

COVER PAGE

PROJECT INFORMATION

Please complete the fields below with information regarding your project.

Project Title	Microbiome Project		
Brief Description	Educating the community about the health benefits of fermented foods and a plant based biodiverse diet while demonstrating sustainability of extending the shelf life of foods that are grown locally.		
Total Estimated Project Budget	\$4799	Amount Requested from SPF	\$4799
Campus(es) Impacted	<input type="checkbox"/> Downtown <input checked="" type="checkbox"/> Macdonald <input type="checkbox"/> Gault Nature Reserve <input checked="" type="checkbox"/> Other Alumni		

CONTACT INFORMATION

Project Leader

This person must be a current McGill University student, administrative staff, or academic staff.

Name	Laura Webb	Affiliation	Undergraduate
Phone	7783853392	Faculty/Unit/Organization	Food Science/Nutrition
Email	laura.webb@mail.mcgill.ca	Campus	Macdonald

Project Team Members

The SPF encourages you to be inclusive, collaborative (especially between staff and students), diverse, and interdisciplinary when possible. To list more members, please e-mail the list to [SPF Staff](#) to include with your application.

Name	Christopher Wrobel	Affiliation	Postgraduate
Email	christopher.wrobel@mail.mcgill.ca	Faculty/Unit/Organization	McGill
Name	Julian Russell	Affiliation	Undergraduate
Email	julian.russell@mail.mcgill.ca	Faculty/Unit/Organization	FAES
Name	Gabrielle Di Gironimo	Affiliation	Undergraduate
Email	gabrielle.digironimo@mail.mcgill.ca	Faculty/Unit/Organization	FAES
Name	Stefanie Larose	Affiliation	Undergraduate
Email	stefanie.larose@mail.mcgill.ca	Faculty/Unit/Organization	FAES
Name		Affiliation	Choose one.
Email		Faculty/Unit/Organization	

SUBMISSION INFORMATION

In line with the [SPF Eligibility Criteria](#), our team certifies that this project takes place at **McGill University**, is **sustainability focused**, is requesting **seed funding**, and is **action oriented**.

Yes No

Our team has read the [SPF Terms & Conditions](#) and agrees to respect them.

Yes No

Our team understands that this application is not confidential and consents to have its contents shared with relevant stakeholders during the review process and, if approved, on the SPF website.

Yes No

Our team agrees to have [their contact information](#) included in the complete and shared application.

Yes No

PROJECT OVERVIEW + PLAN

Instructions: Please answer the questions as clearly and concisely as possible; then, submit your draft online. SPF Staff will respond with feedback on your application within 2 weeks. Once finalized, the application will be provided to the SPF Governance Council for their review and decision. As a reminder, all SPF applications are assessed using the [SPF Eligibility & Evaluation Criteria](#):

ELIGIBILITY CRITERIA		EVALUATION CRITERIA		
AT MCGILL	SUSTAINABILITY FOCUSED	ANALYSIS	IMPACT	FEASIBILITY
SEED FUNDING	ACTION ORIENTED	COLLABORATION	SUPPORT	CAPACITY BUILDING

Before starting, you may find it helpful to consult the [SPF Sustainability Brief](#) and [Vision 2020 Climate & Sustainability Action Plan](#).

CONTEXT

Criteria assessed in this section: **SUSTAINABILITY FOCUSED, ANALYSIS**

- 1. What specific sustainability-related need/issue have you identified at McGill and aim to address through your project? In your response, please describe clearly how the need/issue is related to sustainability and what research you have done on this issue, if any.** *Note: Please wait to detail your project idea in Question 2. Limit ~200 Words*

Promoting the mental and physical health of McGill students through sustainable, plant based food consumption is our primary goal. We will accomplish this by providing the McGill student body the opportunity to learn about the positive impacts that accompany maintaining a balanced gut microbiome through the consumption of locally sourced, sustainably grown plant foods which ultimately enhances an individual's health and sense of wellness. Macdonald Campus's Out of Garden Project is currently promoting food sustainability, but their cause does not educate the student body or demonstrate how to prepare dishes that are probiotic friendly or locally grown. The Microbiome Project intends to do all of the above. As well, we are confident our mission to introduce sustainably grown, probiotic rich plant foods to McGill students will be successful because they are relatively cheap to prepare and are available year round. This means that regardless of socioeconomic background, every student can reap the benefits of this project.

