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Interim Provincial Head Overview

This past year has set in motion significant change to our health care system and to the administration of our department, which we anticipate will more fully unfold in the next few years. The announcement of the Saskatchewan Health Authority in December and Dr. Babyn taking the role as Physician Executive of Provincial Programs in January leaving the Provincial Department Head potentially vacant resulted in a very sudden transition for me when I was asked to take over the role as Interim Provincial Head. A few months later, as I write this, I reflect back on what has transpired over this short time.

It was a fairly steep learning curve for me to get up to speed with what was happening at the SHA, but I soon became aware that very few decisions of how things would functionally work had actually been made. This lack of clarity has at times been frustrating, but at the same time provides us the opportunity to think ahead and create the kind of department we want to work in. I’m sure our department will look and feel different administratively and probably how we manage our work in the months and years to come. Although things have operated in much the same fashion so far as last year, the concept of a Provincial Department with the potential for clinical efficiencies, coordination of services and quality improvement initiatives will take our department to a different level of operation. I personally feel that it is very important to have each member of the department aware and contribute positively to the building of this new provincial department. I think there will be considerable opportunities within the system for people to take leadership roles and contribute to make our department better as we go along. Individually and collectively we will need to take more ownership in the positive constructive administration and management of our future department.

We must also include the academic integration of our new provincial department. The clinical and academic obligations and contributions that our work entails are not mutually exclusive and through the collective building of our new department I think we need to consciously look at both aspects. I am happy to report that our recent external review of our Diagnostic Radiology program in the Spring by the Royal College of Physicians and Surgeons of Canada went very well and I would like to commend Dr. Farid Rashidi for his excellent preparation as well as the support from Prachi Bandivadekar for the review.

Finally, I would like to personally thank Kristin Atkinson, who has kept the administration of the department going rather seamlessly during this transition, making sure things get done when they need to and keeping things on track.

Dr. Sheldon Wiebe,
Professor and Interim Provincial Head
The following annual report is the culmination of work made possible through the tireless efforts and dedication of our incredible Diagnostic Imaging team. 2017/18 has seen significant quality improvement and program expansion in multiple areas throughout the DI service line.

Continued collaborative work with other provincial health regions, e-Health, 3S Health have enabled the progression of a provincial Voice Recognition system that would replace our current dictation/transcription workflow which is projected to go live in the first quarter of 2017.

In the past year we have worked alongside the Sylvia Fedoruk Center cyclotron facility to develop local resourcing of radioisotopes to develop a more responsive Provincial PET/CT program and better serve the patients of Saskatchewan that rely on the timely delivery of these services. Through this work, we have seen our wait times in this area drop from over 5 weeks to just 7-10 days.

Capital equipment accrual has also been at the forefront of work being completed in DI this past year. We have successfully implemented and operationalized the new endo-vascular suite at Royal University Hospital as well as a new SPECT/CT camera at St. Paul’s Hospital.

With the ever increasing need of medical imaging services in our patient’s health care journey, we continue to play an integral role in various expanding programs. We have seen exponential growth in areas such as the Provincial Stroke Pathway, collaborative work with Kidney Health in implementing a DI based Peritoneal Catheter Placement program, and continued work and planning with the Jim Pattison Children’s Hospital stakeholder groups.

Throughout the last year multiple Quality Improvement initiatives have been implemented in order to improve the service that we are able to provide. In order to improve our MRI service, in conjunction with the Health Quality Council, MRI appropriateness criteria was implemented with plans of expansion into CT in the following year. From a financial perspective, several financial sustainability initiatives were put in place focusing on LEAN initiatives. Through this work made possible by our dedicated physicians and staff we were able to realize reductions in paid hours, overtime, service contract costs, sick time and orientation costs.

Over the last year we as a team were able to serve over 200,000 patients during their healthcare journey. I am personally extremely grateful to be part of such a tremendous team of physicians, managers, and front line staff and look forward to the following year to develop and refine how we can better provide quality care for our patients and their families.

Shane Timm,
Director of Medical Imaging
Saskatchewan Health Authority
It is with mixed emotions that I write this annual report message reflecting back upon my time as immediate past Provincial Head of the Department of Medical Imaging. Over the past seven years, I have greatly enjoyed my time as Chair especially working with and learning from the many wonderful trainees, staff and physicians within Medical Imaging. As a team, we have progressed far and I am sorry to not be more personally involved with the next exciting chapter in Medical Imaging.

