THE SCHIZOPHRENIA SOCIETY OF CANADA

& THE SCHIZOPHRENIA SOCIETY OF CANADA FOUNDATION

ANNUAL REPORT
2018–2019

Our mission and goals are at the heart of everything we do. Through our programs and activies, we strive to: reduce stigma through education and awareness; support individuals & families; advocate for improved services and treatments; and support research.

Who We Are

2018-2019 SSC EXECUTIVE COMMITTEE

Dr. Lori Triano-Antidormi
President

Florence Budden
Past President

Joan Baylis
Treasurer

Donna Methot
Member-at-Large

Dr. Chris Summerville
Ex-Officio

SSC TEAM

Dr. Chris Summerville
Chief Executive Officer

Katrina Tinman
Administrative Assistant

Catherine Willinsky
Project Manager, Cannabis and Psychosis Project

Sarah Roht
Marketing Manager, Cannabis and Psychosis Project

Paola Matheson
Accountant

2018-2019 SSC BOARD OF DIRECTORS

The Schizophrenia Society of Canada's Board of Directors is comprised of representatives associated with the provincial schizophrenia societies across Canada, as well as five directors-at-large. (Each provincial schizophrenia society is an independent, autonomous charity with its own board of directors, by-laws, governance model, values, and CRA charitable registration number.)

OUR BOARD MEMBERS

Sylvie Maréchal
Société Québécoise de la Schizophrénie

Florence Budden
Schizophrenia Society of Newfoundland and Labrador

Donna Methot
Schizophrenia Society of Nova Scotia

Colleen Crossley
British Columbia Schizophrenia Society

Gregory Zed
Schizophrenia Society of New Brunswick

Julia Hoeppner
Manitoba Schizophrenia Society

Jeff James
Schizophrenia Society of Saskatchewan

Aamir Mian
Schizophrenia Society of Ontario

Gail MacLean
Schizophrenia Society of Prince Edward Island

Dr. Lori Triano-Antidormi
Director-at-Large, Ontario

Laura Burke
Director-at-Large, Nova Scotia

Elizabeth Anderson
Director-at-Large, Alberta

Hazel Meredith
Director-at-Large, British Columbia

Joan Baylis
Director-at-Large, Ontario

The Schizophrenia Society of Canada: from 1979 to 2019

A Message from the President, Dr. Lori Triano-Antidormi, *Ph.D. C.Psych* and CEO, Dr. Chris Summerville, *D.Min., CPRRP, LL.D (Honorary)*

As the Schizophrenia Society of Canada celebrates 40 years, we recognize that its founder, Dr. Bill Jefferies, was a transformational leader who knew the times and knew what to do! Families had no voice in advocating for better care for their loved ones living with schizophrenia. While not dismissing the voices of those individuals living with schizophrenia, he began in Ontario to gather with family members and friends. All their concerns pointed to the reality that their loved ones were being underrecognized, underserved, and underrepresented. They wanted the suffering associated with the most stigmatized mental illness to stop. Their goal was to alleviate not only the suffering of schizophrenia, but to alleviate all suffering associated with the name "schizophrenic."

When Bill Jefferies started the national organization, Canadian Friends of Schizophrenics, in 1979 in Toronto as an advocacy voice for isolated families of those living with schizophrenia, deinstitutionalization which had begun in the 1960s was well underway. Deinstitutionalization was a government policy that moved mental health patients out of government "insane asylums" into funded community mental health centers as a way of improving treatment of "the mentally ill" while also cutting government budgets. The concept was a good one; however, the money saved by closing beds did not makes its way into community supports and services, including housing, as promised. Thus, the well-intentioned deinstitutionalization process failed due to failed political promises. Many who gained freedom from the institutions became slaves to homelessness. By 1980, Mr. Jefferies had inspired forgotten families across the Canadian provinces to establish their own provincial Friends of Schizophrenics. Eventually this horrible stigmatizing name would be changed to "The Schizophrenia Society."

Forty years ago, there was no talk of hope. That was a hopeless word. There was no talk of remission, no concept of a person with schizophrenia living independently and thriving, no such word or thought of people recovering from schizophrenia. Meaningful family engagement and interaction by service providers was seen as irrelevant! No "voice hearers" groups existed. Further, the myth existed that the opposite of mental illness was mental health and that a person living with mental illness could not experience good mental health. Early intervention leading to more positive and better outcomes would not be a best practice for another 20 years. Schizophrenia was previously seen as a condition with a progressing and deteriorating course. A diagnosis of schizophrenia was seen by most as "a kiss of death" diagnosis as young people with "broken brains" were still being told they would not be able to finish their education, maintain their friendships, or marry. The newer atypical or second-generation medications had not arrived, and side effects of medication were just a given. The only explanation as to a cause was that it was completely genetic, which we now know to be another myth. Most scientists believe that genes don't cause schizophrenia directly, but do make a person vulnerable to developing this illness. Scientists are studying many possible environmental factors, like the use of cannabis, that might cause a person with a genetic predisposition to develop schizophrenia. Thankfully, "Once schizophrenic always schizophrenic" would eventually be proven a myth by long-term studies.

> **"We not only know that recovery from mental illness is possible, but that people living with a mental illness can enjoy good mental health."**

Forty years later, we speak of psychosis as a continuum with multiple contributing factors, rather than speaking of schizophrenia as simply a neurobiological illness. Today, the philosophy of, and paradigm shift, to recovery-oriented mental health services is borne out not only in evidence-based studies but is becoming an actuality, howbeit very slowly and still with strong resistance from people, families, and professionals who hold to a reductionist view of neuroscience. We not only know

that recovery from mental illness is possible, but that people living with a mental illness can enjoy good mental health. Hope, we have learned changes everything. With the advent of the atypical medications, many women with schizophrenia began bearing children. And, today, many people with schizophrenia are finishing their education, maintaining their friends, entering into relationships and long-term marriages or partnerships. Many are learning how to live beyond the limitations and symptoms of schizophrenia or psychosis with a sense of hope, meaning, purpose, and social inclusion. This is what recovery means. It is about gaining a quality of life even with continuing symptoms. Families are discovering that they too are on their own pathway to recovery. Families are encouraged that their loved ones can live satisfying, hopeful, and contributing lives with the right combination of treatment options, including not only medication but psychosocial interventions and talk therapies, as well as appropriate supports and services in the community. Today, a diagnosis of schizophrenia does not automatically mean a life-sentence of ever-worsening symptoms and hospitalizations.

People diagnosed with a mental illness, it has been discovered, have hopes, dreams, and aspirations. They are not just a bundle of deficits, but human beings whose voices are getting louder and more confident as they now openly share their lived experiences of losses associated with mental illness experiences within non-recovery-oriented mental health systems and services and through the continuing stigma and discrimination. They, their families, and many service providers are calling for collaborative mental health care which is closely connected to primary care, and social care to reduce the numbers of people living with schizophrenia who die 10 to 20 years earlier than the rest of the population due to factors such as side effects of medication and respiratory illnesses. More often than not, the mantra proclaimed today is, "A diagnosis is a label, not your identity!"

Young families today are encouraged and inspired by these developments of an understanding of the lived experience of both those living with schizophrenia and their families. Their lived experiences together are informing health care providers' attitudes and delivery of person-centered and shared decision-making mental health care. While there still remains much work to be done in developing recovery-oriented mental health services, engaging and interacting with families with common sense and with emotional intelligence, and encouraging the formal educational system to engage in early prevention, identification, and intervention of psychosis, a radical change is taking place.

