Anesthesia

UNIVERSITY OF TORONTO

Anesthesia

2015—2017 ANNUAL REPORT
# TABLE OF CONTENTS

2 Chair’s Introduction  
3 Vision, Mission and Values  
4 Anesthesia Leadership  
5 Department Committees  
9 Faculty and Affiliated Hospitals,  
11 Recognition of Excellence: Honours, Awards, Chairs and Promotions 2015-2016  
13 Recognition of Excellence: Honours, Awards, Chairs and Promotions 2017-2017  
15 Departmental Merit Awards: 2015-2017 Cycle  
17 Advancement: Endowed Chairs  
18 Faculty Promotions and Recognition  
19 Anesthesia Education: Report from the Vice Chair, Education  
20 Undergraduate Education Program  
23 Postgraduate Education Program  
24 Residents 2015-2016  
25 Residents 2016-2017  
27 Pain Medicine Residency Program  
29 Fellowship Education Programs  
30 Anesthesia Fellows 2015-2016  
32 Anesthesia Fellows 2016-2017  
35 Family Practice Anesthesia  
37 E-Learning and Technological Innovations  
39 Faculty Development  
42 Continuing Education and Professional Development Programs  
43 Annual Shields Research Day 2016  
44 Peer-Reviewed Publications & Non Peer-Reviewed Publications
CHAIR’S INTRODUCTION

Dr. Brian Kavanagh

Dear Colleagues,

We are perhaps the leading department of anesthesia in the country, and amongst the leading departments in the world, when assessed by all of the usual metrics. Certainly, medical schools are facing internal and external pressure to provide unparalleled academic programs (teaching, research, administration, clinical activities) in the face of dwindling operating revenues, increased competition for research grants, rising costs for salaries, healthcare and education, and recruitment and retention challenges. We must successfully attract new resources and people, target near-term priorities, build on our collective excellence, seek new pathways to collaboration and innovation, and provide a strong foundation to succeed in the years ahead. Defining and measuring our key metrics, or performance indicators, and then tracking them over time, will provide a basis to drive change, innovation, and link our strategic goals to activities in our department.

Sincerely,

Brian Kavanagh
Professor and Chair
OUR VISION
The provision of safe and innovative anesthetic, analgesic, perioperative and critical illness management for our patients.

OUR MISSION
The delivery and promotion of preeminent perioperative patient care through continued vigilance, innovation, and scholarship.

OUR VALUES
Our values are the principles by which we guide our mission and reflect the values articulated by our university faculty and our core clinical institutions. We cherish the following values:

- Integrity;
- Commitment to innovation and excellence;
- Life-long learning and critical inquiry;
- Diversity and social justice;
- Partnership with our health science centres;
- Collaboration among disciplines, professions, and in our community;
- Support and collegiality;
- Accountability; and,
- Responsiveness to those whom we serve.
ANESTHESIA LEADERSHIP
2015-16

OFFICE OF THE CHAIR AND EXECUTIVE
Dr. Brian Kavanagh Chair
Dr. Gerald O’Leary Vice Chair, Clinical Practice, Anesthesiologist-in-Chief, Women’s College Hospital and University Health Network (TGH, TWH, Sinai Health System)
Dr. David McKnight Vice Chair, Education
Dr. David Mazer Vice Chair, Research
Dr. Sue Belo Anesthesiologist-in-Chief, Sunnybrook Health Sciences Centre
Dr. Mark Crawford Anesthesiologist-in-Chief, The Hospital for Sick Children
Dr. John Laffey Anesthesiologist-in-Chief, St. Michael’s Hospital
Dr. Wendy Kubasik Director, Administration

UNDERGRADUATE EDUCATION PROGRAMS
Dr. Ahtsham Niazi Director
Dr. Clyde Matava Electives and e-Learning Coordinator
Dr. Diana Tamir Preclerkship Coordinator
Dr. Anita Sarmah Simulation Coordinator
Dr. Marjan Jariani OSCE Committee Representative
Ms. Katia Malyuzhinets Undergraduate Program Assistant

SITE COORDINATORS
Dr. Dragan Djordevic Women’s College Hospital
Dr. Christopher Flynn Trillium Health Centre
Dr. Augustine Rhee Trillium Health Centre
Dr. Marjan Jariani UHN (Toronto General Hospital)
Dr. Mital Joshi Sinai Health System
Dr. Suzanne Lilker St. Joseph’s Health Centre
Dr. Carol Loffelmann St. Michael’s Hospital
Dr. Patrick Mark Michael Garron Hospital
Dr. Clyde Matava The Hospital for Sick Children
Dr. Zoe Unger UHN (Toronto Western Hospital)
Dr. Larry Panos The Scarborough Hospital - General Division
Dr. Anita Sarmah Sunnybrook Health Sciences Centre
Dr. Alan Tallmeister The Scarborough Hospital - Birchmount
Dr. Diana Tamir UHN (Toronto General Hospital)

POSTGRADUATE EDUCATION PROGRAMS
Dr. Lisa Bahrey Director
Dr. Henderson Lee Director, Family Practice Anesthesia
Dr. Tobias Everett Anesthesia Simulator Curriculum Coordinator
Dr. Beverly Morningstar Resident Counselor
Ms. Jennifer Morris Program Assistant
SITE COORDINATORS

Dr. Deven Chandra  
St. Michael’s Hospital

Dr. Mitch Weisbrod  
Michael Garron Hospital

Dr. Alayne Kealey  
Sunnybrook Health Sciences Centre

Dr. Kyle Kirkham  
UHN (Toronto Western Hospital)

Dr. Henderson Lee  
Family Practice Anesthesia Program

Dr. Martin Ma  
UHN (Toronto General Hospital)

Dr. Katherine Marseu  
UHN (Toronto General Hospital)

Dr. Elaine Ng  
The Hospital for Sick Children

Dr. Arun Prasad  
Women’s College Hospital/TWH

Dr. Aliya Salman  
Mount Sinai Hospital

FELLOWSHIP EDUCATION PROGRAMS

Dr. Doreen Yee  
Director, Fellowship & International Graduate Programs

Ms. Katia Malyuzhinets  
Program Assistant

SITE COORDINATORS

Dr. Ki Jinn Chin  
UHN (Toronto Western Hospital)

Dr. Paul McHardy  
Sunnybrook Health Sciences Centre

Dr. Andrea Rigamonti  
St. Michael’s Hospital

Dr. Naveed Siddiqui  
Mount Sinai Hospital

Dr. Coimbatore Srinivas  
UHN (Toronto General Hospital)

Dr. Ilavajady Srinivasan  
The Hospital for Sick Children

CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT

Dr. Peter Slinger  
Director, CE-PD Programs

Dr. Zeev Friedman  
Chair, Annual Shields Research Day 2016

Dr. Martin van der Vyver  
Chair, Faculty Development Day 2015

FACULTY DEVELOPMENT PROGRAMS

Dr. Vincent Chan  
Director (effective May 1, 2016)

Dr. Martin van der Vyver  
Director (to April 30, 2016)

DEPARTMENT COMMITTEES

<table>
<thead>
<tr>
<th>Committee</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Committee</td>
<td>B. Kavanagh (Chair), S. Belo, M. Crawford, W. Kubasik, J. Laffey, D. Mazer, D. McKnight, G. O'Leary</td>
</tr>
<tr>
<td>Education Council</td>
<td>D. McKnight (Chair), L. Bahrey, V. Chan, J. Hanlon, B. Kavanagh, H. Lee, K. Malyuzhinets (Secretary), A. Niazi, P. Slinger, D. Yee</td>
</tr>
<tr>
<td>Department Appointments Committee</td>
<td>B. Macpherson (Chair), M. Graham, S. Halpern, C. Loffelmann, W. Kubasik, A. Perlas</td>
</tr>
<tr>
<td>Promotions Committee</td>
<td>M. Crawford (Chair), S. Beattie, R. Brull, F. Chung, J. Katz, B. Kavanagh, J. Laffey, D. Mazer, B. Orser, J. Tarshis, J. Wassermann</td>
</tr>
<tr>
<td>Continuing Medical Education/Professional Development</td>
<td>P. Slinger (Chair), P. Angle, S. Davies, L. Eisen, M. Friedlander, L. Isaac, B. Kavanagh, J. Kay, C. Knapp, D. McKnight, A. Rigamonti, J. Tarshis, M. van der Vyver, L. Venkatraghavan</td>
</tr>
</tbody>
</table>
### Faculty Development

M. van der Vyver (Chair), L. Bahrey, K. Kanduja, B. Kavanagh, S. Lilker, N. Lo, C. Matava, D. McKnight, S. Riazi

### Fellowship Education Committee

D. Yee (Chair), K.J. Chin, P. McHardy, D. McKnight, J. Morris (Secretary), A. Rigamonti, N. Siddiqui, C. Srinivas, I. Srinivasan

### Postgraduate Education Committee

L. Bahrey, (Chair), Z. Al-Mousawy, L. Bahrey, S. Bragg (PG1), D. Chandra, I. Devito, V. Kamble, B. Kavanagh, A. Kealey, K. Kirkham, A. Krishna (PG5), M. Ma, D. Mazer, D. McKnight, B. Morningstar, J. Morris (Secretary), E. Ng, L.A. Noyahr (PG3), A. Prasad, A. Salman, S. Yu (PG2)

### Research Committee


### Undergraduate Education Committee

A. Niazi (Chair), E. Baig (Resident), V. Chinnappa, M. Choi, G. Cronin (Secretary), S. Desousa, H. Felice (Year 3 Rep), C. Flynn, A. Green, M. Joshi, B. Kavanagh, S. Lilker, C. Loffelmann, D. McKnight, P. Mark, C. Matava, H. Meng (Year 4 Rep), A. Niazi, L. Panos, A. Sarmah, E. Siu (Resident), D. Tamir, A. Tallmeister, D. Thakrar (Resident)

### Faculty Development Day 2015 Planning

M. van der Vyver (Chair), B. Kavanagh, K. Khanduja, W. Kubasik, C. Matava

### Shields Day 2016 Planning Committee

Z. Friedman (Chair), B. Kavanagh, W. Kubasik

---

**2016-17**

**OFFICE OF THE CHAIR AND EXECUTIVE**

**Dr. Brian Kavanagh**  
Chair

**Dr. Gerald O’Leary**  
Vice Chair, Clinical Practice, Anesthesiologist-in-Chief, Women’s College Hospital and University Health Network (TGH, TWH, Sinai Health System)

**Dr. Mark Levine**  
Vice Chair, Education

**Dr. Keyvan Karkouti**  
Vice Chair, Research

**Dr. Sue Belo**  
Anesthesiologist-in-Chief, Sunnybrook Health Sciences Centre

**Dr. Mark Crawford**  
Anesthesiologist-in-Chief, The Hospital for Sick Children

**Dr. John Laffey**  
Anesthesiologist-in-Chief, St. Michael’s Hospital

**Dr. Wendy Kubasik**  
Director, Administration

**UNDERGRADUATE EDUCATION PROGRAMS**

**Dr. Ahtsham Niazi**  
Director

**Dr. Maisie Tsang**  
Electives Coordinator

**Dr. Diana Tamir**  
Preclerkship Coordinator

**Dr. Anita Sarmah**  
Simulation Coordinator

**Dr. Marjan Jariani**  
OSCE Committee Representative

**Dr. Natalie Clabel**  
LInC Committee Representative

**Ms. Hanaa Ahsan**  
Undergraduate Program Assistant
SITE COORDINATORS

Dr. Zoe Unger            Women’s College Hospital
Dr. Christopher Flynn    Trillium Health Centre – Credit Valley Hospital
Dr. Augustine Rhee       Trillium Health Centre – Mississauga Hospital
Drs. Marjan Jariani & Diana Tamir UHN (Toronto General Hospital)
Dr. Eric You-Ten          Mount Sinai Hospital
Dr. Suzanne Lilker       St. Joseph’s Health Centre
Dr. Carol Loffelmann     St. Michael’s Hospital
Dr. Patrick Mark          Michael Garron Hospital
Dr. Maisie Tsang         The Hospital for Sick Children
Dr. Zoe Unger            UHN (Toronto Western Hospital)
Dr. Larry Panos           The Scarborough Hospital - General Division
Dr. Anita Sarmah          Sunnybrook Health Sciences Centre
Dr. Alan Tallmeister     The Scarborough Hospital – Birchmount
Dr. Darryl Irwin          North York General Hospital

