



Research and Innovation Working Group Summary Report

December 2016

EXECUTIVE SUMMARY

The University of Saskatchewan undergoes an institution-wide integrated planning process every five years. In preparation for the fourth integrated planning cycle, and having achieved many of the objectives listed in The Way Forward, the College of Medicine initiated a strategic planning process in August 2016.

The Research and Innovation Working Group was one of two strategic planning groups assigned to evaluate the college's operations. Chaired by Dr. Marek Radomski, Vice-Dean Research, the working group was tasked with evaluating the college's research agenda and recommending strategic areas of focus over the next five years.

This report summarizes the deliberations of the Research and Innovation Working Group. It describes and organizes a current state assessment of the college's research mission by eight themes. The report also identifies potential areas of focus and associated strategic options for the college to consider.

Recommended Focus Areas

STRENGTHS

Infrastructure: as part of a U15 institution, the college has access to world-class facilities and infrastructure.

Cluster Model: the research cluster model is a great concept but is not achieving its intended outcome.

Basic Biomedical Science Researchers: there exists a broad base of basic science researchers with potential to produce high-quality research in the college.

Population Health Science Researchers: there exists a high number of population health researchers producing high-quality research in the college.

Rural and Remote Health: the college's research and geographic location positions the college to be a leader in rural and remote research.

WEAKNESSES

Culture: the existing research culture is weak and Saskatoon-centric.

Interaction Among Researchers: limited interaction among basic, population health, and clinical researchers as well as across disciplines and clusters.

Research Funding: limited access to start-up, seed, and bridge funding. This prevents research projects from starting and faculty from attaining higher levels of funding.

Communication: limited awareness of research initiatives and resources across the college and health system.

Research Support: existing infrastructure inadequately supports the entire research process.

OPPORTUNITIES

Human Resources: develop a human resource plan targeted towards recruiting early and mid-career researchers.

Cluster Review: review and modify the existing model to better facilitate research between basic, population health, and clinical researchers, as well as departments and clusters.

Funding Diversification: college should pursue diversifying funding by promoting existing opportunities and through fundraising.

Translational Research: facilitate producing translational research across the college and health system.

Indigenous Health Research: position and enable the college to be a leader in indigenous health research and respond to the Truth and Reconciliation Commission's Calls to Action.

Health Needs of Saskatchewan: direct research towards the unique health needs of the province.

THREATS

Reputation: failure to improve the college's research reputation has significant risks.

Status Quo: failure to address the existing state of the college's research portfolio will continue to impact institutional reputation amongst peer institutions.

Dedicated Funding: there is limited funding dedicated exclusively to the College of Medicine.

SHRF Funding: annual allocations towards basic science research trail behind other provincial jurisdictions.

Relationship with the University of Saskatchewan: continued disengagement with central planning will limit the influence and effectiveness of the province's only medical school.



BACKGROUND AND METHODOLOGY

The University of Saskatchewan (“UOFS”) undergoes an institution-wide integrated planning process every five years. Integrated planning is intended to support strategic decision-making by providing a comprehensive view of resources and commitments that ensures the alignment of financial and capital resources with academic priorities.¹ The institution as a whole is set to embark upon a fourth integrated planning process in early 2017.

The College of Medicine (“COM”) participated in the previous integrated planning process. However, its Third Integrated Plan was interrupted by a change initiative which resulted in the creation of The Way Forward, the college’s primary strategic document since 2013. Having achieved many objectives listed in this document, a college-wide strategic planning process was initiated by Dr. Preston Smith, Dean of Medicine, in August 2016.

The Research and Innovation Working Group (“RIWG”) was one of two strategic planning working groups assigned to evaluate the college’s current operating environment. Chaired by Dr. Marek Radomski, Vice-Dean Research, the RIWG was responsible for assessing the college’s research portfolio, documenting a SWOT analysis, and recommending potential areas of focus for the next five years. It met a total of six times in November 2016 and had representation from faculty, staff, residents, and medical students. Please see Appendix A: Terms of Reference for working group composition.

