

Engaged Practices Innovation (EPI) Grant Program

ENGAGING CO-LEARNING THROUGH PARTICIPATORY ACTION RESEARCH (PAR)



PSS/ENVS 212 students harvest carrots with farmer Christa Alexander of Jericho Settlers Farm.

(Photo credit: Ernesto Méndez)

Submitting team:

Dr. V. Ernesto Méndez, Professor/Lead of the Agroecology & Livelihoods Collaborative (ALC)

– *Plant & Soil Science Department and Environmental Program*

Dr. Karen Nordstrom, Lecturer

– *Department of Nutrition & Food Sciences and Environmental Program*

Dr. Joshua Faulkner, Farming & Climate Change Coordinator

– *Center for Sustainable Agriculture, UVM Extension*

Dr. Vic Izzo, Lecturer/ALC Educational Coordinator

– *Plant & Soil Science Department*

Martha Caswell, MPP, ALC Research & Outreach Coordinator

– *Plant & Soil Science Department*

Abstract

Recognizing that participating in real, hands-on agroecology-related research has resulted in important results for student engagement and learning. In response to requests from current farmer partners for research that is useful and relevant, this proposal seeks to expand the PSS/ENVS 212 (Advanced Agroecology) service-learning course to incorporate participatory action research (PAR) co-facilitated by student interns. Four students will be selected as “Farmer Team Captains” or FTCs, and will work closely with faculty and staff of the [Agroecology & Livelihoods Collaborative](#), farmers and their student peers, while gaining strong leadership skills, experience in conducting and facilitating agroecological research and learning what a multi-actor PAR process requires to succeed.

1. Introduction and Background

The fall PSS/ENVS 212 course attracts upper level undergraduate and graduate students from a range of majors¹. The course integrates four high-impact practices: service learning, reflection, collaborative assignments and research. For the service-learning² and research components, students work in teams and collect data on four partner farms. To date, the on-farm research activity has been designed for the benefit of students, not farmers. Yet, as Ahmed et al. (2017) argue, it is important for student research to be real and with a purpose, rather than just a learning exercise for student benefit. Capitalizing on existing relationships with farm partners who are enthusiastic about additional on-farm research, and recognizing an opportunity for student leadership and peer-to-peer learning exchanges, we are proposing a redesign of PSS/ENVS 212 to include on-farm agroecological research that will contribute toward an ongoing participatory action research (PAR) process. This will allow “...researchers and stakeholders (to) cooperatively (work) to address a

¹ Majors include Environmental Studies, Food Systems, Natural Resources, Community Development & Applied Economics and Ecological Agriculture.

² The class earned the 2015 [Lynne Bond Outstanding Service-Learning Faculty Award](#), conferred by the CUPS Office.

problem, through iterative research processes that foster reflection and shared learning.” (Bezner-Kerr, et al, 2016 p5)

2. Project Description

Scholarship on agroecology and food systems pedagogy calls for developing courses and curricula, which engage students in experiential and reflexive learning (Valley et al., 2017). Research at the agroecology program of the Norwegian University of Life Sciences also shows the importance of real-world student engagement in farms and communities, as a key component of agroecological learning (Francis et al., 2016; Francis et al., 2011).

Titled the ‘On-Farm Agroecological Investigation’, the laboratory section of PSS/ENVS 212 engages students in collaborative service learning and research on partner farms. Students spend the semester completing farm work shares, and collecting/analyzing data. Ten of the 14 lab sessions are spent on-farm, culminating in a team report and class presentation, which synthesizes social (e.g. farmer livelihood data) and biophysical (e.g. soil properties, and plant inventories) data. During off-farm lab sessions, students learn social (e.g. interviewing) and natural science (e.g. plant surveys) methods.

Converting PSS/ENVS 212 from a basic service-learning model to a Service

Learning/PAR practicum requires transitioning from a recurring model (students conducting the same on-farm activities each year), to cycles of iterative research. In the proposed model **students, faculty and farmers will work together to define research projects that are relevant to all partners, and which benefit from cycles of research that follow selected indicators over time** (Méndez et al., 2017). We will create four **student leadership internship positions** to work with farm partners ([The Farm Between](#), [Jericho Settlers Farms](#), [Digger’s Mirth Farm](#) and [Bread and Butter Farm](#)), thereby ensuring student participation in the “...institutional and/or organizational connections that facilitate the succession of active participants without losing forward momentum.” (Méndez, et al 2017, p 4)

Farm Team Captains (FTCs) will be selected in May, receive training and participate in farm visits/research design activities over the summer, and act as the primary farm contact for student teams in the fall. Dr. Karen Nordstrom brings expertise in the pedagogy of sustainable education to the ALC team, and will oversee development of the FTC curriculum. FTCs will receive training and mentoring from the ALC team, in addition to support from their major/program advisor. Since the farm partners have a strong interest in the long-term monitoring of soil health indicators, the first PAR iteration will focus on soil health and developing a user-friendly mapping system (to be used by both farmers and students). Dr. Joshua Faulkner, who actively works on soil health management with a diversity of farmers in Vermont, will advise this activity.

Implementation plan:

- Jan-Mar 2018: Further design of initial research phase (ALC/Farms/Faulkner)
- Apr-May 2018: Recruitment of pilot cohort of FTCs (ALC)
- May-August 2018: Development of curriculum and assessment plan (ALC/Nordstrom)
- Jun-Aug 2018: Training of the FTCs, farm visits (ALC)
- Aug-Dec 2018: First iteration of PSS/ENVS 212 as Service Learning & PAR Practicum (all)

3. Impact on Student Engagement, Success and Retention

PSS/ENVS 212 evaluations have shown that on-farm service learning and research is by far the most engaging part of the course, and a way to “put a tangible perspective on materials covered in class”.³ According to Brownell and Swayner (2009b), service learning (SL) should be paired with other HIEPs to increase gains for students. Incorporating PAR will make the on-farm experience even more meaningful as students will directly contribute to improving agroecological farm management, while learning how to navigate collaborative research processes.

³ <http://www.uvm.edu/newsstories/news/ernesto-mendezs-agroecological-pedagogy>

Effective leadership relies upon the ability to develop relationships and an advanced capacity for emotional intelligence/awareness (Ashkanasy & Dasborough, 2003). Throughout the PAR process, FTCs will be challenged to leverage their emotional awareness as they co-facilitate farmer communications and class reflections. These activities will include soliciting farmer ideas, discussing feasibility, developing on-farm plans, supporting continuity across cohorts by maintaining consistent relationships and flow of information with farm partners, and comparing data year after year. As part of the on-farm research teams, all students will “learn by doing” as they collect biophysical data and interact with/interview farmers. Dr. Faulkner and the ALC faculty/staff will provide support and mentor students as they acquire these skills.

4. Assessment Plan

As part of an ongoing PAR process, students will be exposed to multiple modes of reflection and assessment. All tools introduced in the FTC training curriculum will be appropriate for use within the cohort and also with course participants and stakeholders. Possible tools include: “K-W-L” (Ogle, 1986) - to describe what they already **K**now, **W**ant to know (as a way of setting personal goals), and then, as part of the final reflection, will assess what they’ve **L**earned; and “What, so what, now what?” (Rolfe, et al. 2001) to encourage critical thinking across categories and time. These will be combined with participant observation, written field notes, and semi-structured individual and group interviews with FTCs, student participants and farm partners. Course materials for review include meeting notes/memos that document course design and development; observational data, including a focus on immersion activities and reflective discussion; and student work (with particular attention to reflective essays and postings that integrated conceptual knowledge with experience). This method was successfully used to evaluate learning and impact outcomes of students in several high impact courses, including an agroecology-focused study abroad course (Nordstrom, 2015). Findings will be presented back to participant stakeholders in the form of “member checks” to ensure that results accurately reflect the ideas of the participants (Yin, 2009).

5. References

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6. Budget Justification and Budget

Up-front investment in curriculum development for training the FTCs and PAR/FTC assessment tools will be developed in year one and represent the bulk of the cost for this EPI proposal. We are also requesting funds to purchase equipment/software that will be used in subsequent years to facilitate the iterative cycles of data collection that have been requested by our farm partners. We are confident seed funding for creating FTC materials and PAR assessment systems for future years, matched with the base support for this course from CALS/PSS (including an annual farmer stipend), will allow us to leverage this EPI investment into an ongoing Agroecology and PAR practicum with unique opportunities for leadership by undergraduate students. Farm partners are connected to the ALC through many avenues, including the nascent Certificate for Graduate Study in Agroecology (CGSA). We trust that after the initial design phase we will be able to maintain their involvement with minimal additional time requested of them, both by being able to provide them with data that is beneficial to them and the work shares that will continue as part of the service learning course component (instead of financial remuneration for their time).

We have included cost share for **dissemination of our model**, as we plan to produce a peer-reviewed publication (target journal is [Agroecology and Sustainable Food Systems](#)) and present results of this initiative at the annual meeting of the Sustainable Agriculture Education Association (SAEA). We also plan to share progress through our ALC website, Facebook and Twitter throughout the duration of the pilot year, but these efforts will not require significant investment of time and are free, so are not included in the attached budget request.

The total request for this EPI proposal is \$14,702.63. We have cost share support from CALS/PSS in the amount of \$1338 for Dr. Méndez' time; a graduate teaching assistant for PSS/ENVS 212 and the course teaching budget/student fees for \$1800; CALS/Extension of \$765 for Dr. Faulkner's time; and a pledge from the Environmental Program to support \$500 in costs associated with training for the FTC cohorts.

BUDGET

BUDGET ITEM	TOTAL REQUEST	COST SHARE	SOURCE
Personnel			
ALC Faculty Lead (Dr. Méndez)(0.01 FTE)		\$1,338.00	UVM
ALC Research & Outreach Coordinator (Caswell)	\$3,484.63		
ALC Research Assistant for 200 hrs @ \$15/hr, 10.6% fringe	\$3,318.00		
Dr. Nordstrom (0.02 FTE summer)	\$1,650.00		
Dr. Joshua Faulkner (0.01 FTE)		\$765.00	Center for Sustainable Agriculture
Supplies/Equipment			
Baseline soil health analysis @ \$500/farm	\$2,000.00		
Soil bulk density kit	\$750.00		
Basic soil sampling equipment: augers, buckets, flags, etc.	\$250.00		
Mapping software	\$450.00		
Tablets for field data collection (4)	\$800.00		
Teaching assistant (3 days per month, for 5 months during Fall semester)		\$1,500.00	PSS
Soil analysis at UVM, student transportation in fall semester		\$300.00	PSS teaching budget and student lab fee
Transportation			
Van rentals for student transportation to farms (10 visits in fall semester)		\$1,000.00	PSS teaching budget and student lab fee
Farm Costs			
Farmer time for input into initial PAR cycle (8 hours per farm @ \$50 per hour)	\$1,600.00		
Planning/Reflection Sessions			
FTC training costs		\$500.00	Environmental program
Refreshments (4)	\$400.00		
Dissemination			
SAEA conference		\$1,500.00	Professional development funds
Publication			
TOTALS	\$14,702.63	\$6,903.00	

APPENDICES



The University of Vermont

October 2, 2017

Engaged Practices Innovation (EPI) Grants Selection Committee
Office of the Provost
University of Vermont
348 Waterman Building
Burlington, VT 05405

Dear Colleagues,

This letter is to provide my support for Professor Ernesto Mendez' EPI proposal titled 'Engaging Co-Learning through Participatory Action Research (PAR)'. Professor Mendez has a track record of service learning with his PSS/ENVS 212 Advanced Agroecology course, which serves a diversity of majors, including Ecological Agriculture, Environmental Studies, Community Development and Applied Economics, Environmental Sciences, the Rubenstein School of Environment and Natural Resources, and Food Systems. The course earned Dr. Mendez the Lynne Bond service learning award in 2015.

The proposal seeks to expand the high impact practices of this course from service learning, to also include hands-on undergraduate research and internships. Mendez is also recognized for his work in participatory action research (PAR), an approach where investigators work with civil society actors, such as farmers and non-profits, to design and implement research projects that have a direct benefit to these individuals, organizations or farms. Hence, the students will be able to gain experience in ecological and social research methods, but also be part of a larger, on-going process that directly responds to the needs of the farmer partners. In addition to the team of instructors, the participation of Dr. Joshua Faulkner, from UVM Extension adds strength to this proposal for both the research and opportunity for students to interact and learn from an extension professional.

