



Spark a brighter world

SPARK: A CENTRE FOR SOCIAL RESEARCH INNOVATION

2020-2021 Annual Report



Spark:
a centre for social
research innovation

Spark: a centre for social research innovation (formerly CRESS) connects researchers to the people, skills and tools needed to stand at the forefront of social research innovation.

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Through partnerships, training, and consultation, our mission is to engage with researchers and the community to expanding methodological boundaries and harness the full power of social research to build a brighter world.

3. Centre Overview

Spark: a centre for social research innovation became a centre 1.5 years ago and has grown rapidly this year to build toward the ambitious vision and mission of our founders.

Over the last year, we built an array of services to support researchers and collaborated with partners to bolster research innovation at McMaster and beyond. In January 2021, the centre, which was previously the Centre for Research in Empirical Social Sciences (CRESS) was officially re-named **Spark: a centre for social research innovation**.

The Spark team has worked remotely since March 2020, offering all programming virtually. We have actively sought and utilized a wide range of virtual technologies to maximize collaboration and social research during the lockdown, and continue to explore creative solutions to support exceptional research both in-person and online.

To meet growing demands and diversify our expertise, our team has grown with both new staff and many students, reaching 18 people in Spring 2021. Fundamental to what we know from research about innovation is that it is a product of deep and layered diversity. We take that seriously and are proud to have spent this year building an exceptional, creative team that made everything described here possible.

This year, Spark:

- Built curricula for 12 new microcredentials and short courses to be released over the next 2-3 years
- Hosted leading experts in knowledge mobilization and translation for 5 in-depth workshops as part of our Relevant Research Series
- Launched Research Conversations, an opportunity for any researcher to get 4 hours free help with any social research design or methodology challenge. Since launching February 1st, we have held over 20 conversations with faculty, students, staff and community members
- Built a new website and guide to virtual Qualitative Research options
- Expanded research support by managing FSS Qualtrics licenses and building capacity to help navigate Research Ethics applications
- Helped 6 not-for-profits better understand their impact and how to strengthen their services as part of our Brighter Spark Applied Research
- Held weekly virtual talks by researchers from around the world doing interesting work in interesting ways – generating over 50 videos in the Productivity During Pandemic series

4. Priorities & Objectives

Over the last year, our team has refined an understanding of the methodological and research challenges that Spark should address through its **programming and research support services**. Because Social Research is a massive, inter-disciplinary and rapidly evolving landscape, Spark organizes our work and tries to balance efforts across seven social research methodology toolkits, and three types of support. These represent the major areas of skill development across social research disciplines, and approaches to catalyzing innovation. We seek to help researchers continuously expand both the range of their toolkits and their skill in the methods within.

Social Research Toolkits:

1. Foundational qualitative and mixed methods
2. Empowerment, engagement, and community-based research methods
3. Foundational quantitative methods
4. Advanced computing and statistics
5. Addressing complexity and uncertainty
6. Supporting evidence-based decision making in policy and social service practices
7. Research quality including ethics, data and project management, and effective teams

Our Work:

As the toolkits are the focus for what we support, the nature of our support falls in three categories: 1) Training; 2) Research Support; and 3) Catalyzing Innovation.

1) Training

At Spark, we know that brilliant social research happens not only in academia but every day in not for profits, think tanks, government organizations and socially-minded businesses. Our goal is to bring the best of methodology to the challenge of understanding and responding to social dilemmas in ways that are innovative and transformative. Our training supports research oriented students, faculty taking on new methods/approaches, and policymakers and practitioners wanting to integrate the collection and interpretation of evidence into how they do their work.

2) Research support

We seek to serve the needs of all social researchers with an ever-growing body of knowledge and services, both by curating, building, and maintaining excellent research tools and facilities, and by providing custom support and services.

3) Catalyzing innovation

We seek to be a place within the Faculty of Social Sciences and the university where those committed to harnessing the power of social research to help build a brighter world can come together, learn from each other, explore crazy ideas, and grow in community.

5. Staffing & Governance

Centre Leadership

Allison A. Van (BS/BA, University of Washington & MPP, Harvard University), Executive Director, joined Spark (formerly CRESS) in July 2019. Allison specializes in mixed-methods complex systems analysis, community/academic partnerships, and the translation of research into social change. Her career has traversed sectors and disciplines, including extensive work in agricultural and rural development, poverty, child welfare and juvenile justice, social entrepreneurship, and medical innovation. In addition, she brings to McMaster significant research experience working with community organizations and in program evaluation.



