### <u>APPLICATION FORM FOR FELLOWSHIPS</u>

Name of Institution: McGill Auditory Sciences Laboratory

Location: MCH

Type of Fellowship: **RESEARCH FELLOWSHIP** 

- Program Information (please append description):
  Number of fellowship positions requested 2 / year
  Start date July 1 until June 30
- Academic affiliation McGill University
- Name of hospitals involved in training Montreal Children's Hospital, McGill Auditory Sciences Laboratory

# **Objective**

To allow motivated academically oriented individuals to develop expertise in auditory sciences research.

#### Justification:

The McGill Auditory Sciences Laboratory is a well-established laboratory, recognized for its expertise in quality auditory sciences research particularly ototoxicity and middle-ear disorders. It offers a unique training opportunity for specialized auditory research in settings equipped with the latest equipment and technology.

## Main supervisor:

Dr Sam J Daniel, director McGill Auditory Sciences Laboratory

### Co-supervisors:

Depending on the nature of the project, other co-supervisors may be involved from various departments including but not limited to biomedical engineering, mechanical engineering, genetics, and surgery.

### **Eligibility**:

Candidates will be individuals having successfully completed or currently enrolled in an otolaryngology residency. We have also accepted previously individuals who have completed medical training in other fields who are interested in developing their research

skills. Candidate selection will be via a process of application, with selection based on letters of recommendation, academic achievements, and personal interview

Candidates are encouraged during their fellowship to enroll in a MSc or PhD program if that is their desire

# **Specific objectives:**

At the end of training, the individual will have acquired skills and knowledge allowing him/her to develop and sustain research skills in general with emphasis on hearing. This will be accomplished as follows

1. Designing and setting-up a research project:

The fellow will be mentored to set-up and design a specific research project. These usually fall within the general research program established by Dr Daniel.

The proposal will be presented in front of a research committee consisting of 3 reputable researchers that will strengthen the proposal and help the fellow finalize their proposal.

2. Acquiring and enhancing technical and surgical skills:

The candidate will be coached to develop and perfect surgical and technical skills necessary in the field of auditory research. This includes:

Animal model and animal handling techniques

Animal anesthesia

Auditory surgical procedures

Auditory assessment

Laser Doppler vibrometry

Audiometry, tympanometry

Histology

3. Acquiring expertise in auditory sciences:

Seminars and courses are provided to perfect the auditory sciences knowledge of the candidate. These include the following:

Auditory anatomy

Auditory physiology

Auditory anatomy

Auditory histology

Audiometry

The candidate will have an exam every 6 months to test and consolidate his/her knowledge in the auditory sciences.

# 4. Enhancing grant writing skills:

The fellow is expected to write a grant for submission to a peer-review committee. Throughout the fellowship, the fellow will be provided with multiple opportunities to enhance their grant writing skills.

## 5. Enhancing communication skills:

The fellow is expected by the end of his/her fellowship to have submitted at least one publication to a peer-reviewed journal.

Throughout the fellowship, the fellow will be tutored to improve his/her writing and verbal communication skills.

## 6. Selected readings program:

The fellow will be furnished a list of selected readings, which are maintained and kept up to date by the director of the McGill Auditory Sciences Laboratory. Additional resources and access to the medical literature and comprehensive research databases is available free of charge in the laboratory.

#### 7. Attendance at a national meeting

The fellow will be sent to attend to at least one major medical meeting during the fellowship year. This may be to present a paper or to attend a specialized

conference.

## 8. Teaching:

The candidate will attend all activities and meetings of the McGill Auditory Sciences Laboratory including Research Rounds as well as special lectures and events organized by the department of Otolaryngology.

**Evaluation**: The fellow will be evaluated every 6 months based on the accomplishments of the previously stated objectives.