



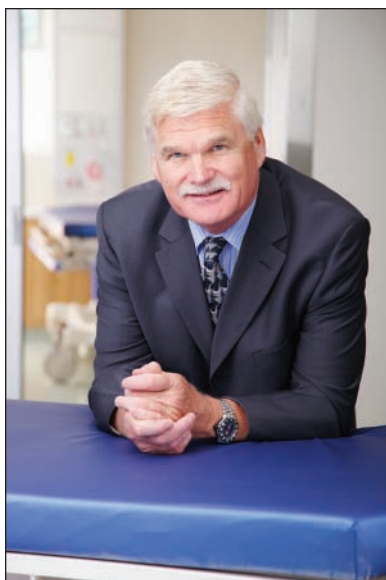
**Annual Report 2017–2018**  
**Eastern Ontario Regional Laboratory Association**



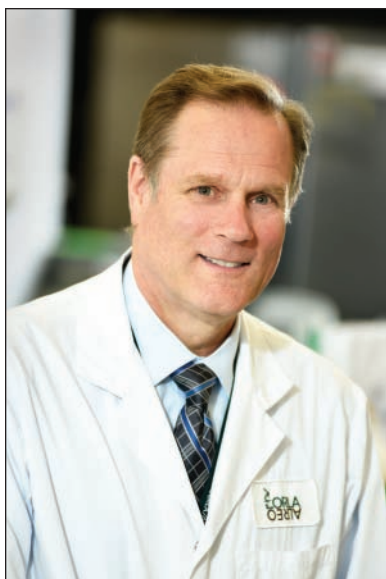


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**EORLA Board Chair: Tom Schonberg**



**EORLA CEO: Craig Ivany**

## Message from the EORLA Board Chair and the EORLA CEO

It is with pleasure that we present the 6th Annual Report for EORLA. The EORLA Board, together with management, employees and members, made great strides to stabilize and strengthen our entire organization and the services to our member hospitals.

Engaged employees are at the heart of a high-functioning laboratory organization and this year EORLA took action to invest in strategies to connect with our staff. With the full support of the Board, EORLA has embarked on a multi-year journey to strengthen employee engagement throughout the organization. The directions were based upon the feedback from an in-depth engagement survey and highlighted the need for greater executive presence and deeper understanding of our strategic plan. While we've made significant strides, more work remains.

Strong financial management enables EORLA to ensure a sustainable model. We have taken great strides to build trust with members through effective board oversight and management effort to bring stability to our financial position. It is satisfying to see these improvements in the financial position. The new funding model has been in place for a full year and the results have been very positive. The objectives of the revised model were to improve cost transparency, stabilize the funding system, and enhance dialogue with members. The funding model met all three objectives. The strongest outcome has been the quality of the dialogue with our members; as we are now seeing the benefit of a funding model that enables collaborative discussions regarding the laboratory requirements of each member.

Our laboratory teams also made significant strides: our new Regional Microbiology Reference Laboratory has stabilized; there have been many improvements in clinical standardization and our core laboratory services are preparing for the future with the completion of major procurement efforts for Biochemistry and Hematology. While we are very pleased with the successes of the past year, we remain focused on improving our services in the interest of providing excellent patient care and advancing laboratory medicine.

This year's annual report highlights some of the great people of EORLA and their contributions to patient care and advancing laboratory medicine.

On behalf of the Board, we want to thank everyone for their ongoing commitment to the success of EORLA.

**EORLA Board Chair: Tom Schonberg**

**EORLA CEO: Craig Ivany**

# Message from the EORLA Chief Medical and Scientific Officer

The past year was one of many changes and challenges. I want to thank all staff for their continued perseverance and dedication. Despite all the challenges, the quality of care we provide continues to be excellent. This is due to our people.

The teamwork demonstrated by the medical scientific and operations staff continues to be outstanding. We work together for the good of our patients and their families. In collaboration you are making a difference.

Strategic planning and assessment of our mandate is ongoing. Efforts were made to consult in the process. Our future must resonate with our values.

Regional Discipline activity continues to grow. Our Regional Discipline Leads are: Anatomical Pathology – Dr. D. Banerjee; Microbiology – Dr. K. Ramotar; Biochemistry – Dr. J. Shaw and Hematopathology-Transfusion Medicine and Tissue Typing – Dr. A. Giulivi.

Dr. Banerjee will be retiring to spend more time looking at the water and with his grandchildren. Thank you for your help over the last years and best wishes for a happy and long retirement Diponkar.

We realized many academic achievements this year. Several staff participated in leadership training, quality and patient safety training. Educationally, we made large contributions to the undergraduate medical teaching curriculum, residency training, training of fellows, and in the teaching in the Faculty of Science and Health Sciences. We have several residency programs—atomic pathology, medical microbiology, and hematopathology and transfusion medicine.

Pathology and Laboratory Medicine Grand Rounds are continuing with a combination of talks from both medical and scientific staff, as well as operations staff.

These accomplishments are only possible through your hard work. People remain our most valuable resource. In the coming year, we plan to focus on wellness, communication, and performance management.

Thank you again for your dedication, perseverance, and support.

**John P. Veinot, MD, FRCPC**

**Chief Medical and Scientific Officer, EORLA**

**Department Head/Medical Director, Department of Pathology and Laboratory Medicine - The Ottawa Hospital**

**Department Head/Medical Director, Department of Pathology and Laboratory Medicine – Children's Hospital of Eastern Ontario (CHEO)**

**Chairman, Department of Pathology and Laboratory Medicine, University of Ottawa**



*Dr. Veinot is a Cardiovascular Pathologist at the Ottawa Hospital, CHEO, University of Ottawa and the University of Ottawa Heart Institute where he has worked since 1994.*

*He is a Full Professor at the University of Ottawa and a Clinical Investigator at the Ottawa Hospital Research Institute.*

*He is Past-President of the International Society for Cardiovascular Pathology. He sits on the Physician Advisory Board of Accreditation Canada.*

*Dr. Veinot completed his undergraduate training at Acadia University, pursued Medical School at Dalhousie Medical School and completed a rotating internship at Victoria Hospital, London Ontario. He did a Residency in Anatomical Pathology at Queen's University, Kingston, Ontario. Dr. Veinot completed his Fellowship in Cardiovascular Pathology at the Mayo Clinic, Rochester MN.*

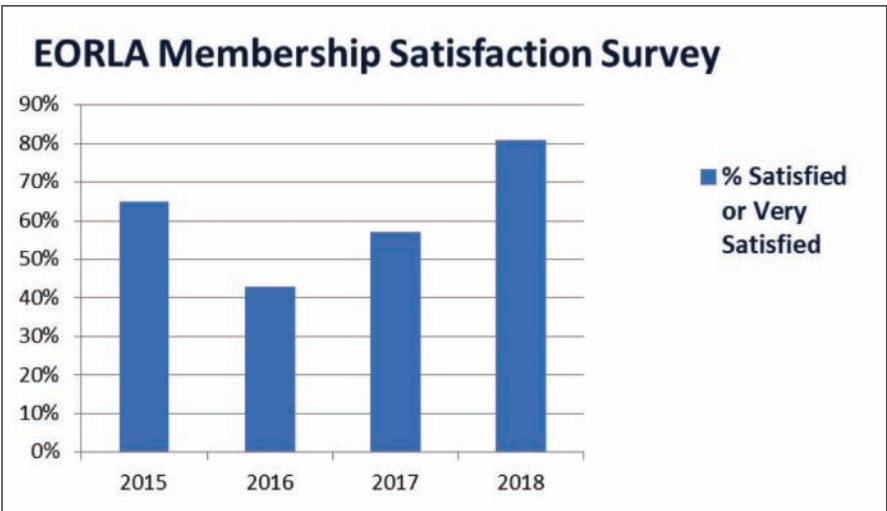
*In September 2010, Dr. Veinot took on the role of Chairman of the Department of Pathology and Laboratory Medicine at the University of Ottawa, Department Head at The Ottawa Hospital and the Children's Hospital of Eastern Ontario and the Medical Scientific lead of the Eastern Ontario Regional Laboratory Association (EORLA).*



# Stakeholder feedback

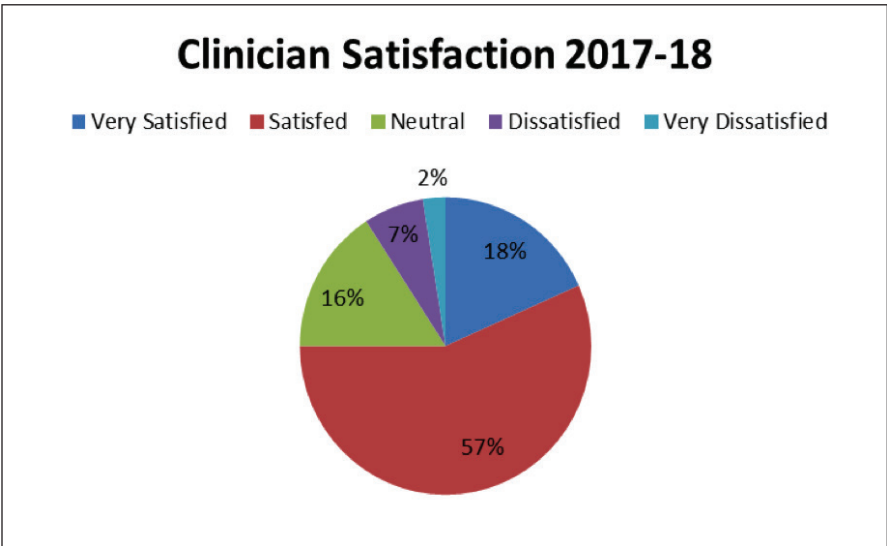
*"We all need people who will give us feedback. That's how we improve."*  
—Bill Gates

EORLA is working hard to engage, understand and strive to meet the expectations of our key stakeholders. Each year we survey our members, physicians who use our services, and our employees with the goal of learning and improving from their feedback.



