POSTDOCTORAL CLINICAL BIOCHEMISTRY FELLOWSHIP PROGRAM

Division of Medical Biochemistry

The Department of Pathology and Laboratory Medicine
University of Alberta, Faculty of Medicine and Dentistry and
Alberta Health Services

April 2016

For Program-related enquiries please contact clinbioc@ualberta.ca.
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Appendix A – Application and Selection Process (includes Application Form)

Appendix B – Program Evaluation Forms
INTRODUCTION

Clinical Biochemistry is the branch of laboratory medicine concerned with the study of the measurement and interpretation of biochemical changes in human health and disease. The University of Alberta, Department of Laboratory Medicine & Pathology Postdoctoral Clinical Biochemistry Fellowship Program is a full-time, 2-year program that offers advanced training at the postdoctoral level for qualified individuals. Trainees will receive specialized training in clinical biochemistry with basic training in hematology, genetics, microbiology, and pathology. The Program is accredited by the Canadian Academy of Clinical Biochemistry (CACB) and start date is July 1.

Since the period of training in our Program is two years, the objectives detailed should be considered the minimum required for satisfactory training in this discipline. It is intended that the trainee should attend and participate in appropriate rounds of other clinical disciplines and have informal discussions with clinical biochemists and pathologists. At appropriate times during training, they should also participate in coursework, seminars, and meetings. It is expected that during the training period the trainee will gain theoretical knowledge of clinical and biochemical disease, general laboratory procedures, instrumentation, and analytical methods, as outlined in rotation objectives. By the end of training, the trainee will develop competence in the roles of medical expert, manager, communicator, collaborator, scholar, professional, and health advocate, meeting requirements of the Canadian Academy of Clinical Biochemistry's (CACB) 2013 Postgraduate Training Program in Clinical Biochemistry syllabus. Graduates of the Program are eligible to apply for certification by the CACB.

APPLICATION AND SELECTION PROCESS
Please see Appendix A.

TRAINING SITES
Through collaboration with government and private laboratories, our Program offers a unique multidisciplinary and innovative trainee-tailored program that provides opportunities to train in both hospital and community settings. Primary training locations for our Program will be within the Edmonton Zone. Access to external training sites may also be feasible based on trainee interest and available funds.

<table>
<thead>
<tr>
<th>TRAINING SITE</th>
<th>TYPE OF SITE*</th>
<th>CONTACT PERSON</th>
<th>TOTAL PROFESSIONAL STAFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Alberta Hospital (P)</td>
<td>Dr. Kareena Schnabl</td>
<td>1 medical biochemist, 3 clinical biochemists, 2 toxicologists, 4 medical geneticists, 2 clinical immunologists, 1 hematopathologist, 1 clinical microbiologist</td>
<td></td>
</tr>
</tbody>
</table>
**DynaLIFE**

<table>
<thead>
<tr>
<th>Location</th>
<th>Site Type</th>
<th>Mentor(s)</th>
<th>Role(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Alexandra Hospital</td>
<td>(P)</td>
<td>Dr. Matthew Estey</td>
<td>4 clinical biochemists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 medical microbiologist</td>
</tr>
<tr>
<td>Small Suburban/Rural Hospital</td>
<td>(O)</td>
<td>Dr. Anna Füzéry / Dr. Mireille Kattar</td>
<td>1 clinical biochemist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 general pathologist</td>
</tr>
<tr>
<td>Alberta Office of the Chief Medical Examiner (Forensic Toxicology Laboratory)</td>
<td>(O)</td>
<td>Dr. Craig Chatterton</td>
<td>2 forensic toxicologists</td>
</tr>
<tr>
<td>Red Deer Regional Hospital</td>
<td>(O)</td>
<td>Dr. Allison Venner</td>
<td>2 clinical biochemists</td>
</tr>
<tr>
<td>Calgary Laboratory Services</td>
<td>(O)</td>
<td>Dr. Isolde Seiden-Long</td>
<td>TBD**</td>
</tr>
<tr>
<td>Metabolomics Centre</td>
<td>(O)</td>
<td>Dr. David Wishart</td>
<td>1 analytical biochemist</td>
</tr>
<tr>
<td>(University of Alberta)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (P) = Primary Site, (O) = Optional Site  ** TBD = to be determined

**PROGRAM MENTORS**

Our Program is unique in that through collaboration with government and private laboratories, we are able to offer a multidisciplinary and innovative trainee-tailored program that provides opportunities to train in both hospital and community settings. The medical/scientific mentors of our core program consist of the individuals listed below. Elective rotations will provide the candidate with further opportunities to meet and work with additional mentors.