Hence, I provide my full support for this proposal, which promises to provide a unique opportunity for students to acquire important research and community development skills.

Sincerely,

Thomas C. Vogelmann
Dean



The University of Vermont

2 October 2017

To: Engaged Practices Innovation (EPI) Grants Selection Committee

From: Dr. Deborah Neher, Professor and Chair 

RE: Support letter for Ernesto Mendez' Engaged practices proposal

This letter is to provide my support for Professor Ernesto Mendez' EPI proposal titled '*Engaging co-learning through participatory action research (PAR)*'. Professor Mendez has a track record of service learning with his PSS/ENVS 212 Advanced Agroecology course, which serves a diversity of majors, including Ecological Agriculture, Environmental Studies, Community Development and Applied Economics, Environmental Sciences, the Rubenstein School of Environment and Natural Resources, and Food Systems. The course earned Dr. Mendez the Lynne Bond service learning award in 2015. The proposal seeks to expand the high impact practices of this course from service learning, to also include hands-on undergraduate research and internships. Mendez earned the 2015 CALS H. W. Vogelmann Award for Excellence in Research and Scholarship for his scholarly accomplishments in participatory action research (PAR). PAR is an approach where investigators work with civil society actors, such as farmers and non-profits, to design and implement research projects that have a direct benefit to these individuals, organizations or farms. In the proposed transdisciplinary course, students will be able to gain experience in ecological and social research methods, but also be part of a larger, on-going process that directly responds to the needs of the farmer partners. In addition to the team of instructors, the participation of Dr. Joshua Faulkner, from UVM Extension adds strength to this proposal for both the research and opportunity for students to interact and learn from an extension professional.

Hence, I provide my full support for this proposal, which promises to provide a unique opportunity for students to acquire important research and community development skills.



2 October 2017

Re: Letter of support for Engaged Practices Innovation (EPI) Grant

Dear Colleagues –

I write with enthusiasm in support of the EPI proposal entitled *Engaging co-learning through participatory action research (PAR)*. This proposal is led by Professor Ernesto Mendez and will heavily rely on collaborations with Karin Nordstrom. Dr. Mendez has successfully engaged students across a variety of majors, ranging from Ecological Agriculture, Environmental Studies, Community Development and Applied Economics, Environmental Sciences, the Rubenstein School of Environment and Natural Resources, and Food Systems in his ongoing service learning course (PSS/ENVS 212 Advanced Agroecology). The proposal he is submitting today will increase the high impact practices already exhibited in PSS/ENVS 212 to provide internships and increased access for undergraduates interested in research. Interestingly and importantly, he is not asking for funds just to have students doing independent theses and projects. Instead, the funds will provide students with experience in ecological and social research methods, and they will be a part of a larger, on-going participatory action research (PAR) project, an approach where investigators work with civil society actors, such as farmers and non-profits, to design and implement research projects that have a direct benefit to these individuals, organizations or farms.

I am excited to see how this EPI evolves, and I am equally excited to have Ernesto and Karin, as well as our many ENVS students, involved in this amazing course. Toward that end, ENVS will contribute \$500 toward the project to increase student research activity. Thus, I fully support for this proposal.

Sincerely,

A handwritten signature in black ink that reads "Nathan Sanders".

Nathan Sanders
Professor and Director of the Environmental Program



The University of Vermont

September 28, 2017

Dr. Ernesto Mendez
Professor of Agroecology & Environmental Studies
Department of Plant and Soil Science
University of Vermont
Burlington, VT 05405

Dear Dr. Mendez,

I am enthusiastic to collaborate with you on your proposed project for the UVM Engaged Practices Innovation Grant Program. This project, which will integrate Participatory Action Research into your advanced agroecology service learning course, is an excellent opportunity to involve private farms and practicing farmers, as well as undergraduates, into critical agricultural and environmental research. In my position as the Farming and Climate Change Program Coordinator with UVM Extension, I have worked with your participating farms in the past, and believe that this project has a high likelihood of success due to their curiosity, engaged nature, and commitment to education and discovery. These are farms that value and utilize research-based information for guiding their management practices and approaches.

As part of this project, my role will include advising students and farmers on data collection methods and analysis procedures. I will travel to farms when needed for field demonstrations, and join you in consulting with farmers on research findings and implications for management. I will maintain fluid communication with you and your project team to ensure that objectives are met in a timely and satisfactory manner.

I look forward to collaborating with you on this exciting project.

Sincerely,

Joshua Faulkner, PhD
Farming and Climate Change Program Coordinator
UVM Extension – Center for Sustainable Agriculture



Diggers' Mirth Collective Farm LLC
Burlington, VT 05401

180 Intervale Road,
802-355-3910

October 2, 2017

Engaged Practices Innovation (EPI) Grants Selection Committee

Dear Selection Committee,

This letter is to confirm our participation and strong enthusiasm to work with professor Ernesto Mendez and other UVM collaborators on the EPI proposal titled '*Engaging co-learning through participatory action research (PAR)*'. We have been collaborating with Professor Mendez since 2008 by hosting his agroecology service learning class (PSS/ENVS 212). The students provide volunteer labor to our farms for the first four weeks of the fall semester, and we then support them doing different types of agroecological research on our farms. Though the research performed on our farm has been interesting, we agree with professor Mendez that the current course model is not fulfilling the true potential of our partnership. We are very enthusiastic to shift the research portion into one that could provide relevant information to monitor our soil health, farming practices and other aspects of our operation. We believe the expansion of the course to include this participatory research component will increase the benefits to our farms and to the students.

We hope that you will be able to support us in this exciting initiative.

Sincerely,

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

Hilary Martin
Diggers' Mirth Collective Farm

SYLLABUS
SL ADVANCED AGROECOLOGY (PSS/ENVS 212- 4 CREDITS)
FALL 2017

Instructor

V. Ernesto Méndez, Ph.D.
Associate Professor of Agroecology and Environmental Studies
[Agroecology and Livelihoods Collaborative \(ALC\)](#)
email: Ernesto.Mendez@uvm.edu
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Teaching Assistant

Alissa White, M.S. Student
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OVERVIEW

This course presents and in-depth overview of research and applications in the field of agroecology, with a focus on providing the student with conceptual and analytical content. The course combines an international and domestic geographic focus, and examines case studies from the U.S. and abroad. The learning and teaching objectives of the course are as follows: 1) students become familiar with current research and applied concepts and applications of the field of agroecology; 2) through hands-on field exercises in local farming systems, students learn practical, ecological and social research and analytical skills, which are commonly used in agroecology and agrifood systems research; 3) students practice working in groups; 4) students practice their critical thinking, reflection and communication skills throughout the course by participating in discussions and preparing written and visual material.

This is a service learning course and requires students to contribute a minimum of 12 hours of service working (and learning) with our farmer partners. This is apart from the hours of field work students will dedicate to their agroecological investigations.

COURSE MATERIALS

There are no required textbooks, as all of the material we will read will be provided in electronic form. However, the recent edited textbook that I co-edited is an excellent text to have for this course.

Recommended Textbook:

Méndez, V.E., C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) (2016) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. Advances in Agroecology. CRC Press/Taylor and Francis.
To order: [CRC Press Site](#) or [Amazon](#)

COURSE ORGANIZATION

The classroom part of the course includes instructor and guest lectures, student presentations, videos and other participatory tools to foster critical discussion of the current agroecology literature. The laboratory part of the course focuses on learning and applying agroecological tools and skills on a real

farm setting. In an effort to support different learning styles and strong participation from students, we combine online teaching/learning tools with classroom activities and hands-on field exercises.

Teams

The class will be divided into 4 teams for both lecture and lab activities. In class, these teams will engage in student led discussions and reflective practice. In lab, these teams will be assigned to a partner farm, where they will conduct service learning and on-farm agroecological investigations.

Labs

Laboratory periods will be used to prepare for agroecological investigations, conduct service learning work and do research on partner farms, as well as prepare presentations and reports.

ASSIGNMENTS

1. Attendance

Attendance to lectures and labs is mandatory, with each session worth 2 points.

2. Discussion Board (online) (4 points per week, totaling 48 points)

The discussion board will engage students in written discussion about the readings, reflective practice and on-farm agroecological investigations. Prompts will be provided for each week's discussion board thread. Students will use the online, Blackboard Discussion Board to share their responses to the prompts and each other's commentary, as follows: 1) a response to **at least one of** the prompts provided by the instructor [2 points]; and 2) an additional posting responding or commenting to another student's comment [2 points]. Comments and responses need to be done in a professional and respectful manner. We will not tolerate the use of rude language or personal attacks on classmates. Students who fail to follow this rule will lose the remaining commentary and response points for the semester.

To post, go to the Discussion Board section of blackboard, click on the forum for the appropriate week (they will be labeled by week) and:

- 1) To post your responses to the reading prompts for the week click on 'Create Thread', write a descriptive couple of words for your posting, post your comments and click 'Submit'.
 - a. ***Due date for posts on the first week: Thursday by 5 pm.***
 - b. ***Due date for posts for all other weeks: Tuesday by 5 pm.***
- 2) To reply to one of your classmate's postings, click on his/her thread and then click 'Reply', write your comments and press 'Submit'.
 - a. ***Due date for replies on the first week: Friday by 5 pm.***
 - b. ***Due date for posts for all other weeks: Wednesday by noon.***

3. Student-led Discussions (10 points)

We will devote 4 days of the semester for student teams to discuss material from lectures, readings and/or films presented on a given week. With the help of the instructor and TA, student teams will facilitate one **structured** discussion using several techniques and tools designed to foster dynamic participation of the members of a group. Learning these techniques is part of the skills content we are providing in this course. Group facilitation is very important in almost all professions. Dates and topic assignments for discussion will be randomly selected the first week of class. On their given day, student facilitators will use prompts, media, skits or any other tool or creative technique of their choice to engage their audience. Please check with the TA or instructor if what you are doing is appropriate (just in case...).

4. Research Paper Proposal (10 points)

Title and 1-2 paragraphs (maximum of half of a page) describing a carefully researched topic for your final research paper.

DUE DATE: Thu September 21 in class

5. Annotated Bibliography (20 points)

You will create an annotated bibliography on the topic you have chosen for your research paper. This is a list of references, each followed by a thorough paragraph explaining—in your own words—what the resource is about and why it is relevant to your topic. This will help you familiarize yourself with the existing literature and start your research early enough to ensure a high-quality final product. For this assignment, you are to turn in a list of *at least* 10 references with associated annotation. At least 6 of these references should be peer-reviewed journal articles and books, with a maximum of two websites. Any research you do for this assignment will only benefit you when you start the writing process, so feel free to include more than ten references. An example annotated bibliography will be posted on Blackboard for guidance.

DUE DATE: Thu October 12 in class

6. Reflective Practice to Integrate Experiential and Academic Content (20 points)

Participating in reflective practice throughout the course will help you deepen your understanding of the course content and link it to both your individual experience as well as to the experiences of other course participants. This understanding, based on prior knowledge combined with new knowledge and experience, will then be translated into a reflective essay, designed to communicate your ideas to others. Reflective practice will be one of the means by which you will provide your instructor with concrete, tangible evidence of your learning.

DUE DATE: Thu November 9 in class

7. Team Presentation (20 points)

Organize a 20 minute presentation based on your farm investigation to share with the class. You will also get up to 10 minutes for questions and discussion. Use of Powerpoint is mandatory (if you need help using Powerpoint please see Rachel). The presentation should include at least the following:

1. A description of the landscape and farm, including the farm map (a scan would be nice), including background of the area where your agroecosystem was located (county, general description (e.g. rural, urban, predominantly dairy, high or low population, etc.).
2. A discussion of the farmer and the social/cultural characteristics of the farm.
3. Agroecology of the farm: crops, practices, diversity, innovations, challenges.
4. Present your multifunctionality assessment.
5. Include your interview guide, farm map, pictures and any other audiovisuals you think are adequate.
6. You will need to turn in your presentation as an electronic file to me, either in powerpoint or as pdf.
7. Groups will conduct anonymous peer reviews of each of their members to evaluate their level of participation in the farm visits and presentation.