Over the past several years as a department, we have started along a path of academic enhancement and operational improvement. Our successes to date have reflected the hard work of our entire team and the tremendous contributions of many of our colleagues. To improve patient care we have started along a path of continuous quality improvement (CQI). CQI is hard but rewarding work, hard because we must learn new skills to allow us to work better as teams and as a system. Good systems don’t magically appear but are created through the efforts of you- our staff and physicians! CQI work is rewarding because we have the opportunity to provide our personal input and to use our creativity as individuals and more importantly as a diverse team to bring better practice and clinical ideas to our work. There remains as always with CQI, much to do. Our coming together with the Provincial Programs portfolio offers us (both staff and physicians) many exciting future leadership and operational opportunities to further improve access to our services and to enhance our patient care.

With my transition to the new Saskatchewan Health Authority as Physician Executive within Provincial Programs, I am excited to start the new work. I have had the wonderful opportunity to see many health facilities across our great Province. I have been thrilled to experience the teamwork, passion, and enthusiasm of a great variety of staff across Provincial Programs and our Province. I have been impressed with our commitment to putting patients first and our shared vision of enhancing patient care.

Within Medical Imaging, we have the great opportunity and challenge to build a provincial team where we all come together. This will allow us to lessen our collective deficiencies and strengthen our provincial care. My hope is that all staff and radiologists will seize this opportunity to strengthen Medical Imaging. Simple examples of where we can improve is by better supporting our smaller communities where staff and radiologist coverage may be sparse or by using our resources as true provincial resources.

Our coming together allows us to bring talents from across the province to assist in designing and developing our team, and simultaneously allow us to better work towards accreditation and enhanced quality of care. As an Executive team, we have been working to establish our teams across all aspects of the healthcare system. Within Medical Imaging, this will allow us to initiate broader discussions and bring our teams together provincially with a view to ramping this up this fall. We have the ability to build a strong provincial network with improved technology and training for our people. When we combine our provincial strengths with a provincial lens of enhanced quality improvement. We have a wonderful opportunity to rapidly enhance patient care!!

In closing, I would to thank all the staff, radiologists and residents that have stimulated my thinking and allowing me to grow along the way! I would especially like to thank Kristin and Prachi for all their support and help. I have been privileged to work with a great team!!

Dr. Paul Babyn, Physician Executive for the Provincial Programs
Saskatchewan Health Authority
Faculty Members

**Interim Provincial Head**
Wiebe, Sheldon (as of Jan/18)

**Department Head**
Babyn, Paul (until Jan/18)

**University Medical Imaging Consultants**
Bell, Clifford
Burbridge, Brent
Chatterson, Leslie
Dabirzadeh, Hamid
Dhir, Anita
Ellchuk, Tasha
Fladeland, Derek
Gitlin, Josh
Karjala, Geoff
Leswick, David
Moulton, Kyle
Obaid, Haron
Otani, Rob
Rashidi, Farid
Rodriguez, Carl
Shepel, Michael
Stoneham, Grant
Szkup, Peter
Theoret, Tina
Waddell, Ian

**Regina Operations**
Regina General Hospital (RGH)
Pasqua Hospital (Pasqua)

**Regina Managers**
Cameron, Bonnie
Eberle, Rhonda
Frombach, Kristin
Leippi, Dawn
Peters, Wade

**Regina Supervisors**
Binner, Arlene (RGH NucMed)
Busch, Delanna (Pasqua NucMed)
Dhillon, Kam (Pasqua Ultrasound)
Ducharme, Tricia (Pasqua CT)
Halldorson, Hallie (RGH CT)
Harper, Cathie (Breast Centre)
Hiebert, Orrey (IT Support)
Montanini, Lorna (Interventional)
McKechnie, Marlene (RGH)
Ramsay, Todd (RGH/Pasqua MRI)
Rodgers, Milissa (RGH Ultrasound)
Shewchuk, Daryl (Pasqua)

**Regina Associated Radiologists**
Adams, Winston
Clarke, Wallace Wayne
Devitt, Neil Gordon
Gourgaris, Adriana
Hillis, J.
Jeon, Albert
Kapoor, Neil
Lala, Shantilal
Le, Brian
Lembke, Edward Charles
Lim, Chong-Ha
Nayeemuddin, Mohammed
Patel, Rajesh
Schulte, Paul
Verma, Ashok

