

**UHN-T**ORONTO REHAB

### ADVANCING ACADEMIC EXCELLENCE FOR BETTER PATIENT CARE









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## Message from Dr. Bob Bell, President and CEO, UHN



In our third integration report – Advancing academic excellence for better patient care – we focus on research and education. Post-integration, we've built on our combined strengths to advance UHN as an academic hospital, leading the way in innovation and teaching today and tomorrow's health-care professionals.

Research and education are at the heart of what we do at UHN: we know that innovation creates better acute and rehab outcomes and less expensive care for Ontarians; and we are committed to training the future health professionals in Ontario to ensure the continuity and evolution of knowledge, expertise and best practices.

Our hospital has an impressive history of innovations: the world's first use of insulin, the first rehab centre for people with spinal cord injuries, the discovery of stem cells and a new application for functional electrical stimulation that teaches damaged muscles to move again are a few examples.

Last year, our hospitals added another world first: the iDAPT Centre for Rehabilitation Research. This Centre is one of the most technologically advanced rehabilitation research centres in the world. Never before have researchers had a facility like this where they can safely and accurately study how people interact with their environment.

The remarkable work of the nearly 700 researchers at our hospital and their success at securing grant funding has

ranked us, once again, the lead research hospital in Research Infosource's Top 40 Research Hospitals in Canada List 2012.

Education has also evolved. This year, we trained approximately 4,000 students at UHN and students gave UHN an exceptional 93 per cent satisfaction rating for their learning experience.

In the following stories, you'll read about some of the ways we are revolutionizing health-care professionals' training before and after they enter practice. The addition of post-acute care gave us a greater ability to provide comprehensive learning experiences for our students.

The stories in this report illustrate our approach to research and education, which helps students and professionals alike to learn, teach, innovate, and create. We know this approach will change patient care and clinical outcomes for the better.

Sincerely,

Dr. Robert Bell, MD, CM, MSc, FRCSC, FACS President and CEO

President and CEO
University Health Network

### Keynote addresses

### Dr. Catharine Whiteside, Dean of Medicine, University of Toronto



The University of Toronto Faculty of Medicine and UHN are committed to training future health leaders. I believe the integration of Toronto Rehab and UHN represents the future of Canadian health care and leads the way in enabling collaborative research.

The Toronto Rehab-UHN integration breaks down institutional silos to provide better interdisciplinary learning opportunities for our health professions students – from rehabilitation sciences, medicine and occupational therapy, to name a few – which in turn results in greater continuity and quality of care for patients.

In our health system, hospital integrations play a key role in fostering leading-edge teaching and learning models. When two world-class hospitals –Toronto Rehab and UHN – join forces, it creates a unique, interdisciplinary environment where students can work with top-of-their-field professionals from all areas of health care – training with the best to be the best.

Ensuring our students and teachers have the opportunity to question, investigate and discover and apply new knowledge is a top priority for the Faculty of Medicine. I am confident this integration will create new opportunities for tomorrow's leading scientists, scholars and clinicians to conduct boundary-crossing clinical research and education that will enable people around the world to live healthier lives.

### Dr. Christopher Paige, Vice President, Research, UHN



The newest research platform at UHN is Health Services Research (HSR). This is multidisciplinary research that examines how people access health-care professionals and services, the cost-effectiveness of patient care, prevention of disease and patients' outcomes.

We're now seeing a shift in health-care towards a greater need for chronic disease management – a result of advances in clinical interventions – making the focus of HSR ever more important. Dr. Geoff Fernie, Director, Toronto Rehab Research Program, and his team are leaders in this area of research – such as research led by Dr. Susan Jaglal, who is profiled in this report – and will be crucial to HSR.

UHN is one of the most advanced research hospitals in the world. This environment and the spectrum of care now provided offers a unique opportunity for studying how to improve health service delivery and outcomes,

and how to undertake such research.

Essential to HSR is collaboration among individuals with different health professional roles and expertise to allow us to fully understand complex health-care problems and how to fix them. The expansion of UHN to include post-acute care at Toronto Rehab has broadened the diversity of professions, strengthening our ability to advance HSR for healthier patient outcomes.

The integration of our research groups is an opportunity to continue to build on UHN and Toronto Rehab's successes in the changing health-care system of Ontario.

### Dr. Brian Hodges, Vice President, Education, UHN



We are all teaching and learning at UHN – it's the foundation of our educational institution.