PROJECT IDEA

Criteria assessed in this section: **ALL ELIGIBILITY & EVALUATION CRITERIA**

2. **What is your project idea? Please describe the idea thoroughly and concisely. In your response, share how the project is new or how it complements, builds upon, or scales existing initiatives. Limit ~400 Words**

Global warming poses one of the most serious threats to the global environment ever faced in human history. One of the single most important steps an individual can take to reduce global warming is to adopt a vegetarian diet. This causes a shift away from methane-emitting (23 times more destructive to the ozone layer compared to carbon dioxide) food sources.

By choosing a plant based diet individuals can also dramatically reduce the amount of land, water and energy resources that they consume and the amount of pollution they otherwise might cause. A meat diet is generally considered twice as expensive as a vegetarian one and increases an individual's chances of obesity, cancers, heart diseases, and other illnesses.

Research is starting to point to the role of the gut microbiome (the sum of all gut bacteria) as one of the prime determinants of the state of human health and sense of wellness. The gut microbes play a central role in digestion, shaping appetite, allergies, metabolism, and neurological function. Studies also suggest that gut microbiota may factor into one's risk of developing neuropsychiatric illnesses as well as autoimmune diseases. These are increasingly adding to health care costs in North America. People are eating too many processed foods and sugars, overconsuming meat, not exercising enough, and leading stress filled lifestyles which all lead to an increase in the ratio of bad to good bacteria in the human gut microbiome.

With all this in mind, we propose to create a campaign of awareness and education about the importance of incorporating probiotic friendly foods and achieving a biodiverse, plant based diet. We will have various events, guest speakers, and workshops to educate attendees about probiotic friendly foods and how they can lead to better overall health. Some of the events include a workshop on stress reduction through the use of essential oils; a demonstration of how to bake desserts without using sugar; and a yogathon in the Macdonald Showcase Permaculture Garden which will demonstrate the value of exercise to increase an individual's sense of well being and sleep. All these elements (stress reduction, cutting sugar consumption, exercise, improved sleep and increased well being) have been shown in various scientific studies to increase the proportion of good bacteria in the gut microbiome. There will also be a probiotic bed in the Macdonald Showcase Permaculture Garden Project to educate people about some of the foods that can be grown to make probiotic friendly dishes. It is important to stress that we will not allow attendees to sample the products of fermentation workshops. Instead, we will provide commercially made free samples to attendees.

3. **Is your project related to the University's [Vision 2020 Sustainability Strategy](#)?** Yes No Not sure

If yes, how does it relate? Please refer to the [strategy category or related action](#) from the [2017-2020 Climate & Sustainability Action Plan](#) in your response. Limit ~100 Words

This project falls under the education category of the Vision 2020 Sustainability Strategy as this project will provide practical skills in preparing fermented and probiotic friendly foods. It will also engage a sustainability dialogue about the benefits of eating a plant based, biodiverse diet which uses locally grown foods. It will also helpfully stimulate lifelong learning about how to achieve a healthy gut microbiome and may continue to stimulate research at the University on this issue. This will be partially achieved through the creation of a website on the subject, conducting workshops about the subject and making guides to go along with these workshops.

