

InterACTIONS

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THE 2015 ATLANTIC MEDICAL PHYSICS MEETING

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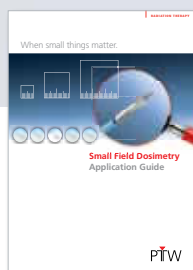
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COMP BOARD

President:

Marco Carlone PhD, MCCPM
Princess Margaret Hospital
Toronto, ON
Tel: (416) 946-4501 ext: 2409
marco.carlone@rmp.uhn.on.ca

Past President:

Luc Beaulieu, PhD
CHUQ—Hôtel-Dieu de Québec
Québec, QC
Tel: (418) 525 4444 ext 15315
beaulieu@phy.ulaval.ca

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Interior
Kelowna, BC
Tel: (250) -712-3966 ext 686738
mhilts@bccancer.bc.ca

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McGill University Health Centre
Montreal, QC
Tel: (514) 934-1934 ext. 44152
esoisson@mephys.mcgill.ca

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Crystal Angers, MSc, FCCPM
The Ottawa Hospital Cancer Centre
Ottawa, ON
Tel: (613) 737-7700 ext 70030
cangers@ottawahospital.on.ca

Directors:

Craig Beckett, MSc, FCCPM, dABR
Allan Blair Cancer Centre
Regina, SK
Tel: (306) 766-2682
craig.beckett@saskcancer.ca

Stephen Breen, PhD, MCCPM
Princess Margaret Hospital
Toronto, ON
Tel: (416) 946-4501 ext 5421
stephen.breen@rmp.uhn.on.ca

Kyle Malkoske, MSc, FCCPM
Royal Victoria Hospital
Barrie, ON
Tel: (705) 728-9090 ext. 43307
malkoskek@rvh.on.ca

Daniel Rickey, PhD, MCCPM
CancerCare Manitoba
Winnipeg, MB
Tel: (204) 787-1764
daniel.rickey@cancercare.mb.ca

Atiyah Yahya, Ph.D., MCCPM
Cross Cancer Institute
Edmonton, AB
Tel: (780) 989-4335
ayahya@ualberta.ca

CCPM BOARD

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COMP/CCPM Office

300 March Road, Suite 202
Ottawa, ON, K2K 2E2 Canada
Telephone: (613) 599-3491
Facsimile: (613) 595-1155
E-mail: Gisele.kite@comp-ocpm.ca
Website: www.comp-ocpm.ca

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Christopher Thomas, Ph.D., MCCPM
Nova Scotia Cancer Centre
Medical Physics Dept.
5820 University Avenue
Halifax, NS B3H 1V7
Email: chris.thomas@nshealth.ca
Phone: (902) 473-1302

Members of the Editorial Board include:

Idris Elbakri
Luc Beaulieu
Parminder Basran

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COMP/CCPM Office
300 March Road, Suite 202
Ottawa, ON, K2K 2E2 Canada
Telephone: (613) 599-3491
Facsimile: (613) 595-1155
E-mail: Gisele.kite@comp-ocpm.ca
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MESSAGE FROM THE COMP PRESIDENT

In my last message to you, we were just getting ready to start the World Congress, and I was reflecting on how beneficial the collaboration with the Canadian Medical and Biological Engineering Society had been. Now that the event has passed, I believe that this event will be remembered in the history of Canadian Medical Physics as the time COMP became a recognised world leader in Medical Physics.

As COMP's president, I get a lot of comments from different people about many aspects of COMP and our profession. In terms of the World Congress, many people, COMP members, and other people, offered me their compliments and congratulations about the meeting. Of all of these, the one that stuck out the most for me was from a COMP member who could not attend the World Congress. This person follows social media, and commented that through our social media efforts, she felt as though she could share in the excitement of the meeting almost as much as if she were physically present at the world congress. I repeat this to you, because, for me, this comment speaks about many of the good things that we (the medical physics profession) do, whether we know it or not.

I am not a social media expert by any means – in fact I am quite mystified by some of the social media events that become popular. It seems to me, though, that most people are interested to know and learn things/events/ideas that resonate with us and that other people are passionate about. In organising the world congress, I think that what the organisers did well (full disclosure: I was one of the organisers) was to organise the science into elements that reflect what medical physicists and biomedical engineers do best, which is to use any form

of technology to improve healthcare. Many of the enthusiastic social media contributions (see <http://medphysz.blogspot.ca/2015/06/social-media-experiments-and-iupesm.html?m=1> for a fantastic write up by Parminder Basran) were about the passion that many physicists and engineers have about what it is that we do.

I was reminded of this over the past weekend in a completely different setting: my daughter's birthday party. I was speaking to the father of one of her school friends, and naturally, we exchanged stories about what we do. He is a lawyer, but as I explained what I did he became quite interested in what medical physicists do. On several occasions he said to me that what I did was fascinating and interesting and that he wanted to know more. But most remarkable of all was his comment on how lucky he thought I was simply because I am able to help people in the way that I do. I admit that there are times when I wonder if what I do actually helps people, most often these thoughts come on days when the constant weight of the somewhat bureaucratic system that I work in wears down on me most. However, when I understand the reaction of other people who see our profession from the outside, I am reminded that indeed I am lucky to have the ability and opportunity to improve our health care system through improving technology. But, luck is not necessarily a chance happening. I prefer the definition of a former colleague of mine: luck is when opportunity meets preparation.

Medical physicists tend to be curious people who are able to focus on a task and not be happy until we find the most complete or elegant way of accomplishing it. In medicine, there are many



Dr. Marco Carlone

problems that need solving, and as in other areas of progress, many, if not most, improvements in healthcare involve technology. When I go to conferences I am amazed by the vast methods that medical physicists find to solve medical problems. In putting together the scientific program for the World Congress, the scientific committee was particular about capturing all the interesting areas that physicists and engineers have worked on to improve human health. This involved traditional areas of health care, but also health in the broader global context involving problems of urban design and gender issues. This tremendous scientific program was the opportunity, but where physicists and engineers really were able to show our talent, I believe, was in the way we showed how passionate we are about these subjects. This is why I believe that my colleague who could not attend the World Congress was able to benefit even though she was quite far away. Because those who attended were able to convey the genuine excitement about the congress

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MESSAGE FROM THE CCPM PRESIDENT

Summer is a time for all of us to take vacations, spend time with our families, and re-energize ourselves. Luckily for the CCPM Board Members, summer also happens to be a slower period for the activities of the College! However, one major change occurred during this summer. Our new website has been activated! The website address has not changed, so you can still access it via www.ccpm.ca, but the look is completely different. I invite all of you to visit the site. It is much easier to navigate within the site and to find the information you are looking for. I would like to thank all of those who worked on the re-design, and especially Darcy Mason, Horacio Patrocinio, Raxa Sankrecha, Matthew Schmid, Gisèle Kite and Nancy Barrett. Please forward any comments you might have on the new website to any of the Board members.

Over the last few CCPM Board meetings, the Board has been developing a policy on cheating, which is missing from our regulations and is typical for certification bodies. The final regulation changes related to this should be approved during a teleconference held in September. Please look for the change to appear in the Regulations posted on the website. Traditionally, the Board meets in November to continue its preparation for the 2016 MCCPM and FCCPM exams. This meeting is also an opportunity to review our regulations and to work on various projects of interest to the College. Some changes should make their way to the Regulations

in the next few months. The Board is also working on a policy regarding internationally-trained physicists. The goal here is to provide a path to certification for these individuals, i.e. a "bridging" program. We are hoping to have this completed during the November Board meeting. Finally, discussions are continuing, in collaboration with COMP, relating to a certification on Bone Mineral Densitometry (BMD). This certification would be similar to the Mammography certification currently offered by the College. A certification in BMD exists in Ontario and there is some interest in establishing this throughout Canada.

Upcoming important dates to remember! The final version of the question banks for the MCCPM exams will be posted on the CCPM website by October 1st. There are always a few changes to the Examination booklet every year. Candidates for the 2016 exams should make sure to download the latest version after October 1st. As in past years, the deadline for application for the 2016 MCCPM Exam will be in early December. Again, please refer to the website for the exact date and the application instructions. For those recertifying this year, the deadline to submit your recertification documentation was October 16th, 2015. This year, we had a record 96 members who were scheduled to recertify. If you have any questions regarding your recertification, please contact our Registrar, Raxa Sankrecha (registrar@ccpm.ca), or Gisèle Kite (gisele.kite@ccpm.ca).



Dr. Clément Arsenault

EXECUTIVE DIRECTOR REPORT

I am writing this just before Labour Day Weekend and summer is about to come to an end and what a lovely summer it was!

While things typically slow down in the summer as COMP members and volunteers enjoy vacation time, it doesn't mean that there isn't a lot going on! I am pleased to announce that (finally) we have launched the new COMP and CCPM websites. As you know, this has been an ongoing project and has involved a great deal of time on the part of the COMP office as well as many volunteers to whom we are most grateful.

The COMP site now has the URL www.comp-ocpm.ca, and while we still have the registered domain www.medphys.ca (which automatically re-directs to the new site) the move to the new address is more reflective of our organization. The email addresses for Gisele Kite and myself have also changed to gisele.kite@comp-ocpm.ca and gisele.kite@ccpm.ca, and nancy.barrett@comp-ocpm.ca and nancy.barrett@ccpm.ca. As with any change (especially involving technology), we anticipate that there will be some challenges as we have introduced new systems for membership management, registration, dues renewal, CCPM re-certification etc. Thank you in advance for your patience and please contact us at any time if there are any problems or concerns.

