

PROJECT TITLE: SPO218 Microbiome Project

Please answer the following questions and return the completed form to the [SPF Staff](#) via e-mail.

Final Report prepared by
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Actual Project Start Date September 4th, 2019

Actual Project End Date June 25th, 2020

Questions

1. Please summarize the project and its key accomplishments to date in 1-2 sentences.
(400 characters maximum)

This project successfully engaged the McGill student body with the subjects of the microbiome, sustainability, fermentation and wellness. Through several workshops, lectures and initiatives, the Microbiome project helped dozens of students to reconsider their personal connection with sustainability and their microbiome, prompting awareness, positive change and education within students and faculty on the Macdonald and Downtown campuses of McGill university.

2. Your team listed the following goal in your project application:

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.

Did your team achieve your project's goal? In your answer, please describe the impact your project had on McGill's structures, processes, and/or systems. Also, please specify how this positively transformed people's behaviors/perspectives/habits on McGill campus(es).

(Unlimited characters, suggested minimum ½ page or approximately 250 words)

The Microbiome Project surpassed its goal of educating the community about the health benefits of fermented foods, biodiverse diets and sustainability.

The Microbiome Project (TMP) is an initiative based on human interaction, promoting holistic education and bettering ourselves and the environment. Thus, the real magic of our project happened throughout the many in person events and activities that we held from September 2019 until the Covid pandemic took TMP to a grinding halt.

The major impact this project had was through education. Not many know how one's microbiome plays a role in their health and well being and not many know how to interact and support their own microbiome.

TMP spread the message that everyone has a microbiome and deserves to take care of it. As well, that this process is actually very user friendly, can be supported through fermentation, and this in turn can have great impacts on improving one's own sustainability footprint.

We led information sessions to educate interested patrons. Then we had hands-on sessions where people could watch us start the fermentation process with real fruits and veggies grown locally, by us in the Microbiome Garden, planted by Chris Wrobel in the summer of 2019.

The answers and concepts we were able to provide our audience clearly changed their perspective on health, their microbiome and sustainability.

The impact this had on McGill's structures and processes are that new dialogues were sparked, collective consciousness was increased, people who were already informed were able to find their voice and teach people who were new to the concepts brought forward by TMP and change was made that impacted the way members of the student body conducted their home life. People who never used to consider their microbiome or how they could do sustainable fermentation at home, now do.

New positively transformed people's behaviors/perspectives/habits on McGill campus(es) include:

- a redefined concept of food waste. This is simply summarized in the TMP tag line "don't throw it out, ferment in out" because in reality, much of our fresh food waste is not actually waste (eg broccoli stalks) and through a simple fermentation stage can be transformed into a food product that is both nourishing to one's microbiome and one less item that ends up in landfill
- more young people started discussing the topics of fermentation, natural beer and wine brewing, gardening and sustainability on their own terms at home and in common spaces at school. TMP made a particularly large impact on the Macdonald campus and became a topic of discussion that was audible around campus
- TMP started on Macdonald campus, but made waves downtown. In fact, because of the TMP, the downtown brewers union was inspired to do more natural fermentation and we mentored this downtown club and included them in workshops and initiatives that we were offering. This made impacts we probably are not even aware of throughout the downtown student body

3. Please describe the key successes and challenges of your project. (Minimum of two examples for each)

(Unlimited characters, suggested minimum ½ page or approximately 250 words)

Overall, TMP was a great success. However, the project went through much evaluation as did its team members and its objectives. The original team consisted of Laura Webb, Chris Wrobel and Julian Russell. As well, the project had more of a focus on permaculture style gardening in the beginning.

However, due to team conflict and some members over committing themselves, the project went through a restructuring where those who took over the torch included current members Julian Russell and John Weilenmann. This was a challenge, but ultimately a great blessing in disguise. Both these new members took incredible joy in collaborating and restructuring the project into what it is today.