POSTGRADUATE EDUCATION PROGRAMS

Dr. Lisa Bahrey            Director
Dr. Henderson Lee         Director, Family Practice Anesthesia
Dr. Tobias Everett        Anesthesia Simulator Curriculum Coordinator
Dr. Fahad Alam            Resident Wellness Lead
Ms. Jennifer Morris       Program Assistant

SITE COORDINATORS

Dr. Deven Chandra          St. Michael’s Hospital
Dr. Jamie Kulchyk          Michael Garron Hospital
Dr. Alayne Kealey          Sunnybrook Health Sciences Centre
Dr. Kyle Kirkham           UHN (Toronto Western Hospital)/WCH
Dr. Henderson Lee          Family Practice Anesthesia Program
Dr. Katherine Marseu       UHN (Toronto General Hospital)
Dr. Elaine Ng              The Hospital for Sick Children
Dr. Mandy Lam              The Hospital for Sick Children
Dr. Stephen Lee            St. Joseph’s Health Centre
Dr. Aliya Salman           Mount Sinai Hospital

PAIN MEDICINE EDUCATION PROGRAM

Dr. John Hanlon            Director, Pain Medicine
Ms. Jennifer Moris         Program Assistant

SITE COORDINATORS

Dr. Paul Tumber            UHN (Toronto Western Hospital)
Dr. Martin Van Der Vyver   Sunnybrook Health Sciences Centre
Dr. John Hanlon             St. Michael’s Hospital
Dr. Allan Gordon            Mount Sinai Hospital
Dr. Hance Clarke           UHN- Toronto General Hospital – Multidisciplinary Clinic
Dr. Adrienne Tan            UHN- Toronto General Hospital – Psychiatry
Dr. Stephen Brown          The Hospital for Sick Children
Dr. Ahmed Al-Awamer         Princess Margaret Hospital (Cancer)
Dr. John Flannery          UHN – Toronto Rehab Institute (Physiatry)
Dr. Wiplove Lamba           St. Michaels Hospital (Addictions)
Dr. Jacqueline Hochman     Women's College Hospital – Rheumatology
Dr. Jason Lazarou          UHN – Toronto General Hospital – Neurology
Dr. Angela Mailis-Gagnon  
Pain and Wellness Centre

**FELLOWSHIP EDUCATION PROGRAMS**

Dr. Doreen Yee  
Director, Fellowship Programs

Ms. Hanaa Ahsan  
Program Assistant

**SITE COORDINATORS**

Dr. Ki Jinn Chin  
UHN (Toronto Western Hospital)

Dr. Paul McHardy  
Sunnybrook Health Sciences Centre

Dr. Niamh McAuliffe  
St. Michael’s Hospital

Dr. Naveed Siddiqui  
Mount Sinai Hospital

Dr. Coimbatore Srinivas  
UHN (Toronto General Hospital)

Dr. Ilavajady Srinivasan  
The Hospital for Sick Children

**CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT**

Dr. Peter Slinger  
Director, CE-PD Programs

Dr. Zeev Friedman  
Chair, Annual Shields Research Day 2017

Dr. Vincent Chan  
Chair, Faculty Development Day 2016

**FACULTY DEVELOPMENT PROGRAMS**

Dr. Vincent Chan  
Director (effective May 1, 2016)

Dr. Martin van der Vyver  
Director (to April 30, 2016)

**DEPARTMENT COMMITTEES**

<table>
<thead>
<tr>
<th>Committee</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Committee</td>
<td>B. Kavanagh, S. Belo, M. Crawford, J. Laffey, D. Mazer, D. McKnight, G. O'Leary, W. Kubasik</td>
</tr>
<tr>
<td>Department Appointments Committee</td>
<td>B. Macpherson, M. Graham, S. Halpern, C. Loffelmann, W. Kubasik, A. Perlas</td>
</tr>
<tr>
<td>Promotions Committee</td>
<td>M. Crawford, S. Beattie, R. Brull, F. Chung, J. Katz, B. Kavanagh, J. Laffey, D. Mazer, B. Orser, J. Tarshis, J. Wassermann</td>
</tr>
<tr>
<td>Faculty Development</td>
<td>V. Chan, F. Alam, M. Garavaglia, K. Kanduja, B. Kavanagh, S. Lilker, N. Lo, C. Matava, D. McKnight, P. Slinger</td>
</tr>
<tr>
<td>Fellowship Education Committee</td>
<td>D. Yee, K.J. Chin, P. McHardy, M. Levine, H. Ahsan</td>
</tr>
<tr>
<td>Pain Medicine Committee</td>
<td>J. Hanlon, J. Morris, P. Tumber, M. Van Der Vyver, H. Clarke, S. Brown, A. Al-Awamer, J. Flannery, W. Lamba, J. Hochman, J. Lazarou</td>
</tr>
</tbody>
</table>
FULLY AFFILIATED HOSPITALS

The University of Toronto and thus, the Department of Anesthesia, has full affiliation agreements with seven Toronto-area hospitals. We have more than 270 full-time faculty members at the following hospitals (please see our website at www.anesthesia.utoronto.ca for a full list of our faculty members, including biographical information):

- Mount Sinai Hospital
- St. Michael’s Hospital
- Sunnybrook Health Sciences Centre
- The Hospital for Sick Children
- University Health Network (includes Toronto General Hospital and Toronto Western Hospital, Toronto Rehab and Princess Margaret)
- Women’s College Hospital
- Baycrest
- Centre for Addiction and Mental Health
- Holland Bloorview Kids Rehabilitation Hospital
- Sinai Health System (includes Bridgepoint)

TORONTO ACADEMIC HEALTH SCIENCE NETWORK (TAHSN) ASSOCIATE MEMBERS

- North York General Hospital
- St. Joseph’s Health Centre (Toronto)
- Michael Garron/Toronto East General Hospital
- Trillium Health Partners (includes Credit Valley Hospital, Mississauga Hospital, Queensway Health Centre)
COMMUNITY AFFILIATED HOSPITALS

We are proud to have built strong relationships with several community-affiliated hospitals. Our clerks and residents participate in educational programs at these hospitals, and we have more than 100 part-time faculty members. Our community affiliates include:

- Humber River Regional Hospital
- Lakeridge Health
- Markham-Stouffville Hospital
- Ontario Shores Centre for Mental Health Sciences
- Providence Healthcare
- Rouge Valley Health System
- Royal Victoria Hospital (Barrie)
- The Scarborough Hospital
- Southlake Regional Health Centre
- West Park Healthcare Centre
- Waypoint Centre for Mental Health Care
- William Osler Health System

NON-HOSPITAL CLINICAL SITES

- Anishnawbe Health Toronto
- Canadian Blood Services
- City of Toronto
- George Hull Centre for Children and Families
- Hincks-Dellcrest Centre
- Kensington Eye Institute
- Ontario Forensic Pathology Service
- Public Health Ontario
- Surrey Place Centre
- Toronto Public Health
- Victorian Order of Nurses Canada
- Youthdale Treatment Centres
RECOGNITION OF EXCELLENCE: HONOURS, AWARDS, CHAIRS AND PROMOTIONS (2015-2016)

The following University department awards were presented at the 37th Annual Shields Research Day on Friday, May 13, 2016:

- The Dr. R.J. Byrick Award recognizes the best fellow's research paper presented at the Annual Shields Research Day: Dr. Lei Lei

- The Dr. A.C. Bryan Award is awarded to a graduate student judged to have presented the best research project at the Annual Shields Research Day: Dr. Nikhil Mistry

- The Dr. Hynek Rothbart Award for the best paper presented by a resident at the Annual Shields Research Day: Dr. Michael Sklar

- The Thomas Donald Hammell Memorial Award in Anesthesia, is awarded in recognition of outstanding contributions to the Residency Program, as chosen by other residents: Dr. Chris Farlinger

- The UT David Bevan Best Shields Day Poster Award: Dr. David Levin

- The Dr. Evelyn Bateman Award is awarded in recognition of excellence in anesthesia at the undergraduate level: Dr. Justin Oh

- The Dr. Alan K. Laws Clinician Scientist Fellowship promotes excellence in training anesthesiologists for careers as Clinician-Scientists (1-2 years). It is one of two awards given by the Department of Anesthesia in honour and memory of Dr. Alan K. Laws. The recipients in 2015/2016 were Drs. Ashwin Sankar, Lavarnthan Sivanathan and Joshua Bell. All three are residents in Anesthesia.

- The Marion and Earl Orser Prize in Anesthesia and Sleep Sciences was created in 2015 through a generous donation by Mr. and Mrs. Earl and Marion Orser. Two awards are available (clinical sciences and basic/translational sciences), and are open to residents, clinical fellows, post-doctoral fellows or graduate students within the UT Faculty of Medicine that have a focus on the discipline of Anesthesia Sciences, who are the first author of a paper published (or in press) in 2015. The recipients in 2016 were Drs. Neil Goldenberg and Hillen Cruz Eng.

- The Alan K. Laws Travel Fellowship provides travel support for senior residents and fellows in furthering academic interests and research projects in anesthesia: Drs. Matthew Lee, Pablo Perez D’Empaire and Asad Siddiqui.

- On an annual basis, the Department of Anesthesia at the University of Toronto funds tuition awards for residents or fellows in the Department of Anesthesia, University of Toronto. This year, this program was generously supported by a donation from Dr. Trisha Mark, and alumnus of our residency program. Please join us in thanking Dr. Mark for her generous support. In 2015/2016, the recipients are Drs. Asad Siddiqui and Eric Siu.
• The Award for Clinical Excellence is awarded by the UT Department of Anesthesia to full or part-time faculty members in the department within each of the fully or partially affiliated hospitals and their respective sites who has been judged by the department’s faculty, fellows and residents to be an outstanding clinician within the Anesthesia community: Drs. James Robertson (The Hospital for Sick Children), Greg Silverman (Mount Sinai Hospital), Marcus Wong (St. Joseph’s Health Centre), Bok Man Chan (St. Michael’s Hospital), Vaibhav Kamble (Michael Garron Hospital), Rita Katznelson (Toronto General Hospital), Pirjo Manninen (Toronto Western Hospital), Jonathan Kong (Sunnybrook Health Sciences Centre) and Pam Morgan (Women’s College Hospital).

The following University department teaching awards were presented at the Annual Faculty Development Day event on November 11, 2015:

• The Dr. John Desmond Award recognizes excellence in clinical teaching of undergraduate students: Dr. Clyde Matava

• The Dr. Gerald Edelist Award is awarded to a faculty member in recognition of excellence as a clinical teacher of residents in anesthesia: Dr. Aliya Salman

• The Dr. David Fear Award is awarded for outstanding contributions to continuing medical education and continuing professional development in the Department of Anesthesia: Dr. Tobias Everett

• The Interprofessional Teaching Award recognizes outstanding teaching both within and outside of the anesthesia community: Dr. Fiona Campbell

• The New Faculty Teaching Excellence Award recognize a faculty member within the first three (3) years of appointment who has been nominated by the department’s faculty, fellows, or residents as an outstanding teacher or mentor: Dr. Neilesh Soneji

Congratulations to UT Anesthesia Department members on their success at the 2016 Canadian Anesthesiologists’ Society Annual Meeting (CAS)!

CAS Research Operating Grants & Awards

• Winner of the Richard Knill Competition: Dr. Sheila Riazi
• Winner of the Cardiac Anesthesiologists’ Society Research Award: Dr. Sinziana Avramescu
• Winner of the Dr. Earl Wynands Research Award in Cardiovascular Anesthesia: Dr. Keyvan Karkouti
• Winner of the Dr. A Gordon Research Award for Innovation in Patient Safety: Dr. Zeev Friedman

CAS Best Paper Winners:

• Award for Best Paper in Obstetric Anesthesia: Dr. Mrinalini Balki
• Award for Best Paper in Pediatric Anesthesia: Dr. Ushma Shah
• Award for Best Paper in Education and Simulation: Dr. Tobias Everett

The following University department awards were presented at the 38th Annual Shields Research Day on April 28, 2017:

- The Dr. R.J. Byrick Award recognizes the best fellow's research paper presented at the Annual Shields Research Day: Dr. Giulia Marie Ruggeri.

