

# HISTORY OF LMP 1843-1993

## PATHOLOGY AND BACTERIOLOGY

John Caven is appointed the first professor of Pathology, becoming first Chair of Pathology and Bacteriology in 1896.

1843 — The first undergraduate medical students registered for classes at the University of Toronto.



JOHN CAVEN

1923

The Pathology Department in 1923  
Sitting L-R: Dr. Price, Dr. Cameron, Dr. Robinson, Dr. Klotz (Chair), Dr. Holman, Dr. Detweiler, Dr. Bates  
Standing L-R: Dr. Shipley, Dr. Easton, Dr. Ham, Dr. McClinton, Dr. Cannell, Dr. Watson, Dr. Nicholson

THE PATHOLOGY DEPARTMENT, 1923



EXTRACT FROM THE LOG BOOK

1903 — The Faculty of Medicine moves into the Medical Building in the Toronto General Hospital complex. During the opening ceremony, guest speaker and physiologist Henry Pickering Bowditch declares that laboratory medicine has become an increasingly vital part of modern medical practice and teaching.

1912 — The Department of Pathology relocates to the Pathology Building in the Toronto General Hospital complex.

1931 — The Division of Neuropathology is created with Eric Linell as head.

1937 — William Boyd is appointed the fourth Chair of Pathology. During his tenure, he creates a pathology museum on campus.

1939 — The Division of Bacteriology is established with William L. Holman as its head.

William Boyd publishes "A textbook of Pathology: an introduction to Medicine". Pathologists said, "it doesn't matter what book you recommend to medical students, they will all read Boyd". One of his textbooks was translated into 13 languages.

1943 — The Division of General and Experimental Pathology is created, led by Henry Movat.

The Department of Pathology moves into the new Medical Sciences Building which replaces the old Medical Building built in 1903.

The Medical Microbiology and Anatomical Pathology residency training programs become Royal College of Physicians and Surgeons of Canada approved programs.

1976 — Hematological Pathology is added to the residency training programs.

1979 — Neuropathology is added to the residency training programs

1987

Malcom Silver proposes to merge the departments of Pathology, Clinical Biochemistry and Medical Microbiology into a single department but it is ultimately turned down.

## DEPARTMENT OF PATHOLOGICAL CHEMISTRY TO CLINICAL BIOCHEMISTRY

1909 — John Leathes is appointed the first professor and Chair of Pathological Chemistry.

Leathes establishes new biochemical laboratories for graduate students on campus, as well additional labs in the Toronto General Hospital and St. Michael's Hospital.

1917 — Walter Campbell, known as the first physician to administer insulin to a patient, publishes a ground-breaking paper on "mercuric chloride nephrosis".

The department now includes four full-time faculty positions and staff numbers have doubled.

Allan Gornall leads the development of a steroid assay laboratory at Toronto General Hospital. This lab allowed for advances in research of the endocrine system in Toronto across multiple specialties.

JAMES DAUPHINEE

The department launches a diploma course in Clinical Chemistry, the first of its kind in Canada.

The department's name changes from Pathological Chemistry to Clinical Biochemistry.

1974



JOHN LEATHES

1920 — The department consists of one professor, one lecturer, and two part time staff.

1935 — James Dauphinee and William Paul establish the first radioactive isotope lab at Toronto General Hospital which Paul ran until 1983.

1949 — James Dauphinee notes that residents who wished to pursue scientific research were limited in laboratory time. He begins working with other departments to enable residents to work at least two years in research labs.

1951 — James Dauphinee creates a Clinical Investigation Unit at Sunnybrook Hospital, acting as its head until 1966.



TEACHING IN CLINICAL CHEMISTRY IN THE 1960S

1971 — George Williams, chair of the Department of Biochemistry, suggests that Clinical Biochemistry be absorbed into his department due to a stagnation of publication and recruitment.