IMPLEMENTATION

Criteria assessed in this section: **ACTION ORIENTED, FEASIBILITY, IMPACT**

4. **List the key activities for your project and indicate the timing for these on the right. Please be specific and realistic when formulating your activities, ensuring that they are achievable within the indicated timeframe.**

Key Project Activities	Start Date (MM-DD-YY)	End Date (MM-DD-YY)
"Probiotic" Gardening in the Macdonald Showcase Permaculture Garden	05-01-19	10-15-19
Fermentation Week	10-01-19	10-07-19
Yogathon	09-20-19	09-23-19

Website and Blog	11-01-19	NA
Fermentation Manual	01-15-20	01-15-19
Fermentation workshops	10-01-19	NA
No Sugar Baking Workshop	01-15-20	01-16-20
Guest Speaker: Rio Infantino, CEO of Copperbranch Restaurants	09-20-19	09-23-19
Guest Speaker: Chris Wrobel, Cofounder of the Macdonald Showcase Permaculture Garden	09-20-19	09-23-19
Guest Speaker: TBA		
Essential Oils Workshop with Mark Samoilovich, Farm Tech Student	09-20-19	09-23-19

5. Please describe what will happen to your project after the SPF funding ends. Additionally, please share if anything will be produced or installed (e.g. a workshop guide, equipment, a toolkit, a network, website, etc) and indicate how this will be maintained. *Limit ~200 Words*

SPF funding is crucial for the debut of this project. Once SPF funding ends, we will have a network of people at the Macdonald Campus that will transform the project into a club or become part of an existing one under the MCSS. The Executives of the MCSS club Green Drinks Ste. Anne have offered to allow us to work with them to continue the microbiome initiative if a separate MCSS club cannot be created (please see attached letter of support). This will allow for additional funding for seeds and continuing workshops. We aspire to create a toolkit through a website, a workshop guide, and a manual about fermentation. These tools should allow for the reduction of food waste, as well as promotion for the gut microbiome, ultimately creating more interest in research. Once these tools are set in place, we can apply for SEEF funding, as well as the Dean's Discretionary Funding. This latter two resources will also ensure the continuity of this initiative.

TRANSFORMING CAMPUS

Criteria assessed in this section: **AT MCGILL, IMPACT**

6. In the table below, describe the project's 1-3 main impacts on the McGill community or its main goals to accomplish. Please check the McGill stakeholders that will be impacted. Finally, please list at least one key success indicator for each impact (e.g. # people engaged, % waste diverted, # buildings certified, etc.)

Main Impacts/Goals		McGill Stakeholders Impacted (check all that apply)	Key Success Indicator(s)
REQUIRED	1 Promotion of the Health Benefits of Probiotics and other Fermented Foods.	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Academic Staff <input checked="" type="checkbox"/> Postgraduate <input type="checkbox"/> Admin. Staff <input type="checkbox"/> Alumni	Number of people engaged, will be assessed through a survey
OPTIONAL	2 Reduction of Household food waste and the promotion of local produce consumption	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Academic Staff <input checked="" type="checkbox"/> Postgraduate <input type="checkbox"/> Admin. Staff <input type="checkbox"/> Alumni	Will also be assessed through a survey.
OPTIONAL	3	<input type="checkbox"/> Undergraduate <input type="checkbox"/> Academic Staff <input type="checkbox"/> Postgraduate <input type="checkbox"/> Admin. Staff <input type="checkbox"/> Alumni	

STAKEHOLDER ENGAGEMENT

Criteria assessed in this section: **AT MCGILL, COLLABORATION, SUPPORT, CAPACITY BUILDING**

7. Please list 3-5 key stakeholders involved in your project, indicating their role and support. If the stakeholder has provided a support letter, please indicate so here and attach it as an appendix document. *Note: Projects involving modifying a space on campus, making a permanent installation, hiring a full-time staff, or adding/modifying a garden, etc., must seek permission from the appropriate stakeholder(s) (e.g. building director, Campus Planning and Development office, staff supervisor, etc.). SPF Staff can help you assess if any key stakeholders need to be added to your list.*

Stakeholder's Name(s)	Title	Role in the Project	Support/Permission	Support Letter
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The Permaculture Club	MCSS Club	Garden Bed Availability	Confirmed support	Attached
Dr. Stan Kubow	Professor	Researcher and Support	Confirmed	No
Jim Fyles	Associate Dean	Supporter	Confirmed	Yes
Green Drinks Ste. Anne	MCSS Club	Supporter	Confirmed	Yes
			Choose one.	Choose one.