With respect to methodology, working group participants were provided with a variety of materials to review prior to the first meeting. The first three RIWG meetings were dedicated to documenting a SWOT analysis and a prioritization survey was distributed afterwards to identify the top five strengths, weaknesses, opportunities, and threats. A fourth meeting was dedicated to validating and updating the findings of the working group using group decision-making techniques. The final two meetings were dedicated to reconciling priorities identified through individual and group exercises as well as for developing potential strategic options for the top weaknesses and opportunities identified.

¹ <https://www.usask.ca/ipa/institutional-planning/what-is-integrated-planning.php>



CURRENT STATE

The first four RIWG meetings were dedicated to documenting and prioritizing the top strengths, weaknesses, opportunities, and threats of the college's research and innovation mission. These findings are described and organized into nine themes below.

I. Administration

The RIWG identified a moderate number of strengths with respect to research administration in the COM. For instance, the establishment of the Vice-Dean Research and Unified Head positions was perceived as an effective leadership model for the college's research portfolio. The research cluster model is conceptually a strength although existing structures are not achieving their intended outcomes. Furthermore, it was expressed that there is growing and strong support for research by administration at the COM campus in Regina.

Numerous weaknesses were identified with respect to research administration. For example, the implementation of the cluster model within the COM has been largely unsuccessful. Cluster leaders are provided little authority over the management, budgeting, and assignment of personnel to their clusters. Lack of administrative authority perpetuates conflict between department heads and cluster leaders. Additionally, the clusters operate in an insular manner and fail to foster collaboration between researchers. Other weaknesses include: ineffective tracking and promotion of research productivity and funding opportunities, a lack of awareness of research initiatives across the college, a weak research culture, and a Saskatoon-centric research agenda.


In terms of opportunities, the existing cluster model could be reviewed and modified to improve effectiveness. Strategies could involve restructuring the clusters using a ground-up approach focused on strategic research areas, creating an administrative role with clear authority over cluster operations, or dismantling the clusters in their entirety. Research supports should be enhanced across all COM campuses. Suggestions ranged from hiring study coordinators, hiring staff to support clinical research trials, developing and offering mentorship programming for early career researchers, and improving project management expertise in the college to support research. Other opportunities include: inventorying and promoting research initiatives and resources across the college, embedding basic, population health, and clinical scientists in the same departments and labs, and strategically focusing the research agenda of the COM.

Most administrative threats identified were in relation to college reputation. Failure to improve the college's research culture and productivity will result in the COM continuing to be outperformed by peer institutions. It will also limit the college's ability to be perceived as a major player by external stakeholders.

II. Infrastructure and Technology

As part of a U15 institution, the COM has many strengths related to infrastructure and technology. Access to the Health Sciences Complex, including new classrooms and laboratory facilities, has the potential to foster collaboration between researchers. There are also a number of unique facilities within the COM to support research, including the Canadian Centre for Health and Safety in Agriculture ("CCHSA"), gene editing technology ("CRISPR"), and microarray screening technologies ("shRNA"). Furthermore, the UOFS has a variety of other amenities, including the Canadian Light Source ("CLS"), the Vaccine and Infectious Disease Organization ("VIDO"), the International Vaccine Centre ("InterVac"), and other professional colleges.

While the COM has access to world-class infrastructure and technologies, failure to capitalize upon existing facilities, such as CLS, VIDO, and InterVac, as well as failure to promote and share internal equipment (such as



genomic infrastructure) negatively impacts the college's research profile. Given the time commitment of clinical faculty, it was also identified that inadequate supports are in place to foster interest and productivity in research. Furthermore, there is limited access to population-based data sets maintained by provincial organizations such as the Health Quality Council ("HQC") and the provincial Ministry of Health ("MOH").