Teaching hospitals have evolved from places where universities send medical students for training to become academic hospitals that play a leadership role and embed life-long teaching and learning in the organization's strategy and culture.

Education for health professionals needs to reflect how care is delivered. Through our partnership with the University of Toronto and other academic institutions, we have evolved education from learning individually to learning in interprofessional teams. The idea behind training learners in teams – which is known as interprofessional education (IPE) – prepares students for today's health-care settings where the complex medical needs of patients require various health practitioners to care for a patient as a team.

Since integration, we have greatly enhanced what we offer our learners. Toronto Rehab extends the continuum of care within UHN, allowing hands-on learning experiences in acute care, rehab and complex continuing care. Toronto Rehab also adds new health disciplines to UHN, enriching the IPE experience for

all of our learners and positioning UHN to set best practices in education.

The education stories in this report illustrate the transformation in learning that has already begun and how we continually strive to lead the evolution of academic excellence in hospitals.

#### Dr. Geoff Fernie, Institute Director, Research, Toronto Rehab



Our researchers are happy solving every-day problems, which is the basis for Toronto Rehab's reputation as the place to find practical solutions to big issues faced by the health-care system and individuals. As an applied research organization, we focus on the translation of ideas into practice, whether it be the alternation of building codes, new treatment interventions or products that achieve the ultimate goal: improved health outcomes.

Our people are our value as a research program – our ability to discover viable solutions comes from the diversity of the research teams, which represent a wide-range of disciplines: computer science, healthcare, engineering, and business.

Toronto Rehab and UHN research groups were collaborating before the integration. We have interests and projects that cross over so it's not a surprise that we're finding even more opportunities to do this. Everything is aligning nicely to quicken the pace and outcomes of our research: collaborations with our new UHN research colleagues and many others worldwide; our close working partnership with the University of Toronto and other academic institutions; state-of-the-art laboratories; and outstanding graduate students,

postdoctoral fellows and scientists.

We focus our research on helping people prevent injury and illness – falls, driving accidents, and heart disease. We also want to ensure that we can help individuals return to their life post-injury or illness. And, we are committed to maintaining quality of life as people age and supporting loved ones who become informal caregivers.

The future of rehabilitation research will continue to have an impact by creating safer and healthier homes, work environments and communities.

# Collaboration of acute and rehab research gives spinal cord injury patients a better chance of independence

Anastacia Espena was taking out the garbage when she fell in the backyard and struck her head on the pavement. The fall caused compression in one of her cervical vertebrae and she couldn't move. She lay there for 45 minutes before she was found by a neighbour.



Anastacia Espena on the exercise bike at Toronto Rehab's Lyndhurst Centre, where she received inpatient and outpatient rehabilitation.

She was rushed to Toronto Western where Dr. Michael Fehlings, Medical Director, Krembil Neuroscience Centre and the neurosurgeon on call that night, performed surgery within 11 hours of Anastacia's injury.

"Through our research, we know that spinal cord injury patients should get surgery within the first 24 hours of their injury to reduce the likelihood of paralysis," says Dr. Fehlings. "It gives patients the best chance for regaining their function during rehabilitation. We are seeing about one in five people walking away from an injury, which may not have been the case without prompt surgery."

When Anastacia left Toronto Western two and a half weeks after her accident, she was admitted to Toronto Rehab's Spinal Cord Injury Program. Upon admission, she couldn't move her body on her own.

"Between my care from Dr. Fehlings and his team and my rehabilitation therapists, I was eventually able to move and walk again," says Anastacia. "I now use a walker without assistance and can walk with a cane if I have someone with me. I know I got the best care possible."

Dr. Milos Popovic is researching ways to improve rehabilitation of spinal cord injury patients like Anastacia. He has developed a portable neuroprosthesis that delivers functional electrical stimulation (FES) — a new treatment approach which uses tiny bursts of electricity to reawaken paralyzed muscles — to restore arm and hand function.

"Toronto Rehab and Krembil have a history of collaborating on research for the spinal cord injured population that's mutually beneficial to each stage of patient care," says Dr. Fehlings. "With the integration, we have a greater opportunity for earlier interventions in acute care so that patients will have more success in regaining function and independence through rehab. Ultimately, this is more cost-effective for the whole system."