8. How will you communicate about your project and share its impacts with the McGill community? Please describe your key tactics (e.g. social media, workshops, tabling, etc.). *Limit ~200 Words*

Communication is a key element for this educational Project. In order to generate awareness, a facebook page will be created, as well as instagram pages that will serve as the roots of information for upcoming workshops, facts and activities that will happen on campus such as the fermentation week and the yogathon. In addition to facebook, there will be posters that will be put up for event promotion. Tabling will only be done during the fermentation week, as it often does not reach as many students as posters, social media or workshops. After we have a network through social media, we will release a website that will also serve as the blog platform where we can showcase new research and household tips. The last strategy is developing a manual by the end of the year on fermentation and another on household waste. We want to create tools that students and staff can use to create a healthy gut microbiome and reduce food waste.

9. If applicable, are there any training, volunteer opportunities, jobs, or complementary applied student research integrated in your project? Please describe. *Limit ~100 Words*

There will be opportunities for volunteering, and complementary student research with this project. As per volunteering, we will need them to help run events and the future website. This will eventually be done in a club setting. As for research we are hoping that it will create an interest in students to pursue graduate studies on the subject.

APPENDIX

Relevant Support Documents

List any appendix documents in order in the table, below.

Please keep the total number of pages as low as possible (recommended maximum is 5). Please include any relevant support letters.

Doc #	Appendix Document Title	# of Pages
1	Appendix 1 Budget Explanation	1
2	Appendix 2 Letter of Support from Dr. Jim Fyles	1
3	Appendix 3 Letter of Support from Green Drinks Ste. Anne	1
4	Appendix 4 Letter of Support from McGill Permaculture Club	1
5	Staff Position Information Appendix , if applicable	3

STAFF POSITION INFORMATION

Please complete the fields below with information regarding the position that you would like to fund through your project. Should you have more than one type of position, please fill and attach a form for each position.

Position Title	Project Manager
Brief Description of Role	The individual who fills this position will manage the project workshops, guides and activities. They will be the main contact for the project.

1. This position is: New Already exists on campus

2. Please describe which McGill Unit/Department/Group/Association will host the position. *Limit ~100 Words*

The Microbiome Project

3. Who will supervise the employee? Please list the supervisor's name and role at McGill. *Note: The supervisor must provide a letter detailing their commitment. Please include this in the application appendix. Limit ~100 Words*

The Manager will work alongside the Project Assistant.

4. Campus(es) where employee will work: Downtown Macdonald Gault Other _____

5. Please provide a detailed task list and/or job description. *Limit ~400 Words*

The candidate will work with the team members to set deadlines and goals for the year. They will organize and run events, workshops and speaker engagements. They will also post material on the project blog and perform any other functions that are necessary for the project completion

6. Please share how you have determined the hours and wages included in the budget. *Limit ~200 Words*

The position requires an average of 6 hours a week to manage the events and workshops. In order to pay equal as the project assistant, the pay will be at \$15.00 an hour.

7. If applicable, please share how you will integrate the employee into the existing team/group structure. *Limit ~100 Words*

The project manager will meet with the team at the beginning of the fall semester and will time line the project and set goals with the team. At this point, the logistics will be done.

8. What will happen to the position after the project funding concludes? Is there an intent to institutionalize this position? *Limit ~200 Words*

The position will be terminated after the project funding concludes

9. If applicable, please briefly describe how you plan to recruit the employee. *Limit ~200 Words*

We already have a candidate in mind.

10. My project team already has a candidate in mind to fill this position: Yes No

If yes, please disclose. You may wish to attach a CV for the candidate in the application appendix. *Limit ~100 Words*

Laura Webb

STAFF POSITION INFORMATION

Please complete the fields below with information regarding the position that you would like to fund through your project. Should you have more than one type of position, please fill and attach a form for each position.

