THE OFFICE OF SURGICAL RESEARCH “REFRESH”:

STRATEGIC PLANNING VIS A VIS RESEARCH IN THE DEPARTMENT OF SURGERY

Respectfully submitted by Claire Temple-Oberle and the members of the Office of Surgical Research to

Dr. Sean Grondin and the Department of Surgery

Nov 10, 2017
FOREWORD

The members of the Office of Surgical Research (OSR) Committee are pleased to present this strategic planning document for consideration by Surgical Leadership. Our team began this process in January 2017. Supported by our chairman Dr. Grondin, we sought internal and external input into the challenges and successes of our surgeons as they balance research in a busy clinical environment. This report represents our recommendations to help move our membership into a more competitive position for grants and publications. It is meant to reflect the voices of the members, the OSR committee, and internal and external experts.

NOTE FROM THE DIRECTOR

As interim director of the OSR, I have had the privilege of leading the team in a vision and mission exercise, where we re-evaluated our values and defined our enablers. Our needs assessment included an external review, a membership survey, and three retreats. The strategy for 2018-2023 is the culmination of recommendations by surgeons and academics, and is presented alongside alignment with Cumming School of Medicine 2015-2020 strategic plan.

To realize this strategy in a climate of ever increasing administrative roadblocks to research, tightening grant opportunities, rising clinical demands, and the geographic sprawl of our over 400-member department will take vision, commitment, collaboration and perseverance. If approved, we are poised to operationalize this plan with understanding, flexibility and dedication.
EXECUTIVE SUMMARY

Multimodal data collection methods were used to engage with the voices of Department of Surgery (DOS) members and their research challenges. Genuine enthusiasm and participation in interactive methods provided unique insight into common frustrations and potential solutions for improving productivity of our membership. First and foremost is the desire to work within a culture of respect for research endeavors, such as funded protected time provided through GFT positions or an AFP, and a culture shift whereby colleagues cover pagers during protected research time. Culture change is recognized to be slow and will require consistent messaging from the top down, which will be aided by a well-equipped and staffed OSR as the operational arm of the DOS to enact the recommendations in this report.

Within our mission statement we recommend concentrating on teams rather than individuals, and programs of research rather than individual research projects. Departmental grant support should expand over a longer period of time, with an expectation of measurable Sectional support that could be realized in the form of, for example, grant dollars, a sectional statistician or a research assistant. Research infrastructure that is already in place, such as the institutes, research centers and data repositories, requires nurturance to optimize its integration, usefulness and efficacy with and for researchers.

Measurement will be key moving forward. ARO and block booking forms attract the information required to gauge productivity, but simple summary reports of publications by surgeon and section are unavailable, challenging our ability to know if a new strategy is impactful. Accurate measurement of grants and publications will add transparency to a surgeon’s research contributions and ensure accountability of grant funds. Guidance through formidable administrative barriers, such as research accounting and IRISS, would be keenly appreciated, via an OSR manager who is agile at navigating these systems.

Future thought to co-locating like-minded researchers would be desirable. Keen attention to celebration of success will take time and consistency of messaging. Equipping the OSR with staff to enable communication, reduce administrative angst, and provide bio-statistical support will go a long way to ensuring sustainability. Updating the grant structure to reflect four pillars (Basic Science, Health Systems, Clinical Research and Education) and providing two-year support should aid our surgeons in leveraging these funds to better position them for outside funding sources. Providing surgeon scientists with additional assistance when applying for tri-council or similar funding could help increase success in obtaining external funding. Finally, clarifying the purpose of research day and improving attendance will provide a key method to communicate, collaborate and celebrate our talent.
VISION AND MISSION

We repurposed the original OSR vision by incorporating the addition of the support of programmatic funding for pillars of excellence, adding emphasis to collaborative teams rather than individuals.

*The Office of Surgical Research exists to help surgeons achieve research excellence.*

*By fostering and facilitating programs aligned with the four pillars of research strength within the Department of Surgery, the OSR will educate, promote, and invest in surgeons working in teams on innovative and impactful research.*
VALUES

1. A culture that recognizes that surgeons’ contribution to research is critical to forwarding our specialty and improving quality care.

2. An opportunity for collaboration with other surgeons, researchers and institutes.

3. A strategy of timely communication of grant opportunities and deadlines.

4. A milieu that celebrates grant and publication successes.

5. An environment that provides time and space for research endeavors.

6. An opportunity to showcase research and to form inter-specialty linkages.

7. An atmosphere of accountability for grant funds and for objective measurement of productivity.

8. An OSR support team that minimizes frustrating barriers from side-tracking researchers.

HISTORICAL NARRATIVE

The OSR structure has been fairly stable since its inception, including a director, an associate director and a half-time administrative assistant. Original and current OSR roles are showcased in the website [http://www.ucalgary.ca/osr/](http://www.ucalgary.ca/osr/), including providing direction and support for discipline-specific research within the DOS, fostering collaborations between sections within the DOS and thematically aligned institutes, instructing our membership in the process of grant writing through workshops and statistical research consultation services, enhancing internal grant review processes to optimize chances for funding success at the level of the CIHR and other external sponsoring agencies, and offering assistance in formulating research policy, direction, goals, and priorities within the Department of Surgery in consultation with the Research and Surgical Executive Committees.

The directorship of the OSR has included Dr. R. Zernicke, Dr. J. Dort, Dr. D. Sigalet, Dr. R. Harrop, and Dr. F. Costello. Dr. E. Odonne-Paoulucci held the role of associate director,
spanning several directors up until 2015. Each made substantial contributions during their tenure, with examples of initiatives including development of the SSP program, upgrade of the grant review process, development of a Surgery Research Coordinators Interest Group, creation of a website (http://www.ucalgary.ca/osr/), distribution of a bimonthly OSR Newsletter, leveraging of industry ties, and restructuring of the OSR committee into portfolios such as grants, leadership and education.

**Funding opportunities** have expanded since the OSR’s inception to include the Surgeon Scientist Program (SSP), the Research and Education Development Fund, the Calgary Surgical Research Development Fund (CSRDF), and the Departments of Medicine and Surgery Research Development Fund. The OSR also organizes the annual **Surgeons’ Day** Research Symposium and awards the Basic Science and Clinical Research awards to staff surgeons at the annual Gala.

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**KEY FINDINGS FROM EXTERNAL REVIEW AND RETREATS**

Full retreat minutes are appended. In brief, the following four areas are highlighted:

**Culture** Broadly, our membership revealed a culture applauding clinical but not research productivity. Surgeons felt that a heavy clinical load and an emphasis on attaining wait times consumed research time. A custom of covering the surgeon’s pager for his/her research day by peers was non-existent. It was unclear to members why some members and some sections,
were highly productive, whilst others published little. No clear metrics for productivity were being collected, collated and presented back to members of the DOS. Accountability for research grant dollars awarded to members was weak.

Support Surgeons recognized that institute liaisons could likely be productive for them but had not explored this and did not know how. The OSR was felt to be underresourced to be of much use to the members. A sectional research plan was not in place for most sections. New recruits did not feel well supported early in developing grantmanship, securing funding, or navigating administrative roadblocks. Space was not optimal for like-minded researchers or programs to be co-located.

Barriers A multitude of administrative barriers were exhausting surgeons who had great, clinically relevant ideas but limited time and patience to devote to the intricacies of navigating IRISS, AHS research, medical records, legal, and research accounting. A lack of easy access to biostatistical support in research design and analysis was the other major hurdle identified.
Planning  Hiring practices were felt to not have been heavily weighted on academic performance, with few new hires having a background in research and or a track-record of research successes. Inequalities were verbalized with GFT and non-GFT classifications seen as have-s and have-nots, with some resentment voiced by non-tenured surgeons trying to produce strong clinical and academic research.

KEY FINDINGS FROM THE RESEARCH DAY SURVEY

Survey respondents preferred more emphasis on staff surgeon presentations at different levels of career (early, mid, mature). Select resident podium presentations were still desired, with an expansion of posters.

Closing ORs was endorsed as acceptable means to improve attendance. A live grant competition with awards going to projects with leads demonstrating good DOS citizenship was endorsed. The Libin venue was preferred. One respondent felt that the purpose of Research Day had been lost over time. The OSR needs to redefine the goal of the event and ensure the objectives and design are fit for purpose. Further details of the survey are in the appendix.
Rich debate ensued to define natural pillars of expertise which align with the strengths of our surgeons. Ultimately, pillars which had a combination of clinical importance, member strengths, alignment with institutes, and consistency with the CSM Strategy were chosen. These included **Basic Science**, **Health Systems** (ie Quality and Health Services Research), **Clinical** (ie Trials), and **Education**.

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<tr>
<th>Institutes and Affiliates</th>
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<tr>
<td><strong>Basic Science</strong></td>
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<td>McCaig Institute for Bone and Joint Health</td>
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<td>Hotchkiss Brain Institute</td>
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<td>Calvin, Phoebe and Joan Snyder Institute of Infection, Immunity &amp; Inflammation</td>
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<td>Libin Cardiovascular Institute of Alberta</td>
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<td><strong>Health Systems</strong></td>
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<td>Institute for Population and Public Health</td>
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<td>Alberta Center for Outcome Research in Neurosurgery (ACORN)</td>
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<td>Health Quality Council of Alberta</td>
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<td>Ward of the 21st Century (W21C)</td>
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<td><strong>Clinical</strong></td>
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<td>AIHS</td>
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<td>Southern Alberta Cancer Research Institute</td>
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<td>Arnie Charbonneau Cancer Institute</td>
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<td>Alberta Children's Hospital Research Institute for Child and Maternal Health (ACHRI)</td>
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<td>Surgical Strategic Clinical Network</td>
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<td><strong>Education</strong></td>
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<td>Office of Health and Medical Education Scholarship (OHMES)</td>
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GRANT STRUCTURE

The DOS annually supports $60K for the Surgeon Scientist Program (SSP), $100K for the Research and Education Development Fund, $10K for the Calgary Surgical Research Development Fund (CSRDF), and $10K for the Departments of Medicine and Surgery Research Development Fund.

Restructuring grant funding The committee felt that grant funding could be used more effectively by repurposing the total funds and changing the granting philosophy to supporting teams with clearly laid-out programs, rather than supporting one-off projects. Teams could then leverage pilot data in securing external funding sources. Moving forward, we suggest a reallocation of funds to a Principal Investigator and team with a thematic research plan over a two-year period.