Dr. Popovic is also collaborating with other Krembil Neurosciences researchers on stimulation work including the development of neuroprostheses for epilepsy, Parkinson's disease and bladder management. The two groups have started sharing post-doctoral students allowing the students to understand the full picture of the research. And, the two groups are applying for grants bringing

neuro-engineering, neurosurgery and neurology together in one application.

"With the integration, we have a greater opportunity for earlier interventions in acute care so that patients will have more success in regaining function and independence through rehab. Ultimately, this is more cost-effective for the whole system." - Dr. Fehlings

"The complement of Toronto Western's clinical expertise and our engineering and technology expertise is a significant advantage to the research we're doing in neuroprostheses," says Dr. Popovic. "The collaborations between our research group and Krembil researchers already existed, but it's been enhanced. Together, we'll provide our patients better outcomes and quality of life."

# Health professions and nursing research crucial to improving patient outcomes

Dr. Katherine McGilton, Senior Scientist, Toronto Rehab, leads research to change how rehabilitation is delivered at the frontline in Ontario, and, as a result of the integration, is one of the newest nurse scientists at UHN.



Dr. Katherine McGilton, Senior Scientist

"Dr. McGilton is a leading nurse scientist and UHN has gained her leadership to help elevate health professions research across our sites and programs," says Dr. Kathryn Nichol, Director of Nursing, New Knowledge and Innovation, UHN.

One of Dr. McGilton's research projects, for example, looks at the rehabilitation provided to hip fracture patients with dementia or delirium. There is a perception

these patients cannot be rehabilitated. Her research disproves this myth and teaches the interprofessional team, how to best care for patients so they can have optimal rehab outcomes.

"The strength of our research projects is the embedding of a health professional with mentoring skills in the area where we're piloting the new practices," says Dr. McGilton. "For this study, an Advanced Practice Nurse works with the staff, builds relationships, understands their challenges and the nuances of each patient, and helps them adopt the new approaches."

The addition of Toronto Rehab researchers, like Dr. McGilton, is enriching health professions research at UHN.

"Toronto Rehab's integration with UHN is a wonderful gift in terms of health professions research," says Dr. Joy Richards, Vice President, Health Professions and Chief Nursing Executive, UHN. "In many ways, Toronto Rehab is ahead of the curve and the rest of the organization can learn a lot from them."

Health professions, including nurses, are at the frontline of healthcare and have the closest connection to patients and the most intimate knowledge of problems that need solutions and questions that require answers. "Each profession brings something unique to the point-of-care and we need to know through scientific means what makes a difference for our patients, families and organizational outcomes," says Dr. Richards. "Our health professionals are best positioned to lead this research."

UHN is building health professions research capacity through the establishment of a leadership team to guide the portfolio and the introduction of numerous initiatives to support the staff interested in pursuing research.

"The challenge for nursing staff and some of the other health professions is that their roles do not incorporate protected time to lead or participate in research," says Dr. Nichol. "Programs that are designed to build research capacity in point-of-care health professions need to take this into consideration."

For example, the Nursing Research Challenge provides funding and mentorship for nursing staff to bring forward questions and problems from the clinical setting in the form of a research proposal. The research team conducts two and half days of research education for those interested in the competition. They also guide them through the research process, such as choosing the right study design, working with the Research Ethics Board and ensuring patient privacy is protected.

For the Health Professions portfolio, UHN has a research grant to give frontline staff an opportunity to build research skills. This year, Toronto Western occupational therapists Andrea Dyrkacz and

Lonita Mak and Health Professions Scientist Carol Heck received the funding to complete the first study of work-related injuries experienced by Canadian occupational therapists. Their research is informing how the Canadian Association of Occupational Therapists will act to mitigate risk and create safer, healthier workplaces for all health-care workers.

"We are providing clinicians with the opportunity to take the time to look at quality and safety, best practices, and point-of-care concerns to determine what area needs to be improved," explains Patti McGillicuddy, Director, Professional Practice, Allied Health/Health Professions, UHN. "They raise questions that are often not obvious to other researchers."

## "Toronto Rehab's integration with UHN is a wonderful gift in terms of health professions research," - *Dr. Richards*

UHN health professions research continues to develop and find more opportunities to lead interprofessional research projects.

"I envision a time soon where UHN will have many research positions for health professions," says Dr. Richards. "The ultimate goal is to drive collaborative research across and between all our health professions."