**Saskatoon Associated Radiologists**
Beck, Maxine
Buglass, Tiffany
Chavarria, Cesar
Chow, Vance
Flegg, Carolyn
Fraser, Don
Gordon, Heather
Jacob, Preman
Kenny, Anne
Lim, Meng
Marshall, Geoffrey
Mack, Tyson
McIntosh, Don
Norval, Ivan
Preman, Jacob
Ross, Todd
Scott, Andrew
Sinclair, Nicolette
Tremeer, Cory
Verrall, John
Wall, Chris
Waslen, Tom
White, Chris

**Regina Clinical Head**
Goyal, Kunal

**Regina Administration**
Lawlor, Karen
Affiliated Members

**Regina Teleradiologists**
- Baldauf, Christian
- Bayat, Muammad
- Bhalla, Sanjiv
- Butler, Robert
- Farooq, Saqba
- Gulka, Irene
- Haba, Justin
- Janzen, Dennis
- Martens, Jason
- Potoczny, Stefan
- Shastry, Anil

**Regina Associate Members**
- Boroto, Kahimano (Annie)
- Cupido, Brindley D.
- Ojo, Alaba
- Sabri, Ali
- Tan, Kiat

**MJH Imaging**
- Hendel, Mary-Jane

**Moose Jaw**
- Du Toit, Abraham

**Prince Albert**
- Buglass, Tiffany
- Lim, Meng Chee

**Adjunct Faculty**
- Caldwell, Curtis (Radiation Safety Institute of Canada)
- Menk, Ralf Hendrick (University of Trieste, Italy)
- Venugopal, Niranjan (Saskatchewan Cancer Agency)
- Wesolowski, Michal (Luxsonic Technologies Incorporated)

**Research and Cross-Appointed Faculty**
- Chapman, Dean (Anatomy and Cell Biology)
- Fonge, Humphrey (Sylvia Fedoruk Centre)
- Kelly, Michael (Neurosurgery)
- Machtaler, Steven (Department of Medical Imaging)
- Mickelborough, Marla (Department of Psychology)
- Peeling, Lissa (Neurosurgery)
- Phenix, Christopher (Department of Chemistry)
- Sarty, Gordon (Department of Psychology)
- Wesolowski, Carl

**Saskatoon Operations**
- Royal University Hospital (RUH)
- Saskatoon City Hospital (SCH)
- St. Paul's Hospital (SPH)

**Saskatoon Managers**
- Shane Timm (Director)
- Darin Humphreys (Royal University Hospital)
- Christine Dawson (PET/CT and NucMed)
- Richard Dagenais (Saskatoon City Hospital)
- Marla Komaransky (St. Paul's Hospital)

**Saskatoon Supervisors**
- Bailey, Cathy (SPH/SCH Office Supervisor)
- Barboluk, Peter (RUH X-Ray)
- Bertoia, Frank (RUH PACS)
- Bradley, Earl (SPH Vascular and Core)
- Fedrau, Curtis (SCH Core)
- Heck, Brian (RUH Vascular)
- Hilkewich, Melanie (SPH CT)
- Kral, Maureen (SCH Ultrasound)
- Lalonde, Al (RUH MRI)
- Mildenberger, Scott (RUH PET/CT)
- Schneider, Darrel (SCH CT)
- Simont, Suzanne (RUH/SPH Ultrasound)
- Toews, Lori (RUH CT)
- Wenzel, Doug (SPH/SCH MRI)

**Medical Office Admins**
- De vera, Alyssa
- Fauvelle, Arlene
- Lagos, Krishna
- Lucier, Chrys
- Olzewski, Jill
- Pambrun, Wendi
- Polischuk-Schmidt, Evelyn
- Poitras, Joanne
- Vasquez, Nancy

**Administration**
- Bandivadekar, Prachi, PGME Admin
- Esterhuizen, Jackee, PGME Admin
- Atkinson, Kristin, Executive Admin
Residency Program Overview

Academic year 2017/18 has been another successful year of our residency program training. All of our PGY-5 residents have passed the Royal College exam and started their fellowship training in prestigious programs with the hope of coming back as subspecialized radiologists to serve our community. We have also accepted four excellent applicants in our residency program who started their first year of training on July 1, 2018. The University of Saskatchewan radiology residency program strives to train competitive radiologists in order to supervise, advise and deliver most up-to-date patient care in terms of medical imaging based on solid knowledge, technical skills and CanMEDs rolls set by the Royal College of Physicians and Surgeons of Canada.