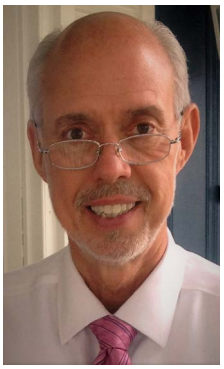
Back in 1979 no one ever thought that a person with schizophrenia could ever be a mentor or a model of encouragement to another person living with schizophrenia. Could lived experience of illness and of recovery be of any value to a newly diagnosed patient? Could family members of those experiencing early intervention and help be mentors and navigators of mental health services for new families? Evidenced based studies around the world are confirming a verdict of "Yes!" This "value added," **THE POWER OF LIVED EXPERIENCE** is now called peer support: personal lived experience or family experience. Many of the 110 early intervention or first episode clinics across Canada are moving towards a recovery orientedness with the inclusion of peer support workers.

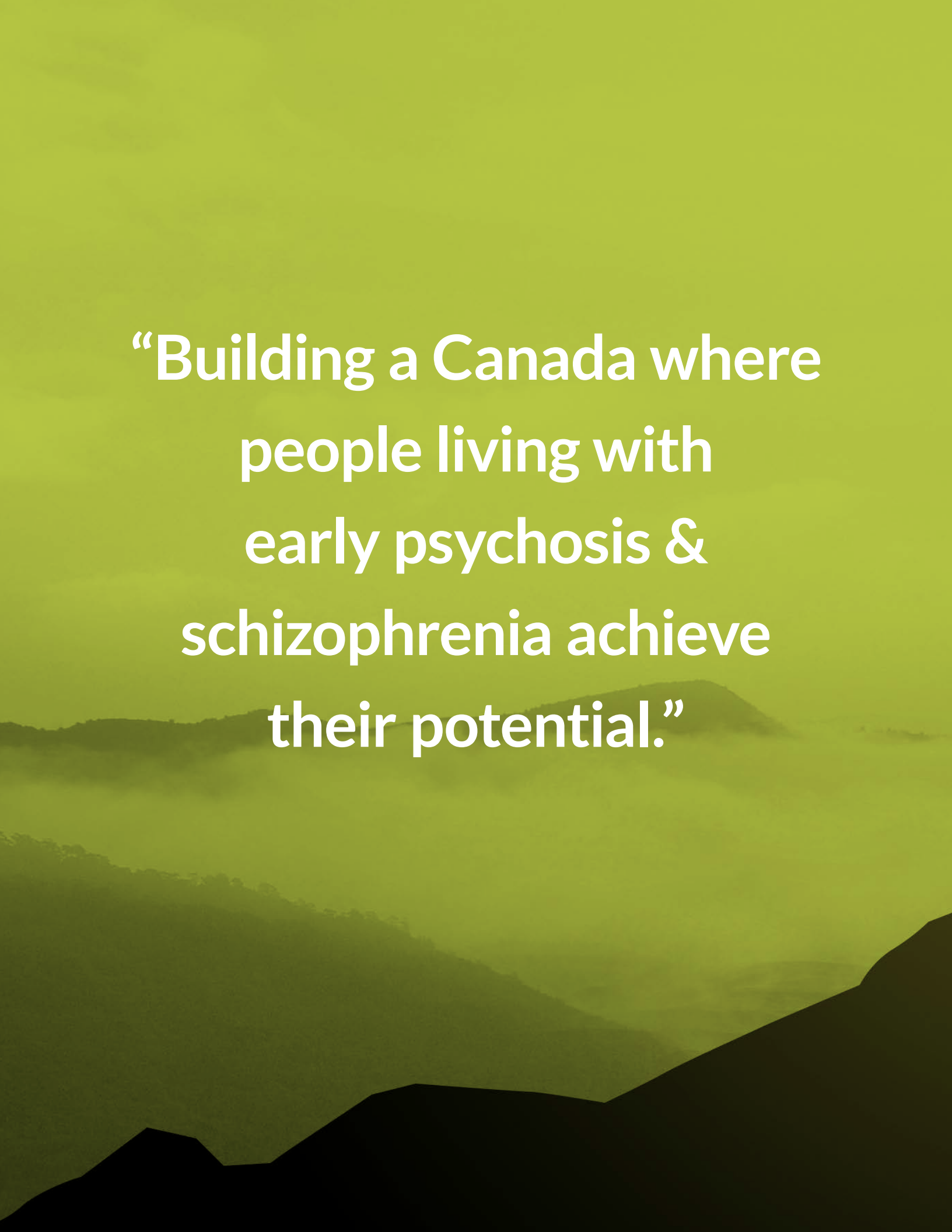
We are please to provide below the branding exercise process and the new exciting brand adopted by the SSC Board of Director. Many of our stakeholders have responded with very positive comments. Family and individuals with psychosis or schizophrenia were involved in this process. We wish to thank Hugh MacPhie of Macphie and all his associates who worked with us to create this youthful, refreshing, and positive brand which will assist SSC as a national organization to network with other national organizations and in our advocacy efforts at the federal level.

Respectfully submitted,

Dr. Lori Triano-Antidormi,
President

Dr. Chris Summerville,
CEO




“Building a Canada where
people living with
early psychosis &
schizophrenia achieve
their potential.”

The Need for a New National Brand

The previous logo *(stylized iris)* and the motto *(A Reason to Hope, the Means to Cope)* was developed by the Schizophrenia Society of Ontario. We express appreciation to SSO for allowing us to use "their brand." It was always a brand more for the provincial schizophrenia societies than a national organization like SSC. Consequently, this past fiscal year, the SSC engaged the services of Hugh MacPhie and his colleagues to assist the Schizophrenia Society of Canada with the branding and the development of a new and exciting mission statement.

With documents like "The 2017 SSC Environmental Scan," MacPhie facilitated a brand workshop to develop the mission statement, differentiating competency, brand character and brand essence. The objectives of this engagement were to align on a new mission statement for SSC and to draft key components of the SSC brand. And we learned that a brand today is more than a logo and motto.

"Target audience, mission, differentiating competency, brand character and brand essence are the ingredients for how we, SSC are reaching to make the world a better place for those people living with early psychosis and schizophrenia (individuals and families and friends)", says president Dr. Lori Triano-Antidormi.

Our Target Audience:

The target audiences served as lenses for the design of the mission and brand tools. They are ways to think about for whom the mission and brand are defined. We concluded that our target audience includes:

Other national mental health organizations. This would include organizations such as CMHA, Mood Disorders Society Canada, Mental Health Commission of Canada, Canadian Centre on Substance Use and Addiction, Canadian Consortium for Early Intervention in Psychosis, PSR Canada, and members of the Canadian Alliance on mental Illness and Mental Health.

