work force while the remainder of pharmacy students ponder what the summer will bring.

Now that I am graduating and looking back on the past seven (!) years of post-secondary school, one of my biggest regrets is not taking some time off to travel. This thing called "tuition" always got in the way of my summer dreams of being abroad, which is why I thoroughly enjoyed reading the feature International Pharmacy Students Federation (IPSF) articles of this issue.

Pharmacy students from across Canada have taken the time to share the experiences of their exchanges to places all over the world, from Alexandria to Romania. I hope their submissions tempt you into applying for exchange next academic year or at least to book that trip you have always dreamed about. Before you are in fourth year and have to live vicariously through the CAPSIL. Quick! Talk to your local IPSF representative or travel broker and save yourself!

As for the rest of the issue, what more can I say? We pharmacy folks go to school with a multi-talented crew of budding journalists. From PAW to the over-use of antibiotics, the Spring 2009 CAPSIL was blessed with an array of interesting and engaging articles.

Since this is the last "Message from the Editor" I will have the privilege to write, I must say thank you to the hard-working local CAPSIL Representatives and to all the student contributors. It has been a pleasure compiling these well-written pieces into one compact PDF file over the past year and I appreciate all your patience and dedication.

Write on!

Pearls from the President

Jonathan Mailman
CAPSI National President
3rd Year, Dalhousie University

My fellow CAPSI members,

Fast approaches the end to another academic year. For some of us this just marks the end of another year of schooling with one, or two, or (for that unfortunate quarter of our population) three more years ahead of us. For others however, it marks the end of their schooling and transition into a new section of their lives. This also marks the end of another term of the CAPSI National Council. This message here marks the last opportunity I have to address you publically. I would like to take an opportunity to thank those sponsors and partners of CAPSI National. Without their support we would be unable to carry out the business of the Association, to represent you, and to provide you with the programming that we offer to all our members.

Firstly, I would like to thank our partners with whom we collaborate to offer you our various awards, including (in no particular order) the Canadian Society of Hospital Pharmacists, ratiopharm, and Wyeth Consumer Healthcare. Secondly, I would like to thank our competition sponsors, The Medisca Network of Companies, Pharmasave National, Wyeth Consumer Healthcare, and the Canadian Pharmacists Journal. For more information on our awards and competitions, please check out www.capsi.ca/awards.php. Thirdly, I would like to thank our CAPSI Club members and CAPSI Corporate Partners (www.capsi.ca/capsi_club.php) and finally, I would like to thank our in-kind contributors. These companies give us aid other than monetary value, whether it is additional programming for our members, educational opportunities, or a donation of meeting space for the National Council. Please see page seven to see our in-kind contributors.

Lastly, I would be remiss if I did not thank some of the most important people, without whom the Association would not be able to function, and without whom my position would be quite meaningless: the members of the CAPSI National Council. These people have worked hard and diligently on your behalf over the past year—and for some of them, even longer. I must not forget CAPSI Local Representatives as well -- I would like to thank each of them personally.

For those of you leaving us, I bid you adieu. For those of you returning, I look forward to seeing you again.

The Canadian Association of Pharmacy Students and Interns National Council would like to extend a formal notice of appreciation to the pharmaceutical companies and organizations listed below—in no particular order. Their in-kind contributions played a significant role in the successful operation of the Association this year.

AstraZeneca Canada Inc / AstraZeneca Canada Inc.
Canadian Pharmacists Association
ratiopharm
Shoppers Drug Mart / pharmaprix
Teva novopharm
Wyeth Consumer Healthcare

Chers membres de l'ACEIP,

Une autre année académique tire à sa fin. Pour certains d'entre nous, ceci marque la fin d'une autre année scolaire avec soit une, deux ou (pour le quart moins fortuné) trois autres années encore à venir. Par contre, pour d'autres, ceci indique la fin des études et le début d'une nouvelle étape de la vie. C'est aussi la fin de mon terme comme président du conseil de l'ACEIP nationale. Ce message est donc la dernière chance que j'ai de vous adresser ces quelques mots. Je veux prendre cette opportunité pour remercier les partenaires et commanditaires de l'ACEIP. Sans leur aide, nous ne serions pas parvenus à accomplir les fonctions de l'ACEIP, à vous représenter et à vous offrir les différents programmes que nous offrons à chacun de nos membres.

J'aimerais tout d'abord remercier nos partenaires, sans aucun ordre particulier, la Société canadienne des pharmaciens d'hôpitaux, ratiopharm, et Wyeth Soins se santé avec lesquels nous avons collaboré afin de vous offrir une variété de prix. Ensuite, j'aimerais remercier nos commanditaires Medisca, Pharmasave nationale, Wyeth Soins se santé, et la Revue des pharmaciens du Canada. Pour plus d'information à propos de nos prix et compétitions, veuillez visiter le site www.capsi.ca/awards.php. J'aimerais aussi remercier les membres du club de l'ACEIP ainsi que ses entreprises partenaires (www.capsi.ca/capsi_club.php). Dernièrement, je ne peux pas oublier ceux qui ont contribué généreusement à notre association. Ces compagnies, mentionnées ci-dessous, ont fait bien plus que donner des fonds monétaires. Elles nous ont aidés en ajoutant de nouveaux programmes pour nos membres, en nous offrant des opportunités éducationnelles et aussi en fournissant des dons pour nous procurer des locaux afin de pouvoir tenir les rencontres du conseil national.

Finalement, il serait négligent de ma part de ne pas remercier les personnes les plus importantes, sans lesquelles, l'association n'aurait pas été capable de fonctionner et pour lesquelles, ma position comme président n'aurait aucune signification. Ces personnes sont belles et bien les membres du conseil de l'ACEIP nationale. Ces membres ont travaillé fort et avec diligence pour vous représenter pendant cette dernière année, et pour certains d'entre eux, même plus longtemps. Les membres de votre exécutif local ont les mis à jour à votre disposition dans le JACEIP. Également, je ne dois pas oublier les représentants de l'ACEIP locale. J'aimerais prendre le temps de remercier chacun d'eux personnellement.

Pour ceux qui nous quittent, je vous dis adieu, mais pour ceux qui seront de retour, au plaisir de vous revoir.

Le conseil national de l'association canadienne des étudiants et internes en pharmacie souhaite formellement souligner un appréciation aux compagnies pharmaceutiques et organisations mentionnées, dans aucun ordre particulier, ci-dessous. Leurs contributions généreuses ont joué un rôle significatif dans le succès de l'association cette année.

AstraZeneca Canada Inc / AstraZeneca Canada Inc.
L'association des pharmaciens du Canada
ratiopharm
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CAPSI Executive Council Updates

Your 2008-2009 CAPSI Executive Council is always hard at work, making school and professional practice a better place for pharmacy students across Canada. Here is what they have already accomplished so far this year, the latest projects underway and what the CAPSI Executive Council has in store for the remainder of the term.

Omolayo Famuyide
Past President

I would like to take this opportunity to welcome the most recent addition and incoming President to the 2009-2010 CAPSI National Executive Council, Brad Elliott from Dalhousie University. Brad joins other members of the Executive Council as they continue to provide educational and professional development opportunities for our members.

Members of the Blueprint Taskforce and Working Groups met in Ottawa, on February 23-25th. I encourage you to continue to remain engaged as the results and work of the Blueprint are scheduled to be revealed at the CPhA 2009 conference in Halifax, NS. CAPSI continues to remain committed to supporting this document and this very important initiative for our profession. Please join us as we move forward to making the vision for pharmacy of "Optimal drug therapy outcomes for Canadians through patient-centred care" become a reality. For more information about the Blueprint, please visit www.capsi.ca.

As I bid my final farewell, I would like to say that it has been a pleasure serving and working for you over the past four years. My experiences on the CAPSI National Executive Council, especially my term as President is an experience that I will never forget. I would like to thank the many dedicated student leaders I have had the pleasure of working with over the past four years. You have made even the toughest days on this job that much more rewarding. Your dedication to this association and Canadian pharmacy students is commendable and I trust that you will continue to be the change you would like to see in this profession.

To our student members, I challenge you to continue to seek and embark on the many rewarding experiences that CAPSI and our profession has to offer. This is a very exciting time to be in pharmacy and I encourage you to hold onto to the experiences that make our profession great; seek out individuals and employers that will support the kind of practice setting you desire and will promote patient care. My time with the association has indeed been the most rewarding experience of my life to date and I will miss all of this very much. Wishing you all continued success in all of your professional endeavours.

Leslie Dagg
Finance Officer

Hello CAPSI Members!

I hope everyone had a great spring break. My break was wonderful as I was able to spend some much needed time with family. Since my last report, the Finance Committee has finalized the Reimbursement Policy. The document is meant to provide guidance to the Finance Officer and CAPSI National Council for years to come. It describes how to handle financial reimbursements, as well as lost/stolen and stale-dated cheques. The policy is currently being reviewed by CAPSI National Council for approval.

I have continued to work on the Finance Officer portfolio to ensure a streamlined transition for the incoming Finance Officer. The portfolio provides guidance to future Finance Officers by giving detailed explanations of activities the Finance Officer is responsible for completing. I have also created a Calendar of Events to ensure important activities are completed on time throughout the year.

CAPSI's fiscal year will come to an end on March 31. As I stated in my last report, CAPSI is currently in a much better financial position this fiscal year than originally projected during the CPhA 2008 CAPSI meetings last summer. Reasons for the large loss projected last summer were mainly the expense of having meetings from coast to coast in the 2008-2009 fiscal year (Victoria, BC and St. John's, NL), as well as the addition of Waterloo to CAPSI and uncertainty regarding sponsorship for Waterloo competitions.

I am elated to announce that our sponsors were very willing to support the addition of Waterloo, and council members have been diligent in finding reasonably priced travel options for meetings. CAPSI is now anticipating a significantly smaller loss than originally projected. Stay tuned for the results of the CAPSI Year End, which should be available in the fall. I am currently in the process of gathering estimates for the 2009-2010 budget. This will be one of the last major projects I will complete before handing over the position to the incoming Finance Officer, Nevina Valani.

Thank you to everyone who has made my time with CAPSI so enjoyable. I will miss everyone and I encourage anyone interested to pursue a position on council. Wishing everyone health and happiness.