**Member Satisfaction Survey Results:**  
**81% Satisfied/Very Satisfied**  
(2016–17: 54%)

The overall performance shows year-over-year improvement. Members view EORLA as a work in progress. They recognize the pattern of improvements realized in recent years and see more opportunities ahead.



**Physician/Clinician Lab Users Satisfaction Survey:**  
**75% Satisfied/Very Satisfied**  
(2016–17: 77%)

This year we received feedback from all 16 hospitals (up from 11 in 2016–17) and had an increase of 18% in participation. Individual hospital Laboratory Directors and Site Managers will be tasked to address the feedback and issues raised.



**Employee Job Satisfaction Results 58%**  
(2016–17: 52%)

In October 2017, a comprehensive engagement survey was launched. This new survey and the feedback received have established the foundation for the strategic EORLA Employee Engagement plans with a revised suite of metrics.

## 2017–18 Notable Accomplishments

### Quality and Service

*"Patients benefit from the safety and quality of our laboratory testing; services and academics"*

### Biochemistry

- Completed regional procurement of Biochemistry analyzers – \$8M
- Implemented new quality control and validation processes
- Introduced Regional standardized interpretation and reporting of results
- Introduced new specialty testing in immunology

### Hematopathology

- Completed regional procurement of Hematology analyzers – \$3M
- Standardized treatment for patients who are bleeding and who are on oral anticoagulants
- Introduction of Choosing Wisely recommendations in all EORLA Blood Banks
- Improved processes for identifying possible new acute leukemia cases
- Standardized quality controls

### Microbiology

- Completed the Microbiology Transformation Project; now operating as a single regional laboratory for all 16 hospitals

### Anatomic Pathology

- Validated and implemented Pathologist Workload System
- Validated and implemented Pathology Specimen Tracking System
- Established EORLA Autopsy Policy

### Responsible stewardship

*"Members benefit from collaborative efforts to use resources carefully, cost effectively and sustainably."*

- Stabilization of the EORLA funding model and achieving annual financial targets
- EORLA joined the Canadian Medical Equipment Protection Plan, a collaborative that lowers overall cost of maintenance without added risk
- Opened new laboratory facilities in Pembroke and Hawkesbury
- Implemented Point of Care Technology strategy at Kemptville

### Connectivity

*"By 2020, Quality, productivity and engagement will improve through information system connectivity, integration and innovation."*

- Implementation of new Laboratory Information Systems at the EORLA sites in Renfrew, Hawkesbury, Winchester and Almonte
- Implemented Microbiology electronic orders/results for Cornwall and CHEO
- Successful reporting of results to the Ontario Laboratory Information System (OLIS) by all sites

### Employee engagement

*"By 2020, our staff will be more engaged, contributing and valued in a healthy and safe environment."*

- 2016–2019 EORLA-OPSEU Collective Agreement
- Implementation of a mandatory Annual Talent Development & Assessment Program
- Focus on raising awareness regarding Psychological Health and Safety
- Implementation of various recognition initiatives





## Innovation in the changing environment of microbiology

### Consolidate: To bring together into a unified whole.

Incredible transformation has taken place in the EORLA microbiology department over the last few years, as services have been consolidated in one site at the General Campus of The Ottawa Hospital (TOH).

“We’ve made substantial changes in the way we do things. We’ve turned ‘micro’ on its head,” says Dr. Marc Desjardins, EORLA Clinical Microbiologist.

There were significant challenges to overcome, with an expected 43% to 48% increase in volume, and no opportunity to expand physical space in a lab that was already bursting at the seams. The department looked to technology for answers.

“We had to work within the same four walls with more staff and more volume. Marie-France Jemus and I embarked on a search to find what was available to automate manual microbiology,” says Desjardins.

The answer came in the form of state-of-the-art technology provided by BD Kiestra Total Lab Automation (TLA) solution, which would increase specimen capacity, ensure efficient turnaround time, and standardize reporting across the Eastern Ontario Regional Laboratory Association.

We’re all about innovation—microbiology in EORLA is state-of-the-art,” states Jemus proudly.

The outcome has been very positive according to the microbiology technicians and technologists involved.

“When we were first told we were going to be amalgamating all the hospitals, it seemed like mission impossible. I didn’t think it would be possible to handle that many specimens, but TLA makes it possible!” shares Andrea Brooks, Medical Laboratory Technician.

The consolidated microbiology lab, which is considered a new entity and referred to as RMRL (Regional Microbiology Reference Laboratory), processes 1,000 specimens each day.

Karen Baird, Medical Laboratory Technologist, who came to RMRL from Queensway Carleton Hospital, points out that Kiestra runs through the night, so turnaround time is not affected. She also feels that it has led to “standardization of reports across the whole region. This way physicians are getting consistency which leads to standardized treatment for patients.”

Caroline Paradis, Medical Laboratory Technologist originally at Hôpital Montfort, is impressed by the increased productivity of the technology. “There is no searching through plates or incubators, Kiestra does it for us, so it’s just report, report, report. I feel much more productive and efficient.”

Around-the-clock processing means that in addition to efficient turnaround times, images are always analyzed at the exact incubation time to get ideal results at the growth they want to see, so they are “picture perfect,” adds Brooks.

An added benefit is that results are stored in the system so technologists have the ability to go back and review images at a later date.

“It was a total change—the same quality work that was carried out by labs in the smaller hospitals, but with extended hours, more automation and different technology, and leveraging all of that to the best of our ability,” concludes Jemus.



## The EORLA vision and values in action

# Alain Tremblay is passionate about his patients and his profession

Highly regarded by his peers for his contributions to professional development in the area of medical laboratory practice, and the instruction of autopsy and gross pathology skills to medical students, residents, PAs and staff, Alain Tremblay, Pathologists' Assistant, is also lauded for being "a wonderful human being."

He exemplifies the EORLA vision, *Providing Excellent Care – Advancing Laboratory Medicine*, and the values, *Compassion and Respect*, on a daily basis in his dealings with patients and family members at a very vulnerable time.

"Alain's passion for his work is evident every single day, in part due to his positive attitude and remarkable enthusiasm. His constant readiness to assist and his concern about the welfare of not only his colleagues, but also patients and decedents' family members, is a testimony to his sense of compassion," notes colleague Dr. Eric Belanger.

"It's a unique and privileged situation," says Tremblay. "It's really to empathize with them, to take the time to listen to them, and take the time to reassure that we are human beings too, and we understand their needs and we'll do what we can to either facilitate or ease the process of grieving."

Colleague Dr. Marcio Gomes noted recently in nominating Mr. Tremblay for the Lloyd A. Kennedy Pathologists' Assistant Award, "the insuperable ability of Alain to manage even the most emotionally charged conflicts with grace and compassion."

"It's not about me at that time, it's all about them," says Tremblay of his interactions with patients and families.

It's important to him to be able to provide results in a timely manner. For a cancer patient awaiting test results, it may provide hope for the future with further treatment. For those who have lost a loved one, it may provide some consolation to learn the cause of death of a loved one.

"It's about taking the time to understand what patients and families are going through, treating them with respect and being present."

In addition to his professionalism, experience and skill, Tremblay is very humble and tries, in his own words, "to be as low-profile as possible."

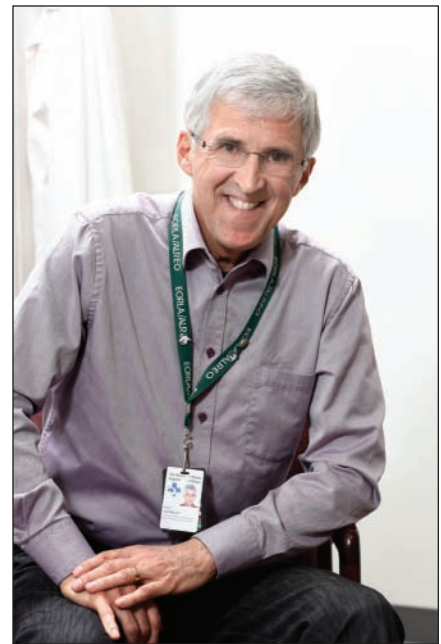
After 35 years in the medical profession, beginning at the age of 18, he says autopsy service is his favourite area.

"It's a unique opportunity to do autopsies because each individual is unique. The families that agree to autopsy, it's an honour to be trusted with this important thing—to find a cause of death, which can be very helpful for them."