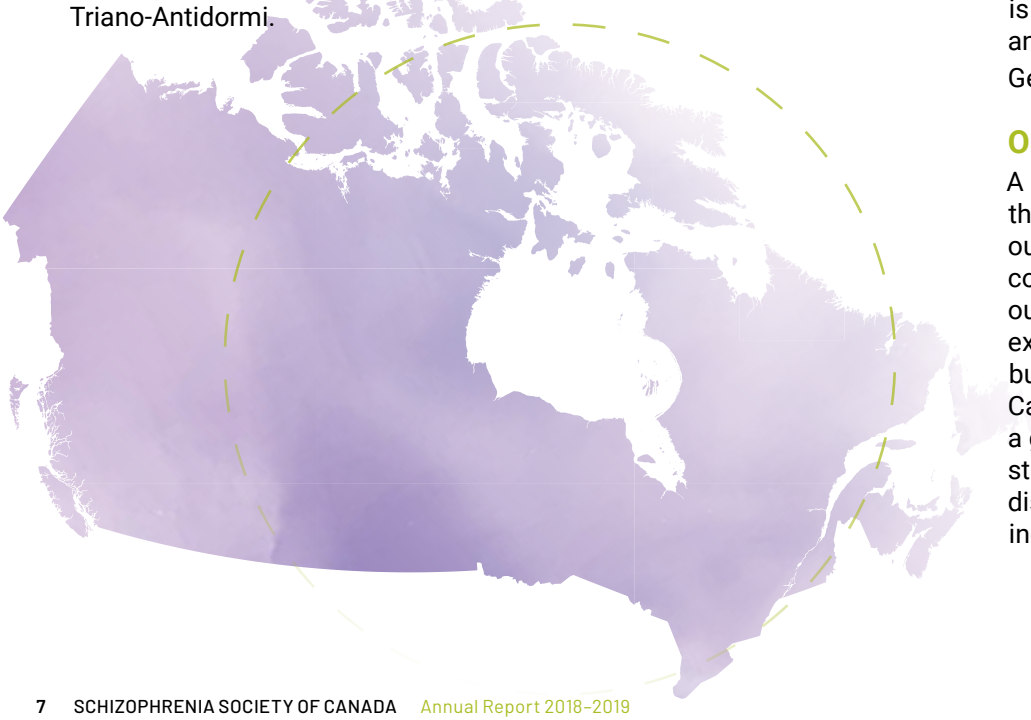
People or groups who can influence policy and/or funding. This includes MPs, Senators, and Deputy Ministers. We should target politicians connected to mental health regardless of political affiliation, keeping in mind that Senators hold a longer term and Deputy Ministers handle the money.

Corporate/employer organizations. These could present opportunities for donations and increased awareness.

Younger audiences. Younger audiences tend to be more receptive to diverse ways of understanding and discussing mental health. Younger audiences are the only real part of the general public that we see ourselves addressing. There is a need to bring the thoughts and influence of Millennials and Generation Z into the work of SSC.

Our Mission Statement:

A mission statement describes the core purpose and function of our organization and our unique contribution as we strive to achieve our vision. The mission is not exclusive to those who we serve but should be embraced by all Canadians. We are seeking to build a geography with less prejudice and stigma with the goal of reducing discrimination and increased social inclusion of those we represent.



Julia Hoeppner, a family member and an SSC board member remarked that, the phrase in the mission statement, "people living with early psychosis and schizophrenia", was clarified as of two groups: 1. The person living with the mental illness. 2. The family members and friends living in association with schizophrenia. Again, this statement **encompasses both individuals and families** by saying "people living with early psychosis and schizophrenia."

And the focus is on helping them to be their best selves, whatever that might be, that's why we went with "achieve their potential," so that it is open-ended and many people can see themselves there, and it is achievable, yet aspirational. This statement is deliberately flexible on the "how" so we have room to make it our own and move forward in a variety of ways. The goal of recovery is achieving one's potential in spite of limitations associated with a mental illness and living a satisfying life with the support of family, friends, service providers, and the community at large.

Build a Canada where people living with early psychosis and schizophrenia achieve their potential.

Our Differentiating Brand Competency:

Differentiating Competency is something that you are really good at, or admired for, that other people lack. As a national organization we feel that our differentiating competency is:

Transforming how people think, with knowledge and youthful enthusiasm

Knowledge speaks to the content we offer that is person-centred, family engagement oriented, strengths based, and recovery focused.

Youthful enthusiasm speaks to our attitude. "You may not now know how old Chris Summerville is, but he acts like he's 19!"

We have come a long ways in our understanding of early psychosis and schizophrenia and its heterogeneity from one person to another, including treatment options, environmental and ethno-cultural influences.

The lived experience of the person, the lived experience of families are diverse. A knowledge of the needs of various demographics is important. For example, millennials who are becoming caregivers to their baby-boomer parents need to be acknowledged and addressed. SSC wants to be transformative and also be seen as transformative in how people think through our knowledge and youthful enthusiasm.

Our Brand Character:

The brand character is a statement that describes the aspirational personality of the brand.

If SSC had a personality, what would it be? As a leading national organization we want be known as an inspirational visionary. With schizophrenia been the most stigmatized mental illness, we want to communicate a vision of hope! Hope changes everything.

An inspirational visionary

Our Brand Essence:

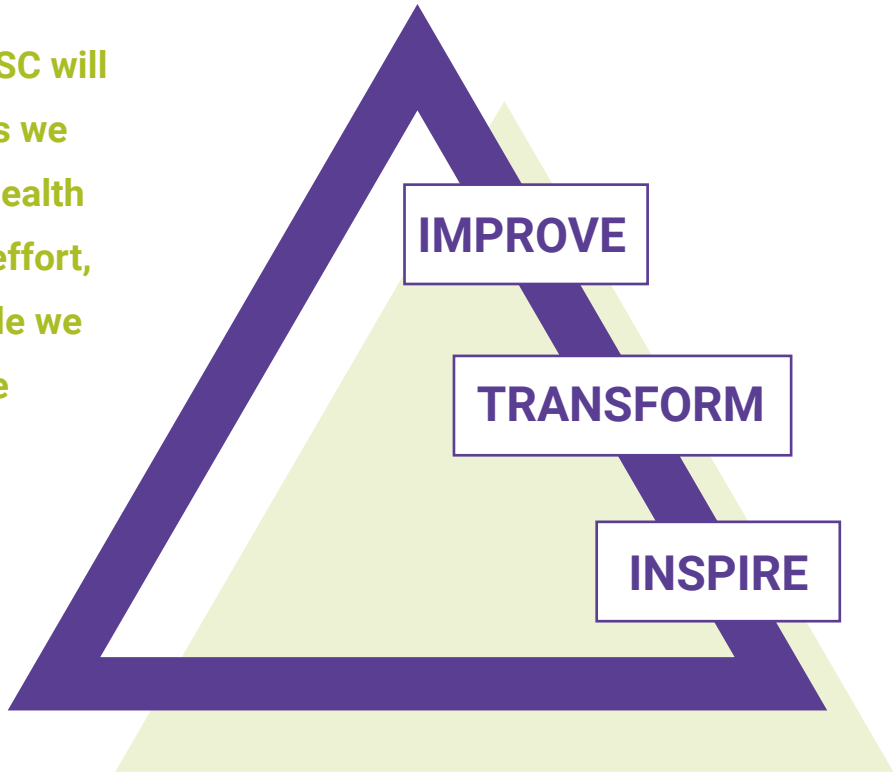
Brand Essence is the heart and soul of the brand, or the brand's most fundamental nature or quality. It is the ingredient without which, all other aspects of the brand would fall apart.

