GENERAL/CLINICAL PATHOLOGY PROFILE

GENERAL INFORMATION
(Sources: Pathway Evaluation Program, the Canadian Medical Residency Guide, Royal College)

General pathology is a specialty concerned with all aspects of laboratory investigation in health and disease that focuses on the causes, manifestations and diagnosis of disease. A pathologist may act as a consultant for clinical physicians and their advice is often sought in the treatment of patients. Pathologists apply a range of biomedical science knowledge to achieve a diagnosis.

General/clinical pathology is the specialty encompassing autopsy, surgical pathology, anatomical pathology, cytology and medical biochemistry, hematological pathology, medical microbiology and transfusion medicine.

General pathologists are competent in the selection and interpretation of diagnostic tests, in the principles of methodology instrumentation and quality control, and managerial skills appropriate to the direction of a clinical laboratory in a community hospital. They are involved in the day-to-day liaison between the laboratory and the clinical staff and serve as consultants to clinical colleagues in the application of the resources of the laboratory to help solve clinical problems.
GENERAL/CLINICAL PATHOLOGY PROFILE

Upon completion of medical school, to become certified in general pathology requires an additional 5 years of Royal College-approved residency training. This training includes:

• 1 year of basic clinical training;
• 2 years of Royal College-approved training in anatomical pathology that must include: 1 year of surgical pathology; at least 2 months of training in a formal, structured medico-legal autopsy program, which must provide exposure to an appropriate mix of medico-legal autopsy cases in sufficient numbers to meet training objectives; and 3 months training in cytopathology;
• 6 months of Royal College-approved training in each of medical biochemistry; hematological pathology, incorporating morphological hematology, coagulation, and transfusion medicine; microbiology, including bacteriology, immunology, mycology, parasitology and virology;
• 6 months of electives including experience in laboratories in smaller community hospitals and in freestanding clinical laboratories. It must include training in facilities with laboratory physicians practicing general pathology.

For more detailed training requirements go to:
http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route

Canadian Association of Pathologists:
www.cap-acp.org
<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Physicians</th>
<th>Phys/100k pop'n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland/Labrador</td>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>7</td>
<td>0.7</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>Quebec</td>
<td>43</td>
<td>0.5</td>
</tr>
<tr>
<td>Ontario</td>
<td>89</td>
<td>0.6</td>
</tr>
<tr>
<td>Manitoba</td>
<td>8</td>
<td>0.6</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>14</td>
<td>1.2</td>
</tr>
<tr>
<td>Alberta</td>
<td>38</td>
<td>0.9</td>
</tr>
<tr>
<td>British Columbia</td>
<td>88</td>
<td>1.9</td>
</tr>
<tr>
<td>Territories</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>CANADA</td>
<td>298</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Source: 2015 CMA Masterfile
Physicians/100,000 population in General/Clinical Pathology in Canada, 1995 to 2015

Source: CMA Masterfile
General/Clinical Pathologists by gender and year in Canada, 1995 to 2015

Source: CMA Masterfile
General/Clinical Pathologists by age and gender in Canada, 2015

Gender

- Male: 66%
- Female: 34%

Age Group

- 34 and under: 1%
- 35 - 44: 20%
- 45 - 54: 27%
- 55 - 64: 31%
- 65 and over: 21%

Source: 2015 CMA Masterfile
General/Clinical Pathologists by age and gender in Canada, 2015

- 65 and over: 18 Female, 42 Male
- 55-64: 26 Female, 62 Male
- 45-54: 21 Female, 54 Male
- 35-44: 25 Female, 31 Male
- 34 and Under: 11 Female, 1 Male

Source: 2015 CMA Masterfile
Main work setting of General/Clinical Pathologists in Canada, 2013*

- Community hospital: 41%
- Free-standing lab/diagnostic clinic: 17%
- Academic Health Sciences Centre: 15%
- Private Office/Clinic: 5%
- Other hospital: 2%
- Non-AHSC Teaching Hospital: 1%

* 2014 data for this specialty is not available

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours worked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct patient care without teaching component</td>
<td>26.3</td>
</tr>
<tr>
<td>Direct patient care with teaching component</td>
<td>3.3</td>
</tr>
<tr>
<td>Teaching without patient care</td>
<td>1.6</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>5.1</td>
</tr>
<tr>
<td>Health facility committees</td>
<td>0.7</td>
</tr>
<tr>
<td>Administration</td>
<td>4.8</td>
</tr>
<tr>
<td>Research</td>
<td>0.2</td>
</tr>
<tr>
<td>Managing practice</td>
<td>2.1</td>
</tr>
<tr>
<td>Continued professional development</td>
<td>2.7</td>
</tr>
<tr>
<td>Other</td>
<td>.4</td>
</tr>
<tr>
<td><strong>TOTAL HOURS PER WEEK</strong></td>
<td><strong>47.2</strong></td>
</tr>
</tbody>
</table>

