

**DR. AMIN KASSAM INVITES YOU TO ATTEND**

**THE NEW**

**360° Minimally Invasive Surgery Endoscopic  
Endonasal Course – Pituitary/Skull Base Approaches**

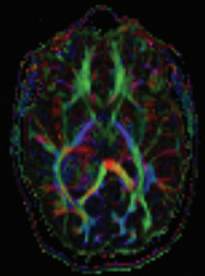
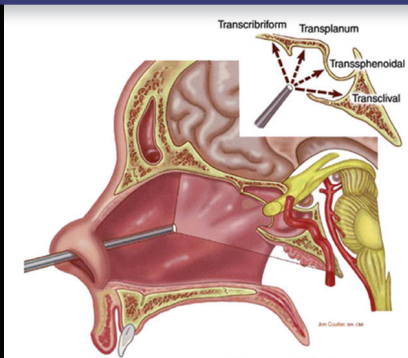
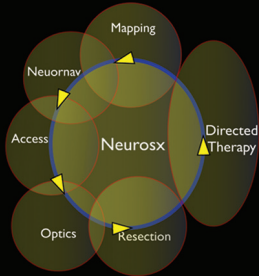
**AND**

**Introducing the “SMART Systems” Approach  
for Minimally Invasive Access to Subcortical  
Lesions –The Brainport**

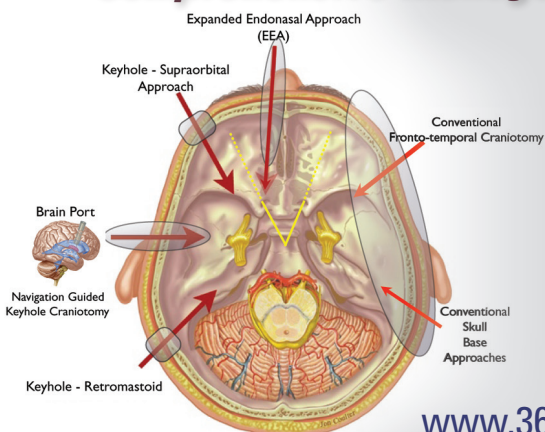
**May 31-June 3, 2012**

**WITH EMPHASIS ON  
Surgical Biometrics  
Resource Optimization**

**University of Ottawa  
Skills and Simulation Centre  
Ottawa, Canada**



***Introducing the Six Pillar Approach for  
Comprehensive Management of Subcortical Lesions***



**COURSE DIRECTORS**

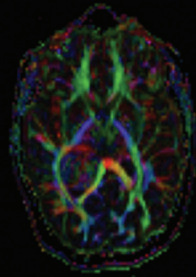
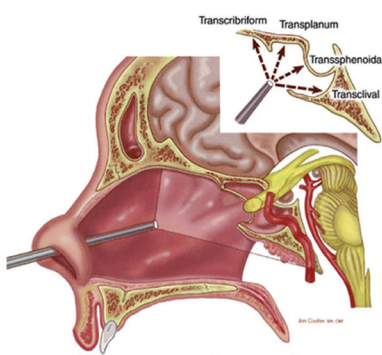
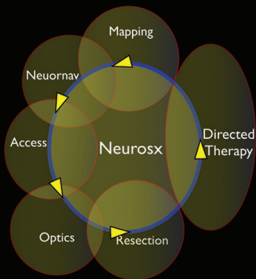
**Amin B. Kassam**

**Charles Agbi**

**Martin Corsten**

**Andre Lamothe**

[www.360-mind.com](http://www.360-mind.com)



## COURSE DESCRIPTION

With the recent evolution of innovative biotechnology there is a progressive convergence of these technologies to manage pathology affecting the sella, skull base and more recently the intraaxial subcortical white matter space. The confluence of these technologies has led to development of minimally invasive strategies via progressively smaller surgical corridors to reach and treat the lesion in a targeted manner. There is both a clinical and economical need to integrate these technologies and establish their value in delivering precise targeted treatment in an efficient manner while articulating these benefits through **Surgical Biometrics**.