"I consider myself privileged to be able to do it and to enjoy it, and to have the trust of families. I do what I can to help them and to serve the coroner's office for results and for diagnosis," says Tremblay. "It's very rewarding for me."

It's important to him that others recognize that those who work in the morgue are human beings too, and provide good care and a good vision for patients, even though they may have passed away.

"If I had to deal with the situation outside my professional life, I would like someone, somewhere to treat my loved one like I treat my patients—with respect."



*NB: On May 22, 2018, it was announced that Alain had been selected to be this year's recipient of the CAP-ACP Lloyd Kennedy Pathologists' Assistant Award. The award, established in 2007 by the Canadian Association of Pathologists, is given to a Pathologists' Assistant in good standing, in recognition of his/her outstanding contributions to continuing professional development in the area of medical laboratory practice.*

# Efficient stewardship of our blood product resources: The EORLA Blood Redistribution Program



**Cheryl Gervais, Charge Technologist at St. Francis Memorial Hospital in Barry's Bay**

In 2017, The EORLA Blood Bank at the General Campus of the Ottawa Hospital (TOH) received 1,426 units of life-saving blood products before they reached expiry from laboratory sites across the region.

This is the result of the Blood Redistribution Program put in place by EORLA to ensure that precious resources do not go to waste.

"We are responsible for proper utilization, and responsible to donors for this gift of life they have given," states Doris Neurath, EORLA Regional Manager, Transfusion Medicine, Hematopathology, Tissue Typing/DNA.

The program relies on tracking, reporting and redistributing blood components and blood products in the small hospital labs and encourages staff to manage wisely. Products nearing outdating are packaged and sent to a larger centre where they have a better chance of being used due to sheer volume of patients.

Mike Wilson, Charge Laboratory Technologist at Deep River and District Hospital, says they have been proactively managing blood products and have not discarded a single blood product since 2005.

"It's one of those common-sense things if you're not going to use it," he states, noting that all products are shipped out with two weeks left to outdating. "You're saving precious resources and saving costs."

EORLA sites in small hospitals reorder products from Canadian Blood Services to



**Val Francoeur, Lab Technologist at Renfrew Victoria Hospital**

maintain the required supply on hand to ensure the safety of patients.

Neurath is proud that under EORLA the program has increased in efficiency. For example, she notes, "We now have a specific courier in place and regular runs that lend to smoother operation."

Sylvie Lavoie-Cyr, Senior Hematology-Transfusion Medicine Lab Technologist at Hawkesbury General Hospital (HGH), was there when the redistribution program was put in place and admits "at first, it took a lot of energy."

As staff became comfortable with the technology, it became more routine. A new Laboratory Information System (LIS) helps with tracking products at HGH, and she confirms that the courier system put in place by EORLA eases the process.

"We can send with the morning or afternoon run. It gives us more space and it's less stressed. Mornings are always very busy."

The service runs seven days a week.

Cheryl Gervais, Charge Technologist at St. Francis Memorial Hospital in Barry's Bay, notes that product safety is assured with the system put in place by EORLA.

The smaller boxes used now for transporting the product maintain the temperature in all environments, and are secured so that tampering cannot take place.

"Blood products are such a precious commodity," states Gervais.



**Sylvie Lavoie-Cyr, Senior Hematology-Transfusion Medicine Lab Technologist at Hawkesbury General Hospital (HGH)**

Wendy Owens is a Program Manager with Ontario Regional Blood Coordinating Network (ORBCoN), an organization that has a mandate to help all hospitals in the province with utilization practices to manage products. She says small hospitals play a critical role in ensuring the redistribution program works and is sustainable.

"Small hospitals put in a lot of effort and really feel a responsibility. They take it seriously to make sure there is as little waste as possible."

"We check our inventory daily," says Val Francoeur, Lab Technologist at Renfrew Victoria Hospital.

Lavoie-Cyr says HGH is proud its record of not outdating any product and receiving a certificate of Longstanding Achievement from Canadian Blood Services and ORBCoN for maintaining the provincial outdate rate (or lower) over the past three fiscal years and demonstrating careful blood product management.

Lavoie-Cyr says she plans to use the data collected by the system to look retrospectively at all the units redistributed and downsize or adjust product inventory brought in from CBS in order to be even more efficient.

"There are a lot of advantages [of the system]. Blood is so precious," states Lavoie-Cyr.

# EORLA Academic Staff

EORLA's partnership with the University of Ottawa has been well-established and most of the Medical and Scientific Staff that support EORLA hold appointments with the University of Ottawa. EORLA's Academic Staff, by site:

## Children's Hospital of Eastern Ontario

Ivan	Blasutig	Assistant Professor
Lucas	Bronicki	Assistant Professor
Melanie	Beaulieu-Bergeron	Assistant Professor
Joseph	de Nanassy	Associate Professor
Dina	El Demellawy	Associate Professor
David	Grynspan	Assistant Professor
Olga	Jarinova	Assistant Professor
Ashok	Kumar	Full Professor
Nathalie	Lepage	Associate Professor
Elaine	Leung	Assistant Professor
Brian	Luke	Adjunct Professor
Jean	McGowan-Jordan	Assistant Professor
Jean	Michaud	Full Professor
Elizabeth	Nizalik	Assistant Professor
Robert	Slinger	Assistant Professor
Amanda	Smith	Assistant Professor
Baldwin	Toye	Assistant Professor

## The Ottawa Hospital

Anna	Adamiak	Assistant Professor	Bryan	Lo	Assistant Professor
Yasmine	Ayroud	Assistant Professor	Esmeralda Celia	Marginean	Associate Professor
Diponkar	Banerjee	Full Professor	Christopher	McCudden	Assistant Professor
Eric	Bélanger	Assistant Professor	Christopher	Milroy	Full Professor
Philip	Berardi	Assistant Professor	Terence	Moyana	Full Professor
Paula	Blanco	Assistant Professor	Vidhya	Nair	Assistant Professor
Ronald	Booth	Assistant Professor	Ruth Frances	Padmore	Associate Professor
Janis	Bormanis	Full Professor	Aleksandra	Paliga	Assistant Professor
Bruce	Burns	Full Professor	Jacqueline	Parai	Assistant Professor
Hakan	Buyukdere	Assistant Professor	Stephanie	Petkiewicz	Assistant Professor
Anthony	Colantonio	Assistant Professor	Robert	Prokopetz	Assistant Professor
Marc	Desjardins	Assistant Professor	Bibianna	Purgina	Assistant Professor
James	Farmer	Assistant Professor	Sergey	Pyatibrat	Assistant Professor
Trevor	Flood	Assistant Professor	Karamchand	Ramotar	Associate Professor
Antonio	Giulivi	Associate Professor	Susan	Robertson	Assistant Professor
Marcio	Gomes	Assistant Professor	Elianna	Saidenberg	Assistant Professor
Denis	Gravel	Assistant Professor	Nadia	Sant	Assistant Professor
Fawaz	Halwani	Assistant Professor	Harman	Sekhon	Assistant Professor
Matthew	Henderson	Assistant Professor	Mary	Senterman	Assistant Professor
Shahidul	Islam	Associate Professor	Julie	Shaw	Assistant Professor
Gerard	Jansen	Associate Professor	Luke	Shier	Associate Professor
Peter	Jessamine	Assistant Professor	Iris	Teo	Assistant Professor
Charis	Kepron	Assistant Professor	Baldwin	Toye	Assistant Professor
Zuzana	Kos	Assistant Professor	John	Veinot	Full Professor
Janice	Lage	Assistant Professor	Alfredo	Walker	Assistant Professor
Goo	Lee	Assistant Professor	Don	Wang	Assistant Professor
Danny	Lin	Assistant Professor	John	Woulfe	Associate Professor



# Publications

## 2017

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## 2018

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## GRANTS 2018

Name	Source	Amount	Date
<b>Banerjee, Diponkar</b>	Ontario Centres of Excellence, Health Technology Fund	\$412,526	2017–2018
	Ontario Centres of Excellence, Advancing Education Program	\$286,446	2017–2018
	PALM Research Fund	\$10,000	2017–2018
<b>Berardi, Philip</b>	PALM Academic Enhancement Funds	\$10,000	2017–2018
<b>Gomes, Marcio</b>	PALM Enhancement funds	\$9,665	2018
<b>El Demellawy, Dina</b>	PALM	\$9,800	2018
<b>Kumar, Ashok</b>	CIHR	\$8.76 million	2014–2019
<b>Moyana, Terence</b>	Pathology Research Network, Cancer Pathology Translational Research, Ontario Institute of Cancer Research	\$42,450	2018
<b>Nair, Vidhya</b>	Heart and Stroke Foundation	\$277,122	2017–2020
<b>Sekhon, Harman</b>	Genome Canada Grant	\$2,020,134	2016–2021
	Joan Sealy Trust Grant	\$44,000	2017–2018
<b>Veinot, John</b>	CIHR	\$1,150,572	2016–2020
<b>Woulfe, John</b>	Canadian Institutes of Health Research	\$152,235 per year	2017–2022
	Partners Investing in Parkinson's Research	\$50,000	2017–2018