DUE DATE: Thu Nov 30 & Tue Dec 5

8. Research Papers (50 points)

Each student will choose an area of agroecology for more in-depth research. Potential areas of research include (but are not limited to):

- i. Agroecology as a tool for conservation in agricultural landscapes.
- ii. Using agroecology to support farmer livelihoods in a particular region.
- iii. Application of agroecological knowledge to manage a specific farm or agroecosystem.
- iv. Achieving food security or food sovereignty in a particular region.
- v. Influence of national and international agricultural and environmental policy on a particular agroecosystem or agricultural region.
- vi. Scaling up agroecology in a particular region or country.

Papers are “literature based”, not observational or obtained through the interview with a farmer, although these observations and interview sources can also be a part of the paper. Here you bring information from published sources related to your topic of study, in order to have a deeper and more comprehensive understanding of your topic. Please follow the guidelines in **Appendix 1** to write your research paper. You will be required to turn in a 1-paragraph topic proposal mid-semester.

DUE DATE: Friday December 8 at Ernesto’s Jeffords 117 mailbox or hand delivered to TA

9. On-Farm Agroecological Research and Practice Report (30 pts)

This exercise will be conducted by teams, and will require team work outside of the classroom. It is designed to replicate a participatory rural appraisal, a rural development technique developed to better understand agroecosystem management and farmer livelihoods. Each student will be required to hand in an **individual report** based on the agroecological research and practice exercise. As this is designed as an integrated, transdisciplinary activity, only one report is required. Please keep careful notes during all your research and practice activities, so that you can refer back to them when you write the report. See report guidelines on blackboard for tips on how to write a successful report.

DUE DATE: Friday December 8 at Ernesto’s Jeffords 117 mailbox or hand delivered to TA

EXTRA CREDIT

Extra credit is available in the form of additional farm work conducted at your partner farm. You can earn 1 point per hour of farm work, for up to 15 points, throughout the semester. You will have to use a record sheet of your hours, which will be signed by the farmer or another farm staff member every time that you work. You will be required to present your signed sheet in order to get the extra credit points. See Appendix 2 for a printable record sheet.

LATE POLICY

One point will be deducted from assignments for every day late, up to 3 days after the due date. No papers will be accepted after 3 days.

COURSE LOGISTICS

Lecture Meeting Times: T/Th 10:05 to 11:20; **Location:** Jeffords 110

Lab Meeting Times:

- Thursday, 1:15 pm – 4:15 pm (Jeffords 101)
- Friday, 9:40 am-12:40 pm (Jeffords 101)

Instructor and TA Office Hours:

Ernesto Méndez: Monday 2:30-3:30 pm and Tuesday 1:30-2:30 pm at Jeffords 225.

Note: Office hours are by appointment **only**. Call or email Cathy Trivieres (ENVS Admin) for an appointment (Tel: 656-4055, email: cathleen.trivieres@uvm.edu)

Alissa White: Jeffords 207; Wed 9-11 am

COURSE EVALUATION

The course evaluation is based on a total of **304** points, separated into the following:

1. Class attendance and participation (2 pts x 2 classes/week x 15)	60
2. Discussion board post & reply (4 pts X 14 weeks)	56
3. Student led discussion (SLD)	10
4. Research paper proposal	10
5. Annotated bibliography	20
6. Lab attendance (14 x 2 points per lab)	28
7. Reflective Essay	20
8. Team presentations	20
9. On-farm Agroecological Experience & Investigation Report	30
10. Individual Research Paper	50
Total	304

Advanced Agroecology Course Schedule Fall 2017

WEEK #	DATE	WEEKLY TOPIC	READINGS	ONLINE DISCUSSION	ASSIGNMENTS
		Course Introduction and Evolution of Agroecology			
1	Aug 29 & 30	<ul style="list-style-type: none"> - Introductions/Logistics - Course Content/Main Themes/Reflection Benchmark 	1-2	Post due Thu & Reply due Fri	
		Foundations of Agroecology			
2	Sept 5 & 7	<ul style="list-style-type: none"> - Agroecology: an evolving field - Transdisciplinary Foundations: Agrifood systems and Rural Livelihoods 	3-5	Post & Reply for Week 2	
3	Sept 12 & 14	<ul style="list-style-type: none"> - Ecological foundations: natural ecosystems & traditional agriculture (EM travel; Guest lectures: Vic Izzo & Alissa White) 	6-8	Post & Reply for Week 3	
		Agroecology and Agricultural Production			
4	Sept 19 & 21	<ul style="list-style-type: none"> - Using traditional agriculture and natural ecosystems to design modern agroecosystems 	9,10	Post & Reply for Week 4	Research Paper Topic Due SLD1
5	Sept 26 & 28	<ul style="list-style-type: none"> - Comparing ecologically-based systems to conventional ones 	11-13	Post & Reply for Week 5	SLD2
		Agroecology, Resilience & Ecosystem Services			
6	Oct 3 & 5	<ul style="list-style-type: none"> - Agroecology and Resilience in the Northeast - Ecosystem Services Rachelle Gould (Th Oct 5) 	14-16	Post & Reply for Week 6	
		Participatory Action Research and Extension in Agroecology			
7	Oct 10 & 12	<ul style="list-style-type: none"> - Participatory Action Research in Agroecology 	17-18	Post & Reply for Week 7	Annotated Bibliography Due
8	Oct 17 & 19	<ul style="list-style-type: none"> - Participatory Action Research in Agroecology (Guest lecture: Joshua Faulkner-Tue Oct 17) 	19-21	Post & Reply for Week 8	SLD3

9	Oct 24 & 26	Participatory action research and extension. (EM travel; Guest lectures: ALC panel – Tue Oct 24 and Rachel Schattman – Th Oct 26)	22-23	Post & Reply for Week 9	
WEEK #	DATE	WEEKLY TOPIC	READINGS	ONLINE DISCUSSION	ASSIGNMENTS
		Political Agroecology, Food Security/Sovereignty/Justice			
10	Oct 31 & Nov 2	- Agroecology, Food Security, Food Sovereignty & Food Justice Heather Darby (Tue Oct 31)	24-26	Post & Reply for Week 10	SLD4
11	Nov 7 & 9	- Agroecology, Food Security, Food Sovereignty & Food Justice	27-28	Post & Reply for Week 11	Reflective Essay Due
12	Nov 14 & 16	- Political Agroecology and the Right to Food	29-31	Post & Reply for Week 12	
13	Nov 21 & 23	Thanksgiving Break			
14	Nov 28 & 30	- Scaling up Agroecology - Student Presentations	32-34	Post & Reply for Week 14	
15	Dec 5 & 7	- Student Presentations - Local & Cultural Food Potluck		No post this week	<ul style="list-style-type: none"> • Research paper due • Lab report due

PSS 212: Agroecology

Required Readings & Prompts for Discussion

1. Wezel, A., S. Bellon, T. Dore, C. Francis, D. Vallod and C. David (2009) Agroecology as a science, a movement and a practice. A review. *Agronomy for Sustainable Development* 29(4): 503-515.
2. Méndez, V.E., C.M. Bacon and R. Cohen (2015) *Introduction: Agroecology as a transdisciplinary, participatory, and action-oriented approach*. Pp. 1-22. In Méndez, V.E. et al. (Editors) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. Advances in Agroecology Series. CRC Press/Taylor & Francis.

Week 1- Prompts: Readings

- What are the advantages and disadvantages of agroecology having dimensions as science, movement and practice.
 - In your own words discuss what transdisciplinarity is and why you believe it is important (or not) for agroecological approaches.
3. Woodgate, G. and E. Sevilla Guzmán (2016) *Transformative agroecology: foundations in agricultural practice, agrarian social thought and sociological theory*. pp. 37-54. In V.E. Méndez, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. CRC Press/Taylor & Francis: Boca Raton.
 4. Amekawa, Y. (2011) *Agroecology and Sustainable Livelihoods: Towards an Integrated Approach to Rural Development*. *Journal of Sustainable Agriculture* 35 (2), 118 - 162.
 5. Pimbert, M. P., Thompson, J., Vorley, W. T., Fox, T., Kanji, N., & Tacoli, C. (2001). *Global restructuring, agri-food systems and livelihoods*. Gatekeeper Series No.100. International Institute for Environment and Development (IIED): London, UK.

Week 2 Prompts: Readings

- Why is it important to understand the sociological bases of agroecology?
 - In your own words, define what a livelihood means.
 - In your own words define what an agrifood system means.
 - Why is multifunctionality conducive to sustainable livelihoods?
6. Gliessman, S.R. (2004) *Integrating Agroecological Processes into Cropping Systems Research*. *Journal of Crop Improvement* 11(1-2): 61-80.
 7. Vandermeer, J. and I. Perfecto (2013) *Complex traditions: intersecting theoretical frameworks in agroecological research*. *Agroecology and Sustainable Food Systems* 37(1): 76-89.
 8. Ewel, J. J. (1999) *Natural systems as models for the design of sustainable systems of land use*. *Agroforestry Systems* 45:1-21.

Week 3 Prompts: Readings

- How is the use of natural ecosystems and traditional agroecosystems as models in agroecology differ from the science of agronomy?
- What are the justifications of agroecologists for using natural ecosystems and traditional agroecosystems as models?
- *Based on your observations and experience with your partner farm, use Ewel's natural systems model to describe the farm (briefly). Make sure that you let us know what farm you are in.*

9. Fujiyoshi, P. T., S. R. Gliessman & J. H. Langenheim (2007) *Factors in the suppression of weeds by squash interplanted in corn*. Weed Biology and Management 7 (2):105-114.
10. Cox T.S., Picone C. and Jackson W. (2004) *Research priorities in natural systems agriculture*. Journal of Crop Improvement 12: 511.

Week 4 Prompts: On-farm experience.

- What areas of agroecology that you have learned so far resonate in your farm experience? Which ones seem to be absent?
 - What ecological processes, as viewed through an agroecological lens, that are occurring at your partner farm most capture your attention? Why?
 - What livelihood factors, as defined by Amekawa (2011) & Pimbert et al (2001), which are occurring at your partner farm most capture your attention? Why?
11. Badgley, C., Moghtader, J., Quintero, E., Zakem, E., Chappell, M. J., Aviles-Vazquez, K., et al. (2007). *Organic agriculture and the global food supply*. Renewable Agriculture and Food Systems 22(2): 86-108.
 12. Seufert, V., N. Ramankutty and J.A. Foley (2012) *Comparing the yields of organic and conventional agriculture*. Nature 485(7397): 229-232.
 13. Rosset, P., & Altieri, M. A. (1997). *Agroecology versus input substitution: a fundamental contradiction in sustainable agriculture*. Society and Natural Resources 10: 283-295.

Week 5 Prompts: Readings

- Many scientists and policy makers propose that we need to choose the type of agriculture that will be able to 'feed the world'. Reflect on this notion, especially on when throughout human history has this been achieved, and why it continues to be brought up on debates about the implementation of organic and other alternative agricultural approaches.
 - In your opinion, what would happen if we provide the necessary resources to transition all of U.S. agriculture to organic or agroecological management? Why?
 - What are the main limitations for organic or agroecological agriculture to become the prevalent model of agriculture today?
 - What are the differences, if any, between agroecology and organic agriculture?
14. Schattman, R.E. V.E. Méndez, S.C. Merrill & A. Zia (2017) A mixed methods approach to understanding farmer and technical service provider perceptions of climate change and adaptation in Vermont, United States. *Agroecology and Sustainable Food Systems* (in press).
 15. Caswell, M., V.E. Méndez, J. Hayden, J. Anderzén, P. Merritt, A. Cruz, V. Izzo, S. Castro, J. Wiegel, A. Ospina and M. Fernandez (2016) *Assessing resilience in coffee-dependent communities of Honduras, Nicaragua and Haiti*. ARLG/LWR Research Brief #5. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont & Lutheran World Relief (LWR).
 16. Raudsepp-Hearne, C., Peterson, G. D., & Bennett, E. M. (2010). *Ecosystem service bundles for analyzing tradeoffs in diverse landscapes*. Proceedings of the National Academy of Sciences of the United States of America 107(11): 5242-5247.

Week 6 Prompts: On-farm experience

- How did the mapping exercise help you better understand the farm? Was it more of an ecological understanding? Social? Both?
- Have you perceived that climate change is impacting your partner farm? Explain why or why not?
- Could an agroecological approach support your partner farm be more resilient? How?

- Define in your own words what are ecosystem services. Give some examples of ecosystem services that your farm partner provides.

