RESEARCH REPORT
COLLEGE OF MEDICINE – REGINA CAMPUS
JANUARY – DECEMBER 2020

Research Department
Room M-704, 2180 23rd Avenue,
Regina, SK S4S 0A5
1. **Introduction**

This report is prepared for the College of Medicine (Regina Campus), University of Saskatchewan and provides an overview of studies that were conducted in Regina, between January and December 2020. It provides a description of the types of studies initiated in 2020, research funding obtained through scholarly activity, and a summary of the posters, presentations, and publications resulting from research being supported on the Regina Campus.

2. **Studies Initiated in 2020**

In 2020, 139 studies were submitted for Research Ethics Board (REB) approval. Of these newly initiated studies, 95 (68%) involved a Regina based physician as a Principal Investigator (PI) or Co-Investigator (Co-I), 17% (n=23) involved a medical student, and 19% (n=26) involved a Resident. **Figure 1** illustrates the number of studies in different categories that were initiated in 2020.

**Figure 1: Number of Studies Initiated in 2020**

![Diagram showing the number of studies initiated in 2020, categorized by type: Regina Based Physicians as PI/CoI (95), No Regina based physicians as PI/CoI (44), Learners involved (18), Medical Residents involved (21), Both Residents and Learners (5), Physicians only (51)].
A number of medical specialties are represented in the studies shown in Figure 1. An overview of these studies categorized by specialty is provided below (Table 1). The numbers of studies that involve residents represent all projects that they are involved in, including those that meet their curricular requirements.

**Table 1: Studies Initiated in 2020 per Specialty (Regina based physician as PI or CoI only)**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Total Number of Studies</th>
<th>Number of Studies Involving Learners</th>
<th>Number of Studies Involving Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiology</td>
<td>17</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>13</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>12</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>9</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>9</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Pathology and Laboratory Medicine</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dermatology</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oncology</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nephrology</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Community Health and Epidemiology</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>95</strong></td>
<td><strong>23</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>
3. Graduates of the Clinician Research Support Program

The Clinician Research Support Program (CRSP) is an exciting partnership between the Saskatchewan Health Authority (SHA) and College of Medicine - Regina Campus. It aims to assist promising new Regina-based clinician researchers in achieving early successes that will strengthen their future funding applications to provincial, national, and international funding opportunities.

Congratulations to the most recent graduates of this program.

Dr. Megan Clark is a Regina family physician and a recipient of the 2019-2021 Clinician Research Support Program (CRSP). Her research supported by the CRSP focuses on improving health care services for trans and gender diverse people in Saskatchewan and is a community-led research project in partnership with SK’s trans community.

Dr. Clark, as co-Principal Investigator with Dr. Stéphanie Madill from the School of Rehabilitation Science, secured a Saskatchewan Health Research Foundation SK Centre for Patient-Oriented Research Sprout grant valued at $176,741.

“This grant is funding a foundational research project in Saskatchewan’s trans and gender diverse community and will pilot a new peer health navigator program.

“The fundamental thing for me is to improve health-care service delivery for gender and diverse people in Saskatchewan. This project will be a great opportunity for our healthcare system and even Saskatchewan’s general public to learn about our trans community, its needs and its strengths.”

Dr. Damien Rattray is the Ob/Gyn Residency Program Director with the University of Saskatchewan for the Regina site and the Simulation Co-Director for the program. He has a research interest in fibroids, endometriosis, ambulatory gynecology, chronic pelvic pain, and surgical simulation.

As part of the CRSP, he secured $14,970 in funding from a ComRAD grant and presented four abstracts.

“The Clinician Research Support Program was a game changer for me. The support through this program allowed me to develop a successfully funded double-blind, placebo-controlled, randomized trial assessing a less painful way to provide an outpatient endometrial ablation for women,” explains Dr. Rattray. “It provided me the extra bit of time necessary to apply for grants that I normally wouldn’t have been able to access. It has been a privilege to be part of the CRSP, and I’m eternally grateful.”

Dr. Eric Sy is a Critical Care Medicine and Internal Medicine physician practicing in Regina, Saskatchewan at the Regina General Hospital and Pasqua Hospital since 2015. Dr. Sy is a 2019-2021 recipient of the CRSP. The research supported by CRSP focuses on several areas including; the study of direct discharges home from the intensive care unit, the safe transition of patients out of the intensive care unit, and the epidemiology of critically ill patients in the intensive care unit.

“These projects are important as ICU admissions are rising across Canada. ICU patients represent the sickest patients admitted to the hospital and typically will have long, costly hospitalizations. The study of improvement processes to safely transition these patients out of the ICU may have meaningful impacts to the health care system.”

Dr. Sy secured $231,600 in funding and authored 12 publications.

