

About iRSM

The Institute for Reconstructive Sciences in Medicine (iRSM) is a centre of excellence for reconstruction and rehabilitation of the head and neck with particular focus on interface biotechnology. iRSM established the Medical Modeling Research Laboratory (MMRL) as a part of its clinical research program in Medical Modeling and Analysis.

iRSM, formerly COMPRU, is a joint initiative of Alberta Health Services, Covenant Health and the University of Alberta.

www.irmsm-canada.com

Future workshops

- Advanced Techniques in Medical Modeling
- Custom Prosthetic Implant Design
- Digital Design in Facial Prosthetics
- Osseointegrated Implant Planning
- Orthognathic/Distraction Osteogenesis/Craniofacial Surgical Planning
- Medical Modeling in Head and Neck Resection and Reconstruction Surgery

To register your interest in these future workshops, please visit:

www.res-inc.com/mmrl.htm

iRSM, Misericordia Community Hospital
1W-02, 16940 - 87 Avenue
Edmonton, Alberta, Canada T5R 4H5

3D MODELING for Medical Applications

Fundamentals in Medical Modeling:
From Imaging to Solid Models

JUNE 1-2
2009



ADVANCED DIGITAL TECHNOLOGY
IN HEAD AND NECK RECONSTRUCTION

This workshop is associated with the
Advanced Digital Technology Conference

iRSM Institute for Reconstructive
Sciences in Medicine



Alberta Health
Services
Capital Health



Covenant
Health



UNIVERSITY OF
ALBERTA

iRSM Institute for Reconstructive
Sciences in Medicine

EDMONTON, ALBERTA, CANADA



Course Description

This Fundamentals Course is intended for the clinical and surgical user group with limited or no experience of 3D digital technology. These users include:

- Anaplastologists
- Dentists
- Maxillofacial Prosthetists and Technologists
- Orthodontists
- Prosthodontists
- Radiologists
- Surgeons (Cardiac, Head and Neck, Neuro, Oral and Maxillofacial, Orthopedic, Otolaryngology, Plastic and Reconstructive)

The workshop will provide a comprehensive understanding of how to use 3D modeling. This hands-on driven program will teach the fundamentals of using images and software to print models, and provide insight into the 3D technology world behind medical modeling. This program will offer an independent source of information in regards to the business considerations of medical modeling as well as introducing various software, hardware and material options.

Registration

RES seminars: www.res-inc.com/mmrl.htm

Registration will be limited to the first 10 paid applicants.

Registration Fee: \$1500 USD

Refund Policy: Requests in writing prior to May 1, 2009 - fees will be refunded less \$75 USD administration fee. No refunds after May 1, 2009.

Further Information

Program information contact: Leanne Mutlow

[email] leanne.mutlow@capitalhealth.ca [fax] 780-735-2658

Recommended Accommodation: Fairmont Hotel MacDonald

Quote reservation # RMS0509

[email] mac.reservations@fairmont.com

[phone] 1-800-441-1414

Registrants are responsible for accommodation arrangements.

Schedule

Day 1 // June 1st

7:30	Registration and Breakfast
8:00	Overview of Program/Introduction to Medical Modeling
8:30	Value of Medical Modeling in Surgery
9:00	Image Acquisition in Medical Modeling
9:30	Coffee Break
10:00	Software Applications in Medical Modeling
10:30	Printing Technologies and Materials in Rapid Prototyping
11:15	Business Considerations
12:00	Lunch at iRSM
13:00	How to manipulate data and print/process the model
14:00	Demonstration of further applications/ technology • Scanning • Printing • Haptics
14:30	Coffee Break
15:00	Surgical Case Studies
16:00	End of Day 1
18:30	Dinner

Day 2 // June 2nd

7:45	Breakfast
8:00	Review of Materials from Day 1
8:30	Hands on Exercises (data acquisition and data manipulation)
12:30	Lunch and Optional tour of iRSM
13:30	Hands on Exercises (data manipulation, printing)
15:30	Closing remarks
16:00	Adjournment

The workshop will be held in iRSM's Medical Modeling Research Laboratory (MMRL), which was established April 27th, 2005 through support from Western Economic Diversification Canada and Covenant Health.



Presenters

Dr. Johan Wolfaardt is a co-founder and Director of iRSM. He is appointed as a Full Professor in the Faculty of Medicine and Dentistry, University of Alberta, Canada.

Dr. Gordon Wilkes co-founded iRSM with Dr. Wolfaardt in 1993. He currently holds appointments as Director of Surgery at iRSM, Clinical Professor of Surgery and Divisional Director of Plastic Surgery at the University of Alberta, Canada.

Dr. Diana Shaw is Director of Business Development at iRSM. Dr. Shaw's previous experience includes a PhD in Craniofacial Genetics and six years in Business Development in the Biotechnology sector.

Dr. Hadi Seikaly is an Associate Professor in the Faculty of Medicine, University of Alberta, Canada, Director of the Division of Otolaryngology Head and Neck Surgery. He is the Regional Section Head for Otolaryngology Head and Neck Surgery for Alberta Health Services.

Dr. Pierre Boulanger is a Professor at the Department of Computing Science at the University of Alberta, Canada and Director of the Advanced Man Machine Interface Laboratory. He was awarded an iCORE industrial chair in Collaborative Virtual Environment in 2004.

Mr. Ben King is an Industrial Designer at iRSM. He has extensive experience in Computer-Aided-Design, Rapid Prototyping and Medical Modeling.

Mr. Andrew Grosvenor is a Maxillofacial Prosthetist and Technologist at iRSM. He has primarily focused on establishing and further developing the 3D digital technologies utilized in iRSM's research and patient treatment planning.

Ms. Akhila Regunathan completed her Master's of Science in Biomedical Visualization focusing on Facial Prosthetics. She is an Anaplastologist with iRSM.