The DOSDOM grant opportunity will be concluded, yet the SSP program is strongly supported as an investment in our resident members’ future ability to become surgeon researchers. The SSP will be adjudicated earlier in the year and before CIP applications are due, to minimize the load to residents in having to prepare multiple applications including masters, SSP and CIP. The CIP application form will be adopted for the SSP to streamline the resident next applying for the CIP if their SSP application is unsuccessful. Drastic simplification of all DOS grant applications is planned to avoid placing another onerous burden on busy surgeons.

Enhancing accountability An annual presentation update at an OSR committee meeting would be required for each program supported for its second year. A podium presentation at a DOS Research Day within 2 years of funding completion would also be required. At any point in time, four programs would be funded, including two new programs each year and two second year funding for the existing program. Ideal allocation would be one program from each pillar, for $25K each year. Program leads would require a letter of guarantee of support from their sectional chief who would demonstrate support in some tangible manner such as additional funding, protected time, statistician support or research assistant support.

Start up funds Funds were felt to be important for new recruits, to get them off to a good start and help them acquire pilot data to populate future grant applications for external funding. Improved sectional support, for instance sectional RAs, would also be key for new recruits to tap into. Funds would be made available for a defined time period after a grant application is approved by the OSR that describes a program of research aligned with one of the pillars. Similar accountability would be required as for the larger Departmental competitive grants.
STRATEGIC OBJECTIVES: KEY RECOMMENDATIONS FROM THE OSR

1. Establish the OSR role as that of education, communication, internal grant administration, bio-statistical support, and navigation through administrative barriers. This will require a significant investment in human capital, including a full time administrative assistant, director, an associate director, a grant administration/funding manager, and a biostatistician.

2. Partner with and support individual surgical sections to formulate their own research plan and onboard their own infrastructure such as RAs and statisticians. Have rotating sectional reports annually at quarterly business meetings.

3. Promote the OSR vision, including a culture shift to honor research and clinical work alike. Set the expectation that surgeons protect a day a week for research would be an example of a good first initiative.

4. Increase accountability of grant recipients via publication of annual academic merit system. Have grant recipients present at OSR meetings and at Surgeon’s Day.

5. Advocate for an AFP system to obliterate the GFT/non GFT divide and to improve recruitment of talented academic surgeons.

6. Set the expectation with new recruits that both academic and clinical excellence are required, with an initial well-supported probationary period to assess fit with the research mission of the DOS.

7. Provide a formal research mentorship program, linking new and seasoned surgeon researchers, and provide enhanced research guidance from the OSR for new recruits.

8. Celebrate research successes, even small grants or individual publications, via the OSR newsletter.

9. Advocate for space with a goal of siting institute affiliates within their home institutes and co-locating other groups as much as possible. Consider full office space for members with strong research commitments, and touch down space for those with fewer research commitments.

10. Foster institute collaborations, encourage programs of research using the novel granting system proposed, and reward team approaches to research.

11. Ensure the OSR supports surgeon scientists seeking external tri-council or similar funding with additional managerial, bio-statistical or other resources if needed.
ALIGNMENT WITH THE CSM STRATEGIC PLAN

Like the CSM’s ambitious but achievable strategic plan, the OSR’s plan aligns well, provided the members have the drive to make the most of the opportunities at the CSM and are dedicated to overcome the obstacles that have deterred clinical researchers in the past.

The CSM Strategic Plan of 2015-2020 describes strategic plan elements for Support of Faculty to enhance productivity. The CSM plan looks to enhance faculty members’ capacity for productivity, via establishing a faculty-wide bridge grant support program for scientists with CIHR and NSERC grants, and along these lines, we hope that our new pillar system and programmatic funding will provide preliminary data upon which our surgeons can build a strong application for tri-council funding. The CSM strategy delineates building an internal grant development and review system to enhance investigators research competitiveness. The OSR will similarly encourage surgeons to develop grant applications for the research awards, and supply rich grant feedback on the successful and unsuccessful applications to continue to educate our membership on grantmanship.

The CSM cites as key performance indicators the number of bridge grants converted into full CIHR or NSERC grants, dollar value leveraged, grants secured, and papers published. In the DOS we can similarly record and report productivity (see appended template adopted from Dalhousie), initially via grant dollars attained and publications. The ARO and block booking forms can be used to glean data, to facilitate annual individual discussions and aid faculty professional development at all career stages. These data will also provide our chairman with a research activity metric for each member and section, allowing celebration of high performing research teams, and identification and support of those with lower productivity.

Another CSM plan element is to enhance, appreciate and recognize outstanding contributions and successes. Our newsletter is well suited to recognize faculty publications and grant awards, and features a scientist in each issue. We also provide communication around grants available to researchers. The gala event in conjunction with the annual research day provides another opportunity for expanded awards for staff surgeons’ contributions to clinical and basic science. This can be further expanded to recognize contributions across our four research pillars.

The CSM plan also discusses Support for Learners, with expansion of the CIP described. The DOS continues to enjoy longstanding success rate at securing CIP funding. The OSR will improve the timing of adjudication of SSP funding to reduce workload for residents.
The CSM discusses Support for Research Enterprise. The foundation of the CSM commitment to research is embodied in its institutes and affiliates. For instance, the Western Canadian Microbiome Centre provides a germ-free environment to support applied research, and the Centre for Applied Health genomic builds the technological, bioinformatics and human resource capacity to support the province’s focus on personalized medicine. Genomics, bioinformatics, large-scale sequencing and web portal resources are also described. The DOS has surgeons currently researching in all these areas and the OSR can continue to supply information and grant opportunity information to the members.

The CSM also describe ongoing assessment and re-alignment, where necessary, of institute priorities and flexibility to invest in developing areas of scientific enquiry and clinical medicine. It describes sharing of institute priorities, as well as annual reports to outline goals, successes and platform needs. The OSR can scan this information and search for key opportunities for linkages with our membership, similar to the CSM supporting multi-institute platforms and emphasizing cross-collaboration. Innovative methods will also be entertained, such as speed dating events and newsletter communication of opportunities available to DOS members through affiliation with an analogous institute. Members will be encouraged to apply for membership within an institute. The OSR can track multi-institute publications and grants will be tracked, acknowledged and rewarded. Our pillars can be monitored to ensure they continue to be a relevant reflection of our surgeon’s talents, and re-tooled as necessary.

Support for Space is another CSM initiative, with re-assignment of under-utilized space at the Foothills considered, and forward planning for long-term space needs. Our OSR team needs to be co-located, and we need to be aware and look for opportunities, such as through partnering with research units within the New Cancer Center, to continue to form a space footprint for aligned researchers to cohabitate.

The CMS Strategic Planning Document in the last cycle emphasized cardiovascular care, stroke, musculo-skeletal and joint disease, cancer care and neurosurgery as areas that the CSM is known for exceptional clinical performance. Our members are keyed into these areas clinically, and these present natural areas to form linkages and seek research opportunities.
Appendices:

2. DOS Retreat Document, Mar 3, 2017
3. OSR Retreat #1 Document, May 29, 2017
4. Surgeon's Day Survey, July 31, 2017
5. OSR Retreat #2 Document, Sept 29, 2017
6. CSM Strategic Plan, Key Performance Indicators
7. Sample scoring system for research deliverables, adapted from Dalhousie

For more information contact:
The Office of Surgical Research
osr@ucalgary.ca
A. Review Process
The Department of Surgery at the University of Calgary has a long and proud history of clinical service delivery and training of first class surgeons in all specialties. Research productivity has been strong but linked to a few very productive faculty members and faculty groups. In contrast to the recognized excellent clinical provision of patient care, research productivity has been considered to be weak in the department as whole, considering its size of some 400 surgeons. The chair of surgery, new to this position, initiated an external review of the research program with the ultimate goal of improving scholarship and research productivity. I thank Dr. Grondin for the invitation to perform this
review. I am also grateful for all the organizational effort that went into preparing for this external review. In particular, I would like to thank Dr. Claire Temple-Oberle and Ms. Chelsie O’Brien for their invaluable contribution during the review process.

This review is based on the on-site visit and interviews with surgeons and investigators associated with the Dept of Surgery. The individuals who participated in these interviews and kindly offered their time and insight on the issue of research, along with their specific department affiliations, are listed in Appendix 1. I thank them all.

Although the initial invitation was to provide an external review of the Office of Surgical Research (OSR), I thought this had an extremely limited scope and would not be of much use to the Chair. The OSR presently consists of a director and a half-time administrative support staff, a woefully small infrastructure, to support a large Department of over 400 surgeons and its research mission. As such I thought it was more useful to expand the mandate of this review to cover the issue of research within the whole of the Department of Surgery. I thought this latter approach was more likely to shed some light on why there is a perception of research productivity weakness. I found the people I interviewed forthcoming in their responses to my queries and they often provided their unique insight into their particular academic situation.

As I cannot possibly list in this report each and every response given to me and protect confidentiality, I have outlined some of the common themes that arose during the interviews. Based on the two day review process, I am providing my recommendations for the Chair's consideration during his mandate. I would strongly encourage him to attempt to implement these recommendations early in his tenure.
B. Common Themes and Observations Arising from the Interviews

1. Historically the culture in the Department of Surgery has been focused on strong clinical work; research has been of secondary importance. To change this culture will require a new vision for the department and fostering a change of attitude by surgeons towards research.

2. Some individuals and some groups within Sections (Divisions) are producing good research. Not all members within each division have been successful, however.

3. The classification of faculty into “GFTs” and “Clinical” is perceived to be divisive. It is thought that the GFTs have “all” the resources (whether they produce research or not) and those outside are left to their own devices with an expectation to perform research but with no support.

4. When GFTs retire or leave the department, the funding associated with them does not revert back to the department.

5. Surgeons do not feel they have resources, such as protected time, through which to carry out research. They feel they are too busy doing clinical work.

6. Whether surgeons currently uninvolved with research would actually embark on research if resources were available was not clear. Some indicated that this depended on their track record and their own knowledge of how to carry out research. These considerations have bearing for future recruits.
7. Those who have shown interest in research have experienced roadblocks, such as issues navigating the Research Ethics Board (REB) process, and not been able to obtain statistical support for their intended project.

8. Some young highly motivated and productive members of the department feel that they do more research than GFTs, yet they are not awarded for their efforts (refer to point 2 above).

9. Space for research activities was perceived to be lacking. My observation, however, is that the University of Calgary has great infrastructure for research but it is not being utilized properly by staff due to:
   a. Distances they have to travel
   b. Lack of awareness their existence
   c. Lack of technicians to help with setting up instruments, work stations, etc. For example at the McCaig Institute, there is space open to orthopedic residents and medical students to do research if there is a PI associated with the project. The institute has a biomechanics lab, joint tissue lab, etc. Use is limited, however, as there is no technician in the lab on a full-time basis to operate the equipment.