## DEPARTMENT OF BACTERIOLOGY TO MEDICAL MICROBIOLOGY

The Division of Bacteriology splits from Pathology to become its own department chaired by Phillip Greey.

A BIOCHEMISTRY LAB IN MSB CIRCA 1970



The Department of Bacteriology changes its name to the "Department of Medical Microbiology".

The Department of Medical Microbiology merges with the Department of Microbiology-Parasitology after another vote.

1951



1970 — Norman A. Hinton is appointed the third Chair after previously refusing the post due to lack of funding and resources. During his tenure, the department increases research funding and the number of tenured faculty positions. He also creates cross appointments with the Department of Microbiology in the School of Hygiene and laboratories at teaching hospitals.

1974

Staff of the Department of Microbiology-Parasitology, chaired by Rose Shenin, are willing to merge with Medical Microbiology, but staff of Medical Microbiology votes 22:13 against this action.

1981

1983

### CHAIRS OF PATHOLOGY

1896	John Caven
1900	John J. Mackenzie
1923	Oskar Klotz
1937	William Boyd
1959	John Hamilton
1961	Alexander Charles Ritchie
1975	Emmanuel Farber
1985	Malcom Silver

### CHAIRS OF BACTERIOLOGY/MICROBIOLOGY

1951	Phillip Greey
1967	Arthur E. Franklin
1970	Norman A. Hinton
1983	Leslie Spence
1992	John Penner

### CHAIRS OF CLINICAL CHEMISTRY

1909	John Leathes
1915	Andrew Hunter
1920	Victor John Harding
1935	Andrew Hunter
1947	James Dauphinee
1966	Allan Gornall
1977	David Goldberg
1988	Andrew Baines

### CHAIRS OF LMP

1997	Avrum Gotlieb
2009	Richard Hegele
2017	Rita Kandel

# HISTORY OF LMP 1994-2008

The Goudge Inquiry into Pediatric Forensic Pathology in Ontario publishes its report. This leads to a major revamp of the practice of forensic pathology in the province with Michael Pollanen and Avrum Gotlieb providing input to the commission. Changes include the establishment, in LMP, of Canada's first residency training program in Forensic Pathology, accredited by the Royal College of Physicians and Surgeons of Canada.

2007

An external review of LMP notes that the department has become "a pre-eminent department on a national and broader international scene".

THE ADMIN TEAM, CIRCA 2007



THE INCOMING RESIDENT AND FELLOWS RECEPTION, 2008



LMP becomes the second most successful clinical department in the Faculty of Medicine in terms of funding.

LMP FACULTY AT THE SUMMER STUDENTS POSTER PRESENTATIONS IN 2002



The first LMP Graduate Students Day is held and later that year, the LMP Residents Research Day. (These have now merged to form the LMP Research Day [LMPRC]).

The first LMP Reunion and Awards Banquet is held at Hart House. (now the LMP Annual Celebration of Excellence)

CLAMPS, the graduate student union, is formed.

LMP REUNION 2002



THE CLAMPS TEAM IN 2004



The Departments of Clinical Biochemistry, Medical Microbiology and Pathology form LMP, becoming the largest laboratory medicine and pathology department in Canada with Avrum Gotlieb as Chair.

1968

The Division of Experimental Pathology taught undergraduate and graduate students, with research focussed on the "molecular mechanisms underlying pathological processes, with emphasis on inflammation and immunopathology". They also supervised a histopathology service to the rest of the Faculty.

Henry Movat was at the time, the only Experimental Pathologist at UofT and reinvigorated the graduate program in the Department of Pathology.

Deciding to proceed with the merger, a new committee was struck to develop a plan.

2008

LMP Celebrates its 10th anniversary with an exhibition at the 58th Annual Meeting of Canadian Association of Pathologists.

LMP expands presence on the 6th floor of the Medical Science Building.

2003

Several faculty members fall ill with the SARS virus while treating patients.



