By: Dr. Kimberly Applegate and Dr. Fred Fahey

The past few years, the Image Gently Alliance has developed eight posters for presentation at the European Congress of Radiology and other meetings (see them here). Originally developed in English, these posters have presented various aspects of paediatric imaging upon which Image Gently has provided guidance and information. Last December, we put out a call for translations on our web page, and in the IAEA’s RPOP newsletter in order to widen our message to as many people as possible. The Alliance would appreciate translation into any language, particularly those languages understood by a good number of individuals from around the world interested in the material, such as Arabic, Bengali, traditional Chinese, French, and Hindi. The posters have already been translated into Portuguese, Russian, and Romanian, and there are simple Chinese, Persian, and Spanish translations underway. Alliance educational materials are always free and available for use by individuals or local organizations.

Some years ago, volunteers provided patient education brochure translations into 20 languages that remain on our web site’s international pages. Individuals and their organizations are recognized for their work. One way anyone may help to promote this effort is to tell people about these materials; another way is to ask those in your organization for help with a translation; and yet another is to post about this effort on your organization’s web site, linking to our poster translation announcement. Finally, those interested in assisting the Alliance in this endeavor should contact Robin Yurchuck (robin.yurchuck@duke.edu) for further information.
BRAZIL — MASSIVE BOOM IN IMAGE GENTLY PARTNERSHIP

Over the past 2 years, there has been considerable increased presence and partnership with Radiology professionals in South America, and particularly in Brazil.

Brazil has
- 208,917,661 inhabitants
- 65 million Children and Adolescents (Brazilian Pediatric Society information)
- 450,000 active medical doctors working (Federal Council of Medicine information)
- 35,000 Pediatricians (Brazilian Pediatric Society information).

OTHER NEW INTERNATIONAL ALLIANCE PARTNERS!

NEWEST CAMPAIGN: FAMILY MEDICINE

By: Dr. Alexander Towbin and Dr. Christopher Bunt

The Image Gently Family Friendly Campaign is an innovative joint venture between Family Medicine and the Pediatric Radiology that targets third-year medical students during their core Family Medicine clerkship. In the Family Friendly Campaign, a team of interprofessional educators is crafting a four-lesson module curriculum that advocates for appropriate use of pediatric imaging through critical appraisal, motivational interviewing and shared decision-making. The first lesson focuses on the principles of radiation protection while providing the learner with lay-person language to support and enhance familial dialogues. The second lesson focuses on clinical decision support applications and teaches the learner how to critically appraise the literature. The third lesson focuses on the learner-as-teacher, and demonstrates how motivational interviewing can be used to advocate for the recommended imaging choice during clinical rounds with a senior resident or attending. Finally, the fourth lesson combines concepts from the first three modules so that the learner can use lay-person language and their newfound knowledge to practice shared decision-making with a child’s family. The Image Gently Family Friendly Campaign’s online curriculum will be available for free and accessible to all in 2021.
THE BUTTERFLY EFFECT

ON ROUTINE USE OF GONADAL SHIELDING AND PEDIATRIC ABDOMEN AND PELVIS RADIOGRAPHY: IMAGE GENTLY EMBRACING THE NEW ROUTINE

By: Don Frush, MD, Chair of The Image Gently Alliance

For decades, based on what was the prevailing scientific position on the radiosensitivity of gonads, we as a medical and regulatory community promoted and practiced radioprotec-
tive (“lead”) shielding placement during much of radiog-
raphy in children. This was the routine. However, the combi-
nation of a growing body of evidence for both the benefit and detriment of this practice, together with increasing voices, some institutional/organizational and some indi-
vidual, have provided … provoked really what some may call a “rout” of the routine. The evidence has been presented in greater detail in other sources but is summarized as:

- we use much less radiation now in diagnostic abdomen pelvis radiography than 70 years ago,
- the gonads are assigned substantially less radiosensitivity than previously,
- there is no statistically significant heritable effect from radiation in human gonads,
- shields are very often (despite adherence to standard guide-
lines) not fully effective in covering gonads, including the tes-
tes,
- radiation dose reductions are relative minimal in ovaries due to the inability to affect internal scatter by shielding,
- the use with automatic exposure control (AEC) can result in an overall increase to other more radiosensitive regions being examined,
- shielding in the field may decrease diagnostic yield, and patient contact with any reusable material can be a hygiene risk.

But, simply rewriting “the gonad shielding book” is challenging. Education, regulation/guidance, public and caregiver and medical professional expectations are rooted in longstanding practices and change is therefore understandable formidable. What are the Image Gently Alliance’s efforts directly or indirectly contributing in this culture shift?

Keith Strauss led a commentary in the Journal of American College of Radiology (as one of the monthly alternating Image Gently/Image Wisely commentaries, Radiation Sensibilities). This was one of the first calls to revisit the practice of routine gonadal shielding. He and I are also leading the preparation of a Statement through the National Council on Radiation Protection and Measurements (NCRP) on shielding that will include comparison content on guidelines for communication of the recommendations. Image Gently is also one of the financial contributors along with other Alliance founding organizations for the NCRP Statement project. There will be Image Gently representation in a session at the 2021 European Congress on shielding.

