

ANNUAL REPORT **2019**



PRAXIS

Spinal Cord Institute

TABLE OF CONTENTS

02	Message from our leadership
03	Our rebrand story
04	Those we recognize
05	A history of impact
06	Building an implementation pathway for SCI innovation
08	Nurturing entrepreneurs and innovators
09	Commercialization snapshot
10	Collaborating to accelerate research
12	Improving research and care standards across Canada
14	Supporting and expanding knowledge and research
15	Additional highlights from the past year
17	Statement of financial position
18	Statement of operations and fund balances
19	Thank you to our supporters



Message from our leadership

Praxis experienced an exciting year of transition in 2019. While honouring our deep roots and remaining steadfast in our commitment to those living with spinal cord injury, we reimagined a bold new identity. We are Praxis Spinal Cord Institute. “Praxis” is ancient Greek for taking theory into practice: we translate knowledge into action. We put people living with spinal cord injury (SCI) at the heart of everything we do; our refreshed image reflects this in a way that we hope will be meaningful to our local and global community and research partners.

Our sincere appreciation goes out to all Praxis staff, our collaborators in research and SCI networks, and to the innovators in the SCI community for their commitment. Collectively, their drive moves us closer to achieving our shared vision: a world without paralysis after spinal cord injury.

We acknowledge the significant contribution of our board members. Their dedication ensures that we continue to adhere to strict governance and guidelines for nonprofits operating in Canada. Our top rating from MoneySense and MacLean’s as one of Canada’s leading charities in 2019 is in no small part due to their efforts.

As we share best practices and collaborate with researchers worldwide, the scope of our work at Praxis expands year-to-year, reaching every corner of the globe. Our research within the Canadian SCI community emphasizes the transformative value of building engaged partnerships to achieve the best outcomes. In our role as a facilitator, a leader, and an architect of SCI networks, we will continue to evolve to support these thriving connections.

In this annual report, we offer you a snapshot of our organization’s contribution to SCI research and care, innovation and our direct engagement of people with lived experience of SCI. You will discover how we support clinician researchers and scientists across Canada through grants and mentorship. You will learn about our investment in entrepreneurs and bioengineers of the future through mentorship and partnerships like Engineers in Scrubs with the University of British Columbia. This report is a window into the world where we accelerate innovations towards positive outcomes for those living with SCI.

Our vision would not be possible without the financial support of the Government of Canada through Western Economic Diversification, the Rick Hansen Foundation, and the Governments

of British Columbia, Alberta, Manitoba and Ontario. Through their generosity, Praxis is transforming the lives of people with spinal cord injury.



BILL BARRABLE
CEO, Praxis Spinal Cord Institute



DR. IAN RIGBY
Board Chair, Praxis Spinal Cord Institute



Our rebrand story

When making an impact on the global stage, a thriving organization is faced with challenging questions. Does our identity demonstrate how inclusive we are of a diversity of voices? Does our name differentiate us within the SCI community for the uniqueness of our mission and clearly reflect our real-world actions? Are we readily recognized as a leader in global SCI collaboration?

Answers to challenging questions are not always easy to accept. However, in our journey over the past year we discovered a courage to embrace and grow with them.

In 2019, we renamed the organization as Praxis Spinal Cord Institute. The new name and refreshed brand speak directly to our position as an international leader advancing SCI outcomes through research and innovation.

The roots of our name reflects our *raison d'être*: “Praxis” means moving knowledge into action. This aligns directly with our mission to move knowledge into action to benefit those living with SCI.

Our new visual identity and logo, a cross-section of the grey matter located in the spinal cord resembles a butterfly shape, highlighting both the beauty and fragility of our biological makeup. A butterfly is also a symbol of change, innovation and resilience, qualities of both the research and individuals we are fortunate to engage with every day.

At Praxis, we value our honoured history. At the same time, we enthusiastically look ahead to our future with renewed clarity and understanding of who we are and what we do.