10. There was a general feeling that an Alternate Funding Plan (AFP) would help in research productivity but many respondents could not elaborate a vision as to how this would actually work.

11. The present fee for service reimbursement of surgeons is not conducive to research. Treating patients is more financially rewarding than research. When asked if they would be willing to contribute some of their clinical earnings to research, most replied in the negative as they felt they were already taxed too much (20%) to support the
overhead in the hospital. This 20%, however, is lower than in other jurisdictions I am aware of where the fee is closer to 40%. A clear understanding of fees paid by surgeons in other jurisdictions, including the private sector in Alberta, needs to be communicated to surgeons in the department and employed strategically by the Chair.

12. Most thought that the Office of Surgical Research (OSR) was not resourced adequately to be of much usefulness to them (minimal staff and lack of statistical support).

13. There is a need to change the mandate of the OSR from supporting each and every research project with its present limited resources to taking more of an educational role and helping surgeons navigate the system and find the resources to execute their research projects. The Office of Surgical Research should make its focus on education (e.g. seminars, workshops on grant writing, act as directory how to navigate the research system).

14. The Department of Surgery should have at least 2 “in-house” biostatisticians associated with the OSR and shared by all divisions (sections) except general surgery and orthopedics which should be organized into different groups because of their sizes.

15. Cost recovery of biostatistical support should be mandated for each project to make the OSR viable. Biostatistical support is available at the various institutes but most surgeons are not aware of the availability. If an institute’s biostatistician is used, then cost recovery should be expected in addition to acknowledgement/co-authorship to future publications.

16. The REB process needs to be expedited. As it stands, it is very cumbersome, lengthy and a major obstacle to research productivity. This was the sentiment of both experienced
and inexperienced researchers. Some surgeons reported that they never heard back from the REB committee after they sent in their application.

17. Most surgeons felt there is a lack of transparency as to where the money goes in supporting GFT positions and research projects.

18. Each division should have its own research plan and infrastructure to include research assistants. The OSR should take a supervisory and informational role pertaining to items mentioned above (refer to point 13 above).

19. A resource book should be provided by the OSR to all new recruits to help them navigate the system.

20. Philanthropy funds should be raised to support a chair in each division to spearhead and support research.

C. Recommendations of the External Reviewer:

1. The chair should explain his vision pertaining to research to all department members at the next retreat. At this retreat it needs to be emphasized that what distinguishes an academic institution from a community hospital is not more clinical work but scholarship. One such way is research productivity.

2. Just as the Dept of Surgery publishes annual metrics on wait times in clinical care, there should be published metrics pertaining to research. Such an annual publication should illustrate research productivity (publications in journals), dollars garnered through competitive grants, and a breakdown of research productivity and grant acquisition by divisions (sections) and individual surgeons. An example of such a report is attached as Appendix 2.
3. The Department of Surgery should introduce an Academic Merit System. Such a system should award points for research productivity (first author, senior author, impact factor of journal, research grants received, invitations to speak at conferences, etc.) and should apply to all 400+ surgeons associated with the department. There should be dollar amounts attached to this. Such a system will add transparency as to where funds are allocated. This system should be used to also recommend promotion from Assistant, to Associate and Full Professor rank. See Appendix 3.

4. The classification system delineating GFTs and clinical surgeons should be abolished. All faculty, senior and new recruits, should be under the same category if they are hospital-based. An Alternate Funding Plan (AFP) should be introduced for all university-based surgeons with specific expectations that research will play an important role. If this is not possible, the department should introduce a tithe to directly support research activities. The chair may use the overhead difference in private sector-hospital cost as an approximate tithe. This could support the division’s research endeavours through the hiring of at least one research assistant per division. As research productivity improves, the research assistants will be covered by future grants that include the cost of a research assistant in the project grant’s budget.

5. The mandate of the Office of Surgical Research (OSR) should change from that of micromanaging each research project to one of education and oversight of research in terms of:
   a. Collecting data and publishing metrics of research productivity
   b. Producing a guidebook incorporating all the resources that surgeons need to navigate through the process of research
c. Providing advice to surgeons when meeting obstacles

d. Providing seminars and workshops on how to do research covering issues such as standardization of research protocols across the department. These should be available to all surgeons, residents, and research assistants.

6. The Department should employ two in-house biostatisticians to help with the biostatistical support of various projects. The financial support of the biostatisticians should come from each research project. Researchers should be instructed to include cost allocated for biostatistical support in each grant application budget. If more biostatisticians are needed, the department can tap into the various Institutes; there are 7 health institutes at the University of Calgary and biostatisticians are available through the Clinical Research Unit. A cost recovery mechanism would be expected as explained above. The biostatisticians should be involved at the inception of the project and be active participants throughout, not only as data analysts at the end of the project.

7. Make use of space and facilities already existing in the institutes. Communicate with the directors of the institutes and provide them with financial support to hire technicians who can support Department of Surgery-based projects led by surgical residents and/or surgeons.

8. Foster a collaborative research model that does not focus solely on the PI. Appoint a senior research mentor to all new recruits.

9. Consider changing the current hiring model for surgeons. Consider provisional recruitment for surgeons that requires participation in research activity or dismissal from their position. Consider hiring those with additional training in MSc or PhD and provide the resources they need for success upon hiring.
Appendix 1. Members of the Department of Surgery Interviewed for This Review

1. Dr. Sean Grondin, Calgary Clinical Zone Department Head, Department of Surgery.
2. Dr. Fiona Costello, Director of the Office of Surgical Research, Neuro-Ophthalmologist.
3. Dr. Paul McBeth, General Surgeon, Trauma and Critical Care.
4. Dr. Andrew Graham, Thoracic Surgeon.
5. Dr. Joe Dort, Otolaryngology, Head and Neck Surgeon; Executive Director, Ohlson Research Initiative.
6. Dr. Kevin Hildebrand, Section Chief, Orthopedic Surgery; Associate Director McCaig Institute for Bone and Joint Health.
7. Dr. Rob Harrop, Section Chief Plastic Surgery; Former Director of the Office of Surgical Research.
8. Dr. Elizabeth Oddone Paolucci, Graduate Program Director for the Department of Community Health Sciences and former Co-Director of the Office of Surgical Research.
9. Dr. David McKenzie, Residency Program Director for Plastic Surgery.
10. Dr. Joyce Wong, Vascular Surgery; former Residency Program Director for Vascular Surgery.
11. Dr. Natalie Rollick, 5th year resident, Orthopedic Surgery.
12. Dr. Gerald Zamponi, Senior Associate Dean of Research, Cumming School of Medicine, University of Calgary.
13. Dr. Indraneel Datta, Residency Program Director for General Surgery.
14. Dr. Stephen Boyd, Director, McCaig Institute for Bone and Joint Health.
15. Dr. Marlis Sabo, Orthopaedic Surgeon; former Resident Research Director for Orthopaedic Surgery.
16. Dr. Elijah Dixon, Section Chief General Surgery.
17. Dr. Mary Brindle, Associate Dept. head, Pediatric General Surgery.
18. Dr. James Brookes, Residency Program Director for Otolaryngology, Head and Neck Surgery.
20. Dr. May Lynn Quan, General Surgeon and Surgical Oncologist.
21. Dr. Anastasio Salazar, Section Chief Transplant Surgery.
22. Dr. Sean McFadden, Section Chief Thoracic Surgery.
23. Dr. Greg McKinnon, Section Chief Surgical Oncology.
24. Dr. Prism Schneider, Orthopaedic Surgeon, Orthopaedic Trauma.
25. Dr. Brenda Hemmelgarn, Department Head of Community Health Sciences.
26. Dr. Todd Anderson, Director, Libin Cardiovascular Institute of Alberta Clinical and Academic Department Head, Cardiac Sciences.
27. Dr. Frankie Fraulin, Site Chief, Alberta’s Children Hospital, Pediatric Plastic Surgeon.
29. Dr. Marcia Clark, Medical Director of the Advanced Technical Skills Simulation Laboratory (ATSSL), Orthopaedic Surgeon.
30. Dr. Eduardo Kalaydjian, Section Chief Dentistry & Oral Health.
31. Dr. Jason Werle, Site Chief, Rockyview General Hospital; Residency Program Director for Orthopaedic Surgery.
32. Dr. Mike Monument (via teleconference ) 24 Jan 2017
Appendix 2. Publication Metrics

Publications Metrics

Department Publications

Publications by Division,
Last 3 Academic Years Only
Publications by Impact Factor,
Last 3 Academic Years Only

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<td>Total # of pubs</td>
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<td>% Change from previous academic year</td>
<td>-</td>
<td>+25.5%</td>
<td>+1.6%</td>
<td>+1.04%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>#</td>
<td>%Change</td>
<td>#</td>
<td>%Change</td>
</tr>
<tr>
<td>Very High &gt;20</td>
<td>3</td>
<td>-</td>
<td>5</td>
<td>+67%</td>
</tr>
<tr>
<td>High 10-20</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>-69%</td>
</tr>
<tr>
<td>Medium 5-9.9</td>
<td>4</td>
<td>-</td>
<td>11</td>
<td>+175%</td>
</tr>
<tr>
<td>Fair 1-4.9</td>
<td>115</td>
<td>-</td>
<td>144</td>
<td>+25%</td>
</tr>
<tr>
<td>Low &lt;1</td>
<td>10</td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>No impact factor</td>
<td>21</td>
<td>-</td>
<td>25</td>
<td>+19%</td>
</tr>
</tbody>
</table>

Funding Metrics

<table>
<thead>
<tr>
<th>Funding Received</th>
<th>2012-2013</th>
<th>2013-2014</th>
<th>2014-2015</th>
<th>2015-2016</th>
<th>2016-17 to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total $ Funding</td>
<td>$4,764,071</td>
<td>$3,268,721</td>
<td>$3,678,344</td>
<td>$5,084,788</td>
<td>$7,932,280</td>
</tr>
<tr>
<td>% Change from previous academic year</td>
<td>+117%</td>
<td>-32%</td>
<td>+12%</td>
<td>+38%</td>
<td>TBD</td>
</tr>
</tbody>
</table>
### Publications per capita: July 2015 - June 2016

<table>
<thead>
<tr>
<th></th>
<th>Cardiac</th>
<th>General</th>
<th>Neuro</th>
<th>Ophthalm</th>
<th>Ortho</th>
<th>Oto</th>
<th>Ped GS</th>
<th>Plastics</th>
<th>Thoracics</th>
<th>Urol</th>
<th>Vasc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total number of Faculty Members</strong></td>
<td>7</td>
<td>23</td>
<td>13</td>
<td>7</td>
<td>26</td>
<td>20</td>
<td>5</td>
<td>16</td>
<td>4</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td><strong>Number of different faculty members represented in published papers</strong></td>
<td>3</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Number of papers published</strong></td>
<td>17</td>
<td>21</td>
<td>17</td>
<td>6</td>
<td>83</td>
<td>7</td>
<td>2</td>
<td>19</td>
<td>10</td>
<td>23</td>
<td>0</td>
</tr>
</tbody>
</table>