Allison A. Van, Executive Director

Over the past academic year, Allison has been a critical driver in the re-launch of Spark, building and expanding the Centre's team, workflow, research conversations, consultations and facilitation, training, promotion/communication, and educational opportunities. In addition, Allison has acted as a mentor to Spark's student team while also overseeing and taking the lead on all research collaborations and programming.

Michelle L. Dion (BA, University of Texas & MA/Ph.D., University of North Carolina), Professor of Political Science and Senator William McMaster Chair in Gender & Methodology, serves as Spark's Academic Director (2020-2025). She has a strong record of interdisciplinary research at McMaster, focusing on public policy, cross-national public opinion, and the sociology of social science and drawing upon a range of qualitative and quantitative evidence and methodologies to advance our understanding of political and social dynamics. In addition, she has over 20 years of experience teaching research design and quantitative methods in the social sciences, including as a visiting instructor in the University of Michigan Inter-University Consortium for Social and Political Research (ICPSR) Summer Program.



Michelle L. Dion, Academic Director

Michelle oversees the design, development, and delivery of academic programming while assisting with Spark's administration and ongoing creative growth.

Centre Governance

As a Senate-approved Centre, Spark reports to its Governing Board, which is Chaired by the Dean of the Faculty of Social Sciences, **Dr. Jeremiah Hurley**, who is also Professor and former Chair in Economics. Other Board Members include **Dr. James Dunn** (Professor and Chair of Health, Aging & Society and Senator William McMaster Chair in Urban Health Equity), **Dr. Tina Fetner** (Professor and Chair of Sociology), and **Dr. James Gillett** (Associate Professor in Health Aging & Society and Associate Dean Research and Graduate Studies, Social Sciences). Drs. Hurley and Fetner chaired the original working group that developed the core vision for the Centre, and Dr. Dunn was a member.

Centre Staff

Spark has been fortunate to have several part-time administrators support our mission during 2020-21. **Cheryl Fenn** played a lead role in organizing and coordinating the Spark launch/open house event in January 2021 before she had to step away from Spark for personal reasons. In addition, **Equity Burke**, who also works at the Gilbrea Centre, has been an enthusiastic addition to our team, including a key role in coordinating our communications with the McMaster community. Last but not least, Spark was lucky to hire **Lynn Holland** out of retirement to coordinate our work while we search for a permanent administrator. **Dr. Abbe Edelson** also worked with Spark this year on a range of communications projects.

In 2020-21, Spark also assumed responsibility for the **Secure Empirical Analysis Lab (SEAL)**, ably managed by **Lars Nielsen** and led by Drs. Arthur Sweetman and Stephen Jones for several years. In addition, Spark assumed management of the **Qualitative Suite**, which includes focus group and interview spaces in Wilson Hall, which will be available to researchers as campus reopens in 2021-22.

In 2020-2021, 12 undergraduate or graduate student members also worked with Spark to implement our programming, training, support, knowledge mobilization, and communication at McMaster and in the Hamilton community. This included Ph.D. students in Social Work (1), Sociology (2), Anthropology (1) and Engineering (2), and undergraduates in Arts & Sciences (2), Statistics (1), Business (1), Computer Science (1), and Science Communications (1) doing website development, videography, event coordination, applied statistics, community engaged research, and co-developing curricula.

Spark's team of student employees is critical to our success, and we have been honoured to work with such talented and creative individuals.