“The CRSP has helped me tremendously in getting my research organized and started, allowing me to be competitive for Provincial Granting Agencies such as the Saskatchewan Health Research Foundation,” says Dr. Sy. “We recently have been able to secure Impact Grant funding from SHRF to study virtual care follow-up of critically ill patients.”
4. Research Funding Applications

In 2020, 21 funding applications from the College of Medicine (Regina Campus) were submitted to different funding agencies; among which 15 were approved and awarded for a total of $1,545,693. One application result is still pending. Table 2 provides a list of the funding applications submitted in 2020. Figure 2 provides a summary of the funding sources.
Table 2: 2020 Research Funding

<table>
<thead>
<tr>
<th>Name of PI or Co-I</th>
<th>Funding agency</th>
<th>Description</th>
<th>Project Title</th>
<th>Amount received/ requested</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Rattray</td>
<td>USask</td>
<td>CoMRAD</td>
<td>The use of fundal block during NovaSure endometrial ablation to reduce intraoperative pain: A randomized controlled feasibility study</td>
<td>$14,970</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Sy</td>
<td>USask</td>
<td>CoMRAD</td>
<td>Evaluation of patient perspectives and outcomes for patients discharged directly to home (DDH) from the ICU</td>
<td>$23,900</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Sy</td>
<td>SHRF</td>
<td>Development Grant</td>
<td>Randomized, Embedded, Multifactorial Adaptive Platform trial for Community-Acquired Pneumonia (REMAP-CAP)</td>
<td>$12,500</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Sy</td>
<td>University of Calgary</td>
<td>Tic Seed Grant</td>
<td>Patient &amp; family perspectives on the quality and safety of direct discharges home and transfers out of the intensive care unit</td>
<td>$10,000</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Sy, Dr. Lee, Dr. Betcher</td>
<td>SHRF</td>
<td>Impact Grant</td>
<td>Saskatchewan Virtual Follow-up Clinic of Patients Directly Discharged Home from ICU (Vi-DISH)</td>
<td>$150,000</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Asiniwasis</td>
<td>USask</td>
<td>CoMRAD</td>
<td>Virtual Dermatology Clinics in Remote and Northern Saskatchewan Indigenous</td>
<td>$27,620</td>
<td>Approved</td>
</tr>
<tr>
<td>Dr. Lee, Dr. Skinner, Dr. Karunakaran, Dr. Kamrul, Dr. Michaels, Dr. Vasquez, Dr. Maroof</td>
<td>SHRF</td>
<td>COVID-19 Rapid Response funding</td>
<td>Staying Connected with Social Media During Social Distancing</td>
<td>$7,523</td>
<td>Approved</td>
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<tr>
<td>Dr. Skinner, Dr. Lee, Dr. Lavoie, Dr. Richardson, Dr. Clark</td>
<td>SHRF</td>
<td>Research Connections COVID-19 Rapid Response</td>
<td>A distance access to prevention, treatment and response (ADAPT-R): An agile approach to COVID-19</td>
<td>$9,050</td>
<td>Approved</td>
</tr>
<tr>
<td><strong>Dr. Clark</strong></td>
<td><strong>Dr. Dehghani</strong></td>
<td><strong>Dr. Prasad, Dr. Goyal, Dr. Korkola</strong></td>
<td><strong>Dr. Prasad (Co-Applicant)</strong></td>
<td><strong>Dr. Prasad, Dr. Goyal</strong></td>
<td><strong>Dr. Goyal, Dr. Prasad</strong></td>
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<tr>
<td><strong>SHRF &amp; SCPOR</strong></td>
<td><strong>SHRF</strong></td>
<td><strong>USask</strong></td>
<td><strong>CIHR</strong></td>
<td><strong>SHRF</strong></td>
<td><strong>USask</strong></td>
</tr>
<tr>
<td>Sprout Grant</td>
<td>2020-2021 Partnership Grant</td>
<td>CoMRAD</td>
<td>COVID-19 May 2020 Rapid Research Funding Call</td>
<td>Collaborative Innovation Development (CID Program)</td>
<td>CoMRAD</td>
</tr>
<tr>
<td><strong>$179,741</strong></td>
<td><strong>$49,389</strong></td>
<td><strong>$20,314</strong></td>
<td><strong>$937,950</strong></td>
<td><strong>$49,486</strong></td>
<td><strong>$28,250</strong></td>
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<td>Approved</td>
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<td>Approved</td>
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</table>
Figure 2: Sources of successful funding in the year 2020

Sources of Funding

- Provincial and National Level (CIHR, SCPOR, SHRF)
- CoM Internally Funded (CoMRAD)
- Externally Funded (e.g. University of Calgary, Hospitals of Regina Foundation)
5. **Posters, Presentations and Manuscripts**

Sixteen posters were presented and 15 oral presentations were given at different local, national, and international conferences during the reporting period. Twenty-four posters were presented by students at the 2020 SHA Research Showcase. Furthermore, 43 manuscripts were published in 2020. Despite our best efforts in compiling this list, it is possible that it is not inclusive of all posters, presentations and manuscripts from Regina Campus clinician researchers.

**Posters:**


Oral Presentations:


peers within rural Indigenous communities and a Regina Hub in Saskatchewan. [Oral Presentation, at Research Showcase].


12. Vasquez-Camargo A. Doctor, vaping is better than cigarettes, Right? September 18, 2020. Presented at the 66th Family Medicine Conference sponsored by the Saskatchewan College of Family Physicians, virtually from Saskatoon, SK.


Publications:


Student Posters (Presented at the 2020 SHA Research Showcase):


8. Kate, K., & Petryk, S. 2020. Free distribution and use of menstrual cups in an effort to decrease school absence. Poster presented at the 14th Annual Research Showcase, Saskatchewan Health Authority, SK


