

CONFERENCE AGENDA *cont'd*

TUESDAY, SEPTEMBER 26, 2017

0630 – 0730 REGISTRATION

0730 – 0815 EDUCATIONAL SESSION 5 - FAST AND FOCUSED (45 minutes)

5A Exploring Indigenous Cultural Bias and the Impact on the Mother-Nurse Dynamic and Care within a Tertiary Neonatal Intensive Care Unit (NICU)

The political and social climates within Canada are currently centered on indigenous wellbeing. Within our healthcare system there are many preconceived notions of indigenous populations resulting in cultural misunderstanding and mistrust. These presumed biases can often lead to negative health outcomes. The literature supports the notion that these biases may impact the nurse-mother dynamic within the NICU. This presentation seeks to explore this phenomena through a comprehensive literature review, while identifying the factors influencing these biases. Furthermore, we probe how these biases affect the dynamic between the nurse and mother, subsequently altering the care during the NICU hospitalization experiences. Nurses within the NICU are in a unique position to offer an unparalleled opportunity to enhance the overall experience of indigenous families, and to provide holistic care and education in a culturally safe environment. This session will describe the experiences of neonatal intensive care unit (NICU) nurses when caring for families and their neonates from indigenous communities. To propose a strengths-based approach for providing culturally competent care for families in the NICU.

Elaine Doucette, Rosetta Antonacci, Annie Chevrier, Elize Cucca, Sandra Bancercz, Ashley Khoury, Marilyn Morand, and Mara Nava Bello

5B Creating, Developing, and Writing an Impressive Abstract for the Dynamics of Critical Care Conference

Have you thought about presenting at Dynamics, but not sure where to begin? Do you have a great idea for a presentation, but just not sure how to get started? It all starts with the germ of an idea, getting your thoughts written down on paper, and submitting an abstract to the Dynamics Conference. But not as easy as it sounds, right? This session, presented by members of the Dynamics of Critical Care™ Program Planning Committee, will help guide you through the newly revised abstract submission process. Suggestions for developing creative titles, identifying the purpose of your session, and writing effective learning outcomes, will be discussed. Most importantly, this session will offer delegates ideas and recommendations on how to effectively describe the nature and scope of your proposed session, successfully creating an award-worthy abstract and a trip to Dynamics!

Ingrid Daley, Karen Dryden-Palmer and Eugene Mondor

5C A Breath of Fresh Air: Diaphragmatic Pacing for Quadriplegic Patients

Presently, the standard management of a high level spinal cord injury (SCI) patient involves the application of positive pressure mechanical ventilation to maintain adequate oxygenation. Unfortunately, modern evidence confirms that mechanical ventilation corresponds with increased patient mortality, longer and costlier inpatient stays, and restricted activities of daily living. Alternatively, diaphragmatic pacing (DP) is a less invasive mechanism of supporting SCI patients with their breathing, while also reducing complications. We will describe the DP implantation procedure, rehabilitation process, and the positive physical and psychosocial effects of DP for SCI patients. We will review a case study of a DP implantation in 2016 at the Ottawa Hospital, along with the nursing implications of caring for a patient with DP in the intensive care unit.

Pre-requisite: Attendees should have a basic understanding of the typical C1-C3 quadriplegic patient and the basic understanding of full mechanical ventilation with volume assist control mode.

Elizabeth Krause and Linda Ferro-Chartrand

CONFERENCE AGENDA *cont'd*

5D CC RAID TEAM: The Ebola Outbreak and Lessons We Have Learned

The 2014 Ebola virus disease (EVD) outbreak revealed an immediate need for hospitals throughout Ontario to be prepared to test, treat and care for suspected or confirmed EVD patients. In association with the Ministry of Health, occupational health and safety, and our infectious disease/infection prevention and control team, the Critical Care Response Against Infectious Disease (CC RAID) Team was created. This presentation will describe the EVD preparation, training, PPE used, donning/doffing procedures, and barriers experienced. Stories from front line staff will describe their personal experience providing care to the two suspected EVD patients brought to our facility. The presentation will describe how our CC RAID team continues to train and remain prepared for any possible emerging infectious disease threat. Opportunity will be available for open discussion of our current training practices and compare PPE/training utilized within other critical care units across Canada.