Those we recognize

Our heartfelt gratitude goes to our board and committees. Their passion for Praxis' mission — commitment to a world without paralysis after SCI — translates into improvements in the lives of Canadians with SCI. Together we are one team with one goal, a dedicated community made real through a sincere engagement with each other.

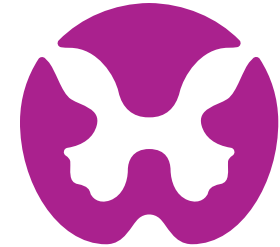
Thank you to our outgoing board members Maria Barrados, Dean Bergeron, and Ross Mason for their service to our mission.



NAVA SWERSKY SOFER



DOUGLAS BROWN



BEN ALMOND



DEAN BERGERON



CHRISTINE SANG



IAN RIGBY



JEFF CHARPENTIER



JEROME SO



KRIS COWLEY



MARIA BARRADOS



MICHAEL BEATTIE



ROSS MASON



SHARI HUGHSON



A history of impact

IN CANADA AND AROUND THE WORLD

700+
CLINICIANS

PROVIDED WITH BEST
PRACTICE TRAINING



MORE THAN

130 FUNDED
PROJECTS

ENGAGED
INDIVIDUALS WITH SCI

20,000+

MORE THAN

80,000
USERS

OF THE ISNCSCI ALGORITHM
IN 168 COUNTRIES

MORE THAN
250 SUPPORTED
PEER-REVIEWED PUBLICATIONS



MORE THAN
400 GRP USERS
WORLDWIDE



Building an implementation pathway for SCI innovation



PRAXIS LAUNCHES WORLD'S FIRST SCI ACCELERATION PROGRAM

In December 2019, applications opened for the Praxis SCI Accelerate Program, a 12-week acceleration pilot program for healthcare start-ups with solutions that address care and cure-related treatments and overall quality of life of individuals with SCI. This is the first ever program internationally that focuses on accelerating health innovations with SCI applications. The program aims to shorten the traditional 17-year timeline from proof of concept to a finished product, and by doing so, transform the lives of people with SCI at a faster pace.

Praxis, through an interdisciplinary consumer, researcher and commercialization panel, selected the top five companies to join the program as part of its cohort. Each venture received \$50,000 in funding to assist with product development, research, fundraising, marketing and regulatory

services, to be able to enter the market and transform the lives of people with SCI. The five companies each seek to address key complications faced by people with SCI, including pressure injuries, spasticity, bladder and bowel complications.

ONTARIO BRAIN INSTITUTE AND PRAXIS CO-HOST NEUROTECH PITCH EVENT IN TORONTO

On November 27, 2019, healthcare start-ups from across Canada showcased their brain disorder and SCI-focused innovations at the 'Innovate SCI & Neurotech' pitch event in Toronto. The event was hosted by independent wealth management firm, Gluskin Sheff, in partnership with Praxis and Ontario Brain Institute. Eight start-ups were selected for the private event, and Trexo Robotics, a prior Y-combinator company and developer of mobility therapeutic aids for children, was selected as the recipient of the financial support grant.

PARTNERSHIP WITH ENGINEERS IN SCRUBS

In 2019, Praxis announced its continued support for the University of British Columbia's biomedical engineering program, Engineers in Scrubs. First established in 2011, the program seeks to address healthcare challenges by supporting the next generation of biomedical innovators and entrepreneurs. Students are given the opportunity to collaborate with healthcare workers and those living with SCI to understand the practical day-to-day challenges that need to be addressed through innovative biomedical design. In November 2019, Praxis hosted an event for BC media, SCI community stakeholders and UBC faculty members and students to showcase several students' top designs. These included a sports grip assist for athletes with limited hand function and a seatbelt attachment for those with dexterity challenges.