**Site 1: University of Alberta Hospital**

**Dr. Kareena Schnabl**, Clinical Biochemist  
Joint Head, Newborn/Prenatal Screening and Biochemical Genetics Laboratory  
Assistant Professor, Dept. of Laboratory Medicine & Pathology  
Clinical Biochemistry Fellowship Program Director

**Dr. George Cembrowski**, Medical Biochemist  
Division Director of Medical Biochemistry and Director of Point-of-Care Testing, Dept. of Laboratory Medicine & Pathology  
Associate Professor, Dept. of Laboratory Medicine & Pathology

**Dr. Penny Colbourne**, Clinical Toxicologist  
Clinical Professor, Dept. of Laboratory Medicine & Pathology

**Dr. Donald LeGatt**, Clinical Toxicologist  
Clinical Professor, Dept. of Laboratory Medicine & Pathology
Dr. Connie Prosser, Clinical Biochemist  
Clinical Professor, Dept. of Laboratory Medicine & Pathology

Dr. Josh Raizman, Clinical Biochemist  
Assistant Clinical Professor, Dept. of Laboratory Medicine & Pathology

Dr. Iveta Sosova, Biochemical Geneticist  
Acting Head, Newborn/Prenatal Screening and Biochemical Genetics Laboratory  
Assistant Professor, Dept. of Laboratory Medicine & Pathology

Site 2: Royal Alexandra Hospital

Dr. Anna Füzéry, Clinical Biochemist  
Assistant Clinical Professor, Dept. of Laboratory Medicine & Pathology  
Clinical Biochemistry Fellowship Program Co-Director

Site 3: DynaLIFE dx

Dr. Mathew Estey, Clinical Biochemist  
Assistant Clinical Professor, Dept. of Laboratory Medicine & Pathology

Mr. Trefor Higgins, Clinical Biochemist  
Director of Clinical Biochemistry  
Clinical Professor, Dept. of Laboratory Medicine & Pathology

Dr. Karina Rodriguez-Capote, Clinical Biochemist  
Assistant Clinical Professor, Dept. of Laboratory Medicine & Pathology

Dr. Dylan Thomas, Clinical Biochemist  
Clinical Lecturer, Dept. of Laboratory Medicine & Pathology

CURRICULUM

PDY-1

The first year of our Program emphasises the building of a solid theoretical clinical and analytical background, understanding how clinical/medical biochemists liaise with their clinical colleagues and laboratory staff, and understanding considerations that go into clinical and laboratory decision making. The trainee will (i) observe day-to-day laboratory activities during their laboratory rotations (see below), (ii) have discussions with clinical/medical biochemists and laboratory staff, (iii) attend laboratory and medical rounds, (iv) present at laboratory rounds, (v) shadow physicians, (vi) lecture to laboratory staff, and (vii) participate in selected day-to-day activities, small laboratory projects, and mentor-designed translational research projects. Mentors will ensure that
experience is gained in the performance of List 1, 2, and 3 analytes as outlined in Appendix 1 of the *CACB 2013 Postgraduate Training Program in Clinical Biochemistry* syllabus. Towards the latter part of the year, the trainee will also be included in the biochemistry on-call schedule and will be first on-call with a back-up senior staff member available for guidance, questions, and feedback.