## Dr. Susan Jaglal: Improving Ontario's healthcare system

Dr. Susan Jaglal, Toronto Rehabilitation Institute Chair at the University of Toronto, focuses her research on improving the health system for Canadians and facilitating knowledge translation.

"My research began with a rehabilitation focus, but soon becomes broader health systems projects," says Dr. Jaglal, an epidemiologist by training. "Inevitably, the success of these projects relies on collaboration with other researchers, clinical experts and health-

system stakeholders."



Dr. Susan Jaglal, Toronto Rehabilitation Institute Chair at the University of Toronto.

Examples of Dr. Jaglal's current research include a project to determine gaps in care for neurological diseases; and the creation of a new rehabilitation triage tool.

The Public Health Agency of Canada has partnered with Dr. Jaglal to address the needs and gaps for certain neurological disease – spinal cord injury (SCI),

Tourette's syndrome, epilepsy and Parkinson's, for example – from the perspective of health-care providers. In collaboration with Dr. Molly Verrier, scientist, Toronto Rehab, and Dr. Connie Marras, neurologist, Toronto Western Hospital, the team has interviewed 180 health-care providers and policy-makers across Canada to gain their insight. The final report, due in 2014 to the Federal Minister of Health, will outline the incidence, prevalence, cost and consequences of the conditions and make recommendations of how to improve care delivery.

Rehabilitation comes in many different forms: community-based, home-based, inpatient care, and outpatient care. Dr. Jaglal is

"Dr. Jaglal and her team explore how to make the health-care system work more efficiently to provide the best possible care at every point in the continuum." - *Dr. Fernie* 

working on an Ontario Ministry of Health and Long-Term Care project to develop a **new rehab triage tool**. The research will focus on the main rehab populations – total joint replacement, stroke and hip fracture patients- which account for 75 per cent of rehab inpatients in Ontario. Dr. Jaglal and her team are analyzing rehab admission and discharge data from across Ontario. They will also consult with acute care about how they decide what rehab setting to discharge their patients. The goal is to figure out a helpful tool that provides acute care clinicians with criteria for determining the most appropriate rehab setting for their patient.

"Dr. Jaglal and her team explore how to make the health-care system work more efficiently to provide the best possible care at every point in the continuum," says Dr. Geoff Fernie, Director, Toronto Rehab Research Program. "Susan is a brilliant scientist with a strong motivation to make the health system work better."

### **UHN** research snapshot

Total researchers	688
Fellows Graduate students Total trainees	580 573 1153
Support staff Research space Publications	1486 809,090 sq. ft 2303
Total funding	\$302,304,068

# Toronto Western and Toronto Rehab tackle the issue of multiple concussions

Clinicians and researchers from Toronto Western and Toronto Rehab are tackling the issue of multiple concussions and the incidence of chronic traumatic encephalopathy (CTE) - a progressive neurodegenerative disease, currently diagnosed postmortem in individuals with a history of multiple concussions.

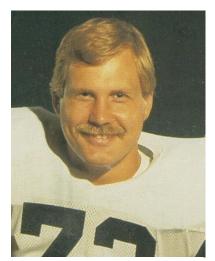
This Sports Concussion Project is led by Dr. Charles Tator, Toronto Western neurosurgeon, who knew the right approach to this problem was a collaborative research team of 14 neuroscience experts from different disciplines.

"Charles is extremely inclusive, collaborative and respects the expertise of each member on the Sports Concussion Project," says Dr. Robin Green, Canada Research Chair in Traumatic Brain Injury, Toronto Rehab-UHN and member of the project. "He has the special ability to lead a cohesive group and extract the most and best out of each of us."

The Sports Concussion Project collaborative approach is exemplified through the partnership of Dr. Green and Dr. Carmela Tartaglia, Toronto Western neurologist. Both have expertise in neurodegenerative diseases – Dr. Green focuses on traumatic brain injury and Dr. Tartaglia on dementia. Together, they are

determining who is at risk of neurodegeneration and why, by assessing 40 former CFL athletes and 20 healthy people over a period of time to determine the behavioural, personality and mood changes caused by multiple concussions.

"Through this project we are working together to better understand the impact of multiple concussions," says Dr. Tartaglia. "At Toronto Western, we are looking for ways to diagnose who



will develop a neurodegenerative disease. And, at Toronto Rehab, they know how to limit the progression of the disease and improve a person's function."