There is ample opportunity to improve access to and promote existing infrastructure on campus, including CLS, VIDO, and InterVac. It was identified that the COM could play a leading role in the creation of a provincial research network for basic science, population health, and clinical research. Such a network should be accessible to all college campuses and external health partners.

III. Personnel

College faculty and research scientists serve a paramount role in the success of the college's research mission. In terms of strengths, there is a critical mass of basic science and population health scientists, some of whom are internationally-recognized researchers in their areas, within the COM. There is also a strong network of researchers across the UOFS campus in Saskatoon and a growing number of researches at the COM campus in Regina. The high number of research personnel across all campuses possess great potential to produce high-quality research in the college.

A variety of challenges were identified with respect to college research personnel. In terms of composition, there is a limited number of early and mid-career researchers, clinical researchers, graduate students, and post-doctoral fellows within the COM. This contributes to a status quo levels of research productivity in the college. The absence of effective recruitment and retention plans for faculty, research scientists, staff, graduate students, and post-doctoral fellows exacerbates this weakness. Additionally, the absence of protected research time contributes to poor retention of clinical scientists. Furthermore, few expectations are set for research within the COM which, alongside limited training opportunities, causes disengagement of existing faculty and researchers.

There are many opportunities to strengthen the college's faculty, research scientist, graduate student, and post-doctoral fellows complement. For example, the development of a strategic recruitment plan targeted at early and mid-career researchers as well as graduate students could improve the college research culture as well as productivity levels. Other opportunities include: establishing two classes of faculty (academics and researchers), recruiting additional research chairs and protecting their research time, capitalizing on the existing mentorship program offered by the Office of the Vice-President Research ("OVPR") at the UOFS, and effectively engaging medical students in the college's research mission early in their studies.

IV. Productivity

Research productivity in the COM has historically trailed behind other medical schools in Canada. While evidence suggests a large amount of research activity is occurring and that pockets of high research productivity exist (cancer, neuroscience, and population health), there is a need for improvement in this area.

A variety of systemic factors contributing to poor research productivity were identified. In general, expectations for research productivity are not formalized and are unclear for basic science, population health, and clinical researchers. This is exacerbated by a lack of formal accountability for research output as well as a promotion and merit system that establishes (and reinforces) low expectations for research productivity. There is also an overall failure to build capacity in strong research programs in the college. Finally, there exist a large pool of research scientists who, in comparison to other institutions, produce limited research outputs and whose salaries could be allocated in an alternative manner to improve research outcomes.



V. Integration

While pockets of collaboration exist, there is an overall lack of interaction, communication, and integration between basic science, population health, and clinical scientists as well as their research within the COM. This is exacerbated by a tendency towards functional isolation of academic departments, units, research clusters, and health agencies as well as a lack of awareness and promotion of research initiatives within the college. The absence of a college-wide vision for research also negatively impacts integration of research within the COM.

There are a variety of ways in which integration between basic science, population health, and clinical researchers could be improved. For instance, the college could focus on strengthening connections between campuses, health agencies, and health regions. Additionally, the college could proactively foster networking between top researchers and scientists through the use of on campus events, cluster seminars, and other means. Other strategies to improve integration include: developing translational research groups, hosting a university-health region consortium (to bridge silos and facilitate collaboration), and better self-promotion of research within the college.

The primary threat related to integration identified by the RIWG was the college's historical failure to engage with central planning units at the UOFS. Failure to participate in central strategic and research planning initiatives will result in the college continuing to be disconnected from agenda-setting at the university.

VI. Funding

Research funding was identified as one of the greatest challenges to the college's research portfolio. In general, there is limited start-up, seed, and bridge funding available for most forms of research in the COM. This is particularly true for translational research. Limited funding contributes to low research productivity and hinders the ability of college faculty and research scientists to compete nationally for all levels of funding, including but not limited to hospital foundation and Tri-Council funding. Furthermore, there is limited capital funding for research infrastructure acquisition in the college.