While individual techniques and technologies have emerged the field is at stage, where integration into a systems approach that leads to a user-friendly method is needed to realize the full potential of each disparate component. This course takes the **six pillars** of Neurosurgical Innovation (Mapping, Navigation, Optics, Access, Resection and Targeted Therapy/Neoadjuvant) and offers a systems solution ("**SMART Systems Approach**"). The participant will be exposed systematically to each of these pillars or core competencies, in an effort to build a personalized delivery system that will create a template/guide for selecting the approach and technology required to treat the specific lesion in a targeted precise fashion, with measurable outcomes – biometrics.

**In addition, given the health care economic environment there will be an additional focus on the field of Surgical Biometrics. This is a rapidly emerging field that focuses on the impact and value added of surgical technologies. The participant will be exposed to the factors that affect surgical efficiency, patient flow, and impact on health system economics; this will allow for a critical assessment of the value added by any technology or system into a tangible deliverable, which is critical to the adaption and acquisition process.**

This comprehensive course will cover current indications, limitations and surgical techniques for endoscopic endonasal surgery of the **skull base, pituitary fossa, orbit and craniocervical junction**. The course will also cover the indications, limitations and surgical techniques for an evolving field of **intraaxial subcortical** surgery using white matter mapping/tractography and the use of the brainport access system and the more recent **exoscope** (not endoscope) optics platform.

Our faculty will present the technical nuances and technological requirements of these surgeries, using a modular anatomical system that can be translated to the dissection laboratory. Current indications, advantages, limitations and outcomes will be discussed. The course comprises a sequence of complementary didactic lectures, prosections, 3-D anatomical reviews and **6 hands-on cadaver dissection**. Two **live** surgical demonstrations (one for the **endonasal approach** and one for the "**SMART Systems**"/**Brainport**) will be scheduled pending logistical availability. These will be transmitted directly to the auditorium where the participants may interact with the surgeons and other members of the faculty.

***THE COURSE FEATURES 6 HANDS-ON DISSECTION LAB SESSIONS.***

# COURSE OBJECTIVES

**At the conclusion of this activity, participants should be able to:**

## Pituitary/ Skull Base

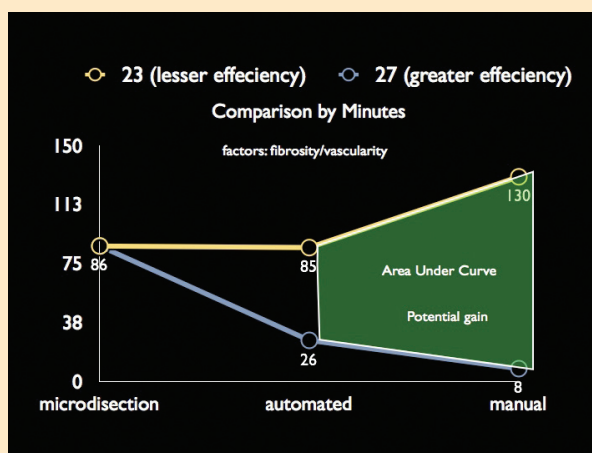
1. Understand the anatomic relationships of the sinonasal tract, orbit and ventral skull base from the endoscopic perspective (approach corridors)
2. Understand the indications and limitations of the sagittal plane expanded endonasal corridors to access the ventral skull base from the anterior skull base/pituitary fossa to the craniocervical junction)
3. Identify the indications and limitations of the coronal (paramedian) plane, expanded endonasal corridors to access: orbit, pterygopalatine, infratemporal fossa and parapharyngeal space)
4. Understand how to avoid and treat complications of endoscopic endonasal surgery of the skull base
5. Develop an effective strategy for tailored reconstruction using state of the art vascularized techniques
6. Assimilate and organize the corridors in concert with those afforded by conventional and minimally invasive lateral approaches, such as the keyhole surgery
7. Synthesize the principles of the extraaxial (ventral endonasal and lateral conventional/minimally invasive) corridors – “360° corridor surgery”

## Subcortical Intraaxial

8. Describe the evolving technology platforms of white matter fascicular mapping and subcortical anatomy (diffusion tensor imaging)
9. Understand the technique and current limitations to accessing the lesions
10. Develop a strategy to treat these lesions via targeted surgical brainport corridors
11. Understand the principles and limitations of selecting the optimal subcortical corridor
12. Identify the current immune targeted molecular treatments available and the potential ability to deliver these in situ – “6th Pillar.”