*Residents not included*

### Ratio of the number of papers published to the number of faculty members per division 2015-2016
Ratio of the number of published faculty members to the total number of faculty members per division 2015-2016

Ratio of the number of published faculty members to the number of papers published per division 2015-2016
## Appendix 3. Academic Merit System Scoring

### Publications

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead author - publication in a peer-reviewed journal</td>
<td>10%</td>
</tr>
<tr>
<td>Senior author - publication in a peer-reviewed journal</td>
<td>75%</td>
</tr>
<tr>
<td>Named co-author - publication in a peer-reviewed journal</td>
<td>5%</td>
</tr>
<tr>
<td>Interned or student - group publication in a peer-reviewed journal</td>
<td>10%</td>
</tr>
<tr>
<td>Group Authorship - Member of a Winning Committee for a Large RCT</td>
<td>90%</td>
</tr>
</tbody>
</table>

Notes:
- Points to be awarded based on impact factor of the journal:
  - 0-1.0: 0 points
  - 1.1-4.9: 20 points
  - 5.0-9.9: 100 points
  - 10.0 and up: 200 points
- Points to be awarded based on Impact factor:
  - 0-1.9: 0 points
  - 2.0-3.9: 20 points
  - 4.0-5.9: 100 points
  - 6.0 and up: 200 points

### Authorship - Books

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editor</td>
<td>50,000 pts</td>
</tr>
<tr>
<td>Associate Editor</td>
<td>25,000 pts</td>
</tr>
<tr>
<td>Author</td>
<td>12,000 pts</td>
</tr>
<tr>
<td>Editor, Author</td>
<td>30,000 pts</td>
</tr>
<tr>
<td>Senior Author</td>
<td>20,000 pts</td>
</tr>
<tr>
<td>Named Co-A</td>
<td>9,000 pts</td>
</tr>
<tr>
<td>Unnamed Co-A</td>
<td>2,000 pts</td>
</tr>
</tbody>
</table>

### Posters

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poster at your own school</td>
<td>2,000 First Author</td>
</tr>
<tr>
<td>International or national meetings, workshops or symposia</td>
<td>1,000 Senior Author</td>
</tr>
<tr>
<td>Poster at your own school or local meetings, workshops or symposia</td>
<td>600 Named Co-A</td>
</tr>
<tr>
<td>3rd Abstract</td>
<td>125 Listed Co-A</td>
</tr>
<tr>
<td>2nd Abstract</td>
<td>120 First Author</td>
</tr>
<tr>
<td>1st Abstract</td>
<td>300 Senior Author</td>
</tr>
<tr>
<td>Unnamed Co-A</td>
<td>120 Named Co-A</td>
</tr>
</tbody>
</table>
### Guest Speaker

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invited Guest Speaker</td>
<td>1,500 pts</td>
</tr>
<tr>
<td>Keynote at National/International</td>
<td>5,000 pts</td>
</tr>
<tr>
<td>Invited Speaker at National/Int.</td>
<td>1,000 pts</td>
</tr>
<tr>
<td>Invited Speaker at Provincial</td>
<td>3,000 pts</td>
</tr>
<tr>
<td>Invited Speaker at Outside Events</td>
<td>1,000 pts</td>
</tr>
<tr>
<td>Invited Speaker at Local Events</td>
<td>500 pts</td>
</tr>
</tbody>
</table>

### Presentations

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations at peer-reviewed</td>
<td>5,000 First Author</td>
</tr>
<tr>
<td>international or national meetings,</td>
<td>2,500 Senior Author</td>
</tr>
<tr>
<td>workshops or symposia</td>
<td>1,000 Named Co-A</td>
</tr>
<tr>
<td>Presentations at peer-reviewed</td>
<td>500 Unnamed Co-A</td>
</tr>
<tr>
<td>provincial or local meetings</td>
<td>1,250 WM Author</td>
</tr>
<tr>
<td>workshops or symposia, includes</td>
<td>350 Named Co-A</td>
</tr>
<tr>
<td>Faculty Research Day</td>
<td>250 Unnamed Co-A</td>
</tr>
</tbody>
</table>

### Membership/Chair

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member of Chair, Organizing</td>
<td>1,000 Chair</td>
</tr>
<tr>
<td>Committee of Research</td>
<td>500 Chair</td>
</tr>
<tr>
<td>Conferences/ Workshops/Symposia</td>
<td>National/International: 100%</td>
</tr>
<tr>
<td></td>
<td>Provincial/Local: 50%</td>
</tr>
<tr>
<td></td>
<td>Non Fee: Res: 25%</td>
</tr>
</tbody>
</table>

### Research Training

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of Advanced Research</td>
<td>Misc: 10,000 pts</td>
</tr>
<tr>
<td>Training – NOTE: one-time entry,</td>
<td>PRO: 20,000 pts</td>
</tr>
<tr>
<td>who compiled</td>
<td>UC Faculty: 1,000 pts</td>
</tr>
</tbody>
</table>


Grants – under review

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant P or Co-P.</td>
<td>$10K-$100K</td>
</tr>
<tr>
<td>Any research grant, regardless of source.</td>
<td>$100K-$200K</td>
</tr>
<tr>
<td>Subsequent years</td>
<td>$200K-$300K</td>
</tr>
<tr>
<td>Still PI for a multicentre study, regardless of source, where the PI is someone else (considering changes)</td>
<td>$100K-$200K</td>
</tr>
<tr>
<td>Per year</td>
<td>$200K-$300K</td>
</tr>
</tbody>
</table>

*Note: Grant opens when account opens – July each year

Grant and Peer Reviewer

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member - Grant Review Panel and Ethics Committee Activity, includes MSA Grant Reviewer</td>
<td>International: 500 pts.</td>
</tr>
<tr>
<td>Peer Reviewer - Journal article, external/internal grant review or conference abstracts</td>
<td>National: 200 pts.</td>
</tr>
<tr>
<td></td>
<td>Provincial: 100 pts.</td>
</tr>
<tr>
<td></td>
<td>Local or Foundation: 50 pts.</td>
</tr>
<tr>
<td></td>
<td>90/80/70 Member: 50 pts.</td>
</tr>
<tr>
<td></td>
<td>Journal: 400 pts.</td>
</tr>
<tr>
<td></td>
<td>Grant: 200 pts.</td>
</tr>
<tr>
<td></td>
<td>External Reviewer for Postgrad Thesis: 200 pts.</td>
</tr>
<tr>
<td></td>
<td>Conference Abstract: 100 pts.</td>
</tr>
</tbody>
</table>

Editorial Board

<table>
<thead>
<tr>
<th>What do I get research points for?</th>
<th>How many points?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Editorial Board: Editor or Co-editor</td>
<td>Editor: 1000 pts.</td>
</tr>
<tr>
<td></td>
<td>Co-Editor: 500 pts.</td>
</tr>
</tbody>
</table>
Welcome and Introductions to the group.

Dr. Achilles Thoma met with a broad group of surgeons at his visit in January. We tried to capture a variety of perspectives and give him an overall picture of research in Surgery for the University of Calgary.

At Dr. Thoma’s recommendation, we broadened the review from looking at the OSR to looking at how research is done within the Department of Surgery as a whole. This part of the retreat will look at Dr. Thoma’s report and recommendations and work together to look at identified challenges.

The external review revealed that we would have to build a plan for ourselves that would meet our needs. This will increase buy in from the group, and help to implement changes going forward.

Common themes came from the interviews. Historically, the culture in the department of surgery has been on a strong clinical work; research has been of secondary importance. To change this culture will require a new vision for the department and fostering a change of attitude by surgeons towards research.

The general feeling is that surgeons do not feel that they have the resources, such as protected time, through which to carry out research. They feel they are too busy doing clinical work. Whether surgeons currently uninvolved with research would actually embark on research if resources were available was not clear. Some indicated that this would depend on their track record and their own knowledge of how to carry out research. These considerations have bearing for future recruits. Some young highly motivated and productive members of the department feel that they do more research than GFTs, yet they are not awarded for their efforts.

Group exercise: How do we alter a culture of clinical excellence to include academic excellence?

- Setting the expectation when staff are recruited.
- Accountability.
- Salary Support (GFT/AARP) & Protected time.
- Dedicated network to plug into.
- Good at recognizing achievements, positive encouragement.
- Remove barriers.
  - Statistician.
  - Clinical research design.
• Encouraging support locally.
  • Mentorship.
    o Buddy system.
    o Guidance.
  • Resources.
  • Change the culture from section head to member – not driven from the top down.
  • What is needed from the membership? Buy in at the grassroots level to support academic motives and requirements.
    o Members want protected time, patient coverage.

Some individuals and some groups within sections are producing good research. Not all members within each section have been successful, however.

Those who have shown interest in research have experienced roadblocks, such as issues navigating the Research Ethics Board (REB) process, and not being able to obtain statistical support for their intended project.

Space for research activities was perceived to be lacking. Dr. Thoma’s observation however, is that the University of Calgary has great infrastructure for research but it is not being utilized properly by staff due to distance, lack of knowledge of their existence, and lack of technicians.

Group Exercise: 25/10 Crowd Sourcing

• What do you think about the space issue? How do we get enough space to house groups of scientists, statisticians, research coordinators, like-minded surgeons in convenient, cohesive units?

Ideas for solving the space issue included:

• Co locate, centralize research – through connectivity, not just a space.
• Reallocate resources, repurpose space, move people off site that aren’t academics.
• Use of committed teams, conducting theme based research.
• Find out what is available, allocate full offices for those with strong research commitments, and use touch down spaces for those with fewer research commitments. The University of Calgary can contribute some space.
• Keep like groups on site. Physical proximity is important, Physical and conceptual space.
• A new building may not be the solution.

From the interviews, Dr. Thoma captured that many respondents felt that the AFP would help in research productivity, but that they were not yet clear on what having the AFP will look like for members.
There was a lot of discussion around the funds that are paid by physicians. Many faculty members felt that this money was going to the overhead with UCMG. Dr. deSouza was able to correct this to share that the 20% paid by physicians does not go to cover clinic costs, or to the hospital, but to the University of Calgary to support other initiatives.

The group took time to acknowledge the great work that Dr. Costello did as the director of the OSR. She worked to streamline a larger committee into a core group that are passionate about research here at the University. She divided the committee up into portfolios, and assigned roles to group members based on their interests and strengths.