Marie-Helene Irvine
VP Education

It has not been too long since my last report in the past issue of the CAPSIL. Since PDW, things have been quite quiet for me in this position. The main responsibility of the VP Education is to coordinate the competitions and since the yearly competitions are now over, I have been working on a couple of small projects. I am gathering some feedback to improve competitions in future years, updating the VP Education files and documents, coordinating the new sexual health outreach program for high school students and the CAPSI-ratiopharm outreach programs called Operation: Wash-up and Operation: Allergy!

I will soon be passing on my responsibilities to the next VP Education but I would like to remind each school that you can still apply for the CAPSI Award of Professionalism sponsored by ratiopharm. This award is for the school that held the most organized and professional Pharmacy Awareness Week (PAW) activities. The $1000 cash prize will go straight to those students involved! The deadline for submission is June 2, 2009. It's really easy to apply, simply fill out an application form that tells us all about your PAW activities and don't forget to include pictures! Contact your local CAPSI Representatives for more details and for your application form! Good luck to everyone!

CAPSI Executive Council Updates

Jason Ross Wentzell
VP Communications

Hello fellow CAPSI Members! For most of us, the spring semester is rapidly concluding, marking the end of another academic year. I would like to extend a very sincere thank you to all of the Pharmaceutical or Industry representatives and sponsors whom I have had the privilege to work with this past year. I would also like to recognize the entire CAPSI Council as their tireless efforts have built upon CAPSI's previous success and helped to strengthen our Association for the future. This article serves as a brief positional update and the conclusion of my term is summarized more completely in the winter edition of the CAPSIL. It has been a pleasure to serve as your VP Communication and I wish you all the best in your pharmacy careers.

2009-2010 Sponsorship of CAPSI

We are continuing to receive various sponsorships of our Association through CAPSI Club Memberships and Agenda Advertising. As sponsors are still being solicited, total sponsorship value can not be determined at this point. This process has been challenging as several past patrons are subject to more severe budgetary constraints than in previous years. Please visit our CAPSI Club Members links on our website which will be updated to accommodate the 09-10 sponsors in September.

2009 – 2010 Student Agendas

Due to financial constraints and challenges with soliciting sponsorships, we are in the works of revising our annual student agenda to make the publication more cost effective. We have suggested changes based on member feedback and hope to deliver a more compact student handbook of similar quality and content to previous publications.

WalMart –CAPSI Survey

In late March and early April, CAPSI will be releasing a survey to gather our members' consensus on the topic of Single tier vs. two tier Health Care in Canada. This survey is made possible by an Unrestricted Educational Sponsorship from Walmart Canada. We hope to gain a Nation-wide perspective on this issue from the point of view of Canada's pharmacy students.

2009-2010 CAPSI Webmaster

The position of CAPSI Webmaster for the 2009-2010 academic year is open for application. If you have any questions or are interested in applying please contact myself or our current webmaster, Abby Lau (webmaster@capsi.ca).

Sharon Leung
IPSF Student Exchange Officer

Placements of our 18 successful CAPSI students are continuing as planned. So far, Canadian students have been successfully placed in countries such as Ghana, Taiwan, India, Singapore, Poland, Spain and Egypt. We hope to have everyone placed by the beginning of April.

As of now, we currently have eight host sites confirmed within Canada for our international students. Our host cities include Vancouver, Toronto, Montreal and Halifax. Our IPSF local reps are working hard to find at least one host site per province in order to increase the number of students that will be able to travel abroad next summer. For every international student that we host this year, we will be able to send 1.5 CAPSI students abroad for international exchange the summer after. It is our goal to surpass the 18 spots that we were able to offer to our CAPSI members for next summer.

We will continue to recruit hosts on an on-going basis to ensure a successful summer in Canada, and allow more Canadian students to go abroad in summer 2010. Host site confirmation will happen into early April. Please feel free to email me at seo@capsi.ca if you know of a pharmacist who would be interested in hosting an international student this year. The process is simple and the experience is unforgettable.

For more information about the student exchange program, please visit our website at www.capsi.ca.

Amy Smith
IPSF Liason

Deadlines for the IPSF World Congress, August 3rd – 13th, are quickly approaching. The IPSF World Congress is one pharmacy conference you will not want to miss! Events for the congress include a scientific symposium, the general assembly, a Bali Adventure, fascinating beaches, Kecak dance, and an IPSF birthday party. My experiences with IPSF have been so incredible thus far that I am sure the Bali congress will not disappoint. If you register for the congress before March 31st you are able to attend the ten day congress for a registration fee of only 400 euros. The registration fee includes hotel, three meals a day, transportation to and from the airport as well to all congress events. CAPSI members can register and get more details about the congress and registration fees at www.ipsf2009.org. Registration fees correspond to the registration date as follows:

Before March 31st ----- 400 euros
April 1st – May 31st ---------- 450 euros
June 1st – July 15th ---------- 550 euros

Congratulations to those students who were selected to participate in the Student Exchange Programme this year. We look forward to hearing about their exciting adventures when they return from their exchanges at the end of the summer. We are always looking for Canadian host sites who are interested in hosting international students through the Student Exchange Programme. If you know of any community, hospital, researching, or industry pharmacists who are interested in hosting a student through the Student Exchange Programme please have them contact me at ipsf@capsi.ca.

Jennifer Day
CAPSIL Editor

Since this is the last issue for the 2008-2009 academic year, I have capped my red editing pen and am now preparing my portfolio for the incoming National CAPSIL Editor, Ms. Brittany Churchill. Thanks once again to the CAPSIL sub-committee, especially **Allen Chernenkoff**, for all their support with the publication details!

CAPSI Executive Council Updates

Alexander Vuong
Executive Secretary

As Executive Secretary, I have been keeping busy compiling the minutes from the CAPSI meetings at Professional Development Week and the Spring teleconference. They will be posted online shortly.

I have also been keeping correspondence between fellow CAPSI Council members with any updates or news they may have. A major task I have been working on has been collecting and redistributing applications from candidates for the two CAPSI By-Elections that have occurred in 2009 and facilitating the entire election process.

Additionally, I have been busy working on the CAPSI Membership Database. As chair of the Constitution Review Committee, we are also busy looking at changes in job portfolios for some of the executive positions. You will be informed of these changes shortly. Lastly, I am currently organizing the spring video teleconference.

Sara Rosaline Lavoratore
VP Interprofessional Affairs

As VP Interprofessional Affairs for CAPSI, I have had the opportunity to represent pharmacy students to other national health student associations. Recently, I attended the National Health Sciences Students' Association (NaHSSA) annual conference in Kingston, Ontario. This conference was a great success! During this conference, representatives from various health care professions across the country contributed to the Canadian Interprofessional Student Network (CISN) Booklet. As your CAPSI National VP Interprofessional Affairs, I contributed to the "Pharmacy Page" in this document. The CISN Booklet will hopefully be available to CAPSI members next year. Please read the article in this issue of the CAPSIL to find out some additional conference highlights.

Since PDW I have distributed the single vs. two-tiered health care survey. In the fall 2008 issue of the CAPSIL I discussed Canada's current health care system and some challenges it faces. To follow-up on this highly debated topic, I have created a survey to determine our member's stance on single vs. two-tiered health care. By this time you should have already received this survey. If you have not already completed the survey, I encourage you to do so. As a national organization representing pharmacy students we have the opportunity to change health care, and your voice counts!

As my term of VP Interprofessional Affairs comes to an end, I have certainly been faced with many challenges and have gained wonderful memories. I would like to thank everyone on the 2008-2009 CAPSI National Council – it has been extremely rewarding working along side you.

Thank you outgoing 2008-2009 CAPSI Executive Council for your dedication to CAPSI and it's members over the past year!

Kayleigh Gordon
CAPSIL Representative
1st year, University of Manitoba

Prescribing Authority

Expansion of the Pharmacist's Role

Canada's health care system is undergoing a paradigm shift from a disease or medication centered approach toward a patient centered approach. Expanded professional roles for physicians, nurses, pharmacists and others are emerging in response to this shift. To serve a dynamic changing population many health care professions are evolving together and placing an increased emphasis upon collaborative practice. (1) Collaborative practice is a model set in place to improve the health outcomes of patients in the most efficient manner, by promoting the attributes and skills that each professional maintains in their field of expertise. (2) Recognizing and accepting the skill set of each professional by their colleagues is imperative to team work as well as expansion of professional roles. Pharmacists are experts within pharmacotherapy and are capable of greater involvement in the medication management of their patients. As prescribers, pharmacists can directly benefit their patients and therefore the Canadian health care system by advocating and promoting the practise of safe, efficient, and ethical pharmacotherapy.

Currently a very significant proportion of the Canadian population is growing older. It has been projected that by 2031 approximately 28.5% of the Canadian population will be 65 years in age or older. This is almost double the estimated 17% of Canadians who were 65 and older in 2002. (1) An aging population will require increased access to the health care system, as with the evident decline in health the dependence on our health care system will increase. The increased life expectancy extrapolates to elevated numbers of individuals experiencing chronic diseases such as diabetes mellitus, rheumatoid arthritis, and atherosclerosis. Since chronic diseases require numerous modality forms of pharmacotherapy to manage the conditions, the benefit of pharmacist intervention to help with medication management is pivotal. Currently, pharmacists are the most accessible health care professional – this advanced clinical function is conducive to the expanded role of the pharmacist. (3) The ability of pharmacists to obtain prescribing authority is essential for making the necessary treatment adjustments required to provide their patients with safe and efficient medication.
Pharmacists are the most accessible health care provider, and are therefore ideally positioned to be the cornerstone of pharmacotherapy continuity. (3) At present, pharmacists are legally able to prescribe, but only under certain conditions. Patients with chronic conditions regularly visit community pharmacists to have a prescription refilled. These recurring interactions allow the pharmacists to become familiar with the patients and their treatment requirements. When pharmacists are part of collaborative practice agreements and intervene within their patients therapy, there is a reduction in adverse effects as well as an overall improvement in the patients health and well-being. (2,3,4) As prescribers, pharmacists can better manage their patient's diseases by providing pharmacotherapy in emergency situations, as well as guiding their everyday self medicating decisions, ensuring the constant treatment of their patients. (5)

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A Glimpse into Family Health Teams in Ontario

Gigi Wong
Past CAPSIL Representative
University of Toronto

In April of 2005, the government of Ontario implemented the creation of 150 multidisciplinary teams called Family Health Teams (FHT). These teams are composed of various health care disciplines that work together to maintain the health of the people in the community. Team members may include pharmacists, physicians, nurses, dieticians, and social workers. This is an exciting expansion to the many challenging roles of the pharmacist.