Our board decided that our brand essence is (and always has been):

Conviction that things can be better

This applies to people impacted by early psychosis and schizophrenia, but it is also a deeper idea than that. It is a world view, a philosophy. It is the heartbeat of SSC as a national leader. It's the key message of our advocacy. When we create better mental health care in partnership with primary health care and social health care, then we can "Build a Canada where people living with early psychosis and schizophrenia achieve their potential."

It is with this new brand that SSC will now undergird all that we do as we go forth as a national mental health organization: every advocacy effort, every engagement, every article we write, every service product we create, and every opportunity to work with media.



Mission Statement

Build a Canada where people living with early psychosis and schizophrenia achieve their potential.

Differentiating Competency

We transform how people think with knowledge and youthful enthusiasm.

Brand Character

An inspirational visionary

Brand Essence

Conviction that things can be better

Target Audience

- National mental health organizations
- People or groups who can influence policy and/or funding (government)
- Corporate/employer groups
- Younger generations

SSC Core Values

The SSC values provide further clarity on what the Society stands for and what it sees as important we seek to **"Build a Canada where people living with early psychosis and schizophrenia achieve their potential."**

1. Early psychosis and schizophrenia and are medical illnesses that, like other medical illnesses, have variable expressions and effects of symptoms, function and response to treatments.
2. Early psychosis and schizophrenia are caused by a number of different factors; from multiple genetic and environmental factors.
3. The SSC fully supports the important role of research in all areas related to early psychosis and schizophrenia and (biological, psychological, spiritual, and social determinants of health, etc).
4. Persons with early psychosis and schizophrenia are entitled to person-centred, recovery-focused, efficient multi-disciplinary and integrated evidence-informed treatments and community support services.
5. Persons at the early phases of their illness are entitled to real secondary prevention (early intervention and treatment) through specialized first episode psychosis clinics and their collaborators.
6. Persons with early psychosis and schizophrenia and psychosis are to be included as full citizens in accessing education, employment, housing, medical services, recreation and social supports.
7. Whenever possible families are essential partners in the care and the treatment and recovery plans of persons with early psychosis and schizophrenia, and deserve respect and support.
8. Persons with early psychosis and schizophrenia must be included in their treatment planning, care and recovery plans using a shared decision approach.
9. Persons with early psychosis and schizophrenia and their families are not to be blamed for this illness.

Cannabis and Psychosis Project Phase 3

Catherine Willinsky,
Project Manager

Since cannabis was legalized in 2018, the industry has evolved rapidly. Researchers, clinicians, and mental health advocates are concerned about the mixed messages along with the competitive nature of how cannabis products are being marketed. These is also confusion about the usefulness of CBD and the risks associated with THC, especially in relation to brain development of children and youth.

With the upcoming roll out by Health Canada - Canada.ca of new regulations for edibles, drinks and vaping products containing cannabis, understanding the research evidence linking cannabis with the risk of developing psychosis is increasingly important. Canadian youth are among the highest cannabis users worldwide. One in five teens between the ages of 15-19 have used cannabis within the last year.

SSC has been actively producing innovative, evidence based and accessible information exploring the link between cannabis and psychosis for over a decade. In 2009 we received a grant from Health Canada to develop a participatory research project based upon the lived experiences of youth with schizophrenia and cannabis use. This project, which wrapped up in 2012, established the SSC as a key organization in engaging youth and promoting dialogue on a range of issues relating to cannabis use and psychosis, placing equal value on research evidence and lived experience. Our deliberate strategy of engaging and reflecting youth perspectives made the project particularly unique and resulted in being awarded Mental Health Commission of Canada's Research Award in 2012.

In preparation for the legalization of Cannabis in 2018, SSC redeveloped the website with funding from Health Canada and the Canadian Centre on Substance Use and Addictions in collaboration with the Canadian Consortium on Early Intervention for Psychosis.

Early in 2019, SSC was fortunate to receive the support of the Substance Use and Addiction Division of Health Canada for a three-year project that aims to further engage youth in creating a public health campaign to promote informed decision-making and harm reduction for a diverse range of youth audiences.

Phase three of SSC's Cannabis and Psychosis: Explore the Link **(www.cannabisandpsychosis.ca),** will be guided by members of a Youth Advisory Council, comprised of diverse young Canadians, and will include a robust social media campaign.

Project staff are currently working with the Youth Advisory Council and key advisors to develop innovative content and approaches to promoting harm reduction and informed decision making among youth. By partnering with a wide range of organizations and stakeholders working in different settings and contexts, we will ensure the project's relevance a to broad range of Canadians, including the general youth population (from 15-25 years of age) as well as youth who may be experiencing greater risk factors due to homelessness, street involvement, LGBTQ2S+, Indigenous youth, and those at increased vulnerability because of mental health concerns.

The near 1 million dollar grant that SSC received from Health Canada for Phase 3 is to make sure that the interactive website is made known to as many young people as possible through networking with universities across Canada and working collaboratively with other national organizations who are producing excellent materials on the relationship between Cannabis use and its effects on the developing brain from conception to the age 25.

Catherine Willinsky,
Project Manager

Sarah Roht,
Marketing Manager

Stay tuned for the launch of the new site in November 2019.


“Transforming
how people think,
with knowledge &
youthful enthusiasm”

SSC 2018-2019 Financial Position

Joan Baylis,
Treasurer

We wish to acknowledge the significant contribution from the following:

Janssen-Ortho Inc.

Health Canada

Redpoll Foundation

Rubin Family Foundation

Ottawa Community Foundation

Vera Dolly Denty Foundation

Ali Khan Foundation

Morris Foundation

Estate of Barbara Camp McMannis

Estate of Dorothy Falconer

Estate of Samuel James Hanna

Estate of Helen Godwin Morris

I am pleased to report on the Schizophrenia Society of Canada financial statement for the year ending March 31, 2019.

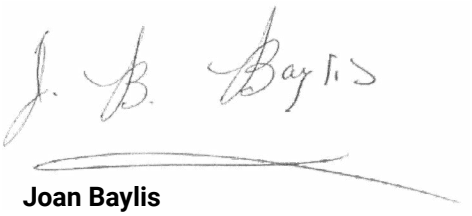
Thanks to generous bequests our revenue for the year was $705,730 with net assets of $1,359,659.

Working with financial advisor Scotia Wealth Management and the investment policy statement for Schizophrenia Society of Canada. While the Schizophrenia Society of Canada continue to be extremely conservative in their spending, the CEO and Board continues to look for opportunities to increase their funding from Government and Private Sector thus allowing the society to have continue growth and fulfill its Mission Statement.

I wish to thank our CEO, staff and Board Members for the opportunity to serve on the Board. I continue to look forward to working with everyone during the next term.

Financial Statements for year ending March 31, 2019 can be found at **www.schizophrenia.ca**

The Chair wishes to thank the tireless work of Chris Summerville in his support of not only the SSC but as well, the SSCF.



Joan Baylis
Treasurer

Our Collaborative Partners

In addition to on-going initiatives and activities which focused on reducing stigma, increasing education, providing support to individuals and families, as well as engaging in systemic advocacy and research, here are some of SSC's activities and accomplishments in 2018-2019 through collaborative partnerships. Through its networking abilities and opportunities, the SSC continues to provide national leadership and presence for the "schizophrenia recovery movement" while promoting peer support for families and people living with schizophrenia and psychosis.