## Surgical Biometrics

13. Understand the “SMART Systems” approach that provides an integration and assembly of the six pillars of innovative technologies to guide tailored corridors for specific sella, skull base and subcortical lesion.
14. Describe the efficiency factors that impact Surgical Biometrics analysis.
15. Understand the resource needs for translating technology into clinical practice and value added analysis.



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Chairman, Department of Otolaryngology  
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***Charles Agbi, MD, FRCS(c)***

Associate Professor  
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***Andre Lamothe, MD, FRCS(c)***

Assistant Professor  
Department of Otolaryngology  
University of Ottawa  
Ontario, Canada

**GUEST FACULTY**

***Ricardo L. Carrau, MD, FACS***

Professor  
Department of Otolaryngology -  
Head & Neck Surgery  
OSUCCC - James  
Columbus, Ohio

***Daniel M. Prevedello, MD***

Assistant Professor  
Department of Neurological Surgery  
OSUCCC - James  
Columbus, Ohio

***Nancy McLaughlin, MD, PhD, FRCS(c)***

**UNIVERSITY OF OTTAWA FACULTY**

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University Of Ottawa  
Ontario, Canada

***Steven M. Gilberg, MD, FRCSC***

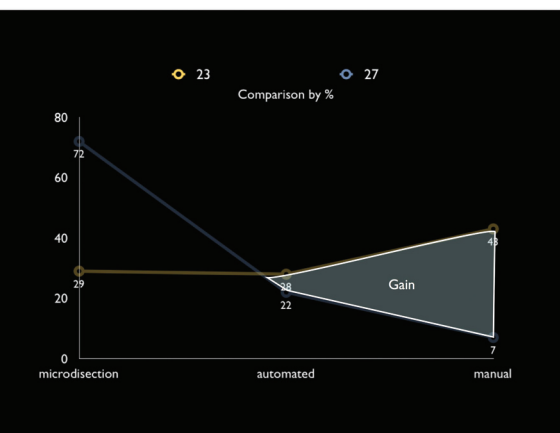
Associate Professor  
Chairman and Head of Ophthalmology  
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Ontario, Canada

***Thanh B. Nguyen, MDCM, FRCPC***

Assistant Professor  
Department of Radiology  
University Of Ottawa  
Ontario, Canada

***Vivek Patel, MD***

Assistant Professor  
Department of Ophthalmology  
University Of Ottawa Eye Institute  
Ontario, Canada



**TARGET AUDIENCE: Neurosurgeons, otolaryngologists-head and neck surgeons** and other **skull base/oncology surgeons** who are interested in learning endoscopic endonasal surgery of the skull base, pituitary fossa, orbit and craniocervical junction. Neurosurgeons and neuroradiologists interested in developing further knowledge of subcortical intraaxial space and white matter tractography and **hospital administrators** interested in surgical biometrics and resource optimization.