There are several advantages of FHTs as they can increase the accessibility of health care professionals to the public. FHTs offer telephone assistance available beyond the standard office hours to assist patients with medical or pharmaceutical concerns. The collaboration of various disciplines will also enable a more holistic level of care. In addition, these teams can adjust their services to the needs of the community that it serves. They can increase the health of the community as a whole by providing information on various topics including the management of chronic conditions, diet, and exercise. This can translate into helping patients make informed choices lifestyles.

I had the pleasure of conducting an email interview with Dr. Natalie Kennie, BSc. (Phm), PharmD, who was a guest lecturer on the profession of pharmacy. The following is her background and answers to my interview questions.

Self introduction

My original position was as the Primary Care Pharmacist in the Department of Family and Community Medicine at St. Michaels' Hospital (SMH) in Toronto for the last eight years. I provided pharmaceutical care to patients at Health Centre at 410 and St. James Town Health Centre, both being academic teaching units affiliated with the University of Toronto. Although not a Ministry of Health Family Health Team, SMH has been an interdisciplinary family practice clinic for over 10 years. I have recently transferred my practice to the Summerville Family Health Team in Mississauga when relocating my family to Oakville. This is a newly formed Family Health Team consisting of four different clinics.

What was your previous practice setting and what made you decide to shift into being a part of a FHT?

I have been part of a family practice setting since my graduation from the Doctor of Pharmacy program. I decided to be part of a team in Family Practice because I had an interest in clinical practice within the Primary Care system. Previously as a pharmacy student, I had worked with my father in his community pharmacy (in Nova Scotia) which was a small dispensary in a Primary Care physician's office building. There I saw many opportunities for a non-dispensing pharmacist related to patient education, medication assessment and assistance in prescribing decisions.

When the government approved FHTs in April of 2005, how were pharmacists approached or exposed to this new teamwork opportunity, and how did you have to go about in order to become a member of your current team?

Pharmacist involvement as part of a Family Health Team was left up to the individual FHTs. Each FHT had to justify the health care providers complement that was needed for the team and community. I responded to a posting for a pharmacist position that was available

Does a patient have access to various professions (pharmacist, nurses, dietician, physician) if they so wish? How does a patient get to interact with these team members if they would like to?

Currently, patients are referred to allied health care professionals by physicians and nurses within

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April Chan
CSHP National Student Delegate
4th year, University of British Columbia

CSHP corner

Entry-level PharmD: What's behind the name?

The existing post-baccalaureate PharmD programs in Canada aim to provide advanced education in clinical pharmacy practice. With the introduction of the entry-level PharmD programs in Montreal, and Alberta and Toronto following suit, the question of how this impacts everyone in the pharmacy profession, from undergraduate students to residents/PharmD students to practicing pharmacists, needs to be addressed.

From the side of practicing pharmacists, particularly hospital pharmacists who would be taking on the bulk of clinical training for these new entry-level PharmDs, the greatest challenge would be allocation of human resources. As it stands right now, hospital pharmacists provide almost half of experiential training for pharmacists yet they only make up 17% of the population of practicing pharmacists.

Secondly, the introduction of the entry-level PharmD would bring into the question the role of the residency program in this new environment. With talks about possibly extending the one year residency program to two years, the act of juggling clinical preceptors and placements will certainly pose a challenge. Speaking for those of us in a bachelor's program, perhaps the greatest worry we harbour is how the introduction of an entry-level PharmD program will erode the marketability of our current education (at least in name), as perceived by outsiders. This could certainly

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If you have questions or have an interest in getting involved with CSHP locally in your province, please contact your local CAPSI representatives or drop April a line at *cshp.studentdelegate@gmail.com*

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Prescribing Authority

Prescribing is a tool which the pharmacist can use to extend their knowledge where appropriate, ensuring pharmacotherapy is effective and convenient for their patients. This may include making modifications to dosages and/or schedules, or possible replacing a medication with a more appropriate pharmacotherapy. (6) Pharmacists are considered to be medication experts, and the authority to prescribe allows them to fully fulfill this imperative role. (5) Expanding the professional role of the pharmacists to include prescribing authority is required to meet the changing needs of the dynamic Canadian population. As professionals, pharmacists will continually have to prove themselves to be worthy prescribers even though literature has demonstrated as part of inter-professional teams pharmacists improve pharmacotherapy outcomes. To adequately serve future Canadian generations, it is imperative that pharmacists advocate for their role expansion.

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Entry-level PharmD: What's behind the name?

hinder job opportunities for new graduates from a baccalaureate program.

At this point, I leave you with some evidence to ponder on. The United States have sustained their entry-level PharmD program since the 1990s. Experience after all these years has shown that American graduates still do not possess the ability levels necessary to manage complex drug therapy and that American pharmacy practice has not progressed toward direct patient care as quickly as anticipated. As a result, many pharmacy organizations in the United States call for mandatory residency training before entering into pharmacy practice in order to provide direct patient care. Until good, solid evidence can be gathered, I am certain that evidence-based trained pharmacists would see the reasoning behind not jumping prudently on the bandwagon for entry-level PharmD.

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A Glimpse into Family Health Care Teams

the practice and are roistered by physicians. Nurse practitioners work directly with physicians for specific nursing acts and patient education. Registered nurses assist in the day to day operations of the clinic and patient care.

Could you describe a typical day for us?

Presently, I am working part-time as I have recently started working after my maternity leave. Since I have just started this practice I am currently building a referral base. I have appointments available for medication assessments (45 minute visits) for three of the four sites starting in December. I also answer drug information questions posed and provide a monthly drug information newsletter.

Have you noticed a difference in the attitudes of your patients that come in? Have you noticed any positive changes? Any negative changes?

Not yet observed in my present position. However in my position at SMH, patients greatly appreciated having access to other health care providers. Although there was a great need for patient education regarding the various roles of the health care providers. There was also a need for close and coordinated communication so that the patient would get the same messages and relevant information would be discussed in a timely manner.

Do you find that you possess the skills to carry out this expanded role, or are there other areas that you would try to enhance?

My PharmD training provided me with adequate skills to carry out the role. Advanced training in a family practice residency would also have been an asset.

Despite the goal of improving access to primary health care, are there any barriers to your provision of FHT services?

The establishment of a coordinated team in FHTs will take time to develop fully. Most FHTs only have a small number of pharmacists compared to the physicians and patient population and therefore targeting which patients are most appropriate for pharmacist referral is a challenge.

For future pharmacists, what would you recommend them in regards to FHTs?

Look for opportunities for training in FHTs if possible.

If you are interested in more information on FHTs, please consult the Ministry of Health website at http://www.health.gov.on.ca/transformation/fht/fht_mn.html. It contains short videos for any of you who may be interested.

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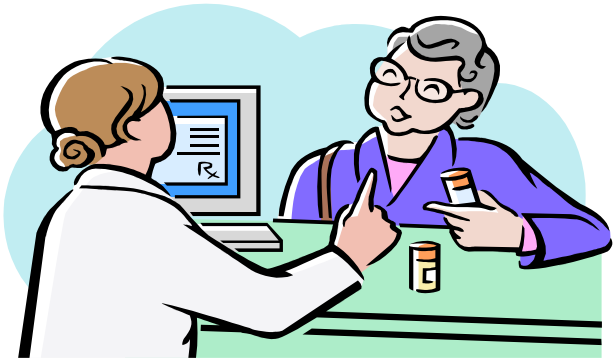
Brittany Churchill
CAPSIL Representative
2nd year, Memorial University of Newfound land

Promoting Pharmacy Awareness: *Not Just During PAW*

Pharmacist Awareness Week (PAW) is described by the Canadian Pharmacist's Association as 'the perfect opportunity for you to share with your patients the vital role of 'today's pharmacist' in their overall health care." (1) This year PAW occurred from March 1 – 7, 2009. As students, we are the future leaders of our profession; thus we can play an important role in promoting it. Events like PAW give us an opportunity to go into the community and make our community members more aware of the ever-expanding role of the pharmacist.



During PAW 2009, students gave presentations to groups in many locations. They were able to interact with a whole spectrum of people, from elementary school-aged children to senior citizens. For example, at Memorial University of Newfoundland, pharmacy students gave a variety of different presentations. They taught elementary school students about pharmaceutical compounding (by teaching them how to compound lip balm), gave high school students their perspective on choosing pharmacy as a career, interacted with the public at information booths and gave presentations in seniors' residences. As well, a colouring contest was held to get young students across the province thinking about pharmacy. Throughout Canada, students in other pharmacy schools took on similar initiatives. By giving different types of presentations, they ensured that the message was well-received by each of the different groups.

Along with the activities that are planned locally at each school of pharmacy, CAPSI and ratiopharm have developed some presentation packages available that pharmacy students can take into local primary/elementary schools and present to the students. These presentations include Operation Wash-up which is about the importance of handwashing to prevent the spread of infections, and Operation: Allergy which, as the name implies, provides information about allergies. The kits that are supplied give a well written plan for the presentation and include activities and a video. They can be very helpful if you would like to be able to give a presentation, but are unsure of how to plan one. Be sure to talk to your local CAPSI representatives if you are interested in holding a presentation. Also, they don't necessarily have to be done during PAW and can be used for outreach at other times of the year as well.

Even though PAW has ended for this year, that doesn't mean that the opportunity for you to get involved has passed completely. Promoting the profession of pharmacy should be an ongoing task for each of us, even if it simply means making others aware that pharmacists do much more than just "lick, stick and pour". We should try to find opportunities year round to promote pharmacy and bring awareness to the general public. This will become increasingly important as the practice of pharmacy expands and changes. By advocating in the community now, we can strengthen the profession for the future.

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Jill Angus, BSc(Pharm) 2008
Kyle Wilby, BSc(Pharm) 2008
Practising Pharmacists
University of Saskatchewan Graduates

Adventures in Pharmacy Abroad

An Insight into Healthcare in Ghana

In January 2008, we traveled to Ghana for four weeks through the Volunteer Abroad Program as one of our fourth year pharmacy rotations. It was definitely the experience of a lifetime! We developed a research proposal wherein we would integrate ourselves into a rural community by doing a building project. In turn, we would be able to develop relationships with local health care workers and members of the community so we could learn about Ghana's healthcare system, pertinent health issues facing Ghanaians, and the potential role for a pharmacist in rural Ghana. After our proposal was approved by the College of Pharmacy and Nutrition, we had weekly meetings with Dr. Roy Dobson in order to further develop our research project, receive ethics approval from the University, and develop a list of interview questions.