The profession was very well-represented recently at the Women in Physics Canada Conference. COMP Vice-President Michelle Hilts gave a keynote presentation on The Future of Breast Radiotherapy. As well, COMP member Nadia Octave served as a panelist on the Challenges of Women in Physics discussion. Nadia recently submitted a proposal to the Board requesting that COMP introduce a Women in Physics Committee.

The Board is supportive of the Committee, so stay tuned for further developments (*actually, see Nadia's article in this issue. – Editor*).

COMP members continue to be sought out as subject matter experts to improve patient care. For example, because of the important contribution that Canadian medical physicists make to the Journal of Applied Clinical Medical Physics (JACMP) in terms of volume and quality of articles, COMP has been invited to play a larger role in this important publication by nominating Section Editors for this journal. More information about this opportunity can be found in this issue.

As I mentioned in the July issue, COMP has entered into a partnership with Sosido, an online knowledge sharing platform for professional healthcare associations and their members. Sosido bridges silos of specialty, discipline, and centre to speed knowledge transfer, promote collaboration, and broadcast contributions of each group to the broader healthcare community. More information will be shared with you about this partnership over the next few months, and as I mentioned, you will be provided with an opportunity to opt out should you not wish to participate. More information is available at www.sosido.com.

Our focus over the next few months will be continuing the work on the new COMP and CCPM websites and planning and preparing for our upcoming meetings. The 2016 Winter School which will be taking place at the Fairmont Le Chateau Montebello, the world's largest log cabin, from February 7th to 11th. The 2016 Annual Scientific Meeting will be taking place in colourful St. John's, Newfoundland from July 20th to the 23rd. The creative teams that are organizing both meetings,



Ms Nancy Barrett

under the leadership of the Science and Education Committee, are committed to introducing new and interesting content to ensure that the meetings are fresh and stimulating. I encourage you to consider joining us for the professional development and the opportunity to network with your colleagues.

In addition to these two large meetings, we are also aware that local and regional continuing education events also provide an opportunity for rich learning and networking. COMP is committed to supporting these local and regional programs. Not only will we promote the programs to our membership, funds have been allocated to provide financial support to these programs if required. For example, COMP recently provided financial support to the 2015 Atlantic Medical Physics meeting. Please contact myself or Gisele Kite for more information about this sponsorship opportunity.

As always, thank you for your continued support and participation. Please contact me anytime with ideas and feedback.

CNSC FORUM:

A RETROSPECTIVE OF THE REGULATORY PROCESSES FOR CLASS II FACILITIES: THEN AND NOW

Kavita Murthy and **Jeff Sandeman**

Accelerators and Class II Facilities Division

It's been 12 years since we both left the medical sector and, within weeks of each other, started to work for what was then the Canadian Nuclear Safety Commission's Class II Nuclear Facilities Licensing Division (CIINFLD). Both of us came to CNSC unsure of what to expect, but it quickly became evident that everyone at the CNSC was still coming to grips with what was then the "new" Canadian Nuclear Safety Act and Regulations. There was an enormous amount of work associated with migrating thousands of old Atomic Energy Control Board (AECB) licences into the new regulatory framework. The Class II Nuclear Facilities and Prescribed Equipment (CIINFPE) Regulations had established an entirely new class of licences which encompassed most aspects of radiotherapy, and the CIINFLD was a new Division created to administer those licences. We were still working to develop the processes needed to implement our new mandate, while simultaneously trying to licence and inspect facilities in accordance with the new Act and Regulations.

When we arrived, the initial DNSR "Risk Based Regulatory Program" analysis was underway. That program used a system of "risk ranking" to determine the baseline inspection frequency of both CII Nuclear Facility and the Nuclear Substance and Radiation Device licensees. At the time, CII facilities in general were considered "high risk" and there was a push to inspect CII facilities annually.

The CIINFLD was using a hybrid of what we would now call the "type II" (snapshot) and "type I" (program audit) approaches to inspection. We examined compliance with the new regulatory requirements, such as the new "Nuclear Energy Worker" provisions in the Radiation Protection Regulations, and those for safety systems in section 15 of the CIINFPE regulations, in detail. Most facilities had not previously been subjected to detailed radiation surveys during an inspection, so extensive dose rate measurements were performed. Inspection criteria were established on a simple, but exceedingly lengthy, regulation-by-regulations basis. Initial reports were on carbon paper forms and highlighted only specific non-compliances. The idea of using "modern" tools, like laptop computers, for recording inspection findings and generating reports on site was being evaluated, but had not been implemented.

For licensing, the existing licence application guides had not yet fully caught up to reflect the new regulations. Required regulatory reports and licence applications all had to be submitted on paper and licences were only issued on paper. There was no defined structure or content requirements for the Appendix of Licence Documents for each licence. There was no such thing as a "consolidated" radiotherapy operating licence; accelerators, HDR and LDR remote afterloaders, teletherapy, manual brachytherapy, and servicing, all had to be licensed separately. Some licences were good for only 2 years, but others, such as most accelerator operating licences, were issued for 25 years. For medical electron accelerators, the CNSC had historically only licensed those having energies ≥ 10 MV, so the many 6 MV medical linacs in use were not subject to the same regulatory requirements.

There was also no such thing as a "certified" CII RSO, although we did interview potential RSOs to try to ensure that they had at least a reasonable background and knowledge of regulatory requirements.

So, besides the fact that the CIINFLD went through couple of name changes, and is now the Accelerators and Class II Facilities Division (ACFD), what has changed since then?

Well, shortly after we started, our Division took on the task of rewriting the licensing guides, which have since gone through multiple iterations and updates. The CIINFLD also set up the initial system for consolidating radiotherapy licences. Consolidated licences have since evolved and are now available to cover a much broader spectrum of activities. In 2015, the ACFD embarked on a commitment to undertake consolidation of all existing CII licences for each licensee/site. The licence period for consolidated licences has been standardized at 10 years, which greatly reduces the number of renewals required overall.

The CNSC also reconsidered its policy on e-linacs operating at < 10 MV and brought them into the scope of licensed and inspected facilities. The Appendix of Licence Documents has been standardized and aligned with information required in licence applications, and now includes only information relevant to ongoing

control of facility operations. Licence application forms and annual compliance report forms are available on-line and may be submitted electronically. All licences are now issued in PDF format via email. The ACFD established a policy of periodic rotation of licences between POs and a formalized peer review process, both of which have helped to ensure a more uniform level of assessment and licence content.

The CIINFPE Regulations have also been amended twice to address gaps and/or changes necessary to accommodate new technologies or activities within the CII realm. One of the key changes was the incorporation and formalization of the RSO certification process. Work is still ongoing on the certification process, and we expect to pilot a new on-line, Webex© based examination process in the near future. Expect to hear more about this in a future Interactions article.

The ACFD has formalized and documented our inspection practices to bring greater consistency in the conduct and reporting of inspections. This includes standardized procedures and reporting formats for both type I and type II inspections, and the implementation of a formal mechanism for non-prejudicial licensee feedback to the ACFD director following each type I inspection. The focus and scope of inspections has also evolved. Inspection criteria have been aligned with CNSC's "Safety and Control Area" (SCA) framework. As discussed in the spring 2015 edition of Interactions, more emphasis is being placed on the evaluation of "safety culture". Dedicated inspections of security provisions for IAEA category I and category II sources are now incorporated as part of the overall inspection of each site.

In 2013, the renamed DNSR "Risk Informed Regulatory Program" analysis was revisited, and corresponding changes to the inspection program were begun when the project was completed early in 2015. All of the CII medical facilities are now considered "medium or medium-low risk". This change results from a careful evaluation of not only the potential impact of misuse of equipment and sources, but also the likelihood that misuse will occur, and takes into account the compliance history of the different sectors we regulate. In essence, your own good track record of compliance and control over licensed activities has had an influence. As a result, ACFD is moving towards conducting more type II inspections, which are much shorter and do not involve formal interviews of staff, coupled with a reduced frequency for type I inspections.

The next major change in modernizing our inspection process will be implementation of the Mobile Inspection Kit, or MIK, later this year. This is a tablet based system which includes all of the inspection criteria, checklists, and reporting functionality needed to enable necessary for field inspections, including the ability to download inspection data directly back into the CNSC inspection database. The next CNSC Feedback Forum article will describe the MIK project in detail, and how it will impact upon how we do business.

So in hindsight, it is apparent to us now that despite some setbacks and frustrations, the ACFD has actually made considerable progress over the years since we started. But the most important improvement the ACFD has tried to make in that period is in our communications with licensees and the level of engagement with our stakeholders. A good example is the CNSC Feedback Forum in Interactions, which did not exist when we started. This is the 33rd article since the column was initiated in 2007! We know there are ongoing regulatory issues that licensees may disagree with, but hopefully we can continue address these in the "open and transparent" manner which best serves the interests of the regulator, licensees, and the public.

