

General:

The second *ICEC Essential News Letter* of 2016 provides updates from activities over the last 4 months. Having made substantial progress on internal organizational structure and procedures we are beginning to provide support for ICEC Experts. We are now reaching out to foundations and holding informational meetings to present the ICEC vision and unique approach to address the need to improve global cancer care. We continue to make presentations at professional meetings and to have publications in the peer-reviewed literature. Enthusiasm and interest remain high. The scope of the gap in cancer care to the underserved remains daunting both globally and within health-disparities populations in resource-rich countries. Arising in the news and political arenas over the last year are global issues of emigration that have produced a frightening wave of xenophobia. This makes the need for the ICEC global partnership for people willing to partner with one another even more important both for the obvious care needed and as a counterpoint to cross-cultural fear and animosity. Given the impact of cancer on everyone everywhere, there are few more important common problems to serve as a counter force to the negative attitudes and to demonstrate that mutual assistance and caring promote health, understanding and partnerships.

- *Our “all-volunteer” staff is providing extensive expertise:* Costing out the hours of volunteerism we have had donated over the first three months of 2016, using the NIH FTE rate not necessarily the actual salaries which would be greater, amounts to approximately \$82,000. We are receiving, and will continue to receive, significant in-kind support, however, with our substantial progress it is a critical time for ICEC to bring on a paid staff and partial support of our mentoring activities. Development is discussed below.

- *Sustainability sets our model apart:* A key underpinning of healthcare is a sustainable infrastructure. We view cancer care as a critical component in that it requires expertise in general medicine, infectious diseases, pathology, surgery, diagnostic and clinical pathology and diagnostic imaging and the physical facility (center)- with radiation and medical oncology- in which to deliver the treatment. The global efforts focusing on infectious diseases are spectacular examples of what can be accomplished with investment and visionary leadership. Changing focus as one problem is eradicated and another becomes the target makes sense but this has the unfortunate tendency for physical centers to close a few years after opening. ICEC is the next step in addressing global health as it aims to provide sustainability in the form of mentored experts who not only remain in country but who have the infrastructure to detect and respond to outbreaks, rather than needing to reestablish teams and medical facilities. Margaret Chan, the Director General of the World Health Organization has pointed out that the absence of healthcare infrastructure is one of the key gaps in detection and response to outbreaks such as Ebola. “The world is ill-prepared. We need national and local capacity,” ^[1]. So, ICEC is both a natural partner with and a next step beyond the investment in infectious diseases, including those that cause cancer such as HPV and hepatitis virus.

- *ICEC is a “start-up”:* While the current partnerships among academic centers in resource-rich countries and nascent centers in Low- and Middle-Income Countries (LMICs) remain inspirational examples of what can be attempted, the enormous growing burden of cancer requires an innovative approach, large enough to effectively address the problem. In that perspective, ICEC is more akin to a start-up company in which we have a highly talented team of experts with the skills and creativity to tackle this problem globally. With a representative metric of being able to commission one well-functioning radiation therapy unit a week, an important centerpiece for cancer care, it will take 100 years to fill the current gap of 5000 linear accelerators. Thus, our model of working with existing programs but bringing together a formal global partnership is the first of its kind to address the problem at the scope needed. Transformational thinking, vision and action like this are necessary.

Organization and Operations

The ICEC Central Operations Working Group focused on recruitment, development and planning at the June 1 Reception and June 2 Board of Directors meeting at the Law Offices of Baker and McKenzie.

- Working with [TECHNA](#), we have migrated our website and email to 1&1 housed in the US.
- A key concept for ICEC is to have in-house systems that enable us to be efficient and cost-effective while using consultants and services as necessary, TECHNA being an outstanding example. We are working on migration of our data to Salesforce.org to facilitate efficient business and financial systems. We hired financial and accounting services to provide independent audits and data that will be presented to the Board of Directors.
- The ICEC Central Operations Working Group, consists of Dave Pistenmaa (Executive Secretary), Larry Roth (President), Nina Wendling (Chief Operating Officer), Norm Coleman (Chief Scientific Advisor), Emine Ozbay, David Kramer (Technical Advisor), Luca Valle and, when available, Nelson Chao.

Telecommunications:

- Working through the various procedures of the US Government and NIH, we are closer to establishing a teleconference and TELESYNERGY facility. With assistance from the Center for Biomedical Informatics and Information Technology (CBIIT) at NIH, and Open Systems Health Laboratory (OHSL), an NGO in Rockville with whom ICEC is working, we are getting this system ready for ICEC use.