The trainee will be expected to complete the following laboratory rotations in his/her first year:

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Duration</th>
<th>Location*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation and Safety</td>
<td>3 days</td>
<td>UAH</td>
</tr>
<tr>
<td>Preanalytical</td>
<td>4 weeks</td>
<td>UAH, RAH</td>
</tr>
<tr>
<td>Quality</td>
<td>4 weeks</td>
<td>UAH, DL</td>
</tr>
<tr>
<td>Urinalysis</td>
<td>2 weeks</td>
<td>UAH, RAH</td>
</tr>
<tr>
<td>High volume general chemistry</td>
<td>6 weeks</td>
<td>UAH, DL</td>
</tr>
<tr>
<td>Point-of-care</td>
<td>4 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Method evaluation</td>
<td>4 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Management and LIS/HIS</td>
<td>3 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Protein electrophoresis</td>
<td>3 weeks</td>
<td>DL</td>
</tr>
<tr>
<td>Toxicology/TDM/trace metals</td>
<td>8 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Endocrinology/Special chemistry</td>
<td>7 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Elective rotation</td>
<td>4 weeks</td>
<td>TBD**</td>
</tr>
</tbody>
</table>

*UAH = University of Alberta Hospital; RAH = Royal Alexandra Hospital; DL = DynaLIFE

**TBD = to be determined

The trainee will be expected to spend 50% of their time in the laboratory and on their rotation assignments. The remaining time should be spent on:

1. Required coursework;
2. Weekly seminars and monthly academic half days;
3. Attending, preparing for, and presenting at rounds;
4. Shadowing clinical staff in medical units;
5. Laboratory projects and translational research;
6. Participating in on-call service;
7. Attending operational meetings;
8. Attending scientific conferences.

**PDY-2**

The second year of our Program emphasizes definition of clinical problems in context of the laboratory, interpretation of results, development of consultative skills, and awareness of proper test utilization. Throughout the year, the trainee will complete brief rotations in mass spectrometry, prenatal and newborn screening, pediatric biochemistry and biochemical genetics, hematology, immunology, molecular diagnostics, and microbiology/virology (see below). The trainee will receive exposure to the remaining
List 1 analytes and also to additional List 2 and 3 analytes as outlined in Appendix 1 of the CACB 2013 Postgraduate Training Program in Clinical Biochemistry syllabus. The trainee will also continue with his/her on-call responsibilities. The remaining time will be filled with elective rotations in sub-specialty areas of interest to the trainee. Depending on available funds, the trainee may choose to visit external training sites such as Red Deer Regional Hospital or Calgary Laboratory Services.

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Duration</th>
<th>Location*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass spectrometry</td>
<td>4 weeks</td>
<td>University of Alberta</td>
</tr>
<tr>
<td>Prenatal and Newborn Screening</td>
<td>4 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Pediatric Biochemistry and Biochemical Genetics</td>
<td>4 weeks</td>
<td>UAH</td>
</tr>
<tr>
<td>Hematology</td>
<td>variable</td>
<td>UAH</td>
</tr>
<tr>
<td>Immunology</td>
<td>depending on trainee’s interests</td>
<td>UAH, DL</td>
</tr>
<tr>
<td>Molecular Diagnostics</td>
<td></td>
<td>UAH</td>
</tr>
<tr>
<td>Microbiology/Virology</td>
<td></td>
<td>Public Health PROV Lab, DL</td>
</tr>
<tr>
<td>Elective rotations</td>
<td>20 weeks</td>
<td>TBD**</td>
</tr>
</tbody>
</table>

**TBD = to be determined

TRAINEE EXPECTATIONS

Rotations
- Spend 50% of your time on clinical laboratory rotations.
- Meet at least weekly with your supervising mentor.
- Complete rotations with a rating of “Good” or better.
- Gain exposure to analytes, diseases, and methods listed in the CACB 2013 Postgraduate Training Program in Clinical Biochemistry syllabus.
- Complete an evaluation form (Appendix B) at the end of each rotation.

Coursework
- Satisfactorily complete two 3-credit courses available through the University of Alberta.
- Satisfactory completion requires a passing grade according to the standards set forth by the University of Alberta.
- Course selection by the trainee will be done in consultation with the Program Director, Co-Director, and/or the Clinical Biochemistry Fellowship Committee.