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
Bekarat	Hamed	Jewish General Hospital	Full
Bertrand	Marie-Joëlle	CIUSS du Saguenay-Lac-St-Jean	Full
Dekker	Kurtis	Western University	Student
Duguay-Drouin	Patricia	CHU de Québec	Student
Eddy	Rachel	Robarts Research Institute	Student
Entezari	Niloufar	Ryerson University	Student
Keldani	Zaid	Ryerson University	Student
Khatchadourian	Rafael Aharon	Hôpital Maisonneuve-Rosemont	Full
Kroshko	Angelika	Université Laval	Student
Lessard	Eric	Western University	Student
Levesque	Ives	Cedars Cancer Centre	Full
Ling	Lin	Dr. H. Bliss Murphy Cancer Center	Full
Michaud	François	Université de Montréal	Student
Rilling	Madison	Université Laval	Student
St-Amant	Patricia	CHU de Québec	Student
Thakur	Varun Singh	CHUM Hôpital Notre-Dame	Full
Verdecchia	Kyle	Western University	Student

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

Archambault	Laurie	Hôpital Maisonneuve-Rosemont
Goulet	Mathieu	CHU de Québec
Heikal	Amr	Cancer Centre of Southeastern Ontario

MESSAGE FROM THE STUDENT COUNCIL CHAIRS

Dear COMP Students,

As Chairs of the Student Council (SC) for the Canadian Organization of Medical Physicist (COMP), we would like to welcome you to our student community. First and foremost, our mission is to be your voice within the COMP organization. Specifically, our key aims include distributing resources to students, establishing funded educational opportunities, collecting and presenting the information of most interest to the student body, and contributing to student-related COMP activities.

The Student Council annually hosts a student lunch symposium session and a student night out at the ASM. For this year's student lunch symposium in Toronto at the World Congress on Medical Physics and Biomedical Engineering, we had a panel discussion with four CAMPEP accredited medical physics residency program coordinators from across Canada. The floor was open to the students who asked questions to the panel about their respective residency programs, how best to prepare for applying for a residency position, what qualities are looked for when hiring residents, as well as other items of interest. The student night out at SPiN Galactic Ping Pong Bar allowed for some fun competition and opportunities to get to know fellow students as well as CCPM and COMP board members.

This past year, the Student Council has also worked hard to maintain the funding opportunities previously established, such as the student exchange program, which was participated in by a student last summer traveling from Vancouver to Montreal. Currently, we are working on expanding and creating new opportunities for students, and the planning has already begun for next year's ASM, and we hope the other students will be as excited as we are to attend.

We are beyond excited to serve as chairs of the COMP Student Council and will be continuing with the great work of our predecessors. We strongly encourage you to contact us with any suggested improvements or questions you may have regarding your role as a COMP student member. Please do not hesitate to contact us should you have any feedback, questions, or concerns. We can be reached by email, either to Olga Dona (donaleom@mcmaster.ca) or Hali Morrison (hamorris@ualberta.ca).

Sincerely,

Olga Dona (MacMaster University) and Hali Morrison (University of Alberta)

THE MEDPHYS MATCH FOR RESIDENT RECRUITMENT

Michelle Hilts and **Cheryl Duzenli**

BC Cancer Agency

and

Alana Hudson, Tom Baker Cancer Centre

Earlier this year, for the first time ever, a matching program endorsed by the AAPM was run for recruitment of medical physics residents into available residency program positions. The program, termed the Med Phys Match, was considered very successful and a comprehensive compilation of the results and statistics from the Match was presented in the May/June 2015 newsletter of the AAPM. Two Canadian programs participated in the match: the Tom Baker Centre in Calgary and the BC Cancer Agency, for a total of three residency positions. For the interest of Canadian students and recruitment centers considering participating next year, we summarize some of the key findings from the AAPM report and present our personal experiences with the Match here in Canada.

HOW THE MATCH WORKS

Very briefly, the Match works as follows. Participating candidates and programs register with the Match, programs undertake their normal recruitment process (ensuring that candidates register with the Match) and accept applications through any channels. A common application program called the Medical Physics Residency Application Program (MP-RAP) was available, however, use of MP-RAP was not required for the Match. Following recruitment, applicants and programs submit rank order lists of preferred sites and candidates, respectively. The Match algorithm completes the matching process, and on a specified date, results of the Match are reported to both candidates and programs. Match results are binding for both parties, thus it is critical that both applicants and programs only rank sites and candidates that they would be happy being matched with.

KEY FINDINGS FROM AAPM REPORT

The 2015 Match included 280 candidates and 112 positions offered by 77 programs. Participation in the US was very high with 92% of residency programs participating. Of all positions, 96% were filled by the Match and 86% of matched applicants were matched to one of their top three choices. The overall success rate (candidates successfully matched) was 39%; however, this may include candidates who did not meet minimum qualifications. CAMPEP graduates had a significant advantage over non-CAMPEP candidates: 76% of CAMPEP applicants were ranked with a success rate of 46%, while only 30% of non-CAMPEP applicants were ranked and the successful match rate was only 20% for this group. Further, for CAMPEP graduates, PhD candidates had a higher success rates than MSc graduates: 49% for Med Phys PhD (37 matched out of 76); 50% for PhD + certificate program (13 matched out of 26); 42% for Med Phys MSc (40 matched out of 88). Note that this does not distinguish between specialty (e.g. radiation oncology or imaging residencies).

EXPERIENCES FROM CANADIAN SITES PARTICIPATING

All three Canadian positions were matched to their top ranked candidate. Using the Match itself was straightforward, and there were no issues submitting rank lists and Match results were communicated timely. Both programs received a large number of applications: BCCA received 155 and 152 applications (no screening) for the two positions; of these 35 had Canadian status. The TBCC received

70 applications (screened for PhD-only and CAMPEP-only). For both programs these numbers were increased from pre-Match years, likely in part due to 'automatic' applications coming through the MP-RAP process where applicants could apply to all centers by clicking a button. The large number of applicants demanded rigorous filtering of applications, which (a) took a lot of time and effort and (b) potentially stripped out some good candidates. It appears that most applicants from graduate students at Canadian institutions only applied to Canadian centers or to Canadian centers plus a small number of US centers. This limited the potential for these Canadian graduates to be successfully matched, and several well-qualified students were not matched.

There were two components to the match: the actual match program and the MP-RAP program administered through the AAPM. In our experience, the later was not a particularly user-friendly system, it will be a fee-for-service next year, it was a route by which we received 'automated' applications, cover letters were not centre-specific, and downloading the application documents was time consuming. In addition, in the MP-RAP process applicants were not required to declare Canadian citizenship status, making life a bit difficult for Canadian programs required to assess Canadian applicants first. This resulted in time-consuming follow-up with all candidates to determine their status in Canada. On the flip-side, MP-RAP provided a spreadsheet listing all candidates and summary credentials, which aided greatly in initial applicant filtering. However, remember that you do not need to utilize MP-RAP to participate in the Match; simply have applicants send their documentation directly to your center.

FINAL THOUGHTS

For sites considering participating, the rationale for the Match is that it evens the playing field, maximizes chances for a good 'fit' between resident and program, and increases exposure of participating sites and the concept of a medical physics residency in general. It is also a mechanism for many centers to look beyond just hiring their own graduate students into residency positions. Further, our profession has something to gain through standardization, including the Match program and the link to physician residents, who also undertake a match program, is a good thing as far as professional status is concerned.

The biggest benefit to Canadian students, currently, is tapping into the US residency program market. As most US centers are participating in the match (see below), the Match represents the only way to do this; Canadian students wishing to tap into US residency programs need to join the match program and apply to US centers. The main problems this year for Canadian students participating in the Match were:

1. The limited participation of Canadian centers.
2. Students restricted their applications to a small number of sites, mainly Canadian sites.

In summary, the Match process ran smoothly and worked well for Canadian sites that participated. The Match offers the benefits for students of tapping into the US market and the ability to select preferred positions without other time pressure factors. At present, the Match may appear to offer few tangible advantages for sites, but on the flip-side, there are no disadvantages, and it is very likely that participation will be advantageous in the long-run as more and more sites participate. For both students and centres recruiting, the experience would be improved with the participation of more Canadian centres and we would encourage new sites to consider participating next year!

A WOMEN'S COMMITTEE FOR COMP

Nadia Octave

CHUQ Hôtel-Dieu du Québec

It all started with an invitation to speak about my career path as a female medical physicist at the Canadian Conference for Undergraduate Women in Physics held last January in Quebec City. We physicists like numbers and to analyze data right? So I asked myself: "How many female physicists are there in Canada? What is the proportion of males versus females? Is this proportion similar worldwide? Etc." COMP provided some Canadian numbers: as of 2014, we are 571 medical physicists COMP members, 117 out of 571 are students, and among those members 27.3% are women. These questions are also of interest worldwide and IOMP has recently completed a study regarding gender composition in the medical physics demography [1]. A couple of interesting and positive discussions later and the idea of a women's committee for COMP was born. The initiative was accepted by the board at their last meeting during the World Congress in Medical Physics and Biomedical Engineering held in Toronto last June, and with this communication it is a real pleasure to inform you that a new COMP Women Committee (CWC) is being formed. I have been given the mandate to form this new committee and to chair it. The CWC is a sub-committee of the COMP Professional Affairs committee. At this time, the mandate and governance of the CWC is being sketched out. The roles of the CWC will be to build strong networks between professionals and students; to promote and provide the means of developing centered leadership; to address work-life balance challenges; to promote the number of female leaders and role models in STEM-related fields across academia, government, and industry; and to support and celebrate women's contributions to medical physics in Canada.

We would like to make it clear that the CWC is not just for women! While some events will be geared towards women, the committee's activities will not be women-exclusive and men are strongly encouraged to participate. Initiatives that the CWC hopes to push forward, such as building strong student-professional connections, will benefit men as well as women. Further, it is valuable for male physicists within COMP to be aware of the issues related to women



in medical physics, and this is key towards promoting leadership of both women and men in the field. The committee aims to be an active means for organizing workshops, talks, get-togethers, etc., and will serve to engage both men and women towards building a strong community of medical physicists via the aforementioned CWC roles.