Under her leadership, the OSR was able to launch a website (www.ucalgary.ca/osr) to host information for members on upcoming grants and Surgeons’ Day, past issues of the OSR Newsletter, useful links to resources.

We also started a bi monthly newsletter where a member from the department is featured with a short bio pic, reminders about upcoming grant competitions, an ethics tip, and when possible a research success story.

As the former director of the OSR. Dr. Harrop gave a brief history of the office. The structure has remained consistent since its inception, with the role of the director, associate director and half time administrative support. The grants that we offer have expanded over time, and a more rigorous review process has been adapted.

Dr. Elizabeth Oddone Paolucci brought together the Surgery Research Coordinators under the Surgery Research Coordinators Interest Group, these coordinators group is a great support for research within the Department as they bring in speakers and are able to tap into each other’s knowledge to problem solve.

The OSR has been a great support for resident research, as seen by our success in the CIP Program and the presentations and posters seen at Surgeons’ Day.

How can this office better support surgeons?
Through providing access to bio-statistical support, working to educate researchers on the REB processes and the hold ups.

The University of Ottawa uses a pillar system to support research. With 2 years of funding for programs, funds are matched at the sectional level.

Using the LS Troika Consulting model come up with ideas on how we can use the DOS Funds more effectively.

- These funds could be used to fund successful researchers.
- Create more of a mentorship process going forward.
- Provide resident specific support.
- Research assistants to be supported.
• Help with barriers of time and limited expertise.

Nominating Pillars for potential funding if we adopted this model:

• Eliminate basic science?
• Education Focus
• QI Support
• 2 to 5 pillars to support over the 2 year term?
  o Encourage buy in by offering a reward for those that are enrolling patients in clinical trials.
• 3 pillar model: Basic Science (25%) Clinical Research (50%) and Resident research (25%)
• 5 pillar model: Surgical Quality, Basic Science, Knowledge Translation, Clinical Research, Education
  o Presents an issue for equality.
  o 5 pillars is too many, focus on 3
  o We could tie them to institutions?
• 2 Pillars: Basic Science and Clinical
  o Too small to focus on only two
  o Tied to a relevant problem
  o Researchers to pitch their pillar?

Publication Metrics:

Currently there is a report generated by the UofC on GFT’s and ARP’s. The majority of the tracking seems to come from self-reporting. On the block booking form. This can lead to under reporting.

Other institutions look at impact factors vs just the number of publications. Results from these measurements could be used to garner support, either financial or through protected time.

Using the impromptu networking LS, the following metrics were identified:

• #of active projects
• #of Student/residents/ collaborators.
• Conferences and presentations
• Posters
• Journal articles
• Impact factor
• Comparison to group members
• Grad students
• Number of grants
• The group doing the research
• Successful mentors
• Pairing with strong productive research teams.
• Looking at Scholarship productivity vs just research
• Quantifiable and measureable outcomes.
• Demonstrating knowledge translation.

How the Department of Surgery can measure productivity?

• Capture traditional methods
• Being involved in mentorship
  o Clinical teams
  o Team based projects
  o National and International Ideas
• Projects that produce clinical charge
• Use the block booking form to help in the accurate capture for the Annual Report.
• Operationalization Metric
  o Global Scale
  o Global Score
  o Comparisons
    ▪ Scale based on peers
• Qualitative impact form
• Expectations outlined
• Contributions to research – i.e. enroll patients into trials
• Balance out clinical work to support others doing the research.
• Departmental growth is based on sectional success.
• H index(looking at quality over quantity)
• Or looking at publications that are cited back.
• Point system for authorship (primary), unlisted (contributing space). At McMaster points assigned are reflected back to the researcher in a dollar amount.

Recommendations and feedback:

Look at all hospitals as academic centers. Community hospitals help to feed data to all of the larger centers for research. Secondary centers are a strength and should be included in academic reporting.

Min Specs for the Wish list:

• To have a practice plan laid out when hiring a new recruit.
• Cultural support
• Protected time
• Personal incentives
• Seminars, venues, meetings in close proximity
• An idea market place to foster collaboration
• Protect one academic day a week. This is time that you would be accountable for.
• Be aligned to a pillar/program.
• Bodies on the ground.
• Reword research to align with Clinical work
• Money.
• Accolades.
• UofC manager supporting the RTA accounts and Research Assistants.
• Rewards and recognition.
• Not expecting everyone to do research, some members are better educators, etc.
• Remove accolades, promotion etc. and offer Research Assistants or additional staff to encourage success.

OSR Mission Statement:

Can the current statement be repurposed?

Foster and facilitate the pillars of research and scholarship within the Department of Surgery.

OSR exists to support and educate in achieving surgical excellence

Invest in surgeons and trainees for health care excellence.

Recap:

Pillars of excellence, pitch the pillars.

Use a metric system that works for the group.

Develop the repurpose statement.

We will host a follow up session in the fall.

Dr. Temple-Oberle will be the interim OSR director.

The goal of examining the OSR is to rethink our current approach to funding and the accountability process.

One solution may be to divide up the funds between the sections and to work with the membership to find out what resources are actually required.

Focusing the funding on researchers with strong performances, and focusing the departmental resources around what they need to be supported. We could potentially use some value add money to support this. This would mean identifying 1-3 researchers within each section.
We could also look at dividing the research into pillars and doing something similar to Orthopaedics and host a speed dating or ‘shark night’ event.

We need a vision, to identify pillars, and a plan to use the funds.

Thank you to everyone that attended and for your feedback and participation.

Appendix 1.
Members of the Department of Surgery Participating in the Retreat

Anastasio Salazar
Andrew Graham
Artan Reso
Chelsie O'Brien
Claire Temple-Oberle
Eduardo Kalaydjian
Elaine Joughin
Emi Sanders
Frankie Fraulin
Jason Werle
Jesse Walper
Kelley deSouza
Kevin Hildebrand
Mary Brindle
Marcia Clark
Miller Smith
Natalie Yanchar
Prism Schnieder
Rob Harrop
Sean Grondin
Sean McFadden
OSR Strategic Planning Session Minutes
May 29th, 2017
15:00-18:00; FMC Boardroom 152

Attendance: Dr. Claire Temple-Oberle, Emi Sanders, Dr. Gary Gelfand, Dr. Prism Schneider, Dr. Marcia Clark, Dr. Mike Monument, Dr. Sean Grondin, Chelsie O’Brien

Supporting documents from this meeting include Dr. Thoma’s report, and the University of Ottawa Research Committee report, and the notes from the brainstorming session at the Department of Surgery retreat.

Below are the areas we discussed and some discussion points.

**Grant Structure Funding Pillars**

We discussed that we would like to work within 3 pillars, Basic Science, Clinical and Quality Initiatives.

To organize funding thoughts we could at the following pillars:

1. **Basic Science**
   - Orthopaedics has strong representation in this area.
   - It is well funded by other groups (i.e. use of patents)
   - Opportunity for commercialization.
   - Translational research, i.e. use of bench to bedside
   - Clinical translational gap. Struggle to find resources.

2. **Quality improvement**
   - Resident research
   - Quality Improvement and Quality Assurance
   - Education in research for trainees
     - Including teaching research methodology (OSE?)

3. **Clinical Research**
   - Precision medicine
   - Patient orientated research.

All pillars should have an education and research objective.

Duration of Support for pillars:

2 year program support.
Support can cover 3-4 projects, but sections would still have to contribute funds.
This would help establish research teams, and would help teams move on to external support
2 years is long enough for pilot data.

If we had 4 pillars with 2 years of support?

- Establish strong research lead
- 50K per pillar
- Sections/department other
- Additional funding through Value Adds?

Idea: When onboarding, include in the recruitment package funds to start up projects for new investigators within the 1st or 2nd years of practice. This would help focus the

How to get groups involved:
- Desire
- Environment
- Protected time
- Space

Accountability and metrics?

Matched funding (5-10 years) 30,000 (supported by the department $30,000)

Section Research Associates / Coordinators / Biostatisticians (Lines on the grants can help pay for these services)

**Research Trust and Accounting:** Additional support required when submitting receipts and claims to RTA

**Accountability**
Presentations at Surgeons’ day? (1 or 2 slots)
Annual progress reports requested for submission to the committee.
Request template to be in place and easily accessible (on the website?).
Presentation at SRG – and for larger projects to be presented at the Executive Meetings (very short update)
consequence: not submitting progress reports would be no funding for the next 5 years (?)

Metrics: Publications, research links, H/M index? Also look at mentoring residents and leadership involvement.

Measure publications:
Voluntary submission? – Trauma does this for their annual report
*Block booking system is currently under review.

Creates pressure / incentive for promotion

Section heads tasked with spreading the wealth of responsibility

Change the incoming culture with deliverables and options.

**Research Assistants**
Not provided by the department of surgery
Mission/Values
Foster and facilitate the pillars of research and scholarship within the Department of Surgery
Invest in surgeons and trainees for health care excellence

- Should this include faculty / resident support?

Biostatisticians
Biostatisticians – master’s level, Research committee to help vet applications before they go to the biostatistician for review. We can onboard group members that would be interested in participating (i.e. people like Dr. Andy Graham)

Employ 2 within the department through a cost recovery model.
Staff has to fund it
Surgeon has to be at initial meeting with Biostatistician
Residents on the projects

There needs to be rules of engagement

- Pi must attend meetings
- committee to vet project
- Lines have to be met

Faculty support instead

- residents to come in later
- High quality
- Sustainable

AHS and UofC – stat software (Stata / SPSS)

Offer Research Methodology Symposiums?

Administrative support:

- Fulltime?
- Explore the link between the department and Jenna Slobozian’s role.
- Support in supply chain, people soft, etc.
- Space?

Terms of Reference:

- Clarify around staff vs. resident support
- Align with institutes?
- Community of research, site of academic excellence, research and education.
Grants:

**SSP** – how do we continue to support and fund this grant?

**CSRFD?**

**Research and Education?**

**Group meeting:**
- Section members (point person)
- Integrate more as a committee
- Divisional contact
- Invite resident research
- Roll out to sections
  - Pillar, funding, feedback

**Research**
- Quarterly business meeting
- Sections to present at quarterly meetings
- Section heads

**Communication person:**
- Newsletter,
- Annual report.
- Will share office updates from all offices.
- Could include the metrics from the quarterly reports
- Sections to provide highlights of current projects
  - Include upcoming deadlines.
  - Pillars to be funded
  - Critical projects, etc.

**Surgeons’ Day**

**GALA**

Awards TOR for next year for the basic science, clinical research, and a new investigator award.