I am delighted to comment on the program's external review which was commenced on May 7, 2018 by the Royal College of Physicians and Surgeons of Canada. The outcome was very favorable with final decision of a fully Accredited Program and schedule for Regular Accreditation Review in 2023, detailing multiple strengths of our program including; but not limited to strong Program Structure and Residency Program Committee engagement. This wouldn't have happened without the active involvement, engagement and endless efforts which have been made by all staff and residents. As a result, today we are witnessing significant improvement in our residency program quality.

There has been multiple other areas of improvement in our program which are summarized as follows:

1. More lectures have been added to residents' academic half-day's schedule in terms of research and its infrastructures in order to improve our program research base.

2. Five core rotations were upgraded to subspecialty rotations in order to improve residency training, quality and increased exposure of residents to more subspecialized teaching. These include: ENT, CT/US, guided biopsy, chest/cardiac, CT colongraphy and abdominal/pelvic MRI rotations.

3. Two dedicated obstetrical ultrasound rotations were added to the residency training program to satisfy Specialty Training Requirements (STR) guidelines outlined by the Royal College of Physicians and Surgeons of Canada.

4. A dedicated ultrasound rotation was added to radiology residency training in PGY-1 year.

5. More rigorous resident assessment procedures have been implemented in order to qualitatively improve our residency training program. This area is under continuous improvement and scrutiny by the Residency Program Committee.

University of Saskatchewan Diagnostic Imaging program has always been providing a very friendly environment for residency training free of any harassment or intimidation and constantly strives for improvement.

Dr. Farid Rashidi, MD, CCFP, FRCPC
Program Director
Chief Resident Overview

There are many strengths to the radiology residency program at the University of Saskatchewan. First and foremost, given our program is smaller than many of the larger institutions, we develop a strong and close working relationship with the staff and radiologists. This allows us to develop a strong working relationship and friendly work environment with the additional benefit of more personalized one-on-one training. Our institution also does not take any fellows, meaning the residents have first access to all of the interesting and challenging cases which would generally be reserved for fellows. Given RUH is the only tertiary care hospital in Saskatchewan, we have a relatively generous catchment area and many of the interesting cases across the province come to Saskatoon for care. RUH will also soon be home to the newest pediatric hospital in Canada, which is scheduled to open in fall 2019.

The challenges to our residency program are not unique to the University of Saskatchewan and are being faced by other programs within Canada. The biggest change coming to our program is the adoption of Competence by Design. This initiative has been embraced and spearheaded by our Program Director and Provincial Head. We are well underway to transitioning our program to meet these standards with the adoption of log books, formal testing during rotations, and more frequent evaluations from staff.

There are many opportunities within our department that are unique to our residency program. As previously described, the lack of fellows allows residents to see the rare cases that come through the department or assist in some of the higher level interventional procedures. All the recent graduates of our program in recent memory have had jobs lined up before heading off to fellowship. Many of these residents are now staff radiologists with the program. After speaking with the residents at other institutions, this seems to be unique to our residency program. We also have a unique demographic in our province which exposes us to pathology not seen as frequently in other programs, such as Tuberculosis and Multiple Sclerosis.

In summary, I believe that we have a strong and close knit residency program which produces residents who have a solid foundation of knowledge and skills allowing them to confidently move into a consultation role after completion of their residency.

Dr. Gage Watson, PGY-4 (Chief Resident 2017/18)
Dr. Brie Alport, PGY-5

Summarizing my 5-year residency is difficult as my experience is limited to the Saskatchewan program and it is hard to benchmark against other programs. From early on as an undergraduate in medical school, I had an interest in diagnostic imaging and participated in research, electives and took advantage of any opportunity to gain exposure to the department. Going into CaRMS, I knew some of the strengths of the program including the small size, staff to resident ratio and volume of work.