TMP became more dynamic, offering more frequent events, on a broader range of fermentation topics. That included natural wine, beer and cider fermentation. As well, a new found partnership with the Macdonald Campus Brewers Union. This union was essential, because both the Mac Brewers union and TMP have at times struggled to draw attendance to their events. However, in co-advertising and over all collaboration, both groups saw an increase in interest and turnout to events.

Some other successes included the harvesting of the permaculture garden in fall of 2019. The harvest was plentiful and offered great educational and fermentation opportunities, presented in a sustainable way. As well, this garden has now been dedicated to future generations.

Other successes included the hot sauce, natural red grape and sustainability week workshops that we put on. These events had some of the best turnout and for sure made waves in the community.

All of the above events were impactful, but to provide insight into what they looked like and what we did, here is an indepth look at the wine workshop.

Wine Fermentation Workshop September 18th, 2019:

The first step we taught people about was harvesting. The grapes must be picked from their vines late August early September to make a balanced wine with acidity and sweetness. We also taught people how to use grapes that were no longer suitable for eating, but instead of throwing them out, one can ferment them and enjoy them later.

Then we got into the maceration step: we showed people how to crush the grapes by hand- as well, we had a grape crusher provided by one of the students, the students were then shown how to use an old wine press which required multiple students to press down on the grapes and filter them through a net. This was a very hands on step that offered an opportunity to speak about the evolution of fermentation, food safety and fermentation technology.

Then for the fermentation step: We were able to use this step as an educational talking piece. We explained the different bacteria involved in fermentation, the health benefits and risks of enjoying a naturally fermented product, how it's a viable method of food preservation, and how it's important to be water conscious and focus on sustainability.

After the workshop, students were asked if they felt confident in reproducing the knowledge taught at the wine making workshop. All of them answered yes and they expressed enthusiasm. They also had asked if there was equipment available on campus to use, and at this time there was not. We tried to facilitate this multiple times over the year, but for many reasons it fell through. There were a total of 15 students that attended the event.

Without surprise, the largest and most recent challenges that TMP has faced came with the Covid 19 pandemic. COVID has compromised the three most significant activities we were intending to hold: those being a fermented sourdough baking event (March 16th), brewery tour (march 17th) and kombucha tutorial with a documentary screening (march 30th). It comes with great sadness that all these final events had to be cancelled.

4. What key points of advice or *lessons learned* would you give to other SPF teams either regarding your experience managing your project or the project itself?

(Unlimited characters, suggested minimum ½ page or approximately 250 words)

Be bold and take a chance!

If you have an idea, go for it. Apply to SPF in the first place. Brainstorm with a friend and do the application and just go for it. The same goes for those who actually get funding. Don't limit yourself in how much you think you can accomplish. This was such a fun and educational process and I feel lucky to have worked with SPF and have successfully led TMP through its year long journey.

Be different! Take this as an opportunity to learn about something new for oneself. I learned so much about the microbiome and sustainability myself. Even as the individual acting as the authority of the subject, I learned a lot and grew as a person doing this project. This is a great thing for others to realize that it's also a self growth and personal learning opportunity.

Aswell, I would highlight how running and organizing an SPF project forces you to practice leadership and decision making skills. Team management is crucial to a successful SPF project and people should consider doing an SPF project if they want to get a taste for dealing with bureaucracy and being an entrepreneur.

As well, it is a great opportunity to make professional connections. TMP hosted workshops where really educated, distinguished people spoke on our behalf, offered us advice and worked with us towards a common goal. John and I met people and professors we never would have otherwise. They now consider us peers in the field and this is a great accomplishment.

Lastly, hosting an SPF project is a great resume piece. I am proud to have this project on my resume and others should know it is something they too can be proud to share about.

5. What recommendations do you have for the future of this project to be continued and are there any opportunities for complementary projects? Who will take responsibility for the project's future and how can interested persons be in touch? The SPF team will also be in touch with this contact for updates on the project's progress in coming years, if ongoing.