* 2014 and 2013 data for this specialty not available

Source: 2010 National Physician Survey. CFPC, CMA, Royal College
Remuneration for **General/Clinical Pathologists** in Canada

**Primary payment method in 2013**

- 30% 90% + fee-for-service
- 25% 90% + salary
- 22% Blended
- 12% 90% + other*
- 10% NR

* Other includes capitation, sessional, contract and other methods

National Physician Survey, 2013, CFPC, CMA, Royal College
Satisfaction among **General/Clinical Pathologists** in Canada, 2013

- **Balance of personal & professional commitments**
  - Very dissatisfied: 16%
  - Dissatisfied: 17%
  - Neutral: 20%
  - Satisfied: 42%
  - Very satisfied: 6%

- **Current professional life**
  - Very dissatisfied: 16%
  - Dissatisfied: 3%
  - Neutral: 6%
  - Satisfied: 51%
  - Very satisfied: 15%

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
General/Clinical Pathologists who are Royal College, CFPC or CMQ certified in Canada, 2013*

- Royal College: 93%
- CFPC: 2%
- CMQ: 19%

Note: Physicians could indicate more than one certification body.

* 2014 data for this specialty is not available

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
Number of General/Clinical Pathologists who retired during the THREE year period of 2012 to 2014

Source: CMA Masterfile – year over year comparisons

Note: “Retired” is based on giving up licence and is therefore excludes those who have retired from clinical practice but are still licensed; it includes physicians who have temporarily given up their licence but may return to practice at a later date.
### Total and Ministry funded postgraduate MD trainees in 2014/15 – General/Clinical pathology

<table>
<thead>
<tr>
<th>Faculty of Medicine</th>
<th>Ministry funded</th>
<th>Total</th>
<th>Faculty of Medicine</th>
<th>Ministry funded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorial U N&amp;L</td>
<td>0</td>
<td>0</td>
<td>McMaster U</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Dalhousie U</td>
<td>3</td>
<td>3</td>
<td>UWO</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Laval</td>
<td>0</td>
<td>0</td>
<td>NOSM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Sherbrooke</td>
<td>0</td>
<td>0</td>
<td>U Manitoba</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Montréal</td>
<td>0</td>
<td>0</td>
<td>U Sask</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>McGill U</td>
<td>0</td>
<td>0</td>
<td>U Alberta</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>U Ottawa</td>
<td>0</td>
<td>0</td>
<td>U Calgary</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Queens U</td>
<td>0</td>
<td>0</td>
<td>UBC</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>U Toronto</td>
<td>0</td>
<td>0</td>
<td>Canada</td>
<td>40</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
First year and exiting postgraduate-MD trainees in 2014/15 – General/Clinical Pathology

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER

IMG – International Medical Graduates
GCMS – Graduates of Canadian Medical Schools
Postgraduate-MD trainees in 2014/15 – General/Clinical Pathology

• Total of 14 first year General Pathology trainees representing 35% of all General Pathology trainees.

• Total of 40 General Pathology trainees representing 0.3% of all Ministry funded trainees.

• Total of 1 visa trainee in General Pathology.

• Total of 8 General Pathology trainees completed postgraduate training in 2014.

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Of the 4 exits in 2013, all were known to be practising in Canada

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Stress associated with finding employment at end of residency

<table>
<thead>
<tr>
<th>Category</th>
<th>NR/NA</th>
<th>Not stressful</th>
<th>Somewhat stressful</th>
<th>Very stressful</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM resident</td>
<td>7%</td>
<td>43%</td>
<td>42%</td>
<td>8%</td>
</tr>
<tr>
<td>Other spec res</td>
<td>6%</td>
<td>20%</td>
<td>50%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: 2012 National Physician Survey of residents. CFPC, CMA, Royal College
Links to the organizations supplying information for this document

National Physician Survey
http://www.nationalphysiciansurvey.ca

Canadian Medical Association
http://www.cma.ca/pdc

Association of Faculties of Medicine of Canada
http://www.caper.ca/

Royal College of Physicians and Surgeons of Canada
http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route

College of Family Physicians of Canada
http://www.cfpc.ca

Canadian Institute for Health Information
http://www.cihi.ca