Research
- Participate in at least one (1) large (i.e. multi-month duration) research project per year. Oral/poster presentation of the results of this project at a national scientific meeting is required and publications are highly desirable.
- Participate in at least three (3) small research/clinical projects per year. Duration of such research projects may range from several days to several weeks. While
these projects may not lead to publications/presentations, they should have an impact on laboratory operations.

- It is highly desirable for at least one of the trainee’s projects to be management-oriented (e.g. lab utilization, clinical and/or lab audit).
- Design at least one (1) research project during the two years of the Fellowship.

**Education**

- Complete literature searches and textbook readings.
- Present at least one (1) time per year at Clinical Biochemistry Monthly Rounds.
- Present at least one (1) time during the two years of the Program at the Department of Laboratory Medicine rounds.
- Present at least one (1) time during the two years of the Program at clinical rounds.
- Present at least two (2) times per year to laboratory staff or Medical Laboratory Science (MLS) students.
- Obtain mentoring experience. You may either mentor a MLS student as s/he completes her/his fourth year research project or you may choose to develop and lead at least two case discussions in the Department of Laboratory Medicine and Pathology’s MLSCI460 course.

**Continuing Education**

- Participate in weekly seminars and monthly academic half day sessions.
- Regularly attend a variety of rounds (LMP rounds, Clinical Biochemistry Monthly Rounds, clinical rounds, etc.).
- Regularly attend educational webinars.
- Attend the annual ASCC fall meeting.
- Attend the annual ASHT fall meeting and possibly the annual spring meeting.
- Attend the annual scientific conference of the CSCC or the AACC.

**Other**

- Assume responsibility of the biochemist-on-call, with back-up from a senior staff member.
- Visit clinical facilities (e.g. Edmonton Clinic, ICU, transplant and dialysis units).
- Attend a range of laboratory meetings (e.g. quality, management, preanalytical).
- Meet with the Program Director and/or Co-Director at least once a month.
- Annually complete written and oral mock exams with a grade of 70% or better.
- Complete any remedial actions deemed necessary by the Clinical Biochemistry Fellowship Committee.

**MENTOR EXPECTATIONS**

Throughout the fellowship mentors are expected to:

**Prior to a Rotation**
• Assist in developing learning objectives for the trainee’s laboratory rotations.
• Make the trainee aware of available resources and suggested activities to facilitate meeting rotation objectives.

During a Rotation

• Meet with the trainee at least once a week to discuss instruments, reagents, methodology, and quality control as well as matters relevant to the ordering, patient preparation and interpretation of investigations pertinent to each area of the laboratory.
• Discuss with the trainee all consultation requests related to the area.
• Involve the trainee in physician/patient/laboratory interfacing.
• Arrange opportunities for the trainee to visit and observe clinical units.

After a Rotation

• Complete an evaluation form (Appendix B) of the trainee’s performance during the rotation and review this assessment with her/him.
• Send a copy of the completed and signed evaluation form to the Program Director or Co-Director for safekeeping.

Mentors will also be expected to participate in tutorial of the trainee through weekly seminars, monthly academic half day sessions, and by guiding the trainee in research projects. Once a year mentors will be asked to submit questions and serve as examiners for written and oral mock exams to be taken by the trainee.

EVALUATION
Trainees will be evaluated on an on-going basis to ensure that they are progressing as expected and to identify knowledge and/or experience gaps that require additional attention.

Trainees will be evaluated as they complete their rotations. At the end of each rotation, the mentor will fill out an evaluation form of the trainee’s performance during the rotation and will review this form with her/him. The mentor will then submit the signed form to the Program Director or Co-Director for safekeeping and for use in the trainee’s quarterly and/or biannual review.

Trainees will also be evaluated semi-annually (Appendix B) by the Clinical Biochemistry Fellowship Committee. This assessment will help direct learning needs of the trainee in preparation for the CACB written and oral certification examinations.