(Unlimited characters, suggested minimum 1 paragraph)

What recommendations do you have for the future of this project to be continued and are there any opportunities for complementary projects?

- yes! There are so many complementary projects and opportunities. I would be very willing to speak on behalf of TMP to anyone who comes forward expressing interest in the subject or students looking for motivation. This project could be continued in line with fermentation of beverages such as beer, wine and kombucha. It could be continued in line with sustainable food production. It could be continued in line with sustainable farming and food production. It could be continued in line with wellness, yoga, health and exercise.
- My suggestion and recommendation for the future of this project is that it is taken up by a downtown student. John and I both live and study at Macdonald Campus. Thus we did an excellent job offering TMP there, but we had a great struggle in offering events consistently downtown - between exams, late nights, freezing snow, little help and a tight budget, we had trouble launching TMP downtown. Thus, following the foundation already established by this project, I would recommend a student from downtown expand upon TMP.

Who will take responsibility for the project's future and how can interested persons be in touch? The SPF team will also be in touch with this contact for updates on the project's progress in coming years, if ongoing.

- Our primary candidates for continuing this project would be Helene Pfaendtner from macdonald campus. Ideally however, I would recommend starting a chapter downtown and Jacques Carmichael may be interested. These people are loosely interested and have not committed.

6. Would you or your project team member(s) be willing to serve as a mentor to SPF project teams? Please choose one. If yes, SPF Staff will contact you with more information.

(800 characters maximum)

Yes No

Before consenting to this, can we please have more information. Thank you.

7. In your application, you listed the following sources of funding:

\$4,860.00 – Sustainability Projects Fund (SPF)

Please confirm if you received this funding in the space below. In your response, please list the actual amount (in dollars) that you received. Note: If you received funding from a McGill Department or Unit, please attach a letter from its Financial/Budget Officer confirming the actual amount of support.

(1,800 characters maximum)

We received a portion of this funding. As events had to be canceled, we were unable to realize a sizable portion of the funds made available to us. This is the most up-to-date summary of our budget that we have.

Approved budget (SPF funding portion only)	\$	4 529,00
Total SPF funds spent	\$	1 742,11
Total SPF funds remaining	\$	2 786,89

This was received as of April 9th and no more funds we used after this point on actual supplies. However, on April 23rd John and I submitted forms for hours we had logged over the past several weeks, 35h combined, for a rough total of an extra 500\$ in compensation for timing.

8. Did you purchase equipment or make an installation on campus? Yes No

If yes, please briefly describe how these items will be maintained and used in the future.

(1,800 characters maximum)

We attempted to do this, but it was not received by the farm center or the library.

9. The following Key Success Indicators were indicated in your project application and selected for tracking. Please indicate the actual results that you have achieved in the “Actual” column.

Selected Key Success Indicators	Target	Actual
# of attendees at each workshop/event	15	15
% of attendees with improved knowledge of the microbiome and its contribution to health and wellbeing	100	80%
# of plans developed for the long-term sustainability of the project	1	3

If there is a significant difference in the target numbers and the actual numbers achieved, please explain. If you have any additional information to share about these success indicators, please also include it below.

(1,800 characters maximum)

- We actually had a lot more people turn out then we expected. 15 is an average, but often we had over 20, which we consider a big accomplishment
- We found that some of the people who came to events already had knowledge. Thus, some of the people who came to do the workshops, already knew what we were teaching. This is why we listed 80% instead of 100%.
- We had some amazing plans we developed along the way and for different reasons, there were barriers in executing them. For example, we wanted to launch a ferment shed and a permanent section in the library. However, the farm center never responded to our inquiries and the library simply was not interested in participating. Thus, John has gone to the incredible extent to write a manual as a legacy piece.