In the last several months, I have had time to reflect and have gained a much greater appreciation for my residency training at the University of Saskatchewan. Having gone through the program, the Royal College exam, talking/working with residents from different programs across the country and training as a fellow at the University of Toronto, I now realize the strengths of our program and the excellent training from across all sites. Daily review with staff, active participation in protocolling studies, managing CT/MRI cases, volume of cases, early exposure to procedures, active involvement in complicated/rare cases, and even managing call shifts are some of the things I took for granted and now consider major strengths of the program. The small program fosters good working relationships between residents and staff. The staff know all residents and help develop skill sets by identifying areas of strength and weaknesses. Our small resident cohort and ambiance of the program create lifelong friendships and close colleagues. The program is extremely supportive, which I believe is important for a residency program.

Over my residency, the program has worked hard to make improvements. There is now greater focus on resident research with scheduled meetings throughout the year to increase resident accountability to their projects and support from staff. Soon, the program will transition to competency by design. The program is preparing by updating rotation objectives, changing rotations to now include more cardiac MRI and CT colonography, and improve resident evaluations. These are all positive changes that will facilitate an easier transition.

To end, I want to thank all the staff, fellow residents, technologists, and support staff for making the last 5 years great. I am so fortunate to have completed my residency at the University of Saskatchewan and look forward to returning to Saskatchewan once I have completed my Women’s Imaging Fellowship at the University of Toronto. To my former residency colleagues, all the best in your upcoming years of study. Know that you are in an excellent program and will be more than prepared to take on your exams, future fellowships and careers in radiology.
Residents of 2017/18

**Back Row, from Left:** Dr. Graeme Bell, Dr. Yang Du, Dr. Jimmy Wang, Dr. Navdeep Sahota, Dr. Brie Alport

**Front Row, from Left:** Dr. Samuel Pike, Dr. Danielle Dressler, Dr. Nick Vassos, Dr. Sarah Melendez, Dr. Scott Adams

**Residents not in Photo:** Dr. Leanne Langford, Dr. Raza Naqvi, Dr. Mia Du Rand, Dr. Kavita Kanga, Dr. Matt Wright, Dr. Neil Kalra, Dr. Gage Watson
Congratulations PGY-5's

From Left: Dr. Nick Vassos, Dr. Danielle Dressler, Dr. Brie Alport, Dr. Navdeep Sahota
Resident Research Projects

**Dr. Graeme Bell**: Missed MRI Appointments: A City-Wide Audit

**Dr. Raza Naqvi**: The Effect of Coordinated Investigations for Rural Lung Cancer Patients on Traveling and Time to Staging Completion

**Dr. Mark Pearce**: CT Reading Room Interruptions

**Dr. Kavita Kanga**: Clinical Audit Project/PQI: Transrectal Ultrasound Prostate Biopsy: How Good Are We?

**Dr. Yang Du**: Use of Oral Contrast in the Setting of Undifferentiated Abdominal Pain in the Emergency Room

**Dr. Sarah Melendez**: Pediatric Consent in Ultrasound Imaging

**Dr. Mia Du Rand**: Interventional Radiology Inserted Pleural Pigtail Drains? Are we Managing them Correctly?

**Dr. Michal Wesolowski**: Overview of potential research projects with the SieVRt Medical Viewer

**Dr. V. Gaja**: A fully automated production of cGMP grade 68Ga-PSMA-11 with cationic pre-purification for clinical PET/CT Imaging

**Dr. K. Barreto**: Formulation of 89Zr-DFO-Nimotuzumab for a Clinical Trial to Assess Diagnostic PET Imaging Quality

**Dr. Xin Yi**: Automatic catheter detection in pediatric radiographs using a scale-recurrent neural network and synthetic data

**Dr. Scott Adams**: Access to Ultrasound Imaging: Qualitative Study in Two Northern, Remote Saskatchewan Indigenous Communities

**Dr. Scott Adams**: A Crossover Comparison of Standard and Telerobotic Approaches to Prenatal Sonography

**Dr. B. Hunter**: Patient Symptom Questionnaires Result in Higher ACR and CAR Appropriateness Scores Compared with Physician Requisitions for Knee MRI

**Dr. Raza Navqi**: Computed Tomography (CT) on Call: An outline, interactive curriculum to prepare medical imaging residents for after-hours CT Image Interpretation
Dr. Graeme Bell: Implementation of a tailored MR stroke protocol

Dr. Kavita Kanga: Evaluation of Current Hip Impingement Measurement Techniques in MRI

Dr. Neil Kalra: Appropriateness in Residency Education: An Initiative in Medical Imaging to Promote System Resource Stewardship

