Living Data Project: Invitation to propose a working group topic

Do you have a research question in ecology, evolution or environmental science that could benefit from a focused working group? Could a team of 10-12 highly qualified and motivated graduate students and postdoctoral fellows from across Canada help you answer this question with a week of intense work? Working groups collaboratively synthesize existing data and research and/or develop new conceptual frameworks or models.

We are seeking a team of two or more researchers to develop and lead a one-week working group, to run between August 30, 2022 and February 28, 2023, and focused on a challenging and important question in ecology, evolution or environmental science. We welcome both applied and fundamental questions. We invite researchers from all sectors (universities, governments, non-profit organizations, Indigenous organizations, community groups, industry) and career stages (from early career to senior researchers, including experienced PhD students and postdoctoral fellows) to submit proposals. The working group will consist of a small group of researchers (the research leaders, 10-12 graduate students and 2-3 postdoctoral research fellows from the Living Data Project) who will meet over a week to work intensively and collaboratively on the research question, using best practices in team science and digital collaboration.

What we will provide:
We will run a national competition to select the graduate students who will take part in this working group. The majority of these graduate students will have already been trained by the Living Data Project in the specialized statistics for synthesis science (1 month course) and in best practices in scientific collaboration (1 month course). The research leaders are invited to be part of the selection process.

The Living Data Project postdoctoral researchers will help you develop the schedule for your working group, assist with facilitation and meeting logistics, and organize the digital platforms. The postdoctoral researchers may also be full participants in the working group, and are highly trained in data management and analysis, reproducible research, and inclusive collaboration practice.

For <u>virtual</u> working groups, we will provide coupons for meal delivery during the working group week for all participants and up to $1500 CAD to cover publication costs. If the working group is <u>in person</u>, travel costs for student participants and organizers will be covered with a budget of $13,800 CAD.

Responsibilities of research leaders:
We are looking for a team of at least two researchers who will co-lead the working group. You will be responsible for setting the scientific agenda, defining the research question(s) and providing in advance any relevant datasets and materials for analysis.

Proposals will be evaluated according to the following criteria:
1. The research question will be of interest to graduate students in ecology, evolution or environmental science.

2. The research question can feasibly be answered within an intensive five day working group, and will result in a concrete product or outcome.
3. The graduate students and postdoctoral fellows will benefit from the working group, for example through exposure to non-academic careers, development of new skills or applications of ecology and evolution theory.
4. The project is consistent with the goals of the Living Data Project. The Living Data project provides cutting-edge training in data and collaboration skills, including breathing new life into legacy datasets in ecology, evolution and environmental science. The Living Data Project applies an equity, inclusiveness and diversity lens to all of its activities.
5. The researchers are highly qualified to lead the working group, including experience leading research teams and building inclusive collaborations.

Proposals should include:
- **A description of the research question and its importance (max 200 words).** We seek research questions of high importance to science or society that require the synthesis of existing data or results, or the development of new models or frameworks. These questions should be addressable within a 5 day working group, and may be either conceptual or applied in nature.
- **A description of the work plan for the working group, including goals (max 200 words).** Provide a step-by-step plan for how the working group will collaboratively answer the research question. An important feature of working groups is that they can be broken into smaller subgroups that work on different aspects of the workflow during part of the day, which then collectively assemble later in the day to synthesize their work. Please specify any product(s) you hope to achieve from the working group (e.g. report, publications, infographics, training tools, etc.), and how production of these products will either be incorporated in the workplan, or will be finalized by the participants after the working group. We expect that graduate students who make substantial contributions to publications would be included as co-authors.
- **If relevant, a description of the data to be analysed (max 200 words).** We require any database, or combination of databases, that will be analysed in this working group to be in a format that allows immediate programmatic access. The emphasis of these working groups is on formulating and testing hypotheses, so it is imperative that participants do not spend most of the working group time in cleaning data, building databases or navigating access. There is a preference, but not requirement, for databases that are open access, Canadian, or that have originated from data rescue activities. The research leaders need not have been involved in the creation of the database, but should be familiar with it.
- **A description of the benefits to graduate students for participation (max 200 words).** Graduate students are often motivated by opportunities to learn about non-academic careers, to deepen their understanding of concepts, to experience the application of science beyond academia, to contribute to initiatives that have high societal value, and to have concrete products that can enrich their CV.
- A budget <u>if the working group will be in person</u>, including meeting room costs, flights, transportation, accommodation, and meals.

Please attach the CV of each research leader that will take part in this working group. Please highlight experience in coordinating research teams and building inclusive collaborations.

Complete applications must be emailed to Kelly Haller at ciee-icee@biodiversity.ubc.ca by **Tuesday, May 24, 2022 11:59pm.**

Testimonials from past working group leaders and participants
From working group leaders:
- "The LDP project has been a transformative experience for work with the long-term dataset we brought to it. The students in the LDP project have been able to not only dig into the natural history of our system, but bring fresh new insights to how it can be used to answer fundamental questions in Ecology. Our LDP project is on track to produce five papers that will have a huge impact on marine ecology in New England and beyond. Perhaps one of the most delightful aspects of the LDP project was watching the students launch themselves and present at a conference none of them had been to before and generate the loudest buzz of any set of talks at the conference. I literally had people coming up to me at a conference asking, *'When are the LDP students going to publish these papers! I need to cite them now!'*"
- "The LDP project was an amazing way to bring together diverse expertise and skills. This diversity enabled us to look at the dataset with a fresh and different perspective, leading to questions and analyses that wouldn't have otherwise happened. Our work is richer and will be far more impactful because of it!"

From graduate student participants:
- "Participating in LDP activities has given me more transferable skills than anything in my [graduate training]. It has renewed my excitement for my work, and has given me hope for the future of ecology and evolution research. Thanks so much!"
- "[T]he sheer volume of learning I accomplished and information I consumed in such a short period of time! I was scientifically enriched in a way that often eludes me in my day-to-day thesis work … I'm still chasing my next working group high!"
- "Thank you for organizing this working group – it was a professional revelation!"
- "Collaborating with others was very stimulating; everyone was super nice, competent, and complementary. It felt so good to work with others, especially during this Covid year."
- "I got more work done during my working group experience than I normally would in a month on my own."
- "It was really neat getting to split tasks according to each member's individual skill set. Reproducible workflows made it easy for one person to tidy a dataset, save it in the repository, and have another person work with that dataset in visualization and analysis."