# AGENDA

## Thursday, May 31, 2012 • DAY 1

- 7:00 a.m. Registration and Continental Breakfast
- 7:45 Welcome and Course Overview
- 8:00 Surgical Biometrics 101: Operative Efficiency and Precision Profiles – The Voice of Change!  
*Amin Kassam*
- 8:30 Level I and II Approaches: The Endonasal Corridor – *Ricardo Carrau*
- 9:00 Principles of Endoscopic Endonasal Expanded Approaches – *Amin Kassam*
- 9:30 Modular Classification System of Endonasal Approach – *Amin Kassam*
- 10:00 Break
- 10:15 Reconstruction: Vascularized Nasal Flaps (Nasoseptal Flap, Lateral Nasal Flap, Turbinate Flaps and Free Flaps) – *Ricardo Carrau, Martin Corsten*
- 11:00 Approaches to the Sella and Parasellar Regions – *Daniel Prevedello*
- 11:30 **Lunch Lecture:** Sagittal Plane Modules I: Pituitary, Trans-planum, and Trans-cribiform  
*Amin Kassam*
- 12:30 p.m. Live Endonasal Surgical Case – *Amin Kassam, Martin Corsten*  
**Commentary:** *Charles Agbi, Andre Lamothe, Ricardo Carrau, Daniel Prevedello*
- 5:00 End of Day 1

## Friday, June 1, 2012 • DAY 2

- 7:00 a.m. Continental Breakfast
- 7:15 **Lab 1** (Level I-II) – Anatomical Prosection: Flaps and the Sagittal Plane: Trans-sellar, Trans-planum, Trans-cribiform Approaches – *Amin Kassam, Martin Corsten, Charles Agbi*
- 8:45 **Lab 1** Anatomical Dissection Level I-II
- 11:45 **Lunch Lecture:** Craniofacial Resection of Sinonasal Malignancy – *Ricardo Carrau*
- 12:15 p.m. 3-D Endoscopic Skull Base Anatomy: The Sagittal Plane – *Daniel Prevedello*
- 1:00 Sagittal Plane Modules II: Pituitary Transposition, Trans-clival, Trans-odontoid – *Amin Kassam*
- 1:45 Break
- 2:00 **Lab 2** Prosection: Sagittal Plane II: Pituitary Transposition Trans-clival  
*Amin Kassam, Martin Corsten*
- 2:30 **Lab 2** Anatomical Dissections: Sagittal Plane II – Pituitary Transposition Trans-clival
- 4:00 **Lab 3** Prosection: Sagittal Plane II: Trans-odontoid Craniocervical Junction  
*Daniel Prevedello, Charles Agbi, Ricardo Carrau, Amin Kassam*
- 4:30 **Lab 3** Anatomic Dissection: Sagittal Plane II: Craniocervical Junction
- 6:00 End of Day 2
- 7:00 **Course Dinner and Lecture** The 6 Pillars of Neurosurgical Innovation: Integration and Application to Minimally Invasive Neurosurgery – A Systems Approach – *Amin Kassam*

# AGENDA

## Saturday, June 2, 2012 • DAY 3

- 7:00 a.m. Continental Breakfast
- 7:15 Anatomical Basis for the Transpterygoid Approaches – *Ricardo Carrau*
- 8:00 3-D Endoscopic Skull Base Anatomy: Coronal Plane – *Daniel Prevedello*
- 8:30 Coronal Plane Modules – *Amin Kassam*
- 9:15 Break
- 9:30 **Lab 4** Anatomical Prosection: Coronal Plane – *Amin Kassam, Ricardo Carrau*
- 10:15 **Lab 4** Anatomical Dissections: Coronal Plane
- 12:30 p.m. **Lunch Lecture:** Prevention and Management of Neurosurgical Complications  
*Amin Kassam*
- 1:30 **Lab 5** Prosection: Infratemporal Fossa, Parapharyngeal Space  
*Amin Kassam, Daniel Prevedello, Ricardo Carrau, Martin Corsten*
- 2:00 **Lab 5** Anatomical Dissection: Infratemporal Fossa, Parapharyngeal Space
- 4:00 Break
- 4:15 Brainport: Principles of Intraaxial White Matter Corridor Surgery – *Amin Kassam*
- 5:00 Neuroradiological Principles and Anatomy of the Subcortical Intraaxial Space and White Matter Fascicles – *Thanh Nguyen*
- 6:00 Surgical Biometrics 102: Principles of Value Added Analysis & Hospital Efficiency/  
Patient Flow – *Amin Kassam*
- 6:30 End of Day 3