17. Méndez, V.E., M. Caswell, S.R. Gliessman and R. Cohen (2017) *Integrating Agroecology and Participatory Action Research (PAR): Lessons from Central America*. Sustainability 9(5): 705. doi: 10.3390/su9050705
18. Kindon, S., R. Pain and M. Kesby (2007) *Participatory action research approaches and methods: origins, approaches and methods*. pp. 9-18 In S. Kindon, R. Pain and M. Kesby (Eds.) *Participatory action research: origins, approaches and methods*. Routledge: Oxon.

Week 7 Prompts: Readings

- What is participatory action research?
 - How does it compare to your ideas of what research is?
 - What are some of the opportunities and challenges of PAR when compared to other types of research?
19. Dlott, J. W., M. A. Altieri & M. Masumoto (1994) *Exploring the theory and practice of participatory research in US sustainable agriculture: a case study in insect pest management*. Agriculture and Human Values 11 (2-3):126-139.
 20. Bacon, C., W.A. Sundstrom, M.A. Flores-Gomez, V.E. Méndez, R. Santos, B. Goldoftas and I. Dougherty (2014) *Explaining the 'hungry farmer paradox': Smallholders and fair trade cooperatives navigate seasonality and change in Nicaragua's corn and coffee markets*. Global Environmental Change 25: 133-149.
 21. Nyantakyi-Frimpong, H., F.N. Mambulu, R. Bezner Kerr, I. Luginaah and E. Lupafya (2016) *Agroecology and sustainable food systems: Participatory research to improve food security among HIV-affected households in northern Malawi*. Social Science & Medicine 164: 89-99.

Week 8 Prompts: Readings

- In your own words define engaged research or scholarship?
 - What are some of the challenges of using PAR approaches to support farmers and promote agroecology?
 - Why are some farmers reluctant to participate in PAR processes?
22. Warner K.D. (2006) *Extending agroecology: Grower participation in partnerships is key to social learning*. Renewable Agriculture and Food Systems 21: 84-94.
 23. Heleba, D., H. Darby and V. Grubinger (2016) *On the Ground: Putting Agroecology to Work through Extension Research and Outreach in Vermont*. pp. 177-192 In V.E. Méndez, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. Advances in Agroecology Series. CRC Press/Taylor and Francis: Boca Raton.

Week 9 Prompts: Integration of Readings and On-farm experience

- How do participatory action research and extension overlap?
 - What are some of the opportunities and challenges of developing learning networks for agroecology?
 - Do you think your partner farm could benefit from a PAR process, as defined by your readings? Why or why not?
24. Fernandez, M., V.E. Méndez, T. Mares & R. Schattman (2016) *Agroecology, food sovereignty and urban agriculture in the U.S.* pp. 161-176. In V.E. Méndez, C.M. Bacon, R. Cohen & S.R. Gliessman

(eds) Agroecology: a transdisciplinary, participatory and action-oriented approach. Advances in Agroecology Series. CRC Press/Taylor and Francis.

25. Martínez-Torres, M.E. and P.M. Rosset (2014) *Diálogo de saberes in La Vía Campesina: food sovereignty and agroecology*. The Journal of Peasant Studies 41(6): 979-997.
26. Mares, T.M., N. Wolcott-MacCausland and J. Mazar (2017) Eating far from home: Latino/a workers and food sovereignty in rural Vermont. *In* Food Across Borders: Production, Consumption, and Boundary Crossing in North America. Matt Garcia, E. Melanie DuPuis, and Don Mitchell, eds. Under Review for Rutgers University Press.

Week 10 Prompts: Readings

- What is food sovereignty?
- Is food sovereignty different than food security? If yes, how?
- What is your perception of food sovereignty in the U.S.?

27. Schattman, R., L. Berlin, F.F. Bochner, & M. Lawrence (2015) Farmer's engagement with community food insecurity: approaches, perspectives and implications for Extension. Journal of Extension, 53 (4), 4FEA2.
28. Putnam, H., R. Cohen and R.M. Jaffe (2016) Agroecology as a food security and food sovereignty strategy in coffee-growing communities: opportunities and challenges in San Ramon, Nicaragua. pp. 193-216. *In* V.E. Méndez, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) Agroecology: a transdisciplinary, participatory and action-oriented approach. CRC Press/Taylor and Francis: Boca Raton.

Week 11 Prompts: Integration of Readings and On-farm experience

- Do you believe that the concepts of food security and sovereignty, are of relevance to your partner farm? Why or why not?
- Can you see your partner farm being involved with a peasant or farmer organization? Why or why not?
- Could a connection with a farmer organization or movement benefit your partner farm?

29. De Schutter, O. (2010) *Agroecology and the right to food*. Report presented at the 16th Session of the United Nations Human Rights Council [A/HRC/16/49]. United Nations Special Rapporteur on the Right to Food.
30. Gonzalez de Molina, M. (2016) Political Agroecology: An essential tool to promote agrarian sustainability. pp. 55-72. *In* V.E. Méndez, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) Agroecology: a transdisciplinary, participatory and action-oriented approach. CRC Press/Taylor and Francis: Boca Raton, FL.
31. Montenegro de Wit, M. and A. Iles (2016) *Toward thick legitimacy: Creating a web of legitimacy for agroecology*. Elem Sci Anth 4(000115). doi: 10.12952/journal.elementa.000115

Week 12 Prompts: Readings and Farm Experience

- How does the politics of food relate to your farmer partner?
- Is something like the right to food in the radar of the farmers you interacted with?
- Do you think it should?

32. Silici, L. (2014) *Agroecology: what it is and what it has to offer*. IIED Issue Paper. International Institute for Environment and Development (IIED): London. www.iied.org
33. Varghese, S. and K. Hansen-Kuhn (2013) *Scaling up agroecology: toward the realization of the right to food*. Institute for Agriculture and Trade Policy: Minneapolis, MN.

34. DeLonge, M.S., A. Miles and L. Carlisle (2016) Investing in the transition to sustainable agriculture. Environmental Science & Policy 55, Part 1: 266-273.

Week 14 Prompts: Readings

- Do you think scaling up agroecology is possible?
- With limited resources, and tensions with powerful actors, what areas do you consider need the most attention in order to accomplish scale-up?

Agroecology Laboratory Schedule 2016

Week			
#	Date	Topic	Location
1	Aug 31 & Sept 1	• Service learning: farmwork with partners	Farms
2	Sept 7 & 8	• Service learning: farmwork with partners	Farms
3	Sept 14 & 15	• Service learning: farmwork with partners	Farms
4	Sept 21 & 22	• Service learning: farmwork with partners	Farms
5	Sept 28 & 29	• Agroecological field methods overview	Lab Room
6	Oct 5 & 6	• Farm participatory mapping • Ask farmer where soil samples would be useful • Soil sampling	Farms
7	Oct 12 & 13	• Preparation to measuring and analyzing ecological variables in agroecosystems: ○ Plot setup & location ○ Plant biodiversity ○ Soil samples	Lab Room
8	Oct 19 & 20	• Measuring and analyzing ecological variables in agroecosystems: ○ Plot setup ○ Plant biodiversity ○ Soil samples	Farms
9	Oct 26 & 27	• Collecting regional data • Prepare interviews	Farms, Towns, Organi- zations
10	Nov 2 & 3	• Farmer interviews	Farms
11	Nov 9 & 10	• Interview processing	Lab rooms
12	Nov 16 & 17	• Collect missing data or lab processing	Farms
13	Nov 23 & 24	Thanksgiving	
14	Nov 30 & Dec 1	• Collect missing data or lab processing	
15	Dec 7 & 8	• Time to prepare your lab reports and research papers.	Lab rooms

Appendix 1: Individual Research Paper Guidelines

The research paper should present a critical review of the literature on your topic. Your paper should include at least:

1. A description of your topic;
2. A critical discussion of the existing literature on the topic;
3. Key questions/issues/problems related to this topic;
4. Future directions based on your literature review. For example, is what you found insufficient? Is there a lot of literature, but incomplete? Is more research necessary? If so, in what areas?
5. Relevance of your topic to agroecology;
6. How this topic applies to your farm. For example, if your topic is an agroecological characteristic of your agroecosystem such as, say, crop rotations, what are the potential benefits according to the literature of the crop rotations used on your farm? Or, if your topic is on an economic characteristic such as, say, CSAs, how does the literature address the benefits and challenges of CSAs mentioned by the farmer? (These are just examples.)

The research paper will be 5-7 pages in length, double spaced, and 12 pt font, not including the Literature Cited section.

The paper will have a minimum of 15 references, and at least 8 of these will be peer-reviewed research articles. Please cite references as follows:

Journal Articles:

Perfecto, I. & R. Snelling (1995) *Biodiversity and the transformation of a tropical agroecosystem - ants in coffee plantations*. Ecological Applications 5 (4):1084-1097.

Books:

Gliessman, S. R. (1998) *Agroecology: ecological processes in sustainable agriculture*. Ann Arbor Press: Ann Arbor, MI, USA.

Edited Books:

Schroth, G., G. Foseca, C. A. Harvey, C. Gascon, H. Vasconcelos & A. M. N. Izac (eds.) (2004) *Agroforestry and biodiversity conservation in tropical landscapes*. Island Press: Washington, D.C.

Chapters in Edited Books:

Rocheleau, D. E. (1999) *Confronting complexity, dealing with difference: social context, content and practice in agroforestry*. pp. 191-236. In L. E. Buck, J. P. Lassoie & E. C. M. Fernandes (eds.) *Agroforestry in sustainable agricultural systems*. Lewis Press: Boca Raton, FL, USA.

Electronic sources:

IUCN (2002) *IUCN Red List of Threatened Species*. <<http://www.redlist.org>> [Date Accessed: August 27, 2003].

Appendix 2: Log Sheet for Extra Credit Farm Work Hours. Please keep this sheet throughout the semester and turn in to Ernesto or Sarah when you are done with your extra credit hours.

Name	Farm	Date	Hours Worked	Farm Verification (signature)
Total Hours:				

V. Ernesto Méndez

Department of Plant & Soil Science/Environmental Program

225 Jeffords Hall, 63 Carrigan Dr.

The University of Vermont, Burlington, VT 05405, USA

☎ (802) 656-2539 & (802) 656-2924; Fax: (802) 656-8015

email: emendez@uvm.edu web: <http://www.uvm.edu/~agroecol/>

Date: October 2, 2017

EDUCATION

Ph.D. (Environmental Studies-Agroecology) Department of Environmental Studies, University of California, Santa Cruz (UCSC)	2004
M.Sc. (Agroforestry) Tropical Agriculture Research & Education Center (CATIE), Turrialba, Costa Rica	1996
B.Sc. (Crop Science) California Polytechnic State University (Cal Poly), San Luis Obispo, CA, U.S.A.	1994

PROFESSIONAL EXPERIENCE

<i>Professor of Agroecology & Environmental Studies</i> Environmental Program(www.uvm.edu/~envprog/) & Department of Plant and Soil Science (www.uvm.edu/~pss/), University of Vermont (UVM).	Jul 2017- present
<i>Associate Professor of Agroecology & Environmental Studies</i> Environmental Program(www.uvm.edu/~envprog/) & Department of Plant and Soil Science (www.uvm.edu/~pss/), University of Vermont (UVM).	Jun 2011- Jun 2017
<i>Visiting Professor of Agroecology</i> Postgraduate School, Tropical Agriculture Research and Higher Education Center (CATIE- http://posgrado.catie.ac.cr/), Turrialba, Costa Rica	Aug 2013- Aug 2014
<i>Acting Chair & Associate Professor, Plant and Soil Science Dept.</i> Environmental Program(www.uvm.edu/~envprog/) & Department of Plant and Soil Science (www.uvm.edu/~pss/), University of Vermont (UVM).	Aug 2012 – May 2013
<i>Assistant Professor of Agroecology & Environmental Studies</i> Environmental Program(www.uvm.edu/~envprog/) & Department of Plant and Soil Science (www.uvm.edu/~pss/), University of Vermont (UVM).	Sep 2006 – May 2011
<i>Post-doctoral Research Associate & Lecturer</i> Agroecology, Environmental Studies and Participatory Action Research (PAR) Department of Environmental Studies & Community Agroecology Network (CAN), University of California, Santa Cruz (www.agroecology.org & www.communityagroecology.net).	Sep 2005 – Aug 2006
<i>Senior Researcher (1/2 time)</i> Agriculture, environment and rural development Programa Salvadoreño de Investigación sobre Desarrollo y Medio Ambiente (PRISMA) San Salvador, El Salvador (www.prisma.org.sv).	May 2001-Dec 2004