ONTARIO INNOVATORS SUPPORTED THROUGH INAUGURAL PRAXIS PRIZE FUNDING

On March 25, 2019, winners of the inaugural Praxis Prize were announced at the first ever virtual Synapse Life Science Competition, hosted by the Innovation Factory. The Praxis Prize was created with the intention of supporting Ontario-based innovators working on cutting-edge products at Technology Readiness Level 3 or higher, with a clearly articulated clinical application specifically in the area of SCI care. Three winners were chosen, each with a product in prototype state with plans to commercialize within the next 2-3 years.

INTERNATIONAL & CANADIAN START-UPS IN THE SPOTLIGHT FOR SCI-FOCUSED INNOVATIONS

Innovative SCI-focused technologies were in the spotlight at an investor event held in Vancouver on June 12, 2019. Hosted by RBC in partnership with Praxis, eight shortlisted international and Canadian start-ups showcased their businesses to a panel of corporate and scientific experts. Three prize winners were awarded grants to help further their innovations.

Nurturing entrepreneurs and innovators

UBC ENGINEERING STUDENTS MAKING A DIFFERENCE

Praxis is fortunate to partner with a number of entrepreneurial biomedical engineering students through its Engineers in Scrubs partnership with UBC. One such student is Alaa Heshmati who designed AccessiBelt, a device aimed at helping people with limited hand function to independently buckle and unbuckle their seatbelt with ease. The device not only makes access to transportation possible for those with grip challenges, but also improves overall quality of life.



BY THE NUMBERS

1 CANADA
RESEARCH CHAIR

2 FACULTY MEMBERS

11 POST-DOCTORAL
FELLOWS

14 FUNDED
RESEARCHERS



RBC INVESTOR EVENT SERIES

After winning first prize at the RBC investor event series for SCI innovations in June 2019, **Dr. Pooja Viswanathan**, co-founder and CEO of Braze Mobility said,

"This award will help us to gain valuable connections to advisors and investors who are passionate about solving problems faced by those with spinal cord injury. We hope to be back in Vancouver soon to nurture the relationships we have created here."



Commercialization snapshot

PRIZE MONEY

\$65,000

TOTAL VALUE

22 FEATURED COMPANIES
THROUGH EVENTS

3 SCI TECHNOLOGIES
BROUGHT TO MARKET

100 COMPANIES
EVALUATED
FOR THE SCI
ACCELERATE
PROGRAM

COMMERCIALIZATION GRANTS

\$798,000

TOTAL VALUE

HEBREW UNIVERSITY BIODESIGN	\$400,000
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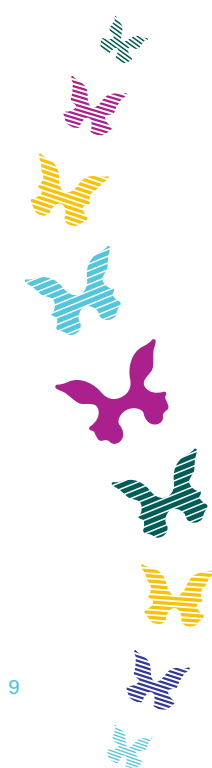
UBC BIOMEDICAL ENGINEERING	\$198,000
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CDL WEST	\$100,000
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GEORGIA TECH	\$50,000
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INDIA COLLABORATION – UBC IC-IMPACTS	\$50,000
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5 COMPANIES ACCEPTED
INTO THE SCI ACCELERATE PROGRAM



Collaborating to accelerate research

CREATING AN ACTION FRAMEWORK FOR SCI CARE IN CANADA

In 2019, we conducted an exploratory study, 'Being Bold: Towards a National Spinal Cord Injury Care, Health & Wellness Strategy', to examine the readiness of the SCI community to create a national strategy for care. This study set the stage for engaging the Canadian SCI community in creating an actionable framework for a national strategy including goals and a vision for the next 10 years.

Praxis has already actioned many of the recommendations from the study, including the formation of regional networks to connect best practice groups with people with lived experience and actively engaging our partners. We are confident these steps will allow the acceleration of implementation of best practices in research and care, both locally and regionally.