In terms of opportunities, effort should be made to better communicate existing granting agency funding opportunities to researchers as well as to provide supports to enhance their grantsmanship. Due to limited funding, the college could also consider focusing the allocation of funds to existing initiatives and infrastructure rather than investing in a host of new research initiatives. Efforts should be made to better articulate the role and funding propensity of the Saskatchewan Centre for Patient-Oriented Research ("SCPOR") in the college's research portfolio. The COM could also engage in discussions with provincial government and granting agencies to discuss increasing the amount of funding available for health sciences research. Finally, the COM could explore fundraising opportunities to increase the amount of research funding available in the college.

There are a variety of provincial and national funding factors which threaten the college's research portfolio. With respect to provincial funding, there continues to be low provincial investment in biomedical science research particularly in comparison to other provinces. Furthermore, there is limited dedicated funding to the COM from the provincial government. There are also significant constraints on the use of Saskatchewan Health Research Foundation ("SHRF") funds given they can be held by post-doctoral fellows but not graduate students. In terms of national funding, there are marginal success rates for college faculty obtaining Canadian Institute of Health Research ("CIHR") funding.



VII. Partnerships

Strong partnerships can greatly improve the COM’s research mission. While the college has historically been ineffective at establishing research partnerships with internal and external stakeholders, it is evident that the COM is interested in engaging health agencies, regions, and educational providers in a collaborative and mutually beneficial manner.

The RIWG identified a host of opportunities related to partnerships. With respect to internal partnerships, the COM could better engage with central units at the UOFS to foster interdisciplinary and transdisciplinary health-related research, access unique infrastructure, and contribute to agenda-setting at the university. In terms of external partnerships, the COM could work with other post-secondary education institutions, such as First Nations University, Saskatchewan Polytechnic, and the University of Regina, to generate health-related research. Furthermore, the COM could partner with health agencies and regions with the intent of inventorying existing research initiatives, and resources, improving access to population and clinical-based data sets, strengthen research productivity across the health system, and better articulate the value of research in improving patient outcomes. Effort should also be made to better align the college’s strategic priorities with that of our health regions and provincial Ministry of Health. There also exists opportunity to engage with federal government to address priority health research needs and secure additional funding, as well as local communities.

The primary threat identified related to partnerships is the amalgamation of the health regions within Saskatchewan. Establishing partnerships before the amalgamation of the health regions is complete could result in a significant amount of rework and may not produce sustainable, value creating partnerships.

VIII. Research Areas

The RIWG devoted a significant amount of time to discussing areas of research that are currently strong, those that could use improvement, and those which are strategic opportunities for the college. The RIWG identified the following non-exhaustive list and concluded that there is not a single research area where the college excels above all other areas or other medical schools. It was identified that all research areas are of equal importance and help the college address the health needs of the populations of the province.

Strengths	Opportunities	
<ul style="list-style-type: none"> - Biomedical sciences - Cancer (basic, not clinical) - Cancer translational imaging - Community health - Dementia - HIV - Indigenous Health - Infectious disease - International health - Musculoskeletal - Neuroscience - One health - Population health - Public health - Rural and remote health - Social accountability 	<p><u>Research Areas</u></p> <p>Cancer</p> <ul style="list-style-type: none"> - Basic research - Translational Imaging <p>Neuroscience</p> <ul style="list-style-type: none"> - Neurodegenerative Diseases such as Dementia, Multiple Sclerosis <p>Infectious Diseases</p> <ul style="list-style-type: none"> - HIV/AIDS <p>Chronic Diseases</p> <ul style="list-style-type: none"> - Cardiovascular - Diabetes - Respiratory Health <p>Autoimmune Diseases</p> <ul style="list-style-type: none"> - Rheumatology <p>Personalized Medicine</p> <p>Reproductive Care</p> <p>Metabolic Diseases</p>	<p><u>Type of Research</u></p> <ul style="list-style-type: none"> Biomedical Sciences Clinical Research and Trials System Research - Health Service Delivery - Telehealth - Treatment Compliance Translational Research Interdisciplinary Research <p><u>Population Health, including One Health</u></p> <ul style="list-style-type: none"> - Indigenous (including prenatal) - Rural and remote - Social accountability - International Health - Climate Change - Refugee