For the first week, we lived in Accra, the capital city of Ghana, where we learned about the Ghanaian culture, language, and healthcare system. Our first true encounter with the healthcare system took place there, when one of our Ghanaian friends feel very ill with malaria. He became so ill that he was convulsing and delirious by the time he went to the Trust Hospital in Accra. Had he gone earlier, his disease would not have progressed to the point of convulsions. However, he could not afford to pay for a doctor's visit, laboratory tests, medication, and a potential hospital stay.

We spent the day with him in his cramped, non-air-conditioned hospital room. We soon learned that a patient pays for absolutely every service and everything provided to them in the hospital: the initial doctor's visit, being admitted, laboratory tests, IV bags, your bed, medications, food, etc. – basically everything that we take for granted living in Canada. It was even the patient's responsibility to bring his or her own towels and blankets and to alert the nurse when their IV bag was empty so that it could be changed. The entire stay ended up costing him about $60. This number may seem small, but when a typical wage in Ghana is $1.50 per day, $60 is not a realistic cost for most people. Our day at Trust Hospital was definitely an eye-opener.

After leaving Accra, we traveled to Nsuta, a small town located in the Ashanti Region of Ghana. Nsuta is surrounded by lush, green forest where plantains, cassava, bananas, and mangos grow. However, it is also a town with no running water and power that frequently fails. In terms of health services, there were four chemical shops, an herbalist and a clinic. There was no pharmacist or doctor in Nsuta but the clinic had nurses, a laboratory technologist, medical assistants and a pharmacy technologist. If a patient needed to see a doctor or go to a pharmacy, they had to travel to Kumasi or to Mampong, both about 20 minutes away by taxi at a cost of $0.50 each way.

Nsuta was where we would live for three weeks. From Nsuta, we biked to Jansa every day to help build a teacher's residence. Jansa was a village of roughly 300 people that was located 5 km away from Nsuta. We were supplied with bikes in order to get to work and back each day. The teacher's residence was built in an effort to attract teachers to Jansa, as this was a very poor village with no running water, electricity or medical services.

We also spent some time at the clinic in Nsuta, getting to know the people who worked there and gathering a better understanding of the services they provided. We soon learned that the person who people kept calling "doctor" was actually the laboratory technologist! There were many nurses and nurses' aides. Since they did not have a doctor, medical assistants were responsible for examining patients and writing prescriptions. A pharmacy technologist ran the dispensary, very limited counselling was provided to patients and only the most basic medications were kept on hand. The majority of medical services provided were that of prenatal care and delivering babies, testing blood glucose (that is, when they had test strips), diagnosing malaria, sickle cell anemia, cough and cold, typhoid fever, as well as some other minor ailments and infections. They could not do HIV testing, as they only had

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Adventures in Pharmacy Abroad
Alexandria, Egypt

Vincent Ho
Local IPSF Representative
University of Toronto

In the land of the pharaohs, pharmacy is king. You may think that statement is crazy, but for those who have travelled to Egypt, it is no exaggeration.

This past summer I had the fortunate opportunity to complete a student exchange in Alexandria for two months. Why on earth did I choose to go to the desert in the hottest months of the year, you ask? The answer was simple: it was the most exotic place I could think of where I've never been and know basically nothing about. My summer of backpacking/exchange took me on a whirlwind tour of five countries around the Mediterranean and North Africa and produced a treasure-trove of memories, experiences and new friends that I will never forget: I slept under the stars on the deck of a Greek island ferry, had a relaxing shisha (hookah) smoking party with students in a Turkish reggae bar, hitchhiked the ancient ruins of Carthage in Tunisia and lost myself in the bazaars and leather tanneries of Morocco. Yet despite all my adventures, Alexandria would always hold a special place in my heart as it was the city that took me in for an entire summer and welcomed me to live as one of it's own.

When imagining what Egypt is like, inevitably one conjures up visions of the endless desert and the great pyramids which arise like islands in the sea. As I'm desperately throwing back my countless bottles of water while staring up at the 50-stories-high-2.5-million-two-ton-blocks-35000-workers-30-years-in-the-making triumph of human ingenuity that was the Great Pyramid of Giza, I could not help but wonder if the Egyptians were any good at providing comprehensive pharmaceutical care to their population…who am I kidding? I was just trying to keep my jaw closed and stop the gritty sand from encasing every orifice.

In Alexandria, I worked in a community pharmacy that was older than my grandparents and all of them have passed on already. However despite its age, the pharmacists who practiced there demonstrated a level of knowledge and professionalism that impressed me greatly. Sure there were no computers, no labels stickers, no child-proof bottles, and best of all, no counting a jillion pills, but ideas such as proper patient counselling, identifying drug interactions and consideration of patient compliance still persists. All other things were merely subtle differences in how they practiced from day to day. Instead of automated 3rd party billing and the sexy adjudicator's voice on the other end of the line, medication prices were standardized across all pharmacies and every transaction was in cash (small change was given in candies instead of coins). Instead of shelves stocked with mega bottles of generic medication, endless packages of all types and brands running from A to Z were jammed into every nook and cranny (limited regulation meant that every pharmacy stocks the spectrum of look-alike and sound-alike products available for each medication).

Oh wait, did I mention that they hardly keep any paperwork at all? Oops, I guess that's a pretty big pink elephant there. What boggled my mind was the lack of records when it came to prescriptions and patient medication history. When a patient arrived at the pharmacy with a prescription, the necessary medications were gathered, the proper instructions written directly on to the package and finally everything, including the prescription was handed back to them. While this was done so that the patients could receive future refills, it wreaked havoc for the pharmacist and occurrences of overdosing, double doctoring and non compliance were common occurrences.

Pharmacies in developing countries have long been associated with fantastic stories of off-the-shelf-prescription-free medications and while some of these claims are true (others you tell gullible friends back home), I slowly realized that an informal system of trust and responsibility does exist. Community pharmacists in Egypt have a great deal of burden in their practices. On the financial side, Alexandria alone graduates 2000 pharmacists per year to flood the countless number of pharmacies around. A law that requires a minimum of 100 meters between pharmacies

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Alexandria, Egypt

translated to four adjacent competitors in each direction, not to mention pharmacists graduating from other areas. On the profession side, the majority of the local population survives on $10 CND a month, meaning that instead of visiting doctors, the first and final line of contact between patients and a medical care professional was the pharmacist and diagnosing, prescribing and dispensing were all part of the job description. For those with money however, it was quite common to visit the personal clinic of a university professor/ hospital department head /renowned specialist for illnesses (money gets you to the top). At the pharmacy where I worked, Dr. Mustafa and his son, Ahmed, who also recently graduated from pharmacy as well, impressed me with their diverse and extensive knowledge. Although it's true that antibiotics do not require a prescription, neither does refilling medications, even narcotics, it was all done at the discretion of the pharmacist and having personally seen the responsibility they felt towards their position, I am cautiously reassured that their pharmacy system may not be as wild as some people may imagine it to be. Nevertheless it's still a jungle out there in some ways…a sand-filled jungle.

Lest you think that all I did was work, I also had plenty of fun in Egypt. We took trips to Cairo to ride camels around the sphinx and the pyramids, saw the royal mummies in the Museum of Egyptian Antiquities (-not-stolen-by-the-British-to-rob-us-of-our-cultural-history), relaxed on a private beach next to a clear blue sea, as well as visiting the new and modern Bibliotheca Alexandrina (the ancient library and lighthouse fell after multiple earthquakes). We also strolled through many bazaars that contained our pick of the freshest fruits and vegetable (mangos for $1/kilo), baskets full of neatly pyramid-ed aromatic spices ranging from anise to zzz-saffron, live chicken/ rabbits/duck/pigeon/pelican cages (Egyptian roast turkey = roast pelican) and hack saw-swinging butchers who did not hesitate to use bug spray directly on the fly-covered carcasses hooked in front of his stall bathing in 40 degree heat. Everyone we met was a character and every place we visited had its own. A typical relaxing day in Alexandria would find me getting up at noon (normal waking hours in Egypt were noon to 3am), strolling along waterfront pathway entwined between the thunderous Mediterranean and the jigsaw traffic of the sea road, to my favourite local hangout: an old sea-view café checkered with cracked mirrors and mahogany panels. Here is the home of shisha pipes that bellow out a sickly sweet haze that gather to obscure the intricate ceiling artisanship, a clientele of backgammon masters who once pimped for British soldiers and now challenges the décor in age, all run by a quiet Chaplin-esque waiter who handed out the stiffest Turkish coffees this side of the Nile in chipped teacups delicately balanced on tarnished metal trays. Basking in the salt-filled air until the sun descended past the towering minarets into the harbour amongst its scant collection, I would read my frayed novel and pen postcards to those I had left behind.

In July, I made friends with students from France, India, Lithuania and Hungary and August saw more arrive from Poland and Switzerland as well. In our short time together, we had gotten closer through our experiences, shared our different cultural backgrounds and forged new friendships that will continue on long after we all return home. I will miss every one of them (as well as our wild "international parties") and I hope that I will see them again the future.

Adventures in Pharmacy Abroad

Ghana Travels

Carrie Roth
Pharmacy Student
4th year, University of Toronto

"Akwaaba…"

That is what the sign said as I walked into the arrivals area of the Kotoka airport in Accra, Ghana. I would find out later that "akwaaba" means "welcome".

The air was heavy with humidity and I could not believe how dark it was for 6:30pm. I arrived at the end of June and would be spending the next five weeks in Adenta, a suburb of Accra (the capital city). I left the terminal and met Joseph, my host student, and we headed for the house. There was a lot of traffic along the main road from the airport and I quickly learned that just about anything is sold along the streets, from souvenirs to clothing to toilet paper.

We wove our way through busy streets, many which were not paved and riddled with potholes. We arrived at the house and I was introduced to the rest of the family. The Amoako family was very generous. They made space in their home not only for me but the two other exchange students even though all of the eight children were home for summer break.

