## **Program**

With links to presentation's slides, virtual posters, and full papers (when available).

This first International Forum on Agroecosystem Living Labs (IF-ALL) marks five years since the agroecosystem living lab concept was first presented by Canada to the Ministers of Agriculture of the G20 in 2018. Agriculture and Agri-Food Canada (AAFC) and France's National Research Institute for Agriculture, Food and Environment (INRAE) are co-hosting this International Forum. The Forum features discussion panels and parallel sessions of scientific papers to establish state-of-the-art practices, share lessons learned from case studies and address challenges facing the international agroecosystem living lab community.

### DAY 1 - Wednesday, October 4

Room	520 E	520 F
8:30	Opening Plenary	
9:05	Theme 1: Promoting innovation through living labs	Theme 2: Fostering transitions toward sustainable food systems through living labs
11:15	Thematic discussion	Thematic discussion

17:00 Networking Activity

### DAY 2 - Thursday, October 5

Room	520 E	520 F
14:00	Theme 3: Empowering participation, strengthening participatory governance in living labs	Theme 4: Evaluating success in living labs
16:15	Thematic discussion	Thematic discussion
17:10	Closing Plenary	

### DAY 3 – Friday, October 6

**12:30 - 20:30** <u>Field Visit</u>: Innovation by and adaptation of Quebec farms relative to climate change (Living Lab – Quebec and Agrisolutions Climat projects)

## DAY 1. Wednesday, October 4. 8:30 - 12:00

#### 8:30 Opening Plenary

Room 520 E

IF-ALL participants are invited to attend the Opening Plenary session that will feature opening remarks and keynote presentations on the concept and value of Agroecosystem Living Labs.

Chairs: François Chrétien (Director, Research Development and Technology, AAFC) and Christian Huyghe (Scientific Director of Agriculture, INRAE)

Minister remarks. The Honourable Lawrence MacAulay, Minister of Agriculture and Agri-Food Canada

Opening remarks. Philippe Mauguin (CEO, INRAE) and Gilles Saindon (Assistant Deputy Minister, AAFC)

Why Agroecosystem Living Labs? / Forum Overview. Javier Gracia-Garza (AAFC, retired and Chris McPhee (AAFC)

## Theme 1 "Promoting innovation through living labs" Room 520 E

#### 9:05 Presentations

This session will focus on the use of the agroecosystem living labs approach to promote agricultural innovation as a way to establish productive and sustainable agroecosystems. Presenters will capture the experience of farmers, scientists, and others using an open innovation approach, capitalizing on the potential of local knowledge, and promoting the dialogue between scientific and empirical knowledge. It will also explore new ways to enable open innovation systems with policy makers.

Chair: François Chrétien (AAFC)

9:10 <u>Invited Speaker</u>: <u>Lessons from building Agriculture and Agri-Food Canada's network of agroecosystem living labs</u>. *Chris McPhee, AAFC, Canada* 

9:25 <u>Invited Speaker (virtual)</u>: <u>Living Labs as a key instrument for the transition to sustainable farming</u>: A <u>European Union perspective</u>. *Kerstin Rosenow, European Commission, Belgium* 

9:40 Ecological intensification of livestock production in native grasslands: operationalizing "win-win" opportunities in South America's Pampas and Campos grasslands. Santiago Dogliotti, Univesidad de la República, Uruguay

9:55 <u>Developing the Organic Field Crop Sector Using the Living Lab Approach: A Story from Abitibi-Témiscamingue</u> (Québec, Canada). Stéphanie Lavergne, Université du Québec en Abitibi-Témiscamingue, Canada

#### 10:10 Break

10:30 <u>Agroecology Virtual Research Environment as an example of collaboration between Living Labs and</u> Research. *Jose-Manuel Avila-Castuera, LifeWatch Eric, Spain.* Download the Full Paper.

10:45 FOod REsilience Living Lab (FORELL): a proposed Soil-Food Living Lab linking soil health to food sustainability and climate adaptation. Achilleas Zalidis, University of the Aegean, Greece

11:00 <u>Breathing life into rangeland living laboratories in the Western US</u>. Hailey Wilmer, U.S. Department of Agriculture, Agricultural Research Service (USDA-ARS), USA

#### 11:15 Thematic Discussion

Facilitator: Chris McPhee, AAFC, Canada

All speakers, presenters and attendees are invited to engage in a guided interactive discussion on the theme of promoting innovation for transition through living labs.