- The Dr. A.C. Bryan Award is awarded to a graduate student judged to have presented the best research project at the Annual Shields Research Day: Dr. Bhushan Katira.

- The Dr. Hynek Rothbart Award for the best paper presented by a resident at the Annual Shields Research Day: Dr. Jay Shou Han.

- The Thomas Donald Hammell Memorial Award in Anesthesia, is awarded in recognition of outstanding contributions to the Residency Program, as chosen by other residents: Dr. Alex Petre.

- The UT David Bevan Best Shields Day Poster Award: Dr. Takeshi Yoshida.

- The Marion and Earl Orser Prize in Anesthesia and Sleep Sciences was created in 2015 through a generous donation by Mr. and Mrs. Earl and Marion Orser. Two awards are available (clinical sciences and basic/translational sciences), and are open to residents, clinical fellows, post-doctoral fellows or graduate students within the UT Faculty of Medicine that have a focus on the discipline of Anesthesia Sciences, who are the first author of a paper published (or in press) in 2016. The recipients in 2017 were Drs. Michael Sklar and Yoshida Takeshi.

- The Alan K. Laws Travel Fellowship provides travel support for senior residents and fellows in furthering academic interests and research projects in anesthesia: Drs. Kapil Gupta, Ashutosh Joshi and Sophia Lane.

- The Dr. Evelyn Bateman Award is awarded in recognition of excellence in anesthesia at the undergraduate level: Dr. Madelaine Kukko.

- On an annual basis, the Department of Anesthesia at the University of Toronto funds tuition awards for residents or fellows in the Department of Anesthesia, University of Toronto. This year, this program was generously supported by a donation from Dr. Trisha Mark, and alumnus of our residency program. Please join us in thanking Dr. Mark for her generous support. In 2016/2017, the recipients are Drs. Naheed Jivraj (Resident, PGY2) and Akash Goel (Resident, PGY2).

- The Award for Clinical Excellence is awarded by the UT Department of Anesthesia to full or part-time faculty members in the department within each of the fully or partially affiliated hospitals and their respective sites who has been judged by the department’s faculty, fellows and residents to be an outstanding clinician within the Anesthesia community: Drs. James Kulchyk (Michael Garron Hospital), Kristina Khanduja (Mount Sinai Hospital), Randy Yue (Southlake...
The following University department teaching awards were presented at the Annual Faculty Development Day event on November 11, 2016:

- The **Dr. John Desmond Award** recognizes excellence in clinical teaching of undergraduate students: Dr. Natalie Clavel (UHN-Toronto Western Hospital).

- The **Dr. Gerald Edelst Award** is awarded to a faculty member in recognition of excellence as a clinical teacher of residents in anesthesia: Dr. Alayne Kealey (Sunnybrook Health Sciences Centre).

- The **Dr. David Fear Award** is awarded for outstanding contributions to continuing medical education and continuing professional development in the Department of Anesthesia: Dr. Jordan Tarshis (Sunnybrook Health Sciences Centre).

- The **Interprofessional Teaching Award** recognizes outstanding teaching both within and outside of the anesthesia community: Dr. Irene McGhee (Sunnybrook Health Sciences Centre).

- The **New Faculty Teaching Excellence Award** recognize a faculty member within the first three (3) years of appointment who has been nominated by the department’s faculty, fellows, or residents as an outstanding teacher or mentor: Dr. Richelle Kruisselbrink (UHN-Toronto Western Hospital).

Congratulations to UT Anesthesia Department members on their success at the 2017 Canadian Anesthesiologists' Society Annual Meeting (CAS)!

**CAS Awards**

- Winner of the Research Recognition Award: Dr. Gregory Hare
- Winner of the Gold Medal Award: Dr. Beverley Orser

**CAS Best Paper Winners:**

- Residents’ Competition – Second Place: Dr. Justyna Bartoszko
- Best Paper in Ambulatory Anesthesia: Dr. Yamini Subramani
- Best Paper in Neuroanesthesia: Dr. Elyana Wohl
- Best Paper in Pediatric Anesthesia: Dr. Maria Salman
- Best Paper in Perioperative Anesthesia: Dr. Justyna Bartoszko
The following individuals have received competitive peer-reviewed merit awards through the UT Department of Anesthesia for the period 2015-2017.

**RESEARCH MERIT AWARDS:**

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Hospital</th>
<th>Project Title</th>
<th>Award Value/Annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdallah, Faraj</td>
<td>St. Michael’s</td>
<td>The PASS Trial (Pain-relief Alternatives for Shoulder Surgery)</td>
<td>$35,000</td>
</tr>
<tr>
<td>Baker, Andrew</td>
<td>St. Michael’s</td>
<td>The role of neuroinflammation following traumatic brain injury to the pathogenesis of neurodegenerative disorders</td>
<td>$30,000</td>
</tr>
<tr>
<td>Balki, Mrinalini</td>
<td>Sinai Health System</td>
<td>Optimizing contractility in desensitized human myometrium: Pulsatile oxytocin pretreatment and role of calcium</td>
<td>$30,000</td>
</tr>
<tr>
<td>Beattie, W. Scott</td>
<td>UHN-Toronto General</td>
<td>The mechanisms, clinical impact, prevention, and treatment of postoperative myocardial injury An ongoing multidisciplinary collaborative program</td>
<td>$35,000</td>
</tr>
<tr>
<td>Brull, Richard</td>
<td>UHN-Toronto Western</td>
<td>The Analgesic Effects of Serratus Plane Block for Breast Cancer Surgery: A Randomized Clinical Trial</td>
<td>$35,000</td>
</tr>
<tr>
<td>Clarke, Hance</td>
<td>UHN-Toronto General</td>
<td>The Development of a Transitional Pain Program: Reducing pain disability &amp; persistent opioid use after major surgery</td>
<td>$30,000</td>
</tr>
<tr>
<td>Cuthbertson, Brian</td>
<td>Sunnybrook</td>
<td>The SuDDICU study- A cluster RCT of the effectiveness of SDD in the critically ill</td>
<td>$40,000</td>
</tr>
<tr>
<td>Djaiani, George</td>
<td>UHN-Toronto General</td>
<td>A unique brain stress test in identifying patients at risk for postoperative delirium</td>
<td>$30,000</td>
</tr>
<tr>
<td>Fisher, Joseph</td>
<td>UHN-Toronto General</td>
<td>Pre-operative cerebrovascular dysfunction and risk of post-op delirium, cognitive decline and stroke</td>
<td>$30,000</td>
</tr>
<tr>
<td>Hare, Greg</td>
<td>St. Michael’s</td>
<td>Hemoglobin Optimization to Improve Event Free Survival in Patient with Perioperative Anemia</td>
<td>$35,000</td>
</tr>
<tr>
<td>Jerath, Angela</td>
<td>UHN-Toronto General</td>
<td>Distinct Insights Into Acute Care Medicine: Innovative Trials</td>
<td>$30,000</td>
</tr>
<tr>
<td>Karkouti, Keyvan</td>
<td>UHN-Toronto General</td>
<td>Blood conservation in cardiac surgery using a novel transfusion algorithm based on point-of-care testing: a stepped-wedge cluster randomized controlled trial</td>
<td>$40,000</td>
</tr>
<tr>
<td>Laffey, John</td>
<td>St. Michael’s</td>
<td>Therapies for Acute Respiratory Distress Syndrome (ARDS)</td>
<td>$40,000</td>
</tr>
<tr>
<td>Laussen, Peter</td>
<td>Hospital for Sick Children</td>
<td>Validating a hemodynamic early warning system in pediatric critical care</td>
<td>$30,000</td>
</tr>
<tr>
<td>Recipient</td>
<td>Hospital</td>
<td>Project Title</td>
<td>Award Value/Annum</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Maynes, Jason</td>
<td>Hospital for Sick Children</td>
<td>Modeling cardiomyopathy and potential therapies using personalized stem-cell derived cardiomyocytes</td>
<td>$30,000</td>
</tr>
<tr>
<td>Mazer, David</td>
<td>St. Michael’s</td>
<td>Clinical Trials to Improve Outcomes in Patients Undergoing Cardiovascular Surgery</td>
<td>$35,000</td>
</tr>
<tr>
<td>Peng, Philip</td>
<td>UHN-Toronto Western</td>
<td>Applied Anatomy of Hip and Knee Innervation relevant to Ultrasound Guided Neural Ablation</td>
<td>$35,000</td>
</tr>
<tr>
<td>Riazi, Sheila</td>
<td>UHN-Toronto Western</td>
<td>Phenotypic variability in malignant hyperthermia (MH) patients: Functional alterations at the cellular level</td>
<td>$35,000</td>
</tr>
<tr>
<td>Wasowicz, Marcin</td>
<td>UHN-Toronto General</td>
<td>Liver transplantation: introduction of novel technologies into perioperative management</td>
<td>$30,000</td>
</tr>
<tr>
<td>Wijeysundera, Duminda</td>
<td>UHN-Toronto General</td>
<td>The PRISM Study: An International Multicentre Cohort Study To Evaluate New Disability After Major Surgery</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

**EDUCATION AND CPA MERIT AWARDS:**

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Hospital</th>
<th>Project Title</th>
<th>Award Value/Annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chin, Ki Jinn</td>
<td>UHN-Toronto Western</td>
<td>Simplifying ultrasound-assisted lumbar neuraxial block in patients with difficult anatomy</td>
<td>$20,000</td>
</tr>
<tr>
<td>Davies, Sharon</td>
<td>Sinai Health System</td>
<td>Spinal Ultrasound: Creating an Accredited Online Continuing Education Module for Practicing Anesthesiologists</td>
<td>$20,000</td>
</tr>
<tr>
<td>Friedman, Zeev</td>
<td>Sinai Health System</td>
<td>Failing to Fail Under-performing Residents- Do We Have a Problem?</td>
<td>$30,000</td>
</tr>
<tr>
<td>Meineri, Massimiliano</td>
<td>UHN-Toronto General</td>
<td>Development of a 3D transesophageal echocardiography research center and cardiac 3D printing facility for teaching, research and surgical planning.</td>
<td>$20,000</td>
</tr>
<tr>
<td>Vegas, Annette</td>
<td>UHN-Toronto General</td>
<td>Development of Perioperative Transesophageal Echocardiography Exam (PTEexam) Web Simulation and Study Guide</td>
<td>$20,000</td>
</tr>
</tbody>
</table>
## ADVANCEMENT: ENDOWED CHAIRS

**Chairs Currently held by UT Anesthesia Faculty:**

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Chair</th>
<th>Hospital/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Baker</td>
<td>Cara Phelan Chair in Critical Care</td>
<td>St. Michaels Hospital</td>
</tr>
<tr>
<td>Scott Beattie</td>
<td>R. Fraser Eliot Chair in Cardiac Anesthesia</td>
<td>UHN - Toronto General Hospital</td>
</tr>
<tr>
<td>Mark Crawford</td>
<td>Curtis Joseph and Harold Groves Chair in Paediatric Anesthesia and Pain Medicine</td>
<td>The Hospital for Sick Children</td>
</tr>
<tr>
<td>Brian Kavanagh</td>
<td>Dr. Geoffrey Barker Chair in Critical Research</td>
<td>The Hospital for Sick Children</td>
</tr>
<tr>
<td>Peter Laussen</td>
<td>David and Stacy Cynamon Chair in Critical Care Medicine</td>
<td>The Hospital for Sick Children</td>
</tr>
<tr>
<td>Pending 2017</td>
<td>Endowed Chair in Anesthesiology and Sleep Medicine at the University Health Network</td>
<td>A Donor/UofT Anesthesia/UHN- Toronto Western Hospital Foundation/ UHN Anesthesia Services Inc.</td>
</tr>
<tr>
<td>Pending 2017</td>
<td>Chair in Translational Anesthesia Research</td>
<td>UT Anesthesia/St. Michael’s Hospital/SMH Anaesthesia Services</td>
</tr>
<tr>
<td>Jason Maynes</td>
<td>Wasser Chair in Pain Management</td>
<td>UofT Anesthesia/The Hospital for Sick Children/HSC Anesthesia Practice Plan</td>
</tr>
<tr>
<td>Richard Brull</td>
<td>Evelyn Bateman Cara Operations Chair in Ambulatory Anesthesia and Women’s Health</td>
<td>UT Anesthesia/Women’s College Hospital/UHN Anesthesia Services Inc.</td>
</tr>
</tbody>
</table>
FACULTY PROMOTIONS AND RECOGNITION

