



RDLP#

Disclosure Date:

For administrative use only

Invention Disclosure Form

Submit Completed Form to: Vishan Sivagnanam
Industry Partnerships & Commercialization (IP&C)
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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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SickKids Contributor #4

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| Email: | | Signature: | |

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: | |
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| Contribution to technology? | | | |

External Contributor #2

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| 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? | 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 |
|---|-----------------------|
| Department of Otolaryngology – Head & Neck Surgery | |
| Materials and Biomedical Engineering, University of Toronto | |
| Harry Barberian Scholarship Fund, University of Toronto | |

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: <u>29</u> / <u>04</u> / <u>201</u> | Location: <u>Bologna, Italy</u> |
| 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