Questions for discussion:

- 1. What kind of outcome would you expect if you were to be engaged in an agroecosystem living labs?
- 2. What are the best practices, tools or research needed to support the co-creation process in an agroecosystem living labs?
- 3. What is the biggest challenge participants face when using a living lab approach?

#### **Virtual Posters**

<u>Living in an Agroecosystem Living Lab: Participant Reflections and Experiences from Canada's Living Laboratories Initiative</u>. *Margaret Bancerz, AAFC, Canada* 

<u>Scientific interest groups in France: an innovative multi-stakeholder initiative for collaborative research in agricultural sectors.</u> *Frédérique Angevin, INRAE, France* 

<u>FINAL: - Facilitating insects in agricultural landscapes: A project to demonstrate the impact of landscape transformation on biodiversity and socio-economic aspects with ALLs in Germany</u>. *Stephanie Holzhauer, Thuenen Institute, Germany* 

From waste land to retention ecosystem, a successful living lab adventure. Jonathan Lafond, AAFC, Canada

ADOPT model predictions in a Canadian context: Estimating future beneficial management practice adoption rates.

Margot McComb, AAFC, Canada. Download the Full Paper.

# Theme 2 "Fostering transitions toward sustainable food systems through living labs" Room 520 F

#### 9:05 Presentations

This session will focus on the use of the agroecosystem living labs approach to foster transitions toward sustainable food systems, including for food production, transformation, and consumption.

Chair: Christian Huyghe, INRAE, France

9:10 Invited Speaker: ALL-Ready: Living labs for agroecology transition. Heather McKhann, INRAE, France

9:25 <u>Invited Speaker: Network for Integrated Resilience Agricultural Research (NIARR): Collaborations on the resilience of agricultural systems</u>. Shana Sundstrom, University of Nebraska-Lincoln, Center for Resilience in Agricultural Working Landscapes (CRAWL), USA

9:40 Rethinking the support of rural actors in Africa: The Living Lab approach as a lever for territorial agroecological transitions? Amandine Hertzog, French Agricultural Research Centre for International Development (CIRAD), France

9:55 <u>A Conceptual Framework of Living Labs for People: Fostering Innovations for Low-Emissions Food Systems and Social Equity</u>. Ryan Nehring, International Food Policy Research Institute, USA

#### 10:10 Break

10:30 <u>Lessons from the agroecological transition through the implementation of the RVG as living laboratories:</u> <u>case analysis in Boyacá-Colombia</u>. *July Carolina Rojas Gómez, Universidad Nacional de Colombia, Columbia* 

10:45 Sustainability by chance – consumer co-creation yielding unintended environmental benefits for the food system. Experiences of EIT Food RIS Consumer Engagement Labs project. Krzysztof Klincewicz, Faculty of Management, University of Warsaw, Poland. Download the Full Paper.

11:00 <u>Farmer-led learning: Understanding sustainable transitions in Ontario's potato sector</u>. *Charlotte Potter, University of Guelph, Canada* 

#### 11:15 Thematic Discussion

Facilitator : Muriel Mambrini-Doudet, Institut de recherche et développement, France

All speakers, presenters and attendees are invited to engage in a guided interactive discussion on the theme of fostering transitions toward sustainable food systems through living labs.

Questions for discussion:

- 1. What is the most important change that you would like to see to support transitions to sustainable food systems?
- 2. What contribution do you think living labs can make to accelerating the transitions toward sustainable food systems?
- 3. What are the most urgent research questions that you think should be addressed in a living lab to foster transitions?

#### **Virtual Posters**

How can living labs contribute to co-create transition pathway towards chemical pesticide-free agriculture by 2050: the example of "la fabrique des transitions en Bergeracois" and wine production. Claire Meunier, INRAE, France

Participatory modeling of soil carbon dynamics following the adoption of agroecological systems in Quebec, Canada. Sylvestre Delmotte, Consultant, Canada

Holos Version 4: A Whole-Farm Model for Estimating Greenhouse Gases and Soil Carbon. Sarah Pogue, AAFC, Canada

<u>Unique Opportunities for Sustainable Agriculture in Alberta through the Alberta AgriSystems Living Lab</u>. *Brian Karisa, Alberta Beef Producers, Canada* 

Resilience Landscapes as a Vehicle Of Change In Local Food Systems. Vimbayi Grace Petrova Chimonyo, International Maize and Wheat Improvement Center (CIMMYT), Zimbabwe

The Castor Project of Quebec's Water Strategy—An Agri-environmental Living Laboratory. Etienne Foulon, INRS, Canada. Download the Full Paper.