# Annual Research Day Winners 2018

## Nadia Mikhael Award for Best Paper presented by a Junior Resident

**Winner: Dr. Ashley Flaman**

**Utility of Core Needle Biopsy in Retroperitoneal Liposarcoma: A Fifteen-Year Review**

*Ashley N. Flaman, Carolyn Nessim, Denis H. Gravel, Iris Y.H. Teo, Bibianna M. Purgina*

Department of Pathology and Laboratory Medicine, The Ottawa Hospital and University of Ottawa, Ottawa, ON, Canada

## 2nd Best Paper by a Junior Resident

**Winner: Dr. Osama Khan**

**Neuronal Intranuclear Rods in the Human Substantia Nigra Across the Age Spectrum**

*Osama Khan<sup>1</sup>, Capitano, M.<sup>1</sup>, Fan, S.<sup>1</sup>, Paul, A.<sup>1</sup>, Michaud, J.<sup>2</sup> Woulfe, J.<sup>1</sup>*

<sup>1</sup>Division of Anatomical Pathology, The Ottawa Hospital/University of Ottawa, Ottawa, <sup>2</sup>Children's Hospital of Eastern Ontario

## Virbala Acharya Award for Best Presentation by a Senior Resident or Fellow

**Winner: Dr. Kianoosh Keyhanian**

**Combination of Cyclin D1 and MCM2 Immunohistochemistry Can Reliably Distinguish Uterine Leiomyosarcomas**

*Kianoosh Keyhanian, Lage J, Chernetsova E, Eslami Z, Islam S.*

Department of Pathology and Laboratory Medicine, Eastern Ontario Regional Laboratory Association & The Ottawa Hospital, Faculty of Medicine, University of Ottawa

## 2nd Best Paper by a Senior Resident or Fellow

**Winner: Dr. Tina Tang**

**Histopathological Study on the Pathogenesis of Intratarsal Keratinous Cyst**

*Tina Tang, Brownstein Seymour, Chen Henry, Jordan David, Blanco Paula, Farmer James*

Department of Pathology and Laboratory Medicine, The Ottawa Hospital, EORLA and The Ottawa Hospital Research Institute, Ottawa, ON, Canada

## Best Poster Presentation by a Resident

**Winner: Dr. Jordan Sim**

**Surface Glycans: Potential Biomarkers to Distinguish Inflammatory Bowel Disease-Associated Neoplasia from Sporadic Colorectal Neoplasia**

*Jordan Sim, Goo Lee, Sergey Pyatibrat, Alton B Farris, Charles Parkos, Jennifer Brazil*

Department of Pathology and Laboratory Medicine, Eastern Ontario Regional Laboratory Association & The Ottawa Hospital, Faculty of Medicine, University of Ottawa

## 2nd Best Poster Presentation by a Resident

**Winner: Dr. Anthea Lafreniere and Dr. Mario Capitano**

**Validation of an Efficient Method for Applying Stereology to Clinical Pathology Practice**

*Anthea Lafreniere, Zhou Y, Bainbridge S, Ball CG, Moretti F, Gaudet L, Grynspar D*

Division of Anatomical Pathology, The Ottawa Hospital / University of Ottawa, Ottawa, Children's Hospital of Eastern Ontario

**Pancreatic Neuroendocrine Tumors Complicated by Sinistral Portal Hypertension: Insights into Pathogenesis**

*Mario Capitano MD<sup>1</sup>, D. Blair Macdonald MD<sup>2</sup>, Guillaume Martel MD<sup>3</sup>, Sergey Pyatibrat<sup>1</sup>, Goo Lee MD<sup>1</sup>, Terence N. Moyana MD<sup>1</sup>*

<sup>1</sup>Dept of Pathology & Lab Medicine, <sup>2</sup>Dept of Medical Imaging,

<sup>3</sup>Division of Hepatobiliary Surgery. The Ottawa Hospital and University of Ottawa, Ottawa, Ontario, Canada.

## Best Poster/Platform presentation by an undergraduate/graduate student

**Winner: Saadia Khilji**

**Insights into the Regulation of Myogenic Enhancers in Early Myoblast Differentiation**

*Saadia Khilji, Munerah Hamed, Qiao Li*

Cellular and Molecular Medicine with specialization in Pathology and Experimental Medicine

## 2nd Best Poster/Platform presentation by an undergraduate/graduate student

**Winner: Munerah Hamed**

**Rexinoid Signaling Promotes Myogenic Differentiation Through A Direct Regulation of MyoD**

*Munerah Hamed, Qiao Li*

<sup>1</sup>Department of Cellular and Molecular Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Ontario K1H 8M5, Canada

<sup>2</sup>Pathology and Laboratory Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Ontario K1H 8M5, Canada

## Dr. M. Orizaga Award for Best Teacher

**Winner: Dr. Sergey Pyatibrat**



# Pathology and Laboratory Medicine (P.A.L.M.)

## Grand Rounds

### 2017/18 Schedule

This event is an accredited group learning activity as defined by the Maintenance of Certification of the Royal College of Physicians and Surgeons of Canada and the CMLTO. Certificates will be issued to individual participants at the end of the year based on registration of their attendance through completion of Survey Monkey evaluations.

Date	Speaker	Title	Discipline
Sep 12, 2017	Sylvia Larrass	Navigating the Uncertainty of Public Speaking: Skills, Tools and Resources for the Uninitiated	Public Speaking
Sep 26, 2017	Marisa Caruso (MLT)	The Lung Screening Program	Cytopathology
Oct 10 2017	Dr. Robin Parks	Taming Viruses: Using viruses to treat genetic and acquired diseases	OHRI
Oct 24, 2017	Edwin N Kengala Nguhdam (MLT)	High grade Cervical Intraepithelial Neoplasia, TRC and c-myc genes: WTF?	Anatomical Pathology
Nov 7, 2017	Craig Ivany, Norm Paquette	EORLA Update – Reflections from the EORLA Board and Members’ Retreat (Oct 14, 2017)	EORLA Management
Nov 21, 2017	Manon Chennette (MLT Charge Tech)	The LEAN Project in Hematology	Hematology (CHEO)
Dec 5, 2017	Dr Ronald Booth (Med/Sci)	Canadian Consensus Recommendations for Laboratory Reporting in Plasma Cell Dyscrasias: The Ottawa Experience	Biochemistry
Dec 19, 2017	Dr. Karam Ramotar	Regional Consolidation of Microbiology	Microbiology
Jan 16, 2018	Dr. Ivan Blasutig	The Evolving Biochemistry Laboratory	Biochemistry (CHEO)
Feb 5, 2018	Dr. Jim Farmer	The Pearls and Perils of the Temporal Artery Biopsy	Ophthalmic Pathology
Feb 27, 2018	Dr. Jean Michaud	Developmental Abnormalities of the Hippocampus in Sudden Unexpected Death.	Neuropathology
Mar 13, 2018	Dr. Mira Liebman	TBD	Hematology - CHEO
Mar 27, 2018	Dana Trofimczuk, Dr. Nadia Sant	Total Laboratory Automation in Microbiology	Microbiology

# Special EORLA PALM Grand Rounds

## Sponsored by the EORLA Board Patient Safety and Quality Committee

On April 18, 2018, Dr. Christopher Naugler Professor and Department Head, Department of Pathology and Laboratory Medicine, Cumming School of Medicine, University of Calgary presented on Laboratory Testing Appropriateness.

Dr. Chris Naugler holds cross appointments in the departments of Family Medicine and Community Health Sciences. He completed medical training at Dalhousie University followed by Family medicine training at Western University (CCFP 1999, FCFP 2010), and specialty training in general Pathology at Dalhousie University (FRCPC 2009). A recognized expert in the field of pathology informatics, Dr. Naugler is the author of approximately 140 peer-reviewed publications and holds A CIHR Foundation Scheme grant for his work on laboratory utilization management. He was the winner of the 2013 University of Calgary Faculty of Medicine Watanabe Distinguished Achievement Award for Overall Excellence. His research includes work on laboratory test appropriateness, clinical epidemiology, pathology informatics, and big data approaches to detecting adverse drug reactions from laboratory data.

Committee Members	
Alfredo E Walker (Chair)	AP (Forensic Path)
Julie Shaw (Sec)	Biochem
Charis Kepron (CME/CPD Secretary)	AP (Forensic Path)
Dina El Demellawy	Ped Path
Harman Sekhon	AP
Dr Vidhya Nair	AP
Nadia Sant	Microb
Lorraine Hart	EORLA Quality Management
Agnes Cadieux	MLT - Microb
Venus Chirip	Mol Path
Julie Shaw	Biochem
Joanne Swift	MLT - AP
Edwin Nkengla	MLT - AP
Nikki Lister	(Admin Support)
Rachael Armstrong	(Admin Support)
Mickey Hooper	(Admin Support)

# EORLA Undergraduate courses

## Undergraduate Medical Education

The Department of Pathology and Laboratory Medicine play a significant role in the teaching of Stage I (first and second year) at all levels including PBL, formal lectures and laboratory demonstrations. The department is also involved in Stage II (third and fourth year) but to a lesser extent. The department is committed to the “Electronic Curriculum” of the Faculty of Medicine providing a number of web-based teaching modules enabling students to review both lectures and laboratory sessions remotely.