Academic Promotions: 2015-2017
We are very pleased to announce the following academic promotions, effective July 1, 2015:

- **To the rank of Full Professor:** Dr. Keyvan Karkouti (UHN-Toronto General Hospital)

- **To the rank of Associate Professor:**
  - Dr. Lisa Bahrey (UHN-Toronto General Hospital)
  - Dr. Michael Gofeld (UHN-Toronto General Hospital)
  - Dr. Stuart McCluskey (UHN-Toronto General Hospital)
  - Dr. Sheila Riazi (UHN-Toronto General Hospital)
  - Dr. Duminda Wijeysundera (UHN-Toronto General Hospital)

And, effective July 1, 2016:

- **To the rank of Full Professor:**
  - Dr. George Djaiani (UHN-Toronto General Hospital)
  - Dr. Annette Vegas (UHN-Toronto General Hospital)

- **To the rank of Associate Professor:**
  - Dr. Cristian Arzola (Sinai Health System)
  - Dr. Ahtsham Niazi (UHN-Toronto Western)
  - Dr. Katherine Taylor (The Hospital for Sick Children)
  - Dr. Lashmi Venkat Raghavan (UHN-Toronto Western Hospital)

We are also pleased to announce the following Junior Academic Promotions, effective as noted:

- **To the rank of Assistant Professor:**
  - Dr. Edgar Hockmann, effective February 1, 2016 (Sunnybrook Health Sciences Centre)
  - Dr. Sunil Kapoor, effective February 1, 2016 (Michael Garron Hospital)
  - Dr. Alayne Kealey, effective June 1, 2016 (Sunnybrook Health Sciences Centre)
  - Dr. Katherine Marseu, effective June 1, 2016 (UHN-Toronto General Hospital)
  - Dr. Joshua Rucker, effective June 1, 2016 (Sinai Health System)
  - Dr. Aliya Salman, effective February 1, 2016 (Sinai Health System)
ANESTHESIA EDUCATION

Report from Dr. Mark Levine
VICE CHAIR, EDUCATION

The Department of Anesthesia at the University of Toronto is the largest in Canada and provides educational experiences for a wide variety of learners. Over 300 faculty members in 14 affiliated and community sites are enthusiastically involved in educating the full range of learners including approximately 100 full time anesthesia, pain medicine and family practice anesthesia residents, many elective residents, over 100 fellows, undergraduate students, graduate students, allied health professionals and anesthesiologist in practice who participate in Continuing Education and Faculty Development programs.

The breadth and depth of clinical experience, the variety of educational opportunities and the rich research environment attracts learners from across the globe. Many faculty members are internationally recognized experts in their fields including the areas of educational research and innovation. In the past few years this has been most evident, but not limited to, the residency program. The recent adoption of Competence Based Medical Education, based on the Royal College initiative, Competence by Design, is an excellent example of the dedication, expertise and innovation demonstrated by educators within the department. Within the last 2 years, the Postgraduate Program Director and a large cohort of experts have redesigned the curriculum, introduced new teaching methods, developed unique evaluation tools, and produced an impressive system designed to collate the huge volume of evaluation data now being collected for each resident.

None of these successes would be possible without the support of our dedicated, talented faculty members and the outstanding administrative and technical support provided by our central office and all the affiliated departments. These successes will be further highlighted in the reports from each of the Program Directors.

I would like to thank and congratulate all who have contributed to these outstanding achievements over the past years.
UNDERGRADUATE EDUCATION PROGRAM

Report from Dr. Ahtsham Niazi
DIRECTOR, UNDERGRADUATE EDUCATION PROGRAM

In the 2016-2017 academic year, the Undergraduate program continued to grow and develop its program by strengthening our e-learning tools and our relationship with our community partners.

Our anesthesia course manual was launched as an iBook, allowing students to access it on their iPads, iPhones and laptops. Students have found the iBook to be very user friendly as they can bookmark important pages, take notes on it and access it from anywhere, on any device, and at any time. A PDF version is still available for students who do not have an iOS device and allows students to print important chapters for their personal use.

The Acute Pain Module, which was developed by Drs. Diana Tamir and Clyde Matava, was also introduced this year. This replaced the last remaining teaching seminar that was being taught to medical students. The anesthesia undergraduate program now has seven e-modules on the following topics: pre-operative assessment, airway, regional anesthesia, obstetric anesthesia, acute pain management and two simulation modules. We are in the process of creating one more e-module on Fluid Management which is being developed by Drs. Beverly Morningstar and Clyde Matava; and we hope to have this ready in preparation for the next academic year.

Due to logistic reasons, our community partners have been unable to attend our monthly Undergraduate Education (UGME) Committee Meetings. The Committee highly values the input our community sites have to offer and strongly felt their lack of presence. To make our meetings more inclusive, we began using a video conferencing platform, Zoom, which enables our community partners to join our meetings remotely without coming downtown. Instructions have been provided to all community sites and community site coordinators are actively joining our meetings through their smartphones, thus greatly improving our community attendance. In addition to this, UGME committee has nominated Dr. Patrick Mark, Undergraduate Site Lead at Michael Garron Hospital, as the committee’s community lead. In his role as Community Lead, Dr. Mark brings forward a community report at our monthly UGME meetings, which highlights issues experienced by community sites. These issues are addressed by the Director, the Vice Chair of Education and the entire UGME committee.

With the introduction of the iBook, we received feedback from our student representatives on the UGME committee, which we hope to incorporate in the next edition of the iBook. Students requested the manual to be more concise and short, as it is quite lengthy. The UGME committee also noted that some of the content was not up to date. In light of this feedback, we have approached old and new authors of our iBook, and requested their assistance in revising and updating their chapters. The content of the 2nd Edition of the iBook will be reviewed by expert faculty within the University of Toronto, and be more concise and up-to-date. We plan to release the 2nd Edition of the iBook in 2017-2018.

The Longitudinal Integrated Curriculum (LInC) is now in its third year. Since the successful launch of the LInC program last year, it has expanded in numbers this year. The LInC anesthesia program now includes twenty seven students who are distributed across six sites as follows: Sunnybrook Health Sciences Center
(4 Students), North York General Hospital (4 Students), Michael Garron Hospital (3 Students), Toronto Western Hospital (4 Students), Mount Sinai Hospital (4 Students) and St. Michael’s Hospital (8 students).

Students complete the equivalent of nine clinical days in anesthesia, longitudinally over the year with the same preceptor. This longitudinal experience allows the preceptors to see progression of the student’s skills and knowledge over the year. Like the core clinical students, the LInC students also attend two simulation days, one at the beginning of their rotation and one near the end. The performance of the students in the Longitudinal Integrated Curriculum program has been equivalent to the students in the anesthesia core rotation, both in their written exam performance and their clinical evaluations.

Changes in roles and responsibilities include Dr. Maisie Tsang taking over from Dr. Clyde Matava as our new Electives Lead, Dr. Lindsay Taam taking over from Dr. Darryl Irwin as our new undergraduate site coordinator for North York General Hospital, Dr. Eric You Ten taking over from Dr. Mital Joshi as our new undergraduate site coordinator for Mount Sinai Hospital and Dr. Patrick Mark as our new Community Site Lead.

In 2015-2016, we sought ways to reward our teaching faculty. We proposed that all University of Toronto affiliated hospitals establish an undergraduate award to reward their outstanding teachers. Most of our hospitals already had an award in place however we hope all hospitals will participate in this program soon. We are happy to announce that Sunnybrook Health Sciences Center was one of the first hospitals to take this initiative and implement an undergraduate teaching award. We are delighted that Dr. Anita Sarmah was the first recipient of this award.

We would like to congratulate Drs. Justin Oh and Madelaine Kukko, who were the recipients of the 2016 and 2017 Dr. Evelyn Bateman Award, for their outstanding contribution to anesthesia as medical students. To recognize their excellence in undergraduate teaching, we would like to congratulate Drs. Natalie Clavel and Dragan Djordjevic, the recipients of the 2016 and 2017 Dr. John Desmond Award.

Within the new Foundations Curriculum, our anesthesia faculty continues to participate as tutors for Case Based Learning in the Toronto Patient-Centered Integrated Curriculum (TOPIC). Our faculty is also involved in the Integrated Clinical Experience (ICE) which is a continuation of the Art and Science of Clinical Medicine (ASCM) course. Our faculty is actively involved as Academy Scholars with the Portfolio Program, and as evaluators in the iOSCE assessment of medical students.

A huge reason behind the success of the Department of Anesthesia’s Undergraduate Program are the Undergraduate Medical Education Committee members. These are a group of highly dedicated teachers who strive to improve the teaching and anesthesia experience for all medical students. This year I would like to thank them for all their support and help in making this program successful and nationally renowned.

Challenges for the upcoming academic year include the release of the 2nd Edition of the iBook and the final e-module on Fluid Management. In addition, we hope to add to our electronic teaching material by replacing our daily evaluation cards with online evaluations. In preparation for next year, we will replace our current yellow daily evaluation cards with online daily evaluations on MedSIS. These evaluations can be completed by preceptors online, and will enable the anesthesia rotation to become completely paperless.
**Figure 1.** The new anesthesia clerkship manual.

**Figure 2.** Worldwide download of the Anesthesia Manual iBook (Within 8 weeks of launching)

<table>
<thead>
<tr>
<th>REGION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada and US</td>
<td>108</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>2</td>
</tr>
<tr>
<td>Europe</td>
<td>2</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figure 3.** The new Acute Pain e-module
POSTGRADUATE EDUCATION PROGRAMS

Report from Dr. Lisa Bahrey
DIRECTOR, POSTGRADUATE EDUCATION PROGRAM

The Residency Program at the University of Toronto remains the largest in Canada with 103 residents. Our program continues to be very popular amongst applicants from Canadian Medical Schools as well as International Medical Graduates. We continue to fill all positions in the first iteration of the CaRMS Match with our highest ranking applicants. This year we welcomed 21 new PGY1 trainees including 4 International Medical Graduates, 2 sponsored trainees and 1 successful transfer trainee from another program. The incoming residents were welcomed with a PGY1 Orientation e-Handbook. This new initiative links incoming residents to key information and resources from the time of the CaRMS Match, including current trainees who serve as near-peer mentors and help navigate the transition to residency.

Research and scholarship are prominent components of our training program. Many of our residents are involved in research, scholarship and advanced degree programs. We currently have 16 residents involved in significant research projects concurrent with their residency training this year and 43 publications as a result. The Clinician Investigator Program has been designed to educate residents in science and medicine so that they are well prepared to embark on careers as clinician scientists. In 2015-2016 we had 7 residents enrolled in this stream, including Drs Gianni Lorello, Neil Goldenberg, Ben Steinberg, Justyna Bartoszko, Joshua Bell, Ashwin Sankar, and Lavarnan Sivanathan.

Significant scholarship continues within the program this year. Six residents are currently enrolled in advanced degrees: Dr. Asad Siddiqui is enrolled in a Master in Education and CACE (Centre for Ambulatory Care Education) a Wilson Centre Associated Fellowship through Women's College Hospital. Drs. Clivatti and Bartoszko are both enrolled in a Master in Education, Dr. Sivanathan in a Master in Clinical Epidemiology, Dr. Law in a Master in Health Policy, and Dr. Eric Siu in a Master of Business Administration. We have several residents actively involved in scholarship and education, including several who have completed learning modules, developed cognitive learning aids, designed and implemented handover tools, and written book chapters.