A SUMMER STUDENT PRESENTS HER RESEARCH, 2003

2007

THE FIRST SPECIALIST PROGRAM IN PATHOBIOLOGY GRADUATING CLASS

The new Undergraduate Specialist Program in Pathobiology launches, as well as the LMP undergraduate summer research program. LMP becomes the first clinical department in the Faculty of Medicine to offer a full Specialist Program through the Faculty of Arts and Science.



UNDERGRADUATE STUDENTS AT THE LMP SUSHI NIGHT

2001

Undergraduate student Lena Koh helps found the LMP undergraduate student union - LMPSU. One of their best-known events is the LMP Sushi Night.



AVRUM GOTLIEB AT THE LMP SUSHI NIGHT

2004

2000

January 1: The LMP Executive Committee meet for the first time.

- Division Head of Clinical Biochemistry - Eleftherios Diamandis
- Division Head of Medical Microbiology - Donald Low
- Division Head of Pathology - Wedad Hanna
- Chair of Clinical Chiefs Committee - Laurence Baker
- Director of Research - Lowell Langille
- Graduate Coordinator - Dittakavi Sarma
- Director of Education - Douglas Templeton

1998

1997



AVRUM GOTLIEB AT THE LMP FACULTY RETREAT IN 2001

Avrum Gotlieb is appointed acting Chair of Clinical Biochemistry, Medical Microbiology and Pathology with the mandate to develop the merger and a strategic plan to be voted upon by all members of the three departments to create a new entity.

1996

1995

The first meetings are held between the departments of Pathology and Clinical Biochemistry to discuss a potential merger. The Pinkerton Committee is established by Dean Arnold Aberman to establish whether a merger is feasible.

**The Pinkerton Committee:**

- Peter Pinkerton (Pathology)
- Sylvia Asa (Pathology)
- Andrew Baines (Clinical Biochemistry)
- Larry Becker (Pathology)
- Peter Bunting (Clinical Biochemistry)
- Eleftherios Diamandis (Clinical Biochemistry)
- Ian Dubé (Pathology)
- Ori Rotstein (Surgery, Inst. Medical Science)

- Malcolm Silver (Pathology)
- Douglas Templeton (Clinical Biochemistry)
- Cecil Yip (Vice-Dean, Research, Faculty of Medicine)
- The committee also collaborates with Paul Sadowski, Chair of "The Medical Genetics - Microbiology Committee" regarding the issues of medical microbiologist being included in the merger.

1994

## LMP SNAPSHOT 1997

285  
FACULTY

212  
PRIMARY APPOINTMENTS

64  
GROSS APPOINTMENTS

9  
TENURED/TENURE STREAM

214  
LEARNERS

122  
DOCTORIAL GRADUATE STUDENTS

25  
RESIDENTS

67  
POSTDOCTORAL TRAINEES AND CLINICAL RESEARCH FELLOWS

\$10,923,359  
RESEARCH FUNDING FOR THE 1996/1997 ACADEMIC YEAR

Key areas of research include "cardiovascular disease, immunopathology and infectious diseases, neurobiology, endocrinology and metabolism, neoplasia, bone and connective tissue disease, clinical and molecular epidemiology and biotechnology".

# HISTORY OF LMP 2009-2016

**2009** Richard Hegele is appointed as the second chair of LMP. The Chair's Office and administrative staff relocate from the Banting Institute to the renovated departmental space on the Medical Sciences Building 6th floor.

**2009** RICHARD HEGELE AND THE ADMIN TEAM, CIRCA 2011

**2010** The LMP Strategic Plan 2010-2015 is launched

**2010** RICHARD HEGELE

**2011** The "Mississauga Academy of Medicine" launches at the University's Mississauga campus. As a result, LMP develops new relationships with community-affiliated sites (Trillium-Credit Valley and Lakeridge Hospitals) which leads to the hiring of several part time clinicians.