Canadian Psychiatric Association

This past year we continued work on a user-friendly guide for people living with early psychosis and schizophrenia and their family members based upon the new Clinical Practice Guidelines for the Treatment of Schizophrenia by CPA. We expect final completion of this project in 2020.

Morris Foundation

Through a generous grant, the Morris Foundation is also assisting with the dissemination of the user-friendly guidelines for treating schizophrenia to be released in 2020.

Strengthening Families Together

With support from the Mental Health Commission of Canada, SSC continues to revise SFT. Wilma Schroder, Hazel Meredith, our CEO continue to finalize this project which will be completed in 2020.

Canadian Consortium for Early Intervention in Psychosis

With the legalization of cannabis October of 2018, the SSC has been very involved with Health Canada regarding public education and awareness around cannabis and mental illness, especially early psychosis and schizophrenia. See Catherine Willinsky's report elsewhere in the Annual Report. SSC was invited to the second annual Partnership Symposium on Cannabis Public Education and Awareness on Monday, October 1, 2018 in Ottawa held by Health Canada.

Health Canada

Canadian Centre on Substance Use and Addictions

Our Collaborative Partners

Mental Health Commission of Canada

SSC collaborated in an advisory capacity with the Mental Health Commission of Canada on several on-going projects:

- Tool Kits for Survivors of Suicide Loss and Survivors of Suicide Attempts
- Family Caregiver Guidelines Roundtable
- Networking with Mental Health Advisories to the MHCC
- Cannabis Research, Education and Awareness and Mental Health
- Provincial Mental Health Indicators
- Hallway Group Advisory of PWLE and Family Members
- E Mental Health
- Mental Health Indicators

Canadian Alliance on Mental Illness and Mental Health

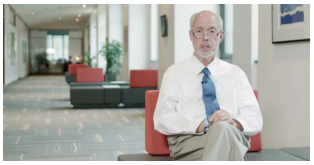
Both as a member of the Canadian Alliance on Mental Illness and Mental Health (CAMIMH) and on its own, SSC pursued opportunities to advocate for improved funding for and access to treatment and services by working with various federal departments, groups and organizations throughout the year.

Florence Budden, SSC Board Members continues as Co-Chair of CAMIMH and its Policy Action Committee of CAMIMH. Our CEO, Chris Summerville ended his three-year term as Co-Chair of CAMIMH this past May.

Brain Health

Last year we worked with Brain Health in the production of three articles and a video for Maclean's Online entitled *"Schizophrenia: An Evolution of Understanding."* **https://youtu.be/v0-DoRHIP8k**

The YouTube Video has been used widely in various forums.



SSC Video on Early Psychosis and Schizophrenia

With funding from Otsuka, the four SSC videos featuring Leonard Reynen, Rhona Reynen, Dr. Ridha Joober, and CEO Chris Summerville has had **over ½ million views**!

http://www.schizophrenia.ca/four_videos.php

COMING SOON

SSC Website

The NEW SSC website will be completed in early 2020 thanks to a grant from Janssen Canada. The site will be easier to navigate and less "static."

Our Collaborative Partners

CADTH

CADTH is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs and medical devices in our health care system. SSC advocated successfully along with other mental health organizations the creation of a patient and community advisory committee. We also attended the CADTH National Conference in Edmonton this past year.

Canadian Consortium for Early Intervention in Psychosis

SSC and CCEIP (**http://epicanada.org**) have formed a strong, solid relationship. This past year we collaborated on three projects:

CCEIP Patient Portal Project.

CCEIP Cannabis Awareness Project.

SSC Cannabis and Psychosis Website Redevelopment Project.

I am very grateful for the clinical and research expertise of Dr. Tibbo and Dr. Candice Crocker who provided an up-to-date evidence review for the Cannabis and Psychosis project.

Disability Tax Fairness Alliance

SSC is an active member of the DTFA to bring about equity, fairness, and parity to those who apply for their DTC. There is a real need for literacy upgrades for CRA workers, not only as far as understanding the medical conditions, but the impacts on an individual's basic activities of daily living. This group has been working with the Disability Advisory Committee and the Minister of Revenue of improve the language of the legislation, make it easier for people to apply, and to address the needs of those who, while receiving DTC For years, are now being denied.

MHA National Conference

Catherine Willinsky and Chris Summerville attended the CMHA National Conference in Montreal this past year October. They presented in a workshop on "Cannabis and the Developing Brain." Chris held a session on, "Compassionate Presence: The Heart and Humanity of Health Care."

Our Collaborative Partners

Scenario Training to Improve Interactions Between Police and Individuals in Mental Health Crisis

SSC is a partner with the above in the Social Sciences and Humanities Research Council of Canada SSHRC-funded study, "Scenario Training to Improve Interactions Between Police and Individuals in Mental Health Crisis" which SSC been assisting with the last 3 years. This research/project is focusing specifically on developing a complete training package comprising a curricular narrative and scenario-based training program centered on enhancing frontline police officer responses to people in mental health crisis including addiction, with an accompanying an evaluation framework.

Other initiatives we were involved in:

- CMHA National *"Recovery and Wellbeing Colleges"* video participant
- Implementing a Recovery Training Program for Mental Health Service Providers: Translating the Evidence into Practice. 5 Sites across Canada. Winnipeg Team. On-going for 6 months.
- Canadian Educators Conference on Mental Health by the Mood Disorders Society of Canada in Toronto
- CMHA Environmental Scan Interview,
- Ontario Peer Development Initiative Training

Schizophrenia Society of Canada Foundation (SSCF) 2018/2019 Annual Report

Florence Budden, *BN RN CPMHN(C)*
Chair

2018-2019 SSCF BOARD OF DIRECTORS

Florence Budden *Chair*,
Newfoundland and Labrador

Joan Baylis *Treasurer*,
Saskatchewan

Dr. John Gray,
British Columbia

Dr. Lori Triano-Antidormi,
Ontario

Donna Methot,
Nova Scotia

Marie Knutson,
Saskatchewan

Dr. William Honer,
British Columbia

Dr. Trina Montreuil,
Quebec

Laura Burke,
Nova Scotia

The SSCF was established in 1994 when the late Dr. Michael Smith made a generous donation of half of his Nobel Prize Laureate monies to the SSC. The donation helped form an endowment fund to which others could contribute and support research, now the SSCF. We are forever grateful for Dr. Smith's generosity. His legacy is an inspiration to others to invest in research initiatives.

The Foundation has another research fund which is called the General Research Fund which can be utilized for psychosocial research.

Research to better understand the biologic basis, psychosocial determinants, as well as pharmacological and non-pharmacological treatment options for schizophrenia is absolutely vital. The SSCF is committed to fostering and supporting research in all areas related to schizophrenia (e.g. biological, psychological, and social) to ensure that recovery is possible.

The Schizophrenia Society of Canada Foundation *(SSCF)* and the Canadian College of Neuropsychopharmacology *(CCNP)* formed a partnership in 2017 to offer research support in the form of a stipend and travel award (to present research results at a future CCNP annual meeting) to a doctoral *(PhD)* and Masters *(MSc)* student pursuing biomedical research related to the cause of, and interventions for, schizophrenia and related psychosis. The 2018/2019 saw the second year of our SSCF/CCNP studentships. Below find information year-end reports from the graduate students.