In addition to these evaluations, the trainee will also be asked to complete written and oral mock exams at the end of each year of the Program. The exams will be in the format of current CACB exams and will be used to assess the trainee’s knowledge as well as to provide practice in completing such exams.

REMEDICATION
Trainees accepted into our Program are expected to meet or exceed all Program requirements. Substandard performance will be identified through post-rotation evaluations, informal feedback from mentors and laboratory staff, and semiannual assessments. Examples of substandard performance include:

(i) Failing to achieve a passing grade in coursework according to the standards set forth by the University of Alberta.
(ii) Ratings of “Fair” or “Unsatisfactory” after completion of a rotation.
(iii) Failing to achieve a grade of at least 70% on the practice written and oral exams completed at the end of each year of the Program.
(iv) Rude behavior toward mentors and/or laboratory staff.

If a trainee performs below Program expectations, efforts aimed at rectifying deficiencies will be initiated by the Program Director or Co-Director in consultation with the Fellowship Committee and, if appropriate, Program mentors. Remedial processes will be dependent on the particular deficiency but may include:

(i) Completion of extra assignments that are related to a particular deficiency;
(ii) Additional rotation time in a particular area of the laboratory;
(iii) Auditing of a failed course or of a related course.

Any such remedial processes will be followed up with an assessment of the trainee's improvement or lack thereof. A trainee will only receive a Program certificate if s/he has satisfactorily completed all requirements of the Program including remedial processes.

ACADEMIC DISCIPLINE & APPEALS PROCESS
The University of Alberta has developed a detailed process for academic discipline and appeal for postdoctoral fellows. Please consult the University of Alberta Postdoctoral Fellows Office website (www.postdoc.ualberta.ca) for more details.

SUCCESSFUL PROGRAM COMPLETION
Successful completion of our Program entails meeting the following requirements:

1. Meeting all of the expectations set forth in this document;
2. Demonstration of a solid foundation in the analytes, methods, and skills listed in the CACB 2013 Postgraduate Training Program in Clinical Biochemistry syllabus;
3. Receipt of an overall rating of “Satisfactory” from the Clinical Biochemistry Fellowship Committee during the final evaluation session (Appendix B).

Upon successful completion of the Program, trainees will be issued a Certificate of Postdoctoral Study from the University of Alberta Postdoctoral Fellows Office.
APPENDIX A - APPLICATION AND SELECTION PROCESS

Individuals interested in our Postdoctoral Clinical Biochemistry Fellowship Program are invited to submit an application package that consists of a completed application form (see last two pages of this Appendix), a curriculum vitae, a personal letter of interest, academic transcripts and documentation of awarded degrees, a TOEFL score (if applicable), and three references.

Applicants will be evaluated by the Clinical Biochemistry Fellowship Committee and possibly additional clinical biochemists and/or toxicologists in Edmonton according to the following criteria:

(a) The applicant must have educational qualifications in biochemistry, analytical or pure chemistry, or related life sciences and earned a PhD, MD, or equivalent degree from a university belonging to the Association of Universities and Colleges of Canada, from a Canadian school of medicine, or from an equivalent international institution. Credential assessment is required for university degrees from outside of Canada or the USA.

(b) Knowledge of biochemistry, physiology, analytical chemistry, molecular biology, immunology, and genetics is ideal.

(c) Exposure to some, or all, of the disciplines of anatomy, pharmacology, toxicology, pathology, hematology, microbiology, biophysics, epidemiology, and biostatistics is helpful.

(d) Grades in relevant courses and overall average during graduate studies (min B+).

(e) The applicant must demonstrate ability for independent research and scholarly activity. Research record, productivity, and relevance of publications to clinical biochemistry will be considered.

(f) Curriculum development or teaching experience.

(g) Relevant experience in clinical biochemistry is desirable (e.g. medical laboratory technologist, laboratory scientist, research assistant, or research associate).

(h) Strong leadership skills, interpersonal communication skills, and community service are important secondary considerations.

(i) Enthusiasm and commitment of the applicant to the field of clinical biochemistry.