**2012** A contest is held to develop a tagline for LMP. Undergraduate Specialist Program in Pathobiology student, Ghassan Awad Elkaram, wins with "Investigating Disease. Impacting Health", which we still use today.

**2012** UNDERGRADUATE STUDENT, GHASSAN AWAD ELKARIM

**2013** LMP undergoes a very successful External Review and Rick Hegele is reappointed for a second term.

**2013** RICHARD HEGELE AT THE LMP ANNUAL AWARDS BANQUET 2012

**2014** The Cytopathology and Transfusion Medicine programs become Royal College of Physicians and Surgeons of Canada Areas of Focused Competence (AFCs).

**2015** Promotions workshops for faculty are launched to foster faculty development, led by Dr. Cathy Streutker. The workshops and support result in more women being promoted in LMP (up to 45% of senior promotions by 2021).

**2015** CATHY STREUTKER

**2015** Vision 2020: the LMP Strategic Plan 2015-2020 is launched

**2016** The Translational Research Program (TRP) is launched by the Institute of Medical Sciences (IMS), led by Joseph Ferenbok.

**2016** Kona Williams completes her training in LMP to become Canada's first Indigenous Forensic Pathologist

**2016** The Digital Laboratory Medicine Library is launched as an educational resource for pathology teaching. Richard Hegele leaves to become Vice Dean of Research and Innovation in the Faculty of Medicine. Avrum Gottlieb returns as interim chair and oversees move of some research labs to the new MaRS Discovery Tower and the 6th floor of MSB renovation which creates modern lab space.

**2016** THE OHH RESEARCH LAB IN MARS, 2023

**2015** THE MEKHAIL RESEARCH LAB IN MARS, 2023

**2010** Images from the Digital Laboratory Medicine Library

**2009** BANTING BUILDING

**2010** MSB BUILDING

## HOW THE MSB LABS HAVE EVOLVED

**LABS IN MSB IN THE 1970S**



A LAB IN MSB CIRCA 1970

**LABS IN MSB IN 2005**

MICHAEL OHH IN THE MSB LABS, 2005



A GRADUATE STUDENT IN THE MSB LABS, 2005

**THE MSB LABS TODAY**



THE MSB LABS TODAY (2023)

# HISTORY OF LMP 2017-2023

25  
YEARS  
OF LMP

2023

Dr. Purna Joshi, guest speaker at the LMPRC 2023 was a member of the first graduating class of the LMP Specialist Program in Pathology!



PURNA JOSHI SPEAKS AT THE LMPRC 2023

A new role of Vice Chair Wellness, Inclusion, Diversity and Equity (WIDE) is created, shared by Isabelle Aubert and Gino Somers as well as a Vice Chair Global Health, Michael Pollanen.

LMP launches the "Strategic Plan 2023-2028: enabling people to be their best" to fulfil LMP's mission to "prepare future leaders in laboratory medicine and pathobiology and improve the health outcomes of individuals and populations through the integration of innovative research, education, and clinical practice."

LMP holds its first ever Faculty Development Day.

A new program is launched in partnership with the Department of Computer Science – the MScAC in Artificial Intelligence in Healthcare, led by Anna Goldenberg.

2023



THE LMP FACULTY DEVELOPMENT DAY 2023



THE LMP VICE CHAIR COUNCIL 2023

2022

T-CAIREM receives the Champions Award for the Institution of the Year from AIMed.

Graduate student Atefeh Mohammadi wins the U of T 3-minute thesis competition and represents the University of Toronto at the Provincial level.