Among the ideas that are strongly supported by the CWC is a Mentorship Program. In the Mentorship Program a junior physicist could benefit from the experience of a senior physicist, have an overview of the medical physics workforce and be offered thoughts on career choices. As a start, this Mentorship Program will be based on an annual mentoring fair organized as an event during the COMP ASM, a once-a-year exchange enabling "long-term" mentor-mentee relationships to be established. Other professional activities will be organized during the ASM, so stay tuned for further information.

Recently, I participated with another COMP member, Michelle Hilts, in the Women in Physics Canada Conference held in Toronto this past July. This meeting, geared towards young female physicists (mostly graduate students and post-docs), was an excellent combination of top quality science and open and honest discussion of issues of interest to women in STEM. Plenary invited talks ranged from superconductors to colliding stars to a talk by Michelle on the future of breast radiotherapy. There were panel discussions on work-life balance (of which I was a panel member) and non-academic careers. In addition to presenting their science, invited speakers, including Michelle, shared career path stories and discussed challenges in work-life balance. Delegate activities included brain-storming on how to respond to situations such as being addressed with offensive gender-related comments in a work environment. Another interesting activity was to develop an “elevator speech” aimed to engage a top-class scientist whom you wish to work with. The young women in attendance were highly engaged, active participants in the meeting; the positive energy was palpable. All in all, it was a fantastic event which helped further open my eyes to the potential positive impact of a CWC.

So stay tuned... ☺

Acknowledgement

I would like to take this opportunity to thank Gisele Kite for providing me with the Canadian demographic data. I would also like to thank the fantastic, very enthusiastic team of students from Laval University that I have started to work with: Madison Rilling, Patricia Duguay-Drouin, Marie-Ève Delage, and Angélique Kroshko, and also Michelle Hilts for her thoughts and sound advice. Now is the time to come forward to show your interest and to contact me to be part of the team. Looking forward to meeting you.

[1] V. Tsapaki et M. M. Rehani, « Female medical physicists: The results of a survey carried out by the International Organization for Medical Physics », *Phys. Medica PM Int. J. Devoted Appl. Phys. Med. Biol. Off. J. Ital. Assoc. Biomed. Phys. AIFB*, vol. 31, no 4, p. 368-373, juin 2015.

The Highlights

- COMP Women's Committee (CWC).
- Subcommittee to Professional Affairs.
- Some CWC goals:
 - To increase networking opportunities.
 - To establish mentorship program.
 - To address work-life balance challenges.
 - To promote female leadership and role models across academia, government and industry.
 - To support and celebrate women's contributions to medical physics in Canada.
- Inaugural event: Luncheon and Mentorship Program at ASM2016.
- Want to contribute? Ideas and comments welcome! Email to: Nadia.octave@mail.chuq.qc.ca

ATLANTIC MEDICAL PHYSICS MEETING 2015

Chris Thomas,
Nova Scotia Cancer Centre

On the August long weekend this year, a number of medical physicists and affiliate staff gathered in beautiful Charlottetown, PEI for the reborn Atlantic Medical Physics meeting. For a decade, starting in the late '90s, physicists in our region had met to discuss various topics, including research, clinical projects, treatment techniques, etc. For one reason or another, they stopped, and so this year the physics staff at the PEI Cancer Treatment Centre rebooted the meeting with some financial assistance from COMP. Attendees included physics staff from Charlottetown, Moncton, St. John, and Halifax. Most attendees were medical physicists, but we also had in attendance a post-doc, a grad student, a physics assistant, a member of the electronics staff, and an RTT (see the cover).

We started at 1 pm on August 31st, with an introduction and welcome by John Andrew (Figure 1). This was followed by a great talk on the Science of Quality Assurance by COMP president Marco Carlone (Figure 2). The afternoon continued with a few other talks. In the evening, we all drove across the island (PEI is small, you can do that in no time ...) to New Glasgow for a lobster dinner. We then all headed back to Charlottetown, where some of us took part in traditional late night physics discussions over a pint of beer at the Gahan House brewpub.

Saturday morning started with another talk by Marco on the linac simulator (SIMAC) of which he's been involved in the development (check it out here <http://simaclinac.com/> and here <https://www.youtube.com/watch?v=l84XlGtHGhk>). This was followed by a number of other talks, including details on the IGRT program at the PEI clinic (Anthony Landry), computer



Figure 1



Figure 2

monitor QA (Reina Lamothe), a database program called RT Tracker for mining quality indicators of radiation therapy (Jonathan Dysart; Figure 3), and the designing of linac-couch trajectories for cranial SRS/SRT treatments (Lee MacDonald). Overall, there were over a dozen talks, with the major focus being on QA. The meeting ended with John Andrew giving an entertaining talk on lessons he's learned from Canadian medical physicists, which featured a who's who of great medical physicists. The meeting was capped off with a barbeque at John Andrew's family home (circa 1790!!) overlooking a beautiful mirror-like pond (Figure 4).

This meeting was undoubtedly a success. It gave us an opportunity to connect, network, share, and discuss clinical problems. It allowed us to see how others solved similar problems that we may have faced in our own clinics and it, hopefully, inspired us to look at things differently and gave some of us some new ideas. I know for me, I'll be incorporating Marco's SIMAC into our medical physics graduate student and resident training, and looking more closely at the state of the computer monitors in our department thanks to Reina.

We all left agreeing that this should be an annual meeting. Many thanks to COMP for providing funding for this meeting. Thank you to the staff in PEI who put this together, and I look forward to next year's Atlantic Medical Physics Meeting wherever it will be!



Figure 3



Figure 4

THE 7TH CANADIAN WINTER SCHOOL

John Kildea

McGill University Health Centre

The seventh COMP-organized Canadian Winter School on quality and safety in radiation oncology will take place at the beautiful Chateau Montebello in Quebec from February 7th to 11th, 2016. The multi-professional organizing committee (see below) has been busy since April of this year planning the event and it's now starting to take shape. Here are a few tasters of what to expect.

KEYNOTE SPEAKER - MARGARET MURPHY

The keynote address will be delivered by World Health Organization Patients for Patient Safety steering committee member Margaret Murphy from Ireland. Margaret tragically lost her son Kevin in 1999 as a result of medical misadventure. After a five year battle to find out why Kevin had died, Margaret became involved in the WHO Patients for Patient Safety. She has worked tirelessly since then to promote patient safety around the world. COMP and the organizing committee are honoured and delighted that Margaret will travel to Montebello to tell her powerful story and deliver her important message to the Canadian radiation medicine community. Margaret, like most of the faculty members, will be in attendance for the full duration of the four-day Winter School, and her insight will no doubt enlighten the many discussions that are anticipated.

FACULTY, FORMAT AND CURRICULUM

Although the final format and curriculum of the 2016 Winter School have yet to be solidified, the organizing committee is drafting a schedule that incorporates faculty lectures, workshops led by faculty members and invited patients, and delegate-presented project galleries.

CURRICULUM

The key quality and safety topics to be covered at the Winter School have been narrowed down to the following:

Teamwork

- Good teamwork, particularly in an interprofessional context, is vital for quality and safety. The subject comes up regularly as a Winter School topic and it never loses its importance. **Dr. Francois Chiocchio**, from the Telfer School of Management at the University of Ottawa, will be the lead faculty on this subject, and he is working with the organizing committee to prepare a workshop using implementation of an interprofessional peer review framework as an example project. Dr. Chiocchio is also preparing a set of questionnaires for the COMP membership, the data from which will be discussed and analyzed at the Winter School. A follow-up InterACTIONS article in the spring of 2016 is envisaged.

Patient involvement

- At the 2015 Winter School, former patient Prof. Laurie Hendren, from McGill, coined the term "schlep" to describe her (non-linear) experience of going through a course of radiotherapy. She, and other 2015 faculty members including keynote speaker Dr. Jan Davies, highlighted the vital role that patients can and should play in their own care and in the decision-making structures of healthcare institutions. The Winter School organizing committee heard and heeded the message. The committee is pleased to have recruited a number of faculty members and former patients who will explain to the Canadian medical physics and radiation oncology communities why and how full patient involvement can be achieved in our centres.
- **Jim Conway**, adjunct professor at the Harvard School of Public Health, fellow of the Institute for Healthcare Improvement, and former chief operating officer of the Dana Farber Cancer Institute, will speak on patient involvement for quality and safety. Jim is a renowned patient safety expert and patient involvement advocate. He will speak about his patient safety leadership experience at the Dana Farber, and in particular, about the role played by patients in the quality and safety infrastructure there. He will explain why and how the Dana Farber Cancer Institute recruited patients into all decision-making committees.

- **Karine Vigneault** is the recently-recruited patient participation approach coordinator at the McGill University Health Centre in Montreal. Karine has a PhD in communication from the Université de Montréal. Her role at McGill is to coordinate the recruitment of patients to help improve the practices, programs, and policies that concern patient care and services at the MUHC. Karine will explain to the Winter School delegates how to go about inviting patients onto committees and how to train both patients and staff for true patient partnership.

