



Return on Investment 2008 – 2009

Summary4
iRSM Progress 2008 – 20096
Clinical Capacity	11
Research Capacity	13
Teaching Capacity	16
Innovation and Service Capacity	17
Administration Capacity.	18
Appendices.	19

Summary

[Vision] iRSM is the international leader in innovation, research and clinical applications of reconstructive technologies to the human body.

[Mission] iRSM provides state of the art patient care through innovative health delivery models, adoption of leading edge technologies, integration of research and clinical care and knowledge management and translation.

[iRSM] Resources

	Budget	Actual
iRSM Budget	\$3.9M	\$3.9M
TOTAL FTE	29.56	26
TOTAL Number of Staff Days	6888	6033

[iRSM] Partner Contributions

	2008-2009 Budget	UA	Covenant	AHS	TOTAL Partner Contributions
EXPENSES					
Executive Administration					
Sub-total	\$ 381,075	\$ 75,600	\$ 178,450	\$ 127,025	\$ 381,075
Clinical Services					
Sub-total	\$ 3,131,211	\$ -	\$ 3,131,211	\$ -	\$ 3,131,211
Research Program					
Sub-total	\$ 415,000	\$ 232,500	\$ 182,500	\$ -	\$ 415,000
Medical Modeling Research Laboratory					
Sub-total		\$ -	\$ -	\$ -	\$ -
EXPENSE TOTAL	\$ 3,927,286	\$ 308,100	\$ 3,492,161	\$ 127,025	\$ 3,927,286
				Variance	\$ -

Other Contributions:

Capital Equipment	\$58K	Covenant (Site Allocation)
Capital Equipment	\$388K	Caritas Hospital Foundation
Research Network Support	\$40K	Caritas Hospital Foundation
Knowledge Leadership Support	\$15K	Caritas Hospital Foundation

[Our Needs]

- Adequate clinical and research facilities for immediate and long-term needs
- Enhanced clinical resources to manage extreme wait-list issues (underway)
- Enhanced research funding (research support, key academic personnel): \$460K incremental research support was identified in the Strategic Plan for 2008/2009, with an additional \$535K identified for 2009/2010
- Mechanisms defined to access required resources through partners
- Support funding for business development and marketing

iRSM Progress 2008 – 2009

[1. Exemplary Care] provide state of the art patient care through innovative health delivery models, adoption of leading edge technologies, integration of research and clinical care and knowledge translation.

<p>Key Results</p> <ul style="list-style-type: none"> ▪ Alberta will be a world leading centre for reconstructive care. Initial focus will be on the head and neck ▪ iRSM will be an international leader in the translation of discovery and innovation to increase patient outcomes 	<p>Strategies</p> <ol style="list-style-type: none"> 1. Leverage and integrate Alberta Health Services' excellence in reconstructive care by establishing iRSM as a formal, integrated collaborative Institute promoting convergence across disciplines and institutions 2. Ensure that the care patients receive is of the highest quality, accessible, and efficient, by leveraging the established inter-disciplinary team approach and enhancing the structured interdisciplinary clinic process 3. Ensure patient care decisions are data driven and based on the philosophy of planning for outcomes 4. Maintain a culture of quality by utilizing appropriate quality management mechanisms 5. Establish acceptable wait times and treatment trajectories and ensure appropriate resources are available to meet these parameters 6. Incorporate appropriate clinical, research, and operational leadership into the Institute's governance and management structure to ensure that all program elements, regardless of location and organizational affiliation, are optimally integrated and appropriately resourced to achieve the Institute's vision
<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Levels of patient satisfaction ▪ Wait times within acceptable parameters ▪ Demonstrated service coordination and integration between programs ▪ Demonstrated positive patient outcomes ▪ iRSM is emulated internationally as the gold standard for care and translational research 	
<p>2008 – 2009 Outcomes</p> <ul style="list-style-type: none"> ▪ Total Active Patients = 2066 ▪ Total Patient Visits = 2377 ▪ Total osseointegration cases increased to 66 (12% annual increase) ▪ 96% patient satisfaction (increase of 4% over 2007-2008) ▪ Two Prosthodontic resources secured and recruitment initiated as first step to managing clinical capacity issues ▪ 3 International Centres establishing functional outcomes programs modelled after iRSM (and under iRSM's direction) as part of the Head and Neck Research Network 	

[2. Research Excellence] better health care is the result of putting excellent research into practice. Pursuit of new knowledge will provide for innovative idea generation and exploration in a translational research environment with seamless interaction between clinical and research activities.