Course Name	Instructor
<b>Introduction to blood: (Week 4)</b>	
Lecture: Disorders of growth	Dr. Trevor Flood
Lecture: Hematopoiesis II: Red Cells & Platelets	Dr. Ruth Padmore
UDA: Diagnostic Tools in Hematology	Dr. Zhaodong Xu
Lecture: Genetic alterations in Cancer – Groups I to Q	Dr. Aleksandra Paliga
Lecture: Genetic alterations in Cancer – Groups R to Z	Dr. Bryan Lo
<b>Red Blood Cells: (Week 5)</b>	
UDA: Introduction to autopsy	Dr. Charis Kepron
Microscopic Lab: Hematology Normal Blood and Marrow and Red Cell Disorders – Groups: R-Z	Dr. Ruth Padmore
Microscopic Lab: Hematology Normal Blood and Marrow and Red Cell Disorders – Groups: I-Q	Dr. Ruth Padmore
<b>Coagulation and Tranfusion: (Week 6)</b>	
UDA: Introduction to inflammation	Dr. David Grynspan
<b>Leukemia: (Week 7)</b>	
Microscopic Lab-Hematology: White Cells Disorders – Groups: R-Z	Dr. Ruth Padmore
Microscopic Lab-Hematology: White Cells Disorders – Groups: I-Q	Dr. Philip Berardi
<b>Immunology: (Week 8)</b>	
LAB: Acute inflammation – Groups R-Z	Dr. Alfredo Walker
LAB: Acute inflammation – Groups I-Q	Dr. Alfredo Walker
<b>Monoarthritis and microbiology: (Week 10)</b>	
Lecture: Pathology of Monoarthritis	Dr. Stephanie Petkiewicz
UDA: Chronic inflammation – Groups R-Z	Dr. Iris Teo
UDA: Chronic inflammation – Groups I-Q	Dr. Iris Teo
<b>Introduction au sang: (semaine 4)</b>	
Cours: Troubles de la croissance	Dr. Denis Gravel
Cours: Altérations génétiques du cancer	Dr. Marcio Gomes
<b>Globules rouges: (semaine 5)</b>	
Activité spécifique à l'unité: Introduction à l'autopsie	Dr. Eric Belanger
<b>Coagulation et transfusion sanguine : (semaine 6)</b>	
Activité spécifique à l'unité: Introduction à l'inflammation	Dr. Yasmine Ayroud

<b>Immunologie (semaine 8)</b>	
LAB: Pathologie, Inflammation aigue Groupes A-H	Dr. Nicolas Roustan Delatour
<b>Monoarthrite et microbiologie: (semaine 9)</b>	
Cours: Pathologie de la monoarthrite	Dr. Denis Gravel
<b>Polyarthrite: (semaine 10)</b>	
LAB: Pathologie, Inflammation chronique – Groupes A-H	Dr. Nicolas Roustan Delatour
<b>CAD- Cardio 3: (Week 3)</b>	
Lecture: Pathology of Atherosclerosis	Dr. John Veinot
<b>Valvular Heart Disease Cardio 4: (Week 4)</b>	
LAB: Unit directed activity: Pathology of valvular disease – Groups R-Z	Dr. John Veinot
LAB: Unit directed activity: Pathology of valvular disease – Groups I-Q	Dr. John Veinot
<b>Oncology: (Week 6)</b>	
Lecture: Introduction to neoplasia	Dr. Shahidul Islam
LAB: Pathology Neoplasms – Groups: I-Q	Dr. Zuzanna Kos
LAB: Pathology Neoplasms – Groups: R-Z	Dr. Zuzanna Kos
<b>Airway Disease (Resp/Ent 3): (Week 9)</b>	
Microscopic Lab: Airflow Diseases of the Respiratory Tract – Groups: R-Z	Dr. Harman Sekhon
Microscopic Lab: Airflow Diseases of the Respiratory Tract – Groups: I-Q	Dr. Harman Sekhon
<b>Pneumonitis (Resp/Ent 4): (Week 10)</b>	
Pathology: Interstitial Lung Disease – Group I-Q	Dr. Marcio Gomes
Pathology: Interstitial Lung Disease – Group R-Z	Dr. Marcio Gomes
Microscopic Lab: Pathology Respiratory Infections – Groups: R-Z	Dr. Marcio Gomes
Microscopic Lab: Pathology Respiratory Infections – Groups: I-Q	Dr. Marcio Gomes
<b>Lung Cancer Resp/Ent 5 : (Week 11)</b>	
Microscopic Lab: Pathology cancer of the lung and airways – Groups: R-Z	Dr. Harman Sekhon
Microscopic Lab: Pathology cancer of the lung and airways – Groups: I-Q	Dr. Harman Sekhon
<b>Lymphoma: (Week 12)</b>	
Lecture: Lymphatic Function & Anatomy	Dr. Aleksandra Paliga
Lecture: Malignant Lymphomas and Plasma Cell Myeloma	Dr. Aleksandra Paliga
Microscopy: Myeloma and Lymphoma – Groups R-Z	Drs. Philip Berardi/Ronald Booth
Microscopy: Myeloma and Lymphoma – Groups I-Q	Drs. Philip Berardi/Ronald Booth



<b>Chronic Renal Diseases (Renal 3): (Week 16)</b>	
Unit directed activity: Interactive discussion: glomerular diseases; clinical and pathological perspectives	Dr. Paula Blanco
Microscopic LAB: Pathology renal disease – Groups:R-Z	Dr. Susan Robertson
Microscopic LAB: Pathology renal disease – Groups: I-Q	Dr. Susan Robertson
<b>Coronaropathie (Cardio 3): (semaine 3)</b>	
Cours: Pathologie athérosclérose	Dr. Joseph de Nanassy
<b>Valvulopathie (Cardio 4): (semaine 4)</b>	
Activité spécifique à l'unité: Pathologie de la valvulopathie – Groupe: A-H	Dr. Joseph de Nanassy
<b>Oncologie: (semaine 6)</b>	
Cours: Introduction à la néoplasie	Dr. Marcio Gomes
Microscopie-Pathologie: Néoplasmes – Groupes A-H	Dr. Nicolas Roustan-Delattour
<b>Maladies des voies respiratoires (Resp/ORL 3) : (semaine 9)</b>	
Microscopie-pathologie: Obstruction à la circulation de l'air dans les voies respiratoires – Groupes: A-H	Dr. Marcio Gomes
<b>Pneumonite (Resp/ORL 4): (semaine 10)</b>	
Pathologie: Maladie pulmonaire interstitielle – Groupes: A-H	Dr. Marcio Gomes
Microscopie-pathologie: Infections respiratoires – Groupes: A-H	Dr. Marcio Gomes
<b>Cancer du poumon (Resp/ORL 5) : (semaine 11)</b>	
Microscopie-pathologie: Cancer du poumon et des voies aériennes – Groupes: A-H	Dr. Marcio Gomes
<b>Lymphome: (semaine 12)</b>	
Cours: Anatomie et fonction des noeuds lymphatiques	Dr. Yasmine Ayroud
Cours: Lymphomes malins et myélomes plasmocytaires	Dr. Marcio Gomes
Microscopie: Hematologie Myélome et lymphome Groupes: A-H	Dr. Yasmine Ayroud
<b>Maladies rénales chroniques (Rénal 3) : (semaine 16)</b>	
Discussion interactive: maladies glomérulaires, aspects cliniques et pathologiques	Dr. Éric Bélanger
Microscopie-pathologie:Maladie rénale – Groupes: A-H	Dr. Éric Bélanger
<b>Week 2 (GI I):</b>	
Unit-directed activity: Clinical pathological conference: Barrett's esophagus, carcinoma, eosinophilic esophagitis	Dr. Celia Marginean
Unit-directed activity: Clinical pathological conference: H. Pylori, peptic ulcer disease, gastric cancer	Dr. Terence Moyana
<b>Week 3 (GI II):</b>	
Unit-directed activity: Clinical pathological conference: IBD & Other Colitides	Dr. Celia Marginean
Unit-directed activity: Clinical pathological conference: Colorectal Cancer	Dr. Fawaz Halwani
<b>Week 4 (GI III):</b>	
Unit-directed activity: Clinical pathological conference: Pancreatic and biliary tumors	Dr. Goo Lee

