# Inter ACTIONS

CANADIAN MEDICAL PHYSICS NEWSLETTER Le BULLETIN CANADIEN de PHYSIQUE MÉDICALE



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Volume 58, Number 3 – juillet/July 2012

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#### **Cover Image**

Dr. Peter McGhee, COMP President, participated in a press conference on Parliament Hill with the Canadian Association of Medical Radiation Technologists President Amanda Bolderston, Canadian Association of Radiologists President Dr. Jamie Fraser, Canadian Interventional Radiology Association President Dr. John Kachura and the Canadian Society of Diagnostic Medical Sonographers Past-President Kim Boles on the occasion of the inaugural Imaging Team Day which was held in Ottawa on May 17, 2012. The Press Conference was hosted by MP Pat Davidson, Sarnia-Lambton who is a former technologist. See the report by COMP Executive Director on page 85.

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Peter McGhee, Ph.D., FCCPM Thunder Bay Regional HS Centre Thunder Bay, ON Tel: (807) 684-7325 mcgheep@tbh.net

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#### **Registrar:**

Darcy Mason, M.Sc., FCCPM Durham Regional Cancer Centre Oshawa, ON Tel. (905) 576-8711 ext 2816 damason@lakeridgehealth.on.ca

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Robert Corns, Ph.D., FCCPM BC Cancer Agency, Fraser Valley Centre Surrey, BC Tel: (604) 930-4055 ext 654558 rcorns@bccancer.bc.ca

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Horacio Patrocinio, MSc, FCCPM McGill University Health Centre Montreal, QC Tel: (514) 934-8052 Horacio.patrocinio@mcgill.ca

#### **COMP/CCPM Office**

P.O. Box 72024 Kanata North RPO Ottawa, ON, K2K 2P4 Canada Telephone:(613) 599-3491 Facsimile: (613) 435-7257 E-mail: admin@medphys.ca Website: www.medphys.ca The Canadian Medical Physics Newsletter, which is a publication of the Canadian Organization of Medical Physicists (COMP) and the Canadian College of Physicists in Medicine (CCPM) is published four times per year on 1 Jan., 1 April, 1 July, and 1 Oct. The deadline for submissions is one month before the publication date. Enquiries, story ideas, images, and article submissions can be made to:

Idris A. Elbakri, Ph.D., MCCPM CancerCare Manitoba 675 McDermot Ave Winnipeg, MB, R3E0V9 Email: Idris.Elbakri@cancercare.mb.ca Phone: (204) 787-2856 Fax: (204) 775-1684

Members of the Editorial Board include: Tony Popescu Boyd McCurdy Parminder Basran

Please submit stories MS Word or ASCII text format. Images in Tiff format at 300 dpi resolution are preferred.

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### Message from the COMP President

Welcome to this, my final ef ort at trying to produce what I hope have been relatively informative and at least quasicoherent messages. As of the upcoming Annual General Meeting scheduled for July 14<sup>th</sup>, President-Elect Luc Beaulieu will assume the reigns. I believe that we are very fortunate to have an individual of Luc's calibre and abilities stepping into the role, and I am very much looking forward to his leadership over the next two years.

Although he has certainly been integrally involved in its development, Luc will be inheriting the new strategic plan and all the challenges associated with its implementation. As outlined in the brief synopsis of the plan provided in the previous issue of InterACTIONs, supporting strategies have been aligned with four priorities. While many of these strategies are not new, and there is already substantial momentum with some, there are those that are new and will require significant investment of ef ort if they are to be ef ectively engaged. The real strength of COMP is its members and a quick review of the strategies readily reveals the critical dependence of success upon the support and engagement of the members. If we have in fact gotten the new plan right, I hope that such engagement will be readily forthcoming to enable Luc and the Board to guide COMP through to realizing the goals that have been established. As more of the details of the strategic plan are rolled out, I wholeheartedly encourage you to contact Luc or any member of the Board to let us know of opportunities where you would be interested in contributing.

Developing a strategic plan provides an opportunity to undertake a bit of "navel gazing" and focus on what is done well and what is perhaps not done so well. A theme that did repeatedly arise, particularly in contrast to radiation oncology physics, was the state of imaging physics in this country and the significant potential for COMP to better champion the importance of the related sub-specialities. While not explicitly identified in any of the priorities, or even specific strategies, the greatest gains from realization of the collective of all the priorities and strategies would likely be achieved within the realm of imaging physics. The suggestion, therefore, is that in the coming years COMP should expand its role in supporting imaging physics. Towards that end, on May 17th I had the privilege of being in Ottawa to participate in the proceedings for the inaugural Medical Team Imaging Day. In addition to COMP, the Team was comprised the Canadian Association of Medical Radiation Technologists (CAMRT), the Canadian Association of Nuclear Medicine (CANM), the Canadian Association of Radiologists (CAR), the Canadian Interventional Radiology Society (CIRS), and the Canadian Society of Diagnostic Medical Sonography (CSDMS). I have mentioned this initiative before, but now it is a reality. (I encourage you to visit http://www.imagingteam.ca for more details.) Member of Parliament Pat Davidson (Sarnia-Lambton) rose in the House to draw attention to the fact that the day now has of cial recognition. In preparation for the event, a document entitled Appropriate use of Medical Imaging in Canada was developed. Appropriateness was identified as meaning "the right test by the right person at the right time", and this became the theme for the event. Having the opportunity to spend time with the leadership of these various societies, and to interact on a common front with federal politicians, was a very positive experience. From my perspective the most significant lesson was that, when given the opportunity to hold the focus of political attention, have a very clear and concise agenda. Aside from the potential for "political attention" to be an oxymoron because of the scant time that is typically available, in the absence of



Dr. Peter McGhee

having an agenda you are quite likely to be given with one. That said, the politicians with whom we met were in fact generous with their time and provided some excellent feedback. By the end of the day there was a consensus that, if leveraged appropriately, this day of recognition has real potential to earn political capital, particularly if specific deliverables can be identified and subsequently realized. As a result, while the Presidents of the various societies are to continue to participate in the Imaging Day proceedings on an annual basis, consideration is being given to forming an inter-society working group that would, on an ongoing basis, develop the annual agenda and promote achievement of highlighted deliverables. Your feedback on this initiative and potential uses of this new forum would be much appreciated.

Other initiatives noted in previous messages are continuing to be pursued but, by the time you read this message, the ASM will be imminent if not actually underway. As there will be a number of positions that will be replaced at the AGM, rather than rhyme of a series of updates, I thought better use of

continued on page 93

### Message from the CCPM President

In discussing proposed changes to EI eligibility rules, we have recently heard from federal Finance Minister Jim Flaherty that "there is no bad job, the only bad job is not having a job". To illustrate this point, we have learned through the media that in his youth, Mr. Flaherty drove a taxi and worked as a hockey referee; Stephen Harper worked in the mail room at Imperial Oil; Justin Trudeau honed his boxing skills as a bouncer at a Whistler bar.