Position Title	Project Assistant/Finances
Brief Description of Role	The individual who fills this position will assist the project manager in the logistics and organization of the various activities associated with the project, as well as keeping track of all finances

1. **This position is:** New Already exists on campus

2. **Please describe which McGill Unit/Department/Group/Association will host the position.** *Limit ~100 Words*

The Microbiome Project

3. **Who will supervise the employee? Please list the supervisor's name and role at McGill.** *Note: The supervisor must provide a letter detailing their commitment. Please include this in the application appendix. Limit ~100 Words*

The employee will work with the project manager and the rest of the project team on all facets of the project.

4. **Campus(es) where employee will work:** Downtown Macdonald Gault Other _____

5. **Please provide a detailed task list and/or job description.** *Limit ~400 Words*

The candidate will keep track of all the project finances; email the Sustainability Projects Fund when purchases are required; assist the project manager in the organization of events, workshops and speaker presentations; post material on the project blog; and perform any other functions that are necessary for the successful completion of the project.

6. **Please share how you have determined the hours and wages included in the budget.** *Limit ~200 Words*

The position requires an average of 4.5 hours per week to help the manager with events and workshops. Since the post requires little or no experience, the salary will be at \$15 per hour.

7. **If applicable, please share how you will integrate the employee into the existing team/group structure.** *Limit ~100 Words*

The project assistant will meet with the team at the beginning of the fall semester and together will timeline the project and set its goals. Together the team will then work out the logistics of each event.

8. **What will happen to the position after the project funding concludes? Is there an intent to institutionalize this position?** *Limit ~200 Words*

The position will be terminated after the project funding concludes.

9. **If applicable, please briefly describe how you plan to recruit the employee.** *Limit ~200 Words*

We already have a candidate in mind.

10. **My project team already has a candidate in mind to fill this position:** Yes No

If yes, please disclose. *You may wish to attach a CV for the candidate in the application appendix. Limit ~100 Words*

Julian Russell

Appendix 1 Budget Explanation

1) Volunteer Food and Drink \$339	Refreshments for the volunteers at various events
2) Plant and Gardening Materials \$350	Seed, growth containers, organic fertilizer, applicator for nontoxic spray
3) Yoga Instructor \$60	Paid yoga teacher for the yogathon in the Macdonald Showcase Permaculture Garden
Paid Refreshments for all events \$400	Refreshments will be both ordered from Café Twigs and made from free produce sourced from the Horticulture Center at Macdonald Campus
Jars for Workshops	Free jars will be given to attendees to take home with them to store their own kombucha and kimchi once they make it
Free Samples of store bought kombucha and kimchi	These premade commercial preparations will be handed out to attendees at various events



McGill

**Faculty of Agricultural
and Environmental Sciences**

**Faculté des sciences de
l'agriculture et de l'environnement**

McGill University
Macdonald Campus

Université McGill
Campus Macdonald

Tel.: (514) 398-7758
Fax: (514) 398-7990
james.fyles@mcgill.ca

Department of Natural
Resource Sciences

Département des sciences
des ressources naturelles

21,111 Lakeshore
Ste-Anne-de-Bellevue
Québec, Canada H9X 3V9

April 15 2019

The McGill Sustainability Projects Fund

Dear Evaluation Committee

I am writing in support of The Microbiome Project submitted by Laura Webb and her colleagues. I see the core value in this project to be the raising of awareness about the importance of a healthy and sustainable diet among students, including some practical and hands-on experience in food preparation to support the adoption of healthier food alternatives.

The University has increasing concern with student wellness, driven by shockingly high levels of anxiety and depression reported in well-run student surveys. Healthy dietary practices are an important but poorly recognized component of wellness. On the Macdonald Campus many students have intermittent access to healthy food alternatives and the need for residence students, and others, to prepare their own food leads to vulnerability to poor eating practices. The Microbiome Project will promote important concepts and useful practices to Macdonald students and will contribute to improved awareness of these issues. It will also provide students with useful experience that can help them prepare foods that will be beneficial to their health and wellness. I am hopeful that the project will not only transfer knowledge but will also foster community around healthy foods. The preparation of fermented foods, in particular, is as much an art as a science and it benefits from communal sharing of knowledge and experience. While the impact on the student body will be difficult to measure due to the many other factors that influence wellness, I am confident that activities proposed in this project will be helpful in our collected effort to have a well campus.