CLINICAL EMBRYOLOGY STUDENTS WITH TED BROWN (FAR LEFT) AND HEATHER SHAIPRO (FAR RIGHT), 2022



2022

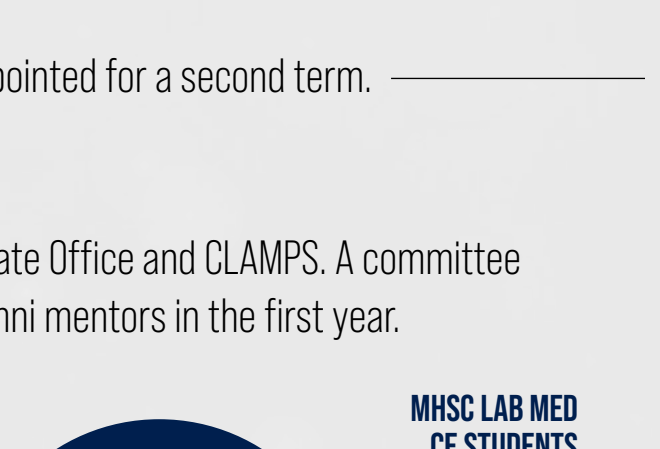
The MHS in Laboratory medicine holds its first white coat ceremony as Pathologists' Assistant and Clinical Embryology students start training in clinical laboratories.

On July 1, LMP turned 25 years old

2022

Paula Nixon is recognized for her work in the transition to CBME by being the first recipient of the Dan Stojimirovic Career Achievement Award from the Postgraduate Administrators Advisory Committee (PAAC) at U of T in 2022.

PATHOLOGISTS' ASSISTANT STUDENTS WITH FANG-I LU (FAR RIGHT), AVRUM GOTLIEB (MIDDLE) AND WILL TSUI (FAR RIGHT)



2021

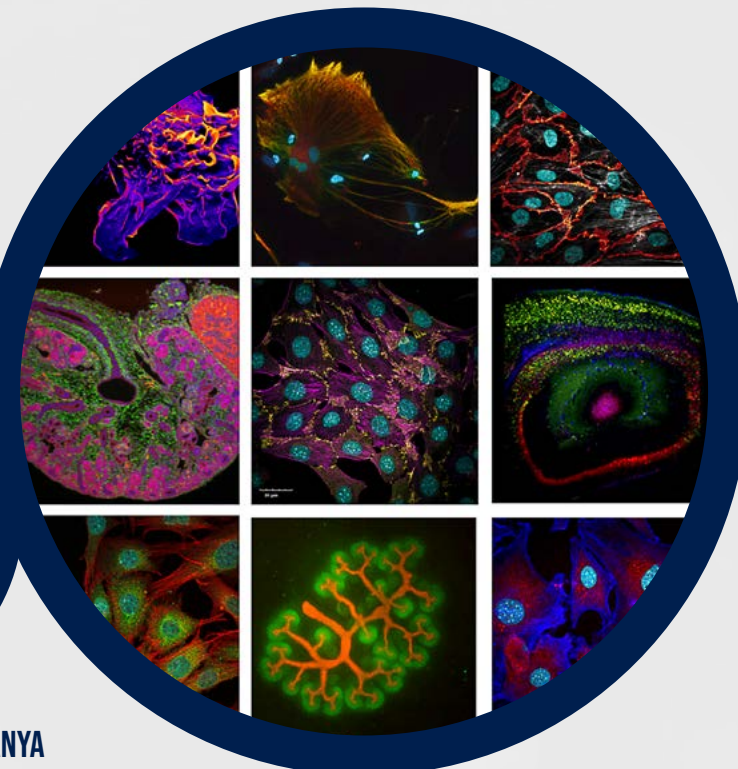
LMP undergoes another successful External Review and Rita Kandel is reappointed for a second term.

The LMP Art Competition is launched, showcasing microscopy images.

The graduate student mentoring program is launched jointly with the Graduate Office and CLAMPS. A committee of staff, students and alumni match over 40 mentees with student and alumni mentors in the first year.



GRADUATE STUDENT KUGANYA NIRMALARAJAH WITH HER ALUMNI MENTOR, ALISON FOO



2021 ART COMPETITION WINNERS

NELSON CABRAL



2021

Nelson Cabral awarded Staff Impact Award for leadership.