BY THE NUMBERS

PARTICIPANTS

ENROLLED IN RHSCIR

8000+

54%

OF THE RHSCIR NETWORK
ACCREDITED

MORE THAN

4500

CANADIANS

BENEFITTED FROM
IMPLEMENTATION OF
BEST PRACTICES

MORE THAN

60 ENGAGED

HEALTHCARE SITES
WORLDWIDE



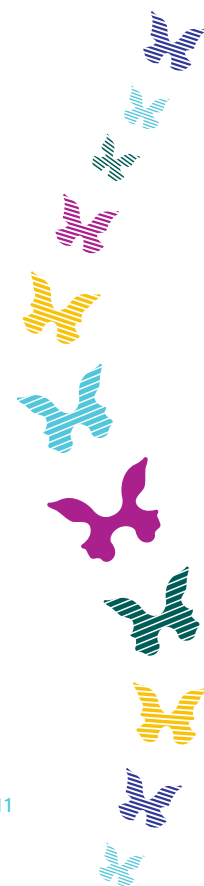


AWARDS ANNOUNCED FOR ACTIVITY-BASED THERAPY RESEARCH PROJECTS

Building on the Activity-Based Therapy (ABT) Summit Praxis supported in 2019, we launched a funding competition to expand available evidence and implementation of ABT targeted to increase neuro-restoration. We were proud to award Canadian researchers with grants to advance their research focus in this emerging field and in parallel, support a Canadian ABT Community of Practice. These studies are novel and will add to growing knowledge on the contribution of ABT to outcomes.

PRAXIS COLLECTS SCI COMMUNITY PERSPECTIVES ON SPINAL CORD STIMULATION

While spinal cord stimulation has shown potential for functional improvement for people living with SCI, the perspectives of those living with SCI have rarely been obtained on this topic. Last year, Praxis partnered with the North American Spinal Cord Injury Consortium to deliver an online research survey; it was co-created by people with lived experience of SCI. The purpose of the SCI Community Personal Opinions and Perspectives on Spinal Cord Stimulation survey was to identify priorities, gauge expectations for recovery, gather opinions on clinical trial design, and assess demand and willingness to pay for spinal cord stimulation. The survey was launched in February 2020 with analysis of this valuable data from people with lived experience currently underway.



Improving research and care standards across Canada

PRAXIS DEVELOPS AND PROMOTES COLLABORATION RECOMMENDATIONS FOR SCI RESEARCH SUCCESS

Praxis continues to be an international leader in advancing Integrated Knowledge Translation (IKT). IKT represents a seismic shift in the way most research was conducted in the past. Based on principles of active participation and partnership, IKT is the process of involving the end users of the knowledge (e.g. patients, clinicians, decision and policy-makers) throughout the entire research continuum, from ideation through to implementation. By engaging those most impacted, IKT has been shown to increase the relevance and implementation of research. In addition, placing the patient's voice

at the forefront of knowledge generation is increasingly considered a best practice entrenched by large research funding organizations.

Praxis recognizes the expertise and experience of SCI consumers as equally important to those of other research disciplines. Inclusion of a comprehensive IKT plan is now required in all Praxis funded research. To facilitate this requirement, Praxis, in partnership with our collaborators, developed a series of recommendations to offer direction to scientists and clinicians on how to incorporate end users at every stage of their research.

These recommendations and guidelines, co-created by a diverse group of SCI consumers, researchers and clinicians, have been met with wide acclaim in international and national academic circles through presentations at events such as the European SCI Federation (ESCIF) Congress, Australian and New Zealand Spinal Cord Society (ANZCoS) Annual Scientific Meeting, the International Spinal Cord Society (ISCoS) Annual Scientific Meeting Annual Meeting and the American Congress of Rehabilitation Medicine (ACRM) Annual Conference.