My own pre-medical physics employment consisted of an assortment of hebetudinous, character-building jobs, including railway track construction, the requisite stint of tree planting, piano moving, goat milking, and my least favourite, cleaning the kitchen at McDonalds. A job as a surveyor's assistant in northern Alberta proved unexpectedly educational. In the dark days before GPS, surveying was done by peering through a transit at a surveyor's pole, held some distance away in thorny shrubbery or bug-infested swamp by me or the other dim-witted assistant, Frank (who had a prodigious capacity for inhaling the combustion products of illicit botanicals). The surveyor would measure the angle with the transit and call them out to an apprentice, who would carefully record them in degrees, minutes and seconds.

Af er several weeks of this, Frank remarked that he thought it was "really cool" how they always recorded the *temperature* and *time*. At that moment, I decided I should go back to university so I could get a job where I would be surrounded by people smarter than myself. My six years on the CCPM Board, which comes to an end this July, has provided that benefit and more. I guess I have Frank to thank for that.

Some of these smarter people who have contributed so much to the operation of the CCPM deserve specific mention and thanks. Dick Drost, who preceded me as president, showed me the ropes and lef things well organized and running smoothly before disappearing into the sunset in his Airstream. Michael Evans worked tirelessly as Chief Examiner, bringing his characteristic energy and integrity to this most vital part of CCPM operations. The position of Chief Examiner is arguably the most important and demanding Board position. The people in this position who have overlapped with me on the Board have accepted this large responsibility with grace and aplomb: Katharina Sixel, Michael Evans, Robert Corns, and Boyd McCurdy. The Canadian medical physics profession owes them a debt of gratitude.

Narinder Sidhu and Sherry Connors have provided organizational and financial acumen to the CCPM in the position of Secretary-Treasurer. Sherry has volunteered tirelessly for professional organizations including COMP, CCPM and AAPM. She has finished her term as Secretary-Treasurer, but remains a Board member for one more year. Glenn Wells has taken over as Secretary-Treasurer, and has already shown himself to be more than capable of filling Sherry's (thoroughly metaphorical) big shoes.

The position of Registrar was ably accomplished by the af able Wayne Beckham when I started on the Board, to be taken over more recently by Darcy Mason. The Registrar performs many vital tasks, including maintaining the list of current members, judging the suitability of applications for new membership, and running the recertification process. This very important function will be performed by Horacio Patrocinio starting this summer, leaving Darcy to bask in gratitude (both ours and his) while spending two years as a Board member at large.

Two new Board members will be presented for ratification by the membership at this summer's AGM, Renée Larouche and Clément Arsenault. Subject to the expected approvals, Renée will assume the position of Deputy Chief Examiner and Clément



Dr. David Wilkins

will become Vice-President. I have every confidence that both will bring dedication, innovation and integrity to the execution of their roles.

Matt Schmid, who has served as Vice-President for the past three years, will become President at the AGM in July. He hails from Saskatchewan but now lives and works in Kelowna, itself a clear demonstration of his prowess for sound decision-making. Matt takes over the leadership of the CCPM with a Board full of excellent people, running a sound and well-respected certification process. Some modest challenges await in the years to come, including: keeping the certification exam fresh and relevant; determining the future evolution of the fellowship process; extending national and international recognition of CCPM certification; ensuring that the certification process properly evaluates the ever-expanding list of competencies required in our profession; increasing the proportion of clinical physicists seeking certification in all provinces; and improving the rate of certification of imaging physicists.

Standard economic theory assumes that people behave as participants in the labour *continued on page 93* 

### Executive Director Report April 2012

There has been a lot of activity within COMP in the last few months. One of the goals from the last strategic plan was for COMP to "be the national resource to members and others interested in physics in medicine". Based on how often COMP is now called upon from other groups to provide input, collaborate on initiatives, serve on committees and taskforces etc. I would say that we have certainly increased our profile. Our constant challenge is balancing our participation in important initiatives within our limited volunteer and staff resources.

An example of collaboration with other groups would be our recent participation in "Imaging Team Day". Peter McGhee refers to this event in his column and there is a summary article along with pictures of Peter in action in this issue. We are grateful to the support of Glen Wells for his review of the paper developed for Imaging Team Day to ensure that it ref ected the role of medical physicists on the team and for Peter's ef orts to represent COMP on the day itself.

We will also be collaborating with the Canadian Medical and Biological Engineering Society (CMBES) to host the 2015 World Congress. I had the privilege of attending the 2012 World Congress in Beijing to learn more about how the event is organized and to promote the 2015 congress. I am appreciative of those who stopped by the Canadian booth to say hello and help out. While there is much excitement around the 2015 World Congress, Marco Carlone, Jean-Pierre Bissonnette, Peter McGhee and David Jaf ray have invested considerable time meeting with CMBES representatives to ensure that the foundation for a successful meeting is in place. Please let us know if you would like to be part of this exciting undertaking.

The Halifax meeting is now upon us and will provide another opportunity to bring the medical physics community together. Our volunteers continue to develop ways to expand and improve the meeting and we look forward to the new continuing education sessions that have been added to this year's meeting. As well, this year we will be presenting the inaugural Fellow of COMP awards and we look forward to recognizing those in our community who have made a significant contribution to the field of medical physics and to COMP. In the east coast spirit, the LAC also has some great social activities planned - I look forward to seeing you there!

In my role as Executive Director of COMP, I have the privilege of working closely with a number of very committed volunteers who serve in a variety of roles. At the upcoming AGM, some volunteers will be finishing their terms and new recruits will be stepping into their shoes. While change brings new energy and enthusiasm, I really enjoyed working with all those who are stepping down and learned a great deal from them. I would like to particularly mention the



Ms Nancy Barrett

contributions of Peter McGhee and Dave Wilkins as both will be finishing their terms as President of COMP and CCPM respectively. Both Peter and Dave demonstrated considerable commitment to more clearly defining the relationship between the two organizations to ensure that both could achieve their respective mandates while taking advantage of operational ef ciencies and in my humble opinion, we are in a really good place. Both employed a leadership style that was positive, collaborative and f exible (with a dose of humour when required!). I am grateful for their ongoing support. COMP and CCPM are in good hands with Peter and David's successors: Luc Beaulieu and Matt Schmid.

As always, please feel free to contact myself or Gisele Kite with any questions or feedback. We enjoy hearing from you.

Wishing you a safe and enjoyable summer!

### Social Media and COMP – Facebook and LinkedIn

Samantha Eustace, MSc, MCCPM Imaging Physicist CancerCare Manitoba

Continuing from Parminder's discussion of social media in January's issue of Inter*Actions*, in this edition we look specifically at Facebook and LinkedIn. These two social networking goliaths are aimed at keeping you connected; to anyone you've ever known, met, heard of or bumped into if you're a 15-year-old!

For most of us with Facebook accounts we have some number of such friends but mostly Facebook is like a modern e-address book – a one stop location where you can not only look up a friends name and contact details but also what they've been up to (occasionally in a very detailed way!). You can also interact with other Facebook users and groups but lets not get ahead of ourselves....