<p>Key Results</p> <ul style="list-style-type: none"> ▪ iRSM will have an internationally recognized research program ▪ iRSM will be an international leader in translating results of our world-class reconstructive sciences research into better outcomes for our patients. 	<p>Strategies</p> <ol style="list-style-type: none"> 1. Build the Research Program around existing world-class strengths in Priority Research Themes: <ul style="list-style-type: none"> • Modeling and analysis • Biomedical engineering • Treatment outcomes 2. Enhance initiatives to foster integration and collaboration between researchers, institutions and clinicians to capitalize on translational opportunities. 3. Create and capitalize on opportunities for internationally significant collaborative research. This requires a strong strategic presence in key international research and professional organizations 4. Focus on directed and investigator driven research. 5. Recruit and develop world-class clinician/scientists and researchers for each of the identified Priority Research Themes 		
<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Papers published ▪ Conferences/workshops/seminars organized ▪ Research alliances and networks ▪ Presentations ▪ Community participation ▪ Priority themes fully developed (funding/personnel/projects) ▪ Demonstrated translation of research into clinical practice 			
<p>2008 – 2009 Outcomes</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> ▪ 20 Publications (16 peer reviewed) ▪ 17 Invited presentations ▪ 6 Presentations, 2 posters (by submission) ▪ 19 Presentations with peer review ▪ 1 Book chapter </td> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> ▪ 2 International research networks established ▪ 1 Product development research centre established ▪ 5 Professional Board positions ▪ 3 Editorial Board appointments ▪ \$374K Research grant funding </td> </tr> </table>		<ul style="list-style-type: none"> ▪ 20 Publications (16 peer reviewed) ▪ 17 Invited presentations ▪ 6 Presentations, 2 posters (by submission) ▪ 19 Presentations with peer review ▪ 1 Book chapter 	<ul style="list-style-type: none"> ▪ 2 International research networks established ▪ 1 Product development research centre established ▪ 5 Professional Board positions ▪ 3 Editorial Board appointments ▪ \$374K Research grant funding
<ul style="list-style-type: none"> ▪ 20 Publications (16 peer reviewed) ▪ 17 Invited presentations ▪ 6 Presentations, 2 posters (by submission) ▪ 19 Presentations with peer review ▪ 1 Book chapter 	<ul style="list-style-type: none"> ▪ 2 International research networks established ▪ 1 Product development research centre established ▪ 5 Professional Board positions ▪ 3 Editorial Board appointments ▪ \$374K Research grant funding 		

[3. Talented People] educate, train, develop, recruit, and retain the best intellectual capital in the world. To be a preferred home for internationally acclaimed investigators, clinicians and students we must ensure a culture of collaboration, access to the latest technologies and facilities, and competitive support mechanisms.