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IX. Other

The RIWG identified many other strengths and weaknesses related to the college’s research portfolio. In terms of strengths, some residency programs embed research throughout their curriculum. For example, residents in the internal medicine program are required to complete a research project case report in their first year, a research project in their second year, and an interprovincial project in their third year. With respect to weaknesses, select graduate programming was identified as outdated and in need of revision. Concerns also arose regarding the failure to implement strategic plans in the past.

A multitude of opportunities were identified for the college’s research portfolio. The province in which the COM operates is relatively small and the college could be more responsive to the needs of the population it serves. There is also opportunity to better engage graduate students, post-doctoral fellows, and residents in the existing clinical investigator program (“CLIP”). Furthermore, the college could establish and support translational clinical programs.

One predominant threats were identified with respect to the college’s research portfolio. First, the current state of the provincial economy is such that there are continued reductions in the amount of funding available in the post-secondary education and health sectors. This can impact the amount of funding available for research in the college.



RECOMMENDED FOCUS AREAS

In addition to documenting a SWOT analysis, the RIWG identified and validated the top strengths, weaknesses, threats, and opportunities of the college's research portfolio. These are high-level findings intended to inform college leaders when deciding upon strategic priorities over the next five years.

I. Strengths

The following represent the top five factors which can differentiate the COM's research portfolio from other medical schools:

- **Infrastructure**. As part of the University of Saskatchewan, the college has access to world-class research facilities and is in close proximity to other health science colleges

- Cluster Model**. The concept of collaborative research groupings is considered a strength. The existing model has been effective in some areas (clusters based on diseases such as cancer and neurosciences), but has been less successful in achieving intended outcomes in other areas clustered more on technologies/equipment (e.g. Structure) or perceived commonalities (e.g. Virology).

- **Basic Biomedical Science Researchers**. The college has a broad base of biomedical science researchers with potential to foster a strong research foundation across the basic sciences.

- **Population Health Researchers**. The college has a critical mass of population health researchers which fosters a strong research foundation for population health.

- **Rural and Remote Health**. The college's research and geographic location positions it to be a leader in rural and remote health research.

II. Weaknesses


The following represent priority areas for improvement to improve the COM's research and innovation mission over the next five years:

- **Culture**: Faculty, staff, and students do not inherently value research. The college should foster a provincially-focused research culture across all its campuses.

- **Interaction among Researchers**. There is limited interaction, collaboration, and communication between basic, clinical, and population researchers, as well as across disciplines and clusters.

- **Research Funding**. Researchers have limited access to all levels of funding, including start-up, seed, and bridge funding. This further prevents researchers from beginning projects or attaining more substantial research funds.

- **Communication**. There is little awareness or promotion of researchers, their projects, or available supports for basic science and clinical research within the college and across the health system.



Research Support: existing college governance, administrative structures, and supports fail to facilitate the entire research process at both campuses. There is lack of support for identifying grants, grant writing, ethics approval, laboratory work (setting up labs, clinical trials), and training clinicians for research careers.

III. Opportunities

The following represent opportunities that should be capitalized upon to strengthen the COM's research and innovation mission over the next five years:

- **Human Resources.** The college must develop a strategic human resources plan that emphasizes the prudent use of faculty and staff resources. This includes the recruitment of new and mid-career researchers, their effective mentorship and management, as well as retirement incentives for faculty with low research productivity.
- **Cluster Review.** The clusters should be reviewed to identify how they might be better organized. Recommended outcomes include providing greater authority to cluster leaders (budgeting, recruitment of personnel), opportunity for mobility and affiliation between clusters, and enhanced collaboration between basic, population health, and clinical researchers within and across each cluster.
- **Funding Diversification.** Due to the limited and competitive nature of national and provincial funding, the college should consider diversifying funding opportunities through fundraising and by providing support for other funding.
- **Translational Research.** The college should facilitate producing translational research within the college and across the health regions with the intent of making an impact in the provincial health system.
- **Indigenous Health Research.** The college's indigenous health research agenda is growing and is well-positioned to be a leader in this area and support the college in responding to the TRC's Calls to Action.
- **Health Needs of Saskatchewan:** The College has great potential to direct its research to address the needs of the province. This includes (but is not limited to) multiple sclerosis, mental health, addictions, human immunodeficiency virus, tuberculosis, and sexually transmitted infections.