The first week I was in Ghana, the Student Exchange Office (SEO), Francis, arranged for all 16 exchange students to visit Cape Coast and Kumasi to see some of the tourist sites. The students were from Spain, Lithuania, USA and Canada. In addition to the pharmacy students, there were six medicine students from Newfoundland that joined us.

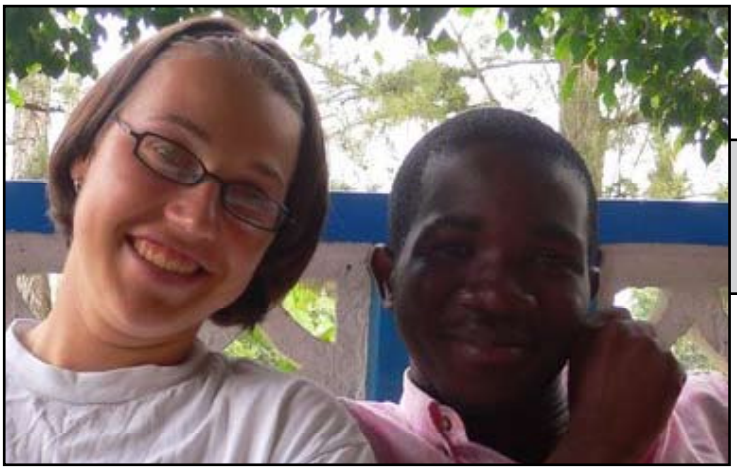
The castles in Cape Coast and Elmina served as reminders that Ghana was a major site of the slave trade in colonial times. Kakum National Park provides quite a view with its canopy walk high above the forest floor. Kintampo Falls is not as large as Niagara but just as amazing to behold and the monkey sanctuary was a tad bizarre as the village had a cemetery just for monkeys!

During my second week in Ghana, I started work at Achimota Hospital. The hospital was originally built to serve the local high school but now services the whole rural community. The pharmacy department is very small and served both as an inpatient and outpatient pharmacy.

The hospital mainly treats patients that have malaria, hypertension, diabetes and a wide range of infections. Nine out of ten prescriptions filled at the pharmacy were malaria medications. Due to the emerging resistance of malaria to chloroquin, dual therapy must be used. The two options of choice at this hospital were artesunate and amodiaquin or artemether and lumefantrine.

In the pharmacy, there were three pharmacists: the pharmacist in charge, a clinical pharmacist and one that remained in the pharmacy to check and counsel on prescriptions. There were also four technicians, a cashier and several other people who would fill prescriptions.

Technicians in Ghana are able to not only dispense medications but are able to check and counsel



Carrie Roth and her host student, Joseph, enjoy some quality time together and a break from work.

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Ghana Travels

Members of the Drug Safety group 2008, from Koforidua, Ghana, take a moment to pose for a photograph

patients on prescriptions. This means that sometimes a pharmacist might not even see a prescription before it leaves the pharmacy and it also means that the pharmacy can still operate even if a pharmacist is not present.

My main job in the pharmacy during the first week was to fill prescriptions and I was able to spend some time counselling patients on medications. The hospital used small Ziploc bags instead of pill bottles to dispense drugs and all labels were handwritten. During my second week at the hospital, I spent some time on one of the wards. It was interesting to see how medications were kept and how patients received them.

After a doctor writes a prescription for a patient, a nurse walks the prescription to the pharmacy where it is filled and checked. The nurse walks it back to the ward and hands it to the patient to keep at the bedside. When it is time for the patient to take a dose, the nurse asks for the medication, finds the right one and gives the patient the dose. Then, the nurse hands all of the medication back to the patient to put away. There are very few medications kept on the ward and these are mainly for emergency situations.

Ghana has a national health/drug insurance plan that has been in place for about two years. Most medications used to cure a disease state are covered as well as hospital and doctors' visits. The cost per year for this insurance is equivalent to $20. While I was in Ghana, the government passes legislation that covered all medications for women who become pregnant. This was a big move for the country since it promotes and helps the public practice health care prevention. After my two weeks at the hospital, I participated in Drug Safety Week, which was organized by the Ghana Pharmacy Students Association. It was held in the Eastern Region (regions are like provinces). 170 pharmacy students from all years gathered to educate the people of the region on the Rational Use of Drugs.

We were divided into groups of 15-20 students and sent to different cities and towns in the region. My group was in the city of Koforidua where we visited churches, primary and secondary schools as well as government buildings and market places. The message was well received by all the groups we spoke to. Most Ghanaians speak English but Twi and Ga, two of the tribal languages, are used more frequently. Communicating was a challenge with young children who were just beginning to learn English in school and with adults who never got the opportunity to go to school.

The food in Ghana is far different from food in Canada. Plantains, yams and other tubers are a staple. The favourite dish is called Fufu, a combination of cassava and either plantain or yam. These are boiled and then mashed into a doughy ball that is then put in a bowl of soup. Rice accompanied by various stews is also a common dish. Most Ghanaian dishes, even soup, are eaten using one's hand.

I look forward to another visit to Ghana to experience more of its people and culture. To anyone thinking of visiting Africa, I would highly recommend starting with Ghana. It is a safe and stable country and Ghanaians are a generous and hospitable people.

Adventures in Pharmacy Abroad

Marie-Pier B.-Dallaire
Représentant local IPSF
3e année, l'Université Laval

200 étudiants, 40 pays, le trip d'une vie: ROUMAINE

Il est 2h30, le soleil est haut dans le ciel, il fait 32°C. Dehors, plusieurs étudiants en pharmacie flânent; jupes, robes et lunettes de soleil, au diable la crème solaire. D'autres, courageux, sont entassés dans un amphithéâtre sans air climatisé, ils attendent le spectacle. Mais moi, je ne fais partie d'aucun de ces groupes. Je suis bien mise, tenue et coiffure professionnelle enfermée avec 5 autres personnes dans une petite pièce vitrée sans autres meubles qu'une chaise pour chacun de nous. Tous tentent de combattre le stress à sa manière car nous allons, à tour de rôle, devoir entrer dans une autre pièce, avec un acteur et une caméra, pour participer aux finales du concours de PCE (Patient Counseling Event), diffusé en simultané dans l'amphithéâtre adjacent. Quel stress! Quelle expérience pour une petite francophone du Lac-Saint-Jean de faire un conseil en anglais devant tant de gens! Ce moment est à jamais gravé dans ma mémoire, comme bien d'autres depuis que je suis revenue d'Europe il y a déjà 6 semaines maintenant.

Ce concours de conseil patient avait lieu dans le cadre du congrès de l'IPSF qui s'est tenu cette année en Roumanie du 1er au 11 août, à Cluj-Napoca, ville étudiante hétéroclite où centres d'achats ultramodernes et prés où broutent librement ânes et chevaux se jouxtent de la manière la plus naturelle du monde. Nous étions près de 200 étudiants provenant de 40 pays du monde, passionnés de molécules et de voyages. Nous étions tous prêts à vivre ces 11 jours sans laisser filler une seule seconde. La délégation canadienne comprenait 7 étudiants de la Colombie-Britannique, une étudiante de la Saskatchewan, une de l'Ontario, et 4 fiers représentants de l'Université Laval : Moi, Léa Prince-Duthel, Dominic Martel et Martin Rajotte.

Nous avions préparé ce voyage depuis des mois : billets, appels, hébergement, valises… Mais ces démarches et les 48 heures passées dans les aéroports ont su être récompensées par la formidable programmation du congrès. Il contenait entre autres : conférences sur plusieurs sujets d'intérêt mondial, notamment la contrefaçon de médicaments; ateliers sur le tabagisme, le VIH, la tuberculose, l'aide humanitaire, la pratique de la pharmacie, etc. Un concours de conseil au patient a également permis aux canadiens de se distinguer puisque, sur les six finalistes, trois provenaient de Vancouver (dont les deux gagnantes!) et deux de Québec (Léa et moi). Il y en avait pour tous les goûts!

Mais détrompez-vous, ce congrès n'est pas seulement pour les futurs pharmaciens avides de savoir et de leadership, il est aussi pour vous, fêtards invétérés! Nous n'avons pas été déçus du côté des activités sociales… imaginez le COCEP, sur 11 jours, avec presque toujours l'alcool fourni et des dizaines de futurs pharmaciens en vacances (particulièrement des Hollandais et des Slovéniens). Malade! Léa était totalement «in control», Martin était «acutally» en feu… bref on pense avoir bien représenté le Québec de ce côté. On a «owné» les partys en votre honneur!

- Visite d'une mine de sel désaffectée : foulards et chaussures de marche étaient de mise!
- Mariage traditionnel roumain dans un petit village,

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An Insight into Healthcare in Ghana

two counsellors, and at least four were required. Lipid panels, blood, urine, and stool cultures could also not be performed. The lab technologist and some of the nurses would also do outreach programs to a different village each week, where they would weigh babies and vaccinate them.

Nsuta only had chemical shops and no pharmacies. Pharmacies were typically only found in the cities and larger towns. The difference between the two is that pharmacies could compound medications and chemical shops could not. As well, chemical shops only carried anti-malarial medications and what would be considered over-the-counter products in Canada. Pharmacies carried all the other prescription medications, such as antibiotics and anti-hypertensives. Chemical shops did not have pharmacists, and at times, neither did pharmacies! Due to the shortage of pharmacists, the Pharmacy Council of Ghana provides licensing and training to chemical sellers. Patients can go to a chemical shop or pharmacy and if the person working thinks that the patient has malaria, he/she will sell them anti-malarials. However, many patients can not afford to have a lab test done to diagnose them, so they go straight to the chemical shop and hope that the anti-malarials work. This is a primary concern, due to the increasing resistance to anti-malarials.

Many people in rural areas still seek traditional treatment. Herbalists do not charge the patient any money; rather the patient brings the healer a chicken, food or other items in exchange for medicine. There, traditional medicine still plays a large role, especially for poorer people.

Overall, we had a very enlightening introduction to the state of healthcare in rural Ghana. By integrating ourselves into the communities of Nsuta and Jansa, we were able to form relationships with local chemical sellers, medical personnel who worked at the clinic, teachers and patients. We were able to conduct interviews with these people in order to learn more about healthcare in rural Ghana and the potential role of a pharmacist. We also learned about Ghanaian people and their culture, beliefs, language and country. As well, we contributed to a community by helping build a teachers' residence. Most importantly, we became more patient, tolerant, compassionate and empathetic future pharmacists. The experiences and conversations we had have instilled qualities in us that could not have been taught in any classroom.