Use a scale

- **GFT vs. GFT**
- Quality of Research
- Quantity of Publications
- Grant dollars received
- Legacy/impact
Also consider who has critical promotions upcoming that this award could help them achieve.

**Surgeons’ Day Operations Manual**

- To be updated
- Dr. Vic Chahal to be the new CME Representative and will oversee the Gala

**Surgeons’ Day**

- Faculty presentations?
- Involvement of the OSF and fellows?
- Revamp?
  - Staff presentations
    - Established researcher
    - New investigator
    - 1 or 2 residents from each section
- Do we need more resident presentations?
- More opportunity for medical students?
- Staff?
  - New faculty?
- Fellows?
- How do we increase attendance?
- Awards given on the day?
  - Encourage participation?
  - Research dollars could be given
  - Related to the % of section faculty present?

Could break up the day so the first part is a shark tank to fund presented resident projects, $ given, 5-6 judged, division heads to participate? Based on attendance at the day and staff attendance at the business meetings.

Poster break for residents/medical students?

2nd session to include research from one of the pillars (ie clinical?)

Include an informative session on a topic if interest – IE STATS?

3rd session to showcase research on another pillar – le translational research, and maybe one on Leadership?

How do we include research coordinators?

GALA – Keep awards – maybe look at windsport/ Hall of fame rental? Add a new location?
Survey Responses regarding Surgeon’s Day

60 Surgeon’s responded. 68% were staff surgeons, 27% residents, 2% fellows and 3% other. The areas surveyed including presentations, attendance and venue.

Ideas for improving Presentations at Surgeon’s Day:

The survey revealed a desire to have fewer resident presentations. One suggestion I liked was to present the best resident paper per section and then the other strong ones could be posters. There was strong endorsement of increasing staff surgeon presentations of various years in practice, and continuing presentations from a local and visiting judge. The respondents were on the fence about including a previous grant awardee.

Here are some verbatim open text responses (I find these very useful):

“poster presentations with judging all residents not at podium?

To be honest, I think the current format is perfect in terms of number of speakers and local/guest judges. Not interested in faculty presentations

Isn’t it time that the Department support diversity and have Judges that are visible minorities! Including women....

Maybe two residents per program

I think this should remain a forum for residents to present their work, so I don’t think it should include too many staff presentations. I think the top few resident papers from each section is a nice way of selecting residents.

I think it is great to have surgeons present but maybe not based on years in practice only

Unfortunately due to Call was unable to attend

Shortened day
Surgeon's day should be more about the surgeon's less about the residents

More presentations is not the solution. They are often so sub specialized that they are of little interest to the general audience. We listen to be polite.

Ideas for improving Attendance at Surgeon’s Day:

There was good endorsement (74%) of closing the OR’s except for on call rooms. There was no clear cut point in terms of what percentage of the sections should be required to be present. The executive may have to set a standard. 20-40% looked reasonable from the survey data. Only 37% felt that grant funding should be linked to attendance citizenship at Surgeon’s day. 64% felt that a grant funding challenge at surgeon’s day would improve attendance.

Some open text responses included:

“not sure how to enforce a mandate

Schedule more breaks.

I don't think people should be forced to attend functions in general. Rather people should be made aware better. Many people don't even realize because they never check AHS emails. So making people more aware as oppose to forcing them is key.

I am more in favor of a carrot rather than a stick.

Clarify first what the purpose of surgeon's day is. This has been lost over time.

Ideas for the Venue for Surgeon’s Day:

Regarding the venue, the Libin was favoured. ACH received some negative reviews although the attendance numbers were actually quite good! Rotating the venue across the various hospitals was not preferred by the majority of respondents. Most preferred to keep Surgeon’s Day linked to the DOS Gala and to present the Research Day awards at the Gala rather than at the end of the research day.

Some open text responses included:
“parking?

prefer the current format

Avoid ACH as not easy in/out.

FMC but small theatre than Libin. ACH was good theatre size, but very awkward coming in at the front and walking on the bleachers was loud.

Should never be held at the ACH, huge effect on attendance

Clarify why you have a surgeon's day? Why do you a gala? What is the point behind each?”
OSR Strategic Planning Session Minutes
September 29th, 2017
13:00-15:00; FMC Boardroom NT 1101

Attendance: Dr. Claire Temple-Oberle, Emi Sanders Dr. Prism Schneider, Dr. Marcia Clark, Dr. Paul Beaudry, Dr. Sean Grondin, Chelsie O’Brien

Supporting documents from this meeting include the Office of Surgical Research “Refresh” report, the External review document, DOS retreat Document, the minutes from May 29th, Surgeons’ Day Survey results, CSM Strategic Plan, the sample scoring guide (adapted from Dalhousie University) and the Ottawa report.

Below are the areas we discussed and some discussion points.

**The Office of Surgical Research “Refresh” Document**

Reactions to the prepared document were very positive. The committee members in attendance felt that the report captured what the next steps of the OSR should be, and brought the large scale ideas down to a tangible level.

Our first discussion point was to cover the Strategic Objectives of the OSR (page 11 in the report) Given the current staff situation, it was suggested that point 7 on staffing be moved to be the first step in making the office a success. We also discussed changing the term manager to something along the lines of: Research manager or analyst / Grant administrator / research funding administrator. This person would help PI’s to navigate the accounting system, and could help send targeted grant emails to faculty members based on their identified area of research. There are similar roles to this in many of the larger universities in the states, but their role would also include completing some of the time consuming administrative steps of the grant application process leaving the pi to complete the project specific details.

Any biostatistical support would have to have their time protected. We could have a small subcommittee that would vet applications before they are sent to the biostatistician. There would also be a requirement for the PI to be involved from the initial meeting. Similar to the protocol that the CRU has in place. An idea was to assign the 10-15 researchers to start and then gauge the volume of work from there.

This role would also be familiar with researching databases, while cross referencing areas of interest. They would need to be familiar with clinical support, and the research web portal, UoF and External.

A chart of researchers and the areas of research will need to be compiled – this will be a great tool to getting appropriate funding opportunities to the appropriate places

Instead of looking at the role of the section – we can identify research programs. This would help the research domains align more with programs and not be limited by the section (ie Basic scientists vs. general Surgery) (Strategic Objectives – point 2&3) would be ideal to be able to promote sections over individual researchers

Strategic Objectives point 4 – use the guide from Dalhousie to gage the academic merit of section or
program members.

Deliverables include tracking of grants received, applications (successful and unsuccessful) publications. This is similar to the block booking and ARP tracking but adding in the social aspect of capturing data, resulting in a culture shift.

We could produce a rank list – similar to other universities that would help to drive competition between researchers (looking at grants, publications, international speaking engagements, etc)

Strategic Objective #5 – Thoracic Surgery and Pediatric Surgery are moving toward the AFP system. There is mixed interest from the rest of the department. Dr. Grondin has been in touch with the University of Toronto to learn more about their approach on medical leadership. Maybe we could add more accountability to those that are getting higher amounts of OR and clinic time. This would also be a cultural shift, and result in strengthened citizenship within the membership.

Strategic Objective #7 – Mentorship. Instead of assigning a mentor to new recruits we could offer the opportunity to meet with a number of mentors and have the new hire formalize the relationship – this could be accomplished with a speed dating session, or a pool of interested researchers that we could pull from. This would have both parties increasingly engaged in the relationship and make it more beneficial to both parties.

Strategic Objective #8 – Research Success can be celebrated within the OSR newsletter, and at Surgeons’ day as a way of sharing success and advancements with the department (focusing on staff with significant publications).

Strategic Objective #9 – there might be space that can be updated and made available in the South Tower. This could also serve as a common space where PI’s and research coordinators could come to meet with the OSR team, biostatistician, and get help with the UofC accounting process.

Strategic Objective #10 – Institutes: Could be invited to host information sessions or lunch and learns for our members. This would increase awareness and collaboration for all members.

Grant Structure:

Accountability brought down to the section level. The section would take ownership for the research productivity of the residents.

There might be an opportunity to have funding increased if a researcher is involved in a multi-center trials. The OSR could identify and support researchers that wouldn’t need section support.

Potential to partner with Masters Students at the UofC. There has been limited interest on the part of students at the university to collaborate, but that could change going forward. We could also look at partnering with the SPOR unit or the CRU (Calgary Research Unit) Ask that applicants include the line for biostatistician in their request for funding.

Surgeons’ Day – this will require a separate planning meeting for those interested. But we are looking at limiting the podium slots to the top resident per section, and really boosting the poster presentations. We want to include faculty presentations, and key note address. We can also look at adding a shark tank portion – points for the shark tank would also include a piece on section representation at different department of surgery meetings/rounds/surgeons’ day symposium.
Pillars of Support:

Look at funding 2 pillars per year. The second year of funding would be contingent on the progress made/use of funds during the first year of funding.

Might look at eliminating the section being responsible for financial support, but have them offer support the researchers through protected time, or the use of a research assistant. A large financial commitment might be harder for smaller sections. We can start with a smaller ask on the sections and build on it with the success of the research program.

From the department we can look at offering a start-up package or in-kind support from the section, and may be able to offer a small fund for new investigators (within 3 years) to apply for. We may be able to support more than one applicant.

This new investigator (within 3 years) package could be for $5000. This would be to support projects with clear deliverables or achievable results. These funds could come from the CSRDF fund to start up new researchers.