#### facebook.

For those of you that haven't already got a Facebook account, the first step is to get one by going to www.facebook.com and "create an account". Facebook requires some mandatory information but apart from the basics you can choose how much information you put into your Facebook profile, and also how much information you share or display on your page (using the privacy settings).

Now start collecting "friends" by searching for their names or by allowing Facebook to access your email contacts. Af er this your level of communication with your friends is governed by you and can be done in a number of ways.

Private conversations can be achieved through an email sytle message function whereas open communication is carried out on your 'wall' or that of your friends. The wall is the main page that you and other people will see when you access Facebook and is the place to update others by posting your 'status' i.e. displaying a text message of what you are currently doing/ thinking or to upload photos. You can visit the wall of your friends and write messages there too. Real time communication is also possible through Facebook's 'chat' feature. Here you can communicate by text in real time with other friends that are currently online.

So how do you find out what all your friends are doing without having to visit each of their pages? Easy, Facebook compiles a 'News Feed' for you detailing the status updates, comments, photo uploads, profile changes, birthdays and much more from your friends. But don't worry you don't HAVE to hear about how your 13 year old niece is "now eating a pretzl with friends in the shoppong mall" you can edit the content of your newsfeed so you only receive the updates you want.

But how is a page like Facebook relevant to an organization like COMP? Users may also join common interest user groups, organized by workplaces, schools, colleges organizations, etc, and follow those that have a 'like page' by 'liking' them. Like twitter, groups and pages can by found using the search function. Updates from liked pages can then also be seen on your Newsfeed and you can write on the organizations wall, and upload photos, so get yourself a Facebook account, like the COMP Facebook page at www.facebook. com/CanadianMedphys and share your professional news, photos and ideas with other COMP page friends.

The true strength of Facebook comes in its versitility of use; providing the means for users to maintain whichever level of contact they desire with their friends and groups, and the entertainment obtained both through your friends activities and if desired though the milleau of games and applications that are available!

For more information please see http:// en.wikipedia.org/wiki/Facebook and the facebook help page www.facebook.com/ help.

#### Linked in

LinkedIn is another social networking site, however this one is specifically designed for professional networking. Here the user is able to create a profile that details information pertinent to their profession, and 'connect' to others that usually have a relation to that profession.

Account creation can be achieved at www. linkedin.com by clicking on "Join Today" and entering some basic information. From here, like Facebook you can search for people you know, (known as contacts or connections on this site) or give LinkedIn access to your email account for them to find contacts for you.

On LinkedIn your profile can be tailored to your needs, but is very much orientated to your professional life. Your current and previous employments and education can be entered together with details on the duties you perform. Due to this, your LinkedIn account can also act like an online resume, but don't worry you don't even have to enter all this information manually. If you have an electronic copy of your resume you can upload it to LinkedIn so most of the work is done for you, its then simple to add to or edit the details as desired.

On LinkedIn a contact network consists of a users direct connections, the connections of each of their connections (termed second-degree connections)

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### Students, are you COMP members?

When COMP held its strategic meeting last November, a student representative was invited to bring students input in the discussions. In preparation for that meeting, a survey was conducted by the COMP Student Council to assess COMP awareness among the student community. Presented here are the surprising answers of this survey where 96 students answered.

First of all, it is reassuring that 86% of the respondents were aware of COMP, either through their supervisors or through the senior students in their groups, even though not all their coworkers were COMP members. In fact, 70% of the respondents surveyed knew fellow students who were not COMP members. The results showed that 55% of the students surveyed were also aware of the existence of the Student Council (SC), again mainly through their supervisors and colleagues. However, only a low 39% of this sample was current COMP members. This is very surprising considering that the awareness of COMP is very high, but it means that we still need to inform and persuade students to subscribe and remain COMP members.

It is interesting to note that students were willing to be in communication with the COMP SC, as 85% of the students said they would like to be on a COMP Student email list, regardless of their membership status. In response to this, one of the first actions taken by the SC was to compile a list of e-mails of all medical physics students, regardless of their membership, that will be used to update students with the news of the organization. Also, the results showed that students prefer to receive information from the COMP SC via email and/or through the COMP website as part of the student section. Accordingly, the SC committee is currently revising how it distributes information.

Interestingly, 80% of current members were willing to pay the current \$30 annual fee, showing that for them, membership fees were not a reason preventing them from becoming COMP members. In fact, more than half of the non-members do not see the fees as an obstacle to join the organization. So how can we attract students? We believe this can be done by adding value to their membership such as providing them with specific information and of ering special courses, resources or activities, such as the Summer Student Exchange Program currently proposed to the Science and Education Council of COMP by the SC. Yes: 39% (80%). O program

Also, students were surveyed as to their opinions regarding the information and communication services they receive as graduate students. In general, most surveyed (45%) felt that they were not receiving adequate information on various career paths available in the field of Medical Physics. They expressed a desire for information Michael Balderson Department of Physics and Astronomy Radiation Oncology Physics, University of Calgary

Bassey Bassey Department of Physics and Engineering Physics University of Saskatchewan

> Jason Crawford Department of Physics and Astronomy University of Victoria

Alejandra Rangel Department of Physics, The Credit Valley Hospital Mississauga, Ontario

Nadia Octave

Département de Radio-Oncologie, Hôtel-Dieu de Québec, Centre Hospitalier Universitaire de Québec; Département de Physique, de Génie Physique et d'Optique, Université Laval, Québec

regarding clinical (as COMP already provides) and non clinical medical physics positions (need for more thorough information) which led us to choose this as a meeting topic at this year's Annual Scientific Meeting (ASM).

This gives the perfect transition concerning the next part of the survey dealing with general attendance to the ASM. There

No: 61%

is a great need to motivate or encourage students to attend COMP and COMP Student Council Meetings as 51% of the students said they have never attended any COMP organized event; and the first reason they gave is that they have never thought of it.

Ninety-one percent of students surveyed confirmed that provisions of some form of financial support should be considered as it could motivate students to

attend the COMP conference and ultimately join COMP. When asked whether COMP should provide support for student presenters, through accommodation, travel expenses or registration fees, it is no surprise that the majority of responses were positive (80%). Of en student presenters are sponsored by their own programs/departments, however resources can be limited and circumstances may arise in which ASM-related expenses impact a student financially. For those cases, some form of funding can be considered. However, students also recognized that they do get some

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### World Congress on Medical Physics and Biomedical Engineering

Nancy Barrett

As you are aware, COMP will be partnering with the Canadian Medical and Biological Engineering Society (CMBES) to host the 2015 World Congress in Toronto from June 7 – 12th. This is an enormous opportunity for the Canadian medical physics community to further establish its presence on the world stage.

**David Jaffray,** along with Tony Easty of CMBES, will be Chairing the 2015 World Congress. While David and Tony were promoting the Toronto meeting throughout the conference, they were given an opportunity to make a more formal presentation at the closing ceremonies. Nancy Barrett, COMP Executive Director, was also present in Beijing to learn about the organizational aspects of the World Congress and staf the booth that was set up to promote the Toronto event. There was excellent support from the many Canadians in attendance in Beijing and special thanks to **James Robar** and **David Parsons** for their support in setting up and helping to staf the Canadian booth. There is definitely a lot of interest in the Canadian meeting.