The Alliance is also one of the recognized contributing organizations in the AAPM Communicating Advances in Radiation Education for Shielding (CARES) Committee (https://www.aapm.org/CARES/), which prepared FAQs and is currently working on educational modules that will provide medical education credit for technologist, medical physicists, and imaging physicians. Image Gently also participated in an AAPM session organized by Sarah McKenney for the Association’s annual meeting this July. Finally, and fundamentally, the gonadal shielding evolution is entirely harmonious with adhering to the mission of the image at the alliance: “... through advocacy, to improve safe and effective imaging care of children worldwide”. And Image Gently is honored to be part of the larger efforts towards this end related to gonadal shielding of children during radiography: transforming the old routine to a new and better routine.
NEW STEERING COMMITTEE MEMBERS

Dr. Quentin Moore joined the Image Gently® Steering Committee in late 2019. Dr. Moore is an Assistant Professor of Medical Imaging and Director of Imaging Sciences at Mercy College of Ohio. He holds professional credentials in Radiography (R), Radiation Therapy (T), and Quality Management (QM) from the American Registry of Radiologic Technologists (ARRT). He has a Master of Public Health degree from Bowling Green State University & the University of Toledo, and a PhD in Health Science from Northern Illinois University.

His primary research interests include radiation safety culture, radiation dose reduction in pediatric radiography, interdisciplinary collaboration and team science, and imaging appropriateness topics. Dr. Moore has provided leadership to several professional organizations including the American Society of Radiologic Technologists’ (ASRT), American Association of Physicists in Medicine (AAPM), American College of Radiology (ACR), and the Association of Educators in Imaging and Radiologic Sciences (AEIRS). PET and SPECT instrumentation, image processing, reconstruction of tomographic data and the radiation dosimetry, particularly in the realm of pediatric nuclear medicine.

Dr. Diana Litmanovich will join the Image Gently® Steering Committee following RSNA 2020 when she steps into the role of Co-Chair for Image Wisely. Dr. Litmanovich is an Associate Professor of Radiology at Harvard Medical School and Chief of Cardiothoracic Imaging section in the Department of Radiology at Beth Israel Lahey Health, Boston, Massachusetts. She is also a Director of Cardiothoracic Imaging Fellowship and Medical Director of Lung Cancer Screening Program at her institution.

Dr. Litmanovich is a President-Elect of North American Society of Cardiovascular Imaging. She also serves on Cardiovascular Research Commission of the American College of Radiology (ACR) and American College of Radiology Appropriateness criteria panel. She is an editorial board member of “Radiology: Cardiothoracic Imaging” journal and “Journal of thoracic Imaging”. She specializes in Cardiac and Pulmonary Imaging. Her main research interests are in the clinical impact of advanced cardiovascular CT, with primary focus in imaging in pregnancy and post-partum, as well as development of radiation dose reduction techniques in cardiopulmonary imaging. She has also led efforts to increase the awareness of appropriate imaging of pregnant patients with suspected pulmonary embolism.

Diana attended Bruce Rappaport Medical School in Technion, Haifa, Israel and completed her residency training in the Rambam Hospital, Haifa, Israel. She moved to the United States in 2006 to pursue a research and clinical career in cardiovascular imaging at BIDMC, where she completed 2 years of combined clinical and research fellowship in cardiothoracic imaging and has joined the faculty in 2008. Her main interests beyond medicine are historical reading and traveling. She is enjoying her free time whenever possible with her young daughter, her son (during his college breaks) and her husband of 25 years.

We thank Elliot Fishman, who is rolling off of the Image Gently Steering Committee, for his years of service in this capacity.

RADIATION SENSIBILITIES

Radiation Sensibilities is a regular column in JACR sponsored by the leadership of the Image Gently® and Image Wisely® initiatives that rotates among selected authors selected. The goal of this column is to provide information relevant to optimizing the amount of ionizing radiation used in high-quality medical imaging for both pediatric patients and adult patients. Columns address not only techniques and tactics, but broader issues in the informed use of ionizing radiation in high-quality medical imaging consistent with the missions of Image Gently® and Image Wisely®. Please be sure to check out the current column as well as past month’s columns, and keep a look-out for future monthly installments of Radiation Sensibilities. We hope you find them informative and useful.

Vol. 17, Issue 9: Patient Shielding in 2020 by Rebecca Marsh
Vol. 17, Issue 5: Artificial Intelligence and CT Image Reconstruction: Potential of a New Era in Radiation Dose Reduction by Avinash Kambadakone
Vol. 17, Issue 4: Improved Estimates of Trunk and Head CT Radiation Dose: Development of Size-Specific Dose Estimate by Keith Strauss, Sarah MckKenney, and Samuel Brady
Vol. 17, Issue 1: Dual-Energy CT and Radiation Dose by Thomas Reher
Vol. 16, Issue 12: The Value of Value by Don Frush
Vol. 16, Issue 4: Abdominal CT Imaging Applications of Low Kilovoltage Peak Techniques by M. Levinson, M. Hoerner, A. Mustafa,
The Image Gently® Alliance is a coalition of health care organizations dedicated to providing safe, high quality pediatric imaging worldwide. The primary objective of the Alliance is to raise awareness in the imaging community of the need to adjust radiation dose when imaging children. The ultimate goal of the Alliance is to change practice.

The organization has developed a transformative group of campaigns to address digital radiography, fluoroscopy, interventional radiology, nuclear medicine, computed tomography, dentistry, cardiac imaging and imaging in the setting of minor head trauma.

Image Gently®, the first in a new world-wide network of campaign partners, has become a recognized presence at both national and interna-

Continued from Page 4….

One size does not fit all….

Don Frush, MD
Chair
The Image Gently® Alliance

Robin Yurchuck
Administrative Director
The Image Gently® Alliance

Noah Samuel Yurchuck arrived December 12, 2019 and is doing well! Thank you for all of the well wishes during his time in the NICU!