<p>Key Results</p> <ul style="list-style-type: none"> ▪ iRSM will develop, recruit, and enhance the education of world leading clinicians and research scientists 	<p>Strategies</p> <ol style="list-style-type: none"> 1. Ensure that iRSM employs the highest level of clinical and research skill and intellectual capital in priority areas 2. Enhance training opportunities for clinical and research professionals 3. Develop appropriate recruitment and succession plans 4. Provide opportunities to enhance the education of tomorrow's health and technology leaders, and to apply new knowledge gained through clinical practice and research related to patient care (e.g. collaborative programs with other institutions, fellowship programs, post-doctoral training, and residency opportunities)
<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Numbers of HQP ▪ Internationally recognized researchers and clinicians ▪ Fellowships/post-doctoral fellows/joint appointments ▪ International visitors ▪ Staff turnover/years of service/awards ▪ Knowledge networks in place 	
<p>2008 – 2009 Outcomes</p> <ul style="list-style-type: none"> ▪ 7 Courses taught ▪ 7 Guest lectures ▪ 26 Students supervised ▪ Master's level course established in Surgical Design and Simulation ▪ Two new surgeons added to the Bone Conduction Amplification Program; budget secured to hire 1.0 FTE Audiologist ▪ New clinical supports hired: 1.0 FTE patient scheduler, 0.5 FTE Clinical Assistant, 0.5 FTE Surgical Processor ▪ Secured funding for additional prosthodontist and associated resources; recruited two international candidates for 1 vacant and 1 new prosthodontic positions ▪ Recruitment underway for Director of Research 	

[4. Outstanding Facilities and Resources]

physical and capital infrastructure is appropriate to the clinical service, knowledge creation, and product development priorities of the program. Our world class facilities give clinicians and researchers access to the latest technologies.

<p>Key Results</p> <ul style="list-style-type: none"> iRSM will provide world class infrastructure that will facilitate a patient centered approach to care, and promote program convergence and interdisciplinary activity 	<p>Strategies</p> <ol style="list-style-type: none"> Complete a comprehensive review of current infrastructure and capital needs (including all relevant regional program elements and activities: head and neck, rehabilitation services, other support services) Particular attention will be paid to developing single purpose, focused interdisciplinary facilities Provide appropriate high quality care to our patients in peerless clinical facilities Support excellence in research by providing the best research facilities in the world Identify opportunities to collaborate and share infrastructure and resources with other organizations in the research community Develop mechanisms for ongoing facilities planning and allocations to ensure accountability and efficient use of resources.
<p>Performance Indicators</p> <ul style="list-style-type: none"> iRSM has recognized world-class research and clinical facilities appropriate to its mandate and long term vision Leverage on new facilities and infrastructure Demonstrated integration of facilities across institutions 	
<p>2008 – 2009 Outcomes</p> <ul style="list-style-type: none"> iRSM’s short term facility needs included in Misericordia Hospital Main floor redevelopment plan (pending funding approval) 	

[5. Innovation, Knowledge Leadership, and Commercialization] focus on Priority Research Themes will shape opportunities for innovation, knowledge leadership and commercialization by aligning clinical and research interests.

<p>Key Results</p> <ul style="list-style-type: none"> ▪ iRSM will be an internationally recognized thought leader and will be a knowledge management hub for medical reconstructive technologies ▪ iRSM will successfully commercialize our research by building upon and marketing unique strengths 	<p>Strategies</p> <ol style="list-style-type: none"> 1. Pursue innovation that will improve the quality of care provided to patients and establish a leadership role in ensuring these innovations have global impact 2. Establish a base of activity in development of knowledge products and knowledge management 3. Create mechanisms to assess, protect, and market inventions arising from clinical and research activity at iRSM 4. Utilize commercialization expertise of partners (e.g. TEC Edmonton) 5. Ensure intellectual property policies are aligned with AHS, UA, and Covenant Health policies 6. Establish formal mechanism for identifying and developing projects and programs with clinical and commercial value 7. Ensure present projects are brought to fruition
<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Numbers of technologies evaluated ▪ Technology generated ▪ Patents applied for/issued ▪ Commercialization revenue ▪ Collaborative projects and partnerships ▪ Awards received ▪ Demonstrated proof of concept activity ▪ Established knowledge networks ▪ Knowledge transfer 	
<p>2008 – 2009 Outcomes</p> <ul style="list-style-type: none"> ▪ 1 Commercial partnership executed ▪ 2 Industrial partnerships established for prototype development ▪ 1 Workshop in medical modeling and surgical design confirmed (as part of 10 workshop series) ▪ 1 Conference co-hosted ▪ Approved service provider for Alberta Advanced Education and Technology's Innovation Voucher Program ▪ 257 Medical models built ▪ 91% Increase in contract revenue through MMRL ▪ 12.5% Increase in research projects supported by MMRL 	<p>Other</p> <ul style="list-style-type: none"> ▪ Successfully transitioned brand from COMPRU to the Institute for Reconstructive Sciences in Medicine (iRSM) ▪ Awarded Alberta Science and Technology Foundation (ASTech) Special Award for 2008 ▪ Established iRSM External Advisory Committee ▪ Enhanced iRSM's media profile ▪ Continued development of iRSM's collaborative partnership (University of Alberta, Covenant Health, Alberta Health Services)