COMP was well-represented in the scientific program of the 2012 World Congress. The following members were authors of oral presentations:

Wamied Abdel-Rahman, Saudi Arabia Ismail Aldahlawi, Saudi Arabia Anna Celler, University of British Columbia/BC Cancer Agency Marc Chamberland, Carleton University Amanda Cherpak, Ottawa Hospital Cancer Centre Tim Craig, Princess Margaret Hospital Joanna Cygler, Ottawa Hospital Cancer Centre George Ding, Nashville, TN Cheryl Duzenli, BC Cancer Agency Idris Elbakri, Cancer Centre Manitoba Bruce Faddegon, San Francisco, CA Ermias Gete, BC Cancer Agency Robert Heaton, Princess Margaret Hospital





David Jaf ray, Princess Margaret Hospital Brad Kemp, Rochester, MN Tomas Kron, Australia Patricia Lindsay, Princess Margaret Hospital Charlie Ma, Philadelphia, PA Thomas R. Mackie, Verona, WI



John McCaf rey, National Research Council Malcolm McEwen, National Research Council Andrea McNiven, Princess Margaret Hospital Jim Meng, Nova Scotia Cancer Centre Vitali Moiseenko, BC Cancer Agency Bernhard Norrlinger, Princess Margaret Hospital





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David Parsons, Nova Scotia Cancer Centre Stephen Pistorius, CancerCare Manitoba Tom Purdie, Princess Margaret Hospital Paul Ravindran, India James Robar, Nova Scotia Cancer Centre Dave Rogers, Carleton University Carl Ross, National Research Council Jan Seuntjens, Montreal General Hospital Michael Sharpe, Princess Margaret Hospital Rachad Shoucri, Royal Military College of Canada Tony Teke, BC Cancer Agency Wil VanDerPutten, Ireland Eric Vandervoot, Ottawa Hospital Cancer Centre Milton Woo, Odette Cancer Centre Tony Xu, Carleton University Lingshu Yin, BC Cancer Agency

If you are interested in getting involved in the 2015 World Congress, the organizing committee would like to hear from you! Please contact Nancy Barrett at nancy@medphys.ca.

#### Social Media and COMP - Facebook and LinkedIn

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and also the connections of the seconddegree connections (termed third-degree connections). This can be used to gain introductions to new people through mutual contacts, or gives you a potential audience or support network that is much larger than that of just those persons you have a direct connection to. It is possible to both communicate privately with your connections through your 'inbox' or publically by sharing a written message, and communication with other group members can be achieved on the group's page by 'starting a discussion'.

Like Facebook and Twitter it is also possible to follow special interest groups such as COMP and AAPM, and to companies and organizations that have a profile. Thus according to the LinkedIn website it can be used to search for (or advertize): career opportunities, consulting of ers, new ventures, job inquiries, expertise requests, business deals, reference requests, and of course getting back in touch with people you may have met.

So go ahead get yourself a LinkedIn account, join the "Canadian Organization of Medical Physicists" group (you can find it by entering then name in the search box at the top right of any LinkedIn webpage) and start communicating with all your fellow COMP'ers.

For more information about LinkedIn

please see www.linkedin.com or http:// en.wikipedia.org/wiki/LinkedIn.

What content would you be interested in seeing or interacting with on any of COMP's emerging social network sites? If you have an opinion post it at any of the following:

Twitter: @medphys

Facebook: www.facebook.com/ CanadianMedphys

LinkedIn: http://www.linkedin.com/group s?home=&gid=4135236&trk=anet\_ug\_hm

And for those of you searching for a fellow Nuc Med'er I can be found at

http://www.linkedin.com/pub/samanthaeustace/18/abb/961

#### Students, are you COMP members?

#### continued from page 77

form of financial support through reduced registration fees.

Half of the responders indicated that they planned to attend the annual meeting this year in Halifax, while less than one third were unsure, with their decision depending on project progress. Students who do not present their projects at the conference may not have financial support for their attendance.

This survey obtained responses from across Canada. It was considered to be representative of the medical physics student population studying in Canada, taking into account the variation in enrolment among the provinces.

This survey helped COMP to better understand and answer to the needs of its students' community. Through the COMP Student Council, a two-way communication channel is now open to provide broader student participation, an essential resource for promoting and maintaining synergy between COMP and the medical physics students across Canada.

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#### Nancy Barrett

### Medical Imaging Team Day – May 17, 2012

#### Background

During a meeting between CAMRT and CAR at the 2009 RSNA conference, the idea emerged for an initiative that would draw attention among other health professionals, legislators and the public to the imaging team and the crucial role its members play in the delivery of health services. While the Canadian Association of Medical Radiation Technologists (CAMRT) and the Canadian Association of Radiologists (CAR) were the two organizations that had the initial discussion, both recognized that it would also be a good idea to extend an invitation to other groups such as nuclear medicine physicians, sonographers and medical physicists.

After much preparation and many meetings, the first Medical Imaging Team Day was held in Ottawa on May 17th and was deemed a success by all participating organizations. On hand for the event were representatives of the partner organizations:

Amanda Bolderston, President, CAMRT Dr. Jamie Fraser, President, Canadian Association of Radiologists (CAR) **Dr. Peter McGhee, President, Canadian Organization of Medical Physicists (COMP)** Dr. John Kachura, President, Canadian Interventional Radiology Association (CIRA) Kim Boles, Past-President, Canadian Society of Diagnostic Medical Sonographers (CSDMS)

#### Accompanying staff:

Chuck Shields, CEO, CAMRT; Adele Fifield, CEO, CAR; Annie Bilodeau, Executive Director, CIRA and Nancy Barrett,



Executive Director, COMP. The Canadian Association of Nuclear Medicine (CANM) is also a partner but was not able to participate due to a death in Dr. Laurin's (CANM President) family. Tania DaCosta and Louise Pilon, CAR Communications staf also attended the media conference, while Leacy O'Callaghan-O'Brien, CAMRT, remained at the phone in the event of media requests.

On Medical Imaging Team Day, a paper was released that addresses the complex issues involved in promoting and implementing the highest standards for appropriate use of medical imaging in Canada. The paper was a collaborative effort of all participating groups. Many thanks to Glen Wells who provided input to the paper on behalf of COMP. The paper is available on the Imaging Team website at www.imagingteam.ca.

Members of the team met privately with MP Carolyn Bennett, former Liberal party health critic, on the evening of May 16. They began their day on May 17 meeting privately with Senator Art Eggleton, former Liberal Cabinet minister, and now co-chair of the Standing Committee on Social Affairs, Science and Technology. This committee recently released the report entitled Time for Transformative Change, a review of the 2004 Health Accord. The meetings provided an opportunity for introduction of the team, and for presentation of an overview of the issues that the team would like to explore further to develop national strategies on medical imaging. The team then proceeded to a media conference in the parliamentary press gallery, hosted by MP Pat Davidson, Sarnia-Lambton, a former technologist.