Also, the Foundation was invited by the Mental Health Commission of Canada *(MHCC)* to participate in and contribute to a Canadian Institutes of Health Research *(CIHR)* catalyst grant in partnership with the MHCC, Canadian Consortium for Early Intervention in Psychosis and CIHR. The research would be related to cannabis and psychosis in terms of factors learned from people with psychosis who use cannabis: impact on quality of life, mental health, relapse, decision-making process informed by social determinants of health, awareness of harm reduction approach, etc. This project will unfold in 2020.

The Chair wishes to thank the tireless work of Chris Summerville in his support of not only the SSC but as well, the SSCF.

Respectfully submitted,

Florence Budden

Florence Budden, *MB RN CPMHN(C)*
SSCF Chair

SSCF/CCNP Yearly Report

Tara Delorme,
McGill University, Montréal

"The Interaction Between Circadian Disruption and Genetic Risk Factors for Schizophrenia"

Introduction

One of the many challenges in developing effective treatments for those suffering from psychiatric disorders, including schizophrenia, is that these disorders are multifaceted in nature. They are likely triggered through a complex set of interactions between genes, environmental exposures, and developmental insults. These interactions are currently poorly understood. Our aim is to explore if circadian disturbance, an environmental exposure, contributes to the development of schizophrenia. Disrupted circadian rhythms have been reported in many psychiatric patients, affecting up to 80% of schizophrenia patients. It is likely that circadian disruption interacts with schizophrenia in two related ways. Firstly, circadian disruption may contribute to the etiology of schizophrenia, causing a worsening of the preexisting symptoms. Alternatively or conjunctively, circadian disruption may be an additive risk factor that triggers the development of schizophrenia.

To understand whether disrupted circadian rhythms contribute to schizophrenia, we are using a well-established neurodevelopmental mouse model. The viral mimic polyinosinic: polycytidylic acid *(polyIC)* is a synthetic analog of double stranded RNA and causes an acute systemic challenge in the animal it is administered. Pregnant dams thus undergo maternal immune activation *(mIA)* at a specific point in gestation, which leads to direct physiological changes in the fetal environment and negatively affect the course of early brain development in the offspring. Offspring exposed to polyIC in utero exhibit neurobehavioral impairments thxqat have been shown to affect motor control, anxiety, sociability, memory, and sensorimotor gating that are reminiscent of schizophrenia symptoms.

Our central hypothesis is that circadian disturbance may contribute to the development of schizophrenia, and in conjunction with a developmental insult (i.e. polyIC exposure), might increase its incidence.

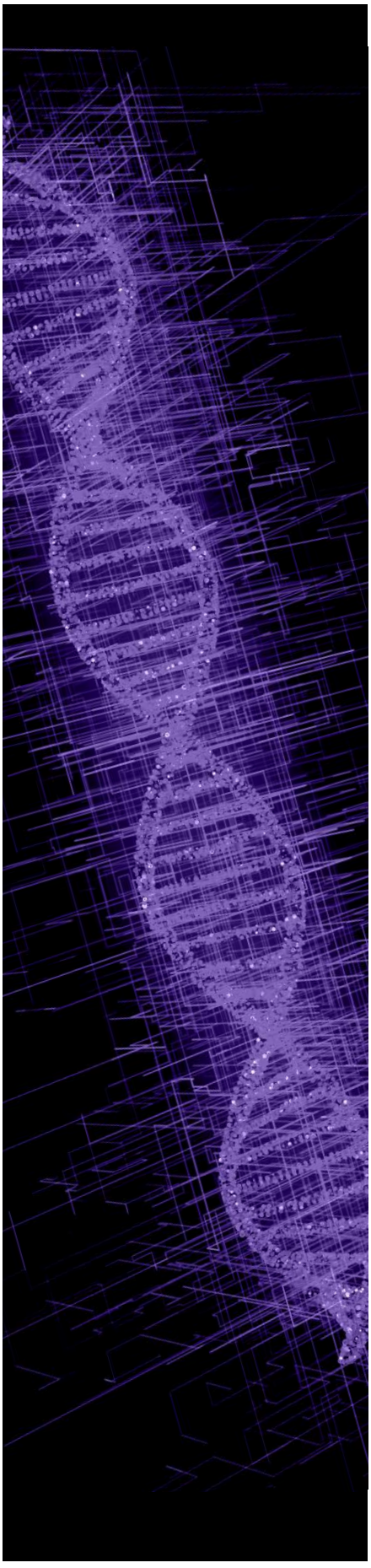
Objectives

Our hypothesis is that circadian disturbance may be an additive risk factor for schizophrenia. The first aim is to investigate if circadian disruption is a symptom of schizophrenia. Mice that were exposed to polyIC in utero are assumed to display schizophrenia-like phenotypes. I am therefore characterizing the running wheel behavior of male and female polyIC exposed mice compared to controls (experiment one). Mice in running wheels have been exposed to several different lighting environments, each for a period of at least 2 weeks. These are: LD12:12 (a typical lighting condition), a single 6- hour phase advance (like a time zone shift, to assess clock resetting), and constant conditions, both constant darkness (DD) and constant light (LL) (environments absent of external timing cues).

The second aim is to investigate if disrupting the circadian clock of polyIC exposed mice will interact with mIA and exacerbate schizophrenia-like behavior. We know that exposure to constant light disrupts circadian behavioral rhythms by disrupting the cellular organization of the suprachiasmatic nucleus. I am therefore disrupting the circadian clock with constant light exposure and then assessing schizophrenia-like behavior of male and female polyIC exposed mice compared to controls (experiment 2). The four behavioral tests to assess schizophrenia-like behavior are: Crawley's social interaction test, prepulse inhibition of acoustic startle, activity box and elevated plus maze. The mice in this experiment are from a second group of polyIC mice and controls. Mice were tested after three weeks in LD12:12 to serve as a baseline measure of behavior. To explore the proposed interaction between circadian disruption and mIA, mice will be tested again, this time after constant light exposure. This round of testing is currently underway. Lastly, I will test mice a third time after another LD12:12 exposure, serving as a recovery treatment.

Preliminary Results

For experiment one, I have already collected wheel-running activity of polyIC/saline-exposed mice after being subjected to several lighting conditions. Of these data, I have already phenotyped the wheel-running activity of male mice when exposed to LD12:12. I found that male polyIC-exposed mice had increased daytime running compared to controls and that some male polyIC exposed mice began running a few hours before the lights turned off.



For experiment two, I have completed the baseline behavioral testing after mice are exposed to LD12:12. This included 4 behavioral tests, of which, 2 have already been analyzed in males. Our preliminary data in males showed no significant differences between groups in the open field and in the elevated plus maze. Prepulse inhibition of acoustic startle and Crawley's three chamber social interaction test still need to be analyzed. I will repeat behavioral testing in the same mice after they are exposed to LL, a condition known to disrupt circadian rhythms. Then again after exposure to a recovery LD12:12 lighting condition.

Upcoming experiments

To ensure sound results, I will be repeating all the aforementioned experiments. I will also add two control experiments.

The first control experiment is to ensure that the maternal polyIC injection did not alter post-partum maternal behavior. Differences in mother-pup interactions between groups could be a confounding variable that could later drive behavioral differences in the pups. Thus, I will videotape and score maternal behavioral in polyIC-injected dams compared to controls.