Our residents were also very successful in acquiring very competitive awards and Honours: Dr. Ben Steinberg was the recipient of the 2015 CSCI/CIHR Resident Research Award. Dr. Ashwin Sankar, Dr. Joshua Bell and Dr. Lavarnan Sivanathan were all recipients of a Dr. Allan K. Laws Clinician Scientist Fellowship Award. Dr. Joshua Bell also received: The Joseph M. West Family Memorial Fund, the William Cron & Jean Harris Memorial Fellowship, and the Starr Medal Awards. Dr. Michael Sklar received the Joseph M. West Family Memorial Fund Award. Dr. Pablo Perez d’Empaire received the 2016 Postgraduate Medical Trainee Leadership Award and was inducted as a Fellow of the American College of Critical Care Medicine.

Many of our residents presented research findings at the 37th Annual Shields Day. Dr. Michael Sklar was the recipient of the Hynek Rothbart Award for Best Resident Oral Presentation and Dr David Levin was presented the David Bevan Award for Best Overall Poster Presentation. The Thomas Donald Hammell Award, for the resident who is identified by his/her peers as the person who has made the greatest
contribution to the program was presented to Dr. Chris Farlinger. The Alan Laws Travel Fellowship Awards were presented to Dr. Pablo Perez d’Empaire and Dr. Asad Siddiqui. Dr. Asad Siddiqui and Dr. Eric Siu each received Resident and Fellows Tuition Awards.

The Program has seen many new initiatives this year. There is now a formal, longitudinal POCUS curriculum which includes a PGY2 and PGY3 hands-on “bootcap”, clinical rotations and academic teaching sessions throughout the year. We are the only program in Canada to have a formal POCUS curriculum. Several new evaluation tools and learning modules have been developed and introduced to support residents in the intrinsic CanMEDs roles. A Resident Wellness Committee has now been formed with Dr Fahad Alam as Resident Wellness Lead. The committee is working to develop a formalized wellness curriculum, in alignment with the ACUDA vision. Dr Sheldon Lyn is now the Community Anesthesia Faculty Liaison and serves to aid residents in organizing educational opportunities at community hospitals. The end of the year saw the introduction of the first annual Voice of the Resident (VOTeR) Survey. This was introduced as a form of annual program feedback and quality improvement initiative.

In the spring of 2016, all fifteen final year residents were successful at the Royal College Examinations and many have remained on as fellows or faculty members at our teaching sites. A reception was held at the Faculty Club to celebrate the successful completion of residency. This event was attended by the graduating anesthesiologists, family members and a number of faculty. Dr. Peter Pisters, President and CEO of University Health Network, was the keynote speaker at this event.

As the Program moves forward and looks ahead to 2017, there will be continued focus on Program Development as we plan to implement The Royal College’s competency based medical education initiative: Competency By Design. Our Program’s strategic planning is well underway. A large Needs Assessment for Curriculum Re-Design has been done with our Program’s key stakeholders and we have been collaborating with both the Royal College and Postgraduate Medical Education at The University of Toronto to make our exceptional program even better.

RESIDENTS 2015-2016

PGY5

Baig, Ehtesham   Gleicher, Yehoshua   Peacock, Sharon
Benson, Garrett   Goodick, David   Song, Yuning
Chbat, Tarek  Huang, Alexander   Sutherland, Ainsley
Cummings, Theresa  Lorello, Gianni   Thakrar, Dipen
Farlinger, Chris  Moeenalsadat, Mahsa  Yau, Brian
Fraser, Tyler

PGY4

Andrawes, Maged   Kozik, Adrian   Petre, Maria-Alexandra
Boulis, Sherif Refaat   Lam, Karen   Steinberg, Benjamin
Dinsmore, Michael   Law, Tyler   Suen, Alexander
Dube, Rebecca   Lee, Kenneth   Valeeva, Liliya
Duncan, Dallas   Levin, David   Van Haaften, Timothy
Goldenberg, Neil   Li, Melinda   White, Alexander
Khan, James   Miller, Marcus   Wiegelmann, Julian
Knight, Jeff   Perez D’Empaire, Pablo   Yu, Savio
### PGY3

<table>
<thead>
<tr>
<th>Bartoszko, Justyna</th>
<th>Lane, Sophia</th>
<th>Sharma, Richa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bragg, Susan</td>
<td>Nkemngu, Njinkeng</td>
<td>Sklar, Michael</td>
</tr>
<tr>
<td>Chan, Stephen</td>
<td>Nurmohamed, Aliya</td>
<td>Siddiqui, Asad</td>
</tr>
<tr>
<td>Elman, Joel</td>
<td>Padzik, Jan</td>
<td>Siu, Eric</td>
</tr>
<tr>
<td>Goldmacher, Jesse</td>
<td>Roy, Debashis</td>
<td>Tse, Andrew</td>
</tr>
<tr>
<td>Ladowski, Stephanie</td>
<td>Salmikivi, Lance</td>
<td>Van Orman, Jordan</td>
</tr>
<tr>
<td>Lam, Thach</td>
<td>Sellings, Laurie</td>
<td>Vorobeichik, Leon</td>
</tr>
</tbody>
</table>

### PGY2

<table>
<thead>
<tr>
<th>Aflaki, Sena</th>
<th>Garg, Nitan</th>
<th>Sankar, Ashwin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell, Joshua</td>
<td>Han, Jay</td>
<td>Sarhan, Mazin</td>
</tr>
<tr>
<td>Bopardikar, Ameya</td>
<td>Meng, Howard</td>
<td>Sawicki, Christian</td>
</tr>
<tr>
<td>Brown, Tyler</td>
<td>Oyberman, Inna</td>
<td>Sivananthan, Lavarnan</td>
</tr>
<tr>
<td>Gomez, Luis</td>
<td>Parajian, Talar</td>
<td>Toguri, Clare</td>
</tr>
<tr>
<td>Choi, Diana</td>
<td>Rotstein, Alexandra</td>
<td>Turnock, Matthew</td>
</tr>
<tr>
<td>Clivatti, Jefferson</td>
<td>Salvatori, Marcus</td>
<td>Wong, Eric</td>
</tr>
</tbody>
</table>

### PGY1

<table>
<thead>
<tr>
<th>Al Mandhari, Maha</th>
<th>Goel, Akash</th>
<th>O’Brien, Michael</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Sulaimi, Jawaher</td>
<td>He, David</td>
<td>Patel, Shiel</td>
</tr>
<tr>
<td>Chen, Ewen</td>
<td>Heffernan, Spencer</td>
<td>Schwindt, Graeme</td>
</tr>
<tr>
<td>Cox, Gemma</td>
<td>Ismaiel, Nada</td>
<td>Sharma, Soniya</td>
</tr>
<tr>
<td>DesRoches, Jaclyn</td>
<td>Jivraj, Naheed</td>
<td>Zhang, Edward</td>
</tr>
<tr>
<td>Esmail, Tariq</td>
<td>Kothari, Rohan</td>
<td>Zhou, Cheng</td>
</tr>
<tr>
<td>Ferreira de Oliveira, Katia</td>
<td>MacLean, David</td>
<td></td>
</tr>
</tbody>
</table>

### RESIDENTS 2016 - 2017

### PGY5

<table>
<thead>
<tr>
<th>Andrawes, Maged</th>
<th>Law, Tyler</th>
<th>Suen, Alexander</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulis, Sherif Refaat</td>
<td>Lee, Kenneth</td>
<td>Thakrar, Dipen</td>
</tr>
<tr>
<td>Cummings, Theresa</td>
<td>Levin, David</td>
<td>Valeeva, Liliya</td>
</tr>
<tr>
<td>Dinsmore, Michael</td>
<td>Li, Melinda</td>
<td>Van Haaften, Timothy</td>
</tr>
<tr>
<td>Dube, Rebecca</td>
<td>Miller, Marcus</td>
<td>Van Orman, Jordan</td>
</tr>
<tr>
<td>Duncan, Dallas</td>
<td>Noyahr, Lori-Anne</td>
<td>White, Alexander</td>
</tr>
<tr>
<td>Goldenberg, Neil</td>
<td>Peacock, Sharon</td>
<td>Wiegellmann, Julian</td>
</tr>
<tr>
<td>Khan, James</td>
<td>Perez D’Empaire, Pablo</td>
<td>Yu Savio</td>
</tr>
<tr>
<td>Kozjak, Adrian</td>
<td>Petre, Maria-Alexandra</td>
<td></td>
</tr>
<tr>
<td>Lam, Karen</td>
<td>Steinberg, Benjamin</td>
<td></td>
</tr>
</tbody>
</table>
## Department of Anesthesia, Annual Report 2015-2017

### PGY4

<table>
<thead>
<tr>
<th>PGY4</th>
<th>PGY4</th>
<th>PGY4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartoszko, Justyna</td>
<td>Lam, Thach</td>
<td>Sharma, Richa</td>
</tr>
<tr>
<td>Bragg, Susan</td>
<td>Lane, Sophia</td>
<td>Sklar, Michael</td>
</tr>
<tr>
<td>Chan, Stephen</td>
<td>Nkemngu, Ninkeng</td>
<td>Siddiqui, Asad</td>
</tr>
<tr>
<td>Clivatti, Jefferson</td>
<td>Nurmohamed, Aliya</td>
<td>Siu, Eric</td>
</tr>
<tr>
<td>Elman, Joe</td>
<td>Padzik, Jan</td>
<td>Tse, Andrew</td>
</tr>
<tr>
<td>Goldmacher, Jesse</td>
<td>Roy, Debasish</td>
<td>Vorobeichik, Leon</td>
</tr>
<tr>
<td>Ladowski, Stephanie</td>
<td>Salmikivi, Lance</td>
<td></td>
</tr>
</tbody>
</table>

### PGY3

<table>
<thead>
<tr>
<th>PGY3</th>
<th>PGY3</th>
<th>PGY3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aflaki, Sena</td>
<td>Han, Jay</td>
<td>Sankar, Ashwin</td>
</tr>
<tr>
<td>Bell, Joshu</td>
<td>Howerd, Meng</td>
<td>Sarhan, Mazin</td>
</tr>
<tr>
<td>Bopardikar, Ameya</td>
<td>Knight, Jeffrey</td>
<td>Sawicki, Christian</td>
</tr>
<tr>
<td>Brown, Tyler</td>
<td>Oyberman, Inna</td>
<td>Sivanathan, Lavarnan</td>
</tr>
<tr>
<td>Chaparro Gomez, Luis</td>
<td>Parajan, Talar</td>
<td>Toguri, Clare</td>
</tr>
<tr>
<td>Choi, Diana</td>
<td>Rotstein, Alexandra</td>
<td>Turnock, Matthew</td>
</tr>
<tr>
<td>Gerg, Nitan</td>
<td>Salvadori, Marcus</td>
<td>Wong, Eric</td>
</tr>
</tbody>
</table>

### PGY2

<table>
<thead>
<tr>
<th>PGY2</th>
<th>PGY2</th>
<th>PGY2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Mandhari, Maha</td>
<td>Goel, Akash</td>
<td>O’Brien, Michael</td>
</tr>
<tr>
<td>Al Sulaimi, Jawaher</td>
<td>He, David</td>
<td>Patel, Shiel</td>
</tr>
<tr>
<td>Chen, Ewen</td>
<td>Heffernan, Spencer</td>
<td>Sharma, Soniya</td>
</tr>
<tr>
<td>Cox, Gemma</td>
<td>Ismaiel, Nada</td>
<td>Zhang, Edward</td>
</tr>
<tr>
<td>DesRoches, Jaclyn</td>
<td>Jivraj, Naheed</td>
<td>Zhou, Cheng</td>
</tr>
<tr>
<td>Esmail, Tariq</td>
<td>Kothari, Rohan</td>
<td></td>
</tr>
<tr>
<td>Ferreira de Oliveira, Katia</td>
<td>MacLean, David</td>
<td></td>
</tr>
</tbody>
</table>

### PGY1

<table>
<thead>
<tr>
<th>PGY1</th>
<th>PGY1</th>
<th>PGY1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Neamy, Mohammad</td>
<td>Lee, Aidan</td>
<td>Singh, Devin</td>
</tr>
<tr>
<td>Al-Shuraim, Farah</td>
<td>Meng, Zhen</td>
<td>Su, Haitong</td>
</tr>
<tr>
<td>Busuttil, Alia</td>
<td>Pankiv, Evelina</td>
<td>Taras, Jillian</td>
</tr>
<tr>
<td>Charles, Christopher</td>
<td>Purza, Razvan</td>
<td>White, Ulyse Carl</td>
</tr>
<tr>
<td>Fan, Dongning</td>
<td>Quan, Yi</td>
<td>Wong, Kelvin</td>
</tr>
<tr>
<td>Holowachuk, Spencer</td>
<td>Ragoonanan, Tenille</td>
<td>Yang, Michael</td>
</tr>
<tr>
<td>Kamel, Rami</td>
<td>Ricci, Michael</td>
<td></td>
</tr>
</tbody>
</table>

Department of Anesthesia, Annual Report 2015-2017|26
PAIN MEDICINE RESIDENCY PROGRAM

Report from Dr. John Hanlon
DIRECTOR, PAIN MEDICINE RESIDENCY PROGRAM

It has been an exciting and busy year for the Pain Medicine sub-specialty residency. July 2016 will mark our official residency start date when we welcome two FRCPC trained physicians into our program and much of our work over the last 12 months has been to prepare for their entry.