Kendrah Krousos, Erin Penstone, Krista Shea, and Gina Souilere

5E LGBTQ+ in the ICU: Improving Healthcare through Understanding

Through this presentation, we aim to foster understanding and facilitate awareness of internalized cisheteronormative assumptions and attitudes that we may carry as nurses and the ways these attitudes impact our nursing practice. Five percent of the population in Canada identifies as LGBTQ+. Despite significant advances in equality rights in Canada, barriers to accessing queer and trans-positive healthcare services, including end of life care, persist. Key barriers include institutionalized assumptions of heteronormativity and biases and assumptions that healthcare providers may hold. There is increasing awareness that culturally supportive care improves patient outcomes in ICU, a key component of which is the creation of environments that are respectful of all aspects of client identities, including gender identity and sexual orientation. Through an interactive workshop format, we aim to foster understanding and facilitate awareness of internalized cisheteronormative assumptions and attitudes that we may hold and the way these attitudes may impact our nursing practice. An introduction of definitions and history of homophobia and transphobia in healthcare will be followed by an interactive dialectic small group workshop.

Pre-requisite: Willingness to engage in a sex-positive and anti-oppressive environment.

Ruth Trinier and Sarah Quinto

0825 – 1015

GREETINGS

PLENARY SPEAKER

Organ and Tissue Donation in the Conscious Competent Patient – Medical, Legal and Ethical Considerations

Leading practice recommendations for the medical, ethical and legal framework for controlled donation after circulatory death (cDCD) were established by Canadian expert consensus in the 2005 Canadian Council for Donation and Transplantation forum published in the Canadian Medical Association Journal (CMAJ) in 2006. There have been gradual and incremental increases in cDCD since that time and as of 2014, DCD accounts for 21% of all deceased donors in Canada. CDCD generally occurs after sudden, acute and severe brain injury with a poor prognosis, a consensual decision with families to discontinue life sustaining treatments and a prediction of imminent death. In these situations, the patient is unconscious and thus not competent nor capable to make treatment or end-of-life decisions including organ donation. The health care team discusses end-of-life care and the DCD option with the family and/or other surrogate decision makers who are providing consent on behalf of the unconscious, incompetent patient. There are other groups of patients with illnesses that are incurable and terminal but are not associated with brain injury. These patients may be conscious, competent and capable of actively participating in decisions about their end-of-life care including consenting to organ donation. Recent Canadian legislation and evolving practices around Medical Aid in Dying (MAID) also may raise potential scenarios where organ patients or health care professionals may initiate requests for organ donation around decisions to end life. This presentation will focus on the unique medical, legal, and ethical perspectives of organ donation in this situation.

James Downar



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Société canadienne du sang

CONFERENCE AGENDA *cont'd*

CACCN AWARDS PRESENTATION

Join us in celebrating the achievements of your critical care colleagues receiving CACCN Awards as well as the presentation of the Dynamics of Critical Care™ Conference Poster Awards including the Delegate's Choice!



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CANADIAN
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CARE
NURSES

1015 – 1100

NUTRITION BREAK - EXHIBIT HALL and POSTER VIEWING

1100 – 1145

EDUCATIONAL SESSION 6 - FAST AND FOCUSED (45 minutes)

6A CQI in the CCU: Using Smart Pumps and Quality Improvement to Increase Medication Infusion Safety

Continuous Quality Improvement (CQI) is a concept that has become synonymous with patient safety and improving clinical practice and outcomes. This presentation will focus on defining CQI concepts, the role in patient safety, and the influence of data on these processes. Smart pump technology has evolved to become vital in the delivery of high risk medications in critical care settings. A key feature of Smart Pumps is the customizable electronic 'drug libraries' which are developed to define parameters of intravenous drug administration, such as rates, infusion duration, and titration guidance. Drug libraries help to guide medication administration and provide users with warnings when defined parameters are exceeded. With this technology, pumps can collect data related to medication administration which is then translated into CQI reports identifying trends, sources of error, potential solutions, and opportunities for clinical practice improvements. This presentation will incorporate scenarios from critical care settings and demonstrate how data analysis captured from smart pumps was used to improve patient safety and clinical practices.