PRAXIS LEADS DEVELOPMENT OF FIRST-OF-ITS KIND REPORT ON PEDIATRIC SCI IN CANADA

The incidence of pediatric SCI is relatively low. The consequences, however, are devastating, with substantial impact on young people living with the condition, their families, the health care system and society. To date, most of the research and evidence available has focused on spinal cord injury in adults. Through the support of a philanthropic donor, Praxis conducted the first Canadian environmental scan of pediatric SCI research and care. The goal was to improve the understanding of pediatric SCI and identify priority knowledge gaps. The resulting report “An Overview of Pediatric Spinal Cord Injury

in Canada” serves as a starting point for future planning in both research and care. Of note is that one of the strongest themes presented in the report is the need to establish a pediatric SCI network. This would bring together Canadian pediatric SCI stakeholders and would provide an effective channel for knowledge sharing and collaboration on topics of national relevance. Praxis is committed to continuing to advance future planning and strategic collaboration in this important area to ultimately improve the health and well-being of children and adolescents living with SCI.

PRAXIS PARTNERS WITH HEALTH STANDARDS ORGANIZATION

Praxis has partnered with Health Standards Organization (HSO), an affiliate of Accreditation Canada, to engage the Canadian SCI community to enhance current HSO SCI Standards and accreditation processes. The first step of this engagement involved conducting a needs assessment in the form of a survey, which

attracted over 220 participants. The new approach will be both comprehensive and centered around the needs of the SCI community. These Standards will be applied to many aspects of SCI care and services, including inpatient care, rehabilitation and re-integration into the community.

INAUGURAL INDIGENOUS HEALTH WEBINAR SHINES SPOTLIGHT ON HOLISTIC CARE PROJECTS

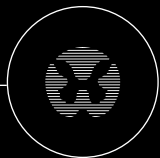
In February 2020, Praxis was pleased to host its inaugural webinar “Indigenous Populations and TSCI: Using an Indigenous Lens to Establish Meaningful Data”. The presenters included Dr. Melanie Jeffrey from the University of Toronto’s Waakebiness-Bryce Institute for Indigenous Health and Assistant Professor Sandra Juutilainen, Indigenous Health and Nutrition, School of Nutrition in Ryerson University. Both researchers conduct studies guided by the epistemologies of Anishinaabe/Cree and Haudenosaunee peoples in Ontario. They spoke about the importance of considering Indigenous healthcare and research studies through a holistic lens considering physical, mental, emotional and spiritual health. The presenters emphasized the importance of this approach in building trust, cooperation and productive research relationships.

Supporting and expanding knowledge and research

RESEARCH WEBINARS

>250 PARTICIPANTS, INCLUDING **55**

NATIONAL AND LOCAL ATTENDEES AT INDIGENOUS HEALTH WEBINAR



CURE AND CARE PROGRAM PROJECT FUNDING

\$3.9M

ABT GRANTS

\$450,000

TOTAL AWARD VALUE

230 RESPONDENTS

TO SPINAL CORD
STIMULATION SURVEY

42 PARTICIPANTS

IN THE CONVERSATION ABOUT
A NATIONAL SCI CARE STRATEGY

Additional highlights from the past year

PRAXIS PRESENTERS RECEIVE NSCI AWARDS

Praxis participated in the 8th National Spinal Cord Injury Conference hosted by the Canadian SCI Rehabilitation Association in Niagara Falls in October 2019. Praxis presenters received two awards: second place for a podium presentation on how machine learning can be used to predict survival rates after traumatic SCI, and a People's Choice award for a poster on how to improve clinical trials by examining neurological recovery.



PRAXIS SCI STUDIES AMONG MOST CITED IN THEIR FIELD IN NATURE PUBLICATION

Praxis received recognition from leading scientific journal, Nature, as two papers co-authored by its researchers ranked among the most cited in their field in 2020. The first publication offered a retrospective analysis around the timing of

decompression/stabilization surgery following traumatic SCI. The second offered evidence-based exercise guidelines for adults with SCI and may offer a foundation for developing exercise policies and programs for people with SCI globally.