IV. Threats

The college must be prepared to respond to the following over the next five years:

- **Reputation.** Failure to improve the college's research reputation will prevent the college from strategically recruiting high-profile researchers, graduate students, and can contribute to loss of existing research potential.
- **Status Quo.** The college's reputation and research portfolio is at significant risk if the college does not actively focus its efforts on improving our college's research operations and productivity.
- **Dedicated Funding.** The Government of Saskatchewan provides limited dedicated funding for research to the College of Medicine. Annual allocations trail behind other provincial jurisdictions.



- **SHRF Funding:** the amount of basic research funding allocated by the Saskatchewan Health Research Fund on an annual basis. Annual allocations trail behind other provincial jurisdictions.
- **Relationship with the University of Saskatchewan:** historically, the college has and not been involved in decision-making for institutional research priorities. Continued disengagement with central units is a significant threat and effort should be made to better align priorities of the college and university.

STRATEGIC OPTIONS

The final RIWG meeting was dedicated to identifying potential strategic options for our college’s research portfolio. These are high level goals intended to inform college leaders in deciding upon strategies to pursue over the next five years.

Focus Area	Funding Diversification
Desired Outcome	Increase the total funds available for research within the College of Medicine over the next five years.
Proposed Strategy	<p>Establish an internal research foundation dedicated to securing research funds for the College of Medicine. This could be achieved by:</p> <ul style="list-style-type: none"> • <u>Establish the Foundation</u>: working with college leadership to establish the foundation and assign a principal investigator or manager for the fund. • <u>Develop a Fundraising Campaign</u>: work with the college advancement team to develop a fundraising campaign that is highly visible and articulates SIC resident needs. • <u>Supporting College Advancement</u>: support the college advancement team in securing research funds by creating an advisor group consisting of researchers and leaders from within the college.

Focus Area	Human Resources
Desired Outcome	Successfully recruit new and mid-career researchers as well as top-performing graduate students within the College of Medicine.
Proposed Strategy	<p>The college must develop a strategic human resources plan that emphasizes the prudent use of faculty resources. This includes:</p> <ul style="list-style-type: none"> • Recruitment strategies for new and mid-career researchers. • Competitive start-up research funds for new researchers. • Mentorship opportunities for new college faculty and researchers. • Resignation/retirement incentives for low performing researchers.

Focus Area	Communication
Desired Outcome	Better communicate research initiatives and resources within the College of Medicine.
Proposed Strategy	<p>The existing college website should be improved to better communicate research initiatives and resources within the College of Medicine.</p> <ul style="list-style-type: none"> • <u>Identify critical content</u>: working with college leadership to identify critical content to be included on the college website. Initial ideas include: information to enhance awareness of research, highlight success and human interest stories, and to highlight the benefits of research on patient health. • <u>Include fundraising tools</u>: a refreshed college website should provide an opportunity for fundraising / direct contributions on the college website. • <u>Support Communications Team</u>: support the college communications team to update the college website.



Focus Area	Communication
Desired Outcome	Celebrating research success, building relationships and trust, and ensuring all researchers have a place and feel valued.
Proposed Strategy	Various strategies can be employed to celebrate research success, build relationships, and create a sense of value for college researchers. <ul style="list-style-type: none"><li data-bbox="391 499 1365 558">• <u>Website</u>: capitalize on the college website to better communicate research initiatives, resources, and successes.<li data-bbox="391 562 1393 621">• <u>Interdepartmental Seminars</u>: alter existing graduate seminars so that researchers can be exposed to other research initiatives in the college.<li data-bbox="391 625 1398 653">• <u>Faculty Research Days</u>: an opportunity to highlight the work of faculty within the college.