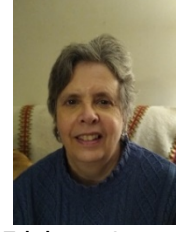
Staff Members



Lars Nielsen, Lab Manager, SEAL

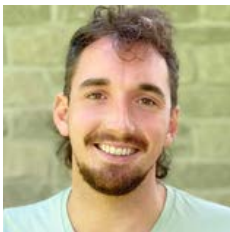


Equity Burke, Administration



Dr. Abbe Edelson, Communications

Student Team Members



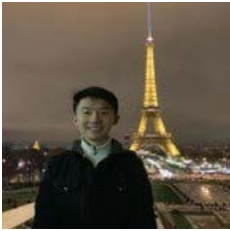
Jeff Black, Brighter Spark



Kohei Kanai, Brighter Spark



Dr. Rochelle Wijesingha, Brighter Spark*



Gavin Zhao, Brighter Spark



Kartik Sharma, Course Developer



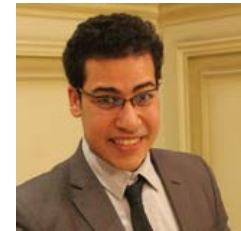
Astara van der Jagt, Course Developer



Supriya Thukral, Communications



Celine Keomany, Web Developer



Mohamed Fathalla, Course Developer



Ahsan Saeedzadeh, Course Developer



Novera Shenin, Course Developer

Not pictured: Cheryl Fenn, Allison Leavage & Lynn Holland.

* Rochelle Wijesingha defended her doctoral thesis in Spring 2021. Congratulations, Dr. Wijesingha!

6. Educational Programming & Training

Relevant Research



Relevant Research

2020-2021 Research Innovation Series



Each year, Spark selects a topic that we believe is challenging for social researchers across disciplines and requires a range of skills to do well. We then find exceptionally talented researchers and bring them to Mac to do intensive workshops on a skill they have mastered related to our topic.

In 2019-20, our Transparent Research series focused on Data Management. This year, we joined forces with the Sherman Centre for Digital Scholarship to offer **Relevant Research**.

The series focused on improving research communication and knowledge mobilization to be able to inform policy and public practice decision-making. Due to the pandemic, all Relevant Research workshops were conducted virtually. Each combined asynchronous with synchronous content, addressing the entire knowledge mobilization cycle. All are preserved on our MacVideo site.

- **Plan to communicate** with Mihaela Gruia from Research Retold, UK. A two-part series on developing a communication plan and refining your message. (Oct. 2021 – 106 Registrants)
- **Mental Models, Trust and the Translation**

of Science with Dr. Brian Southwell – Senior Director, Science in the Public Sphere, Research Triangle Institute. We explored how mental models work and the way one must work with them to be heard. (Nov. 2021, 69 Registrants)

- **Telling Data-Driven Stories: Lessons from Journalism** with Roberto Rocha - CBC/Radio-Canada. This applied workshop involved constructing a narrative with data visualization basics. (Jan. 2021, 31 Registrants)
- **Design Principals for Data Visualization** with Juan Velasco, Data journalist and founder of 5W infographics. Two synchronous learning sessions introducing critical design principles in developing communication products with an asynchronous tutorial on using major software for data visualization. (March. 2021, 204 Registrants)
- **Methodology and approach to knowledge mobilization** with Caroline Sindors from Convocation design + research. Two events immersing participants directly in a knowledge mobilization experience as we built a feminist data set to help alter the inputs to machine learning, and learn about how machine learning works as we did. (April. 2021, 149 Registrants)

560 students, faculty, staff, or community partners attended Relevant Research Series Workshops in 2020-2021.

The Series was funded by a SSHRC Connections Grant awarded to Andrea Zeffiro (PI) and Michelle Dion (co-PI), with Jason Brodeur and Allison Van as Collaborators and support from the Library and Faculties of Humanities and Social Sciences.

Short Course: Data Wrangling in R



This short course included two-hour sessions Monday to Thursday, May 3rd-14th online and was taught by course instructor **Allison Leanage**.

The course focused on how to wrangle data in the free, open-source software R. Designed for beginners, the course introduced participants to R basics, including installation, essential tools, and libraries before moving to basic data manipulation and visualization in R's Tidyverse using hands-on examples.

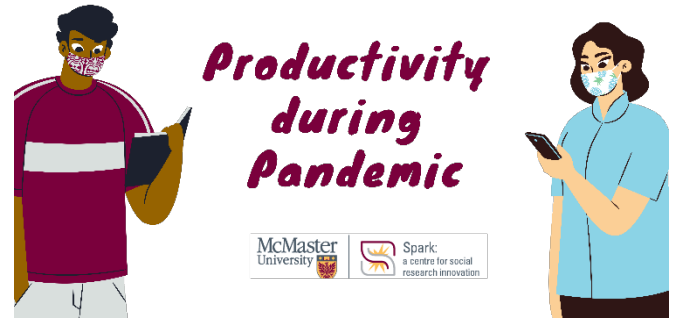
This pilot course and feedback from participants will help us design and improve future offerings, including 4 new short courses to be offered in 2021-22.