Dr. Matt Wright: Evaluation of Med-Comp, Dignity, Power Injectable Port at Royal University Hospital

Dr. Gage Watson: Ultrasound Imaging: Features of Soft Tissue Sarcoma with Biopsy Correlation Imaging Criteria for Malignancy

Dr. Jimmy Wang: Implementing Online TI-RADS Calculator

Dr. Jimmy Wang: Fleischner Criteria Web App

Dr. Brie Alport: Knee MRI: How Fast Can We Go? A Comparison of Routine and Fast Knee MRI Protocols

Dr. Nick Vassos: Soft Tissue Sarcomas: Revisiting MRI Imaging Criteria

Dr. Danielle Dressler: Prevalence of Bone-Cartilage Mismatch in the Tibial Plateau on Knee MRI
Departmental Research Awards

"Once again the research projects and presentations were very well done and I would like to thank everyone who presented projects at the Departmental Research Day on June 8, 2018. I would also like to thank GE Healthcare who provided a grant to fund the day. I am grateful to the Associated Radiologists, University Medical Imaging Consultants and Saskatoon Medical Imaging for their sponsorship, for their assistance with comments on all the presentations and performance of judging duties." Dr. David Leswick, Research Director and Professor

Although, all of the presentations were well done, some stood above the others and were presented with the following awards:

The 'Stuart Houston Award for Medical Imaging Research' at the University of Saskatchewan is awarded annually for the Best Resident Research Project. This year it was awarded to Dr. Scott Adams for his presentation "A Crossover Comparison of Standard and Telerobotic Approaches to Prenatal Sonography."

Honorable mention was given to Dr. Neil Kalra for his project, "Appropriateness in Residency Education: An Initiative in Medical Imaging to Promote System Resource Stewardship."

The $250 Best Practice Quality Improvement (PQI) award was won by Dr. Raza Naqvi for his project, "The Effect of Coordinated Investigations for Rural Lung Cancer Patients on Traveling and Time to Staging Completion."
Honorable mention went to Dr. Yang Du and Dr. Gage Watson for their project, "Use of Oral Contrast in the Setting of Undifferentiated Abdominal Pain in the Emergency Room"

The $500 Best Medical Student Project award was won by Dr. Bjorn Hunter for his project, "Project Symptom Questionnaires Result in Higher ACR and CAR Appropriateness Scores Compared with Physician Requisitions for Knee MRI."

Acknowledgements:
Dr. David Leswick, Professor and Research Director

Thank you again to everyone who has worked to make this a successful Research Day. This includes the quality research produced by residents, medical students and departmental radiologists. Our department administrative assistants, Prachi Bandivadekar, Kristin Atkinson and Jacqueline Esterhuizen organizing the details. Three local radiology groups (Associated Radiologists, University Medical Imaging Consultants, and Saskatoon Medical Imaging) have donated funds for motivational prizes.

We were fortunate to have Dr. Jacob Jaremko join us from the University of Alberta as our distinguished guest. He is a fellowship trained radiologist with a very active research program centered on pediatric and musculoskeletal imaging. We look forward to his insights and comments on the projects this year.

On behalf of the University of Saskatchewan Residency Program and the department of Medical Imaging, I would like to sincerely thank everyone who has contributed to this event.
University Medical Imaging Consultants and Associated Radiologists

Back Row, from Left: Dr. Sheldon Wiebe, Dr. Ivan Norval, Dr. Andrew Scott, Dr. Geoff Karjala, Dr. David Leswick
Front Row, from Left: Dr. Paul Babyn, Dr. Leslie Chatterson, Dr. Tina Theoret, Dr. Farid Rashidi, Dr. Grant Stoneham
Not all Members are in the photo
Best Clinical Teacher and Best Researcher of the Year

Best Clinical Teacher of the Year Award
The Best Clinical Teacher award is awarded to one radiologist or scientist who has been voted the best teacher by the current cohort of residents in the Royal College program. The Chief Resident will obtain the vote from the residents prior to June 1st of each year -- the nominee is presented the award at the Residents Farewell held in June.

This year's award was presented to Dr. Geoff Karjala!

Best Researcher of the Year Award
The Best Researcher Award is awarded to one radiologist or scientist who has been voted the best researcher by a subcommittee developed through the departmental adjunct professors. Nominations or submissions are sent to the Chair of the Academic Council prior to the end of April of each year. The nominee is presented the award at the Residents Farewell held in June.