APPENDIX ONE: TERMS OF REFERENCE

Note: amendments were made to the original terms of reference at the request of the RIWG. This primarily included meeting scheduling and deadlines.

TERMS OF REFERENCE

College of Medicine – Strategic Planning (2017-2022) Research and Innovation Working Group

Project Scope

The College of Medicine is in the process of renewing its strategic plan which will orient the college's teaching and learning, research and innovation, clinical care service and community engagement, as well as governance and partnerships and administration agenda over the next five years.

The Research and Innovation Working Group is one of three working groups established to inform the college's strategic planning process. The committee is responsible for evaluating the research and innovation mission of the college, assessing the environment and for identifying future strategic priorities in this area. This mandate does not include agenda-setting for teaching and learning priorities.

Objectives:

1. Review supplied documentation before the initial meeting.
2. Evaluate the research and innovation mission of the college by:
 - a. Documenting a SWOT Analysis; and
 - b. Documenting strategic options and performance metrics.
3. Present findings at college-wide visioning meeting.

Stakeholders

Research and Innovation Working Group:

The working group is comprised of 30 members appointed for up to a 2-month term. The composition of the working group, though subject to change, will be as follows:

Role	Incumbent
Chair	Dr. Marek Radomski Vice-Dean, Research
Rep – Biomedical Head	Dr. Thomas Fisher Department Head, Physiology
Rep – Biomedical Head	Dr. Jo-Anne Dillon Department Head, Microbiology and Immunology
Rep – Biomedical Head	Dr. Scot Stone <i>on behalf of</i> Dr. Ramji Khandelwal Representing Department Head, Biochemistry
Rep – Biomedical Head	Dr. Venkat Gopalkrishnan Department Head, Pharmacology
Rep – Biomedical Head	Dr. Adel Mohamed Department Head, Anatomy and Cell Biology
Rep – Community Health and Epidemiology	Dr. Anne Leis Department Head, Community Health and Epidemiology
Rep – Unified Head	Dr. Ivar Mendez Unified Head, Surgery
Rep – Unified Head	Dr. John Thiel Unified Head



Rep – Unified Head	Dr. Sam Haddad Unified Head
Rep – Biomedical and Environmental Research Cluster	Dr. Shelley Kirychuk Faculty
Rep – Cardiopulmonary Research Cluster	Dr. John Gordon Faculty
Rep – Imaging and Developmental Biology Cluster	Dr. David Cooper Faculty
Rep – Drug Design Cluster	Dr. Terra Arnason Faculty
Rep – Molecular Design Cluster	Dr. Miroslaw Cygler Faculty
Rep – Translational Research Cluster	Dr. John DeCoteau Faculty
Rep – Cancer Cluster	Dr. Deborah Anderson Faculty
Rep – Neuroscience Cluster	Dr. Lisa Kalynchuk Associate Dean
Rep – Immunology Cluster	Dr. Linda Chelico Faculty
Rep – Researcher (Regina)	Dr. David Kopriva Faculty
Rep – Community Health and Epidemiology	Dr. Nazeem Muhajarine Faculty
Rep – Saskatchewan Cancer Agency (VDR Request)	Dr. Monica Behl Vice-President, Medical Services and Senior Medical Officer
Rep – Canadian Centre for Health and Safety in Agriculture.	Dr. Niels Koehncke Faculty
Rep – Student (SMSS)	Mr. Scott Adams Undergraduate Student
Rep – Student (PAIRS)	Dr. Eddiu Liu Resident
Rep – Student (CGSR)	Mr. Zakery Baker Graduate Student
Rep – Student (CGSR)	Mr. Isaac Pratt Graduate Student
Rep – Indigenous Health Committee	Dr. Sylvia Abonyi Faculty
Rep – Division of Social Accountability	Ms. Lisa Yeo Administrative Coordinator
Rep – Research Office Administration	Ms. Megan Steeves Manager
Rep – Information and Communication Technology Administration	Ms. Marianne Bell Manager
Rep – Research Facilitator	Dr. Izabela Szelest Research Facilitator
Rep – Research Facilitator	Dr. Bruna Bonavia-Fisher Research Facilitator
Facilitator / Administrative Support	Mr. Christopher Martin Project Coordinator