CLINICAL CAPACITY¹



¹ (note: 2008-2009 calculations exclude vacant positions – 0.5 FTE Epidemiologists and 1.0 FTE Prosthodontist)

2008 – 2009 Objectives:

Exemplary Patient Care

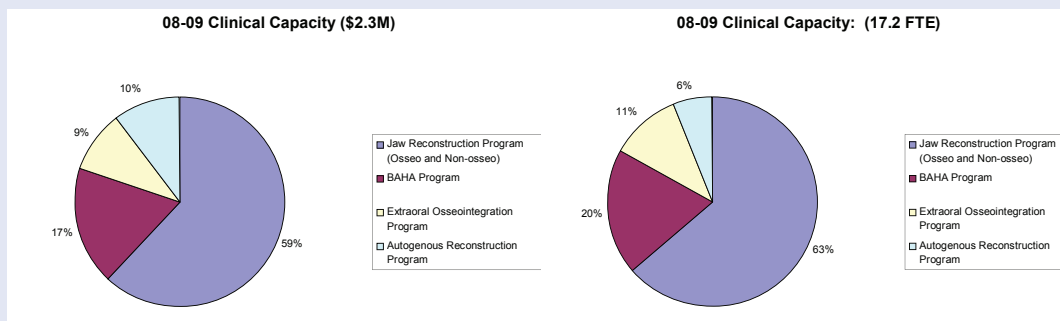
- Secure resources required to decrease patient wait-times and treatment trajectories
- Increase number of osseointegration cases

Resources:

TOTAL FTE	17.2
TOTAL Cost of Clinical Activity	\$2.4M
TOTAL Number of Staff Days	4004

Overall Clinical Outcomes:

- Total active patients = 2066
- Total patient visits = 2377
- Total osseointegration cases increased to 66 (12% annual increase)
- 96% patient satisfaction (increase of 4% over 2007-2008))
- Two prosthodontic resources secured and recruitment initiated



[A] Jaw Reconstruction Program

FTE	10.87
Cost of Activity	\$1.43M
Number of Staff Days	2519

Core Activities

- Prosthodontic Work-up
- Maxillofacial Prosthodontic Treatment
- Prosthodontic Treatment
- Intraoral Education
- Intra-oral Implant Surgery
- Functional Assessment
- Speech and Swallowing Therapy
- Resonance Rehabilitation
- Implant Maintenance
- Patient Care Coordination
- Interdisciplinary Clinics
- Jaw Reconstruction Implant Clinic
- Head and Neck Clinic

Outcomes

- 756 Total visits to program
- 106 New patients seen
- 95 Referrals
- 14 Intra-oral implant surgeries completed
- 8 Intraoral osseointegration education visits
- 125 Implant maintenance visits
- 11 Interdisciplinary clinics held
- 16 Prosthodontic work-up visits
- 148 Prosthodontic treatment visits
- 284 Functional assessments completed (or visits)
- 74 Speech and swallowing therapy visits
- 37 Resonance rehabilitation visits
- Jaw Reconstruction Implant Program management plan developed and implemented (for management of extreme wait-lists and treatment trajectories)

Gaps – Activities/Resources

- Clinical facilities insufficient to manage current and projected clinical activity
- OR availability insufficient to handle projected clinical activity
- Province Wide Services costing has not been updated since 2002 (90% increase in costs)
- 2.0 FTE prosthodontists (in progress) and associated clinical resources