<u>Transitioning from swidden to agroforestry: the role of risks and uncertainties for adaptation to Climate Change in Yucatan.</u> *Mar Moure, University of Copenhagen, Denmark* 

Gaps and needs for pesticides reduction in viticulture production. Evidence from Romania in a multi actor value chain assessment. Iulia Sorina Dan, University of Agricultural Sciences and Veterinary Medicine of Cluj Napoca, Romania.

#### 17:00 - 20:00/22:00 Networking Activity

Location: Collège Ahuntsic

## Omics To Close the Loop X Adaptation Futures/International Forum on Agroecosystem Living Labs

We invite the agroecosystems living labs community to a networking event featuring the Genome Canada and Génome Québec-supported project "Omics to Close the Loop/Les Sciences omiques pour boucler la boucle". This is a unique opportunity to create links between researchers, collaborators and partners in this project, which includes a living lab component, but also to further network between IF-ALL participants.

Part 1, Meet and Greet : Collège Ahuntsic (17:00 – 20:00) Part 2, After (optional) : Beer at Centrale agricole (20:00 – 22:00)

For the first part, you'll be welcomed at Collège Ahunstic in a cocktail buffet format, with welcoming remarks from the hosts and partners. For those who wish to continue the evening, participants will be invited to La Centrale agricole, a relaxed venue where you can enjoy beers from local microbreweries. A bus will take you from the Palais des congrès to the Collège, with two return trips planned, one after each part of the evening.

## DAY 2. Thursday, October 5. 14:00 - 18:00

## Theme 3 "Empowering participation, strengthening participatory governance in living labs"

Room 520 E

#### 14:00 Presentations

This session will focus on empowering participation and strengthening participatory governance in agroecosystem living labs, including encouraging the inclusion of all relevant partners and identifying best practices to work on shared goals with a prospective vision.

Chairs: François Chrétien, AAFC, Canada

14:05 <u>Invited Speaker: Living Lab approaches enrich INRAE strategy for research, partnership for innovation and support to public policies.</u> *Christian Huyghe, INRAE, France* 

14:20 <u>Democratizing interactions with and among food system actors in a newly set-up Agroecology Living Lab in a Mediterranean area</u>. *Luca Colombo, Italian Foundation for Research in Organic and Biodynamic Agriculture (FIRAB), Italy* 

14:35 Empowering communities to build regional resilience: A case study of the Goulburn Murray Irrigation District in Australia's Murray-Darling Basin. Ruby Olsson, Australian National University (ANU), Institute for Water Futures, Australia

14:50 <u>Co-design of insect-friendly agricultural landscapes – Results and experiences from a transdisciplinary process in three German landscape labs</u>. *Maria Busse, Leibniz Centre for Agricultural Landscape Research (ZALF), Germany* 

15:05 Open Innovation and transdisciplinary for territorial transitions: the case of the TETRAE Program in France. *Romain Melot, INRAE, France* 

15:20 Occitanum, an archipelago Living-Lab to evaluate and co-design digital technologies as enablers of the agroecological transition. Véronique Bellon-Maurel, French National Institute for Agriculture, Food and Environment - Convergences in Digital Agriculture Institute (INRAE-DigitAG), France

#### 15:35 Break

16:00 <u>Invited Speaker:</u> <u>Bridging Land and People to Secure our Future</u>. *Roger Daniels, Mistawasis Nêhiyawak, Living Lab – Bridge to Land Water Sky, Canada* 

#### 16:15 Thematic Discussion

Facilitator: Muriel Mambrini-Doudet, Institut de recherche et développement, France

All speakers, presenters and attendees are invited to engage in a guided interactive discussion on the theme of **empowering participation** of every single actor in an agroecosystem living lab (such as farmers, scientists, policy makers, partners and citizens) to **strengthening participatory governance in living labs.** 

Questions for discussion:

- 1. Is empowerment in a living lab comparable or different from what you have already experienced? Do you have any tips to support such empowerment?
- 2. Do you have advice on how to ensure the engagement of the diversity of partners needed in the cocreation process? Who is to be engaged?
- 3. If you had to choose the three most important factors to empower participation in a living lab, which ones would you choose? These could be skills, knowledge, values, etc.