<i>Consulting Scientist</i> Inquiry-based training in ecology to elementary school teachers and students. Life Lab Science Project, Santa Cruz, CA U.S.A. (www.lifelab.org).	Jun 1999-Oct 2000
<i>Agroforestry Specialist</i> Participatory agroforestry extension and training in Central America CATIE/GTZ Agroforestry Project, Turrialba, Costa Rica (www.catie.ac.cr).	Sep 1996 - Sep 1998
<i>Research Assistant</i> Crop Science Department/USDA, Cal Poly State University.	Sep 1993 - Oct 1994
<i>Farm Manager</i> Student Experimental Farm, Crop Science Dept., Cal Poly State University.	Jun 1992 – Jul 1993

TEACHING AND TRAINING EXPERIENCE

Courses Taught at the University of Vermont Advanced Agroecology (senior/graduate); Coffee Ecologies and Livelihoods (undergraduate); International Environmental Studies (undergraduate); Conservation in Agricultural Rural Landscapes (graduate); Café (en) Tacuba: Ecologies and Livelihoods in a shade coffee landscape of El Salvador (Study abroad course-2 weeks). For more information and course syllabi, please go to: http://www.uvm.edu/~agroecol/?Page=courses.html&SM=coursessubmenu.html	2006-present
Academic Advising at the University of Vermont (Fall 2016) Current PhD students: 2 ; Current MS students: 1 ; Graduated advisees: 6 Ph.D., 4 MS. Current Environmental Studies advisees: 50; Senior capstone advisees: 0	2006-present
International Shortcourses in Agroecology, USA (Santa Cruz) and Latin America (México, Costa Rica, Nicaragua, Brazil) (www.agroecology.org/shortcourse.htm) <i>Instructor</i> - International training courses for professionals working in the areas of ecology, agriculture, conservation and rural development. Coordinated courses at the University of Vermont in 2009 and 2013 , and Costa Rica in 2002 .	1999-present
Graduate Program in Agroecology and Sustainable Rural Development, International University of Andalucía, University of Cordoba & University Pablo Olavide <i>Adjunct Professor</i> - Annual instruction of a one week module on different aspects of Agroecology and Rural Development as part of the Master's and Doctoral Curriculum.	2004- present
Tropical Agriculture Research and Higher Education Center (CATIE) <i>Visiting Professor of Agroecology</i> - 3.5 day workshop on Agroecology Concepts & Practice; 3 Guest Lectures for MS program in Agroforestry & Sustainable Agriculture.	Aug 2013- Aug 2014
Department of Environmental Studies University of California, Santa Cruz <i>Lecturer</i> - Tropical Ecology and Conservation, an upper division undergraduate course (Winter 2006)	Sep 2005 – Aug 2006
Master's Program in Sustainable Tropical Agriculture,	2001-2004

University of El Salvador, San Salvador

Adjunct Professor- Development & instruction of the Tropical Agroforestry course & Co-instructor in a Sustainable Production Systems course.

Yale School of Forestry & Environmental Studies, USA

Apr 2003

Instructor- Workshop on Participatory Research in Environment and Rural Development.

April 12. *Invited Lecturer*- Graduate Class on Globalization and Development.

Dept. of Environmental Studies, University of California, Santa Cruz, CA U.S.A

Jan 1999 – Jun 2000

Teaching Assistant - Environment and Society (Winter 1999); Integrated Pest Management (Spring 1999); Agroecology (Fall 1999); Ethnobotany (Spring 2000).

CATIE/GTZ Agroforestry Project, Turrialba, Costa Rica

1996-1998

Teaching Assistant- Graduate course in Environmental Sociology. Coordinated the field rural appraisal component of the course.

SELECTED CONSULTING EXPERIENCE

Food and Agriculture Organization of the United Nations (FAO),

Dec 2004 – Apr 2005

San Salvador, El Salvador

Elaboration of a review document on the socioeconomic and environmental situation and perspectives of the coffee sector in El Salvador and Central America. Elaboration of two project profiles for coffee regions as part of a Food Security program.

IUCN BASIM Project, El Salvador

Jul-Oct 2004

Social & ecological characterization of coffee farms in “Barra de Santiago-El Imposible” watershed. Participatory research and consultation with coffee farmers to evaluate alternatives to avoid land use changes, in the midst of the coffee crisis.

Colorado State University-USA/DESAL, A.C.-México

Mar-Sep 2002

El Salvador Case Study, Research project on the potential of fair trade coffee to alleviate rural poverty, as part of a larger project funded by Ford Foundation.

IICA-Embrapa, Pelotas, State of Rio Grande do Sul, Brazil

Nov – Dec 2001

Agroecological evaluation of projects on family farming. Coordination and instruction of an “Intensive Workshop on Research in Agroecology”.

CAPACITIES AND AWARDS

Languages: Bilingually educated in English & Spanish since elementary school (reading, writing & conversation).

Hubert W. Vogelmann Award for Excellence in Research and Scholarship (2015). College of Agriculture and Life Sciences, University of Vermont

Lynne Bond Outstanding Faculty Service Learning Award (2015). Community and University Partnerships Office (CUPS), University of Vermont.

Finalist for the Engaged Scholar Award (2009). Vermont Campus Compact.

Outstanding Teaching Assistant Award (1999-2000). Environmental Studies Department, University of California, Santa Cruz.

FUNDING

Fellowships & Scholarships Received (Career Total: \$111,000)

<i>Rainer-Arnhold Fellowship</i> (\$17,000) Systematic design and up-scaling of participatory action-research model on rural livelihoods and biodiversity conservation in Central American coffee landscapes.	2005-2007
<i>Center for Tropical Ecology, Agriculture and Development-University of California, Santa Cruz</i> (\$1,000) Dissertation improvement fellowship.	2004
<i>Vavilov-Frankel Fellowship, Biodiversity International</i> (\$18,000) To conduct Ph.D. dissertation research.	2001-2002
<i>WWF/BMZ Mesoamerican Biological Corridor Fund Research fellowship</i> (\$5,000) Ph.D. dissertation fellowship.	2000
<i>United States Graduate Studies Fellowship, Interamerican Foundation (IAF)</i> (\$40,000) For the first two years of Ph.D. studies at the University of California, Santa Cruz.	1998-2000
<i>Government of the Netherlands</i> (\$30,000) To conduct M.S. studies at CATIE.	1995-1996

Grants & Contracts Received (Career total: \$2,874,687) *Denotes peer review

- Méndez, V.E. (PI) & M. Caswell (Co-PI) Elementa Journal and Food & Agriculture Organization of the United Nations (FAO) (\$37,000) Leading the editorial of a special forum on Agroecology Elements in the journal Elementa and creating an Agroecology Knowledge Collection at UVM. 2017-18
- *Méndez, V.E. (Co-PI), M. Caswell (Co-PI), C.M. Bacon (Co-PI), R. Cohen (Co-PI) "Thought for Food Initiative" Carasso/Cariplo/Agropolis Foundations (\$534,000) Assessment of Diversification Strategies in Smallholder Coffee Systems of Mesoamerica. 2017-2020.
- Méndez, V.E. (PI) McKnight Foundation (\$197,000) A Participatory Action Research (PAR) approach to Assess Monitoring and Evaluation in a Farmer Research Network (FRN) in Bolivia. 2016-2019.
- Méndez, V.E. (PI) US Forest Service (\$190,000) University of Vermont Collaboration with the USDA Northeast Climate Change Hub. 2014-2019.
- *Méndez, V.E. (PI) & R. Schattman (Co-PI) USDA Hatch Funds (\$45,000) Agricultural Resilience in a Changing Climate: Towards a Resilient Farmer Typology. 2015-2018.
- Méndez, V.E. (PI), M. Caswell, M., M. Fernandez, J. Hayden (\$50,000) Lutheran World Relief. Evaluation of resilience in coffee-dependent communities of Haiti, Honduras and Nicaragua. 2015.
- Méndez, V.E. (PI) UVM Environmental Program and Gund Institute for Ecological Economics (\$4,500) Collaborations for adaptation: Smallholder Coffee Farming in Latin America Workshop. January 2015.
- *Van Zonneveld, M. (PI), V.E. Méndez, J. Ordoñez, J.P. Solis, F. Fonseca (Co-PIs) Climate Change, Agriculture and Food Security Program (CCAFS) (\$275,000- Méndez portion \$53,289) Planning and investing in climate smart agriculture for risk reduction in Central American coffee-based landscapes. 2015-2016.
- Méndez, V.E. (PI) Green Mountain Coffee Roasters (\$28,583) Revisiting the thin months in Nicaragua, Mexico and Guatemala. 2013.
- Méndez, V.E. (PI) Mercy Corps (\$22,000) Integrating agroecology and resilient food systems into Mercy Corps agriculture and rural development programs. 2013.
- Méndez, V.E. (PI) Gund Institute for Ecological Economics (\$10,000) Potential of Agroecological Management to Support Food System and Climate Resilience in Smallholder Coffee Farms in the Americas. Competitive Faculty Development Grants. 2013.
- Méndez, V.E. (PI) High Meadows Fund (\$37,950) Vermont Agricultural Resilience in a Changing Climate: Training Farmers and Service-Providers for On-farm Management. 2012-2014.
- Méndez, V.E. (PI) Vermont Community Foundation (\$15,000) Vermont Farm Resilience in a Changing Climate. 2012-2013.
- *Hurley, S. & V.E. Méndez (Co-Pis) USDA Hatch Funds (\$110,938) Climate Change Best Management Practices on Vermont Farms. 2012-2015.

- *Méndez, V.E. (PI), C. Adair, L. Berlin, D. Conner, H. Darby, S. Hurley, C. Koliba, A. Zia (Co-PIs). UVM Food Systems Research Spire Competitive Grant (\$300,000) Climate Change Adaptation and Mitigation in the Lake Champlain Basin of Vermont. 2012-2015.
- Méndez, V.E. (PI) Gund Institute for Ecological Economics (\$8,300) Climate Change, Ecosystem Services and Farmer Livelihoods in the Vermont Landscape: Policy, Governance and Agricultural Practice. Competitive Faculty Development Grants. 2012.
- Méndez, V.E. (PI). Green Mountain Coffee Roasters (\$194,000) Confronting The Thin Months: Participatory Learning on Best Practices and Impacts of the GMCR Food Security Program. 2010-2014.
- Méndez, V.E. (PI). Green Mountain Coffee Roasters (\$54,608) Sustainable Livelihoods in Coffee Growing Communities. Continuation 2011-2012.
- Méndez, V.E. (PI). Pro-Poor Mitigation Theme of the Climate Change, Agriculture and Food Security Challenge Program (CCAFS) (\$12,430) Climate Mitigation and Smallholder Livelihoods in Coffee Landscapes: Synergies and Tradeoffs. 2010.
- *Méndez, V.E. (PI). Earthwatch Institute (\$143,328) Sustainable coffee growing communities in Costa Rica. 2009-2012.
- *Strong, A. (PI), V.E. Méndez, S.T. Lovell, A. Troy & N Perluth (Co-PIs). USDA-NRI (\$382,161- Méndez portion approximately \$112,000) Landscape context as a framework to quantify the multifunctionality of agricultural systems in the Northeast. 2009-2012. Reviewed by a panel of anonymous peers.
- *Méndez, V.E. (PI). Northeastern States Research Cooperative (\$25,000) The Economic and Ecological Yields of On-Farm Treed Habitat in Vermont. 2009-2010.
- *Méndez, V.E. (PI). S.T. Lovell and J.D. Erickson (Co-PIs). UVM Research Opportunities Grant Program (\$45,000) Long-term agroecological change in shade coffee landscapes of Latin America: Lessons for sustainable livelihoods and conservation. 2008-2010.
- Méndez, V.E. (PI). Green Mountain Coffee Roasters. (\$140,000) Sustainable Livelihoods in Coffee Growing Communities. 2008-2011.
- *Méndez, V.E. and S.T. Lovell (Co-PIs) USDA Hatch Funds (\$90,000) Benefits of On-farm Ecosystem Service Conservation and Assessment of Water Quality BMP's and Innovative Practices on Small- and Medium-Sized Farms in Vermont. 2008-2011.
- *Méndez, V.E. (PI). USDA Hatch Funds (\$10,000) Seed Research project on "Ecosystem Services and Farmer Livelihoods in the Vermont Agricultural Landscape". 2007-2008.
- *Méndez, V.E. (PI). USDA Hatch Funds (\$10,000) Research project on agroforestry and tree cover in the Vermont agricultural landscape. 2006-2007.
- *Méndez, V.E. (PI). Oxfam America (\$78,400) Research project titled Sustainable coffee from the bottom up: impacts of certification initiatives on small-scale farmer and estate worker households and communities in Central America and Mexico. 2004-2007.
- Méndez, V.E. (PI). Center for Tropical Ecology Agriculture and Development (UCSC) (\$1,000) Dissertation improvement fellowship. 2004.
- Méndez, V.E. (PI). Spanish International Cooperation Agency (AEI) (\$14,000) To conduct research and training on livelihoods and conservation in Tacuba, El Salvador. 2003-2004.
- Méndez, V.E. (PI). Conservation, Food & Health Foundation (\$15,000) Ph.D. dissertation research with Fundación Salvadoreña para Investigaciones del Café (PROCAFE). 2001-2002.
- Méndez, V.E. (PI) Alfred E. Heller Chair in Agroecology (UCSC) (\$5,000) Ph.D. dissertation field research. 2001.
- Méndez, V.E. (PI). Center for Agroecology & Sustainable Food Systems (UCSC) (\$3,200) Ph.D. dissertation field research and travel to conference. 2000 & 2001.

