

**RDLP#****Disclosure Date:**

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# Invention Disclosure Form

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Please list all SickKids personnel that have made an inventive contribution to this disclosure. All SickKids contributors must sign and date the Invention Disclosure Form to initiate the review process. **In the absence of an indication to the contrary, it will be assumed that all SickKids contributors have an equal interest in the disclosed invention.**

## Non-confidential Invention Title

Steerable Endoscopic Ear Surgery Instrument

## SickKids Contributor #1 (Primary Contact for IP&C)

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## Collaborating Institution or Company

Please list all external (Non-SickKids) personnel that have made an inventive contribution to the invention. Please describe their contribution in the space provided.

## External Contributor #1

Name:		Institution/Company:	
Work Phone #:		Department:	
Work Fax #:		Title:	
Email:			
Contribution to technology?			

## External Contributor #2

Name:		Institution/Company:	
Work Phone #:		Department:	
Work Fax #:		Title:	
Email:			
Contribution to technology?			

Did you use materials, equipment, or software from another company/institution?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Company/Institution name:	_____	
Are there any Material Transfer Agreements related to this invention?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Where was the research carried out?	ENT department and CIGITI lab at SickKids Hospital	

## Sources of Grant Funding or External Sponsorship

Provide details regarding sources of funding that were used during development of the invention

Name of Granting Agency/Sponsor	Grant/Contract Number
SickKids Department of Otolaryngology – Head & Neck Surgery	
Institute of Biomaterials and Biomedical Engineering, University of Toronto, Director's Innovation Grant	
Harry Barberian Scholarship Fund, U of T	

## **Detailed Invention Description**

Please provide a detailed description of your invention in the space provided below, or attach a copy of a relevant manuscript describing your invention, complete with diagrams or drawings and copies of any relevant references. Please highlight the novel or patentable aspect(s) of the invention.

The invention allows the tip of the instrument to bend by rotating a finger piece on the handle. It can be adapted for suction and laser fibre orientation. Please refer to the attached detailed invention description.

## **Prior Public Disclosure**

Submitted to Journal:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Date:	___/___/___	Journal Name:	_____
Published:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Date:	___/___/___	Journal Name:	_____
Oral Disclosure	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Date:	29 / 04 / 2017	Location:	Bologna, Italy
Poster Presentation:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Date:	___/___/___		
Published abstract:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>				
Other Disclosure:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Date:	___/___/___	Describe:	_____

## **Commercial Advantages**

Describe the potential commercial advantage of the invention over existing technologies on the market, or how the invention meets an unmet market need. Please indicate below if there has been commercial interest and by whom.

Currently, tools for endoscopic ear surgery do not reach all areas of interest within the middle ear. To gain access to these regions, surgeons need to remove bone, and possibly the hearing bones which affects the patient's hearing ability. In order to access these regions of interest without removing bone, a tool with a steerable tip that can bend to reach objects while in the surgical field may help this problem.

This is also applicable for reaching structures during endoscopic sinus and skull base surgery with longer instruments and other areas of precision surgery, endoscopy, and interventional radiology.

Commercial interest: Integra