The project is a logical extension of the Permaculture project and will be a good demonstration of the links between where our food is grown, our diet, and its wellness outcomes. There are obvious complementarities with the Out of the Garden Project that will develop as the activity continues.

Overall, I see the Microbiome Project as a valuable initiative that will serve the student community well and promote sustainable lifestyles on campus.

Yours sincerely,

James Fyles
Professor and Tomlinson Chair in Forest Ecology

April 10, 2019.

To whom it may concern:

We, the Green Drinks Ste. Anne executive, fully support the aims and goals of the Microbiome Project. Our first event of this semester highlighted the power of Probiotics, which included a talk by Laura Webb on the subject. In the event that Laura cannot form a new MCSS club devoted to promoting probiotic friendly foods and fermentation, we will allow Laura to join our executive and help her push the probiotic agenda. Green Drinks Ste. Anne has existed as a MCSS club for over ten years. Its mandate is to promote sustainability through films, guest speakers and workshops.

Respectfully yours,

Siri Van Gruen U2 FAES and Co-president Green Drinks Ste. Anne

Handwritten signature of Siri van Gruen in blue ink.

Gabrielle Di Geronimo U2 FAES and Co-president Green Drinks Ste. Anne

Handwritten signature of Gabrielle Di Geronimo in black ink.

April 10,2019.

Dear Sustainability Projects Fund Committee,

The McGill Permaculture Club fully supports the Microbiome Project. We will allocate sufficient space for the Microbiome Project in the Macdonald Permaculture Showcase Garden (MPSG) to allow a probiotic garden bed to be created. The Microbiome Project will also have the advantage of being accepted under the Mac Regenerative Food System Network (MRSFN) (pending approval), should both projects be accepted by the SPF.

Respectfully,

Audrey Constance Wagner U4 FAES

A handwritten signature in black ink that reads "Audrey Wagner". The signature is written in a cursive, flowing style.

President of the McGill Permaculture Club

Cofounder and Co manager of the Macdonald Permaculture Showcase Garden

#5, 40 Rue Maple
Sainte-Anne-de-Bellevue, QC, H9X1E6
778-385-3392
laura.webb@mail.mcgill.ca

Laura Webb

Objective Enhance career experience, building upon skills acquired during previous employment while continuing to develop organizational and leadership skills.

Education **McGill University**, *B.S. Food Science and Nutritional Sciences, 2021*

Work Experience Jan 2015-September 2018 **Lifeguard**
Canada Games Pool New Westminster, BC

- Core Lifeguard Summer 2018; this position requires a higher level of experience
- Create and maintain a safe, clean, and friendly work environment
- Teach and manage swimming lessons

Volunteer Experience Jan 2017-April 2017 **Saint-Anne's Veterans Hospital**
Sainte-Anne-de-Bellevue, QC

- Accompany, socialize and help in social-recreational activities with residents

Extracurricular September 2018-Present **Food Science Association Concurrent Representative**

- Act as the Representative for Students in the Food Science and Nutrition (Concurrent) Program
- Planned social and networking events for all students in Food Science

September 2018-Present **DHNUS VP Finance**

- Manage Finances for the Dietetics and Human Nutrition Undergraduate Society
- Helped

September 2017-May 2018 **DHNUS Events Coordinator**

- Organized and planned both career and social events for the Undergraduate Society
- Assured that events ran smoothly
- Communicated with committee, the school and suppliers

Awards and Certificates May 2018 CPR-C

Skills and Abilities Responsible Self-Starter, Fast learner, Problem Solver. Kombucha brewer and Baker Extraordinaire!