Both incoming trainees are Toronto graduates who have demonstrated a longstanding commitment to practicing comprehensive pain medicine. Dr. Ehtesham Baig recently obtained his FRCPC certification in Anesthesiology and Dr. Najam Mian recently obtained his FRCPC certification in Physiatry. Over the next two years, the residency will provide them with intensive multidisciplinary training necessary to become experts in the prevention, diagnosis, treatment and rehabilitation of the spectrum of acute pain, cancer pain and non-cancer pain problems.

As with any multi-specialty residency, there will be significant variation in the baseline knowledge and skills of the trainees entering the Pain Medicine residency. In order to support our diverse learners, we developed and will host the inaugural U of T “Pain Medicine Ground School”, an intensive two-day course with didactic sessions, case-based learning and hands-on physical exam teaching. In an effort to build overall capacity in pain medicine, we also invited all chronic pain fellows from across the U of T hospital to attend.

The University of Toronto Pain Medicine residency program is well positioned to become the national leader in pain medicine education. We have also reached agreement with other participating Universities to deliver quarterly national webconference learning events focusing the non-medical expert roles as a collaborative effort between all active programs. As shown in the accompanying screenshot of Pain Medicine residents across the country, we are planning on using webconference platforms allows us to connect trainees from coast-to-coast and leverage resources to overcome many of the challenges inherent to new and small residency programs.

In Toronto we are fortunate to have many national and international leaders in Pain Medicine. Together we have developed an unparalleled comprehensive didactic curriculum. In the spirit of building national and international capacity, our Pain Medicine residents plan to invite all Toronto Pain fellows to attend the didactic teaching curriculum in person and via webconference. We believe this inclusive approach improves the learning experience for our Pain Medicine residents and is more rewarding for the instructors. It also supports important networking that we believe will translate into an ongoing community of practice for the participants.

Chronic Pain affects over 15% of Canadians. As of July 2016 there will be seven Pain Medicine residency spots across the country, which is woefully inadequate to meet our societal need. We continue our efforts lobbying the Post Graduate Medical Education office, the respective provincial ministries and the RCPSC. Our goal is to increase training spots to build capacity and reach the critical mass of well-rounded pain physicians capable of leading the medical community’s response to inadequately treated chronic pain and an ongoing opioid crisis.

Like other fledgling residency programs, Pain Medicine initially existed outside of the Canadian Residency Matching System (CaRMS), but for our upcoming application cycle we were able to successfully lobby the National Committee of Post Graduate Deans to allow Pain Medicine into the CaRMS program. This will allow for a smooth and transparent application cycle that will be completed in November 2016.

The backbone of every successful residency training program is the administrative support. We thank Jennifer Morris for her ongoing hard work and experience in supporting the training program and our learners. We are also very fortunate to have a truly multidisciplinary Residency Program Committee (RPC) full of passionate leaders within their own specialties. This committee will oversee all aspects of the pain medicine residency with
representation from nine Departments and Programs within the Faculty of Medicine. Together, with our teaching faculty, these dedicated clinicians will be our greatest resource. We thank them all for their ongoing time and dedication as we prepare to train the future Pain Medicine leaders of Canada.

PICTURE CAPTION: Screenshot captures Pain Medicine trainees and faculty across the country sharing a laugh while participating in a web-conferenced curriculum needs-assessment.
FELLOWSHIP PROGRAM

Report from Dr. Doreen Yee
DIRECTOR, FELLOWSHIP PROGRAMS

Fellowship positions across the six fully affiliated teaching hospitals continue to be very popular among both Canadian and international trainees. The subspecialty positions tend to fill up first, although the Advanced Clinical Practice positions are ideal for some who wish to consolidate their practice skills after finishing their residency. Some places are accepting people 2 years in advance.

Although not all fellowships have a research component, most fellows have an opportunity to do some kind of research work with a mentor. Productivity ranges from book chapters, articles in peer-reviewed journals, to presentations at meetings. This was evidenced by the fact that more than half of the oral presentations and over 40% of the abstract presentations at Shields Day were presented by fellows. Dr. Giulia Marie Ruggeri won the Dr. R J Byrick Award for the Best Fellow’s Research paper presentation at the 38th Annual Shields Research Day. A number of these went on to be presented at the annual CAS meeting the following month, as well as at other national and international meetings. Drs. Papu Nath and Ushma Shah won the best paper awards for the Ambulatory Anesthesia and Pediatrics categories at the CAS meeting in Vancouver in June 2016. The following year Dr. Elyana Wohl won the best Neuroanesthesia paper in Niagara Falls.

There are also numerous opportunities for educational activities. Fellows were once again involved in Undergraduate teaching as workshop station leaders at the now annual Anesthesia Interest Group (AIG) evening organized by Dr. Diana Tamir. The stations included teaching demonstration of airway skills, ultrasound visualization of nerves and vessels, and neuraxial techniques, to name a few. It was an exciting opportunity for teaching and interaction between fellows, residents and medical students. For those interested in simulation in education, there was ample opportunity to run simulation sessions for both resident and medical student teaching. A handful of fellows pursue concurrent Master’s programs in Education, Global Health, or other related areas. There was even one fellow with a multi-year CIHR fellowship grant doing a PhD in Clinical Epidemiology.

The “fellowship experience” extends beyond the subspecialty work for many. It is a time for most to transition to a consultant anesthesiologist with graduated professional independence, surrounded by peers, role models and mentors. Life-long friendships are initiated between people “placed in a common situation”. A few fellows wrote articles about their year, and both concluded that it was an extremely worthwhile experience, particularly in hindsight!

The Professor’s Rounds for fellows continue to be a success, and draws out 20-40 fellows monthly. Our faculty experts gave nine talks across a wide variety of topics over the academic year.
PROFESSORS’ ROUNDS FOR FELLOWS 2015-2016

<table>
<thead>
<tr>
<th>DATE</th>
<th>SPEAKER</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 29, 2015</td>
<td>Dr. Scott Beattie</td>
<td>Facing an Uncomfortable Truth - The Choice of Your Anesthesiologist does make a difference!</td>
</tr>
<tr>
<td>October 19, 2015</td>
<td>Dr. Hannah Wunsch</td>
<td>Use of Intensive Care After Surgery –International Comparisons!</td>
</tr>
<tr>
<td>November 20, 2015</td>
<td>Dr. Mark Warner</td>
<td>How Future Technology Advances Will Improve Perioperative Safety</td>
</tr>
<tr>
<td>January 25, 2016</td>
<td>Dr. Brian Kavanagh</td>
<td>How Mechanical Ventilation Injures Lungs</td>
</tr>
<tr>
<td>February 16, 2016</td>
<td>Dr. Cengiz Karsli</td>
<td>Pediatric Airway Management: The Basics and Beyond</td>
</tr>
<tr>
<td>March 21, 2016</td>
<td>Dr. Beverley Orser</td>
<td>Delirium: The Role of Anesthetics and Potential Treatments</td>
</tr>
<tr>
<td>April 18, 2016</td>
<td>Dr. Andrew Baker</td>
<td>Neuroscience Research in Anesthesia</td>
</tr>
<tr>
<td>May 16, 2016</td>
<td>Dr. Keyvan Karkouti</td>
<td>What’s new in point-of-care testing and transfusion in cardiac surgery</td>
</tr>
<tr>
<td>June 6, 2016</td>
<td>Dr. Frances Chung</td>
<td>Patients with Morbid Obesity: A Clinical Challenge for Anesthesiologists</td>
</tr>
</tbody>
</table>

ANESTHESIA FELLOWS 2015-2016
The Hospital for Sick Children

Kazuyoshi Aoyama  Diego Neuhaus
Vannessa Chin     Erika Nguyen
Jeffrey Keilman   Pavithra Pasupathy
Mandy Lam         Pablo Rossi
Anne-Marie Leo    Ushma Shah
Sylvain Mauron    Michael Tan
Mark McVey        Ohood Abdullatif Tulbah
Solmaz Nakhjavani Silky Wong
Papu Nath

Mount Sinai Hospital

Sameh Abdelghany  David Flamer
Hala Baithoun     Lilia Fung
Nicholas Barrett  Kushlin Higge
Ricardo Bittencourt Maria de Lourdes Espinosa Perez
Denis Correa      Andre Schneider
Chameli Deb       Ramakrishna Vyakernam
Marcelo Epsztein Kanczuk Paul Zakus
Naguib Farag
**St. Michael’s Hospital**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khaled Alrashedi</td>
<td>Thomas Kriz</td>
</tr>
<tr>
<td>Maya Contreras</td>
<td>Matthew Lee</td>
</tr>
<tr>
<td>Ahmed Mazen Elwishi</td>
<td>Yevheniy Leshchynshyn</td>
</tr>
<tr>
<td>Deepak Hanumanthaiah</td>
<td>Niamh McAuliffe</td>
</tr>
<tr>
<td>Paul Henry</td>
<td>Andrea Petropolis</td>
</tr>
<tr>
<td>Adam Hicks</td>
<td>Lindsay Taam</td>
</tr>
<tr>
<td>Melissa Ho</td>
<td>Kacey Williams</td>
</tr>
<tr>
<td>Andrew Jorgensen</td>
<td>Michael Woloszyk</td>
</tr>
<tr>
<td>Barry Kelly</td>
<td>Taylor Zhou</td>
</tr>
<tr>
<td>Mumtaz Khan</td>
<td>Haibei Zhu</td>
</tr>
</tbody>
</table>

**Sunnybrook Health Sciences Centre**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janis Ferns</td>
<td>William Rutherford</td>
</tr>
<tr>
<td>Grace Kong</td>
<td>Joel Shapiro</td>
</tr>
<tr>
<td>Xi Lisa Li</td>
<td>Marietjie Slabbert</td>
</tr>
<tr>
<td>Thiago Moreira</td>
<td>Alison Tedder</td>
</tr>
<tr>
<td>Mahesh Palanisamy</td>
<td>Catherine Traill</td>
</tr>
<tr>
<td>Ryan Perlman</td>
<td>Scott Wu</td>
</tr>
<tr>
<td>Thiago Fernandes Ribeiro</td>
<td></td>
</tr>
</tbody>
</table>

**UHN - Toronto General Hospital**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gabriela Alcaraz Garcia Tejedor</td>
<td>Vina Meliana</td>
</tr>
<tr>
<td>Saptashree Melissa Basu</td>
<td>Mahesh Palanisamy</td>
</tr>
<tr>
<td>Robert Bechamp</td>
<td>Li Khai Daniel Phang</td>
</tr>
<tr>
<td>Abhijit Biswas</td>
<td>Reva Ramlogan</td>
</tr>
<tr>
<td>Melissa Brockerville</td>
<td>Rajendra Kumar Sahoo</td>
</tr>
<tr>
<td>Diana Catalina Casas Lopez</td>
<td>Herman Sehmbi</td>
</tr>
<tr>
<td>Kariem El-Boghdadly</td>
<td>Veena Sheshadri</td>
</tr>
<tr>
<td>Najia Hasan</td>
<td>Anthony Short</td>
</tr>
<tr>
<td>Narendra Kumar</td>
<td>Yamini Subramani</td>
</tr>
<tr>
<td>Siaw May Leong</td>
<td>Akhilesh Tiwari</td>
</tr>
<tr>
<td>Bo-Feng Lin</td>
<td>Tze Yeng Yeoh</td>
</tr>
</tbody>
</table>