[B] Bone Conduction Amplification Program

FTE	3.67
Cost of Activity	\$438K
Number of Staff Days	855

Core Activities

- Interdisciplinary BAHA™ Clinics
- BAHA™ Education
- BAHA™ Surgery
- Audiological Evaluation and BAHA™ Fitting
- BAHA™ maintenance

Outcomes

- 1117 Total visits to program
- 86 New patients seen
- 126 New referrals
- 42 BAHA™ education visits
- 669 BAHA™ maintenance visits
- 55 BAHA™ surgeries completed (20% increase over 2007-2008)
- 59 New BAHA's fitted
- 338 Audiological visits
- 9 BAHA™ clinics held

Gaps – Activities/Resources

- Additional Clinical Audiology resources (in progress)
- Province Wide Services costing has not been updated since 2002 (27% increase in costs)
- OR resources will be limited for further activity increases

[C] Extraoral Osseointegration (EO) Program

FTE	1.69
Cost of Activity	\$218K
Number of Staff Days	390

Core Activities

- Prosthodontic Work-up
- Anaplastology Consult
- Anaplastology Treatment
- EO Education
- EO Implant Surgery
- EO Implant Maintenance
- EO Prosthetic Treatment

Outcomes

- 411 Total patient visits to program
- 3 New referrals
- 8 EO education visits
- 126 EO maintenance visits
- 2 Extraoral implant surgeries completed
- 8 EO work-up visits
- 9 New prostheses completed
- 17 Prostheses remakes completed
- 221 EO treatment visits
- 48 EO prosthetic consults

Gaps – Activities/Resources

Vacant Anaplastology position limits clinical capacity (plan to address through Master's program in Surgical Simulation and Design)

[D] Autogenous Reconstruction Program

FTE	1.04
Cost of Activity	\$231K
Number of Staff Days	240

Core Activities

- Clinical Consult
- Autogenous Work-up
- Digital Planning
- Post-operative Clinical Care/Follow up

Outcomes

- 25 New patients seen
- 39 Referrals
- 5 Reconstructions completed
- 84 Total visits to the program

Gaps – Activities/Resources

- Insufficient prosthodontic resources to complete patient planning work-ups (in progress)

RESEARCH CAPACITY²



² (note: 2008–2009 calculations do not include vacant positions – 0.5 FTE Epidemiologists and 1.0 FTE Prosthodontist)

2008 – 2009 Objectives:

Research Excellence

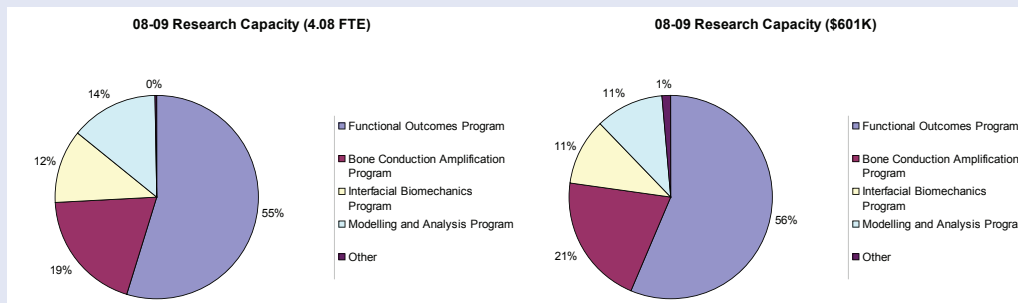
- Enhance research capacity in Priority Research Themes and Programs
- Enhance global knowledge leadership profile
- Establish innovative educational programs that will enhance clinical/technology/research interface mandate

Resources:

TOTAL FTE	4.08
TOTAL Cost of Research Activity	\$601K
TOTAL Number of Staff Days	945

Overall Outcomes:

- 20 Publications (16 peer reviewed)
- 17 Invited presentations
- 6 Presentations, 2 posters (by submission)
- 19 Presentations with peer review
- 1 Book chapter
- 2 International research networks established
- 1 Product development research centre established
- 5 Professional Board positions
- 3 Editorial Board Appointments
- \$374K Research grant funding
- > 70 Research projects in development or underway