CAMRT president Amanda Bolderston led the media conference, with opening remarks that explained the purpose of the day and defined appropriateness in simple terms for the attendees:

"... Our medical imaging team is a perfect example of positive, productive collaboration in the health care system. We are here today to talk about how collaboration with Canadian decision makers and with other healthcare professions, to determine how the quality of diagnosis and treatment can be improved. This can be accomplished by greater understanding and attention to appropriateness. Appropriateness means the right test by the right person at the right time."

Amanda then introduced each of the other members of the team, who in turn explained their role on the team, linking it to

issues identified in the paper. Peter McGhee described the role of medical physicists in the areas of research and quality assurance. Amanda then concluded the press conference with the following remarks:

"Medical imaging affects all Canadians. These are the faces of professions that you may not always see, but we are working together to make imaging safer, and of the highest quality for all Canadians. Our professions collaborate in practice every day, but today is the first time that we have come together to celebrate the work that we do. Today is also the first time we have come together to speak with one voice on one issue: appropriateness. This is the start of an ongoing commitment to working together with governments and other stakeholders to define the issues that can be addressed through a national strategy on appropriate medical imaging. The key message we want to leave with you today is that appropriateness means the right test by the right person at the right time."

A CBC reporter attended the media conference to probe the team on the subject of 3D ultrasound. This has been a continuing story for the particular reporter over the last few weeks. Dr. Fraser and Kim Boles provided thoughtful and authoritative responses, which you can view at: http://www.cbc.ca/video/#/News/Canada/ Ottawa/1305550861/ID=2236351154.

The team then had the opportunity to dine in the Parliamentary cafeteria and attend the opening of Question Period to hear Pat Davidson ask for recognition of the Medical Imaging Team in the House of Commons. The podcast of statement of recognition in the House of Commons is found at 14.07.07 of this broadcast. http://parlvu.parl.gc.ca/ParlVu/TimeBandit/PowerBrowser.aspx? ContentEntityId=9081&EssenceFormatID=440

Finally, the team was interviewed by Jerry Zeidenberg, *Canadian Healthcare Technology (CHT)*, for a feature article in the July issue of CHT. Medical Imaging Team day was also featured in the CHT E-messenger.

#### **Other Media Coverage:**

http://www.canhealth.com/News1968.html

http://www.cbc.ca/news/politics/inside-politics-blog/2012/05/ orders-of-the-day---surprise-its-an-unannounced-tripleministerial-omnibudget-subcommittee-jamboree.html

### CNSC Feedback Forum Heads Up!!! Discussion Paper on Proposed Changes to the Radiation Protection Regulations

Mark Broeders Program Officer Accelerators and Class II Facilities Division Canadian Nuclear Safety Commission

The current Radiation Protection Regulations (RPRs) (http://laws-lois.justice.gc.ca/eng/regulations/sor-2000-203/ page-1.html) came into force in 2001 and are based upon the 1991 recommendations of the International Commission on Radiological Protection (ICRP 60). The ICRP recommendations form the fundamental basis of radiation protection worldwide and underlie the International Atomic Energy Agency's (IAEA) Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (IAEA BSS).

Over the intervening years, the ICRP recommendations have been updated and revised to ensure they remain relevant, useful and suitable for worldwide use. In 2007, new ICRP recommendations (ICRP 103) were published. While these did not change significantly from the 1991 recommendations, some of the key elements in dose assessment did change and a proposed method for further radiation dose optimization was introduced.

In April 2011, the CNSC established the CNSC Fukushima Task Force to evaluate the operational, technical and regulatory implications of the March 11, 2011, nuclear event in Japan in relation to Canadian nuclear power plants. Overall, the Task Force agreed that the current RPRs suf ciently protect the health and safety of persons under both normal and accident conditions. However, the Task Force recommended that the RPRs be reviewed to be more consistent with international guidance and to describe the regulatory requirements needed to address radiological hazards during the phases of an emergency in greater detail.

To ensure Canada's radiation protection requirements continue to align with international standards, the CNSC has conducted a review of the RPRs. As a result of that review, the CNSC believes that certain areas within the RPRs can be strengthened. In particular, changes are needed to:

- harmonize the RPRs with the most recent ICRP recommendations (ICRP 103, 2007) and International Atomic Energy Agency Basic Safety Standards (IAEA BSS, 2011);
- address the recommendations of the CNSC Fukushima Task Force, and;
- improve clarity and address gaps in the RPRs based on lessons learned and experience gained since the RPRs came into force in 2001.

The CNSC intends to issue a Discussion Paper outlining the proposed changes in the summer of 2012.

Discussion papers play an important role in the selection and development of the Canadian Nuclear Safety Commission's (CNSC) requirements or guidance. They are used to solicit early public feedback on CNSC policies or approaches.

The use of discussion papers early in the regulatory process is consistent with the CNSC's commitment to a transparent consultation process. The CNSC analyses and considers this early feedback when determining the type and nature of requirements and guidance to issue. This process is intended to streamline document development and publishing.

Discussion papers are made available for public comment for a specified period of time. At the end of the first comment period, CNSC staf review all public input. Public comments are then posted for feedback on the CNSC Web site for a second round of consultation.

The CNSC takes all feedback received from this consultation process into consideration in determining its regulatory approach.

The Medical Physics community is encouraged to take this opportunity to review and comment on the proposed changes. The CNSC will be seeking feedback from licensees, the Canadian public and other stakeholders on the proposed amendments described in the discussion paper. Revisions to the RPRs may result in additional implementation costs and administrative burden to licensees. The CNSC actively encourages stakeholders to voice their views on these issues.

Notification will be sent out to all key stakeholders, including the Radiation Safety Of cers for all Class II Nuclear Facility Licences, once the Discussion Paper has been published. Access to the Discussion Paper and instructions for providing feedback will be available via the CNSC website.

Some of the topics that have been tentatively identified for possible inclusion or revision within the RPRs include:

- radiation weighting factors and tissue weighting factors
- radiation exposure to caregivers
- · radiation protection programs and responsibilities
- use of dose constraints
- emergency dose limits
- posting of signs
- · calibration of radiation detection and measurement instrumentation
- radiation protection requirements for transport carriers

The CNSC will consider all feedback received from this consultation process before moving forward with any amendments to the RPRs.