**UHN - Toronto Western Hospital**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rohit Vijay Agrawal</td>
<td>Denver Glasgow</td>
</tr>
<tr>
<td>Gabriela Alcaraz Garcia Tejedor</td>
<td>Lindsay Hurlburt</td>
</tr>
<tr>
<td>Bilal Ansari</td>
<td>Karim Ladha</td>
</tr>
<tr>
<td>Rafael Arboleda</td>
<td>Lei Lei</td>
</tr>
<tr>
<td>Adam Badenoch</td>
<td>Helen Lindsay</td>
</tr>
</tbody>
</table>
PROFESSORS’ ROUNDS FOR FELLOWS 2016-2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 26, 2016</td>
<td>Dr. Peter Slinger</td>
<td>Anesthesia For Patient With Severe Lung Disease</td>
</tr>
<tr>
<td>November 7, 2016</td>
<td>Drs. Terri Skelton &amp; Ian Randall</td>
<td>Global Health – How Anesthesiologists Can Contribute</td>
</tr>
<tr>
<td>December 5, 2016</td>
<td>Dr. Vincent Chan</td>
<td>Does Regional Anesthesia Affect Functional Outcomes After Major Surgery?</td>
</tr>
<tr>
<td>January 23, 2017</td>
<td>Dr. Pirjo Manninen</td>
<td>Outpatient Neurosurgery! What Next?</td>
</tr>
<tr>
<td>February 13, 2017</td>
<td>Dr. Lakshmi Venkatraghavan</td>
<td>A Novel Brain Stress Test For Assessing Cerebrovascular Reserve</td>
</tr>
<tr>
<td>March 27, 2017</td>
<td>Dr. Richard Cooper</td>
<td>My Laryngoscopy Failed! What Now?</td>
</tr>
<tr>
<td>April 24, 2017</td>
<td>Dr. Beverley Orser</td>
<td>Restoring Memory in the Postoperative Period</td>
</tr>
<tr>
<td>May 29, 2017</td>
<td>Dr. Stuart Mccluskey</td>
<td>Enhanced Recovery after Surgery at the University Of Toronto Hospitals: Structure, Process and Outcome Measurements</td>
</tr>
</tbody>
</table>

ANESTHESIA FELLOWS 2016-2017

The Hospital for Sick Children

Gabriela Alcaraz Garcia-Tejedor  Amanda Mary Jasudavisius
Talal Eed H Aljuhani             Solmaz Nakhjavani
Mary Claire Julia Avanis        Diego Neuhaus
Baljoet Singh Bhangoo           Erika Thuy-Ha Nguyen
Abhijit Biswas                  Benjamin Joseph O’Sullivan
Danelle Glenice Dower           Pablo Ignacio Rossi
Yvonne Mary Doyle               Ushma Jitendra Shah
Gaston Rodrigo Echaniz Barbero  Naiyi Sun
David Faraoi                    Michael Richard Guan Seng Tan
David Earle Goodick             Ohood Abdullatif Sulaiman Tulbah
### Mount Sinai Hospital

- Sameh Mohammed Abdelghany
- Sadiq Abdulla
- Ibukunoluwapo O M Adedugbe
- Hala Mumtaz Daoud Baithoun
- Ricardo Bittencourt
- Juliana Caicedo Salazar
- Ronald De Albuquerque Lima
- Chameli Deb
- Maria Lourdes Espinosa Perez

- Heddy Jennifer Guevara Velandia
- Jeske Adriana Hakse
- Ashok Kumar Jayaraj
- Yusuke Mazda
- Jorge Mario Mejia Kattah
- Aidan Michael Sharkey
- Barry George Thorneloe
- Ramakrishna Vyakernam
- Paul Gerard Harry Zakus

### St. Michael’s Hospital

- Andrew Gene Allenby
- Matthew John Beech
- Amir Reza Bouzari
- Claire Diana Burrows
- Filipe Nadir Caparica Santos
- Tarek Terry Chbat
- Stephanie Pei Pei Chen
- Jaclyn Gilbert
- Sameer Najeeb Hanna-Jumma
- Adam John Hicks
- Thomas Adam Kriz

- Matthew Wai Kei Lee
- Alessandra Paola Lombardo
- Farah Naaz Manji
- Thiago Appoloni Moreira
- Stuart Alistair Nicholson
- Graham Bruce Noble
- Laura Regina Rodriguez Arias
- David Sussman
- Kacey Nicole Williams
- Haibei Zhu

### Sunnybrook Health Sciences Centre

- Timothy Aaron Donaldson
- Janis Mei Ferns
- Yehoshua Gleicher
- Ine Gruyters
- Kalyna Harasymiv
- Darryl Nolan Hoffer
- Richard Alan Lam
- Sharon Peacock

- Thiago Fernandes Ribeiro
- Joel Michael Shapiro
- Marietjie Slabbert
- Catherine Eileen Traill
- Hawn Trinh
- Lisa Erin Webb
- Scott Yu-Chun Wu

### UHN - Toronto General Hospital

- Bilal Mustafa Ansari
- Rafael Arboleda Salazar
- Adam David Badenoch
- Ari Shmuel Balofsky
- Mahder Kinfe Baraki
- Jodie Anne Beuth

- Helen Agnes Lindsay
- Nathan Scott Ludwig
- Carla Andrea Luzzi
- Robert Charles Mcmonnies
- Alex Mu
- Kiritpaul Singh Nandra
Carl Andrew Mikolai Brown  |  Judith Lyn-Marie Nicholls
Tez Venetta Shevannese Brown-Cotterell  |  Marcelo Amancio Nicora
Davide Corbella  |  Villamayor
Carlos Mauricio Corredor Rosero  |  Giulia Maria Ruggeri
Florin Costescu  |  Daniel Sellers
Joanna Kay Gordon  |  Farrukh Suhail
Alexander Francis Huang  |  Ainsley Mary Sutherland
Carlos Alberto Ibarra Moreno  |  Tarik Timoumi
Karim Shiraz Ladha  |  Michael James Tylee
Weishan Delice Lee  |  Yoshiaki Uda

**UHN - Toronto Western Hospital**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sujoy Banik</td>
<td>Matthew Ronald Miller</td>
</tr>
<tr>
<td>Saptashree Melissa Basu</td>
<td>Bahadur Khan Niazi</td>
</tr>
<tr>
<td>Melissa Ann Brockerville</td>
<td>Mahesh Palanisamy</td>
</tr>
<tr>
<td>Amelie Dallaire</td>
<td>Daniel Phang Li Khai</td>
</tr>
<tr>
<td>Kariem El-Boghdady</td>
<td>Nathan Peter Royan</td>
</tr>
<tr>
<td>Kapil Gupta</td>
<td>Matthew Jacob Sheppard</td>
</tr>
<tr>
<td>Khawaja Rashid Hafeez</td>
<td>Anthony James Short</td>
</tr>
<tr>
<td>Najia Hasan</td>
<td>Ranvir Singh</td>
</tr>
<tr>
<td>Ashutosh Joshi</td>
<td>Chandrasekaran Subramanian</td>
</tr>
<tr>
<td>Bo-Feng Lin</td>
<td>Carla Todaro</td>
</tr>
<tr>
<td>Monica Hue Yee Liu</td>
<td>Anita Van Domselaar</td>
</tr>
<tr>
<td>Gianni Roberto Lorello</td>
<td>Kim James Wild</td>
</tr>
<tr>
<td>Poorna Madhusudan</td>
<td>Elyana Renee Wohl</td>
</tr>
<tr>
<td>Laith Mazen Malhas</td>
<td>Li Xu</td>
</tr>
<tr>
<td>Vina Meliana</td>
<td></td>
</tr>
</tbody>
</table>

**Multi-Site Fellowship**

Jennifer Kelly Mcdonald
Rajendra Kumar Sahoo
FAMILY PRACTICE ANESTHESIA

Report from Dr. Henderson Lee
DIRECTOR, FAMILY PRACTICE ANESTHESIA PROGRAMS

Curriculum

The curriculum for the FPA Residents remains the same, with the FPA Residents rotating through:

- Toronto East General Hospital
- Mount Sinai Hospital
- The Hospital for Sick Children
- North York General Hospital – ICU
- Port Perry Hospital or Orangeville Hospital (rural Anesthesia)

Intensive Care Unit (ICU) Rotation:

The ICU rotation was re-introduced to the FPA Residency Program (4-weeks) in the 2014/2015 academic year in order to have the FPA Residents get dedicated clinical time and teaching with regards to managing critically ill patients. The FPA residents are now rotating through North York General Hospital (NYGH) ICU for their 4-week block. The ICU rotation has been warmly received by the FPA Residents. The FPA Residents are exposed to various critically ill patients during the ICU rotation. This experience has been very useful for their future clinical practice since many of their Emergency Medicine Room Physician colleagues often consult Family Practice Anesthetists for their expertise in managing the airway, inserting invasive lines and stabilizing critically ill patients that arrive in rural/smaller hospital Emergency Rooms.

Orangeville Hospital:

Orangeville Hospital has been added as a second rural site for the FPA Residency Program starting this academic year in order to provide an alternate site for rural Anesthesia. Dr. Rickesh Sood, FPA (and previous graduate of the University of Toronto FPA Residency Program) will be the Resident Coordinator, in charge of their education and clinical experience at Orangeville Hospital.

All of the FPA residents successfully completed their FPA Residency training and all of them are currently working in smaller/rural hospitals providing Anesthesia for their communities, such as Simcoe ON, Arnprior ON, Port Perry ON, Hanover ON

Internal Review

The FPA Residency Program underwent an Internal Review conducted by the Department of Family and Community Medicine (DFCM) at the University of Toronto. The Internal Review was conducted in September 2016.

The Internal Review Committee consisted of three reviewers. The reviewers were very happy with the curriculum, the administration of the Program, the enthusiastic teachers, engaged/enthusiastic FPA RPC, established CanMEDS-FM roles (well defined) in the Goals/Objectives.
A full report was written and given to the FPA Residency Program. Overall, the reviewers were very happy with the Administration, Structure, Curriculum as well as the evaluation process (CanMEDS-FM format) for the trainees. Numerous strengths were highlighted however a few weaknesses were noted.

The FPA Residency Program made some changes to address the weaknesses identified in the report from the Internal Review. The changes were implemented and the Internal Review Committee was happy with the changes implemented. The DFCM gave the FPA Residency Program full accreditation.

**Family Practice Anesthesia Residents**

**2015/2016**

- Dr. Adrian Bruno
- Dr. Wesley Eby
- Dr. Hang Shi
- Dr. Ilana Winrob

**2016/2017**

- Dr. Victoria Squissato
- Dr. Susan Zhu
The eLearning and Technological Innovations Program has collaborated with Dr Ahstham Niazi (UME) to create the new content for the UME students.

**iBook**

The Anesthesia Clerkship Manual iBook was launched to help improve the experience of medical students rotating through anesthesia. This self-study iBook was created from the pre-existing paper based clerkship manual. The iBook features interactivity designed to assist with learning for the medical student rotating through anesthesia.

The new Anesthesia Clerkship Manual features an introduction to anesthesia, key topics and uses illustrations and other key graphical elements to enhance understanding. The iBook incorporates advanced interaction technology that creates study notes and cards as a student highlights text. This iBook brings a new sophistication not previously seen to our undergraduate medical education curriculum and pedagogy. The iBook is available for free.

The iBook was developed as a new eLearning Technology innovative effort under the Department of Anesthesia, University of Toronto.

**eModules**

eModules previously developed in 2013 were updated to the a new and modern look. These eModules offer great interaction, visuals to the end-user. A total of six eModules have been updated. Collaborators on the creation of the eModules were Drs Marjan Jariani, Isabella Devito, Carol Loefflemann, Mital Joshi, Ahstham Niazi, Diana Tamir. In addition, emodules designed by Dr Sharon Davies have all be updated and are now available in the format.
Our aim is to plan and implement various program-related initiatives to facilitate the development of our faculty as clinical teachers and educators and impart upon them knowledge and skills to fulfill multiple roles and responsibilities expected of physicians in academic medicine including but not limited to teaching, career planning, leadership and academic promotion.