High-reliability organizations

- A high-reliability organization is one that has succeeded in achieving none or few adverse events in an environment where the risk and complexity involved would suggest a greater frequency. Veteran Winter School faculty member **Todd Pawlicki**, physicist, professor, and vice-chair of the Department of Radiation Medicine and Applied Sciences at University of California San Diego, will lead a session on high reliability theory. The organizing committee is working to engage another high-profile speaker to partner with Todd for a roundtable discussion on the subject.

The second victim

- Few medical physicists may know what the term second victim means, but some or many of us may have lived through the experience. It refers to the healthcare worker who has been involved in an adverse event and who can suffer him/herself as a result. Does the institution support staff involved in adverse events? It should. Otherwise the staff member may become the second victim of the event. The second victim can experience guilt, shame, stress, and depression, to name but a few emotions. He/she may perform poorly and may adversely affect team morale. Incident reporting is a hot topic in radiation medicine, but for it to be effective, the staff involved in an incident must feel supported and must feel that they can speak openly in a respectful learning environment without fear of shame or repercussion. The organizing committee is currently working on confirming an expert speaker on the subject of the second victim.

Quality of medical data

- The electronic health record and the record-and-verify database form the backbone of modern medical physics and radiation oncology practice. However, efforts to use electronic health records for quality, safety, and research initiatives are often frustrated by poor or incomplete data. As our practice becomes more and more dependent on the data that we store, the importance of the

quality of those data is becoming increasingly clear and urgent. The organizing committee is presently working on confirming an expert faculty member who can speak authoritatively on this subject and provide practical advice.

Tying it all together

- Veteran Winter School faculty member **Mona Udowicz**, Director of Quality, Safety and Patient Experience for CancerControl Alberta, will weave the thread that joins all the topics of the Winter School. Mona will ensure that the messages of the Winter School faculty are reiterated in a coherent manner and translated into the on-the-ground context of radiotherapy practice such that the delegates will take away practical advice on how to affect real change at their centres.

Come participate in the 2016 Winter School at Montebello or encourage a colleague (physicist, therapist, radiation oncologist, or all of the above!) to attend and report back to your centre. The Winter School is a relaxed and collegial multi-professional learning environment where the delegates learn from each other and from the experts. **Quality matters - travaillons ensemble !**

IMPORTANT DATES

October 12th, 2015: Abstract submission for project gallery presentations opens

November 23rd, 2015 at 5 pm: Abstract submission deadline

Mid December 2015: Abstract review completed

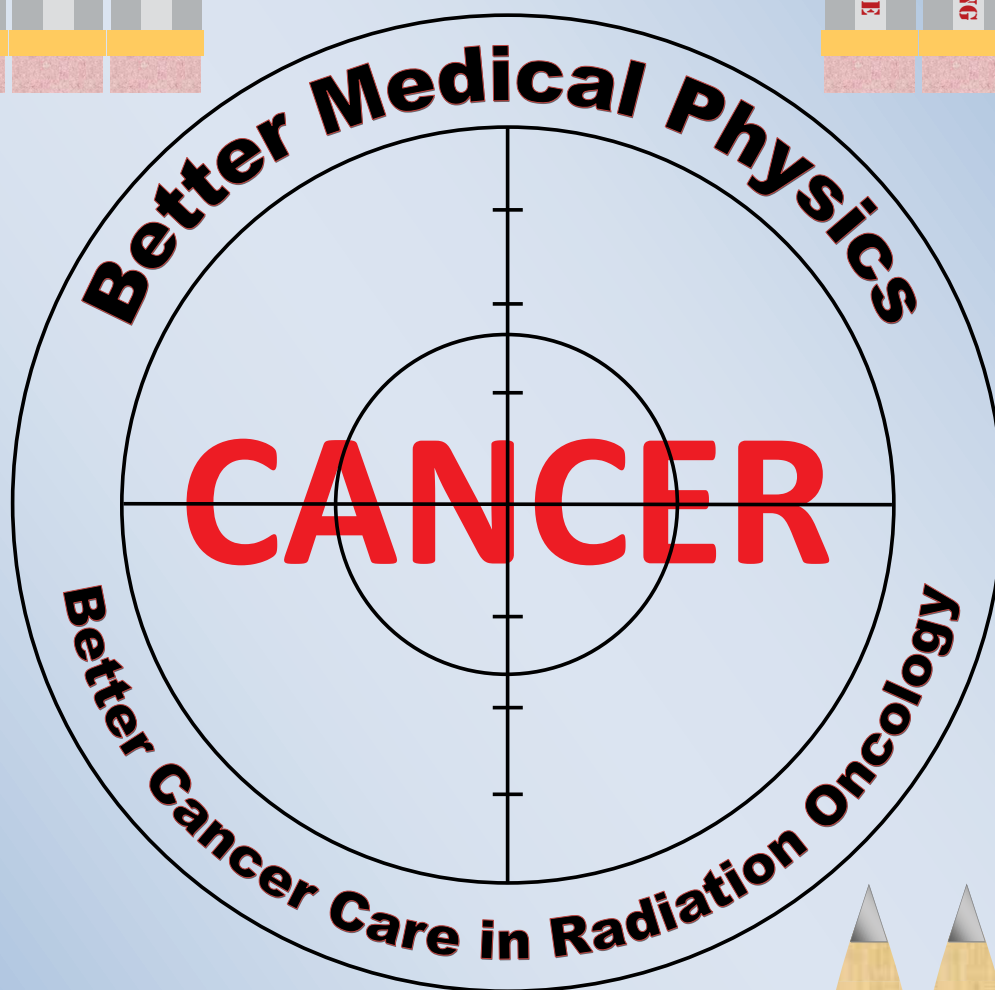
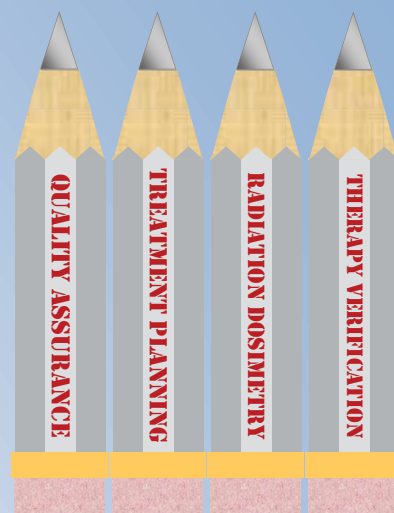
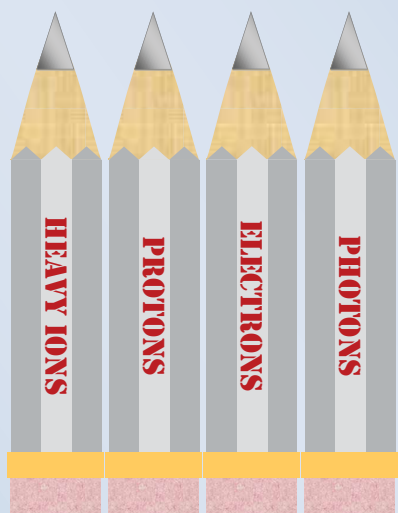
January 7th, 2016: Deadline for negotiated hotel rate

January 8th, 2016: Early-bird registration deadline

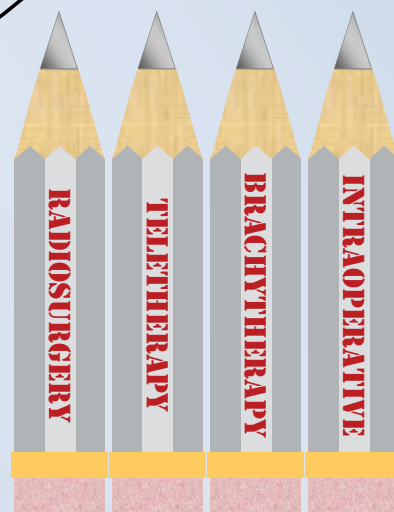
February 7th, 2016: Winter School begins

THE 2016 WINTER SCHOOL ORGANIZING COMMITTEE

Deidre Batchelar
Nancy Barrett
Carolyn Freeman
Vicky Huang
Dan LaRussa
John Kildea
Gisele Kite
Kathryn Moran
Todd Pawlicki
Christiaan Stevens
Mona Udowicz



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www accuray.com

Contact: Laurie Howard
lhoward@accuray.com



CDR Systems Inc.

Phone: 1-855-856-7035 (ext 3)
www.cdrrsys.ca

Contact: Mike Wallace
mikewallace@cdrrsys.ca



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www.donaldsonmarphil.com

Contact: M. Michel Donaldson
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Contact: Doris AuBuchon
Doris.AuBuchon@elekta.com



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2016 SYLVIA FEDORUK PRIZE IN MEDICAL PHYSICS

The Saskatchewan Cancer Agency is pleased to sponsor a competition for the 2016 Sylvia Fedoruk Prize in Medical Physics. This award is offered annually to honour the distinguished career of Sylvia Fedoruk, former Lieutenant-Governor of Saskatchewan and previously physicist at the Saskatoon Cancer Centre.

The prize will comprise a cash award of five hundred dollars (\$500), an engraved plaque and travel expenses to enable the winner to attend the annual meeting of the Canadian Organization of Medical Physicists (COMP), which will be held from July 20th to 23rd, 2016, in St. John's, Newfoundland.

The 2016 Prize will be awarded for the best paper (i) on a subject falling within the field of medical physics, (ii) relating to work carried out wholly or mainly within a Canadian institution, and (iii) published during the 2015 calendar year. The selection of the award-winning paper will be made by a panel of judges appointed by COMP.