# Optically-stimulated luminescent dosimetry: an alternative to TLD for *in vivo* measurements?

Charlie Kirkby, Michael Balderson, Ian Nygren, J. Eduardo Villarreal-Barajas, and Esmaeel Ghasroddashti

Alberta Health Services

#### Introduction

In the recent report of Sawakuchi et al.<sup>1</sup> on the status of in-vivo dosimetry in Canada it was reported that 27 of the 34 centres that responded to the survey perform in-vivo dosimetry and that one of its major drawbacks included increased time staf dedicate to working with thermoluminescent dosimetry (TLD) systems. In the survey, no mention was made of opticallystimulated luminescent (OSL) dosimetry systems, which are potentially less labour intensive than crystal or powder-based TLD systems. Our centre has been using Landauer's InLight microStar OSL dosimetry system with "nanodot" aluminum oxide detectors (Landauer Inc., Glenwood, Il) for in vivo dosimetry since June 2010. As new radiation therapy centres are constructed within our province, there has been interest in the performance of this system. Since it may also be of interest to our colleagues across the country, we present a review of the system and its characteristics.

#### System Characteristics

The InLight microStar system (shown in Fig. 1) was purchased in 2009, which included the reader, a dedicated laptop computer, sof ware, a bar-code scanner, a carrying case, and 50 nanodot aluminum oxide dosimeters. While TLD reader systems range considerably in price, the OSL system was comparable in price to some of the most basic single chip TLD reader systems. Replacement dosimeters are available at costs of approximately \$5 or \$10 for the  $\pm 5\%$  (standard) or  $\pm 2\%$  (screened) models, respectively.

Full details of the theory behind OSL dosimetry and the microStar readout process are available elsewhere.<sup>2-4</sup> In brief, the "nanodot" dosimeters consist of an Al2O3:C crystal fixed inside a light-tight polyethylene casing that provides 0.04 g/ cm<sup>2</sup> of intrinsic buildup,4 giving it dimensions of  $1.0 \times 1.0 \times 0.2$  cm<sup>3</sup>. Larger "dot" detectors are available as well, but we have not tested these. Each nanodot has a barcode sticker that can be scanned, allowing for automatic identification of the crystal (and

thus its associated unique sensitivity factor) in the microStar sof ware with minimal chances for identification error.

The phenomenological operation is similar to that of more familiar thermoluminsecent dosimeters. The carbon doping creates imperfections in the crystal lattice that can act as traps between valence and conduction bands that will trap electrons or holes created during the irradiation process. Recombination centres are generally created from oxygen vacancies where holes can be trapped (referred to as  $F^+$  centres). When the crystal is optically stimulated, electrons can gain enough energy to leave their traps and recombine with holes at the  $F^+$  centres. The recombination energy is transferred to a luminescence centre where light is released with a peak wavelength of 410-420 nm.

#### Operation

Af er irradiation the nanodot is scanned via the barcode reader and placed into an adapter that goes into the reader, which is then closed. The readout process uses a light emitting diode to stimulate optical emissions from the crystal, which are then measured using a photomultiplier tube with a high-sensitivity photon counting system. The number of counted photons is proportional to the radiation dose received by the OSLD crystal. The readout process does not itself anneal the crystal. Signal is lost at a rate of roughly 0.05% per reading (see below).

From a practical point of view the setup is reasonably simple. The reader attaches to a laptop via a USB cable. The microStar reader sof ware comes already installed on the laptop, but can be installed on a network server if desired. The sof ware naturally requires some configuration and the reader itself must be calibrated. The procedures are outlined step-by-step in the manual. Essentially, reader calibration involves irradiating a few OSLDs to known doses, reading them and typing in the doses they have received. Landauer recommends recalibration every six months or if the reader is moved.



Prior to reading, the reader requires 10 minutes to warm up. For stable readings the literature also suggests a lag time of at least 10 minutes after irradiation to avoid signal from the unstable traps.<sup>5</sup> There is no additional equipment such as a nitrogen tank common with TLD readers that needs to be operated or attended to. The reading operation is straightforward and requires only a few seconds. The user has the option of exporting the data in various formats including a Microsoft Excel Spreadsheet. The user can tailor the output to include much of the data relevant to the readout process and includes conversions of the PMT counts to deep dose equivalent, shallow dose equivalent, beta dose, and eye lens dose when configured.

#### Annealing

The low cost of the detectors and factory-provided calibration factors (discussed below) make one-time clinical use a financially viable option. This eliminates any risk of transferring pathogens between patients without the need for cleaning or enclosing the detector in a disposable casing. Users may however be interested in repeated use, e.g. for determining in-house calibration factors or for research projects. This requires annealing of the nanodots - exposing the crystal to a light source for suf cient time that enough electrons and holes are liberated from their traps so as not to generate a signal discernable from background. We are aware of commercially available annealing systems that use high-intensity LEDs or f uorescent lamps for this purpose. However, the nanodot cassette can be opened with a paper clip, exposing the crystal to light (see Fig. 2). We have found that placing opened OSLDs on an old light box acts as an ef ective annealing process. In Fig. 3 we show a log-log plot of the relative signal vs. time measured with such an approach. Obviously the specific slope can be expected to vary with factors such as light intensity, but in general this simple approach can reduce the signal from an irradiated nanodot by two orders of magnitude in less than two hours and by three orders of magnitude overnight. One word of caution: it has been reported that af er an accumulated dose of 20 Gy, the sensitivity drops at a rate of 4% per 10 Gy of additional dose.4

#### **Results of Interest**

While commissioning our unit we investigated various aspects of OSLD performance. Most of these tests have been investigated in the literature. However there is still value in revisiting these tests both to af rm reproducibility with the new technology, and in order to define the performance characteristics of an individual system.

#### Dosimetric Accuracy

The nanodots are manufactured with accuracy of either  $\pm 5\%$  (standard – which we use in our clinic) or  $\pm 2\%$  (screened) as stated by Landauer. We exposed 20 nanodots to a dose of 200 cGy in a 6 MV photon beam under full buildup conditions in solid water. (All doses are to water following AAPM TG-51 protocol). Using the manufacturer's sensitivities, the OSLDs measured a mean dose of 200.1 cGy with a standard deviation of 11.5 cGy or 5.7%. The most extreme case measured 27.1 cGy or 13.6% high. The individual precision (expressed as a standard deviation about the mean over four measurements for an individual OSLD) ranged from 1.0% to 4.1% with a mean value of 2.0% – suggesting more accurate measurements may be possible with individually determined sensitivity factors.

In a separate experiment, we exposed OSLDs to a range of known doses (~5 to 400 cGy) at 6 MV. The results are shown in Fig. 4. Here the relative standard deviation from the known value was 6.7%. OSLDs have been shown to exhibit a small supra-linear behaviour above approximately 300 cGy,<sup>4</sup> but this is only a ~ 4% ef ect at 400 cGy, which is not detectable with a measurement uncertainty of 6.7%.

To test the readout reproducibility and signal loss with readout, we repeatedly read a single OSLD 50 times af er it had been irradiated to 200 cGy at 6MV. The results are shown in Fig. 5. The standard deviation as a percentage of the mean over the first 10 readings was 1.3%. Over the 50 readings, we registered an average signal loss of 0.05% per reading, which is consistent with Landauer's claims. This of ers an advantage over TLD systems in that the OSLD chip can be re-read in the event the data is lost or in question.