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200 étudiants, 40 pays, le trip d'une vie: Roumaine

qui s'était monopolisé au grand complet pour l'évènement (on se croyait à La Petite Séduction!) : costumes traditionnels, chevaux décorés, balades en calèche, grand banquet, 400 litres de vin, sans oublier la fameuse PALINKA! En fait j'en ai peut-être oublié quelques bouts…

• Soirée internationale dans un ancien château de la renaissance : présentation de numéros artistiques et dégustations de produits des différents pays présents. Les Espagnols nous ont préparé une sangria sur place, les Portugais avaient bien sûr du porto, et les finlandais on empoisonné plusieurs personnes avec leur shooter de bonbons à la réglisse fondus mélangés à de la vodka…

• Cocktail d'ouverture et gala de fermeture avec repas copieux, champagne, jolies robes, feux d'artifice, photos, fort et vin à volonté, encore une fois!

Ce n'est qu'un échantillon des multiples activités qui étaient organisées pour nous faire apprécier le voyage et découvrir un peu de qu'est la culture Roumaine. Si vous le demandez à mes compagnons de voyage, ils auront beaucoup de choses à dire sur l'organisation d'évènements à la manière Roumaine… Mais ceci n'est pas l'objet de cet article.

Par cet article, j'espère vous donner envie de voyager. Et pourquoi ne pas voyager en tant qu'étudiant en pharmacie? L'IPSF vous offre plusieurs opportunités, notamment de faire des échanges étudiants à l'étranger, de faire des stages au siège social de l'IPSF aux Pays-Bas, de vous impliquer dans diverses campagnes de sensibilisation, d'assister au prochain congrès qui se tiendra l'an prochain à Bali en Indonésie et peut-être — qui sait! — vous impliquer directement au sein de l'organisme en tant que délégué nal!

Bali 2009… on l'apelle l'Ile des Dieux, j'ai bien hâte de découvrir pourquoi!

Rachel Neumann
Pharmacy Student
3rd year, University of British Columbia

Drug Profile

The history and pharmacology of gamma-hydroxybutyric acid (GHB)

Gamma-hydroxybutyric acid (GHB), also known as 4-hydroxybutyrate or sodium oxybate, has historically been used to treat pain, insomnia, depression narcolepsy and alcoholism (1). This compound was first synthesized by Alexander Zaytsen in 1874, and the first research done in humans was by Henri Laborit in the 1960s (1). Laborit investigated its use as an anesthetic; he found that it causes minimal side effects, but was not practical to use due to its short duration and narrow therapeutic index (1,5). Xyrem (Sodium Oxybate oral solution) was approved by the FDA in 2002 for the treatment of narcolepsy (2). In 2007, French cyclist Franck Bouyer sued the World Anti-Doping Association to be allowed to compete while taking Xyrem to treat narcolepsy (1,3). Also in 2007, plastic toys containing the plasticizer 1,4-butanediol were pulled off the market in Australia when children were hospitalized after eating plastic beads (1,4). 1,4-butanediol is converted to GHB by alcohol dehydrogenase (ADH) and aldehyde dehydrogenase (ALDH).

GHB is an endogenous substance in the body that is metabolized to gamma-aminobutanioc acid (GABA) by GABA transaminase or to succinic semialdehyde then succinate by ADH and ALDH (8). Succinic semialdehyde dehydrogenase (SSDH) deficiency can cause increased levels of GABA and GHB in the brain. This disorder causes intellectual disability, seizures, sleep disorders and psychiatric disturbances (8). A mouse model of SSDH deficiency has been developed to study epilepsy (8). GHB has weak affinity for inhibitory GABAB receptor (5,6) and strong affinity for recently-discovered excitatory GHB receptor (6). Wu et al showed that in GABABR knockout mice, GHB bound specifically to sites in the hippocampus, cortex and thalamus (6). Based on this data, the physiological role of GHB is probably to regulate sleep patterns. It can also affect the release of natural opioids, such as dynorphin (7). GHB induces sleep and secretion of growth hormones that are usually released during this stage (7). This has lead to claims that GHB has anabolic effects, although there is not good evidence to support this (7).

There is, however, some evidence to suggest that GHB is effective for treating narcolepsy, alcoholism and opiate withdrawal (7). Xyrem (sodium oxybate oral solution, 0.5 mg/ml) is available in the US to treat narcolepsy. The recommended starting dose is 2.25 g of solution at bedtime, followed by another dose of 2.25 g three to four hours later (2). In studies be Scrima et al, GHB 25 mg/kg HS and repeated three hours later was shown to improve nighttime sleep quality and reduce daytime sleepiness (8). In clinical trials of Xyrem, the most commonly reported side effects were headache and dizziness (2). In larger doses, GHB may also cause hallucinations, confusion, seizures, nausea and vomiting, decreased heart rate and respiration (7).

GHB solutions are also available in the US and over the internet as a natural health product for bodybuilding, due to its theoretical anabolic effects. Unfortunately, it is also used as a recreational drug, or to facilitate date rape (1). It can be dangerous when GHB is used recreationally, especially when mixed with alcohol. These two drugs have additive effects and their combined use can increase the risk of CNS and respiratory depression (7). GHB also has the potential to interact with many other drugs, including amphetamines, anticonvulsants, antipsychotics, benzodiazepines, narcotics, naloxone, ritonavir and muscle relaxants (7). Overall GHB may be a useful

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Important Considerations: The Move of Plan B

Krista Adams
Pharmacy Student
3rd year, University of Saskatchewan

In 2001, Plan B was approved by the National Drug Scheduling Advisory Committee (NDSAC) to meet the status of a Schedule II drug. After careful evaluation and proper patient counseling, the pharmacist would be able to provide the patient with this medication without a prescription from a physician. (1) Now, seven years later, Canada has joined four other countries (Norway, Netherland, Sweden and India) in moving the drug to a Schedule III status, due to a recommendation by the National Association of Pharmacy Regulatory Authorities (NAPRA). Pharmacists will now be able to take Plan B from behind the counter and put it on the shelves, allowing patients to select the drug themselves. (2)

Plan B contains 0.75 mg of levonorgestrel, and is indicated for use within 72 hours of unprotected intercourse, as the efficacy decreases significantly within this time. Current evidence indicates that Plan B will prevent 95% of expected pregnancies if taken within 24 hours of unprotected sex, 85% between 24-48 hours and 58% if used within 48-72 hours. (1) It is not an abortifacient, and there is no evidence that it will harm an unborn fetus or the patient, making it appear to be like a "miracle" medication for those in desperate need. (3) Although the benefits of the drug, when used correctly, are quite clear, the move from a Schedule II to a Schedule III drug product has stirred up a bit of controversy.

Plan B will now be more accessible to the public, which in return will reduce the number of unplanned, unwanted pregnancies or abortions. But on the flip-side, allowing the drug to be sold to anyone who picks it off of the shelf may result in superfluous and increased use of the emergency contraceptive. Under the Canadian Pharmacist Associations Guidelines for the Provision of Plan B as a Schedule II Product, pharmacists were recommended to take a training program to ensure they had sufficient knowledge to make an informed decision to adequately dispense the product to women where the use of Plan B was appropriate. (1) The Saskatchewan College of Pharmacist's set out guidelines indicating that pharmacists were required to successfully complete programs accredited for at least 3.0 continuing education units (CEUs) before prescribing Plan B. These programs aimed to ensure the competency of pharmacists to prescribe emergency contraception and meet the following learning objectives: possess essential components of an assessment for a woman requesting EPC; ensure adequate education of patients requesting EPC, including appropriate indications for use, mechanism of action, and efficacy and safety; differentiate prevention of pregnancy from pregnancy termination; and to compare the available products with respect to safety and efficacy. Pharmacists were to document these encounters and also had the authority to prescribe to minors under the mature minor rule, or to report acts of unwanted sexual activity. (4) This leads to the question about whether pharmacists will still be required to fulfill the guidelines now that Plan B is available as OTC? The patients are still required to receive appropriate counseling from the pharmacist upon purchasing of the drug product, but providing the drug product as OTC gives the potential buyer the option of buying it from the other cash registers and not at the pharmacy counter. Patients will fail to get the invaluable advice of the pharmacist, who will provide an assessment on if they actually need to take the drug, counseling on the correct usage, potential drug interactions, potential allergic reactions, side effects, and the possibility of Plan B being ineffective.

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Spare the Antibiotics; Save Ourselves

"No antenna, no radio, we're back in the 19th Century!" This remark was made by the fishing-boat captain played by George Clooney in the 2000 film The Perfect Storm, after his ship was damaged and the amenities of modern seafaring were lost to him. This notion of being metaphorically transported to an unfamiliar and inhospitable world is a chilling one – and all the more so for the health professionals who understand that this may very well soon become our reality.

When the first effective antibiotic, penicillin was introduced during World War II, it was seen by many as a miraculous Panacea. When penicillin became available in to the public at large it was promoted not just for bacterial infections, but also as a cure for everything from baldness to tooth decay. Physicians eagerly prescribed it en masse, as it was an effective treatment for many serious conditions, but also in indulgence of high patient demand. (1)

In the early 1950s, penicillin was such a big success that many believed that infection was a thing of the past. This was soon found not to be the case. Through their numbers and their speed of reproduction, bacteria (the dominant form of life on this planet) are incredibly adaptive and soon developed mechanisms to circumvent the action of the once mighty penicillin and other antibiotics. Methicillin-resistant Staphylococcus Aureus (MRSA) soon became prevalent in hospitals. Vancomycin is one of the few effective treatments for this strain, but in 1997 hospitals in Japan reported a Staphylococcus strain that was resistant even to that. (2)

Whenever too much or too little of an antibiotic is used, the stage is set for resistance to develop. It does not matter if 99.9% of a group of bacteria are killed off if that 0.1% that survive are allowed to replicate with impunity, increasing the hardiness of the strain and making future infections all the harder to treat. The world recently celebrated the 200th birthday of Charles Darwin, whose theories of natural selection fundamentally changed our understanding of life on Earth. Darwin did not understand bacteria the way that we do, but the mechanisms of his theory are utilized by them at an exponentially faster rate than they are by us slowly evolving vertebrates. It seems tragic that we have such detailed knowledge of these organisms that plague us, but have failed to show them due respect. Also tragic is the fact that one of the most prominent sources of antibiotic resistance does not even involve the use of these medications in human beings.