<b>Week 5 (GI IV):</b>	
LAB: Pathology/Radiology Workshop PCR: Liver tumors – Groups: I-Q	Dr. Fawaz Halwani
LAB: Pathology/Radiology Workshop PCR: Liver tumors – Groups: R-Z	Dr. Fawaz Halwani
Unit-directed activity: Clinical pathological conference: NASH, Alcohol and other hepatitides	Dr. Terence Moyana
<b>Week 7 (Endo II):</b>	
LAB: Pathology in diabetes – Groups: I-Q	Dr. Paula Blanco
LAB: Pathology in diabetes – Groups R-Z	Dr. Paula Blanco
<b>Week 8 (Endo III):</b>	
LAB: Parathyroid/thyroid metabolic disease – Groups: I-Q	Dr. Susan Robertson
LAB: Parathyroid/thyroid metabolic disease – Groups: R-Z	Dr. Susan Robertson
<b>Week 10 (Repro I):</b>	
Unit-directed activity: Abnormal uterine bleeding	Dr. Zuzana Kos
<b>Week 11 (Repro II):</b>	
Lecture: Pathology of Pregnancy – Groups: R-Z	Dr. David Grynspan
Lecture: Pathology of Pregnancy – Groups: I-Q	Dr. David Grynspan
<b>Week 12 (Repro III):</b>	
Unit-Directed activity: Benign breast disease	Dr. Susan Robertson
<b>Semaine 2 (Digestif I):</b>	
Activité spécifique à l'unité: Conférence anatomo-clinique: oesophage de Barrett, carcinome, oesophagite éosinophile	Dr. Cherif Ibrahim
Activité spécifique à l'unité: Conférence anatomo-clinique: H. pylori, ulcère gastro-duodéal, cancer gastrique	Dr. Yasmine Ayroud
<b>Semaine 3 (Digestif II):</b>	
Activité spécifique à l'unité: Conférence anatomo-clinique: MICI et autres colites	Dr. Nicolas Roustan-Delattour
Activité spécifique à l'unité: Conférence anatomo-clinique: cancer colorectal	Dr. Nicolas Roustan-Delattour
<b>Semaine 4 (Digestif III):</b>	
Activité spécifique à l'unité: Conférence anatomo-clinique: Tumeurs pancréatiques et biliaires	Dr. Nicolas Roustan-Delattour
<b>Semaine 5 (Digestif IV):</b>	
LAB: Atelier pathologie/radiologie: Conférence en radio-pathologie: Tumeurs du foie	Dr. Nicolas Roustan-Delattour
Activité spécifique à l'unité: conférence anatomo-clinique: stéatohépatite non alcoolique, hépatite alcoolique et autres	Dr. Cherif Ibrahim
<b>Semaine 7 (Endo II):</b>	
LAB: Pathologie du diabète	Dr. Yasmine Ayroud
<b>Semaine 8 (Endo III):</b>	
LAB: Pathologie: Maladies métaboliques des os liées à la parathyroïde et à la thyroïde	Dr. Denis Gravel
<b>Semaine 10 (Repro I):</b>	
Activité spécifique à l'unité: saignement utérin anormal	Dr. Nicolas Roustan-Delattour

<b>Semaine 11 (Repro II):</b>	
Cours: Pathologie de la grossesse	Dr. Nicolas Roustan-Delattour
<b>Semaine 12 (Repro III):</b>	
Activité spécifique à l'unité: Les maladies bénignes du sein	Dr. Denis Gravel
LAB: Pathologie: sein – Groupes A-H	Dr. Denis Gravel
<b>Week 1 (Mood Disorders):</b>	
LAB: Dementia: Pathology & Pathophysiological concepts – Groups I to Q	Dr. John Woulfe
LAB: Dementia: Pathology & Pathophysiological concepts – Groups R to Z	Dr. John Woulfe
<b>Week 5 (Neuro I):</b>	
Lecture: Primary Tumors of CNS	Dr. John Woulfe
<b>Week 6 Stroke and Trauma (Neuro II):</b>	
LAB: Pathology Stroke – Groups R-Z	Dr. John Woulfe
LAB: Pathology Stroke – Groups I-Q	Dr. John Woulfe
<b>Week 7 (Infectious, Inflammatory and Demyelinating disorders):</b>	
LAB: Pathology: Infections and demyelinating disorders – Group R-Z	Dr. Gerard Jansen
LAB: Pathology: Infections and demyelinating disorders – Group I-Q	Dr. Gerard Jansen
<b>Week 8 (Neuromuscular, Degenerative and Developmental Disorders):</b>	
LAB: Pathology of movement disorders and muscle disorders – Group R-Z	Dr. Gerard Jansen
LAB: Pathology of movement disorders and muscle disorders – Group I-Q	Dr. Gerard Jansen
<b>Week 9 (Neuro V):</b>	
LAB: Pathology: Epilepsy – Groups I-Q	Dr. Gerard Jansen
LAB: Pathology: Epilepsy – Groups R-Z	Dr. Gerard Jansen
<b>Semaine 1: Trouble de l'humeur:</b>	
LAB: Pathologie: Démence, pathologie et concepts physiopathologiques	Dr. Jean Michaud
<b>Semaine 5: Neuro I:</b>	
Cours: Tumeurs primaires du SNC (pathologie)	Dr. Jean Michaud
<b>Semaine 6: Neuro II:</b>	
LAB: AVC	Dr. Jean Michaud
<b>Semaine 7: Neuro III:</b>	
LAB: Pathologie: Infections et maladies démyélinisantes	Dr. Jean Michaud
<b>Semaine 8: Neuro IV:</b>	
LAB: Pathologie: Troubles du mouvement	Dr. Jean Michaud
<b>Semaine 8: Neuro V:</b>	
LAB: Pathologie: Épilepsie	Dr. Jean Michaud

# Specialized Course

## CMM5001 The Pathological Basis of Disease

An introductory course to general pathology for graduate students in the life sciences. This course teaches fundamental concepts of the basis of disease as viewed from a general pathology perspective. It provides three-hour weekly lectures dealing with manifestation of disease at the macroscopic and microscopic levels. Background lectures are given on the morphology of normal tissues and organs and in investigative approaches used. A range of General Pathology topics are covered over the duration of the course.

## CMM 5001 – The Pathological Basis of Disease Course – Winter 2018

**Coordinator:** Dr. Adolfo J. de Bold. (adebold@bell.net)

**Teaching support:** Eric Labelle

Lecture	Topic	Professor
<b>January</b>		
1st Lecture	Intro to General Path	Dr. Rudolf W. Mueller
2nd Lecture	Cell and tissues	Dr. Safaa El-Bialy
3rd Lecture	Methods in Pathology	Dr. Mercedes L. Kuroski/Dr. Adolfo de Bold
4th lecture	Organ Pathology	Dr. Rudolf W. Mueller
<b>February</b>		
5th Lecture	Neoplasia	Dr. Stephanie Petkiewicz
6th Lecture	Molecular Pathology	Dr. Lucas Bronicki
7th Lecture	Cardiovascular	Dr. John P. Veinot
8th Lecture	Endocrine	Dr. Qiao Li
<b>March</b>		
9th Lecture	Genetic diseases	Dr. Joseph de Nanassy
10th Lecture	Hematopathology	Dr. Hakan Buyukdere
11th Lecture	Neuropathology	Dr. Jean Michaud
12th Lecture	Gastrointestinal	Dr. Fawaz Halwany
<b>April</b>		
13th Lecture	Issues in Toxicological Pathology	Dr. Colin Rousseaux
Students are evaluated at the end of the course through answers to a single, take-home question.		



Financial Statements of

**EASTERN ONTARIO  
REGIONAL LABORATORY  
ASSOCIATION INC.**

Year ended March 31, 2018

# **EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.**

Financial Statements

Year ended March 31, 2018

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## INDEPENDENT AUDITORS' REPORT

To the Members of Eastern Ontario Regional Laboratory Association Inc.

We have audited the accompanying financial statements of Eastern Ontario Regional Laboratory Association Inc., which comprise the statement of financial position as at March 31, 2018, the statements of operations, changes in net assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion*

In our opinion, these financial statements present fairly, in all material respects, the financial position of Eastern Ontario Regional Laboratory Association Inc., as at March 31, 2018 and its results of operations, changes in net assets and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Chartered Professional Accountants, Licensed Public Accountants

Ottawa, Canada

(date)



# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

## Statement of Financial Position

March 31, 2018, with comparative information for 2017

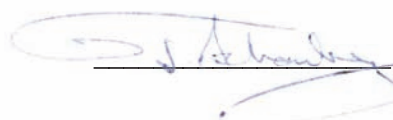
	2018	2017
<b>Assets</b>		
Current assets:		
Cash	\$ 8,400,771	\$ 8,278,336
Due from member hospitals (note 2)	1,475,676	1,806,278
Taxes recoverable	1,925,630	1,093,033
Other receivables	522,650	1,171,430
Prepaid expenses	906,934	794,349
	<u>13,231,661</u>	<u>13,143,426</u>
Due from member hospitals (note 2)	1,700,298	1,788,719
Prepaid occupancy costs (note 2)	5,679,920	5,875,820
Capital assets (note 3)	14,757,274	15,709,859
Funds held in trust (note 4)	330,094	353,222
	<u>\$ 35,699,247</u>	<u>\$ 36,871,046</u>

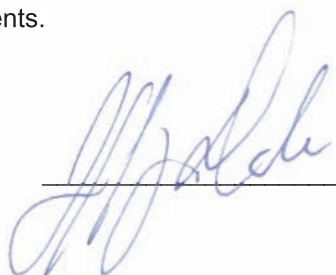
## Liabilities and Net Assets

Current liabilities:		
Accounts payable and accrued liabilities	\$ 7,046,350	\$ 7,860,933
Due to The Ottawa Hospital - operations (note 2)	4,405,811	3,867,799
Due to The Ottawa Hospital - capital (note 2)	6,273,777	7,053,777
Deferred revenue (note 5)	38,342	122,657
	<u>17,764,280</u>	<u>18,905,166</u>
Due to member hospitals (note 2)	2,598,281	3,464,469
Employee future benefits (note 6)	4,382,000	4,086,800
Deferred capital contributions (note 7)	8,114,762	8,955,130
Funds held in trust (note 4)	330,094	353,222
Net assets:		
Unrestricted deficiency	(4,132,682)	(5,648,470)
Invested in capital assets	6,642,512	6,754,729
	<u>2,509,830</u>	<u>1,106,259</u>
Contingencies (note 10)		
	<u>\$ 35,699,247</u>	<u>\$ 36,871,046</u>

See accompanying notes to financial statements.