UNIVERSITY AND PROFESSIONAL SERVICE

Plant and Soil Science Department, UVM

- Graduate Affairs Committee (2007-2013): Chaired in FY 2009, monthly meetings and graduate student admissions.
- Acting Department Chair (Aug 2012- May 2013)
- Faculty Search (2007-2008) Agroecology of Specialty Crops
- Seminar Committee (2007-2008; 2015-): Scheduled and invited speakers for PSS weekly seminar.
- Tabling for PSS dissemination at the UVM Harvest Festival 2010.

Environmental Program, UVM

- Co-Chair of Cluster Hire Search (2014-2015) 3 faculty positions for ENVS, including Program Director.
- Faculty Search (2011-2012) Political Ecology position, joint between ENVS and Geography.
- Faculty Search (2008-2009) Ecosystems Ecology position, joint between ENVS and Plant Biology: Meetings with committee.
- Senior thesis options and curriculum committee (2007-2008): meetings and presentations of progress to ENVS faculty.

University of Vermont

- President's Advisory Council (2012-2015)
- Envisioning Environment Working Group Member (2012-2013)
- UVM Food Systems Initiative Steering Committee (2010- present)
- Fellow, Gund Institute for Ecological Economics (2007-present).
- Fellow, Center for Sustainable Agriculture (2011-2013).
- Steering committee member of the Community Participatory Action Research Network (2008-2012).
- Faculty Search (2010-2011) Rural geography position for the UVM Geography Department.

Peer Review

- Editorial Board Member: Agroecology & Sustainable Food Systems (formerly Journal of Sustainable Agriculture, 2010- present).
- Ad-hoc Peer Reviewer: Agriculture Ecosystems and Environment, GeoForum, Journal of Ethnobiology, Agroforestry Systems, World Development, Land Degradation and Development, Journal of Environment and Development, Agriculture and Human Values, Ecosistemas (Spain), Renewable Agriculture and Food Systems
- Agroecology book proposal for Blackwell Scientific Publishers (2010).

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

Ecological Society of America (ESA); Sociedad Científica Latinoamericana de Agroecología (SOCLA); Association of American Geographers (AAG); Association for Environmental Studies and Sciences (AESS).

PUBLICATIONS

Most of these can be accessed at <http://www.uvm.edu/~agroecol/?Page=Publications.html> *=Graduate student advisee;

Peer Reviewed Journal Articles

IF=Impact Factor, if available, from the Thompson Reuters' Journal Citation Reports latest year; **R**=Rank, if available, from Thompson Reuters' Journal Citation Reports latest year; **TC**=Times Cited from Google Scholar Citations

In preparation, submitted or in review

1. Mithöfer, D., A Bose & **V.E. Méndez** (in review) *Potential impact of coffee sustainability standards: Context, concerns and actions*. Invited Article to Special Issue on Sustainability Standards. International Journal of Biodiversity Science, Ecosystem Services and Management.
2. Schattman, R⁺. & **V.E. Méndez** (in review) *The resilient farmer: an agroecological typology of Northeastern farmers in an era of climate change*. Agriculture and Human Values

Accepted, in press or published

1. Schattman, R⁺. **V.E. Méndez**, S.C. Merrill & A. Zia (2017) *A mixed methods approach to understanding farmer and technical service provider perceptions of climate change and adaptation in Vermont, United States*. Agroecology and Sustainable Food systems in press.
2. **Méndez, V.E.**, M. Caswell, S.R. Gliessman & R. Cohen (2017) *Integrating Agroecology and Participatory Action Research (PAR): Lessons from Central America*. Invited Article for a Special Issue on "Agroecology at the Crossroads: Challenges for Sustainable Agriculture and Food Systems". Sustainability 9(5):705. doi: <http://dx.doi.org/10.3390/su9050705>
3. Schattman, R⁺, D. Conner & **V.E. Méndez** (2016) *Farmer perceptions of risk in Vermont: Public support and private responsibility in adaptation to climate change*. Elementa: Science of the Anthropocene.
4. Goodall, K.E., C.M. Bacon & **V.E. Méndez** (2015) *Shade tree diversity, carbon sequestration, and epiphyte presence in coffee agroecosystems: a decade of smallholder management in San Ramón, Nicaragua*. Agriculture, Ecosystems and Environment 199:200-206 (IF: 3.203; R: 1 of 56 in Agriculture, Multidisciplinary).
5. Morse, C., A. Strong, **V.E. Méndez**, S.T. Lovell, A. Troy & W.B. Morris (2014) *Performing a New England Landscape: viewing, engaging and belonging*. Journal of Rural Studies 36:226-236 (IF: 2.036; R: 7 of 55 in Planning and Development).
6. Gross, L.H.⁺, J.D. Erickson & **V.E. Méndez** (2014) *Supporting rural livelihoods and ecosystem services conservation in the Pico Duarte coffee region of the Dominican Republic*. Agroecology and Sustainable Food Systems 38(9): 1078-1107 (IF: 0.849; R: 22 of 56 in Agriculture, Multidisciplinary).
7. Alvez, J.P.⁺, J.D. Erickson, A. Schmitt, J. Farley & **V.E. Méndez** (2014) *Transition from semi-confinement to pasture-based dairy in Brazil: Farmers' view of economic and environmental performances*. Agroecology and Sustainable Food Systems 38(9): 995-1014 (IF: 0.849; R: 22 of 56 in Agriculture, Multidisciplinary).
8. Becot, F., D. Conner, J. Kolodinsky and **V.E. Méndez** (2014) *Measuring the cost of production and pricing on small diversified farms: juggling decisions amidst uncertainties*. Journal of the American Society of Farm Managers and Rural Appraisers.
9. Bacon, C., W.A. Sundstrom, M.A. Flores-Gomez, **V.E. Méndez**, R. Santos, B. Goldoftas, I. Dougherty (2014) *The 'Hungry Farmer Paradox': Smallholders and Fair Trade Cooperatives Navigate Seasonality and Change in Nicaragua's Corn and Coffee Markets*. Global Environmental Change (IF: 5.236; R: 8 of 209 in Environmental Sciences)
10. Jha, S., C.M. Bacon, S. Philpott, **V.E. Méndez**, R. Rice, and P. Läderach (2014) *Shade Coffee: update on a disappearing refuge for biodiversity*. Bioscience 64 (5):416-428 (IF: 5.439; R: 10 of 83 in Biology)
11. Richards, M.B.⁺ & **V.E. Méndez** (2014) *Interactions between carbon sequestration and shade tree species diversity in a smallholder coffee cooperative of El Salvador*. Conservation Biology 28 (2): 489-497 (IF: 4.692; R: 15 of 205 in Environmental Sciences).

12. **Méndez, V.E.**, C.M. Bacon & R. Cohen (2013) *La agroecología como un enfoque transdisciplinar, participativo y orientado a la acción*. Agroecología (Spain) 8(2):9-18. Translated version of the article previously published in Agroecology and Food Systems 37(1):3-18.
13. Chappell M.J., H. Wittman, C.M. Bacon, B.G. Ferguson, L. García-Barrios, R. García-Barrios, D. Jaffee, J. Lima, **V.E. Méndez**, H. Morales, L. Soto-Pinto, J. Vandermeer & I. Perfecto (2013) Food sovereignty: an alternative paradigm for poverty reduction and biodiversity conservation in Latin America [v1; ref status: indexed, <http://f1000r.es/23s>] *F1000Research* 2013, 2:235.
14. Morris, K.S. ⁺, **V.E. Méndez**, M. Olson⁺ & S.T. Lovell (2013) *Conventional food plot management in an organic coffee cooperative: explaining the paradox*. Agroecology and Sustainable Food Systems 37(7): 762-787 (IF: 0.744; R: 24 of 57 in Agriculture, Multidisciplinary).
15. Erickson, D.⁺, S.T. Lovell and **V.E. Méndez** (2013) *Identifying, quantifying and classifying agricultural opportunities for land use planning*. Landscape and Urban Planning 118(1):29-39 (IF: 2.004; R: 15 of 77 in Environmental Studies).
16. **Méndez, V.E.**, C.M. Bacon, M.B. Olson, K.S. Morris & A. Shattuck (2013) *Conservación de agrobiodiversidad y medios de vida en cooperativas de café bajo sombra en Centroamérica (Conservation of agrobiodiversity and livelihoods in shade coffee cooperatives of Central America)*. Ecosistemas (Spain) 22(1): 16-24
17. Sales, E.F., **V.E. Méndez**, F.R. Caporal & J.C. Faria (2013) *Agroecological transition of Conilon coffee (Coffea canephora) agroforestry systems in the state of Espírito Santo, Brazil*. Agroecology and Sustainable Food Systems 37 (4): 405-429 (IF: 0.744; R: 24 of 57 in Agriculture, Multidisciplinary).
18. Morris, K. S.⁺, **V. E. Méndez** & M. B. Olson⁺ (2013) *'Los meses flacos': seasonal food insecurity in a Salvadoran organic coffee farming cooperative*. Journal of Peasant Studies: 40(2): 457-480 (IF: 2.548; R: 8 of 79 in Anthropology).
19. **Méndez, V.E.**, C.M. Bacon and R. Cohen (2013) *Agroecology as a transdisciplinary, participatory and action-oriented approach*. Agroecology and Sustainable Food Systems 37(1):3-18 (IF: 0.744; R: 24 of 57 in Agriculture, Multidisciplinary).
20. Fernandez, M. ⁺, A. Shattuck, K. Goodall⁺, M.B. Olson⁺ & **V.E. Méndez** (2013) *Agroecology and alternative agrifood movements in the United States: towards a sustainable agrifood system*. Agroecology and Sustainable Food Systems 37(1): 115-126 (IF: 0.744; R: 24 of 57 in Agriculture, Multidisciplinary).
21. Cayuela, L., L. Gálvez-Bravo, R. Pérez Pérez, F.S. de Albuquerque, D.J. Golicher, R.A. Zahawi, N. Ramírez-Marcial, C. Garibaldi, R. Field, J.M. Rey Benayas, M. González-Espinosa, P. Balvanera, M.A. Castillo, B.L. Figueroa-Rangel, D.M. Griffith, G.A. Islebe, D.L. Kelly, M. Olvera-Vargas, S.A. Schnitzer, E. Velázquez, G. Williams-Linera, S.W. Brewer, A. Camacho-Cruz, I. Coronado, B. de Jong, R. del Castillo, I. de la Cerda, J. Fernández, W. Fonseca, L. Galindo-Jaimes, T. W. Gillespie, B. González-Rivas, J.E. Gordon, J. Hurtado, J. Linares, S.G. Letcher, S. Mangan, J.A. Meave, **V. E. Méndez**, et. Al. (2012) *The Tree Biodiversity Network (BIOTREE-NET): prospects for biodiversity research and conservation in the Neotropics*. Biodiversity and Ecology (Germany) 4: 211-224. Available online: http://www.biodiversity-plants.de/biodivers_ecol/vol4.php
22. Cayuela, L., L. Gálvez-Bravo, R. Pérez Pérez, F.S. de Albuquerque, D.J. Golicher, R.A. Zahawi, N. Ramírez-Marcial, C. Garibaldi, R. Field, J.M. Rey Benayas, M. González-Espinosa, P. Balvanera, M.A. Castillo, B.L. Figueroa-Rangel, D.M. Griffith, G.A. Islebe, D.L. Kelly, M. Olvera-Vargas, S.A. Schnitzer, E. Velázquez, G. Williams-Linera, S.W. Brewer, A. Camacho-Cruz, I. Coronado, B. de Jong, R. del Castillo, I. de la Cerda, J. Fernández, W. Fonseca, L. Galindo-Jaimes, T. W. Gillespie, B. González-Rivas, J.E. Gordon, J. Hurtado, J. Linares, S.G. Letcher, S. Mangan, J.A. Meave, **V. E. Méndez**, et al. (2012) *La Red Internacional de Inventarios Forestales (BIOTREE-NET) en Mesoamérica: avances, retos y perspectivas futuras (The Tree Biodiversity Network (BIOTREE-NET) in Mesoamerica: progress, challenges and future perspectives)*. Ecosistemas (Spain) 21(1-2):126-135.
23. Olson, M.B.⁺, K.S. Morris⁺ & **V.E. Méndez** (2012) *Cultivation of maize landraces by small-scale shade coffee farmers in western El Salvador*. Agricultural Systems 111: 63-74 (IF: 2.899; R: 2 of 57 in Agriculture, Multidisciplinary).