Mohammed Al-Sukhni

6B Providing Care in the Digital Way: A Day in the Life of a Nurse in a Digital Intensive Care Unit (ICU)

A digital hospital uses technology to support systems and processes to achieve efficiency, save energy, manage costs and provide safe and quality care (Buntin et al., 2011; Restuccia et al., 2012). This oral presentation will discuss and provide information on what a fully digital hospital means using Humber River Hospital's (HRH) digital platform in patient care delivery, and demonstrate how this digital platform is being used and integrated in a day of a life of an ICU nurse. The HRH became the first fully digital hospital in North America when it opened in 2015. This new, high-technological facility operates based on four digital platforms (Bak, 2016): (1) Electronic Information, (2) Mobile and Connected, (3) Patient Empowerment, and (4) Systems Automation. Each platform defines current systems and processes to provide quality care to the community, and the drivers of HRH's future operations. These platforms are used in the daily operations of HRH's intensive care units. The perspectives of the HRH's Information Technologist and ICU Clinical Leadership on the use of HRH digital platforms and its relationship with patient care are to be shared with focus on the successes, opportunities, and future directions.

*Francis Cacao, Jane Cornelius, Kevin Fernandes, Yemi Adebayo, Maria Lozada, and
Cecile Marville-Williams*

CONFERENCE AGENDA *cont'd*

6C **Breaking the Code: Navigating Resuscitation from the Patient's Perspective**

All too often, the conversation about life and death occurs later in the process of diagnosis and prognosis. Having an Advance Care Planning (ACP) team may create an open dialogue with patients and facilitate conversations with patients, substitute decision makers as well as the health care team. A quality improvement initiative is currently being undertaken providing ACP opportunities to complex inpatients where they can share a values history that is then documented electronically and used to support their resuscitation choices. Under the initiative, it has been observed there is a high rate of discordance (24%) between patients' preferences and those documented on their health records. Once notified, it was found that 46% of patients did not have their documentation changed to reflect the discrepancies identified. The goal for the ACP team is to give patients an opportunity to share their values history, provide education, and give them a platform to ask questions. This presentation will discuss the impact of a meaningful ACP through a patient's story, how her journey unraveled and how this impacted the critical care team.

Launa Elliott

6D **RNAO Best Practice Guidelines for Prevention of Pressure Injuries & Emerging Evidence**

This session will highlight the best practice guidelines, evidence and challenges of the Prevention of Hospital-Acquired Pressure Injuries. The presentation will focus on evidence-based practice including the use of emerging therapies.

Karen E Campbell

6E **Critical Care Certification: A National Program for Success**

Despite mounting evidence of the benefits of specialty certification, only a fraction of eligible Canadian critical care nurses hold the credential. Cost and limited opportunities for exam preparation have been cited as restrictive factors. In 2016, a certification challenge was issued to our colleagues nationally. Success of the participating candidates was supported with coordinated study groups and a series of complimentary review webinars. Many institutions provided financial support. Participating nurses were surveyed to understand the impact of the supportive interventions on their exam experience and on their practice. Results demonstrated an increase of 20% of nurses certified in Critical Care Pediatrics [CNCCP(C)] in 2016. This presentation will review strengths and limitations of the strategies used for advancing national certification and report on the results of the participant survey. Strategies for sustained support of certification in one participating hospital program will also be shared.

Ruth Trинier, Karen Dryden-Palmer, and Tanya Spence

MASTERY SESSION 4 (1100 - 1300 120 minutes)

6M **Recognizing When the Brain and Cord are Injured: Essentials of Neurophysiology and the Nursing Assessment**

All critically ill patients are at risk for neurological complications. Patients may present with a specific neurological diagnosis, or they may develop an acquired insult due to vascular disorders, thromboembolism, shock states, coagulopathies, hypoxemia, or infection. Because early recognition is essential, all critical care nurses must be able to perform an accurate neurological assessment. For nurses who work outside of a neuro-specific setting, the development and maintenance of neurological assessment skills can be more challenging. Patient related factors, such as decreased level of consciousness, sedation, metabolic encephalopathy, and delirium can add to the complexity. Nurse confidence and the ability to recognize significant findings is increased when a consistent approach to the neurological examination is incorporated into the routine assessment of all critically ill patients. The purpose of this presentation is to briefly recall important anatomical and physiological concepts of the brain, spinal cord, and cranial nerves, and to utilize this foundational information to guide an organized approach to the neurological examination. Case scenarios will be used to correlate signs and symptoms to possible areas of injury, and to illustrate hallmark or noteworthy neurological assessment findings. This session will be of interest to all nurses wishing to enhance their assessment skills of the neurological system.