On behalf of the Board:

 Chairman

 Director

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

## Statement of Operations

Year ended March 31, 2018, with comparative information for 2017

	2018	2017
Revenue:		
Medical laboratory services	\$ 112,729,296	\$ 108,923,692
Government of Ontario contributions	5,109,888	4,488,612
Other income	1,710,278	1,298,579
Amortization of deferred capital contributions (note 7)	848,054	1,487,741
	120,397,516	116,198,624
Expenses:		
Salaries and wages	62,728,246	61,394,708
Medical and scientific remuneration	22,126,806	21,551,297
Supplies	26,769,068	25,512,405
Referred out services	2,286,028	2,342,936
Amortization of capital assets	2,974,460	2,905,404
Courier and delivery	986,704	938,020
Professional services	926,733	973,962
Amortization of prepaid occupancy costs	195,900	195,900
	118,993,945	115,814,632
Excess of revenue over expenses	\$ 1,403,571	\$ 383,992

See accompanying notes to financial statements.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

## Statement of Changes in Net Assets

Year ended March 31, 2018, with comparative information for 2017

	Investment in capital assets	Unrestricted (deficiency)	Total 2018	Total 2017
Balance, beginning of year	\$ 6,754,729	\$(5,648,470)	\$ 1,106,259	\$ 722,267
Excess of revenue over expenses	—	1,403,571	1,403,571	383,992
Purchase of capital assets	2,021,875	(2,021,875)	—	—
Amortization of capital assets	(2,974,460)	2,974,460	—	—
Deferred capital contributions received (note 7)	(7,686)	7,686	—	—
Amortization of deferred capital contributions (note 7)	848,054	(848,054)	—	—
Balance, end of year	\$ 6,642,512	\$(4,132,682)	\$ 2,509,830	\$ 1,106,259

See accompanying notes to financial statements.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

## Statement of Cash Flows

Year ended March 31, 2018, with comparative information for 2017

	2018	2017
Cash provided by (used for):		
Operating activities:		
Excess of revenue over expenses	\$ 1,403,571	\$ 383,992
Items not involving cash:		
Amortization of capital assets	2,974,460	2,905,404
Amortization of deferred capital contributions (note 7)	(848,054)	(1,487,741)
Amortization of prepaid occupancy costs	195,900	195,900
Net increase in employee future benefits liability	295,200	272,500
Change in non-cash operating working capital items:		
Decrease in due from member hospitals	330,602	631,609
Decrease (increase) in taxes recoverable	(832,597)	5,083,032
Decrease (increase) in other receivables	648,780	(1,041,684)
Increase in prepaid expenses	(112,585)	(470,139)
Increase (decrease) in accounts payable and accrued liabilities	(814,583)	3,241,564
Decrease in deferred revenue	(84,315)	(136,923)
Increase (decrease) in due to The Ottawa Hospital - operations	538,012	(1,388,601)
	3,694,391	8,188,913
Investing activities:		
Purchase of capital assets	(2,021,875)	(4,662,649)
Financing activities:		
Decrease in long-term due to/from member hospital	(777,767)	(10,518)
Decrease in due to The Ottawa Hospital - operations	(780,000)	(780,000)
Deferred capital contributions received (note 7)	7,686	1,891,865
	(1,550,081)	1,101,347
Net increase in cash	122,435	4,627,611
Cash, beginning of year	8,278,336	3,650,725
Cash, end of year	\$ 8,400,771	\$ 8,278,336

See accompanying notes to financial statements.



# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements

Year ended March 31, 2018

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Eastern Ontario Regional Laboratory Association Inc. ("EORLA") was incorporated on April 15, 2003, as a shared services corporation without share capital. The member hospitals voluntarily joined EORLA to foster continued and increased cooperation between members and to support the integration of laboratory service in the region. EORLA is an integrated hospital laboratory network with sixteen acute care hospital facilities having on-site laboratories configured to meet program needs while referring specialized services to regional laboratory sites. EORLA began active operations as of April 1, 2012 and was previously considered a development stage enterprise.

These financial statements reflect the assets and liabilities and results of operations of EORLA. They do not include the assets, liabilities or operations of its member hospitals, which, although associated, are separately managed, and report to separate Boards of Directors. Note 2 provides details on related party transactions.

## 1. Significant accounting policies:

The financial statements have been prepared by management in accordance with the Canadian public sector accounting standards including the 4200 standards for government not-for-profit organizations and include the following significant accounting policies:

### (a) Revenue recognition:

EORLA follows the deferral method of accounting for contributions.

Operating grants are recorded as revenue in the period to which they relate. Where a portion of a grant relates to a future period, it is deferred and recognized in that subsequent period.

Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Externally restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Contributions restricted for the purchase of capital assets are deferred and amortized into revenue on a straight-line basis, at rates corresponding with the amortization rates for the related capital assets.

Revenue derived from laboratory services are recognized when services are rendered.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 1. Significant accounting policies (continued):

### (b) Financial instruments:

EORLA's financial instruments consist of cash, accounts receivable and accounts payable and accrued liabilities.

EORLA's financial instruments are measured as follows:

Cash	Fair value
Due from member hospitals	Amortized cost
Taxes recoverable	Amortized cost
Other receivables	Amortized cost
Funds held in trust	Fair value
Accounts payable and accrued liabilities	Amortized cost
Due to The Ottawa Hospital – operations	Amortized cost
Due to The Ottawa Hospital – capital	Amortized cost
Due to member hospitals	Amortized cost

Unrealized changes in fair value are recognized in the statement of remeasurement gains and losses until they are realized. When the financial instrument is derecognized, the unrealized gains and losses previously recognized in the statement as remeasurement gains and losses are reversed and recognized in the statement of operations.

Financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using the straight-line method.

All financial assets are assessed for impairment on an annual basis. When a decline is determined to be other than temporary, the amount of the loss is reported in the statement of operations and any unrealized gain is adjusted through the statement of remeasurement gains and losses.

EORLA does not have any amounts to record on the statement of remeasurement gains and losses and therefore this statement has not been included in these financial statements.

### (c) Prepaid occupancy costs:

Prepaid occupancy costs are amortized on a straight-line basis over 40 years.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 1. Significant accounting policies (continued):

### (d) Capital assets:

Purchased capital assets, other than minor equipment, are recorded at cost. Minor equipment replacements are expensed in the year of replacement. Computer hardware and software under development and construction in progress are capitalized until placed in service, at which point they will be amortized.

Capital assets are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. When a capital asset no longer contributes to EORLA's ability to provide services, its carrying amount is written down to its residual value.

Construction in progress is not amortized until the project is complete and the assets come into use. Capital assets are amortized on a straight-line basis over their expected useful lives as follows:

Computer hardware and software	5 to 10 years
Major equipment	5 to 10 years
Lab renovation	20 years

### (e) Employee future benefits:

EORLA provides defined retirement and other future benefits for substantially all retirees and employees. These future benefits include life insurance and health care benefits.

EORLA accrues its obligations for employee benefit plans as the employees render the services necessary to earn the benefits. The cost of non-pension post-retirement and post-employment benefits earned by employees is actuarially determined using the projected benefit method pro-rated on service and management's best estimate of retirement ages of employees and expected health care costs.

Adjustments arising from plan amendments, including past service costs, are recognized in the year that the plan amendments occur. Actuarial gains or losses are amortized over the average remaining service period of active employees.

The average remaining service period of active employees covered by the employee benefit plan is 13.2 years (2017 - 13.8 years).

EORLA is an employer member of the Healthcare of Ontario Pension Plan, which is a multi-employer, defined benefit pension plan. EORLA has adopted defined contribution plan accounting principles for this Plan because insufficient information is available to apply defined benefit plan accounting principles.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

---

## 1. Significant accounting policies (continued):

### (f) Funds held in trust:

EORLA holds resources and makes disbursements on behalf of certain third party groups. EORLA has no discretion over such transactions; hence, resources received are reported as liabilities, not revenue, and subsequent distributions are reported as decreases to the liability, not expenses.

### (g) Use of estimates:

The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from these estimates. These estimates are reviewed annually and, as adjustments become necessary, they are reported in the periods in which they become known. The most significant estimates used in preparing these financial statements include the assumptions underlying the employee future benefit liability

## 2. Related party transactions:

The Ottawa Hospital entered into an agreement with the Ministry of Health and Long-Term Care of Ontario to construct a regional laboratory, including investment in capital equipment. The Ottawa Hospital completed the project in September 2006 at a total cost of \$25,375,812. EORLA's share of the project's total cost was \$7,833,777 and is accounted for as prepaid occupancy costs. In return for this capital investment, EORLA is permitted to occupy the premises at The Ottawa Hospital, General Campus, under the provisions set out in the related agreements. The accumulated amortization as at March 31, 2018 is \$2,153,857 (2017 - \$1,957,957).