Project Scope Description

The Research and Innovation Working Group is expected to achieve the following objectives:

- Review Pre-Meeting Documentation and Complete Pre-Meeting Assignment

This includes reviewing: college self-study report, external reviewer report, past strategic planning documents, college ASPIRE application (social accountability), and an environmental scan of U15 medical strategic plans. This also involves brainstorming initial ideas on strengths, weaknesses, opportunities, and threats.

- Evaluate the effectiveness of the research and innovation mission of the college.

This includes assessing the successes of the previous planning cycle, identifying and assessing emerging opportunities, identifying cross-cutting themes for prioritization, as well as identifying success criteria and measurement procedures. The assessment should consider research initiatives at both the Saskatoon and Regina campus.

- Document a SWOT Analysis, Strategic Options, and Performance Metrics

- Present findings and recommendations at a college-wide visioning meeting on November 25, 2016.

Project Team/Stakeholder Governance

The *Research and Innovation Working Group* will meet a total of five times between November 4, 2016 and November 18, 2016. Each meeting will be either 60 or 75 minutes in duration and will be scheduled in the early morning to allow for participation from all working group members.

The meeting will be Chaired by the Vice-Dean of Research. Due to the large size of the group, timed agendas will be distributed well in advance of working group meetings. Working group members will be provided with a meeting objective at the beginning of each meeting, be assigned to smaller working groups during the allotted time, and a facilitator will support the summarizing, evaluation, and prioritization of all findings.

The following is a tentative overview of the working group responsibilities:

Activity	Description	Objective	Deadline
1	Meeting Package Circulation	1. Distribute Meeting Package 2. Distribute Pre-Meeting Assignment	21-Nov
2	Pre-Meeting Assignment	1. Complete Pre-Meeting Exercise	28-Oct
3	Pre-Meeting Review	1. Review Agenda 2. Review Supplementary Materials 3. Review Guiding Questions.	4-Nov
4	Research and Innovation Working Group Meeting (1)	1. Document Strengths, Weaknesses of Research Mission	4-Nov
5	Research and Innovation Working Group Meeting (2)	1. Document Weaknesses, Opportunities of Research Mission	7-Nov
6	Research and Innovation Working Group Meeting (3)	1. Document Opportunities, Threats of Research Mission	10-Nov



7	Online Prioritization Survey	1. Distribute Prioritization Survey to Working Group Members	11-Nov
8	Online Prioritization Survey	1. Complete Online Prioritization Survey	14-Nov
9	Research and Innovation Working Group Meeting (4)	1. Validate Top Strengths, Weaknesses, Opportunities, Threats 2. Discuss Potential Metrics	15-Nov
10	Complete Pre-Meeting Assignment	1. Brainstorm a total of 3 strategic options. 2. Bring findings to the next meeting.	17-Nov
11	Research and Innovation Working Group Meeting (5)	1. Develop Strategic Opportunities for the Future	18-Nov
12	Draft Summary Report	1. Summary Report Drafted, Sent to Working Group Members	21-Nov
13	Review Summary Report	1. Working Group Members Review, Provide Feedback on Summary Report	23-Nov

Decision Making Model:

- Decision-making will be by consensus. In situations where consensus cannot be reached, options will be summarized and escalated to the Chair for decision.
- All decisions and recommendations will be documented and shared with the group via email.