Brenda Morgan

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CONFERENCE AGENDA *cont'd*

1200 – 1300 **PLENARY SPEAKER**

We are Nurses... and It Matters

This session will inform and inspire the participant about the vital role that nurses have in producing optimal patient and family outcomes and in driving change that matters across the health care system. It matters what nurses do in every setting, on every day and is based on the values, vision and voice of nurses at every level. Using our singular and collective bold voice to relentlessly drive change - matters. A variety of evidence-based examples of nurses doing what matters and stories of nurses' impact on the delivery of care will be discussed. Several participatory exercises will engage the participants to tell their own stories of when they mattered.

Clareen Wiencek

OR LUNCH, EXHIBITS, POSTERS

1315 – 1415 **PLENARY SPEAKER**

It Takes Us All: Leading Change Without Burning the Place Down

Leading change is about asking the right questions and creating momentum with your team to move forward. Whether it is reducing hospital acquired conditions, ensuring safer handling of narcotics or creating a healthier work life balance for yourself or creating a healthier work life balance for yourself or with your staff; you are starting from a position of strength and success. You have accomplished so much already. You are already successful. Learn how the questions you ask will surface where you are, how you can build on those strengths to move forward, how to bring in more voices and create momentum for continuing progress in your unit.

Clare Fielding

OR LUNCH, EXHIBITS, POSTERS

1430 – 1515 **EDUCATIONAL SESSION 7 - FAST AND FOCUSED (45 minutes)**

7A Practice Improvement Initiative: Creating Guidelines for Head and Neck Flap Patients in Critical Care

Traditionally patients undergoing major head and neck reconstruction surgery are brought postoperatively to the intensive care unit for close observation before transferring to a non-critical care unit (Arshad et al., 2013). Extant literature shows that early extubation and minimalized sedation improves patient outcomes (Allak et al., 2011; Clemens et al., 2015). In 2014, the Foothills Medical Centre in Calgary, Alberta implemented a set of guidelines that aim to reduce the time that the patient is mechanically ventilated, minimize or eliminate sedatives, encourage early mobilization, and reduce total time spent in the ICU. This session will present information on the creation of the guideline and implementation in a large twenty-eight bed intensive care unit, as well as the ongoing collaborative evaluation with key stakeholders against key performance indicators that reflect current best practices.

Daniel Cashen, Pam Hruska, and Joan Harris

7B Creating Exceptional Critical Care Units (CCU): How Healthy is Your Work Environment?

Canadian nurse mean turnover rates have been shown to be 19.9%, with supportive work environments playing a key role in curtailing turnover (O'Brien-Pallas et al., 2010). Healthy work environments have been linked to nurse retention (Heinen et al., 2013). In this presentation results of a work environment study conducted among Canadian and United Kingdom critical care nurses will be described. The intent of this study was to establish a baseline in the Canadian and United Kingdom context to begin planning strategies to improve ICU nurse work environments and positively impact nurse retention. The study was a cross sectional survey design. The practice environment scale of the nurse work index was the primary measure used in this study. The PES-NWI is the most widely reported measure that has been used to examine various aspects of a nurse's work environment. Two additional reliable and valid measures that were used in this study included: the moral distress-revised instrument (Corley, 2005) and the intent to stay measure (adapted from Facticeau et al, 1995). Research Questions: 1. How do nurses in Canada and the UK rate their current work environment? 2. Is there a relationship? The aim of this presentation will be to follow up an initial presentation at Dynamics 2016. Results of the work environment study conducted among critical care nurses in Canada and the United Kingdom will be presented.

Sandra Goldsworthy and Nicola Witton

CONFERENCE AGENDA *cont'd*

7C Delirium in the ICU: Is Dexmedetomidine Effective?