Few human activities are as fundamentally destructive as the raising of cattle. From the emission of massive amounts of the potent greenhouse gas methane, to the clear-cutting of South American rain forests to produce unsustainable grazing land, to the general energy inefficiency associated with the consumption of beef (as opposed to vegetarian diets), this is an industry that seems destined to render our planet uninhabitable if continued in its current forms. Aside from all this, the American cattle industry misuses antibiotics in a grotesquely irresponsible and myopic way. In what Al Gore called a "Faustian bargain," (3) they are fed to livestock in sub-therapeutic doses because (for reasons not fully understood) these medications promote growth in cattle. In 1984, congressional hearings chaired by Gore found that 45% of antibiotics sold in the US were consumed by livestock in this way. (3) More recent estimates put this number as high as 70%. (2) This large-scale use of low-dose antibiotics virtually assures the development of resistant bacteria in livestock, which may be spread to humans directly or indirectly via the transmission of resistance from germ to germ via plasmids.

The pharmaceutical industry is also contributing to our seemingly inevitable defeat to the bacteria. Development of new antibiotics is not prioritized for,

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The history and pharmacology of gamma-hydroxybutyric acid (GHB)

therapeutic tool to treat narcolepsy and drug addiction. If this drug were approved for use in Canada, it should be used with caution and measures should be established to prevent illicit use of this substance.

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Important Considerations: The Move of Plan B

Another possible concern is now that Plan B is available as an OTC drug it may start to be substituted for use for regular methods of contraception. Plan B is not as effective as birth control that is correctly and consistently administered, and should only be used in situations of emergency. If a patient needs to use Plan B frequently, they could be at increased risk of contracting HIV(AIDS) or other sexually transmitted infections (STIs), because Plan B offers no protection against these risks. Advertisements for the product Plan B fail to alert potential users of the drug of any kind of consequences, sending the wrong message to women and young girls, and portraying a false sense of security to women. Websites boasting to "share your oops", or the mishap that occurred that caused the patient to take Plan B, online further glamorizes the miraculous ability of the drug to prevent pregnancy. (5) The advertisements fail to provide an accurate description of Plan B, as there is still a possibility of becoming pregnant, especially if the drug is not used within 24 hours.

According to an article in the Canadian Medical Association, the Canadian Pharmacy Association asked NAPRA to delay the move so that scheduling decisions on the drug could be based on more than just the pure science. There are important patient care issues surrounding emergency contraception that should have been taken into consideration before the move of Plan B to schedule III. (2) The freedom now granted to patients has the possibility of resulting in abuse and could hinder the opportunity for pharmacists to counsel properly. Maybe NAPRA should reconsider the recommendation given and decision made, before it negatively impacts the lives of patients who fail to correctly use the drug.

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Spare the Antibiotics; Save Ourselves

as James Surowiecki noted, "given a choice between developing antibiotics that people will take every day for two weeks or antidepressants that people will take every day forever, drug companies not surprisingly opt for the latter." (2) There have only been two major new classes (Oxazolidinones in 2000 and Lipopeptides in 2003) introduced in that last 40 years. (4)

But in the end, the development of new kinds of antibiotics will be a long and Sisyphean struggle if major attitudinal changes are not made. First and foremost, physicians must exercise professionalism (and a bit of basic restraint!) in not prescribing antibiotics where they are not needed. Colds, flus, and other viral ailments will not be helped by amoxicillin, no matter how steadfastly the patients demand it. (5) Given the grave nature of the situation, it may even be reasonable for pharmacists to refuse to fill inappropriate prescriptions. But the main role of the pharmacist is education; this should go beyond merely placing an auxiliary label on each vial telling patients to finish the full course. Detailed counseling should be given as to why appropriate antibiotic use is essential. I would suggest including illustrated brochures that explain the process of natural selection as it pertains to bacteria. If we can facilitate understanding (and maybe even a healthy and appropriate dose of fear) in the public, then we will have taken an important step in staving off our own extinction.

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My Experience as the CPhA Student Board Member

Kristjana Gunmundson
CPhA Student Board Member
4th year, University of Saskatchewan

Remember back to first year and those first few days in the college of Pharmacy? I remember feeling that a whole new side of the world was being unveiled to me. It was so new, so exciting! Then came the unleashing of the acronyms……they just kept coming…… and they have yet to stop years later. This is similar to the feelings that I have experienced as a new board member on CPhA Board of Directors. I feel like my "bubble" that contained my world as a pharmacy student, my daily activities, was smaller than I imagined.

My interactions as a board member have reminded me of compounding class. Sometimes the prescription looks overwhelming and unattainable. With patience, each ingredient is incorporated to attain the desired final product. The part that I find the most empowering is the fact that the students' perspective and opinion is always on that list of ingredients. Sometimes more steps are required to balance all the perspectives, similar to levigation, to make sure all the ingredients, including the binding agent, work together to reach pharmaceutical elegance.

I don't think there has been such a time where the profession of Pharmacy has come together in unison to push the profession to be all that is can be. Students are not only being asked for input, they are also being sited in discussions and documents. The Blueprint for Action is a tool to ensure that we as students have our voice carried forward into the future about our professional future. Many of us have read the Blueprint for class assignments and know the document well. My challenge is if you know the Blueprint and support it, sign the Personal Commitment to Act. If you haven't read it yet, do. While we may be in the early stages of our Pharmacy careers our voice is a genuine component in the complex formulation of our profession.

So as I continue on the board, I will carry my glossary of acronyms, torsion balance, mortar and pestle and my e-Therapeutics+ in my backpack. I will continue to expand my horizons and challenge those around me to do the same. As I recall…….isn't it -10% for bubbles in a formulation anyway?

Questionnaire international de l'IPSF

Par Marie-Pier Bouchard-Dallaire

<u>Nom:</u> Bernardi Laetitia
<u>Pays:</u> Suisse
<u>Université/Ville:</u> Université de Genève (Unige)/Genève

1. Faites une courte présentation de vous, votre pays et l'université où vous étudiez.

Après un bachelor (3 ans) en sciences pharmaceutiques, j'ai commencé un master en Pharmacie (2 ans) que je finirai en septembre 2009 (si tout se passe bien !). J'ai commencé par être secrétaire de mon association régionale (pour la Suisse Romande) avant de m'investir dans l'association nationale (asep, association suisse des étudiants en pharmacie) et ipsf ; je suis également membre de psf (pharmacien sans frontières).

La particularité de la Suisse est d'avoir quatre langues nationales : l'allemand, le français, l'italien et le romanche. Nous avons la chance d'avoir un pays très hétéroclyte, villes internationales, campagne, montagnes ou lacs sont atteignables en moins de 4h ! Il est possible de suivre les cinq années de pharmacie dans trois de nos universités : Bâle (allemand), Zürich (allemand) et Genève (français).

2. Combien de nouveaux étudiants sont acceptés dans le programme de pharmacie chaque année? Combien graduent?

Entre 600 et 700. Plus ou moins le même nombre. Désolée, je n'ai pas les chiffres! Je me renseigne et te redis.

4. Quels sont les préalables pour étudier en pharmacie dans votre pays?

Il faut avoir obtenu une maturité (correspondant au bac en France). Celle-ci se déroule après l'école obligatoire. Elle peut durer entre 3 et 5 ans en fonction de son canton d'origine (la Suisse est partagée en 26 cantons). Une de nos particularités difficilement compréhensible, même pour nous ! Pour pouvoir faire la maturité, il faut toutefois avoir un certain niveau. L'école obligatoire est séparée entre l'école primaire (la même pour tous) et l'école secondaire où les élèves sont séparés en fonction de leurs niveaux (3 différents). Seuls les élèves du meilleur niveau pourront faire la maturité directement. Il est possible de faire une ou deux années supplémentaires (en redoublant pour accéder au niveau du dessus) pour les autres afin d'effectuer leur maturité par la suite ou de faire une école qu'on appelle le diplôme (également 3 ans) et de faire ensuite leur maturité sur 2 ans.

5. Expliquez le cheminement scolaire qui mène à la profession de pharmacien.

Dans mon canton, nous pouvons commencer l'école enfantine deux ans avant l'école obligatoire. L'école obligatoire commence à 3-4 ans et se déroule sur 4 ans (4 années primaires). Ensuite, 2 années servent à séparer les élèves en fonction de leurs niveaux pour les 3 dernières années de scolarité obligatoire. Le meilleur niveau permet d'aller ensuite en maturité. Celle-ci se déroule sur 3 ans. C'est le papier nécessaire pour accéder à une université. D'autres voies sont accessibles pour y arriver, mais celle-ci est la plus directe.

Après un bachelor de trois ans en sciences pharmaceutiques, il faut choisir le master de deux ans en pharmacie pour obtenir le diplôme fédéral de pharmacien. Là également, il est possible de joindre en cours de route avec des équivalences, mais c'est assez compliqué!

6. Faites une brève description des principaux cours faisant partie de votre formation.

Chaque année, des travaux pratiques en relation avec les cours sont obligatoires (pas de liberté académique!!) et des rapports doivent être rendus (chaque semaine).

La première année, les cours sont axés dans le domaine scientifiques (mathématiques, physiques, chimie, biologie, botanique, informatique). La deuxième année, nous sommes plutôt axés médecine (anatomie, hématologie, microbiologie, physiologie, biochimie, bactériologie, chimie). La troisième année est plus centrée sur la pharmacie : toujours de la chimie (analytique, thérapeutique), galénique, méthodologie, pharmacie hospitalière, pharmacognosie et phytochimie, pharmacologie.

La première année de master consiste en 1 semestre de cours (analyse pharmaceutique, pharmacie

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galénique et biopharmacie, pharmacochimie, produits naturels bioactifs, analyse pharmaceutique, biochimie pharmaceutique, pharmacologie, technologie pharmaceutique) suivi d'un semestre de travail personnel de recherche (dans un domaine choisi). La deuxième année de master comprend 8 semaines de cours obligatoires (connaissances du médicament, préparations des médicaments, suivi pharmaceutique hospitalier, santé publique, médicaments de la médecine complémentaire), 3 semaines de cours à option, et 30 semaines de stage (19 en officine, 1 à l'hôpital et 10 en officine ou hôpital). Le cursus se termine par des examens finaux.