2020

Samira Mubareka and Robert Kozak are part of the team that isolates the novel coronavirus in Canada. An important step in understanding the virus at the centre of the COVID-19 outbreak and part of the significant impact made by LMP faculty and learners during the pandemic.



ROBERT KOZAK AND SAMIRA MUBAREKA

MHSC LAB MED PA STUDENT



2020

The MHSc in Translational Research (TRP) relocates to LMP from the Institute of Medical Sciences (IMS)

An LMP initiative, led by Stephen Girardin, leads to the creation of the internal grant review system in the Faculty of Medicine.

Leadership Training grants for faculty are launched to develop leadership skills in the department and partner institutes.

The summer undergraduate research program is rebranded and expanded by Jeff Lee, becoming the SURE Program.

The professional graduate program, the MHSc in Laboratory Medicine (Clinical Embryology and Pathologists' Assistant fields), is launched, led by Avrum Gotlieb, Juan Putra (now Fang-I Lu), Heather Shapiro, Ted Brown and George Yousef.

The Temerty Centre for Artificial Intelligence Research and Education in Medicine (T-CAIREM) is created. Expansion into artificial intelligence is cemented with recruitment of AI professors: Bo Wang and Rahul Krishnan in partnership with the Department of Computer Sciences.

Competency-Based Medical Education (CBME) for residency programs was implemented by the Royal College of Physicians. LMP's Forensic Pathology program is one of the first residency programs in Canada to transition to the new model.

2019

Myron Cybulsky receives the inaugural LMP Outstanding Mentor Award for his mentorship of Sonya MacParland.

MICHAEL POLLANEN WITH THE CHANG FAMILY AND FELLOWS



2019



THE TRP WITH FRIENDS AND FAMILY

2015 - 2020

382 faculty members in LMP publish over 10,800 scholarly articles.

RITA KANDEL



Rita Kandel, Chief of Pathology and Laboratory Medicine at Mount Sinai Hospital, is appointed as the third Chair of LMP.

2017

THE PATHOLOGY RESIDENT BOOTCAMP, 2019



The Raymond Chang Foundation is established for Forensic Fellowships - the first fund in the world that enables young physicians from the developing world to train in forensic pathology and ultimately strengthen forensic capacity in their own countries.

The Continuing Professional Development (CPD) program at LMP is launched for Pathologists and Pathology Fellows, led by Anna Plotkin.

Six new Vice Chair roles are appointed as the Executive Committee undergoes restructuring.

The LMP Faculty Mentorship Program launches.

The Quality Council is established, led by Khosrow Adeli, with the aim to harmonize clinical laboratory quality systems across the region.

The Pathology Resident Bootcamp is launched by Carlo Hojilla to help prepare trainees as they start their residencies.

The Wellness, Inclusion, Diversity and Equity (WIDE) committee is established, led by Isabelle Aubert.

## LMP SNAPSHOT 2021

445  
FACULTY

43%  
FEMALE

57%  
MALE

338  
PRIMARY APPOINTMENTS

107  
CROSS APPOINTMENTS

16  
TENURED/TENURE STREAM

487  
LEARNERS

93  
UNDERGRADUATES

96  
PROFESSIONAL MASTERS

215  
DOCTORAL GRADUATE STUDENTS

40  
RESIDENTS

43  
POSTDOCTORAL TRAINEES AND CLINICAL RESEARCH FELLOWS

217  
ATTENDEES AT CONTINUED PROFESSIONAL DEVELOPMENT (CPD) EVENTS

\$42,800,000  
RESEARCH FUNDING FOR THE  
2020/2021 ACADEMIC YEAR

Key areas of research include "Artificial Intelligence in healthcare, Brain and Neuroscience, Cancer, Cardiovascular, Genetics, genomics and proteomics, Hematopathology, Human development, aging and regenerative medicine, Infectious diseases and immunopathology, Metabolism and nutrition, Molecular and cellular biology"