Despite vigorous efforts to encourage the use of screening tools and adoption of prevention strategies, delirium in the intensive care unit (ICU) continues to affect 30% of patients. The success of the pharmacological treatment of delirium remains equivocal; moreover, there is a paucity of research that supports the use of antipsychotic drugs. However, Dexmedetomidine, a selective alpha2 adrenoreceptor agonist, at least appears to have a promising role in the management of delirium. A brief review of delirium will be provided including the epidemiology, pathophysiology, and predisposing factors. The current management, complications, and long term consequences of delirium are presented. This presentation will provide a critical appraisal of the research findings in relation to the use of Dexmedetomidine in ICU management of delirium. The implications for critical care RNs in relation to nursing care and education will be provided. The critical care nurses will be invited to participate in informal audience polling to determine their familiarity and experience with the use of Dexmedetomidine.

Joelle Ungarian, James Rankin, and Karen Then

7D How to Outsmart Your Exhausted Brain

The brain has a built in “negativity bias” Stress often reinforces this negative bias. We often provide fragmented care not always knowing the outcome of patients/families we care for and this causes stress on our brain and preoccupies our thoughts. Since formal nursing education does not include how to deal with the stress of working with those who are ill, in pain, dying we tend to become detached and withdrawn both at work and home causing an increase in adrenaline and cortisol and decrease in connectedness to others. By understanding our brains when they are stressed, we can take advantage of the hormones oxytocin, dopamine, endorphins serotonin, to re-engage with patients and our families/loved ones and keep us from that exhaustive state of mind. Reviewing how the limbic system reacts to our job stress we can outsmart it by utilizing our pre-frontal lobe, which will allow the positive experiences to over-ride our negative experiences, as well as how to separate work from home and mindfulness strategies.

Daniel Doherty

7E You Want Me to What? Mobility and Continuous Renal Replacement Therapy (CRRT) Patients

Current literature supports the benefits of early mobilization in the critical care population. Immobility is known to be associated with poor patient outcomes, including increased morbidity and mortality. Bedridden patients have increased rates of delirium, muscle wasting, skin breakdown, increased insulin resistance, as well as many other long term side effects that affect a patient’s quality of life beyond the critical care setting. Mobility is frequently considered to be out of bed walking, however it can take many different forms. Mobility can include a variety of activities such as passive / active range of motion exercises, sitting in a chair or dangling the legs at the side of the bed, standing in place or marching in place, and of course walking. This presentation was designed to demonstrate how the benefits of early mobilization can be extended to our patients receiving continuous renal replacement therapy (CRRT), and to provide a novel new pathway to help guide bedside practitioners in implementing a mobility protocol for this patient population.

Sarah Crowe, Ashli Brook, and Janet Reynolds

CONFERENCE AGENDA *cont'd*

MASTERY SESSION 5 (1430 - 1630 120 minutes)

7M Alveoli, Airways, Volumes and Ventilators: Breathing Easier About Mechanical Ventilation

Critical care nurses are acutely aware that knowledge about mechanical ventilation is essential for optimal patient care. This session focuses on an overview of mechanical ventilation in adult critical care, with an emphasis on the most up-to-date strategies for managing ventilated patients, from intubation to extubation. The role of non-invasive ventilation, including identification of appropriate candidates and nursing care considerations, will be reviewed. Intubation, choosing an appropriate mode of mechanical ventilation, and understanding fundamental mechanical ventilator settings and respiratory adjuncts, will be highlighted. Case studies will actively engage the audience's knowledge of mechanical ventilation to specific clinical situations, including the ability to troubleshoot and correct mechanical ventilator problems. Application of evidence-based guidelines for weaning and liberation from mechanical ventilation, including spontaneous breathing trials, will be discussed.

Eugene Mondor

1515 - 1600 NUTRITION BREAK - EXHIBIT HALL and POSTER VIEWING

1600 - 1645 EDUCATIONAL SESSION 8 - FAST AND FOCUSED (45 minutes)

8A New Beginnings: Integrating New Graduate Nurses to Critical Care: Where are they now?

Recruitment of new graduate nurses (NGN) into paediatric intensive care (PICU) has been embraced to address current and predicted shortfalls in critical care nurses. From 2007-2010 we developed a learner-centered program for the direct integration of NGN into the PICU. Over a 6-month period in 2007, 40 NGN were integrated into a large academic PICU. Essential to program success was the design and maintenance of an inclusive learning culture and a 'whole community' approach to education. This innovative program was evaluated prospectively and results shared with Dynamics attendees after the initial phase of implementation. We will look back at sustained gains, ongoing interventions, competency attainment and clinical team impacts of the program over the past decade. Pre-orientation, clinical integration, post-orientation and 3-year outcomes will be discussed. We will update on 10-year retention of these NGN and describe their professional journeys. This program will be discussed as an approach to early career success and sustained nurse investment in the critical care nursing specialty.