Papers published in Physics in Medicine and Biology and Medical Physics, which conform to the conditions of the preceding paragraph, will automatically be entered in the competition and no further action by the author(s) is required. All other papers should be submitted electronically to:

Nancy Barrett
Executive Director
Canadian Organization of Medical Physicists
E-mail: nancy.barrett@comp-ocpm.ca

Each paper must be clearly marked: "Entry for 2016 Sylvia Fedoruk Prize" and must reach the above address no later than **FRIDAY, FEBRUARY 5TH, 2016**.

The award winners from the last five years were:

Goulet M, Rilling M, Gingras L, Beddar s, Beaulieu L, and Archambault L, Novel, full 3D scintillation dosimetry using a static plenoptic camera, Medical Physics, 41, Vol. 8, August 2014; 082101

Renaud J, Marchington D, Seuntjens J, and Sarfehnia A, Development of a graphite probe calorimeter for absolute clinical dosimetry, Medical Physics, 40, Vol. 2, February 2013; 020701

Goulet M, Archambault L, Beaulieu L and Gingras L, High resolution 2D dose measurement device based on a few long scintillating fibers and tomographic reconstruction, Medical Physics, 39, Vol. 8, August 2012; 4840-4849

Andreyev A. and Celler A., Dual-isotope PET using positron-gamma emitters, Physics in Medicine and Biology, 56, Vol. 14, 4539-4556 (2011).

Frédéric Tessier and Iwan Kawrakow, Effective point of measurement of thimble ion chambers in megavoltage photon beams, Medical Physics, 37(1), 96-107 (2010).

CALL FOR BOARD NOMINATIONS

The COMP Awards and Nominations Committee is responsible for presenting a slate of nominations for the COMP Board of Directors to ensure that the organization is governed with excellence and vision. There will be two openings on the Board of Directors as of the 2016 Annual General Meeting.

PRESIDENT

The COMP President serves a two-year term and has the following responsibilities:

1. To work in conjunction with other Board members in the best interest of the organization.
2. To prepare for, attend, and Chair all Board meetings and relevant committee meetings. In-person meetings take place in November and at the Annual Scientific Meeting, and there may be up to four (4) teleconferences.
3. To preside over the Annual General Meeting.
4. To serve as the spokesperson for COMP as required.
5. To serve as the representative of COMP to the public as required.
6. To oversee projects and assume responsibilities as required.

VICE-PRESIDENT

The Vice-President serves a two-year term and has the following responsibilities:

1. To work in conjunction with other Board members in the best interest of the organization.
2. To prepare for, attend, and actively participate in all Board meetings and relevant committee meetings. In-person meetings take place in November and at the Annual Scientific Meeting, and there may be up to four (4) teleconferences.
3. To oversee projects and assume responsibilities as required.
4. To represent the President in his/her absence.

While certainly not necessary, there is an expectation that the Vice-President would be willing to stand for the position of President when that position becomes available.

SECRETARY

The Secretary is responsible for overseeing the policies and records of the organization. The Secretary is expected to attend and record the minutes of the Board and Executive committee meetings and may be asked to oversee taskforces and other projects as designated by the President. The Secretary also works with the COMP office as required to review applications for membership and confirm the applicant's eligibility.

Nominations for these roles are due **April 29th, 2016** and **must be accompanied** by a duly signed Expression of Interest and Nomination Form endorsed by no fewer than two (2) voting members of COMP as well as a brief bio. To access the nomination form, please visit www.comp-ocpm.ca or contact the COMP office.

GOLD MEDAL AWARD

CALL FOR NOMINATIONS

The COMP Gold Medal will be awarded to a member of COMP (or retired former member) who has made an outstanding contribution to the field of medical physics in Canada. An outstanding contribution is defined as one or more of the following:

1. A body of work which has added to the knowledge base of medical physics in such a way as to fundamentally alter the practice of medical physics.
2. Leadership positions in medical physics organizations which have led to improvements in the status and public image of medical physicists in Canada.
3. Significant influence on the professional development of the careers of medical physicists in Canada through educational activities or mentorship

The Gold Medal is the highest award given by the Canadian Organization of Medical Physicists and will be given to currently active or retired individuals to recognize an outstanding career as a medical physicist who has worked mainly in Canada. It will be awarded as appropriate candidates are selected, but it will not generally be given more than once per year.

Nominations for the 2016 medal are hereby solicited. Nominations are due by **February 5th, 2016** and must be made by a Full Member of COMP. Nominations must include:

1. The nominator's letter summarizing the contributions of the candidate in one or more of the areas listed above.
2. The candidate's CV.
3. The candidate's publication list (excluding abstracts) which highlights the candidate's most significant 10 papers.
4. Additional one to two page letters supporting the nomination from three or more members of COMP.

Please forward nominations electronically to Nancy Barrett at the COMP office (preferably in pdf format, nancy.barrett@comp-ocpm.ca).

Candidates selected for the medal will be invited to attend the COMP Annual Scientific Meeting where the award will be presented by the COMP President. Travel expenses will be paid for the medal winner. The medal winner may be asked to give a 30 minute scientific presentation at the COMP meeting in addition to a short acceptance speech when the medal is presented.

ORGANIZING A LOCAL OR REGIONAL MEDICAL PHYSICS CONTINUING EDUCATION EVENT? COMP CAN HELP WITH THAT!

As you are aware, COMP members have access to ongoing continuing education opportunities at the Annual Scientific Meeting and also at the Winter School. We are also aware that local and regional continuing education events also provide an opportunity for rich learning and networking. COMP is committed to supporting these local and regional programs. Not only will we promote the programs to our membership, funds have been allocated to provide financial support to these programs if required.

If you are interested in taking advantage of the support available, the following information is required:

- The name, date, and location of the program.
- A description of the program.
- The nature of the support being requested (eg. advertising support, financial support etc.).
- The amount of funds requested (if relevant).
- Whether or not the program is CAMPEP-accredited. While not essential, CAMPEP-accredited programs are preferred.

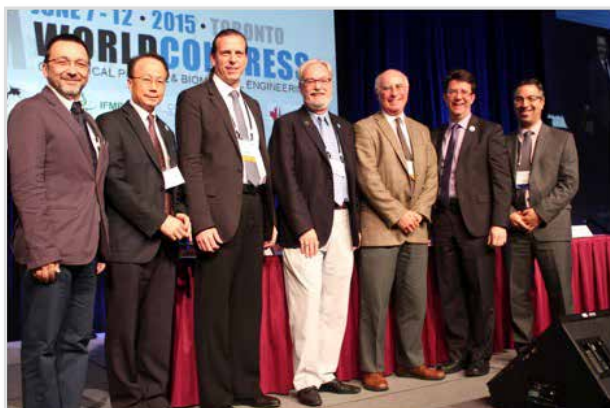
More information and an application is available from gisele.kite@comp-ocpm.ca at the COMP office.

REPORT ON THE WORLD CONGRESS OF MEDICAL PHYSICS AND BIOMEDICAL ENGINEERING 2015 – HEALTH, TECHNOLOGY, HUMANITY

Dr. David A. Jaffray PhD FCOMP and Dr. Tony Easty PhD, PEng, CCE
Co-chairs, World Congress 2015

The 2015 International Union of Physics and Engineering in Medicine (IUPESM) World Congress of Medical Physics and Biomedical Engineering was a resounding success with over 2300 attendees filling the Toronto Convention Centre with a week of science, networking, collaboration, and fun! Attendees came from 105 countries, including 34 low resource countries, to learn and share their efforts in advancing biomedical engineering and medical physics through science and clinical practice –roughly equal attendance by the two disciplines highlighted the collaborative tone of the meeting. With 1042 oral presentations and 402 posters across 19 tracks, the participants were able to access a broad range of topics from speakers from around the planet. In addition to the tracks, there were 25 special sessions covering various topics of interest that aligned with our 5 themes: Global Health, Women in Physics and Engineering, Next Generation Medicine, Urban Health and Future Earth, and Evidence and Health Informatics. The continuing education program of the World Congress was unprecedented with 83 lectures in three languages (English, French, and Spanish)

providing topics of interest to both medical physicists and biomedical engineers. Industry also played a major role in the success of the congress with 104 exhibitors and sponsors presenting thought-provoking technologies and financial support for the meeting. The opening ceremony launched the week's events with the Canadian host societies - the Canadian Medical and Biological Engineering Society (CMBES) and the Canadian Organization of Medical Physicists (COMP), the international societies - the International Organization of Medical Physics (IOMP), the International Federation of Medical and Biological Engineering (IFMBE), and the IUPESM joint society welcoming the attendees. The President of the IUPESM, Dr. Herb Voigt, invited the congress registrants to engage in collaboration and networking with their fellow attendees and in the words of T.S. Elliot '...not cease from exploration...'. The opening ceremony also had some drama with a technical failure in the audio-visual system that broke the ice and Shannon Thunderbird saving the day with her drum and booming voice filling the huge plenary hall as the technical team addressed the issue.



IUPESM World Congress 2015 Leadership – From left to right: Dr. Ratko Magarevic (President, IFMBE), Dr. KY Cheung (President, IOMP), Dr. David Jaffray (WC2015 Co-chair), Dr. Herb Voigt (President, IUPESM), Dr. Tony Easty (WC2015 Co-chair), Mr. Martin Poulin (President, CMBES), and Dr. Marco Carlone (President, COMP).



