



THE HOSPITAL FOR
SICK CHILDREN

August 4th, 2017

To whom it may concern

Re Arushri Swarup

Application for grant funding for MASc, Institute of Biomaterials and Biomedical Engineering,
University of Toronto

Dear Sir / Madam

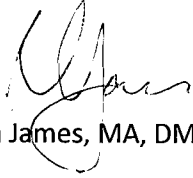
I am very pleased to write this letter of support for Arushri Swarup and her application for a grant to support her MASc on Development of Surgical Instruments for Endoscopic Ear Surgery through the IBBME at University of Toronto. With Dr Jan Andrysek I am her co-supervisor. I have known her for nearly two years, since she was part of an undergraduate team working on a Capstone Project at the Hospital for Sick Children.

Arushri started working towards her MASc nearly one year ago. I have been very impressed with her organisation and progress to date. Without any prior medical training she has mastered not just an understanding of the intricate anatomy of the ear, but also an appreciation of the complexities and controversies surrounding different surgical approaches to the ear. This provides clear evidence of her academic ability. Her competence in this arena is demonstrated by the recent draft publication she prepared on her Needs Analysis for submission to a specialist otolaryngology journal. The manuscript was written in a scientific style eminently suitable for publication and will require very little editing before submission. This is an unusual achievement for any trainee, even surgical residents on an academic path. Her strong ability to communicate, which is of course so important in academia and beyond, was also revealed by Arushri's presentation at the World Congress on Endoscopic Ear Surgery at which she very clearly described her work on instruments to date and generated significant interest among the delegates.

Throughout the year, Arushri has been making methodical progress with her work as planned: the needs analysis is almost complete, after she overcame all the requirements for Research Ethics Board approval; virtual and printed temporal bone models (ie models of the ear) have been prepared after identifying and mastering the optimum software and printing processes; prototype instruments have been manufactured in accordance with the needs analysis. All of this has been accomplished by her own work with little support, also an impressive achievement in so short a time. The next steps of her project include refinements to the prototypes based on testing in the models, followed by validation exercises in which she will assess task completion by surgeons on cadaveric models with the new instruments in comparison with currently available instruments. Based on her performance to date I have no doubt that Arushri will complete this work to the highest standard and in good time.

I cannot imagine any student working to a higher standard on this project and fully endorse consideration of grant support to allow her to complete her MASc. Please feel welcome to contact me for any further information.

Kind regards

A handwritten signature in black ink, appearing to read 'Adrian James', written in a cursive style.

Adrian James, MA, DM, FRCS(ORL-HNS)

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