Curriculum Development

Over the last year, Spark built 12 curricula for both current and future courses, including several proposed micro-credentials or certificates related to research methods for social innovation. The courses built include Numeracy, Data Visualization, Experimental and Quasi-experimental Methods, Data Wrangling in R, Descriptive Statistics, Social Inquiry, Research Design, Critical Data Analysis, Thinking in Systems, Modelling Complexity, and Communicating Complexity.

Support from **McMaster Student Success Centre** and the **MacPherson Institute** funded student involvement in curriculum development.

Productivity During Pandemic

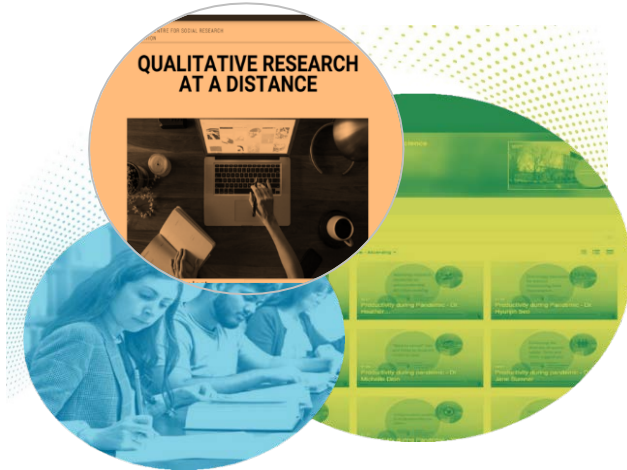


In the spring of 2020, amidst news that many researchers were struggling with productivity as lives were fundamentally up-ended by the pandemic, we decided to launch a weekly talk by a researcher whose work we found exciting or could share a skill that would benefit our community. **Productivity During Pandemic** has developed over this year into an innovative weekly speaker series encouraging unexpected and inter-disciplinary connections between researchers, including faculty and graduate students, while working from home during the pandemic.

These **one-hour virtual research talks focus on methods and tools of social research**. Popular topics have included tips for conducting virtual one-on-one interviews, snowball sampling with social media data, community consent and research ethics, and how to promote research on social media platforms such as Twitter.

Over the last academic year, more than 40 scholars from around the globe presented their research to an average of 20 participants per event. Videos of each talk are preserved on the Spark MacVideo Channel.

Qualitative Research at a Distance



Due to the pandemic's on-going disruptions of research, the Spark team wanted to highlight tools and methods to help qualitative researchers continue their important work despite social distancing and lockdowns.

This toolkit offers a brief introduction to digital adaptations of major qualitative methods and was written by **Astara van der Jagt**, a Ph.D. student in Anthropology and Spark Research Assistant.

It provides a starting point for academic and non-academic communities to explore socially distanced but deeply engaged qualitative research methods. Each method described has its own benefits, shortcomings, and place in the qualitative methodological toolkit.

The guide was distributed on our website (Resources for Research section) and circulated through our social media accounts and *Spark Connections* newsletter.

7. Research Support & Activities

Research Conversations

At Spark, we have expertise in a wide array of qualitative and quantitative methods and can help turn research ideas into protocols and designs. In addition, we can

- help refine research question(s);
- make connect to other researchers or resources,
- identify relevant methods, tools, and software,
- advise on data management/storage;
- and advise on knowledge mobilization and communication.

Beginning in February 2021, with generous support from the **Faculty of Social Sciences**, we offer up to 4 hours per year of free consultation for any social researcher at McMaster or in the community.

We not only advise researchers on methods and tools but direct them to other state-of-the-art facilities and equipment in the Faculty of Social Sciences, such as the **Secure Empirical Analysis Lab (SEAL)**, the **Qualitative Suite**, or the **Decision Science Lab (McDSL)**, an experimental lab that has amongst its equipment virtual reality gear.

We also connect researchers with other experts on campus, including those with data and research method expertise in the **McMaster Library**, **Sherman Centre**, **StatsCanada Research Data Centre (RDC)**, **Compute Canada**, and **Research and High-Performance Computing Services (RHPCS)**.