#### Virtual Posters

Affordances and improvements of design thinking to support farmers in the process of adaptation to climate change. Diane Pruneau, Université de Moncton, Canada

Effects of Organic Amendments on Soil Health indicators in an Indigenous Farm in the Northern Peace River Region of Canada. Bharat Shrestha, AAFC, Canada

A Conceptual Framework for Enhancing Resilience to Climate Change in Ghana's Agriculture and Food Sector through Improved Climate Information Accessibility. Mark Atta Mensah, Department of Computer Science, University of Ghana, Legon, Ghana. Download the Full Paper.

## Theme 4 "Evaluating success in living labs" Room 520 F

#### 14:00 Presentations

This session will focus on evaluating success in living labs using natural and social indicators. Topics will include the evaluation of processes, innovation outcomes, and impacts beyond the living labs.

Chairs: Javier Gracia-Garza (AAFC, retired)

14:05 <u>Invited Speaker: Agriculture Living Labs across LTAR and other USDA ARS Research Networks</u>. *Marlen Eve, United States Department of Agriculture (USDA), Agricultural Research Service (ARS), USA* 

14:20 Knowledge gaps in evaluating the effectiveness and impacts of Living Labs focused on environmental and agricultural sustainability. *Vivian Nguyen, Carleton University, Canada* 

14:35 <u>A Multilevel Evaluation Approach of Agroecological Living Labs: The Occitanum Case.</u> Alexia Gobrecht, French National Institute for Agriculture, Food and Environment (INRAE), France

14:50 A customisable tool for monitoring and evaluating transformational change in European Agri-Food Living Labs: ATP-in-ALL "Analysing Transformation Processes within Agroecosystem Living Labs". Erika Angarita, Thuenen Institute, Germany

15:05 <u>Place-based evaluation in Living Labs: designing tools for collective learning</u>. Erwan Sachet, French Agricultural Research Centre for International Development (CIRAD), France

15:20 Innovation through collaboration: Co-developing ecohydrological indicators in a US rangeland to balance livestock production and conservation in a changing climate. David Hoover, U.S. Department of Agriculture, Agricultural Research Service (USDA-ARS), USA

#### 15:35 Break

16:00 <u>Invited Speaker (virtual)</u>: <u>Agroecosystem Living Labs approach</u>: <u>INTA's strategy to promote territorial innovation processes in Argentina</u>. <u>Eduardo Cittadini, Instituto Nacional de Tecnología Agropecuaria (INTA), Argentina</u>

#### 16:15 Thematic Discussion

Facilitator: Chris McPhee, AAFC, Canada

All speakers, presenters and attendees are invited to engage in a guided interactive discussion on the theme of **evaluating success in living labs** including processes, innovation outcomes, and impacts beyond the living labs.

Questions for discussion:

- What would be your advice for setting up a monitoring or evaluation framework to follow the outcomes
  of a living lab, considering the unpredictability of the co-creation process and the long-term impact of
  changes in the agroecosystem?
- How would you measure the environmental, social, economic and cultural impacts of the living lab?
- If you had to choose only three specific indicators to measure the impact of the agroecosystem living lab, which ones would you choose?

#### Virtual Posters

Agroecosystem Living Lab, Methodological Proposal for Impact Evaluation. Pablo Andrés Curarello, INTA, Argentina

<u>Using agro living labs as a transition tool: how to measure outcomes? The example of prudent antimicrobial use in European countries and livestock sectors.</u> *Florence Beaugrand, Oniris-INRAE, France* 

### 17:10 Closing Plenary

#### Room 520 E

All attendees are invited to join us in **Room 520E** for the <u>Closing Plenary</u> of the International Forum on Agroecosystem Living Labs

Highlights from oral presentations, posters and group discussions will be summarized as well as reflection on the future of agroecosystem living labs at Global scale. Information and logistical details on the field tour organized by the *Union des producteurs agricoles du Québec (UPA)* will also be provided.