Leo Ezerins, Executive Director, Canadian Football League Alumni Association and a former CFL player who is also a participant in the study, began his partnership with Dr. Tator's group in 2009 to help

recruit the athletes and advocate for the project in his community and the ways in which football and other sports can be played safer.

"The key in sports and for a research project, like this one, is to have a team that gels," says Leo. "There is an incredible level of passion,



Dr. Carmela Tartaglia assesses Leo Ezerins as part of the Sports Concussion Project.

focus, dedication and collaboration amongst the Sports Concussion Project team and it's what gives me hope and confidence that we will make progress in diagnosing and treating neurodegenerative problems that result from multiple concussions."

Diagnostics tools are needed that can detect early on if someone's multiple concussions have resulted in CTE so the progression of the disease can be optimally managed.

"There is an incredible level of passion, focus, dedication and collaboration amongst the Sports Concussion Project team and it's what gives me hope and confidence that we will make progress..." – Leo Ezerins

"Our research is working to improve diagnostic tools and treatment options to address this," says, Dr. Tartaglia. "In clinical practice, it's unfortunate that we can sometimes miss the window for clinical intervention with patients with multiple concussions."

This research team hopes to change that with the combined expertise of neuropathology, neurology, neurosurgery, neuro-imaging, neuro-radiology, neuropsychology and neuro-rehabilitation.

The Sports Concussion Project has also made it a priority to provide the athletes participating in the research with clinical interventions that include cognitive behaviour therapy and goal management training for mood and cognitive issues. Not all of the participants will have CTE, but they can still benefit from the therapy.

"An important aspect of the project is that the research participants receive multidisciplinary care," says Dr. Green. "Together, we've created a program for chronic multiple concussions for the athletes participating in research with a spectrum of clinical services— which wouldn't have been possible without the collaboration across disciplines."

# Cardiac Rehab integration improves patient care through education and research



Kelly Angevaare supervises Heidi Holmes' cardiac rehabilitation.

Cardiac rehabilitation programs at UHN have now joined forces to deliver better patient care.

"The expertise in the two programs complements one another nicely and will benefit all of our patients," says Dr. Paul Oh, Medical Director, Cardiac Rehabilitation and Secondary Prevention, Toronto Rehab. "We are stronger together as an integrated

program, making us the largest in Canada and positioning UHN to have global impact in cardiac rehabilitation care, education and research."

The two programs have complementary specialities and similar challenges they can partner on.

"We are stronger together as an integrated program, making us the largest in Canada and positioning UHN to have global impact in cardiac rehabilitation care, education and research." – *Dr. Paul Oh* 

"By working together, we will also collaborate on education initiatives as well as focusing on more patients' specialized needs," explains Dr. Caroline Chessex, Medical Director, Cardiac Rehabilitation, Peter Munk Cardiac Centre. "This will help address issues that prevent some individuals —such as the elderly, non-English speakers and women — from accessing the cardiac rehab they need."

Patient and family education is a major area for the integrated program to improve and lead. Together, the two sites' different patient populations and staff expertise provide a breadth of knowledge.

The Toronto Rehab team has also been developing the Cardiac College – a first-of-its-kind for patients and families – that will provide online, multi-media, multilingual cardiovascular health education to change behaviours and improve rehab outcomes. Working together, the two programs' will expand the Cardiac College to more than 2,200 patients annually.

"Our sites serve patients from different demographics and clinical backgrounds," says Dr. Oh. "This will make the Cardiac College more relevant to more people and have a greater success in making cardiac rehab accessible to everyone who needs it."

Kelly Angevaare, Exercise Physiologist, Cardiac Rehabilitation, Peter Munk Cardiac Centre, sees the formal collaboration as a wonderful opportunity. "We know that many cardiac rehab patients don't complete the program," explains Kelly. "The collaboration will allow us to combine our research and education efforts to address the shared challenges and clinically provide our patients with more program options to better suit their needs."

In the area of research, both the Toronto Rehab Foundation and Toronto General and Western Foundation have established Chairs in Cardiac Rehabilitation. Both Chairs will be chosen by the joint Cardiac Rehabilitation leadership team. The successful candidates will collaborate on common areas of interest such as determining how to reach new patient populations and how to successfully change patients' lifestyles to ensure cardiac rehab has long-term success.