There could be the potential to have this be a competition for investigators within 5 years of practice to compete for 10,000. A caveat on this competition would be that you would have to have an established research mentor (can be self-identified)
# Support for faculty

<table>
<thead>
<tr>
<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
<th>KPI Accountability</th>
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| • Support our faculty and enhance their capacity for productivity                      | • Establish a faculty wide bridge grant support program for scientists with CIHR and NSERC grants.                                                                                                        | • Number of bridge grants ultimately converted into full CIHR or NSERC grants.  
• Dollar value leveraged.                                                                 | • Associate Dean Research - Grants                                                                                                           |
|                                                                                       | • Build an internal grant development and review system to enhance investigators’ research competitiveness.                                                                                               | • Grants secured and papers published by supported faculty.                                                                             | • Associate Dean Research-Grants                |
| • Ensure faculty renewal                                                               | • Implement a process to hire junior faculty with support from the Provost.                                                                                                                               | • Number of new faculty successfully recruited to CSM.                                                                                   | • Senior Associate Dean Research                |
|                                                                                       | • Compete for funds to support salaries for new faculty (CRCs, AIHS funds, etc).                                                                                                                                 | • Number of successful versus failed searches.                                                                                           | • Vice Dean                                     |
|                                                                                       | • Timely hiring of new faculty when positions become available.                                                                                                                                          | • Time from advertisement to arrival of new faculty member.                                                                            | • Vice Dean                                     |
|                                                                                       | • Develop a Uniting Leaders Program in conjunction with community partners to include early career faculty in the community engagement process.                                                        | • Number of early career faculty who enroll in and successfully complete the program.                                                   | • Associate Dean Faculty Development            |
| • Provide professional development at all career stages                                  | • Continue to provide and enhance faculty orientation.                                                                                                                                                   | • Numbers and types of workshops and other training events.  
• Evaluation data on effectiveness of workshops.                                                                                           | • Associate Dean Faculty Development                                                                                                    |
|                                                                                       | • Clarify the alignment of activity profiles with career goals, supporting flexibility throughout careers.                                                                                               | • Monitor the activity profiles through the ARO.                                                                                         | • Associate Dean Faculty Development            
• Office of Faculty Analysis                                                             |                                                                                                                                                                                                         |                                           |
|                                                                                       | • Create a leadership development program to ensure faculty are in a position to lead.                                                                                                                  | • Number and range of faculty who complete leadership program with the Haskayne School of Business.  
• Feedback on quality of HSB program.                                                   | • Associate Dean Faculty Development                                                                                                    |
|                                                                                       | • Provide external leadership development opportunities to faculty members as indicated. Track this in a database.                                                                                                                                                 | • Number and range of programs utilized.                                                                                                  | • Office of Faculty Analysis                    |
| • Build a system to provide comprehensive financial and non-financial support to grant applicants | • Develop a program to support investigators competing for CIHR SPOR grants (including the securing of matching funds) and similar competitions.                                                          | • Total amount of SPOR grant funding awarded to CSM.                                                                                      | • Associate Dean Research - Grants               |
| • Enhance our support for a culture that identifies, appreciates and recognizes outstanding contributions and successes. | • Create a catalogue of the awards available at the university and national/international levels.                                                                                                         | • Increase the number of departmental, CSM, University and external awards.                                                            | • Director Communications Support Unit          |
## Support for learners

<table>
<thead>
<tr>
<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
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<tbody>
<tr>
<td>• Increase our focus on undergraduate research projects and summer studentships that take place in the community—within Calgary, across Alberta and beyond</td>
<td>• Develop urban and rural partnerships to engage BHSc and BCR students in community based scholarship and service learning.</td>
<td>• Number of urban and rural community agencies hosting our students for placement.</td>
<td>• Associate Dean Education - Undergraduate Health And Science Education</td>
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<td>• Measure the satisfaction of students with their placements through surveys.</td>
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<td>• Conduct a scan on international student experience.</td>
<td>• Number of students engaged annually in international experiences.</td>
<td>• Associate Dean Strategic Partnerships and Community Engagement</td>
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<td>• Student satisfaction with experience.</td>
<td></td>
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<td>• Support summer studentships.</td>
<td>• Number of BHSc students awarded summer research studentship awards.</td>
<td>• Associate Dean Education - Undergraduate Health And Science Education</td>
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<td>• Promote competitions for internal and external awards to students.</td>
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<td>• Host symposia for faculty and students to foster excellence in collaboration and integration in the CSM community.</td>
<td>• Number of students who present their work at an external forum.</td>
<td>• Associate Dean Education - Undergraduate Health And Science Education</td>
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<td>• Develop a competitive support program for CSM graduate students that recognizes their efforts not only as students but as valued contributors to the research enterprise</td>
<td>• Cumming School of Medicine Scholarship program was launched with the first competition in October 2015.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
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<td>• Number of students funded through the CSM scholarship program.</td>
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<td>• Number of students obtaining external funding.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
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<td>• Provide students support to be competitive for external funding.</td>
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<td>Find mechanisms that ensure support for postdoctoral scholars</td>
<td>• Establishment of a school wide postdoctoral funding program.</td>
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<td>• Numbers of post-doctoral scholars funded in CSM.</td>
<td>• Senior Associate Dean Research</td>
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<td></td>
<td>• Provide postdoctoral scholars support to be competitive for external funding</td>
<td>• Senior Associate Dean Research</td>
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<td>Initiate a career centre and professional development program</td>
<td>• Develop a task force/committee to examine the professional development needs for our learners.</td>
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<td>• Number of students attending the seminars.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
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<td>• Satisfaction of students with workshops.</td>
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<td>• Develop programs and workshops available to graduate students and post doctoral fellows.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
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<td>• Tracking/surveying students after graduation.</td>
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<td>• Numbers of PDFs recruited to academic and non-academic sectors.</td>
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<td>Strategic plan elements</td>
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<td>KPI Accountabilities</td>
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<tr>
<td>• Train the physicians of today to create a sustainable health system tomorrow</td>
<td>• Train successful undergraduate medical students.</td>
<td>• MCC results collected and monitored annually.</td>
<td>• Associate Dean Education - Undergraduate Medical Education</td>
</tr>
<tr>
<td>• Develop a scholarly track for physicians interested in business, policy and public health.</td>
<td>• Develop a scholarly track for physicians interested in business, policy and public health.</td>
<td>• Percentage of students who match into top post-graduate choices.</td>
<td></td>
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<tr>
<td>• Obtain further funding for Leaders in Medicine (LIM) program.</td>
<td>• Obtain further funding for Leaders in Medicine (LIM) program.</td>
<td>• Number of MD students enrolled in MD-MBA program.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
</tr>
<tr>
<td>• Expand Clinician Investigator Program (CIP).</td>
<td>• Expand Clinician Investigator Program (CIP).</td>
<td>• Funding available for LIM program.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
</tr>
<tr>
<td>• Establish Pathways Program for medical school applicants from rural, aboriginal, and low SES backgrounds.</td>
<td>• Establish Pathways Program for medical school applicants from rural, aboriginal, and low SES backgrounds.</td>
<td>• Numbers of MD/MSc and MD/PhD students within LIM program.</td>
<td>• Associate Dean Education - Graduate Sciences Education</td>
</tr>
<tr>
<td>• Secure mechanism for sustainable funding.</td>
<td>• Secure mechanism for sustainable funding.</td>
<td>• Numbers of residents in CIP program.</td>
<td>• Associate Dean Education - Postgraduate Medical Education</td>
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<td>• Eventual expansion of program.</td>
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<td>• Produce physicians who meet the needs of Albertans.</td>
<td>• Produce physicians who meet the needs of Albertans.</td>
<td>• Number of UME and PGME learners at distant sites.</td>
<td>• Associate Dean Education - Distributed Learning and Rural Initiatives</td>
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<tr>
<td>• Support for a culture of life-long learning by providing access to rigorous and unbiased professional development and assessment strategies for practicing physicians</td>
<td>• Support for a culture of life-long learning by providing access to rigorous and unbiased professional development and assessment strategies for practicing physicians</td>
<td>• Increased enrollment of rural, immigrant and indigenous students.</td>
<td>• Associate Dean Education - Postgraduate Medical Education</td>
</tr>
<tr>
<td>• Ensure that physicians throughout Alberta have access to in-person and on-line programs for updates and skill development.</td>
<td>• Ensure that physicians throughout Alberta have access to in-person and on-line programs for updates and skill development.</td>
<td>• Rates of matriculation, discipline choices and practice locations of participants in Pathway program.</td>
<td>• Senior Associate Dean Education</td>
</tr>
<tr>
<td>• Faculty have access to their own clinical and other data to guide their practice and identify learning needs.</td>
<td>• Faculty have access to their own clinical and other data to guide their practice and identify learning needs.</td>
<td>• Number of programs that are live and on-line.</td>
<td>• Associate Dean Education - Continuing Education and Professional Development</td>
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<td>• Numbers of registrants served through live and on-line offerings.</td>
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<td>• Monitor participants satisfaction with programs.</td>
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<td>• Number of collaborative projects with external stakeholder groups including AMA, AHS, CPSA, specialty societies, departments, divisions, and others.</td>
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<td>• Specific learning outcomes data.</td>
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</tbody>
</table>
## Support for global health education

<table>
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<tr>
<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
<th>KPI Accountabilities</th>
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</thead>
</table>
| • Expand our [global health education](#) program to explore more opportunities for training with underserved populations locally and globally | • Develop opportunities for post graduate medical education trainees to have international health experiences. | • Numbers of learners who take part in an international health experience. | • Associate Dean Strategic Partnerships and Community Engagement  
• Associate Dean Education - Postgraduate Medical Education |
| | • Increase local global health opportunities in collaboration with not-for-profit organizations and other groups. | • Increase the number of opportunities for learners to take part in local experiences that support global health awareness. | • Associate Dean Strategic Partnerships and Community Engagement  
• Associate Dean Education - Undergraduate Medical Education |
| • Offer the majority of students access to opportunities outside traditional learning environments | • Strengthen community and industry based opportunities for BHSc/BCR and GSE students. | • Numbers of opportunities created within community and industry. Satisfaction from students and sponsoring sites. | • Associate Dean Strategic Partnerships and Community Engagement  
• Associate Dean Education - Undergraduate Medical Education |
| | • Develop service learning opportunities for MD students. | • Numbers of students able to access opportunities. | • Associate Dean Strategic Partnerships and Community Engagement  
• Associate Dean Education - Undergraduate Medical Education |