Board of Directors and Advisory Board

- The members of the Boards and biographies are on the ICEC [website](#).
- A Board of Directors in-person meeting was held on June 2 at the Law Offices of Baker & McKenzie.
- Harmar Brereton, MD, medical and radiation oncologist, has joined the Board of Directors. He has retired from active practice and helped to establish The Commonwealth Medical College in Scranton, PA. Dr. Brereton was a colleague of Dr. Coleman when they were Clinical Associates at the National Cancer Institute in the 1970s and brings a wealth of experience in multi-site community practice, academia and entrepreneurship.

Outreach and Development:

- We have contacted the Carter Foundation. Even though cancer is not among the projects they support, we are aiming to discuss with them how the sustainability of the ICEC model could benefit their programs including the need for infectious disease experts as a component of cancer care. Our Outreach and Development group is working on applications for funds from foundations. We are very much open to your suggestions, contacts, support and assistance.

- The first informational reception, [Partnering to Transform Global Cancer Care](#) was held on June 1 with the generous support from the Department of Radiation Oncology at the Princess Margaret Cancer Centre and the Washington, DC office of [Baker and McKenzie, LLP](#). Baker & McKenzie is the largest international law firm in the world, with lawyers in 77 offices across 47 countries. ICEC appreciates the office's generosity and interest in our mission. The individuals who spoke at the reception demonstrated the unique breadth of ICEC:

- The [Ellen Lewis Stovall Early Career Leaders Award](#) was given to Danielle Rodin, Mac Longo, Surbhi Grover, Tracy Sherertz and Mira Shah. Both an individual stipend and a group award was provided with the funds to be used at their discretion.

- The [Dr. Rodney R. Million Fund for Innovation in Clinical Care](#) has been established by a generous contribution from the Million family to support activities in Africa. This new fund was announced at the June 1 reception. Lynn Million, MD, an ICEC Expert in pediatric radiation oncology will be spending a sabbatical in Africa this summer to help ICEC assess needs and develop programs.

More information about making a contribution to support the [Stovall Award](#) or the [Million Fund](#), or to submit an [application to join ICEC](#), can be found on the ICEC website.

ICEC Centers and Associates:

- There are ongoing discussions with potential ICEC Centers and Associates in preparation for our initial funding and pilot projects. ICEC is developing a map that will include these sites.

Hubs:

- ICEC is working with a number of cancer centers and private practices to establish the global network of ICEC Hubs in developed countries. The names of the initial Hubs will be posted on a website global map. At this time,

these Hubs are providing in-kind assistance, advice and key connections to potential ICEC Centers in their overseas or indigenous regions of interest.

- ICEC is pleased to include private practices as Hubs, a unique aspect of ICEC, thanks to our pioneers. The power of collaboration in cancer care as opposed to potentially wasteful competition will be the subject of an editorial to a leading journal in radiation oncology (in preparation by N Coleman). As ICEC is a model of broad partnership across academia and private practice, a similar concept will be aired for career development for translational science in radiation oncology in the US in this editorial. The need for new approaches for sustainable clinician-scientist careers is based on discussions at an NCI Workshop “The Future of Radiation Biology” in May, 2016 in which the lack of sustainable careers in basic research has many similarities to that facing those interested in global health careers.

Indigenous populations:

- Initial activities with indigenous populations builds on the “Walking Forward” program for American Indians in South Dakota (Hub and Center). We have had discussions with colleagues in Canada who are working with their First Nations populations and also with another potential partner with which to pilot a university-tribal partnership in the US. We were honored to have Gloria Letendre, Bonnie Healy and Lea Bill, from the [Alberta First Nations Information Governance Centre](#) join us in Washington, DC at our reception. We look forward to working with them to identify additional ways we can help bolster their efforts. Furthermore, we aim to work with the [Union for International Cancer Care](#) on addressing needs of indigenous populations.

Experts & Career Path:

Expert Panels are being formed with professionals involved in cancer care: radiation oncology, medical oncology, physics (with partner organizations, e.g., Medical Physicists without Borders and the American Association of Physicists in Medicine), pathology (or with partner networks), radiology (also potentially with partner networks), pharmacy, nursing, palliative care as well as surgical/gynecological oncology. We will also begin to organize Expert Panels is supporting activities including economics and survivorship.

- Inspired by discussions at the Stanford course on Human Rights and with other retiring internists, ICEC will establish a General Medicine Expert Panel. This is important both to assist with cancer care but also to work on establishing a sustainable healthcare infrastructure as outline in the General Section.

Early Career Leaders:

Members of the [Early Career Leaders Working Group](#) joined us at the Reception at Baker & McKenzie, including Mac Longo and Surbhi Grover.

- As noted above, the Ellen L. Stovall Early Career Leaders Award was awarded to Danielle Rodin, Mac Longo, Surbhi Grover, Tracy Sherertz and Mira Shah. Each is doing exciting and challenging work and ICEC commends them on their commitment to improving the access to quality global cancer care.