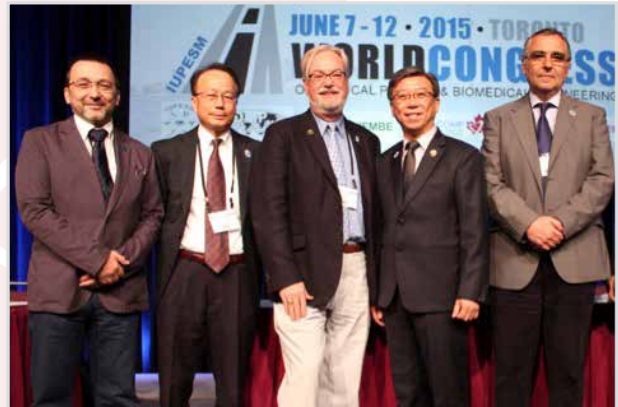
Shannon Thunderbird and her troupe performing their drumming tradition from Canada's west coast first nations.

The week was full of highlights that drew the thousands of attendees back together. Tuesday's plenary speaker was Mr. Jeff Immelt, CEO of General Electric. Mr. Immelt shared his vision of the future of medicine and the role of companies like his and joined Dr. Mary Gospodarowicz, past-President of the UICC and Dr. Bob Bell, Deputy Minister of Health of the Province of Ontario for a panel discussion (see photo below). Covering topics of industry, government, and civil society collaboration – the audience enjoyed heated debate between the three luminaries that brought spontaneous applause from the crowd of several thousand. The gala dinner was the social highlight with numerous awards given to outstanding physicists and engineers from across the globe for their remarkable contributions and careers. The camaraderie and social nature of the attendees was palpable and extended into the late evening as the Parkside Band was called back to the stage multiple times by the hundreds of well-healed attendees and spouses that took part in the dancing. Sorry - no pictures ;-). There were also many special sessions and sub-meetings held over the course of the 6 days of the World Congress. Of particular note was the MedTech Institutes – an effort that sought to bring together medical technology development houses from across the globe to learn from each other. I had the pleasure of participating in these discussions with participants from Qatar, Germany, and many other countries sharing their experience and strategizing for future collaboration. The closing ceremonies were held on the Friday with an excellent attendance of registrants eager to hear

the outcome of the Young Investigator's Competition and additional honours. The incoming presidents of the IOMP, IFMBE, and IUPESM took their first official duties in giving out the awards and encouraging future collaboration between the disciplines. The true success of the meeting could be measured by the substantial crowd that stayed on after closing to congratulate awardees and wish each other well with plans to meet again in Prague at WC2018. There are many people and organizations to thank for their hard work and dedication to making the 2015 World Congress a success. The many people on the Congress Organizing Committee worked hard over the past year with weekly teleconference calls in preparation – these were both challenging and enjoyable – the stresses of finance often tempered with humour. The many track chairs, keynote speakers, and lecturers brought the highest quality of science and education to the meeting and involved countless hours of volunteer effort. While they are too numerous to list here, the congress program book lists each contributor. We thank our industry and government sponsors for their support and investment in the meeting. The team at the International Congress Services were instrumental in bringing the event together with particularly effective support during the congress. And finally, we would like to thank the many attendees that share the vision of the IUPESM and the unique nature of the World Congress and made their way to Toronto in early June for their efforts – you made the meeting a great success. See you all again in Prague at World Congress 2018!



Jeff Immelt, CEO of General Electric, Mary Gospodarowicz, past-President of the UICC, and Bob Bell, Deputy Minister of Health, Province of Ontario highlighted the issues and opportunities for industry, government, and civil society to work together.



Changing of the Guard – Dr. K.Y. Cheung (2nd from left) takes over the Presidency of IUPESM from Dr. Herb Voigt (3rd from left), Dr. James Goh (4th from left) takes over the Presidency of IFMBE from Dr. Ratko Magarevic (at left), and Dr. Slavik Tabakov (5th from left) takes over Presidency of IOMP from Dr. K.Y. Cheung

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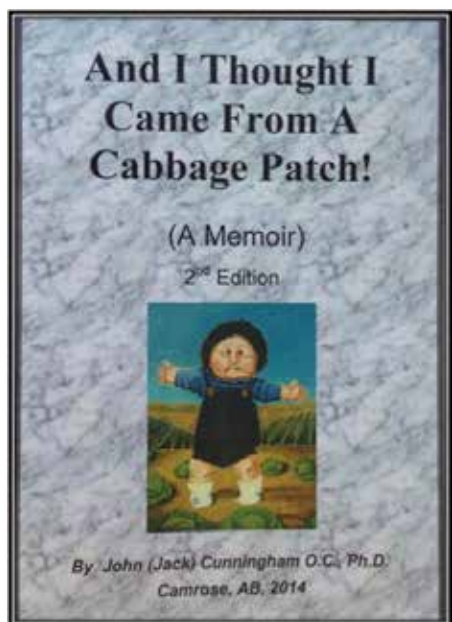
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By John (Jack) Cunningham O.C., Ph.D.
2nd Edition, Camrose, AB, 2014



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A book review, prepared by Crystal Plume Angers, was published in the October 2014 edition of Interactions.

2016 COMP STUDENT EXCHANGE PROGRAM

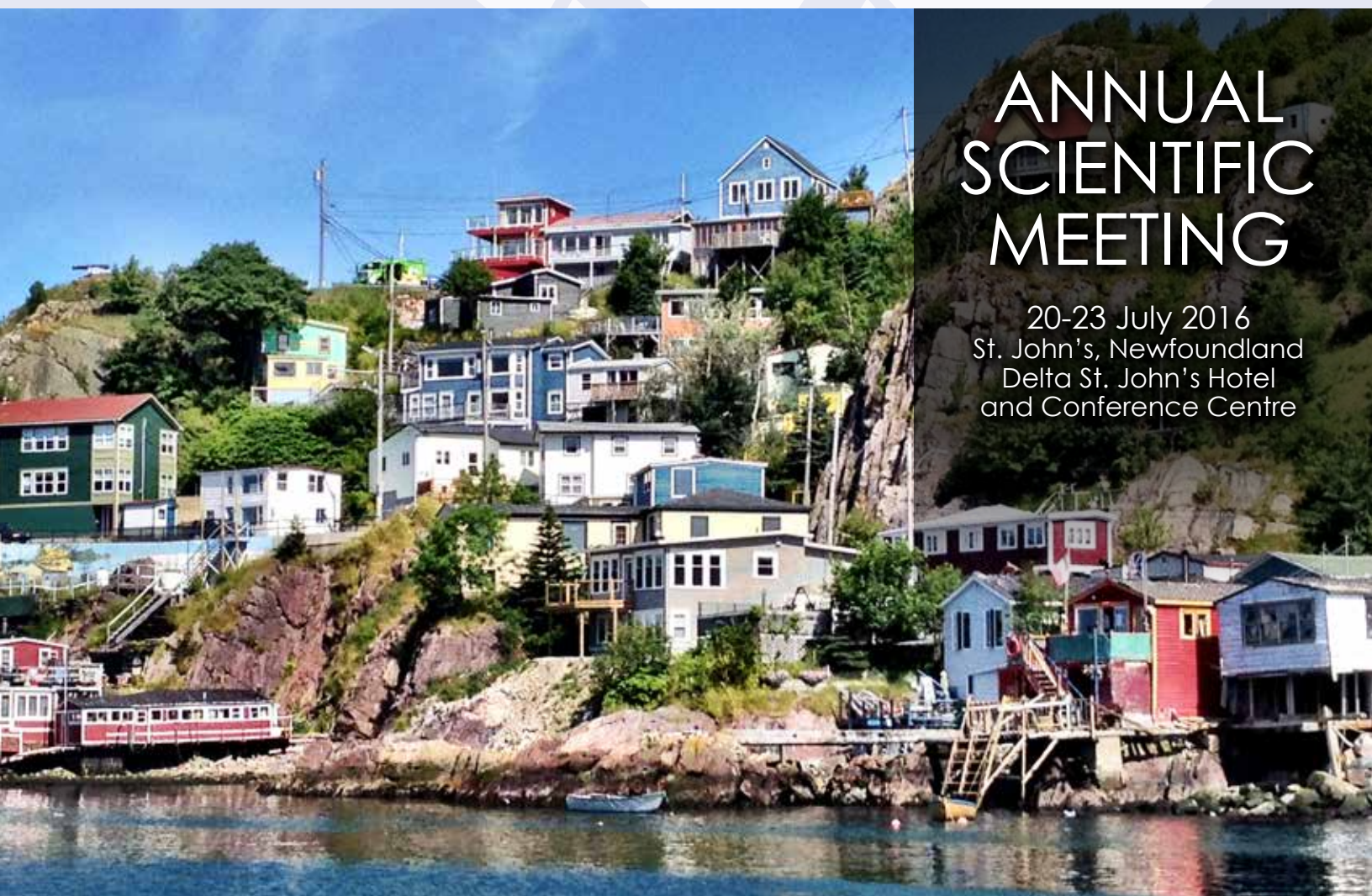
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CCPM FELLOWSHIP EXAM REVIEW

Clément Arsenault

Dr. Georges-L.-Dumont University Hospital Centre and President of CCPM

At the 2014 CCPM Annual General Meeting, the CCPM Board announced that it would perform a review of the Fellowship Distinction. This included a review of the examination process as well as the need for the Fellowship. Feedback was requested via the CCPM President's Message in the October 2014 issue of InterActions. In an effort to obtain additional feedback on the Fellowship distinction, a survey was prepared and sent to all CCPM Members and Fellows in February 2015. In preparation for the 2015 FCCPM exams, Wendy Smith, Secretary-Treasurer of the CCPM, reviewed the current regulations and provided some suggestions which could be implemented in 2015. The results of the survey, and the changes to the 2015 FCCPM exam, are presented here.