The second control experiment will serve to validate our model of maternal immune activation, as well as our lot of polyIC. For this experiment, I will collect a blood sample from pregnant dams 3 hours post polyIC/saline injection on embryonic day 9.5.

I will measure the cytokine response of each dam, by quantifying inflammatory proteins such as (IL)-1, IL-6 and TNFα. For this experiment, I have already collected blood samples from half of our desired sample size.

Significance of work

This project serves to better understand the interaction between two environmental risk factors for schizophrenia: circadian disruption and a developmental insult, maternal immune activation. Specifically, we want to know if the combination of these risk factors promoted the onset or the worsening of schizophrenia-like phenotypes. This work will also suggest new therapeutic strategies to control or prevent schizophrenia and related psychosis.

SSCF/CCNP Yearly Report

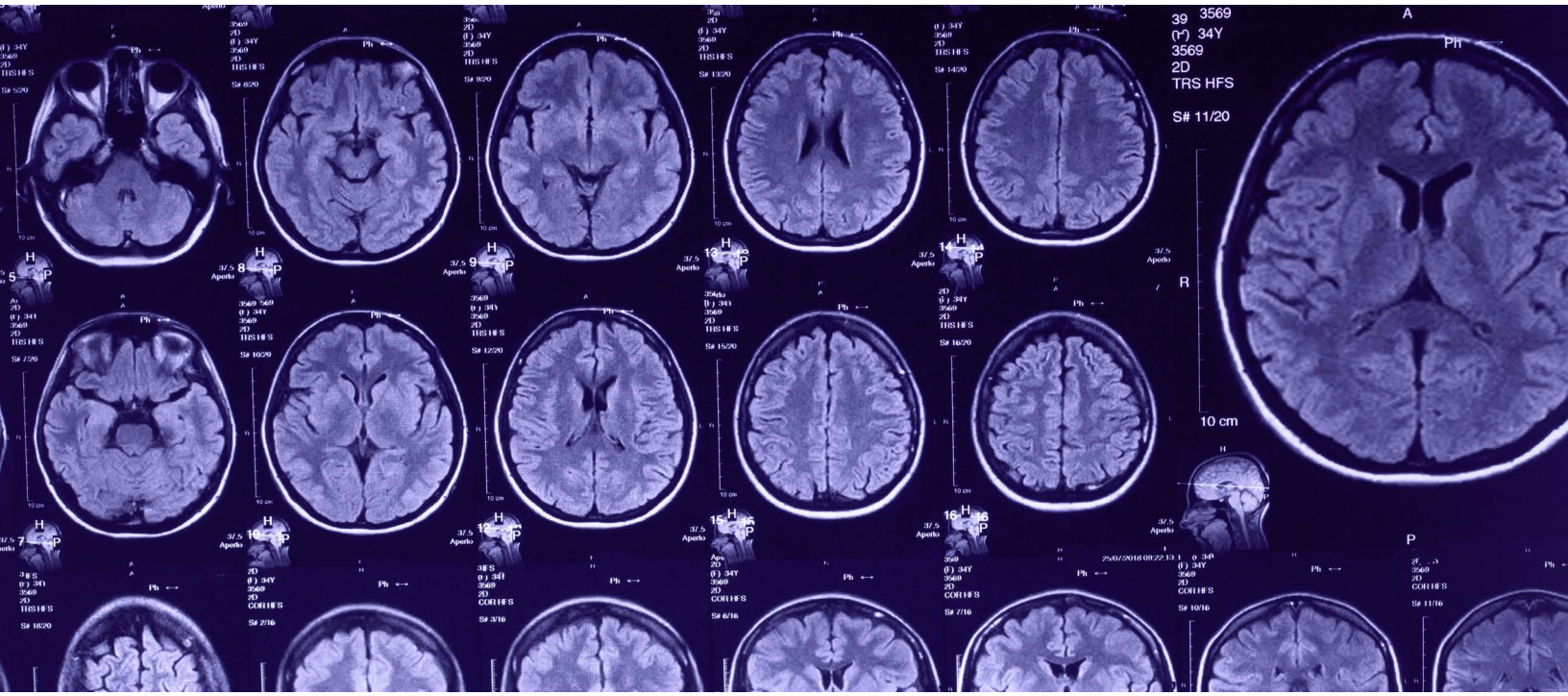
T-Jay Anderson,
Mount Saint Vincent University, Halifax

"Non-invasive brain stimulation as treatment for auditory hallucinations in schizophrenia: Transcranial magnetic stimulation vs transcranial direct current stimulation"

Supervisor:
Dr. Derek Fisher, *Dalhousie University*

My research interests involve the treatment and monitoring of auditory hallucinations in schizophrenia with non-invasive neuroelectric methods. I am particularly interested in using electroencephalograph/fMRI brain-based measures to track treatment progress with measures of basic sensory processing. These measurements involve the auditory mismatch negativity which is an event related potential (ERP) in response to violations of auditory schema on a preconscious level of neural processing. As for treatment, I am interested in the use of transcranial direct current stimulation and transcranial magnetic stimulation in the treatment of auditory hallucinations in schizophrenia, then being indexed by the mismatch negativity. Since these are intertwined endeavors my research interests will span the entirety of my thesis and throughout the incoming PhD.

My progress to date has largely involved the training of my foundational skills as a clinician which have covered advanced research statistics and modeling with R and MATLAB software, clinical interviewing, assessment, and therapeutic skills. Along with my clinical training I have been undergoing the beginnings of researching how the mismatch negativity is associated with symptoms before moving on to how it changes with treatment. I have been finishing a project on the effects of caffeine on basic auditory processing and have been going through steps to get clearance from Dalhousie and Mount Saint Vincent on the ethical level as well as for the use of my comprehensive projects in my research of the mismatch negativity in a schizophrenia spectrum starting with sub-clinical schizotypy.



SSCF/CCNP Yearly Report

Franz Veru,
McGill University, Montreal

"Adipose Tissue Dysregulation through Psychosocial Risk Factors in First-Episode Psychosis"

Supervisor:
Dr. Ashok Malla and Dr. Srividya Iyer, *McGill University*

Overview

The broader objectives of my doctoral research are: 1) to demonstrate that patients with psychotic disorders bear an increased susceptibility for the development of metabolic disorders, independent of the secondary effects of antipsychotics, and 2) to determine the extent to which such susceptibility depends on psychosocial risk factors.

Summary of Previous Research

The previous years had been dedicated to define and refine the objectives of my project, at the same time acquiring the skills required to take the project to a successful completion. My course workload reflects this by including three courses that provide key theoretical pillars of my project. First, I completed a course on advanced statistics, which was focused on regression models, covering the type of data on which my projects are based. Second, a course on psychiatric genetics, which provided a complementary perspective, as genetic variants could be encompassed as competing/complementary hypotheses of my main theoretical proposition (i.e., that environmental factors are the main drivers of metabolic dysregulation in first-episode psychosis). Finally, a course on Biosociology/Biodemography, which allowed me to gain deeper knowledge in the sociobiological aspects that affect disease, which widened my understanding by providing a population level perspective of the social determinants of disease.