This year's award was presented to Dr. Humphrey Fonge!
Promotion to Full Professor

Dr. Leswick was appointed Assistant Professor in 2005, promoted to Associate Professor in 2009 and this past July, he was promoted to Full Professor with the University of Saskatchewan.

Academically, Dr. Leswick has completed a Bachelor of Sciences with a honours degree in Life Sciences from Queen's University in 1996, he received his Medical Doctorate from the University of Manitoba in 2000 and did his Medical Imaging Residency at the University of Saskatchewan and finished in 2005. In 2007, he had subsequent training in Musculoskeletal MRI.

Since 2009, Dr. Leswick has continually been actively involved in all aspects of the Department of Medical Imaging. This includes research, education, administration and a full clinical work-load as a Radiologist with a subspecialty interest in musculoskeletal imaging. The majority of his formal teachings to residents involves Musculoskeletal Imaging and includes teaching clinical reviews in all aspects of Radiology.

Administratively, he has fulfilled the role of the Department of Medical Imaging Research Director since 2007. This role has involved him as a member of the Research Committee, Academic Committee and Postgraduate Education Committee. He has also been Clinical Site Lead for Musculoskeletal Imaging from 2008-2014 and MRI from 2008 to current.

Dr. Leswick has taken an active role as a researcher and has been involved in over forty research projects at the University of Saskatchewan, including being primary investigator and/or collaborator. When supervising residents and medical students, he involves them on all levels on the project, including manuscript preparation where he often gives them the opportunity to be first author on publications and presentations.

Dr. Leswick's philosophy of teaching reflects the fact that his target audience (medical students, residents and other health care professionals) are largely adult learners. In order to best engage them, it is important for him to treat them with respect, honesty and openness. He also incorporates humour in his teachings as it keeps his audience more engaged and interested in the topic. One of his main reasons that attracted him to an academic position with Medical Imaging at the University of Saskatchewan is the opportunity to teach.

"Congratulations Dr. Leswick!"
Dr. Brent Burbridge, MD, FRCPC

Dr. Burbridge started in the department in 1992, between then and now, he has achieved the rank of Full Professor and served many roles including: Residency Research Director, Program Director and both Academic/Clinical Department Head roles. Currently, he is the Medical Imaging Undergraduate Education Coordinator for the College of Medicine. His teaching and research focus has begun to migrate toward educational strategies for learners.

In the process of developing educational tools and opportunities, the Medical Imaging department has deployed a RSNA-MIRC teaching file server. (TFS: https:mistrodnew.usask.ca:8443/query), developed an image transfer tool that extracts DICOM images from the Phillips PACS, anonymizes the images and sends then to the MIRC-TFS. It has been modified to an open source DICOM viewer for teaching and learning (ODIN: https://mistr.usask.ca/odin/). Plug-ins have been developed for MIRC-TFS and Blackboard Learn to allow the images and content in the MIRC-TFS to be embedded into Blackboard learn pages. All of these strategies have improved the ability to use clinically relevant images for teaching and research.

Recently, Dr. Burbridge developed an eBook titled: "Undergraduate Diagnostic Imaging Fundamentals" (https://undergradimaging.pressbooks.com) by Pressbooks.com.

These teaching and learning technologies are functional and have been deployed locally in a limited fashion, performed in a stable manner, and have been well received. In an effort to use these learning tools, a new online learning curriculum for Medical Imaging Elective students will be forthcoming.

Email: brent.burbridge@usask.ca
Dr. Steven Machtaler, PhD., BSc.

Dr. Machtaler has a tenure-track appointment as an Assistant Professor in Medical Imaging, College of Medicine. He received his Bachelor of Science in Biology from the University of British Columbia-Okanagan. He also received his PhD in 2011 from the University of British Columbia-Vancouver in Cell Biology, where he studied the role of BCR signaling and the gap junction protein Cx43 in lymphocyte cytoskeletal rearrangements.

In 2015, he completed his postdoctoral studies in the Molecular Imaging Program at Stanford University working with ultrasound contrast agents for imaging and quantifying angiogenesis in small tumors and inflammation in inflammatory bowel disease. The ultrasound contrast agents, microbubbles, are very versatile. They can be used to both image disease location, and have shown promise as a drug delivery tool across the blood brain barrier.