24. Erickson, D.[†], S.T. Lovell and **V.E. Méndez** (2011) *Landowner willingness to embed production agriculture and other land use options in residential areas of Chittenden county, VT, USA*. *Landscape and Urban Planning* 103(2):174-184 (IF: 2.004; R: 15 of 77 in Environmental Studies; TC:1).
25. Lovell S.T., **V.E. Méndez**, D.L. Erickson, C. Nathan and S. DeSantis (2010) *Extent, pattern, and multifunctionality of agroforestry systems in Vermont, USA*. *Agroforestry Systems* 80(2):153-171 (IF: 1.378; R: 31 of 79 in Agronomy; TC: 1).
26. **Méndez, V. E.**, C.M. Bacon, M. Olson, S. Petchers, D. Herrador, C. Carranza, L. Trujillo, C. Guadarrama-Zugasti, A. Córdón & A. Mendoza (2010) *Effects of Fair Trade and organic certifications on small-scale farmer households of Central America and Mexico*. *Renewable Agriculture and Food Systems* 25(3): 236-251. (IF: 1.274; R: 12 of 57 in Agriculture, Multidisciplinary; TC: 11).
27. **Méndez, V.E.**, C.M. Bacon, M. Olson, K. S. Morris & A. Shattuck (2010) *Agrobiodiversity and Shade Coffee Smallholder Livelihoods: A Review and Synthesis of Ten Years of Research in Central America*. Invited Article for a Special Focus Section on Geographic Contributions to Agrobiodiversity Research. *Professional Geographer* 62(3):357-376 (IF: 1.206; R: 28 of 73 in Geography; TC: 8).
28. Lovell, S.T., S. Desantis, C.A. Nathan, M.B. Olson, **V.E. Méndez**, H.C. Kominami, D.L. Erickson, K.S. Morris, and W.B. Morris (2010) *Integrating agroecology and landscape multifunctionality in Vermont: a framework to evaluate the design of agroecosystems*. *Agricultural Systems* 103:327-341 (IF: 2.899; R: 2 of 57 in Agriculture, Multidisciplinary; TC: 12).
29. **Méndez, V.E.**, E.N. Shapiro, and G.S. Gilbert (2009) *Cooperative management and its effects on shade tree diversity, soil properties and ecosystem services of coffee plantations in western El Salvador*. Selected for a Special Issue on Agroforestry for Ecosystem Services and Environmental Benefits. *Agroforestry Systems* 76 (1):111-126 (IF: 1.378; R: 31 of 79 in Agronomy; TC: 11).
30. Bacon, C.M., **V.E. Méndez**, M.E. Flores, D. Stuart & S.R. Díaz (2008) *Are sustainable coffee certifications enough to secure farmer livelihoods? the millenium development goals and Nicaragua's Fair Trade cooperatives*. *Globalizations* 5 (2): 259-274 (IF: 0.468; R: 56 of 89 in Social Sciences, Interdisciplinary; TC: 42).
31. **Méndez, V. E.**, S.R. Gliessman, and G.S. Gilbert (2007) *Tree biodiversity in farmer cooperatives of a shade coffee landscape in western El Salvador*. *Agriculture, Ecosystems and Environment* 119(1-2):145-159 (IF: 3.004; R: 1 of 57 in Agriculture, Multidisciplinary; TC: 35).
32. Gliessman, S. R., F. Rosado-May, C. Guadarrama-Zugasti, J. Jedlicka, A. Cohn, **V. E. Méndez**, R. Cohen, L. Trujillo, C. Bacon & R. Jaffe (2007) *Agroecología: promoviendo una transición hacia la sostenibilidad (Agroecology: promoting a transition towards sustainability)*. *Ecosistemas (Spain)* 16(1): 13-28 (TC:18).
33. **Méndez, V.E.** & S.R. Gliessman (2002) *Un enfoque interdisciplinario para la investigación en agroecología y desarrollo rural en el trópico Latinoamericano (An interdisciplinary approach for research in agroecology and rural development in the Latin American tropics)*. *Manejo Integrado de Plagas y Agroecología (Costa Rica)* 64: 5-16 (TC: 30).
34. **Méndez V.E.**, R. Lok & E. Somarriba (2001) *Interdisciplinary analysis of homegardens in Nicaragua: micro-zonation, plant use and socioeconomic importance*. *Agroforestry Systems* 51(2): 85-96 (IF: 1.378; R: 31 of 79 in Agronomy; TC: 92).
35. Shelton M.D., V.R. Walters, D. Brandl & **V.E. Méndez** (1996) Refrigerated controlled atmosphere storage during marine shipment on insect mortality and cut flower vase life. *HortTechnology (U.S.A.)* 6(3): 247-250.

Peer Reviewed Chapters in Edited Books (accepted, forthcoming, in press or published)

1. **Méndez, V.E.**, C.M. Bacon and R. Cohen (2016) *Introduction: agroecology as a transdisciplinary, participatory and action-oriented approach*. In **V.E. Méndez**, C.M. Bacon, R. Cohen & S.R. Gliessman (eds) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. *Advances in Agroecology Series*. CRC Press/Taylor and Francis.
2. Fernandez, M., **V.E. Méndez**, T. Mares & R. Schattman (2016) *Agroecology, food sovereignty and urban agriculture in the U.S.* In **V.E. Méndez**, C.M. Bacon, R. Cohen & S.R. Gliessman (eds) *Agroecology: a*

transdisciplinary, participatory and action-oriented approach. Advances in Agroecology Series. CRC Press/Taylor and Francis.

3. Schattman, R., **V.E. Méndez**, et al. (2014) *Vermont Agricultural Resilience in a Changing Climate: A transdisciplinary and Participatory Action Research (PAR) process*. In N. Benkeblia (Ed) Agroecology, Ecosystems and Sustainability. Advances in Agroecology Series. CRC Press/Taylor and Francis.
4. Olson, M.B., R. Peyser, **V.E. Méndez**, S. Fujisaka, T. Oberthür, D. Seville, and M.U. Georgeoglou-Laxalde (2012) *Measuring impact at origin*. Pp. 231-248 In T. Oberthür, P. Läderach, H.A. Jürgen Pohlen and J. Cock (eds) Specialty coffee: managing quality. International Plant Nutrition Institute: Northcross, GA.
5. **Méndez, V. E.**, S. Castro-Tanzi⁺, K. Goodall⁺, K.S. Morris⁺, C.M. Bacon, P. Läderach, P., W.B. Morris⁺ and M.U. Georgeoglou-Laxalde (2012). *Livelihood and environmental trade-offs of climate mitigation in smallholder coffee agroforestry systems*. Pp. 370-381. In E. K. Wollenberg, A. Nihart, M. Grieg-Gran & M. L. Tapio-Biström (Eds.) Climate mitigation and agriculture. London: Earthscan.
6. Jha, S. C.M. Bacon, S. Philpott, R. Rice, **V.E. Méndez** and P. Laderach (2011). *A review of ecosystem services and farmer livelihoods in shade coffee agroecosystems*. In B. W. Campbell and S. Lopez Ortiz (eds) Integrating Agriculture, Conservation, and Ecotourism: Examples from the Field. Volume 1 of the Issues in Agroecology Series. Springer Academic Publishers: New York and The Netherlands.
7. **Méndez, V. E.** (2010) *Agroecology* In B. Warf (ed) Encyclopedia of Geography. Sage Publishers: Oakland, CA.
8. **Méndez, V. E.** (2008) *Farmers' livelihoods and biodiversity conservation in a coffee landscape of El Salvador*. Pp. 207-236 In C. M. Bacon, V. E. Méndez, S.R. Gliessman, D. Goodman & J. A. Fox (eds.) Confronting the coffee crisis: Fair Trade, sustainable livelihoods and ecosystems in Mexico and Central America. MIT Press: Cambridge, MA, U.S.A.
9. Bacon, C.M., **V.E. Méndez** & J.A. Fox (2008) *Cultivating sustainable coffee: persistent paradoxes*. Pp. 337-372 In C. M. Bacon, V. E. Méndez, S.R. Gliessman, D. Goodman & J. A. Fox (eds.) Confronting the coffee crisis: Fair Trade, sustainable livelihoods and ecosystems in Mexico and Central America. MIT Press: Cambridge, MA, U.S.A.
10. **Méndez V.E.** (2000) *An assessment of tropical homegardens as examples of local sustainable agroforestry systems*. pp 51-66. In S.R. Gliessman (ed.) Agroecosystem sustainability: developing practical strategies. CRC Press: Boca Raton, FL, USA.
11. Lok, R. & **V.E. Méndez** (1998) *El uso del ordenamiento local del espacio para una clasificación de huertos en Nicaragua (The use of local spatial organization for the classification of homegardens in Nicaragua)*. Pp 129-149. In R. Lok (ed) Huertos caseros tradicionales de América Central: características, beneficios e importancia desde un enfoque multidisciplinario. CATIE: Turrialba, Costa Rica.

Peer Reviewed Books and Journal Guest Editorials

1. **Méndez, V.E.**, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds) (2016) *Agroecology: a transdisciplinary, participatory and action-oriented approach*. Invited book for the Advances in Agroecology Series. CRC Press/Taylor & Francis.
2. Salvador, R.J. & **V.E.Méndez** (Guest Editors) (2015-2016) [New pathways to sustainability in agroecological systems](#). Open Access Special Forum. Elementa: science of the Anthropocene 3: in progress.
3. **Méndez, V.E.**, C.M. Bacon, R. Cohen, S.R. Gliessman & M. Gonzalez de Molina (Guest Editors) (2013) [Agroecología y la transformación de los sistemas agroalimentarios: perspectivas transdisciplinarias y participativas](#). Monográfico Invitado [Invited Special Issue]. Translated and re-edited Open Access version of the Special Issue published in Agroecology and Sustainable Systems 37 (1), 2013. Agroecología [Spain] 8(2).
4. **Méndez, V.E.**, C.M. Bacon and R. Cohen (Guest Editors) (2013) [Agroecology and the transformation of agro-food systems: Transdisciplinary and participatory perspectives](#). Invited Special Inaugural Issue of Agroecology and Sustainable Food Systems 37(1) (formerly Journal of Sustainable Agriculture; IF: 0.673; R: 23 of 57 in Agriculture, Multidisciplinary)

5. Bacon, C.M., **V.E. Méndez**, S.R. Gliessman, D. Goodman & J. A. Fox (eds.) (2008) *Confronting the coffee crisis: Fair Trade, sustainable livelihoods and ecosystems in Mexico and Central America*. Food, Health and the Environment Series. MIT Press: Cambridge, MA, USA.