PRAXIS EXPANDS CONSUMER PROGRAM

Praxis has expanded its Consumer Engagement Program. Joining John Chernesky, Lead, Consumer Engagement, are Sam Douglas, GRP and BC Programs Support; James Hektner, Regional Community Liaison - BC Interior; Chris Marks, Regional Community Liaison - Vancouver Island; and Richard Peter, Indigenous Peoples Liaison. All with lived SCI experience, these new team members are critical to sustaining our focus on improved health outcomes and quality of life for those living with SCI.

EXPANSION OF RHSCIR DATASET FOR RESEARCH COMMUNITY

Praxis expanded its Rick Hansen Spinal Cord Injury Registry (RHSCIR) dataset to include non-traumatic SCI in order to better understand the epidemiology and to further support rehabilitation care for this population. The new dataset was developed in collaboration with subject matter experts and network representatives from across the country. The dataset was also condensed and refined to streamline the most impactful and useful information for end users. With national implementation being rolled out in the coming year, we look forward to sharing the learnings in future reports.

PRAXIS RECOGNIZED AS ONE OF MONEYSense'S TOP-RATED CANADIAN CHARITIES FOR 2020

Praxis has once again been named one of MoneySense's top-rated charities in Canada for 2020. The list includes a wide range of not-for-profit organizations across various fields including hospital foundations, food banks and international aid groups. Praxis ranked second overall in the health sector. MoneySense develops its ratings based on organizations' finances and openness using data from Charity Intelligence Canada and filings from the Canada Revenue Agency.

Statement of financial position

March 31, 2020, with comparative information for year 2019

	2020	2019
ASSETS		
Current assets		
Cash and cash equivalents	\$ 1,696,974	\$ 3,847,434
Short-term investments	5,644,330	7,097,194
Accounts receivable	706,401	26,930
Prepaid expenses	63,365	98,120
	8,111,070	11,069,678
Capital assets	116,372	101,853
Investment funds	208,939	200,000
	\$ 8,436,381	\$ 11,371,531
LIABILITIES AND NET ASSETS		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 1,737,867	\$ 1,396,996
Deferred contributions	5,987,504	9,028,057
	7,725,371	10,425,053
Net assets:		
Unrestricted funds	711,010	946,478
	\$ 8,436,381	\$ 11,371,531

For Praxis Spinal Cord Institute's complete audited financial statements, please visit the Resources section of our website: praxisinstitute.org



Statement of operations and fund balances

Year ended March 31, 2020, with comparative information for year 2019	2020	2019
Revenue		
Grants and contributions	\$ 11,893,350	\$ 10,942,564
Donations and sponsorships	11,884	3,450
Investment income	176,105	224,786
Other income	162,510	53,230
Amortization of deferred capital contributions	-	37,457
	12,243,849	11,261,487
Expenses		
Translational research	3,105,107	3,930,955
Best practice implementation	4,739,437	3,432,534
Commercialization	1,230,599	929,541
Informatics	929,291	1,053,190
Network development	434,606	315,243
Best and brightest awards	110,000	119,988
Consumer engagement	841,236	593,152
Fundraising	265,247	121,022
Management and administration	823,794	508,799
	12,479,317	11,004,424
Excess (deficiency) of revenue over expenses	(235,468)	257,063
Adjustment to unrestricted fund balance	-	262,131
Unrestricted fund balance, beginning of year	946,478	427,284
Unrestricted fund balance, end of year	\$ 711,010	\$ 946,478

For Praxis Spinal Cord Institute's complete audited financial statements, please visit the Resources section of our website: praxisinstitute.org



Thank you to our supporters

The projects highlighted in this year's annual report are made possible through the generous support of our funders.



Western Economic
Diversification Canada

Diversification de l'économie
de l'Ouest Canada



Our work would not be possible without the significant contribution of individuals living with spinal cord injury.



BLUSSON SPINAL CORD CENTRE

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819775229 RR0001