Dr. Machtaler is an author of many scientific publications and is the Principal Investigator and Co-Investigator of numerous Research Grants since his hire at the University of Saskatchewan in 2017. In addition to his research projects, Dr. Machtaler continues to supervise resident research projects, graduate research projects and summer students.

Email: stm291@usask.ca
Dr. Humphrey Fonge, PhD, MBA

Dr. Fonge is a Radiopharmacist at the Saskatchewan Health Authority and an Assistant Professor in Medical Imaging at the College of Medicine, University of Saskatchewan. He received his PhD in Radiopharmacy from KU Leuven, Belgium and completed a post-doctoral fellowship in Molecular Imaging and Radiopharmaceuticals at the University of Toronto. At the University of Toronto he completed a Master of Business Administration (MBA) with focus on Strategic Management and Commercialization of Innovations. He is a member of the Society of Nuclear Medicine Molecular Imaging (SNMMI), American College of Nuclear Medicine and Association of Canadian Society of Radiopharmaceutical Scientists. Dr. Fonge has an active role in Nuclear Medicine, Teaching and Research. He is an author of many scientific publications and is the Principal Investigator and/or Co-investigator of Research Grants in excess of $5 Million over in the last few years. Dr. Fonge's research expertise is in the area of precision diagnostics and therapeutics using different antibody platforms and radionuclides.

Grants July 2017 – March 2018

2017/10 – 2018/09  PI: Changiz Taghibiglou Humphrey Fonge: co-PI
College of Medicine – University of Saskatchewan - COMRAD Grant
Amount: $27,370
Title: Cellular prior protein (PrPC)-dependent brain insulin resistance: A missing molecular link between traumatic brain injury (TBI) and neurodegenerative diseases

2017/10 – 2018/09  PI: Humphrey Fonge
College of Medicine – University of Saskatchewan - COMRAD Grant
Amount: $30,000
Title: Multifunctional anti-EGFR immunoconjugates as theranostics

2018/03 – 2019/02  PI: Clarence Geyer Humphrey Fonge Co-PI
Saskatchewan Health Research Foundation
Total amount: $ 50,000
Title: Domain II specific antibody for imaging EGFR in vivo by PET

2017/09 – 2018/08  PI: Humphrey Fonge
Mitacs Elevate grant – co-funding organization: Canadian Isotope Innovation Inc
Amount: $45,000
Title: Processing of Linac Produced 99Mo, and Extraction and Validation of 99mTc using a unique 99Mo/99mTc generator system

Fedoruk Centre – Engagement Grant
Amount: $5,000
Title: Introducing Saskatchewan as a national centre of excellence for molecular imaging research
Special Notes

Congratulations Dr. Paul Babyn on your appointment as Physician Executive for the Provincial Programs for the Saskatchewan Health Authority.

Congratulations Dr. Sheldon Wiebe on your interim position as Provincial Head for the Department of Medical Imaging.

Congratulations Dr. Scott Adams, PGY-1 on the RSNA Trainee Research Award for "Telerobotic Ultrasound Service" - Supervisor: Dr. Brent Burbridge

Congratulations Dr. Scott Adams, PGY-1  on the Vice-Dean Research prize for the Resident Research in Medical Imaging. This Award recognizes outstanding dedication to research during the residency program.

Congratulations to the following retirees within Medical Imaging:
Arlene Fauvelle, Peter Barboluk, Brenda Downing, Karen Maki, Sandra Vols, Earl Bradley, and Curtis Fedrau.
Best wishes on your future endeavors and a pleasure working with you all!

Special thank you to the RUH Foundation for use of their photo for the cover page.
"The department continues to evolve and adapt to the pressures and changes; both the technical developments and advancements that we use in every aspect of our work as well as the political-economic pressures that influence the operations of our department within the institutions we function. The key to individual resiliency as well as maintaining a high level of performance centers on relationships and trust. We continue to experience accelerated pressures and change at a pace that sometimes stretches those relationships, however; within that discomfort lies an opportunity that I hope to foster. The opportunity to engage individuals to participate in the building of this new provincial department as well as the local clinical areas as much as possible. We need you to help build and determine what our department will look like in the future and I will do my best to provide everyone the appropriate platform to make a positive influence."

Dr. Sheldon Wiebe, Professor & Interim Head of Medical Imaging