"The Chairs will complement one another and work closely on their respective research projects," says Dr. Chessex. "Our research focuses have commonalities and this funding to one team will allow us to delve deeper into the questions and challenges surrounding cardiac rehabilitation."

# Integration expands interprofessional education across the continuum of care

UHN is taking interprofessional education (IPE) to the next level with the opportunity to teach across the continuum of care within its own organization.

"UHN is a leader in interprofessional education," explains Maria Tassone, Senior Director, Health Professions and Interprofessional Care, UHN. "The clinical teams at Toronto Rehab use a strong IPE model of teaching and learning, which has strengthened IPE placements for learners across UHN."

"With the integration of the hospitals, the potential for teaching students across the continuum has been accelerated."— *Maria Tassone* 

Interprofessional education focuses on training health-care practitioners to work collaboratively with other practitioners by teaching students from different professions to work together. For example, through IPE, students have opportunities to interact and understand one another's skills, scopes of practice, and roles in patient care.

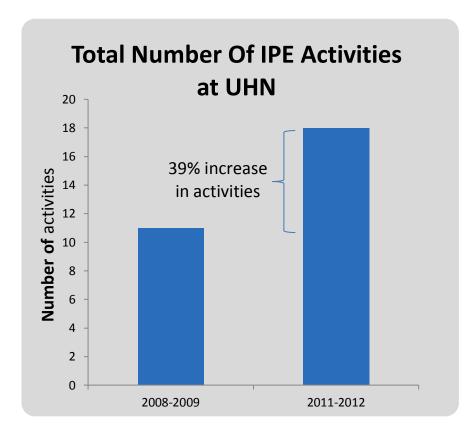
"Many patients we see at UHN and other hospitals have complex needs that we know can't be addressed by any one health professional – they need a team," says Mandy Lowe, Director, Education and Professional Development, UHN and Education Lead, Toronto Rehab-UHN.

A patient with a pressure sore, for example, may be helped by changing the angle of the bed to help alleviate the pressure and speed healing. One member from the health-care team may not consider that if the angle is changed and the patient has a swallowing problem, there's a risk of choking. But, if the problem is assessed by the whole health-care team, collaboration between the speech language pathologist and nurse, for example, may alert them to this hazard before it happens.

"IPE is the groundwork for ensuring our health professionals know how to work together as a team, which has a significant impact on patients' safety and the quality, efficiency and effectiveness of their care," says Mandy.

The integration has allowed UHN to design IPE placements and electives that focus on the continuum of care, enriching the learning experience. In these IPE learning activities, which are

currently being worked on, students will either follow particular patients through the system or focus on how to develop better patient flow and ensure patients get the right care at the right time.



"With the integration of the hospitals, the potential for teaching students across the continuum has been accelerated," says Maria.

Claire Nash is a physiotherapy student at the University of Toronto who had the opportunity to do an IPE placement at UHN moving from the Princess Margaret Cancer Centre to Toronto Rehab.

"My placement has highlighted that with the complexity of patients," says Claire, "we need to understand other health professions' roles and the potential for collaboration to provide the best care."

# Patient and Family Education integration enriches health information services

Millie Dolanjski has been a patient at University Health Network over the years and the patient and family education centres have been an important part of her care.

She is currently an outpatient in Toronto Rehab's Prevention and Rehabilitation of Osteoporosis Program, but her health information needs cross programs and sites – she's interested in education on



Raluca Serban helps Millie Dolanjski navigate health resources in the Sun Life Centre for Patient and Family Education.

osteoporosis, lung disease, nutrition and other areas.

It was the recognition that patients want and need to be educated holistically that was a major driver behind the 2011 integration of the site-based Patient and Family Education programs at UHN.

"Each UHN program has unique expertise to offer our patients and families, which is what makes the Patient and Family Education integration so valuable." – *Farrah Schwartz* 

"Historically, patient and family education was run independently at each UHN site," explains Audrey Friedman, Director, Patient and Family Education, UHN. "We had decided it was time to centralize patient and family education under the corporate Education Department. The Toronto Rehab-UHN integration provided us with the perfect timing to make the change."

Now, with one Patient and Family Education Program, the collection of consumer health information has expanded.

"The integration of Patient and Family Education is better for our patients," says Audrey. "Our patients often have co-morbidities and

their health information needs reach beyond the specific care they're receiving at one of our hospital sites. We have the in-house expertise to provide patients a broad range of health information from acute care to rehabilitation."