[A] Functional Outcomes Program

FTE	2.2
Cost of Activity	\$216K
Number of Staff Days	520

Core Activities

- Assessment of function in patients with head and neck cancer throughout treatment to determine efficacy of surgical and prosthetic interventions
- Assessment of function in patients receiving dental rehabilitation with osseointegrated implants
- Treatment of speech and swallowing disorders related to interventions for head and neck cancer
- Assessment and treatment of individuals with articulation, swallowing and resonance disorders in an interdisciplinary prosthetic rehabilitation clinic
- Presentation and publication of clinical research results in the areas of surgical reconstruction, prosthetic intervention and prevention of xerostomia
- Establishment of an international research network in the area of functional outcomes (HNRN)

Outcomes

- 14 Peer reviewed publications (4 in review, 1 accepted, 1 in press, 8 published)
- 10 Invited presentations
- 1 Post-doctoral fellowship grant: Cultural Foundation of Finland - \$34,000 CAD
- AHFMR Scholarship Grant renewed: \$375K over three years
- Head and Neck Research Network on-going development
 - Awarded: EVO operating grant funding from the Academy of Finland: \$170,000 CAD/year for 3 years
 - Awarded: Faculty of Rehabilitation Medicine Support for the Advancement of Scholarship: \$12,000 CAD
 - Added 1 member centre: McGill University
 - Two planning meetings completed
 - \$15,000 in member contributions received
 - Database in development

Gaps – Activities/Resources

- Substantive research funding for translational research, collaborative network development
- Research support (grant writing, statistician, project management)
- Laboratory facilities insufficient for program growth
- Funding to support a Project Coordinator for the HNRN

[B] Bone Conduction Amplification Program

FTE	.79
Cost of Activity	\$80K
Number of Staff Days	184

Core Activities

- BAHA™ verification system development
- Prescriptive methods for bone conduction hearing
- Technology development of bone anchored hearing aids
- Technology assessment of bone anchored hearing aids

Outcomes

- 1 Poster (by submission)
- 5 Publications
 - 2 in press (1 peer reviewed)
 - 3 in review
- 1 Research grant (total value: \$3,800)
- 1 Award (total value \$1500)
- 3 Invited presentations
- 2 Submitted presentations with peer review
- 2 International Board positions held
- 1 Editorial Board appointment

Gaps – Activities/Resources

- Substantive research funding for translational research, collaborative network development
- Research support (grant writing, statistician, project management)
- Laboratory facilities insufficient for program growth

[C] Interfacial Biomechanics Program

FTE	0.48
Cost of Activity	\$41K
Number of Staff Days	112

Core Activities

- Load transfer to craniofacial osseointegrated implants
- Load transfer to bone – FEM and strain gauge technology
- Mechanical evaluation of implant components
- Non-destructive implant stability assessment
- Development of 3D biomechanical models for jaw function
- Development of active facial prosthetics

Outcomes

- 1 Poster (by submission)
- 1 Peer reviewed publication
- 2 Research grants (total value: \$11,640)
- 1 Award (total value \$1500)
- Oral Rehabilitation Outcomes Network (ORONET) continued development
 - NIH Planning grant prepared and submitted (iRSM/ UCLA/Mayo Clinic)
 - Participated in interdisciplinary planning meeting in France

Gaps – Activities/Resources

- Substantive research funding for translational research, collaborative network development
- Research support (grant writing, statistician, project management)

[D] Modelling and Analysis Program

FTE	0.57
Cost of Activity	\$41K
Number of Staff Days	126

Core Activities

- Advanced digital technology application for surgical design, planning and prosthesis construction
- Biomechanical evaluation and design of prosthetics
- Development of technology tools for data analysis, data aggregation tools and decision making
- Bone modeling and remodeling – mathematical modeling

Outcomes

- 3 Presentations (by Submission)
- 1 Poster (by submission)
- 132 Research projects supported (through MMRL)