Karen Dryden-Palmer and Ruth Trinier

8B The Experience of Intensive Care Nurses Caring for Patients with Delirium: A Phenomenological Study

Results of this study revealed that intensive care nurses find a way through many complexities to provide person-centred care. Caring for these patients was exhausting but could also be rewarding. This session will review the findings of an original research study about the experience of intensive care nurses caring for patients with delirium. Main topics include a review of the findings of the study including the overarching theme, finding a way to help them through it, as well as the main themes and sub-themes. Factors that helped and hindered nurses will be discussed in the context of the complexities of patients, nurses, and the intensive care environment. Implications for practice will be reviewed with a focus on delirium assessment, engaging with families, patient safety, and finding rewards in the experience. Qualitative data will be presented in quotations and diagrams that summarize the study results. Participants will be invited to engage throughout the presentation by reflecting on and sharing their own similar or contrary experiences, as well as their reactions to the researcher's conclusions.

Allana LeBlanc and Frances Fothergill-Bourbonnais

CONFERENCE AGENDA *cont'd*

8C Death and Dying in the ICU: A Review Exploring Critical Care Nurses' Experiences of Treatment Withdrawal

Death and dying are part of the critical care reality - particularly in the intensive care unit (Coombs, Addlington-Hall, & Long-Sutehall, 2012). Death in this clinical environment often follows a decision to withdraw life-sustaining treatments (Sprung, Cohen, Sjokvist et al., 2003). This presentation aims to provide an overview of the findings of a systematic review of qualitative evidence that explored the experiences of critical care nursing who have provided care to patients and families within the context of withdrawal of life-sustaining treatment. A systematic review of qualitative literature was completed following a comprehensive search. All qualitative studies and mixed methods studies that met the inclusion criteria were included. Meta-aggregation modelled on the Joanna Briggs Institute (2014) was performed to synthesize the findings. Thirteen studies were included in the review. Key themes were identified from the original research: Navigating Complexity and Conflict, Focusing on the Patient, Working with Families, Dealing with Emotions Related to Treatment Withdrawal. Practical implications and areas for future research are discussed.

Brandi Vanderspank-Wright, Nikolaos Efstathiou, and Amanda Vandyk

8D Join the A-Team: Exploring the Key Role Nurses Play in Antimicrobial Stewardship

Antimicrobial resistance poses a grave threat to the landscape of healthcare with the failure of effective strategies against resistant infectious organisms. Risks associated with resistance include increased patient mortality and morbidity, length of stay, and higher associated costs. Antimicrobial stewardship programs are multidisciplinary with a focus to minimize adverse resistance. Registered nurses play a pivotal role in the beneficial outcome of antimicrobial stewardship programs. As frontline caregivers, registered nurses are the hub of coordinating appropriate antimicrobial management related to patient response based on appropriate nursing assessments and interventions. This presentation will be supported by recent literature on the nurse's role in antimicrobial stewardship and elaborate on the main ways nurses can influence antimicrobial care decisions. The goal is to highlight how mitigating incidents of resistance is an integral role for registered nurses.

Mat Wenger

8E Presenter and topic to be updated in early July

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PHILIPS

CONFERENCE AGENDA *cont'd*

1215 - 1345 CACCN ANNUAL DINNER

**“Oh I, I love the nightlife, I got to boogie,
on the disco ‘round, oh yea!...”**

LEARN ALL DAY. DANCE ALL NIGHT!

Do the Hustle, the Bump, YMCA, the Electric Slide... dig out your bell bottoms, leisure suits, jump suits, platform shoes, disco wear, and afro hair and get ready for Disco Fever! Boogie the night away in true Donna Summer fashion with the hippest, coolest disc jockey Toronto has to offer! Can you dig it?

Dynamics 2017 will be recognizing GE Healthcare for their support of our educational program at the Annual Dinner

\$ 70.00 per person - includes dinner and dance party

Tickets are non-refundable once purchase. Tickets will not be available on-site.