Education & Training:

- The hiring of an educational expert is essential for developing both our own expertise and for collaborations with educational organizations. One of our early career leaders, Onyinye Balogun, is working with Silvia Formenti on potential models for establishing an education and training program for radiation technologists and ancillary staff.

- Mathili Daphtary, ICEC Central, is building up our education resources section which soon will be available on the ICEC Website.

Partners & Collaborators:

- An ICEC-based abstract was presented at the Consortium of Universities for Global Health (CUGH). ICEC will be in attendance at the Union for International Cancer Control (UICC) 2017 annual meeting.

- An abstract “Security of global nuclear material requires addressing the unacceptable lack of cancer care” has been submitted to the International Conference on Nuclear Security: Commitments and Action to be held at the International Atomic Energy Agency (IAEA) December 5-9, 2016 in Vienna.

- We work with and seek potential collaborations with the NCI Center for Global Health, recognizing the distinctions between government programs and NGO activities.

- We have open discussions with ASTRO, SCAROP and ASCO regarding formalizing relationships with professional societies and organizations. We have had initial discussions with the National Coalition for Cancer Survivorship.
- We have formal endorsements by the American Brachytherapy Society and Radiating Hope.
- We are working with the Department of Energy regarding the security of radiological materials globally and how this may relate to education and training for a workforce to be able to safely use linear accelerator technology that will replace cobalt-60 treatment machines.
- Inquiries from organizations to work with ICEC are welcome.

Recognition:

- Norm Coleman will receive the Failla Award from the Radiation Research Society at the annual meeting in Kona Hawaii, October 2016. "Failla Award and Lectureship: The Failla Lectureship was established by the 29th RRS Council to honor Dr. Gioacchino Failla. The lecture was first given in 1963. [The Failla Lectureship](#) may be considered as an award for a distinguished career in radiation research, or an award to an individual who is in mid-career, highly productive, and working in an exciting and cutting-edge area of radiation research."
- ICEC's Chief Operating Officer, Nina Wendling, though racing through chronic pain from a previous injury, finished only 12 minutes behind professional triathlete Wendy Ingraham, overall 12th woman and in the top 20% of the entire field at Ironman 70.3 St. Croix, and qualified for the World Championships in Australia in August.

Presentations- key meetings: [DW1]

- Norm Coleman: International Conference on Translational Research in Radio-Oncology | Physics for Health in Europe, Geneva, February 2016; presented the ICEC model and opened up discussion about the design of a linear accelerator for the developing world. This will be a topic of a meeting in CERN in November 2016
- Norm Coleman: Stanford Medical School Course on Human Rights, and Stanford Radiation Oncology Rounds, February 2016; discussed that it is easy to declare healthcare a human right, implementation is difficult. Presented the unique ICEC mentoring model.
- "Establishing global health cancer care partnerships across common ground: Building on nuclear security, cancer disparities, education and mentorship." Was presented at the Consortium of Universities for Global Health, San Francisco, April, 2016. A [copy of the presentation](#) is on the ICEC website.

Upcoming

- Surbhi Grover (presenter) and Norm Coleman (moderator): Global health, ASTRO, October 2016

Innovation and entrepreneurship

- There is a need for linear accelerator technology that can function in the developing world and be of sufficiently high quality to meet the needs of the patients and maintain the interests of the local physicians and staff. To address this, the ICEC is working with the physicists at CERN (Geneva) at their invitation for a meeting on this subject Nov 7-8, 2016. Manjit Dosanjh, Dave Pistenmaa and Norm Coleman are working on an agenda and invitation list. This will bring together engineers, physicists, academia and industry to address innovative approaches that would have a substantial impact on filling the gap of 5000 linear accelerators in LMICs and other underserved regions. More on this in the next Essential News Letter.

Publications (since the last Essential News Letter related to ICEC and/or from ICEC members relevant to global health; readers, please provide additional citations):

- [Treatment, not Terror: Strategies to Enhance External Beam Cancer Therapy in Developing Countries While Permanently Reducing the Risk of Radiological Terrorism](#) by Miles A. Pomper, Ferenc Dalnoki-Veress and George M. Moore is posted on the ICEC website.
- An editorial summarizing the Treatment, not Terror concept by M. Pomper and N. Coleman, under review.
- Knaul FM, Langer A, Atun R, Rodin D, Frenk J, Bonita R. Rethinking maternal health. Lancet Glob Health. 2016 Apr;4(4):e227-8.

[1] <https://www.weforum.org/press/2016/01/preparing-for-the-next-pandemic-fear-cannot-be-our-motivation/>