## Support for faculty as educational scholars

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<tr>
<th>Strategic plan elements</th>
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<th>KPI Accountabilities</th>
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</thead>
</table>
| • Support the sustainability of the Office of Medical Education and Scholarship to enhance our educational programs and faculty mentorship opportunities | • Develop a roster of approaches to support faculty as educational scholars. | • Number of faculty engaged in medical education scholarship.  
• Number, range, and quality of funding opportunities for faculty to engage in medical education scholarship. | • Office of Health and Medical Education Scholarship  
• Office of Health and Medical Education Scholarship |
| | • Develop structures to document research grants received for educational scholarship work. | • Resources in place to meet OHMES strategic goals to educational scholarship work. | • Office of Health and Medical Education Scholarship  
• Office of Health and Medical Education Scholarship |
Support for research enterprise

| Strategic plan elements | Actions | KPIs |
|-------------------------|---------|-----|---|
| • Develop the **scientific platforms and cores** necessary for the conduct of transformative research | • Western Canadian Microbiome Centre (WCMC) will provide a germ-free environment to support applied research. | • Number of partnerships with industry. | • Director Snyder Institute for Chronic Diseases |
| • Centre for Applied Health Genomics will build the technological, bioinformatics and human resource capacity to support the university and province’s focus of personalized medicine. | • Number of publications, presentations, and patent applications arising from work carried out at the centre. | • Director Alberta Children’s Hospital Research Institute |
| • Recruit faculty with expertise in genomics and bioinformatics. | • Number of trainees recruited. • Number of sequences generated and analyzed. | • Director Alberta Children’s Hospital Research Institute |
| • Provide support for large-scale sequencing projects. | • Grant funds that are attracted. | • Director Alberta Children’s Hospital Research Institute |
| • Continue development of web portal resources. | • Number of CSM and outside investigators who utilize the facility. | • Senior Associate Dean Research |
| • Ensure ongoing assessment and where necessary realignment of institute priorities and flexibility to invest in developing areas of scientific inquiry and clinical medicine | • Establishment of process/ requirement for sharing of institute priorities and emerging strengths with SRC and PPC. • Establish process for annual reports from institutes that outline their goals, success and platform needs. | • Number and quality of newly developed multi-institute platforms. • Number of submitted and funded large submissions (eg CFI, SPOR, CFREF) that are multi-institute. | • Senior Associate Dean Research |
| • Ensure ongoing support for global health research partnerships | • Strengthen partnerships with low and middle income countries’ academic institutions and provide support to new and emerging global health research leaders. | • Number of research teams in collaboration with LMIC institutions (e.g., Guyana, Tanzania, etc). | • Associate Dean Strategic Partnerships and Community Engagement |
| • Strengthen coordination of international visiting scholars and delegations to foster research partnerships. | • Number of submitted and funded grant submissions to traditional and non-traditional research funding agencies (e.g. DEFATO, Grand Challenges Canada). • Number of coututelle and Feasby Scholars enrolled in Masters and PhD programs. • Number of international delegations, fellows and scholars provided logistical and technical support. | • Associate Dean Strategic Partnerships and Community Engagement |
## Support for IT and connectedness

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<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
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<tbody>
<tr>
<td>Work with the university and AHS to support IT infrastructure and big data projects</td>
<td>• Support the IT investment council with the CIO</td>
<td>• Number of health researchers and projects supported as a direct result of investment.</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td>• Work with other UCalgary faculties to support capacity for related big data projects.</td>
<td>• Innovation through creation of novel tools and services to support health research.</td>
<td>Executive Director</td>
</tr>
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<td></td>
<td>• Establish a fund to support high risk, high return and early stage research</td>
<td>• Number of grants awarded and converted into external research funding with emphasis on tri-council success.</td>
<td>Executive Director</td>
</tr>
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<td></td>
<td>• Support of pan-institute initiatives that strengthen CSM platforms</td>
<td>• Establishment of a process that will identify pan-institute platform needs via SRC.</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td>• Establishment of sustainable funding process to support pan-institute platforms.</td>
<td>• Use of platforms to support the precision medicine initiative.</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incorporate new platforms developed and tested at the level of individual institutes as faculty wide platforms (i.e., institutes act as incubators).</td>
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</tbody>
</table>

## Support for space

<table>
<thead>
<tr>
<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Convene a working group to examine long-term space expectations</td>
<td>• Assess the available space within the Foothills campus and how it is currently utilized.</td>
<td>• On time and on budget renovations within Snyder and ACHRI.</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td>• Reassignment of space which is under-utilized.</td>
<td></td>
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<tr>
<td></td>
<td>• Review the utilization of leased space and renewal of leases.</td>
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<tr>
<td></td>
<td>• Plan for long term space needs.</td>
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</tr>
</tbody>
</table>
Support for community linkages

<table>
<thead>
<tr>
<th>Strategic plan elements</th>
<th>Actions</th>
<th>KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Recruit an Associate Dean to the Faculty Affairs portfolio to oversee initiatives through the local to the global level</td>
<td>• Enhance CSM partnerships locally through strategic engagement.</td>
<td>• In five years 80 per cent of the CSM Deans Advisory Board perceive the CSM as having high quality local engagement.</td>
</tr>
<tr>
<td>• Develop public engagement programs</td>
<td>• Integrate community engagement into the fabric of the CSM through:</td>
<td>• Associate Dean Strategic Partnerships and Community Engagement</td>
</tr>
<tr>
<td></td>
<td>• Co-ordinating service learning opportunities with underserved populations (eg. Street CCRED, indigenous health dialogue).</td>
<td></td>
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<tr>
<td></td>
<td>• Participate and collaborate in integrating “social accountability” / “social responsibility” themes across the academy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Collaborate on community linkages for CSM outreach to underserved populations (eg. support pathways, indigenous health dialogue, launch “Yellow Bus”, aboriginal science outreach).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enhance meaningful partnerships with local groups and organizations, through:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Organization and delivery of public programs.</td>
<td>• Number and type of inner city partnerships.</td>
</tr>
<tr>
<td></td>
<td>• Creating a Community Engagement presence and program.</td>
<td>• Number of CE learning resources posted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of CSM trainees with an experience outside traditional learning environments.</td>
</tr>
<tr>
<td></td>
<td>• High quality co-ordination of visiting scholars and delegations.</td>
<td>• Number of communities visited by the yellow bus.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of people attending programs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feedback from participants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Associate Dean Strategic Partnerships and Community Engagement</td>
</tr>
<tr>
<td></td>
<td>• Enhance international trainee integration and success through:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• peer mentorship</td>
<td>• Number and type of Street CCRED partners.</td>
</tr>
<tr>
<td></td>
<td>• international trainee leadership development program</td>
<td>• Number of events and opportunities for international student integration</td>
</tr>
<tr>
<td></td>
<td>• alumni program</td>
<td>• Programs for international student leadership and alumni.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number and types of training events.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Associate Dean Strategic Partnerships and Community Engagement</td>
</tr>
<tr>
<td>Strategic plan elements</td>
<td>Actions</td>
<td>KPIs</td>
</tr>
<tr>
<td>-------------------------</td>
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<td>------</td>
</tr>
<tr>
<td>Communicate a bold vision as a research-intensive medical school</td>
<td>• Expansion of the Dean’s Talk into rural communities.</td>
<td>• Number of Dean’s Talks in rural communities</td>
</tr>
<tr>
<td></td>
<td>• Enhance alignment with high priority and strategic areas.</td>
<td>• Greater presence in connectivity map of key communications partners in the four priority areas: CE, BMH, Chronic Disease, Precision Medicine.</td>
</tr>
<tr>
<td></td>
<td>• Strengthen digital communications.</td>
<td>• 20 per cent growth in social media reach by 2017.</td>
</tr>
<tr>
<td>Expand our Alumni Relations Office to have greater contact with our diverse and widespread alumni</td>
<td>• Collaborate with communications to develop tools to engage all diverse alumni constituencies.</td>
<td>• Update CSM alumni webpage by 2016.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase alumni website visits by 20 per cent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase number of alumni featured in UCalgary Medicine and UToday.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evaluate existing and potential communications vehicles for alumni.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase the number of alumni reached.</td>
</tr>
<tr>
<td></td>
<td>• Improve engagement of alumni through creation of a Medicine Alumni Advisory Council.</td>
<td>• Develop Council terms of reference and engage committee members for three year terms.</td>
</tr>
<tr>
<td></td>
<td>• Use Raiser’s Edge to increase alumni volunteer activity and track engagement.</td>
<td>• Capture 100 per cent of all volunteer activities performed on behalf of the alumni office and 50 per cent of CSM alumni volunteers (MMI, etc).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase CSM alumni engagement by 12 per cent.</td>
</tr>
<tr>
<td></td>
<td>• Develop a workplan to include trainees as alumni.</td>
<td>• Establish and maintain an accurate and complete list of PGME graduates from 2000 – present.</td>
</tr>
<tr>
<td></td>
<td>• Identify and engage CSM alumni not currently captured in the alumni audience.</td>
<td>• Develop programming for PGME and post-doctoral fellow alumni.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create a process to identify retrospectively and prospectively track post-doctoral fellows.</td>
</tr>
<tr>
<td></td>
<td>• Work with fund development to identify giving opportunities that will engage our alumni.</td>
<td>• Collaborate with fund development to increase the number of new alumni donors and repeat alumni donors by 10 per cent.</td>
</tr>
</tbody>
</table>

**Director Alumni Relations**

**Director Communications Support Unit**

**Director Alumni Relations**
**Surgery Faculty – Research: NAME of SURGEON**  
Template adapted from Dalhousie

### Scoring System for Research Deliverables

<table>
<thead>
<tr>
<th><strong>Grant Support</strong></th>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Award (&gt;50K/year)</strong></td>
<td></td>
</tr>
<tr>
<td>Principle Investigator</td>
<td>20 points</td>
</tr>
<tr>
<td>Co-PI</td>
<td>15 points</td>
</tr>
<tr>
<td>Co-Applicant</td>
<td>7 points</td>
</tr>
<tr>
<td><strong>Minor Award (&lt;50K/year)</strong></td>
<td></td>
</tr>
<tr>
<td>Principle Investigator</td>
<td>10 points</td>
</tr>
<tr>
<td>Co-PI</td>
<td>7 points</td>
</tr>
<tr>
<td>Co-Applicant</td>
<td>3 points</td>
</tr>
</tbody>
</table>

### Intramural Support

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle Investigator</td>
</tr>
<tr>
<td>Co-PI</td>
</tr>
<tr>
<td>Co-Applicant</td>
</tr>
</tbody>
</table>

**Contract Research**

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
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</thead>
<tbody>
<tr>
<td>5 points</td>
</tr>
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</table>

**Applied** for, but not successful external NGA

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
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<tbody>
<tr>
<td>Only for PI</td>
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</table>

### Presentations

#### Research Presentations

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>With abstract publication at peer reviewed national or international conference or international conference</td>
</tr>
</tbody>
</table>

**Invited Presentations**

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 points</td>
</tr>
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</table>

Peer reviewed manuscript

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>First or Senior Author</td>
</tr>
<tr>
<td>Middle Author</td>
</tr>
</tbody>
</table>

Book Chapters

<table>
<thead>
<tr>
<th><strong>Points achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
</tr>
</tbody>
</table>
Case Reports
   Senior Author 3 points
   Mid Author 2 points

**Trainees**
   Primary Supervisor 2 points

Co-Supervisor
   Graduate Student 5 points

Post Doctoral Training 5 points

Successful trainee judged by trainee publication record and/or Graduate degree awarded (per year) ^5

**Trials Participation:**
   Local PI ^6 bringing clinical studies “of value” either industry or peer review funded to the Division with successful recruitment 3 points

**Intellectual Property:**
   Patents ^7 applied for/held
   Development of IP ongoing 5 points

**Committee & Review Work**
   Journal Reviewer ^8 1 point
   Editor of Peer Review Journal 5 points
   Member of Peer Review Committee ^9 5 points
   Graduate Committee 1 point

**Total**