7. Est-ce qu'il y a des évènements sociaux important dans votre faculté de pharmacie? Lesquels?

Pour Genève. Nous organisons une soirée publique (environ 1200 personnes, étudiants ou non) dont les bénéfices sont reversés à PSF (pharmaciens sans frontières). Les cinquièmes (dernière année) organisent le souper de fin d'année (novembre-décembre) où ils font un spectacle sur les cours et les évènements universitaires ; les déguisements sont à l'honneur en fonction du thème ; étudiants, assistants et professeurs sont conviés (environ 200 personnes). Un rallye est organisé par les quatrième années ; les autres années forment les équipes et se battent pour être les meilleurs ; un souper clôt la journée. Un week-end pharmaski, payant, est organisé pour les fans de la glisse, du vendredi au dimanche, en janvier ou février.

Au niveau national, chaque année une des universités organise un meeting d'une journée sur un thème relatif à la pharmacie (conférences sur les diverses possibilités de métier par exemple). De même, un week-end pharmasport est organisé.

D'autres activités locales sont organisées dans les autres universités.

8. Avez-vous de la formation pratique incluse dans votre formation? Si oui, pendant combien de temps? Quand?

Oui! Un stage de 6 semaines doit être effectué en officine avant la fin de la deuxième année d'étude (pendant les vacances). De plus, deux cours de secourismes doivent être suivis.
La dernière année d'étude comprend 30 semaines de stage.

11. Est-ce que les pharmaciens ont le droit de prescrire dans votre pays? Ont-ils d'autres droits spécifiques? Sont-ils autorisés à faire des diagnostics?

Non. Ils peuvent toutefois prendre certaines libertés et donner des médicaments seulement en vente sur ordonnance (par contre, nous avons des médecins dispensant dans certains cantons, ce qui est totalement injuste !). Diagnostics, cela dépend. Pour les petites choses, oui (maux de gorge, léger eczéma, etc.), mais sinon il faut rediriger chez le médecin ou aux urgences si nécessaire!

12. Pour les lecteurs qui aimeraient visiter votre pays, quels conseils leur donneriez-vous? (évènements, attractions, villes, conseils pratiques, etc.)

Divers évènements musicaux sont intéressants comme le Paléo Festival Nyon (www.paleo.ch) qui est un des plus grand festival à ciel ouvert d'Europe ou le Montreux Jazz Festival (www.montreuxjazz.com). Les fêtes de Genève (www.fetesdegeneve.ch) attirent beaucoup d'étrangers. Sinon, Lake Parade (www.lakeparade.ch) ou Street Parade (www.streetparade.ch) pour les amateurs de musique électronique.
Les attractions sont multiples entre les musées (comme le Musée Olympique à Lausanne (www.regart.ch/lausanne/olympique/fra/) ou celui de l'alimentation à Vevey (www.alimentarium.ch)).
La Suisse a beaucoup de charmes. Comme villes je conseillerais Zurich, Bâle, Genève, Lausanne, Berne et Bellinzona pour les principales, mais beaucoup d'endroits sont intéressants comme la Gruyère (www.la-gruyere.ch) ou les chutes du Rhin. Les stations de ski sont très prisées (Crans-Montana, Verbier, Villars sur Ollon, Zermatt, Gstaad et autres (www.isocolt.ch)) tout comme le lac (Montreux, Vevey (www.sisl.ch/leman.htm)). Les marchés de Noël ont beaucoup de charme (Bulle et Montreux pour les plus populaires).
Plus de renseignements sur www.swissvisite.ch/ !!!
Trop de belles choses à voir dans un si petit pays pour toutes les énumérer !!!

Questionnaire international de l'IPSF

Par Marie-Pier Bouchard-Dallaire

Nom: **Rouger Julien**
Pays: **France**
Université: **François Rabelais (Tours)**

1. Faites une courte présentation de vous, votre pays et l'université où vous étudiez.

J'ai 21 ans, jamais redoublé, aimant voyager, le sport, la musique, etc … Je suis en 4ème année de pharmacie en France.

La France est un pays connu de tous pour ses paysages diversifiés, pour être le pays le plus visité au monde, pour sa gastronomie. Tours se situe dans le centre de la France.

L'université de Tours (François Rabelais) regroupe environ 24 000 étudiants. Fondée en 1969, elle est répartie dans toute la ville de Tours.

2. Combien de nouveaux étudiants sont acceptés dans le programme de pharmacie chaque année? Combien graduent?

Le numérus clausus varie tous les ans, mais en ce moment, il est de 110.

3. En quelle langue étudiez-vous?

En français.

4. Quels sont les préalables pour étudier en pharmacie dans votre pays?

Il faut avoir le baccalauréat, diplôme que nous obtenons à la fin de notre lycée (enseignement général). On peut avoir un Bac scientifique, littéraire, économique, peu importe. Tout le monde peut se présenter.

5. Expliquez le cheminement scolaire qui mène à la profession de pharmacien.

Cela se fait en 6 ans après le Bac. La 1ère année est ouverte à tout le monde et est purement théorique. Tous les étudiants suivent les mêmes cours et ont des examens en janvier et en mai. Cela est un concours. Seuls les 110 premiers étudiants sont pris (environ 350 – 400 étudiants passent le concours). Les autres peuvent redoubler une seule fois. De la 2ème année jusqu'à la fin des études, il faut simplement avoir la moyenne (qui est de 10/20) pour passer dans l'année supérieure. Les 2ème, 3ème et 4ème années sont théoriques et pratiques (travaux pratiques en microbiologie, botanique, chimie, biologie …). La 5ème année comporte un stage à l'hôpital tous les matins pendant toute l'année, les après-midi étant des cours. La 6ème année comporte un stage de 6 mois dans une officine ou dans une industrie (selon la filière choisie).

On peut également passer l'internat pour travailler plus tard en hôpital ou dans un laboratoire microbiologique. Certains peuvent également faire un double-diplôme pour être ingénieur/pharmacien en industrie.

6. Faites une brève description des principaux cours faisant partie de votre formation.

Bcp de chimie (chimie minérale, organique, générale, analytique, biochimie): très axé industrie, production de molécules.
Biologie végétale, botanique, mycologie: beaucoup d'études des plantes et des champignons.
Physiologie, anatomie : étude du corps humain.
Physique, maths.
Modules: cours regroupés par système (ex : SNC, Cardiologie, Cancérologie, Gastro …)
Hématologie: étude du sang
Bactériologie, virologie, immunologie: étude des micro-organismes et des réponses immunitaires.
Hydrologie: étude de l'eau, de sa pollution …

7. Est-ce qu'il y a des évènements sociaux important dans votre faculté de pharmacie? Lesquels?

Des fêtes (une dizaine par an), des associations (orchestre, association humanitaire, course de voile), des weekends d'intégration, le Crit (une semaine de débauche dans une station de ski).

8. Avez-vous de la formation pratique incluse dans votre formation? Si oui, pendant combien de temps? Quand?

En 2ème année: 6 semaines de stage en officine.
En 3ème et 4ème année: 2 fois 2 semaines de stage en officine.
En 5ème année: un an à temps partiel en hôpital.
En 6ème année: 6 mois à temps plein dans une pharmacie.

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EMPOWERING MINDS

A United Vision for Interprofessionalism

Sara Rosaline Lavoratore
Vice President of Interprofessional Affairs
4th year, University of Toronto

Over the weekend of March 21st, I had the opportunity to attend the 5th Annual National Health Sciences Students' Association (NaHSSA) Conference in Kingston, Ontario. The first day of the conference was a Student-Managed Interprofessional Health Initiatives Leadership Event (SMIHILE). The first speaker of SMIHILE, Dr. Margo Paterson, discussed evidence supporting interprofessional education and encouraged students to start initiatives at their local schools using the catch phrase – "Just do it!" The leadership event also consisted of presentations of different initiatives from schools across Canada. One presentation lead by students from Saskatoon discussed SWITCH, which is a student-run, interdisciplinary clinic. The clinic provides patient-care services and promotes wellness to residents in Saskatoon's core neighborhoods. Similar student-run clinics were discussed, such as CHIUS in Vancouver, WISH in Winnipeg, and SHINE in Edmonton.

The second day of the conference consisted of a myriad of phenomenal speakers. One speaker that I found extremely exciting was Naomi Blundell, who is a nurse and a care clown! Naomi brings fun, laughter, and caring to not-so-funny places. Naomi has even had the opportunity to study with Patch Adams. The final day of the conference was the candidate speeches and elections for the incoming NaHSSA council. Also the final day consisted of some fun activities to allow delegates to see Kingston. Delegates were invited to Fort Henry or to the Queen's University Anatomy Museum.

Pharmacy was extremely well represented at the NaHSSA conference. Ms. Jennifer Fookes from the University of Alberta won a scholarship allowing her to travel to the conference. Ms. Fookes won for creating an interprofessional competition at the University of Alberta. Ms. Adriana Maik from the University of Manitoba presented at the conference as well. Ms. Maik presented on behalf of the Winnipeg Interdisciplinary Clinic (WISH).

Overall, the conference was a great success and allowed students interested and excited about interprofessional education to share ideas and resources. The NaHSSA conference is an annual event, and if you are interested in interprofessional education, I encourage you to attend next year!

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10. Est-ce que votre diplôme vous donne le droit de travailler dans d'autres pays?

Cela doit dépendre des pays. Mais au Canada, un papier vient d'être signé pour qu'il y ait une équivalence.

12. Est-ce que les pharmaciens ont le droit de prescrire dans votre pays? Ont-ils d'autres droits spécifiques? Sont-ils autorisés à faire des diagnostics?

Pas le droit de prescrire (à part les MVL), et pas le droit de faire de diagnostics (sauf si bénin. Ex: verrue, …)

13. Pour les lecteurs qui aimeraient visiter votre pays, quels conseils leur donneriez-vous? (évènements, attractions, villes, conseils pratiques, etc.)

Visiter Paris, les châteaux de la Loire (profitez en pour goûter le bon vin de ma région !!), les Alpes, les Pyrénées (pays basque de préférence), la côte Atlantique (vers La Rochelle/Bordeaux), la côte méditerranéenne, la Provence, la Bretagne, le Jura. Ce sont mes régions préférées.

Sinon il y a beaucoup de festivals de musique (à La Rochelle, à Paris, à Belfort …), beaucoup de parcs d'attractions (Disneyland, parc astérix, Futuroscope …).