Toronto Rehab Foundation secured the funding to open the Sun Life Centre for Patient and Family Education. The support of the three other UHN sites enhanced the Centre.

"The information specialists from Princess Margaret and Toronto Western, Michelle Snow and Valeria Raivich, adviced on the resources necessary for the Centre," says Farrah Schwartz, Manager, Patient and Family Education, Toronto Rehab. "Having this expertise internally was a benefit to our Centre and patients."

The shared UHN resources, including Denice Koo, patient education specialist, and Kristin Foster, graphic artist, have allowed Toronto Rehab to create 45 new patient and family education materials. In 2012, 11,000 copies were ordered from across the hospitals. In addition, Toronto Rehab patients and families now have access to more than 900 UHN Patient and Family Education materials.

"Each UHN program has unique expertise to offer our patients and families, which is what makes the Patient and Family Education integration so valuable," explains Farrah. "At Toronto Rehab, for example, we can address living with disabilities, wellbeing and self-management topics that are important to all patients."

At the time of the Toronto Rehab-UHN integration, a donation was made to Princess Margaret Cancer Centre to support patient navigation. This funding will benefit all UHN patients through the creation of a web-based catalogue that staff and patients will be able to access at all the hospital sites and from home.

"The shared catalogue will make health information from our four hospitals accessible to our patients at the moment they need it," says Audrey. "We've been able to enrich patient and family education through the Toronto Rehab-UHN integration and the integration of our site-based programs."

# Improving UHN learning services to support lifelong education

UHN is enhancing its ability to support lifelong learning with an enhanced infrastructure and increased education resources.

"Education is continual and integration allows us to elevate our academic excellence by increasing the learning opportunities for our staff and physicians," says Dr. Brian Hodges, Vice President, Education, UHN.

**Library Services** has combined its virtual library resources across all UHN sites. This added rehab resources to the library for acute care. And, access for Toronto Rehab staff increased from 1,900 to 5,000 e-journal titles.

"I use Library Services quite a bit for my information searches related to patient and family education," says Sandra Mills, Patient and Family Educator, Spinal Cord Rehab Program, Toronto Rehab. "Our access to these resources has grown significantly since integration."

Toronto Rehab staff can also attend the Library Services workshops to learn how to use the new Virtual Library and other resources to their full potential.

"Our patients ultimately benefit from the expansion of the information resources available to all of our UHN staff," says

"I use Library Services quite a bit for my information searches related to patient and family education, our access to these resources has grown significantly since integration."— **Sandra Mills** 

Bogusia Trojan, Director, Library Services, UHN. "Not only do our resources now represent more areas of care, but all of our Library Services staff have expanded their knowledge to help navigate the enriched collection of resources."

Conference Services, a department from Toronto Rehab that joined the UHN Education Department after integration, has also expanded UHN staff's opportunity for information sharing and learning. Toronto Rehab conferences now include other UHN experts on the planning committees and the conference themes have been broadened to encompass the continuum of care.

"Since we integrated, the majority of the conference themes have been focused around the continuum of care," says Jill Fredericks, Manager, Conference Services. "We're able to draw on a broader expertise and as a result attract a more diverse health-care audience to our events."

In fact, Conference Services has grown the number of registrants by 1,000. Staff from across UHN are also beginning to use Conference Services to assist in the logistics of their conferences. The growth in attendance and number of events is on the rise and a Conference Centre is being built in the new Krembil Discovery Tower through funds raised by the Toronto Western and General Foundation.

**Media Services** plays an integral role in Conference Services establishing and managing the new Conference Centre. They will be responsible for the broadcast technology and other technical components of the new facility.

"Our goal is to plan all of UHN's conferences, and the new Conference Centre is crucial to be able to do so," says Jill. "In addition, the broadcast technology capabilities will allow our conferences to have international reach."

Post-integration, Media Services partnered with Conference Services by supporting all of their events with audio visual resources at approximately half the cost of external vendors.

"UHN now has more staff and equipment to support all sites with media services," says Grigory Vainberg, Manager, Media Services, UHN. "We've also expanded the infrastructure for learning opportunities across UHN by adding Toronto Rehab sites to major video conferencing events and meetings, such as the Medical Grand Rounds."

UHN's learning infrastructure will continue to evolve and grow.