A. FCCPM SURVEY

A.1 Who responded?

We would like to thank the 249 Members and Fellows who responded to the survey. This represented 60.7% of the CCPM membership, an amazing response rate for any survey! As expected, the distribution by sub-specialty strongly favored Radiation Oncology with 83.5% of the respondents. Of the 249 respondents, 44.5% had attempted the FCCPM exam.

A.2 Criteria for Excellence

Section E.1 of the CCPM Regulations lists the standards for Excellence that should be met in order to be granted the distinction of Fellow of the CCPM. These standards or criteria have been established over the years by the Board of the CCPM. The FCCPM Survey was an opportunity to see what the membership felt were the most important criteria to be met. The following table lists the criteria from Section E.1 of the Regulations in order of importance as determined by the survey.

Rank	Criterion	Average Score
1	The ability to initiate, lead and complete a substantial clinical project	4.45/5
2	Broad, experience-based knowledge in the designated sub-specialty	4.25/5
3	The ability to assess the relevance of related emerging technologies and their impact on clinical practice	4.04/5
4	The ability to communicate a scientific contribution for peer review	3.72/5
5	The ability to promote and enhance the profession of Medical Physics	3.66/5
6	Thorough knowledge of radiation safety	3.64/5
7	Understanding of relevant legal/ethical and cost benefit issues	3.62/5

This ranking suggests that the emphasis should be on the leadership qualities as well as the broad knowledge of the candidates, over more detailed knowledge of radiation safety and legal/ethical or cost benefit issues.

A.3 FCCPM Exam Process

Several weeks before the FCCPM exam, candidates are provided instructions by the Chief Examiner in order to help them prepare for the exam. The information indicates which documents are required prior to the exam (i.e. summary of project which the candidate lead, CV, brief description of the candidate) as well as topics which would be covered during the question period of the exam. In the survey, the Board wanted feedback on how well the candidates felt prepared for the exam.

In general, the respondents felt that they were well informed about the exam process and expectations. However, only a slight majority of the respondents (51%) felt that the exam process properly evaluated "Excellence". This result suggests that some improvements can, and should, be made to the FCCPM exam. The following table lists the criteria used to evaluate the candidate, either by the Credentialing Committee, or by the examiners.

Rank	Criterion	Average Score
1	Credentials Review (Application form, CV, Body of work...)	4.26/5
2	Ability to communicate	4.05/5
3	Presentation of a project for which you were the lead	3.96/5
4	Breadth and depth of knowledge of general medical physics	3.85/5
5	Letters of reference	3.81/5
6	Legal, ethical and economic issues	3.60/5
7	Questions on Radiation Safety	3.43/5

From the table above, the membership is indicating that the credentials review is an important aspect of the exam process. However, based on our current regulations, the credential review, which is performed by the Credentialing Committee prior to the exam, cannot be used as part of the evaluation of the candidate. It is only used to establish the candidate's eligibility for the FCCPM exam. Clearly, the use of the credentialing documentation should be reviewed by the Board for future exams.

A.4 Need for FCCPM Distinction

As part of this survey, and also informally, several members suggested to the Board that the Fellowship should be abolished. The arguments used focused on the fact that "Excellence" is very difficult to quantify, and, therefore, quite subjective. In the past (e.g. 2002), attempts were made by the Board to abolish or phase out the Fellowship exam. However, these motions were voted down by the membership.

With the last question of the survey, the Board was interested in gauging (again!) the general support for the Fellowship. 51.3% of the respondents agreed or strongly agreed that the CCPM should continue granting the Fellowship as a distinction of excellence, 10.4% were undecided, and 31.1% disagreed or strongly disagreed with the statement. This indicates to the Board that a majority of our members still value the Fellowship. The Board will continue its discussions on the need for the Fellowship but there are no immediate plans to remove it. Several comments received proposed that the focus of the Fellowship should be changed to a distinction of "Leadership" instead of "Excellence". This is an interesting suggestion that will be reviewed by

the Board. Note that any change to the Fellowship's status or focus would require a change to the CCPM Bylaws. This requires that a motion be presented, and ratified by a 2/3 majority vote of no less than 15% of the total membership.

B. 2015 Changes to the FCCPM Exam

In parallel to the preparation of the survey, some changes were being discussed for the 2015 FCCPM exam while still respecting the current CCPM regulations (see Section E of the Regulations). The changes made were consistent with the suggestions proposed by the membership throughout the survey.

B.1 Credential Review

Prior to 2015, the only information on the candidate that was provided to the examiners was a brief half-page description of the candidate and a one page summary of the project being presented. The detailed information contained in the candidate's CV was only reviewed by the Credentialing Committee.

For the 2015 exam, the examiners were provided with a much more detailed picture of the candidate. The examiners' documentation included the candidate's full CV with emphasis on leadership experience and areas of excellence. As well, the candidate was requested to provide up to 2 project summaries that demonstrate the candidate's leadership qualities. Up to 4 pages of supporting documentations could be provided for each project. This includes letters of review/support from references who worked closely with the candidate.

This is substantially more information that was provided to examiners in past FCCPM exams. Examiners arrived at the exams better prepared to question the candidate on their project and on their leadership qualities.

B.2 Exam Process

The structure of the FCCPM exam is described in Sections E.6 through E.8 of the CCPM Regulations. The length of the exam is set at 90 minutes, with 15 minutes for the presentation. The rest of the exam focuses on questions relating to the presentation and on pre-established general questions. For the 2015 exam, the question period was changed slightly. Because of the additional documentation provided to the examiners, more questions could be asked on the candidate's experience and leadership qualities. For this purpose, the question period following the presentation was extended from 15 to 30 minutes. The number of general questions was also reduced in order to respect the 90-minute length of the exam.

Based on informal feedback from the examiners, the changes to the 2015 FCCPM exam allowed for a much more detailed knowledge of the candidates and, ultimately, for more consistent evaluations by the examiners. The Board plans to continue with this process for future exams.

In summary, we would like to thank all of those who participated in the survey and provided feedback. The Board's future efforts will be focused on making changes to the FCCPM exam and to the regulations in order to improve the FCCPM exam process.

MESSAGE FROM THE EDITOR

Hello and welcome to autumn! I hope everyone had a good, relaxing summer. First off, as you hopefully have noticed by now, we have a new look to the newsletter. This all came together rather quickly, but I think we have a fresh look that reflects COMP and CCPM's new websites, as well as the Annual Report. I'd like to hear your feedback on the new format (now, with colour!!!).

This issue is packed (I love it when that happens)! We've got a great article on the new COMP Women's Committee by Nadia Octave, which I think is a very exciting development. There's also a retrospective on the regulatory process from our colleagues Kavita and Jeff at the CNSC. This

is their 33rd CNSC Forum article for InterACTIONS, and I hope there is more to come. In this issue, I actually have contributed an article as well on the Atlantic Medical Physics Meeting that I attended in Charlottetown, PEI. Charlottetown, if you've never been, is a nice, laid-back town, and PEI is just gorgeous with rolling hills and beautiful scenery. John Andrew and company put on a great regional meeting that I hope will continue for years to come. I think we're all still somewhat full from the lobster dinner. Hope you enjoy this issue!

Just as a reminder, YOU help make InterACTIONS work, so please submit articles. Take care and see you soon.



Dr. Chris Thomas

MESSAGE FROM THE COMP PRESIDENT

Continued from page 5

to those who were not there, she and many others were able to benefit. It is a skill that many in our profession excel at, and I am quite certain that this is why the things we do are so well appreciated by our colleagues and also complete strangers, such as my new lawyer friend that I met this past weekend.

The World Congress involved many years of preparation and planning. There were many times when barriers came up,

and when there were differing views that may have prevented us from developing the congress that we wanted. Through all of this, for me, the most important outcome that I kept my mind on was that I wanted Canadian medical physics to be known throughout the world. Now that the event is over and successful, what I have noticed in my role as COMP president is that it is a bit easier to get the attention of other medical physics organisations

or prominent medical physicists outside of Canada. This was quite apparent when I attended the recent AAPM meeting which was about a month after the world congress. For this I am grateful to those who helped organise the World Congress, but I am most grateful to the Canadian medical physics community because we demonstrated that through our passion for the work we do, we are indeed able to be global leaders in our profession.

DATES TO REMEMBER

ASTRO 2015, San Antonio, USA:
October 18th – 21st, 2015

International Day of Medical
Physics: November 7th, 2015

InterACTIONS Winter issue
deadline: December 1st, 2015

FCOMP Award Nomination
deadline: February 1st, 2016

COMP Gold Medal Award Call for
Nominations deadline: February
5th, 2016

Sylvia Fedoruk Prize in Medical
Physics deadline: February 5th,
2016

7th Annual Winter School,
Fairmont Le Chateau Montebello,
Montebello, Quebec : February
7th – 11th, 2016

COMP Board Nominations
deadline: April 29th, 2016

COMP ASM, St. John's, NL: July
20th – 23rd, 2016

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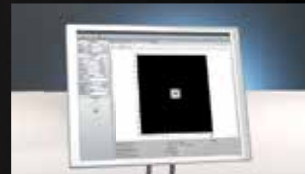
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