The next step was to provide a tangible rationale for the exploration of adipose tissue dysregulation. In order to do so, it was necessary to demonstrate the presence of metabolic anomalies at the clinical level. The first component of my project stemmed from this premise. In it, I used data collected at the Prevention and Early Intervention Program for Psychosis Montreal *(PEPP)*. I tested the effect of four psychosocial aspects (childhood trauma, socioeconomic deprivation, migration background, and visible minority status) on the levels of glycated hemoglobin, which is a marker of the metabolic control of glucose. This component of my project demonstrated that belonging to a minority significantly increased the levels of glycated hemoglobin (indirect indication of insulin resistance), even after controlling for BMI, which accounts for the effect of ethnicity. Physical abuse had a marginally significant effect on glycated hemoglobin as well. This part of my research has already been published in the Canadian Journal of Psychiatry *[Can J Psychiatry. 2018 (In Press) Jan 1:706743718762097 doi: 10.1177/0706743718762097].*

Progress Report of the Previous Year (2017-2018)

The main objective in the previous year was to further consolidate the theoretical basis of my project. The main endeavours conducted in the previous year are the conception, analyses and drafting of a manuscript on psychosocial adversity and blood lipid levels, and the definition, outline, planning, and associated logistics of the main component of my doctoral research, which includes the acquisition of data to test the main hypotheses of my doctoral research.

Manuscript: Blood lipid levels, socioeconomic deprivation and psychosis

As discussed with my supervisors, and supported by my supervisory committee, before undertaking the main part of my project a second step was necessary to enhance the understanding of metabolic changes in first-episode psychosis, and its relationship with the psychosocial environment. Along with glucose, blood lipids are central markers of the metabolic state, and chief determinants of cardiovascular risk. The objective of the second component of my research is to broaden the scope of our understanding of the relationship between psychosocial adversity and the metabolic control of lipids in first episode psychosis.

In the previous year I conducted a comprehensive literature review, in which socioeconomic deprivation emerged as the most probable environmental factor associated with disturbances of lipid metabolism. I hypothesized that higher levels of social and material deprivation would alter blood lipid levels. To test this, I compiled the database using data collected in the PEPP cohort, and analyzed it. I have already written a manuscript that encompasses this part of my research, and will submit it for publication in the following weeks.

Main project: Adipose Tissue Dysregulation Adipokine Levels

The previous two manuscripts demonstrated that there is metabolic dysregulation in first- episode psychosis. More importantly, this foundational part of my project provides evidence that psychosocial factors are partly responsible for such changes. As mentioned above, the first part of my research showed that being part of a visible minority, or having a history of physical abuse, increased the levels of glycated hemoglobin. The second component shows how social deprivation predicts alterations in the levels of blood lipid levels, in a way that suggests changes in cholesterol transport.

These two previous manuscripts provide evidence that there are significant metabolic disturbances at the clinical level in patients with a first episode of psychosis. The determination of the presence of clinical metabolic disturbances supports the exploration of the potential pathophysiological mechanisms responsible for such changes. This allows me to test if one of the leading theories on the origins of metabolic disease – adipose tissue dysregulation– is responsible for the metabolic disturbances observed in patients with psychotic disorders. To determine adipose tissue dysregulation, I will rely on measuring key hormones produced by this tissue: leptin, adiponectin, resistin, and chemerin.

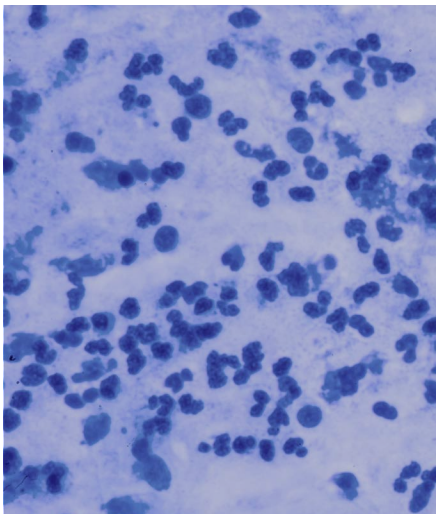
Logistics: Signature Project

The main study of my doctoral research will be conducted using data from the Signature project. This project is based at the Institut Universitaire en Santé Mentale de Montréal – IUSMM. In brief, Signature recruits participants from the IUSMM's emergency department, who consent to provide blood samples, and to answering questionnaires related to various aspects of mental and physical health.

In the previous year I had been working closely with the team at the Signature project. An initial project proposal was sent to Signature. A discussion of the feasibility of the proposal ensued, and changes were made according to the availability of the data at Signature. After arriving to a final version of the proposal, a research protocol was drafted and an application to the research ethics board of the IUSMM was made as well. The research protocol was successfully approved, only needing minor changes.

After approval, the team at Signature identified a total of 180 potential cases for inclusion in their database. The clinical files of these pre-selected cases were thoroughly reviewed to ensure that the participants corresponded to the inclusion criteria. Of particular importance were the confirmation of no previous episodes of psychosis, and exposure to medication (antipsychotics or antidepressants) of less than one week. This revision ensured the quality of the sample, which yielded a total of 51 cases of completely or almost drug-naive patients with a first-episode of psychosis. A total of age-matched 40 controls were included as well.

Following the selection of the cases, a request for the following data was made: demographic information, childhood experiences of trauma questionnaire, depression scores, diabetes diagnosis, prescriptions, diagnoses, anthropometric measures, tobacco use, and physical disability score (walking long distances). In addition, a request for the laboratory analysis of adipokine levels (indicators of adipose tissue dysregulation) from stored (frozen) serum samples: leptin, adiponectin, resistin, and chemerin. Siganture has already processed the samples and sent the data. In the previous weeks I have been revising and organizing the database for analysis.



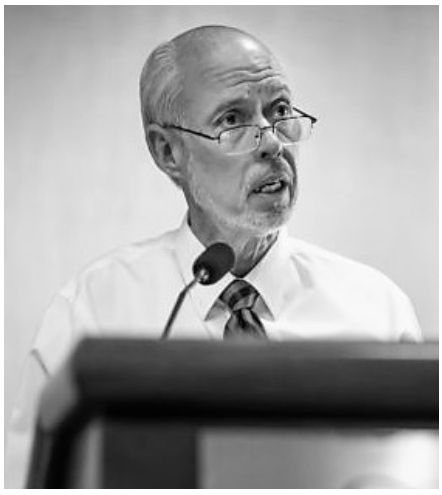
Memorable Photos

At the Canadian Alliance on Mental Illness and Mental Health (CAMIMH) Champions Awards Gala
from left to right: **Dr. Chris Summerville** *(CEO of SSC),* **Mary Deacon (***Bell Let's Talk)* **Madame Sophie Grégorie Trudeau,** and **Sapna Mahajan (***Director at Treasury Board of Canada Secretariat)*

At the CAMIMH Champions Awards Gala
from left to right: **Dr. Lori Triano-Antidormi** *(President),* **Julia Hoeppner (***SSC Board Member), and* **Catherine Willinsky (***SSC Project Manager)*

At the CAMIMH Champions Awards Gala
from left to right: **Florence Budden** *(Chair of the SSC Foundation),* and **Chris Summerville** *(CEO of SSC)*

from left to right: **Catherine Willinsky** (*Project Manager of SSC),* and **Dr. Chris Summerville** *(CEO of SSC)*



Dr. Chris Summerville *(CEO of SSC)*

Advocacy on the Hill 2019

"Building a Canada where people living with early psychosis & schizophrenia achieve their potential."

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