"Our support and technology for information sharing is crucial to facilitate health professionals' lifelong learning at UHN," says Dr. Hodges.

# Integration gives medical students new opportunities for learning

Medical students at the Wightman-Berris Academy are now getting more exposure to the continuum of care since Toronto Rehab



Third year U of T medical students learn IV skills.

became an official member after it integrated with UHN in July 2011.

"Toronto Rehab adds to the strength of Wightman-Berris," says Dr. Jackie James, Director, Wightman-Berris Academy. "We can now truly offer our students a menu of clinical setting and experiences from highly acute to rehabilitative care."

An understanding of rehabilitation is an important part of the curriculum and at Toronto Rehab there are dedicated inpatient units for

learning activities. An activity was held for the Wightman-Berris medical students hosted by Toronto Rehab in August 2012, which focused on interprofessional education and care.

Students shadowed a health professional from another discipline for a half day, interviewing them about the role they play on the health-care team. Melissa Walker, a third year University of Toronto medical student, was paired with Lucy Kilby, an occupational therapist from Stroke Rehab.

"As physicians, we diagnose and prescribe, but there are so many other factors essential for a patient to return home successfully. That was what I gained from this stroke rehab experience." – *Melissa Walker* 

"This was the most valuable IPE event I've experienced," says Melissa. "It made me realize I didn't understand the scope of some of the other health professions. We only get a general sense of the different health professions in the classroom. You really need to be in the hospital setting to understand each of their contributions."

Melissa observed Lucy treat a stroke patient who worked as a baker. Lucy used the kitchen facilities to help retrain the patient's baking skills. "As physicians, we diagnose and prescribe, but there are so many other factors essential for a patient to return home successfully," says Melissa. "That was what I gained from this stroke rehab experience. I realized that without Lucy, the patient wouldn't be able to return to baking – a crucial part of the patient's identity."

The addition of Toronto Rehab gives Wightman-Berris the opportunity to show medical students how the continuum of care and health systems works.

"The opportunity for our medical students to learn in an integrated health environment will increase their understanding of the specialized services and expertise we have in our health-care system and when it's appropriate to seek particular care for a patient, be it in the acute care or rehab setting," says Dr. James.

### What integration means to our students



perspective for me."

Claire Nash, University of Toronto physiotherapy student:

"It's really important to see each end of the continuum of care spectrum to understand how to make the best use of the health-care expertise and resources so that patients get optimal care. UHN provided that broader



Melissa Walker, University of Toronto and Wightman-Berris Academy medical student:

"What struck me about Toronto Rehab is how strong the team dynamics are. You learn about other health professions in the classroom, but the IPE event showed me the expertise each professional brings to the table and how important it is as their team member to know what they can do."



Livia Leite, Ryerson University nursing student:

"In university, we focus on our own profession. My placement at Toronto Rehab introduced me to professions I didn't realize were part of the healthcare team and gave me an understanding of how they work with

one another and benefit the patient."



José Zariffa, Toronto Rehab-UHN post-doctoral fellow, researching neuro-prostheses:

"The integration has allowed us to form a research team with a wider range of expertise, and carry out projects that would otherwise not have been possible. For example, biomedical engineers at Toronto Rehab are working with neuro-urologists at Toronto Western to develop medical devices for bladder dysfunction to

improve the quality of life for individuals with spinal cord injury."



Kerseri Scane, University of Toronto graduate student, researching cardiac rehabilitation:

"There is more opportunity to collaborate with more researchers within the organization allowing for research to be done through the entire continuum of care: from acute care to

rehab to home. As well, there is a better knowledge translation process for putting evidence into practice."



Tatyanna Mollayeva, University of Toronto PhD candidate, researching sleep disorders in Ontario workers with traumatic brain injury:

"My colleagues and I would not have been able to undertake this multidisciplinary research without the integration of Toronto Rehab and UHN. The integration makes it easier to coordinate patients' care with education and research, creating an

opportunity for collaboration among researchers across UHN, which will take current and future rehabilitation research to new heights.

### **Summary**

Integration brought two world-class institutions together to create the new UHN. Our Education portfolio and Research enterprise have benefited from collaboration and will continue to thrive as we identify new ways to innovate and approach learning and teaching.

We look forward to our final report in June 2013. We will share new perspectives of what integration has meant for our organization and the health-care system. We will also take the opportunity to report the impact the integration reinvestments are all ready making on patient care.