(j) Knowledge of the career is imperative and may be shown through evidence of visits to clinical laboratories, meetings with clinical biochemists or job shadowing.

(k) Some knowledge of the Edmonton fellowship program and of Alberta.

(l) Professional career goals fit with the profession of a clinical biochemist.

(m) Professionalism in working with teams of health care professionals.

(n) The applicant has Canadian citizenship or landed immigrant status.

A combination of the initial application package, telephone interviews, and on-site interviews will be used for selection of the successful applicant to be admitted into the Program.
POSTDOCTORAL CLINICAL BIOCHEMISTRY FELLOWSHIP PROGRAM

APPLICATION FORM

Part 1: Personal Information

Last Name: ___________________________ First Name: ___________________________

Current Address: ___________________________

Permanent Address: ___________________________

Home and Business Phone Numbers: ___________________________

Email: ___________________________

Citizenship: □ Canadian Citizen □ Permanent Resident □ Other (specify)

First Language: □ English □ French □ Other (provide TOEFL)

____________________________        ___________________________
Date Applicant Signature

☐ I permit the distribution of information contained within this application form for the purpose of application to the Postdoctoral Clinical Biochemistry Fellowship Program, University of Alberta, Faculty of Medicine & Dentistry, Department of Laboratory Medicine & Pathology.
Part 2: Personal Statement
State your short and long term career goals. Explain why you are interested in applying to this Postdoctoral Clinical Biochemistry Fellowship Program.

Part 3: Curriculum Vitae (CV)
Enclose a copy of your current CV. Please ensure to include the following information:

(i) Education
   - Undergraduate and doctoral or medical degrees
   - Postdoctoral training or specialty certifications

(ii) Clinical Experience
(iii) Teaching Experience
(iv) Research Experience
(v) Other Work/Volunteer Experience relevant to Clinical Biochemistry, Hematology, Molecular Biology, Microbiology, or Pathology
(vi) Publications including papers and abstracts
(vii) Awards and Accomplishments

Part 4: References
Please ask three individuals to send us letters of support to complete your application. Provide the names, positions, mailing addresses and email addresses of three individuals below.

1.

2.

3.

Part 5: Application Package (send to clinbioc@ualberta.ca)

☐ Application form
☐ Personal Statement
☐ Curriculum vitae
☐ Three letters of support
☐ Copies of undergraduate and graduate transcripts, medical degrees, specialty certificates etc. If education was obtained at an institution outside of Canada or the United States, an evaluation must be submitted from a credentials evaluation agency.

We thank all applicants for their interest in our Program, however, only those chosen for an interview will be contacted.
APPENDIX B – PROGRAM EVALUATION FORMS  (see following pages)
## Rotation Evaluation by Trainee

<table>
<thead>
<tr>
<th>Organization of the Rotation</th>
<th>Could Not Judge</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The overall workload of the rotation was appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was adequate space for me to complete my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was adequate access to internet resources, books, and personnel during the rotation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The rotation overview provided a clear overview of rotation-specific educational objectives and areas to focus on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was given clinical and laboratory responsibilities appropriate for my level of training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had opportunities to work in a team setting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I met with my mentor(s) on a regular (minimum weekly) basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I received feedback about my performance throughout the rotation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I received my evaluation by the end of the rotation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pedagogy**

| The rotation provided novel & useful learning opportunities. | | | | | | |
| The rotation afforded me new laboratory and clinical knowledge that is part of the CACB Syllabus. | | | | | | |
| I received opportunities to develop my judgment and decision making. | | | | | | |
| I received opportunities to develop my communication skills. | | | | | | |
My mentor(s) were up-to-date in their area of expertise, incorporating sound scientific and clinical knowledge.

Projects
There were projects available for me to work on during this rotation.
The project(s) were interesting and clinically relevant.
The project(s) required a reasonable time commitment.

Fellow-Faculty Interactions
My mentor(s) showed an interest in teaching and mentoring me.
My opinions were respected and I felt like a member of the team.
Discussions with my mentor(s) were relevant and useful.

Overall
Overall this rotation allowed me to meet most of the rotation-specific educational objectives.