10. Please report on your progress with the standard SPF Key Success Indicators in the “Actual” column.

Standard SPF Key Success Indicators	Actual
# of volunteers directly or indirectly engaged in the project	5
# of people (student, staff, or other) trained in the context of the project	3
\$ raised for project activities subsequent to SPF funding	0
# of tons of GHG emissions reduced by your project	1950kg / year
# of partnerships or collaborations developed between the project team and other McGill administrative units, student groups, community groups, other universities, and/or other groups/organizations.	4

Regarding the last Key Success Indicator, please list the groups and/or organizations that you counted.
(Unlimited characters; point form acceptable.)

- Brewers union of Macdonald Campus
- Downtown McGill brewing club
- Macdonald permaculture club
- Macdonald Campus Ceilidh

If you have any additional information to share about the Standard SPF Key Success Indicators, please include it below.
(1,800 characters maximum)

11. Please indicate the McGill stakeholder groups that were involved with your project as a team member or collaborator/partner. Choose all that apply.

- Undergraduate Postgraduate Administrative Staff Academic Staff Alumni

12. Please rate your project team’s overall satisfaction with the support provided by the SPF Staff. Choose only one response.

- Very Dissatisfied Dissatisfied Neither Satisfied Nor Dissatisfied Satisfied Very

Satisfied

13. Please provide any feedback or recommendations regarding your team’s experience with the SPF

(Unlimited characters, suggested minimum 1 paragraph)

Stéphanie Keller-Busque was amazing. She was very helpful, always available and eager to help us in any way. Thank you Stéphanie. However, we were really distressed by how challenging it was to utilize and redeem our funding. It seemed that at every turn there was a money related challenge.

We were forced to purchase equipment and supplies out of pocket and it took an uncomfortably long time to be

reimbursed.

As well, there was very little room for innovation. The nature of doing a project and anything dynamic is that it must evolve to accommodate the various challenges that materialize along the way.

However, we found it challenging to adapt and respond to the feedback and challenges that were coming up along the way, because our modifications were not explicitly laid out in our initial application. But how could it have been?

This is likely our most significant complaint. It's hard to be motivated when one is fearful they will be out of pocket.

14. If there is additional information you would like to share about your project, please use the field below.

(Unlimited characters)

15. Has involvement in this SPF project positively impacted your team in the area of professional growth? Please choose one. If you would like to elaborate, please use the field below.

(800 characters maximum)

Yes No Prefer Not to Share

Yes, this project has been very beneficial in boosting our professional capacity. It has benefited our capacity to work in a team, advertise our project and our skill sets, advertise to the general public, appeal to professionals, and work under pressure.

16. Has involvement in this SPF project positively impacted your team in the area of personal growth? Please choose one. If you would like to elaborate, please use the field below.

(800 characters maximum)

Yes No Prefer Not to Share

17. Which of the following skills or attributes has your team improved through involvement in your SPF project? Choose all that apply.

Budgeting

Networking

Systems Thinking

Communications

Planning

Teamwork

Conflict Resolution

Problem Solving

Technology

Leadership

Project Management

Time Management

Listening

Public Speaking

Writing

Mentoring

Stakeholder Engagement

Other (Please specify in the

Negotiating

Stakeholder Identification

field below)

Other:

18. Since starting your SPF project, has your team improved its knowledge of sustainability? Please choose one. If you would like to elaborate, please use the field below.

(800 characters maximum)

Yes No Prefer Not to Share

19. (Optional) If applicable, please list the total number of team members voluntarily self-identifying as members of marginalized communities:

Please identify the represented communities below. (e.g. women, Indigenous people, people of colour, LGBTTQI, student parents, members of ethnic minorities, immigrants, people with disabilities)

(1,800 characters maximum)

there was engagement from many of these groups, including:

- women
- people of colour
- LGBTQ
- ethnic minorities
- immigrants
- people with disabilities

THANK YOU FOR COMPLETING YOUR FINAL REPORT!

Please e-mail your report to the [SPF Staff](#) attaching any additional information that you would like to share about your project

(e.g. other reports, research, documents, photos, etc.). Please note that this Final Report will be shared publicly on your SPF project's webpage.