## Sunday, June 3, 2012 • DAY 4

- 7:30 a.m. Continental Breakfast
- 8:00 Principles of White Matter Corridors – *Vasco Da Silva*
- 8:15 Live Brainport Intraaxial Surgery – *Amin Kassam*  
*Commentary: Vasco Da Silva, Charles Agbi*
- 12:00 **Lunch Lecture:** Final Frontier: 360-Degree Minimally Invasive Brain Surgery –  
A Concept & Philosophy – *Amin Kassam*
- 1:00 **Lab 6** Anatomic Dissections: Intraaxial Brainport
- 4:00 Adjourn



# COURSE LOCATION



## University of Ottawa Skills and Simulation Centre

725 Parkdale Avenue 1st Floor  
Ottawa ON K1Y4E9  
Canada

A block of rooms has been reserved at:

### Fairmont Château Laurier

1 Rideau Street  
Ottawa, Ontario  
Canada K1N 8S7  
Tel +1 613 562 7079  
Fax +1 613 562 7033  
www.fairmont.com



## HOTEL RESERVATIONS

Call 1-800-441-1414 and mention the "Kassam Course" to get a special rate of \$219 per night (Canadian) plus taxes. Cutoff date to get the special rate is April 30, 2012.

Transportation will be provided each day from the Fairmont Chateau Laurier to the course.

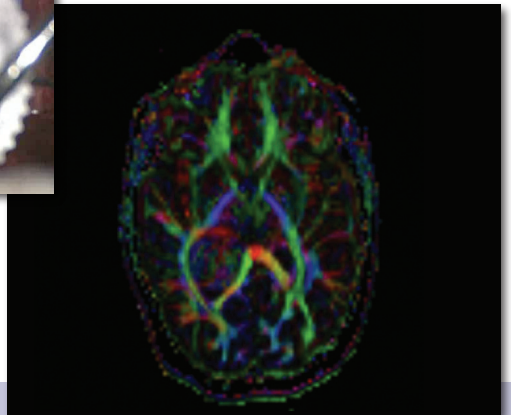
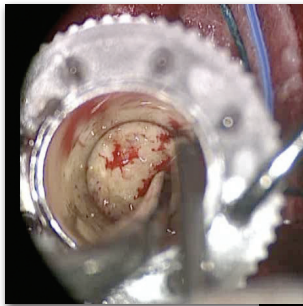
## ACCREDITATION

The University of Ottawa's Office of Continuing Medical Education is accredited by the Committee on Accreditation of Continuing Medical Education (CACME) to provide accredited CME activities for family physicians and specialists. This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada for up to **35.75** credits. Through an agreement with the U.S. Accreditation Council for Continuing Medical Education, it is also accredited for **35.75 AMA PRA Category 1 Credits™** towards the Physicians' Recognition Award of the American Medical Association (AMA). Physicians should claim only credit commensurate with the extent of their participation in the activity.

## REFUNDS

Cancellations must be received in writing by March 15, 2012 and will be subject to a \$200 processing fee. No refunds will be given after that date. Academic Event Management reserves the right to cancel,

discontinue or reschedule this program at any time and will assume no financial obligation to the registrants in the event of a cancellation. In case of cancellation, registration fees will be refunded in full.



## ACKNOWLEDGEMENT

This course is supported in part by educational grants from the following companies at press time: Stryker Canada, Karl Storz Endoscopy Canada, Medtronic, KLS Martin Group, NICO Corporation, Integra, Biomet Microfixation.

This educational course will involve the presentation of a medical device that is approved for market distribution in Canada but pending approval for market distribution in the United States.

# REGISTRATION

## 360° Minimally Invasive Surgery Endoscopic Endonasal Course – Pituitary/Skull Base Approaches

### TUITION (USD):

\$3,000 – Lectures & 6 Labs • \$5,000 – Team of 2 • \$1,500 – Didactic Only  
\$1,500 – Hospital Administrators

**Space is limited!** Please print clearly.

SPECIALTY

DEGREE

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POSTAL/ZIP CODE

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(AREA CODE) BUSINESS FAX

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Expiration

Signature

Send completed enrollment form to: **Academic Event Management**

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