#### Energy Sensitivity

The OSLDs have been shown to be independent of energy for photons and electrons in the megavoltage range<sup>4, 5</sup> however, there is a known dependence in the kilovoltage range, which is due to the ef ective atomic number of aluminum oxide (11.2). OSLD output has been shown to dif er by a factor of 3 in comparing the delivery of 1 Gy from a 150 kVp beam to a 6 MV beam.<sup>6</sup> (For comparison, the same factor for a TLD 100 is approximately 1.1.<sup>7</sup>) In an imaging or orthovoltage context energy-specific calibration factors are necessary for OSLDs.

In a therapeutic context, when the OSLDs are used for measuring out-of-field dose (eg. confirming dose to an implantable cardiac device), the lower energy of the scattered radiation implies a correction may need to be applied. Recent work by Scarboro *et al.* has demonstrated this correction could be greater than 30% in extreme circumstances.<sup>8</sup> We tested a scenario measuring dose in a solid water phantom 10 cm from the edge of a  $10 \times 10$  cm<sup>2</sup> 6 MV photon field at 1.5 cm depth and



measured a factor of  $0.91 \pm 0.03$  to correct to the ion chamber reading. This result was consistent with Scarboro et al. who reported a factor of  $0.89 \pm 0.02$  for the same setup.

#### Angular Dependence

The OSLDs have an angular dependence. Under full build-up conditions, edge-on irradiation scenarios, compared to broadside scenarios show dif erences of 4% in a 6 MV beam, 3% at 18 MV, which is due to self-attenuation and the air gap within the cassette.9 Our own measurements under full build-up were not able to identify any angular dependency to within measurement uncertainty (5%). When used for entrance dosimetry, the literature suggests a strong angular dependence with the OSLD measuring high by a factor of 1.72 at an angle of 75 degrees (for screened nanodots).5 We conducted our own simple experiment to test this, mounting OSLDs on an adjustable platform (the Iso-Align from Civco Medical Solutions, Kalona, IA). The OSLDs were irradiated for 200 MU at 6MV with the platform at varied angles (0° representing normal incidence, 90° being the "edge-on" orientation). The results are shown in Fig. 6. For angles greater than 45° we detected a change in relative OSLD signal beyond experimental uncertainty, but in contrast to Kim et al. at 75° our signal was only high by a factor of 1.38. It is important to note here that surface dose itself can vary as a function of angle as a result of changes in the buildup phenomenon and may be inf uenced by contaminant electrons.

#### Conclusions

The microStar reader and nanodots provide a simple, fast, and cost-ef ective means of performing *in vivo* dosimetry. In general the measurement accuracy we observed was approximately 5-7% with the standard nanodots. This is generally consistent with the performance seen with TLD-100 systems that we are familiar with. It of ers advantages over TLD systems of requiring less dedicated time for operation, dose not require a nitrogen source, and the OSLDs can be re-read. The OSLDs are not tissue equivalent and have energy-specific sensitivities below the megavoltage range that may af ect out-of-field measurements. Overall, we have found the OSL dosimetry system to be an ef ective substitute for a TLD system.

#### Acknowledgements

The authors would like to acknowledge Peter Dunscombe for useful discussions on this work.

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### COMP Professional Affairs Committee Update

Craig Beckett Allan Blair Cancer Centre Regina, SK

Our members are of en called upon to reconcile aspects of their practice nationally. These requests are usually in the context of supporting changes to services provided, changes in staf ng levels or acquisition of equipment. Surveys addressing specific issues of concern are of en circulated by individual members. While the results of these surveys may well serve the individuals specific purpose at a point in time, the data is not captured and archived in a standard and generally useful way and not generally available to our members, the medical community or the public. The number of such purpose specific surveys can be a burden. Compliance to ad hoc surveys may be less than might be achieved with some organization. COMP is in a good position to organize these surveys, particularly the technical components.

The COMP professional af airs committee is currently investigating the feasibility and cost of implementing some form of an ongoing technical database. The project could improve the quality of data, provide historical data and improve distribution. A small budget has been allocated with which we hope to identify project scope, potential sof ware platforms, address issues related to data ownership, security and liability, estimate implementation cost and identify a template in which we can cast our content and functionality requirements in a form amenable to a web designer. We hope to complete this feasibility study by fall, 2012.

Rather than circulate a traditional survey and then collate the results, the working concept is to develop a structured database and associated web portal for data entry and review. Data entry would only be required for items that have changed; this should result in reduced busy work. Tools could be implemented to maximize participation. A consistent database would improve quality of the data and enable a meaningful historical perspective. Potentially, the web portal might also be programmed to automatically or semi-automatically collate and publish the data. The cost of these functional components must be estimated and assessed. The question of scope must be carefully considered. Certainly the interesting endpoints are the issues of services, staf ng and equipment. Such high level requirements motivate the development of a fairly comprehensive database. However, we should also consider our points of strength as well as activity in other organizations. While we are not aware of any surveys or databases related to oncology, diagnostic imaging or nuclear medicine achieving the level of organization and functionality advocated above, COMP is not alone in the ef ort to address this general problem.

- The Canadian Association of Radiation Oncologists (CARO) has for many years circulated a brief survey with fairly broad scope to its members.
- The Canadian Institute for Health Information (CIHI) solicits some minimal information regarding imaging equipment by contacting hospital and cancer centre employees.
- The Canadian Partnership Against Cancer (CPAC) has been steadily increasing their data acquisition and publishing activity respecting Radiation Oncology. Information is solicited from key staf in Oncology centres.

COMP is probably in the best position to steward the collection of technical data related to equipment and perhaps some general demographic, service and staffing data related to our members areas of work. Initially, the plan is to develop database content along these lines. Collaboration with CARO, CIHI, CPAC and CAMRT is important. CPAC is a well-funded organization with growing interest in data collection. There may be opportunities to merge our data collection efforts with CPAC's.

In the coming months, we'll be developing a content proposal, functionality requirements and cost estimates. Please feel free to provide me with any comments and suggestions.

### New COMP Members

Please welcome the following new members who have joined COMP since our last issue:

Last Name	First Name	Institute/Employer	Membership Type
Abdellatif	Ady	London Regional Cancer Program	Full
Anderson	Danielle	Cross Cancer Institute	Student
Belliveau	Jean-Guy	Robarts Research Institute	Student
Budzalewicz	Nancy	Laurentian University	Student
Crawford	Jason	University of Victoria	Student
Degila	Nicephore	Institut Gustave Roussy	Student
DeVries	Amanda	Juravinski Cancer Centre	Associate
El Gamal	Islam	Carleton University	Student
El-Sherif	Omar	University of Western Ontario	Student
Fattahi	Shahin	Modus Medical Devices Inc.	Full
Heikal	Amr	University of Alberta	Student
Laamanen	Curtis	Laurentian University	Student
Lessard	François	Université Laval	Student
Milroy	Desmond	McGill University	Student
Parsons	David	Dalhousie University/Nova Scotia Cancer Centre	Student
Pekar	Julius	Juravinski Cancer Centre	Full
Pierce	Greg	London Regional Cancer Program	Full
Poulin	Éric	Université Laval	Student
Roumeliotis	Michael	The Ottawa Hospital	Full
Therriault-Proulx	François	Université Laval / MD Anderson Cancer Center	Student
Yao	Weiguang	Eastern Health Cancer Care Program	Full