Please comment on aspects of the rotation that you particularly liked or found useful:

Please comment on aspects of the rotation that posed a challenge or that you’d like to improve:

Are there any areas where you’d like to get additional experience or where you didn’t get sufficient training?
Trainee Name: ________________________  Mentor(s): ________________________________
Rotation: ____________________________  Dates: ____________________________________

This form is to be completed at the end of each rotation. If you select “Fair” or “Unsatisfactory” for any item, please explain your reasoning in the Comments section.

<table>
<thead>
<tr>
<th>Communication</th>
<th>Could Not Judge</th>
<th>Unsatisfactory</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses ideas clearly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frank, honest and objective.</td>
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<td>Reports and written assignments are concise, accurate and objective.</td>
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<td>Presents information with clarity and a balanced perspective.</td>
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<td>Demonstrates skill in presentations, both formal and informal.</td>
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</table>

| Temperament                                                                  |                 |                |      |      |           |           |
| Interacts cordially with academic staff, colleagues, and laboratory personnel.|                 |                |      |      |           |           |
| Displays tact in communication in all inter-personal relationships.          |                 |                |      |      |           |           |
| Responsible, fair and ethical.                                               |                 |                |      |      |           |           |
| Recognizes personal strengths and weaknesses and responds appropriately to criticism. |                 |                |      |      |           |           |
| Displays sensitivity towards other personnel.                                |                 |                |      |      |           |           |
| Works well in a team.                                                        |                 |                |      |      |           |           |
| Uses own initiative.                                                         |                 |                |      |      |           |           |

| Clinical and Analytical Knowledge                                           |                 |                |      |      |           |           |
| Sound knowledge of analytical and clinical aspects of clinical biochemistry in areas listed in the CACB 2013 syllabus. |                 |                |      |      |           |           |
| Familiar with current literature and guidelines.                            |                 |                |      |      |           |           |
| Able to apply his knowledge to solving analytical and clinical problems.    |                 |                |      |      |           |           |
| Shows balanced perspective in both practical and theoretical knowledge.      |                 |                |      |      |           |           |
| Shows skill in gathering data, in the choice and use of laboratory tests and interpretation of the results. |
| Knowledgeable about analytical methods other than those done in the training hospital. |
| Participates effectively as Biochemist on-call. |

**Problem Solving and Thought Processes**

| Demonstrates common sense and flexibility in applying knowledge to the solution of clinical and laboratory problems. |
| Receptive to new ideas. |
| Knows personal weaknesses and strengths and consults appropriately when help is required. |
| Demonstrates judgement and skill in interpretation of laboratory and clinical data and when making decisions. |
| Well-organized and keeps thorough records. |

**Special Assignments and Investigative Abilities**

| Carries out special assignments efficiently and effectively. |
| Participates in research projects wherever and whenever possible. |
| Consults literature appropriately. |
| Evaluates information critically and comes to logical conclusions. |
| Identifies areas where research is needed. |
| Able to prepare results for presentation or publication. |

**Administration**

| Understands clearly the role of the laboratory in patient care and the regulations, both provincial and hospital, which govern its operation. |
| Understands management matters relating to laboratory operations. |
| Understands safety procedures relating to laboratory operations. |
| Understands quality assurance relating to laboratory operations. |
| Understands financial matters relating to laboratory operations. |
| Able to develop a suitable organizational structure for the optimal operation of the laboratory. |
| Aware of where and how the laboratory fits into the overall |
Can you identify any areas in which the trainee needs further experience or training?

Do you have any concerns or positive feedback related to the Training Program at this time?

This evaluation was discussed with the Trainee.

_________________________  Date:  _________________ ______
(Trainee’s signature)

_________________________  Date:  _________________ ______
(Mentor’s signature)
CLINICAL BIOCHEMISTRY FELLOWSHIP PROGRAM

SEMIANNUAL TRAINEE EVALUATION BY COMMITTEE

Trainee Name: ___________________________ Date: ________________________________

Committee Members: __________________________________________________________________

This form is to be completed once every six (6) months or more frequently. If you select “Needs Improvement” for any item, please explain your reasoning in the Comments section.