Between February and July, we held research conversations with 20 faculty members, graduate students, staff and community researchers.

Brighter Spark Applied Research

Spark believes that one of the best ways to support research is to remove barriers to innovation for researchers and demonstrate diverse methodology and rigorous analysis of real problems and solutions in the community.

We built **Brighter Spark Applied Research** as our fee-for-service arm to provide deeper, fuller research support and services to McMaster researchers and provide game-changing, custom applied research and evaluation services to community organizations, filling a gap in expert applied research support, that marries academic rigour and practicality.

All Bright Spark projects are led by **Allison Van** who supervises and trains students in applied research by directly engaging them on projects.

Our work with FSS faculty members includes:

- assisting **Judy Fudge** with research team training in methods and data management related to her SSHRC -funded project and
- providing literature review training for **Phillipa Chong's** SSHRC-funded research team.
- supporting work by **Jeremiah Hurley** on assessing community capitals and building an evaluation framework for a social impact investing platform.
- collaborating with **Marisa Young** on an evaluation model for a mental health portfolio, with community partner **Green Shield Canada**.

Brighter Spark also provides custom applied research services to a range of community partners.

Salvation Army Lawson Ministries is a Hamilton organization that enhances social inclusion for individuals with developmental disabilities and their families, including community transportation access programs.

Mending the Chasm - "Inside Out: Our Future is Anti-Racist" is a community-based project in Halton focused on building inclusive cultures from the inside out within community-serving not-for-profits.

Parkdale Neighborhood Land Trust is a community land trust led by local residents and organizations in Toronto to protect the community's diversity and mitigate the impacts of gentrification on the neighbourhood.

Green Shield Canada is a large Canadian insurance provider with a foundation that provides grants to strengthen and expand mental health services. Our work with them is in partnership with the ARMS (Advanced Research on Mental Health and Society) project led by Marisa Young.

Grenfell Ministries offers harm reduction programs for those who have experiences with addiction or incarceration through a peer-to-peer model that supports people with various client-driven and non-judgmental methods.

YouthCAN is a Hamilton-based collaboration of over twenty organizations addressing youth unemployment and developing innovative supports including occupational therapy and arts-based training.

In-kind Grant Support for FSS Research

Spark provides in-kind support for Faculty of Social Sciences research projects and funding applications, including space, training, or other research supports. Spark provided in-kind support for grant applications led by faculty members in Labour Studies, Economics, and Sociology last year.

Co-working Space – Spark CoLab

Though we have been unable to utilize it this year, we are eager to soon welcome everyone back to the **Spark CoLab** on the 5th floor of L.R Wilson Hall, available to all research teams, faculty members, and graduate students. The CoLab supports interdisciplinary collaboration with a space designated for research teams. It includes reservable meeting rooms, computer labs with software, and private workstations. From May 2020 to February 2021, we hosted an active virtual version of our CoLab, to fill a gap in opportunities for graduate student engagement across disciplines. We were able to phase this out as the pandemic wore on and more supports became available.

The CoLab is not just a place to work but also a place to learn & collaborate on interdisciplinary research.

Qualitative Suite

The **Qualitative Suite** includes **focus group** and **interview rooms** with audio/camera capabilities. The focus group space fits 20 and offers remote live-streaming, audio/video available immediately for analysis. In addition, Spark provides catering, parking, trained facilitators/interviewers if needed and related support. The Qualitative Suite is available for use by McMaster and external researchers on a fee-for-service basis.

Secure Empirical Analysis Lab (SEAL)

SEAL is a high-security lab for secure storage of confidential data that is valuable for research. This includes data sets from companies, governments, researchers, and community organizations which contain private information that cannot be made public. SEAL acts as a trusted intermediary between data holders and research users, using state-of-the-art technology to provide security while making authorized access from anywhere seamless.

SEAL works with researchers to establish data-sharing agreements, assist with cleaning and linking administrative datasets, manage ongoing access for team members, and support analysis software integration.

SEAL services have been available during the pandemic due to our MobiKey access system which allows secure access to data in the lab for authorized researchers anywhere in the world. Once campus reopens, researchers will also again be able to use the physical lab located in a restricted area of L.R Wilson Hall at McMaster.