Congratulations to our past student COMP members who are now full members:

Last Name	First Name	Institute/Employer
Becker	Nathan	Princess Margaret Hospital
Chytyk-Praznik	Krista	Nova Scotia Cancer Centre
Cropp	Robert	Vancouver General Hospital
Foottit	Claire	Ottawa Hospital Cancer Centre
Hoisak	Jeremy	University of California at San Diego
Kildea	John	McGill University Health Centre
Lamey	Michael	Credit Valley Hospital
Mathew	Lindsay	Juravinski Cancer Centre
Matthews	Quinn	BC Cancer Agency - Vancouver Island Centre
Owen	Daron	R.S. McLaughlin Durham Regional Cancer Centre
Sabondjian	Eric	London Regional Cancer Program
Sarfehnia	Arman	McGill University Health Centre
Thebault	Jonathan	SMDB Jewish General Hospital

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#### Message from the COMP President

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remaining space would be to acknowledge the contributions of those who, af er having worked so diligently on behalf of us all, are now stepping down. While the accomplishments of these individuals in their respective roles entail much more than can be mentioned here, allow me to identify at least one highlight for each. Under the leadership of Jean-Pierre Bissonnette, the Quality Assurance and Radiation Safety Committee adopted its new name and mandate. One particular accomplishment that resulted was the spearheading of COMP's significant contributions to the ef orts of the Canadian Partnership for Quality Radiotherapy (CPQR). Marco Carlone achieved a number of firsts as Councillor for Science and Education, including being the first to fulfill (and survive) that role. Marco was instrumental in reorganizing COMP's approach to the science and education portfolio, including the introduction of the Student Council, and I believe everyone is well aware of his particular success with establishing the Winter School. As Councillor for Communications, Tony Popescu took on the challenge of how COMP could best leverage social media and we are now embarking upon that road. Even though his six year commitment to COMP will come to a close with the end of his term as Past-

President, Jason Schella continues to carry responsibility for core COMP activities. In fact, he has become so proficient that I am wondering if it might not be a good idea to establish a new Board position: Past-Past-President. (Amongst his many hats, if you do happen to be in attendance at the Halifax meeting, keep in mind that he is Chair of the Local Arrangements Committee for the conference.) Idris Elbakri will also be completing his term as Editor of InterACTIONS. Idris has significantly streamlined the process for producing the newsletter and, let's face it, without Idris I would not have had these opportunities to monopolize your attention (for which you can thank him...or not?). Probably the only part of the process that he has not managed to streamline is getting people like me to adhere to submission deadlines. As with those that preceded them and those that will follow, COMP does owe these individuals a sincere thank you for all of their diverse and invaluable contributions. And now that I hope I have them feeling good, I just want to raise the point that, in my experience, concluding one position only makes you fair game for recruitment to another....

On that note, for those of you we have not yet managed to coerce, I will return to a theme that I introduced in my first message as President: get involved. COMP has survived, evolved, and excelled because of the dedication and commitment of those that gave of their time and talents to make things happen. As an organization, COMP continues to grow and is more active and dynamic today than at any time in its history. My hope is that at the same time COMP is successfully maintaining a meaningful relevance to the profession of medical physics in Canada. If this is a reasonable assumption, then is it unreasonable to believe that each individual member should be able to identify at least one thing within the spectrum of activities in which COMP is engaged that would have particular appeal? Be a representative for COMP with another society, volunteer as an expert resource, get on an advisory committee, become a Councillor, run for President. Let's have elections instead of acclamations, stimulate more dialogue and discussion, truly champion comprehensively the profession of medical physics, and make sure that COMP meets the needs and expectations of all members.

Ok, took my last shot so I can now leave the pulpit contented. Let me conclude by stating that it has been a pleasure to serve as President. My thanks to you for the opportunity and the privilege.

#### Message from the CCPM President

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market, and as consumers of goods, in a rational manner to achieve maximum utility or benefit for themselves or their families. Volunteerism appears to be at odds with this assumption. Economists have contorted themselves to try to fit volunteerism into maximum utility theories – is there a future benefit due to investment of volunteer labour? Is it given of free will, or is it coerced? Are there non-monetary rewards which can be assigned a monetary value? I take the view that people are a lot more complex and interesting than economists think, and they sometimes do apparently irrational things because they care about something beyond personal gain, or because it is the right thing to do. When we tally up all of the Canadian medical physicists who volunteer on COMP or CCPM Boards or committees, contribute CCPM exam questions, act as markers or examiners, etc, we find that about 25% of the Canadian medical physics community have volunteered on behalf of the profession. It is remarkable that so many medical physicists provide so much time and ef ort to nurture and advance our profession. Or is it really so remarkable? It's a great profession, filled with smart people who earn a good living doing interesting things that benefit society and patients in need. Perhaps it is only natural that many are willing to provide some time and ef ort in return. Regardless, such high levels of engagement are clearly indicative of a robust and healthy profession, to which I am grateful to have had the opportunity to provide some small service.

## Message from the Editor

Idris Elbakri, PhD, MCCPM CancerCare Manitoba



This is my farewell column as editor of Inter*ACTIONS*. It is hard to believe that 3 years have gone by since I was recruited for this position. Time went by so fast that I had to double check a couple of times to make sure that my term is really over!

I returned a few days ago from the World Congress on Medical Physics and Biomedical Engineering, which was held in Beijing, China. It was nice to meet a few fellow Canadians on the other side of the globe. Whenever I meet members of COMP at scientific meetings, they usually offer some encouraging compliments to the "man behind the newsletter". Well, while I feel flattered the real praise needs to go the contributing members who keep a steady stream of articles coming. We have a very interesting newsletter. It offers its readership a mixture of reports from organization leaders, articles of technical or scientific nature, travel reports, regulatory topics and topics of general interest to the profession. In this regard, InterACTIONS reflects the varied interests of our membership and the multidisciplinary nature of our work. As I wind down my term as editor, I can only thank you for the privilege and honor to serve you in this role. I wish the incoming editor, Christopher Thomas, all the best in his new role as editor.

Finally, China is a fascinating country for one to visit. I confess that I could not wait for the Congress to conclude for me to fully immerse myself in full time sightseeing for a few days. I had the opportunity to visit the major historical sites in Beijing, to hike parts of the Great Wall not frequented by tourists, dine at a rural guesthouse and shop at world-class Western style malls. It was an experience were one felt the wealth of history, and tension of the present and the ambition for the future

All the best to you all!

### Dates to Remember

Meeting and CCPM Symposium July 11 – 14th, 2012 Halifax, NS 2012 AAPM Annual Meeting July 29 – August 2, 2012 Charlotte, NC

2012 COMP Annual Scientific



4th Annual COMP Winter School January 27 – 31st, 2013 Mont Tremblant, QC



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