The amount due to The Ottawa Hospital - capital, bears interest at prime and is payable on demand.

EORLA is related to all member hospitals due to the composition of its Board of Directors. Unless otherwise stated, transactions occur in the normal course of operations and are recorded at fair value.

Medical laboratory services are invoiced to member hospitals at pre-established rates.

The long-term receivable from members is non-interest bearing with no fixed terms of repayment.

The balance due to The Ottawa Hospital operations bears interest at a rate of 3.1% (2017 - 3.1%) with no fixed term of repayment.



# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 2. Related party transactions (continued):

### *Billing adjustment and member assessment:*

Effective March 31, 2016, EORLA entered into an agreement with one of its members to repay \$4,330,470 related to the billing adjustment over a five-year period. The amount bears interest at prime minus 0.25% and requires EORLA to make annual principal payments of \$866,094 with the first payment paid in the current fiscal year. The balance due to the member hospital as at March 31, 2018 is \$3,464,375 (2017 - \$4,330,470).

## 3. Capital assets:

	Cost	Accumulated amortization	2018 Net book value	2017 Net book value
Computer hardware and software	\$ 14,146,497	\$ 5,982,352	\$ 8,164,145	\$ 9,379,105
Equipment	14,350,427	9,137,316	5,213,111	4,922,164
Lab renovation	1,606,182	226,164	1,380,018	1,408,590
	\$ 30,103,106	\$ 15,345,832	\$ 14,757,274	\$ 15,709,859

Cost and accumulated amortization of capital assets at March 31, 2017 amounted to \$28,081,231 and \$12,371,372, respectively.

## 4. Funds held in trust:

Funds held in trust are held in EORLA's bank account and represent education funds held in trust for third parties (employees).

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 5. Deferred revenue:

	Balance, beginning of year	Funds/ interest received	Funds used	Balance, end of year
Ontario Buys project:				
Continued administrative support	\$ 9,937	\$ —	\$ (9,937)	\$ —
Regional integration initiative	32,657	—	(32,657)	—
Members payroll advance	45,419	—	(45,419)	—
POCT professional services	12,600	—	(12,600)	—
Laboratory Medicine Funding Framework Agreement (LMFFA)	22,044	—	(22,044)	—
NaN Ontario Centres	—	98,880	(60,538)	38,342
	\$ 122,657	\$ 98,880	\$ (183,195)	\$ 38,342

## 6. Employee future benefits:

### (a) Non-pension benefits:

EORLA offers a defined benefit plan which provides extended health care and dental insurance benefits to certain of its employees and extends this coverage to the post-retirement period. The most recent actuarial valuation of employee future benefits was completed as at March 31, 2016. The next actuarial valuation is expected to take place as at March 31, 2019.

As at March 31 2018, EORLA's liability associated with the benefit plan is as follows:

	2018	2017
Accrued benefit obligation	\$ 4,739,000	\$ 4,502,800
Unamortized experience losses	(357,000)	(416,000)
Employee future benefit liability	\$ 4,382,000	\$ 4,086,800

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 6. Employee future benefits (continued):

### (a) Non-pension benefits (continued):

EORLA's defined benefit plan is not funded, resulting in a plan deficit equal to the accrued benefit obligation. The significant actuarial assumptions adopted in estimating EORLA's accrued benefit obligation are as follows:

	2018	2017
Discount rate to determine accrued benefit obligation	3.37%	3.56%
Dental cost increases	3.50%	3.50%
Extended health care cost escalations	7.50%	7.50%
Expected average remaining service life of employees	13.2 years	13.8 years

The employee future benefit liability change for the year ended March 31, 2018 is \$295,200 (2017 - \$272,500). This amount is comprised of:

	2018	2017
Current service cost	\$ 262,000	\$ 243,800
Amortization experience losses	31,500	20,200
Benefit payments	(160,400)	(147,200)
Interest on accrued benefit obligation	162,100	155,700
	\$ 295,200	\$ 272,500

### (b) Pension:

Substantially all of the employees of EORLA are members of the Healthcare of Ontario Pension Plan (the "Plan"), which is a multi-employer defined benefit pension plan available to all eligible employees of the participating members of the Ontario Hospital Association. Contributions to the Plan made during the year by EORLA on behalf of its employees amounted to \$5,504,690 (2017 - \$5,185,267) and are included in the statement of operations.

In consultation with its actuaries, pension expense is based on Plan management's best estimates of the amount required to provide a high level of assurance that benefits will be fully represented by fund assets at retirement, as provided by the Plan. The funding objective is for employer contributions to the Plan to remain a constant percentage of employees' contributions.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

## 6. Employee future benefits (continued):

### (b) Pension (continued):

Variances between actuarial funding estimates and actual experience may be material and any differences are generally to be funded by the participating members. The most recent triennial actuarial valuation of the Plan as at December 31, 2017 indicates the plan is fully-funded.

## 7. Deferred capital contributions:

	Balance, beginning of year	Contributions received	Amortization	Balance, end of year
Ontario Buys project:				
LIS integration and connectivity	\$ 797,616	\$ —	\$ 547,514	\$ 250,102
Front end automation	815,000	—	169,707	645,293
Telepathology	487,069	—	85,026	402,043
Ministry of Health and Long-Term Care of Ontario:				
Start-up funding	15,876	—	7,660	8,216
Contingency fund:				
Foundation	1,514	—	—	1,514
eHealth - OLIS funding	6,700,365	—	—	6,700,365
Cancer Care Ontario	114,440	—	38,147	76,293
BD Life Sciences	23,250	—	—	23,250
Microscope	—	7,686	—	7,686
	\$ 8,955,130	\$ 7,686	\$ 848,054	\$ 8,114,762

## 8. Bank indebtedness:

EORLA has an available line of credit of \$10,000,000 with its corporate bankers, of which no amount was drawn against at March 31, 2018 (2017 - \$Nil). This line of credit is unsecured and bears interest at prime less 0.25%.

# EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.

Notes to Financial Statements (continued)

Year ended March 31, 2018

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## 9. Financial instruments:

### *Establishing fair value:*

The following classification system is used to describe the basis of the inputs used to measure the fair values of financial instruments in the fair value measurement category:

Level 1 – Unadjusted quoted market prices in active markets for identical assets or liabilities;

Level 2 – Observable or corroborated inputs, other than Level 1, such as quoted prices for similar assets or liabilities in inactive markets or market data for substantially the full term of the assets or liabilities; and

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of these assets and liabilities.

Cash and funds held in trust are a Level 1 hierarchy. There have been no movements between levels during the year.

### *Risk management:*

EORLA is exposed to various financial risks through its transactions in financial instruments.

### *Credit risk:*

Credit risk relates to the potential that one party to a financial instrument will fail to discharge an obligation and incurs a financial loss. EORLA is exposed to credit risk on its accounts receivable. Management does not believe it is exposed to any significant credit risk due to the nature of the counterparties of its receivables.

### *Liquidity risk:*

Liquidity risk is the risk EORLA will not be able to meet its financial obligations when they come due. EORLA manages its liquidity risk by forecasting cash flows from operations and anticipating investing and financing activities and maintaining credit facilities to ensure it has sufficient available funds to meet current and foreseeable financial requirements.

### *Market risk:*

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of market factors. Market factors include three types of risk: interest rate risk, currency risk and other price risk.

EORLA believes it is not subject to significant interest rate, foreign currency or other price risks arising from its financial instruments.

There have been no significant changes from the previous year in the exposure to risk on policies, procedures and methods used to measure credit risk.



# **EASTERN ONTARIO REGIONAL LABORATORY ASSOCIATION INC.**

Notes to Financial Statements (continued)

Year ended March 31, 2018

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## **10. Contingencies:**

The nature of EORLA's activities are such that there may be litigation pending or in prospect at any time. With respect to claims as at March 31, 2018, management believes EORLA has valid defenses and appropriate insurance coverage in place. In the event any claims are successful, management believes that such claims are not expected to have a material effect on EORLA's financial position.

A group of healthcare organizations formed the Healthcare Insurance Reciprocal of Canada ("HIROC"), of which EORLA is a member. HIROC is registered as a Reciprocal pursuant to provincial Insurance Acts which permit persons to exchange with other persons reciprocal contracts of indemnity insurance. HIROC facilitates the provision of liability insurance coverage to healthcare organizations in the provinces and territories where it is licensed. Subscribers pay annual premiums, which are actuarially determined, and are subject to assessment for losses in excess of such premiums, if any, experienced by the group of subscribers for the year in which they were a subscriber. No such assessments have been made to March 31, 2018.

## **11. Accounting changes:**

On April 1, 2017, EORLA adopted Canadian public sector accounting standards PS 2200 Related party disclosures, PS 3420 Inter-entity transactions, PS 3210 Assets, PS 3320 Contingent Assets, and PS 3380 Contractual rights.

The adoption of these standards did not result in an accounting policy change for the entity, and did not result in any adjustments to the financial statements as at April 1, 2017.