

# **Reduced Recruitment into Laboratory Medicine Specialties**

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**Explanation of the current state of affairs with  
suggestions for remedy**

Prepared for the BCALP by John X. O'Connell MD October 1999

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# Reduced recruitment into Laboratory Medicine Specialties

## Explanation of the current state of affairs with suggestions for remedy

### Background

Before 1993, entry into laboratory medicine postgraduate training programs occurred through an application process involving the candidate and the program. The pool of candidates for laboratory medicine programs included physicians currently completing their rotating internships, physicians involved in alternative post graduate medical training and physicians in practice. The application process did not include medical students. At that time, there was no national organization overseeing the applications and all arrangements were made between individual physicians and individual programs.

In 1993, the Canadian Resident Matching Service (CaRMS) introduced a coordinated process that provided a mechanism for linking potential applicants for post graduate medical training programs with the programs. The service was loosely based upon the US residency-matching program. However, CaRMS introduced a set of rather restrictive rules governing the entire application process. These are summarized briefly below.

1. The number of positions available in the match is linked to the number of graduating medical students in any year. This number varies from approximately 1100 to 1300 per year.
2. The internship component of Royal College programs is included in the residency program.
3. A rank order matching process is used to match applicants to the programs.
4. The process occurs in two phases or rounds.
  - (a) In the first round only graduating medical students of Canadian medical schools may participate.
  - (b) The second round is available to all other candidates. Only positions that remain unfilled after the first round are available for second round candidates.

The following table gives the results of recruitment into laboratory medicine specialties for the entire country for the last 4 years:

Year	Number of positions available	Number of positions filled in first round	Number of positions filled in second round	Unfilled positions
1996	36	15	7	14*
1997	43	9	9	25*
1998	25	9	7	9*
1999	25	8	9	8*

\*This figure may not be accurate since some positions may have been filled outside the match

## **What is happening at UBC?**

Before 1990, the Lab Medicine program had 29 positions. These positions were divided over four years since all of the residents had already completed at least a rotating internship before their acceptance into the program. Currently the Lab Medicine program has 21 positions. This number includes two PGY 1 rotating interns. This year six residents will graduate from the program and we will receive four (probably) PGY 1 slots for next year making 19 the total number of residents in the program. Last year UBC Lab Medicine had three PGY1 slots in the match. We were scheduled to receive only three for the year 2000 but we will have four because one of our PGY2 residents transferred to Psychiatry this year. Currently our 21 positions are divided as follows, 10 Anatomic Pathology (AP), 9 General Pathology (GP), 1 Hematopathology, and 1 Medical Microbiology. Last year UBC filled only one of its three slots in the first round of the match. This was the first year that this has happened at UBC; however this is the typical situation at most other Canadian Laboratory Medicine Residency programs. We did fill the remaining two positions in the second round of the match although we were very lucky to do so. The entire second round of the match is a difficult situation to read because candidates literally crawl out the woodwork when they discover that positions are available. This makes evaluation of the seriousness of any candidate's interest in laboratory medicine difficult to evaluate. I am currently able to assess the level of interest in Lab Medicine programs nationally for the forthcoming 2000 match since UBC is still regarded as one of the best programs in the country. Hence virtually all medical students who are considering a career in Lab Medicine will at least express an interest in our program. Currently I know of only FOUR medical students in the country that have expressed an interest in our program.

## **What is happening to the Pathology work force nationally and provincially?**

These figures were obtained from the Canadian Association of Pathologists 1999 documentation.

- In BC 21% of the practicing anatomical pathologists are older than 55.
- In BC 34% of the practicing general pathologists are older than 55.
- In other provinces the figures for practicing anatomic pathologists over 55 range from 21-41%.
- In other provinces the figures for practicing general pathologists over 55 range from 25-100%.

## **What are the reasons for the diminished national and local recruitment?**

1. The CARMS process has the effect of restricting the pool of applicants for Laboratory Medicine programs to fourth year medical students.
2. The lack of protected "reentry" positions for Laboratory Medicine programs eliminates the traditional candidate pool for the specialty.
3. The reduced role of the University of British Columbia Pathology Department (and other Universities) within the modified undergraduate medical school curriculum almost certainly results in reduced exposure of potential candidates to effective pathologist role models.
4. Basic science research opportunities that were once the exclusive domain of Pathology Departments have been extended into Medicine and Surgery Departments throughout the Universities. Academically inclined candidates see greater potential for autonomous research outside the highly structured and controlled atmosphere that exists within university affiliated hospital pathology departments.
5. Laboratory restructuring in British Columbia and across Canada has affected the working conditions for

pathologists adversely. This sends negative signals to potential recruits regarding the ability of pathologists to function as independent medical practitioners and suggest that pathologists are more vulnerable than other physicians to capricious health care reforms.

## **What can be done to reverse the continuing trend towards diminished recruitment into the Laboratory Medicine specialties ?**

There is no simple answer to this question. There must be a two pronged approach. Firstly throughout their training, medical students must have exposure to pathologists who are positive role models. The success of this strategy depends for its effectiveness not only on the pathologist but also on the working conditions under which the pathologist practices. Secondly physicians practicing in the community must have access to pathology residency training - an opportunity which is unavailable to them under the present matching system. A significant number of practicing pathologists entered their pathology training after they spent time working in the community as a family doctor or following transfer from another specialty training program.

The following steps are suggested.

1. Significant efforts must be made to raise the profile of Laboratory Medicine within the Medical School (UBC). Medical students must have positive, early exposure to laboratory medicine throughout their training. To this end, actions should be undertaken to acknowledge the value and importance of pathologists to the activities of the Hospitals, Universities and general medical community.
2. It must be acknowledged that even with positive exposure to laboratory medicine, most medical students will choose a specialty that is seen to involve more patient care. Having to choose so early in their training and with no perceived opportunity to change their one choice, medical students are reluctant to sign up for a pathology residency. Because of this and the historical fact that many pathology residents had left practice to enter a pathology residency, it is imperative that pathology residency “reentry “ positions be available.

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