Gaps – Activities/Resources

- Dedicated research capacity in modeling and analysis
- Substantive funding for translational research, collaborative network development
- Research support (grant writing, statistician, project management)

[E] Other

FTE	0.01
Cost of Activity	\$2K
Number of Staff Days	2.33

Core Activities

- Research related to:
 - plastic surgery
 - reconstructive surgery
 - maxillofacial prosthodontics
 - quality
 - ...and other areas that leverage and/or integrate activity in iRSM's Priority Research Themes (Functional Outcomes, Biomedical Engineering, Modelling and Analysis)
- Development of innovative surgical techniques

Outcomes

- Established Centre for Implantable Medical Device Development
 - international, interdisciplinary team established
 - letter of intent submitted to Alberta Ingenuity
 - project charters developed for two product development projects: implantable neuroinfusion device and fully implantable bone conduction amplification device
- 2 Awards
- 3 Professional board positions held
- 2 Visiting professorships
- 1 Peer reviewed publication
- 10 Invited presentations
- 1 Book chapter
- 1 Appointment to Editorial Board
- 1 Appointment to Editorial Board - Reviewer

Gaps – Activities/Resources

- Dedicated research leadership and funding for development of new or related areas of research
- Substantive funding for translational research, collaborative network development
- Research support (grant writing, statistician, project management)

TEACHING CAPACITY³

³ (note: 2008-2009 calculations exclude vacant positions –1.0 FTE Prosthodontist)

2008 – 2009 Objectives:

Talented People

- Establish innovative educational programs that will enhance clinical/technology/research interface mandate

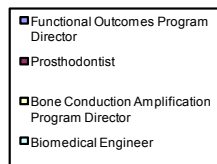
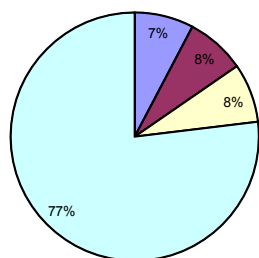
Resources:

TOTAL FTE	0.65
TOTAL Cost of Teaching Activity	\$63K
TOTAL Number of Staff Days	151

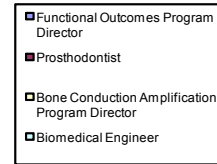
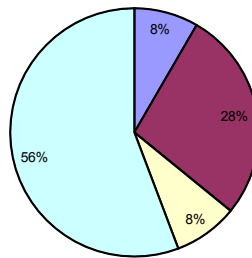
Overall Teaching Outcomes:

- 7 Courses taught
- 7 Guest lectures
- 26 Students supervised
- Master's level course established in Surgical Design and Simulation

08-09 Teaching Capacity (0.65 FTE)



08-09 Teaching Capacity (\$63K)



[A] Teaching and Student Supervision

Core Activities

- Teaching – Faculties of Medicine and Dentistry, Engineering, Rehabilitation Medicine, Arts (Industrial Design)
- Student supervision – practicum, co-op, theses

Outcomes

- Masters Program in Surgical Simulation and Design established in partnership with Faculty of Rehabilitation Medicine and University of Illinois at Chicago (2009)
- Teaching
 - 5 graduate level courses
 - 2 undergraduate level courses
 - 7 guest lectures
- 4 Master's theses supervised
- Student supervision
 - 16 graduate students
 - 7 undergraduate students
 - 1 post-doctoral fellow
 - 2 co-op students

Gaps – Activities/Resources

- Physical space to support on-site student involvement

INNOVATION AND SERVICE CAPACITY

2008 – 2009 Objectives:

- Increase development of new technologies with clinical and/or commercial application
- Position iRSM as leading knowledge provider in the utilization of advanced technologies for treatment planning
- Increase MMRL services – clinical, research, contract

Resources:

TOTAL FTE	1.8
TOTAL Cost of Innovation and Service Activity ⁴	\$495K
TOTAL Number of Staff Days	420

Overall Outcomes:

- 1 Commercial partnership executed
- 2 Industrial partnerships established for prototype development
- 1 Workshop in medical modeling and surgical design confirmed (as part of 10 workshop series)
- 1 Conference co-hosted
- Designated an approved service provider for Alberta Advanced Education and Technology's Innovation Voucher Program
- 257 medical models built
- 91% increase in contract revenue through MMRL
- 12.5% increase in research projects supported by MMRL

Core Activities

- Medical model production: clinical, research, contract
- Industry partnership development for research, product development and testing, clinical trials, commercialization
- Knowledge transfer and network development
- Project management and fund development

Outcomes

- Initiated comprehensive review of current technologies in development and opportunities for future development: assess market potential, industrial partnership opportunities (estimated completion April 2009)
- Completed commercialization agreement for Implant Manager with Redengine Inc.
- Workshop for 3D Modeling for Medical Applications confirmed (June 2009) – first in series
- Advanced Digital Technologies Conference held June 2008, co-hosted by iRSM and Morriston Hospital. More than 240 attendees.
- iRSM designated a service provider for Alberta Advanced Education and Technology's Innovation Voucher Program
- AHFMR provided \$10K grant for technology evaluation for iRSM's implant stability testing device
- Medical Model production:
 - 117 clinical
 - 132 research
 - 8 contract

- Established partnership with priMED Inc. to develop fit-test models for medical face masks: exploring funding potential; received HREB approval; project charter in development
- Established partnership with Factor II (Chicago, Illinois) for development of rhinoplasty model prototypes

Gaps – Activities/Resources

- Dedicated operating budget for MMRL (including business development and marketing support)
- Academic leadership – Modelling and Analysis Program Director
- Access to dedicated project managers, health economists, analysts

⁴ (note: includes estimated 2008-2009 MMRL Direct at \$200K - unbudgeted)

ADMINISTRATION CAPACITY

2008 – 2009 Objectives:

Talented People

- Recruit key clinical and research personnel – Director of Research, Modelling and Analysis Program Director, researchers – functional outcomes, bone conduction amplification, biomedical engineering

Outstanding Facilities and Resources

- Meet iRSM’s short term facility needs and complete long term plan
- Pursue opportunities for physical integration with surgical programs and better access to related researchers, research facilities and collaborators

Resources:

TOTAL FTE	2.2
TOTAL Cost of Administration Activity	\$282K
TOTAL Number of Staff Days	512

Overall Outcomes:

- Added key clinical and surgical staff to enhance clinical activity
- Completed brand transition to iRSM
- Increased iRSM’s media and community profile
- 1 ASTech Award

Core Activities

- Executive Leadership: operational and strategic
- Operational Administrative Support
- Marketing and Business Development
- Research Administration Support
- Innovation Administration Support

Outcomes

- Enhanced iRSM’s media profile
 - 5 institutional publications
 - 4 television news features
 - 1 radio feature
 - 2 industry publications
- Successfully transitioned brand from COMPRU to the Institute for Reconstructive Sciences in Medicine (iRSM)
 - iRSM website redevelopment launched September 2008.
 - iRSM visual identity materials completed
- Awarded Alberta Science and Technology Foundation (ASTech) Special Award for 2008
- Two new surgeons added to the Bone Conduction Amplification Program; budget secured to hire 1.0 FTE Audiologist
- New clinical supports hired: 1.0 FTE patient scheduler, 0.5 FTE Clinical Assistant, 0.5 FTE Surgical Processor
- Secured funding for additional prosthodontist and associated resources; recruited two international candidates for 1 vacant and 1 new prosthodontic positions
- Recruitment underway for Director of Research
- Established iRSM External Advisory Committee

- Completed short term facilities functional plan
- Continued development of iRSM’s collaborative partnership (University of Alberta, Covenant Health, Alberta Health Services)
- Quality
 - Patient Satisfaction Questionnaire completion rate up 40% for 2008/2009
 - 40% increase in Non-Conformance Report identification in areas other than Clinician Availability (suggests enhanced utilization of quality practices across iRSM’s activities)

Gaps – Activities/Resources

- Dedicated resources for business development and marketing activities