<table>
<thead>
<tr>
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<th>Completed</th>
<th>In Progress</th>
<th>Not Started</th>
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<tbody>
<tr>
<td></td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

**ROTATIONS**
- Completion of rotations with a rating of “Good” or better
- Exposure to analytes, diseases, methods listed in the CACB 2013 Postgraduate Training Program in Clinical Biochemistry syllabus

**COURSEWORK**
- Passing final grades

**RESEARCH**
- Minimum one (1) multi-month duration project per year
- Minimum three (3) multi-day to multi-week projects per year
- Oral/poster presentation of results
- Impact on lab operations
- Publications (desirable)
- Management-oriented project (desirable)
- Design of a research project

**EDUCATION**
- Minimum one (1) presentation per year at Clinical Biochemistry Monthly Rounds
- Minimum one (1) presentation per 2 years at LMP Rounds
- Minimum one (1) presentation per 2 years at clinical rounds
- Minimum 2 presentation per
Mentoring experience

CONTINUING EDUCATION

- Regular attendance at a variety of rounds
- Regular attendance at educational webinars
- Attendance at ASCC fall meeting
- Attendance at ASHT fall or spring meeting
- Attendance at CSCC or AACC meeting once per year

OTHER

- Independently and effectively fulfills on-call duties
- Visits with various clinical units/departments
- Attendance at a variety of laboratory meetings
- Successful completion of mock written and oral exams once per year
- Successful completion of remedial processes
- Completed rotation evaluations (by trainee)

OVERALL RATING OF PROGRESS:

Satisfactory ________ Unsatisfactory ________

COMMENTS:

This evaluation was discussed with the Trainee.

_________________________ Date: ___________________
(Trainee’s signature)

_________________________ Date: ___________________
(Director’s signature)
Trainee Name: __________________________  Date: _________________________________
Committee Members: ____________________________________________________________

This form is to be completed at the end of the two year training program. If you select “Unsatisfactory” for any item, please explain your reasoning in the Comments section.

<table>
<thead>
<tr>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
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</table>

**ROTATIONS**
- Completion of all rotations with a rating of “Good” or better
- Exposure to analytes, diseases, methods listed in the CACB 2013 Postgraduate Training Program in Clinical Biochemistry syllabus

**COURSEWORK**
- Coursework with passing grades

**RESEARCH**
- Minimum of two (2) large (multi-month) projects
- Minimum of six (6) small (multi-day to multi-week) projects
- Oral/poster presentation
- Publications (desirable)
- Impact on laboratory operations
- Management-oriented project (desirable)
- Design of a research project

**EDUCATION**
- Minimum two (2) presentations at Clinical Biochemistry Monthly Rounds
- Minimum one (1) presentation at LMP Rounds
- Minimum one (1) presentation at clinical rounds
- Minimum four (4) presentations for laboratory staff or MLS students
- Mentoring experience

**CONTINUING EDUCATION**
- Regular attendance at a variety of rounds
- Regular attendance at educational webinars
- Attendance at ASCC fall meetings
- Attendance at ASHT fall meetings and/or spring meetings
- Attendance at CSCC or AACC meetings

**OTHER**
- Independently and effectively fulfills on-call duties
- Visits with various clinical units/departments
- Attendance at a variety of laboratory meetings
- Completed rotation evaluations (by trainee)
- Successful completion of all mock written and oral exams (grade ≥70%)
- Successful completion of remedial processes
- Satisfactory semi-annual evaluations
OVERALL RATING:  Satisfactory _____  Unsatisfactory _____

COMMENTS:

This evaluation was discussed with the Trainee.

_________________________  Date: _________________
(Trainee’s signature)

_________________________  Date: _________________
(Director’s signature)

FOLLOW-UP

Trainee was hired by: _________________________________________________________________

Trainee passed written CACB exam:  YES ____  NO ____
Trainee passed oral CACB exam:  YES ____  NO ____