Chair: François Chrétien, AAFC, Canada

An introduction to Living Lab Québec and field visit instructions. Chantal Foulds (Union des producteurs Agricole, Canada)

Forum Summary. Muriel Mambrini-Doudet (Institut de recherche et développement, France) and Javier Gracia-Garza (AAFC, retired)

Reflection on the future/next steps. François Chrétien (AAFC) and Christian Huyghe (INRAE)

## DAY 3. Friday, October 6. 12:30 - 20:30

#### **Field Tour**

## Innovation by and adaptation of Quebec farms relative to climate change (Living Lab – Quebec and Agrisolutions climat projects)

The Union des producteurs agricoles (UPA), in collaboration with the IF-ALL 2023 Organizing Committee, invites you to Ferme Cristallina, a family farm specializing in dairy production, operated by Mr. Michael Jeker, located one hour from Montreal.

Transitioning towards a sustainable agri-food sector requires innovations at different levels: technical, social, economic, etc. This multi-level approach to innovation and adaptation will be presented through the lens of lessons learned through two major agri-environmental projects run by the UPA in Quebec (Living Lab – Quebec and Agrisolutions climat). Joined by researchers from Agriculture and Agri-Food Canada and other specialists, farmers will share with you the innovative farming practices they have codeveloped and experimented with.

Boarding starts at 12:30 from the Adaptation Futures event at the Palais des Congrès de Montréal.

Boarding location: 1015 rue de Chenneville via l'avenue Viger Ouest

Departure time: 13:00

Return to Montreal: estimated arrival 20:30 at the Palais des Congrès de Montréal (exact hour may differ slightly).

## About the Organizers

#### Agriculture and Agri-Food Canada

Agriculture and Agri-Food Canada (AAFC) is proud to present the first edition of the International Forum on Agroecosystem Living Labs as part of the 7th Adaptation Future conference. While guiding the growth and development of a competitive, innovative and sustainable Canadian agriculture and agri-food sector, we believe it is important to share knowledge and innovations at an international level in a common effort to strengthen our resilience to climate change.

## Institut national de recherche pour l'agriculture, l'alimentation et l'environnement

INRAE, the French National Institute for Agricultural, Food and Environmental Research, is the leading public research organization in France specializing in its three scientific fields. It contributes to meeting the challenges facing humanity, including climate change mitigation and adaptation, food and nutritional security, agricultural transition, natural resource preservation, biodiversity restoration, and risk anticipation and management. Through research, innovation and support to public policies, INRAE proposes new orientations to accompany the emergence of sustainable agricultural and food systems. INRAE's ambition is to provide solutions for life, humans and the earth.

## **Organizing Committee**

#### **Conference Co-chairs**

Christian Huyghe, National Research Institute for Agriculture, Food and Environment, France François Chrétien, Agriculture and Agrifood Canada

#### **Steering Committee Members**

Ann Lévesque, Agriculture and Agrifood Canada Bradley Noonan, Agriculture and Agrifood Canada Caroline Rochon, Agriculture and Agrifood Canada Claire Mullen, Agriculture and Agrifood Canada Greta Chiu, Agriculture and Agrifood Canada Hervé Guyomard, National Research Institute for Agriculture, Food and Environment, France Ines Akué, Agriculture and Agrifood Canada Jamie Hewitt, Agriculture and Agrifood Canada Joshua Girard, Agriculture and Agrifood Canada Kevin Anderson, Agriculture and Agrifood Canada Luka Kovacec, Agriculture and Agrifood Canada Natalie Boulay, Agriculture and Agrifood Canada Oussama Turki, Agriculture and Agrifood Canada René Morissette, Agriculture and Agrifood Canada Sarah Breton, Agriculture and Agrifood Canada

#### **Scientific Committee**

Chair: Javier Gracia-Garza, Agriculture and Agrifood Canada (retired)

Aude Ridier, Institut Agro Rennes-Angers, France

Chris McPhee, Agriculture and Agrifood Canada

Eduardo Cittadini, Instituto Nacional de Tecnología Agropecuaria, Argentina

Ionel-Mugurel Jitea, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania

Marlen Eve, Agricultural Research Service, USDA, United-States

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### **Contact Information**

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