Faculty Development Day 2015

The annual Faculty Development Day was held on November 11, 2015 at the Chestnut Hotel and Conference Centre in downtown Toronto. This was the first joint meeting with Department of Surgery with nearly 200 faculty staff in attendance. The goals of Faculty Development Day are to showcase and create opportunities for networking, learning and collaborations around faculty development in the Department of Anesthesia, Department of Surgery, and the University of Toronto system; to provide a platform to present research and innovations in the field of Education or Creative Professional Activities; and to recognize teaching excellence.

Dr. Brian Hodges, Vice President, Education, University Health Network gave the keynote presentation entitled “Transformation: Learners, teachers & 21st century health professional curricula.” Dr. Hodges explored the history of models of competence and examined three domains that are likely to require specific attention in the 21st Century. They are: knowledge and its evolution, skills and the ability to perform and identify, and the ability to work in teams.

This was followed by small group workshop sessions on the following topics:

- Clinical supervision in acute care environments. Balancing patient care and teaching. (Dominque Piquette)
- Collegial conflict: Who do I think you are? (Nancy McNaughton)
- Team Communication in the Operating Room: Is there a chill in the air? (Isabella Devito, Anita Sarmah)
- Time Management for the busy physician in the Connected Era: Apps for that! (Guy Petroz)
- Making learning stick: teaching for understanding, retention and application. (Beiseida Mema and A. Kawamura)
- Quality Improvement: increasing communication and cooperation in undertaking quality initiatives in the operating room (Robin McLeod, Stuart McCluskey)
- Effective mentorship (Ori Rotstein and Paul Grieg)
- Teaching technical skills and incorporating an assessment process (Ron Levine and Oleg Safir)
- Negotiations, taxes, incorporation and financial considerations for surgeons and anesthesiologists starting in practice (Barry Rubin)
- Late career transitioning. (Terry Axelrod and George Christakis)
- Social media in medical education: (Farhad Alam, Karen Devon, Jerry Maniate & Taylor Zhou)
Faculty Development Day 2016

The annual Faculty Development Day was held on November 11, 2016 at the Chestnut Hotel and Conference Centre in downtown Toronto.

For 2016, the theme was Competency Based Medical Education and Assessment and the following topics were addressed - Introduction to CBME Concept, Defining the Process and Challenges of Implementation, Lessons Learnt from CBME Implementation - the Orthopedic Perspectives and Anesthesia Program Perspectives. The event was again held jointly with Department of Surgery and faculty turnout was excellent with close to 200 faculty staff participating in the event.

Following the plenary session, a selection of small group interactive workshops were offered, as listed below:

- Competency By Design (Susan Glover Takahashi, Lisa Bahrey, Scott Berry, Paolo Campisi, Rebecca Dubé and Markku Nousiainen)
- New Technology: Apps and Medical Devices: Practical guidelines for medical educators and innovators (Clyde Matava)
- Social Media in Medical Education (Fahad Alam, Melinda Musgrave)
- Assisting Students in Difficulty - Residents & Undergraduates (George Christakis, Mark Levine, Ron Levine)
- Continuing Medical Education: How to Change Practice Behaviour Long Term (Terry Axelrod, Peter Slinger)
- Assessing Technical Skill Acquisition (Sandra de Montbrun, Zeev Friedman, Oleg Safir)
- Leadership and Strategy (Robin Richards)
- Mindfulness & Wellbeing (Christopher Trevelyan)
- Understanding the Promotion Process (Howard Clarke, Mark Crawford)
- Practical Tips to Success in Research (Andras Kapus, Beverly Orser)

Other events organized by the Faculty Development Committee

2015 - 2016

A Senior Promotions workshop was conducted to provide faculty more in depth knowledge about the promotion application process. Topics covered were ‘Promotion Mindset’ by Brian Kavanagh, ‘Demonstrating National and International Impact of Research’ by Kevan Karkouti, ‘Preparing and Organizing the CPA Dossier’ by Mark Crawford, ‘Demonstrating Sustained Achievement in Teaching: Preparing the Dossier & Appendices’ by Jeff Wassermann, and ‘Demonstrating National / International Impact of CPA’ by Brian Kavanagh.

2016 - 2017

A workshop on Developing Effective Online Modules for CBD Anesthesia was provided on March 27, 2017. This workshop was led by Clyde Matava, Director – eLearning and Technological Innovations, Department of Anesthesia. The objectives were to help learners to understand the underlying principles and theories and evidence supporting effective online module and review the anatomy of
A Senior Promotions workshop was conducted on April 3, 2017 to provide faculty more in depth knowledge about the promotion application process. Topics covered were: ‘Timelines & Resources’ by Wendy Kubasik, ‘Promotion Mindset’ by Brian Kavanagh, ‘Demonstrating National and International Impact of Research’ by Kevan Karkouti, ‘Preparing and Organizing the CPA Dossier’ by Beverley Orser, and ‘Demonstrating Sustained Achievement in Teaching: Preparing the Dossier & Appendices’ by Jeff Wasserman.

A faculty orientation workshop was conducted on June 12, 2017 to address Competency By Design (CBD) for the Anesthesia Residency Program. The learning objectives were to provide an overview of implementation of CBD process, to introduce University of Toronto CBD resident assessment process and assessment tools, to understand the principles and process of the Competence Committee, and to understand the role of faculty feedback in CBD assessment of learning and for learning.
CONTINUING EDUCATION
Report from Dr. Peter Slinger
DIRECTOR, CE/CPD PROGRAMS

The Continuing Education Committee for the Department of Anesthesia is comprised of representatives from each of the teaching hospitals as well as directors of CE courses and community hospital representatives. The committee meets four times per year to discuss, plan and organize a number of continuing education initiatives. Among the primary goals of the committee is to ensure that most CE activities qualify for University of Toronto sponsorship and are accredited learning activities.

Course Development
The committee supervises the Toronto Interactive Anesthesia Meeting under the direction of Dr. Adriaan Van Rensburg. This two-day course provides a combination of lectures, workshops and problem-based learning discussions for both fellowship anesthesiologists and GP anesthetists.

Course Sponsorship
The CE Committee aids in the development and accreditation of ongoing CE courses produced by anesthesia faculty at the University of Toronto.

Web-Based Learning:

1. CME Online Anesthesia Rounds
   Developed by Sharon Davies (MSH), this program has been enlarged to include 15 educational modules. These modules have been accredited by the University of Toronto CEPD Department for Section 3 RCPSC credits. In 2014, 987 modules were completed by 451 participants. These modules can be currently accessed through and archived version of the U of T Department of Anesthesia website at http://www.anesthesia.webservices.utoronto.ca/edu/cme/courses.htm

2. Perioperative Interactive Education
   The Department of Anesthesia at Toronto General Hospital has developed an online medical education program with teaching modules that include: Patient Simulation, Cardiac Anesthesiology, CV Pharmacology, Malignant Hyperthermia, Obstetric Anesthesia, Point of Care Ultrasound, and Transesophageal Echocardiography. Modules can be found at www.pie.med.utoronto.ca

3. Web-Based Bronchoscopy Simulator
   The Thoracic Anesthesia group of the Toronto General Hospital has created an online bronchoscopy simulator to improve Anesthesiologist’s skills in providing lung isolation for thoracic anesthesia by learning bronchial anatomy. The Simulator and Quiz can be accessed on the website www.ThoracicAnesthesia.com
The 37th Annual Research in Progress Shields Day was held this year before the usual full house. Cutting edge innovative research projects were presented by the department trainees. Over 80 abstracts were submitted this year. These were scored by an abstract committee with the top 21 presented in the oral presentation sessions. Thirty six moderated poster sessions took place for the first time this year and were conducted throughout the day with the presenters available for discussion and questions about their projects.

The Annual Shield Day lecture was given by Annual Shields Lecture titled “Perioperative application of long-duration opioids” was given by Dr. Evan D. Kharasch. It highlighted new insights regarding opioid treatment gained through decades of opioid pharmacology study. This was followed by the “Anesthesia in the News lecture”. It was presented by Dr. Jason Maynes: “Converting knowledge to patient care: developing personal therapies for heart disease”.

The day was concluded with the award presentation in which 10 awards were handed for different areas of excellence including clinical excellence, teaching and research as well as trainees travel awards and awards for the winning presentations.

I’d like to thank the anesthesia department staff for their hard work in organizing this day and making it the success it is. We all enjoyed the day and no one went home hungry either. See you at the 38th Annual Shields Research Day.
PEER-REVIEWED AND NON PEER-REVIEWED PUBLICATIONS

2015

A


Arzola C, Perlas A, Siddiqui NT, Carvalho JC. Bedside Gastric Ultrasonography in Term Pregnant Women Before Elective Cesarean Delivery: A Prospective Cohort Study. Anesthesia and Analgesia 121(3):752-758, 2015

B


C


D


F


G


S


T

V


W


X


Y


Z


2016

A


Banks, L, Wells GD, Clarizia NA, Jean-St-Michel E, McKillop A, Redington, AN, McCrindle BW. Short-term remote ischemic preconditioning is not associated with improved blood pressure and exercise capacity in young adults. Applied Physiology, Nutrition, and Metabolism, 2016


Campbell DM, Poost-Foroosh L, Pavenski K, Contreras M, Alam F, Lee J, Houston P. Simulation as a


E


El-Boghdadly K, Kruisselbrink R, Chan V, Perlas A. Gastric Ultrasound. *Anesthesiology*, 2016


F


L


M


N


O


2017


Alam A. International medical graduates discipline: further causes and methods to improve quality of care – a reply. Academic Medicine Letter (Accepted), 2017

Alam A, Bopardikar A, Au S, Barrett J, Callum J, Kiss A, Choi S. Protocol for a Pilot, Randomized, Double-Blinded, Placebo Controlled Trial of Prophylactic Use of Tranexamic Acid for Preventing Postpartum Hemorrhage (TAPPH-1). BMJ Open (Accepted), 2017


Davies S, Lorello GR, Downey K, Friedman Z. Effective learning environments – the process of creating and maintaining an online continuing education tool. Advances in Medical Education and Practice 8:447-452, 2017


Elsharkawy H, Sonny A, Govindarajan SR, Chan V. Use of colour Doppler and M-mode ultrasonography to confirm the location of an epidural catheter - a retrospective case series. Canadian Journal of Anaesthesiology 64(5):489-496, 2017


F


G


Gleicher J, Mosko J, Mcghee I. Improving Cardiac Operating Room to Intensive Care Unit. Handover Using a Standardized Handover Process. *BMJ Open Quality* (Accepted), 2017

Gleicher Y, Singer O, Choi S, McHardy PG. Thoracic epidural catheter placement in a preoperative block area improves operating room efficiency and decreases epidural failure rate. *Regional Anesthesia and Pain Medicine* (Accepted), 2017


Kanczuk E, Barrett NM, Arzola C, Downey K, Ye XY, Carvalho JC. Programmed intermittent epidural bolus for labor analgesia during first stage of labor: A biased-coin up-and-down sequential allocation trial to determine the optimum interval time between boluses of a fixed volume of 10 mL of bupivacaine 0.0625% with fentanyl 2 μg/mL. *Anesthesia and Analgesia* 124(2):537-541, 2017


Lorello GR, Alam A. Perioperative transfusion-related acute lung injury. *International Anesthesiology Clinics* (Accepted), 2017


M


P


Q


R


Skubas NJ, Rehfeldt KH, Beattie WS. Be FoCUSed: The time is now! *Anesthesia and Analgesia* 124(3):714-715, 2017


Turbitt L, McHardy P, Casanova M, Shapiro J, Li L, Choi S. Analysis of inpatient falls following total knee arthroplasty in patients with continuous femoral nerve block. *Anesthesia & Analgesia* (Accepted), 2017


Wang DS, Penna A, Orser BA. Ketamine Increases the Function of γ-Aminobutyric Acid Type A Receptors in Hippocampal and cortical Neurons. *Anesthesiology* 126(4):666-677, 2017