During 2020-21, SEAL had 19 clients or users from around the world, including:

University of Regina, Ryerson/University of Toronto, The Cardus Institute, McMaster University, Western University, Toulouse School of Economics, University of British Columbia, University of Ottawa, University of Melbourne, University of Alabama, and Australian Broadcasting Company (ABC Researchers).

8. Communication

Faculty of Social Sciences Department Outreach

During winter/spring 2021, Michelle Dion and Allison Van visited all available Faculty of Social Sciences departments to update faculty members on Spark's new programming and research supports.

These conversations provided opportunities for faculty members to ask questions or suggest additional programming, leading to research consultations and collaborations.

We intend throughout 2021-22 to continue to engage with departments in the Faculty of Social Sciences and to reach out to other Faculties to let them know about our services.

Spark Connections



Beginning in February 2021, Spark has developed and distributed a bi-weekly e-newsletter.

Spark Connections features news, updates on research, opportunities, upcoming events, and other social research news and information for McMaster and the local community.

Newly Updated Website

In addition to a new name and services, Spark has completely redesigned its website to better inform researchers about research supports and resources.

The new site's "**Resources for Researchers**" section includes research guides, toolkits, info sheets and information about upcoming seminars, programming, and educational

training.

The Communications Team has also spent this year giving SEAL's website a refresh.

Relationship Building

Through our programming and research support activities, we have developed working relationships with other McMaster units, such as the *McMaster Master of Public Policy in Digital Society Program*, *Sherman Centre for Digital Scholarship*, *McMaster Institute for Indigenous Studies (MIRI)*, *Community Research Platform*, *Office of Community Engagement*, *Library, Research and High-Performance Computing Service (RHPCS)*, *University Technology Service (UTS)*, *MacChangers*, *McMaster Equity and Inclusion Office*, *Collaborative Housing Research Network*, *Advanced Research on Mental Health and Society project*, *The School of Social Work*, *Student Success Centre*, *Digital Society Lab*, and *Housing and Conference Services*.

Social Media and Networking



Spark has built an active user base on social media platforms beginning in February 2021. Spark now has accounts on **Twitter** and **LinkedIn** as an additional way to reach internal and external researchers.

These platforms have been a helpful medium to reach researchers inside McMaster and the local community and to establish professional relationships for future collaboration. It is also beneficial for the knowledge dissemination of created and sharable resources.

Our Spark communications team works hard to keep all knowledge mobilization media updated with content, information, and resources that are readily available for use by researchers.

9. Looking Ahead

In 2021-22, we are excited to continue growing Spark's programming and research support services through educational offerings and proactive promotion of our services. We will continue to develop training opportunities and resources for researchers and communicate such opportunities on our website, newsletter, and social media channels.

We plan to host an annual open house at the start of each academic year to introduce new students, faculty, and staff to Spark. We believe that reaching those at the beginning of their McMaster research journey is a way to build and broaden research relationships, while we deepen existing collaborations and partnerships. We are also working to implement a tracking system for our services and develop processes that will sustain continuous improvement and minimize the growing pains experienced by smaller organizations like Spark. We aim to seamlessly provide a full array of services from sharing information, hosting research talks, doing intensive workshop series and trainings, directly helping researchers implement their work, and providing facilities and expertise for applied research projects and evaluation of community interventions. In this, we want to both meet pressing needs for the social research enterprise at McMaster, and offer opportunities, ideas and models, for continuously expanding the innovation and impact of our work.

In 2021-22, as we return to campus, we plan:

- to continue our weekly speaker series, rebranded as **Spark Talks**,
- offer a new workshop series Identity in Research, exploring methodology for addressing intersectional identities,
- offer additional short courses on research tools,
- grow Brighter Spark Applied Research and provide real value and impact for our partners and
- continue to expand our online presence.

For 2021-22, we will deliver innovative Skill Labs in Data Analysis for the McMaster Master in Public Policy in Digital Society offered by the Faculty of Social Sciences. We will also continue our work developing micro-credentials and certificate programs related to social research innovation.

We look forward to our eventual return to campus, when our team can welcome McMaster and local community members to the 5th floor of Wilson Hall, including the CoLab, SEAL, and the Qualitative Suite.

Finally, we are most excited to continue to build meaningful partnerships and relationships with individual faculty, students, McMaster units, and community change-agents across the University and beyond.