Other Books and Manuals

1. Morris, K.S., I. Nelson, **V.E. Méndez** & S. Ali (Editors) (2015) *International Environmental Studies*. Cognella Publishers.
2. **Méndez, V.E.** (2005) *Café con sombra y alternativas para reducir la presión del cambio del uso del suelo en la zona Sur de Ahuachapán, El Salvador (Shade coffee and alternatives to reduce pressure of land use change in the Southern zone of Ahuachapán, El Salvador)*. UICN-Proyecto BASIM: San José, Costa Rica. 56 p.
3. **Méndez V. E.**, J. Beer, J. Faustino & A. Otarola (2000) *Plantación de árboles en línea (Line tree planting)*. Módulo de Enseñanza Agroforestal 1. 2ª Edición. Serie Materiales de Enseñanza 39. CATIE: Turrialba, Costa Rica. 134 p.
4. **Méndez V. E.**, J. Beer & J. Faustino (1998) *Plantación de árboles en línea (Line tree planting)*. Módulo de Enseñanza Agroforestal 1. Serie Materiales de Enseñanza 39. 1ª Edición. CATIE: Turrialba, Costa Rica. 117 p.

Edited Research Series, Policy, Technical or Extension Publications

1. Caswell, M., **V.E. Méndez**, J. Hayden, J. Anderzén, P. Merritt, A. Cruz, V. Izzo, S. Castro, J. Wiegel, A. Ospina and M. Fernandez (2016) Assessing resilience in coffee-dependent communities of Honduras, Nicaragua and Haiti. ARLG/LWR Research Brief #5. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont & Lutheran World Relief (LWR).
2. Hethcote, L., M. van Zonneveld, W. Solano, **V.E. Méndez** and N. Vasquez (2016) Improving access to vegetable seeds for resilient family farms in Costa Rica. Farming Matters. April: 14-17.
3. Schattman, R.E., H.M. Aitken, **V.E. Méndez** & M. Caswell (2014) Climate change resilience on Vermont farms: a research report for service providers. *ARLG Research Brief # 2*. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont: Burlington, VT.
4. Caswell, M., **V.E. Méndez**, M. Baca, P. Läderach, T. Liebig, S. Castro-Tanzi & M. Fernández (2014) Revisiting the "thin months" - a follow-up study on livelihoods of Mesoamerican coffee farmers. Policy Brief # 19. Centro Internacional de Agricultura Tropical (CIAT): Cali Colombia.
5. Fernandez, M., **V.E. Méndez** & C. Bacon (2013) Seasonal hunger in coffee communities: integrated analysis of livelihoods, agroecology, and food sovereignty with smallholders of Mexico and Nicaragua. Conference Paper # 42. Food Sovereignty: A critical dialogue. International Conference at Yale University. September 14-15.
6. Caswell, M., **V.E. Méndez** & C.M. Bacon (2012) *Food security and smallholder coffee production: current issues and future directions*. *ARLG Policy Brief # 1*. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont: Burlington, VT.
7. Schattman, R., **V.E. Méndez** & K.E. Westdijk (2012) Vermont farm resilience in a changing climate: survey of Vermont agricultural service providers. *ARLG Research Brief # 1*. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont: Burlington, VT.
8. Davis, A. and **V.E. Méndez** (2011). *Prioritizing food security and livelihoods in climate change mitigation mechanisms: experiences and opportunities for smallholder coffee agroforestry, forest communities and REDD+*. Policy Brief. Salvadoran Research Program on Development and Environment (PRISMA): San Salvador, El Salvador.
9. Bacon, C., **V.E. Méndez**, M.E. Flores & M. Brown (2008) *Will "we" achieve the millenium development goals with small-scale coffee growers and their cooperatives? a case study evaluating Fair Trade and organic coffee networks in northern Nicaragua*. Center Research Brief # 12. Center for Agroecology and Sustainable Food Systems. University of California: Santa Cruz, CA, USA.

10. Bacon, C. M., E. Whitlow-Inman & **V.E. Méndez** (2008) *Agroecology, a next step in sustainable coffee*. Fresh Cup, February:82-87.
11. **Méndez, V. E.** & C. Bacon (2006) *Ecological processes and farmer livelihoods in shaded coffee production*. Invited Article. LEISA (The Netherlands) 22(4): 22-23.
12. **Méndez, V.E.** & C. Bacon (2005) *Medios de vida y conservación de la biodiversidad arbórea: las experiencias de las cooperativas cafetaleras en El Salvador y Nicaragua (Livelihoods and conservation of tree biodiversity: experiences in coffee cooperatives of El Salvador and Nicaragua)*. LEISA Revista de Agroecología (Peru) 20(4): 27-30.
13. Gómez, I. & **V. E. Méndez** (2005) *Asociación de comunidades forestales de Petén, Guatemala: contexto, logros y desafíos (Association of forestry communities of Petén, Guatemala: context, accomplishments & challenges)*. PRISMA: San Salvador, El Salvador.
14. Bacon, C., **V.E. Méndez** & M. Brown (2005) *Participatory action-research and support for community development and conservation: Examples from shade coffee landscapes of El Salvador and Nicaragua*. Center Research Brief # 6. Center for Agroecology and Sustainable Food Systems. University of California: Santa Cruz, CA, USA. Available online: http://repositories.cdlib.org/casfs/rb/brief_no6/
15. Gliessman, S. R., C. Bacon, R. Cohen, C. Guadarrama-Zugasti, L. Trujillo & **V. E. Méndez** (2004) *Qu'est-ce que l'agroecologie?(What is agroecology?)*. L'Ecologiste (French edition of the Ecologist) 5 (3):27-29.
16. Cuéllar, N., **V.E. Méndez**, S. Larios & L. Dimas (2003) *Tendencias y perspectivas del sector forestal en El Salvador del siglo XX (Tendencies and perspectives of the forestry sector in El Salvador for the 21st century)*. FAO/MAG: San Salvador, El Salvador.
17. **Méndez, V. E.** (2002) *Fair trade networks in two coffee cooperatives of western El Salvador: an analysis of insertion through a second level organization*. Case Study for the Project on "Poverty Alleviation Through Participation in Fair Trade Networks". Colorado State University/Ford Foundation: Ft. Collins, CO, USA. Available on-line: www.colostate.edu/Depts/Sociology/FairTradeResearchGroup/.
18. Calvo, G., **V.E. Méndez** & M. Ortiz (1999) *El proceso agroforestal participativo en Valle de Risco, Bocas del Toro (The participatory agroforestry process in Valle de Risco, Bocas del Toro)*. Agroforestería en las Américas (Costa Rica) 6(21): 17-19.
19. **Méndez, V. E.** (1999) *Metodologías de diagnóstico rápido, con énfasis en sistemas agroforestales (Methodologies for rapid appraisals, with an emphasis on agroforestry systems)*. Proyecto Agroforestal CATIE/GTZ: Turrialba, Costa Rica.
20. **Méndez, E.**, G. Calvo & M. Ortiz (1999) *Caracterización de la comunidad Ngöbe de Valle de Risco, Bocas del Toro, Panamá (Characterization of the Ngöbe community of Valle de Risco, Bocas del Toro, Panamá)*. Revista Forestal Centroamericana (Costa Rica) 28: 32-36.
21. **Méndez V.E.**, R. Lok & E. Somarriba (1996) *Análisis agroecológico de huertos caseros en Nicaragua (Agroecological analysis of homegardens in Nicaragua)*. Agroforestería en las Américas (Costa Rica) 10: 36-40.

Research Reports

- Méndez, V. E.**, C. Bacon, S. Petchers, D. Herrador, C. Carranza, L. Trujillo, C. Guadarrama-Zugasti, A. Córdón & A. Mendoza (2006) *Sustainable coffee from the bottom-up: impacts of certification initiatives on small-scale farmer and estate worker households and communities in Central America and Mexico*. Research Report. Oxfam America: Boston, MA.
- Méndez, V. E.**, D. Herrador, L. Dimas, M. Escalante, O. Diaz & M. Garcia (2002) *Café con sombra y pago por servicios ambientales: riesgos y oportunidades para impulsar mecanismos con pequeños agricultores de El Salvador (Shade coffee and payment for environmental services: risks and opportunities to foster mechanisms with small-scale farmers in El Salvador)*. Estudio de Caso para El Proyecto "Pago por Servicios Ambientales en las Américas" PRISMA/Fundacion FORD: San Salvador, El Salvador.
- Herrador, D., L. A. Dimas & **V. E. Méndez** (2002) *Pago por servicios ambientales en El Salvador: oportunidades y riesgos para pequeños agricultores y comunidades rurales(Payment for environmental services in El*

Salvador: opportunities and risks for small-scale farmers and rural communities). PRISMA: San Salvador, El Salvador.

Edited Conference Proceedings

- Méndez, V.E.** & S.T. Lovell (2007) *Ecosystem Services Conservation and Farmer Livelihoods in a Shade Coffee Landscape of Western El Salvador*. Electronic Proceedings of the Second International Symposium on "Multi-Strata Agroforestry Systems with Perennial Crops: Making ecosystem services count for farmers, consumers and the environment." September 17 – 21, 2007. CATIE, Turrialba, Costa Rica
- Rosa, H., S. Kandel, L. Dimas & **V. E. Méndez** (2003) *Payments for environmental services and rural communities: Lessons from the Americas*. Conference Paper No. 14. International Conference on Natural Assets. 8-11 January. Tagaytay City: The Phillipines. Available on-line: <http://www.umass.edu/peri/icnapapers.html>.
- Méndez, V. E.** (2002) *Sombra, medios de vida rural y conservación en pequeñas fincas y cooperativas cafetaleras del occidente de El Salvador (Shade, rural livelihoods and conservation in small coffee farms and cooperatives of western El Salvador)*. pp. 63-69. In A. Monro & M. C. Peña-Chamorro (eds.) *Actas del Simposio sobre Café y Biodiversidad/Revista Protección Vegetal* 12(2). The Natural History Museum (London)/Universidad de El Salvador: San Salvador, El Salvador.
- Méndez, V. E.**, R. Lok & E. Somarriba (1999) *Interdisciplinary analysis of homegardens: a case study from Nicaragua*. Pp. 260-263. In F. Jimenez & J. Beer (eds.) *Proceedings of the International Symposium on Multi-strata Agroforestry Systems with Perennial Crops*. CATIE: Turrialba, Costa Rica.
- Méndez, E.** & R. Lok (1997) *Análisis agroecológico de huertos caseros tradicionales en Nicaragua (Agroecological analysis of traditional homegardens in Nicaragua)*. CATIE (ed.) *Actas de la III Semana Científica*, CATIE. 3-5 Feb. pp. 240-244. CATIE: Turrialba, Costa Rica.

Book Reviews

- Gershenson, A., K. Holl, P. Holloran, J. Jedlicka, **V.E. Méndez**, D. Mulvaney, B. Petersen, A. Spalding & M. Vasey (2007) Mann, A. (2005) 1491: New revelations of the Americas before Columbus. Alfred Knopf: New York, NY, 465 pp. Reviewed for *Restoration Ecology* 15(1): 168-169.
- Méndez, V. E.** (2002) Gliessman, S. R. (2002) *Agroecología: procesos ecológicos en la agricultura sostenible (Agroecology: ecological processes in sustainable agriculture)*. CATIE: Turrialba, Costa Rica. 359 p. Reviewed in *Manejo Integrado de Plagas y Agroecología (Costa Rica)* No. 65: 130.
- Méndez, V. E.** (2002) Monro, A., D. Alexander, J. Reyes, M. Renderos & N. Ventura (2001) *Arboles de los cafetales de El Salvador (Trees of the coffee plantations of El Salvador)*. The Natural History Museum/MARN/PROCAFE/UES/Jardin Botanico La Laguna: San Salvador, El Salvador. Reviewed in *Plant Cuttings On-line Issue* 8. <http://www.nhm.ac.uk/botany/cuttings/issue8/publications/index.html>.
- Méndez, V. E.** (2001) SNV-Netherlands Development Organization and AID Environment (1999) *SEAN Toolbook*. Contains booklet with theoretical background to Strategic Environmental Analysis (SEAN); Case study; Process cards*SEAN graphs. SNV: The Hague, the Netherlands. Reviewed in *Indigenous Knowledge and Development Monitor* 9 (3): 35-36.
- Méndez, V. E.** (1999) O'Donoghue, R., L. Masuku, E. J. van Rensburg & M. Ward (eds.) (1999) *Indigenous knowledge in/as environmental education process*. EEASA Monograph No. 3. EEASA/SADC: Howick, South Africa. Reviewed in *Indigenous Knowledge and Development Monitor* 8 (3): 36.

SELECTED PRESENTATIONS IN CONFERENCES AND SEMINARS (LAST 5 YEARS) * DENOTES PEER REVIEW

1. ***Méndez, V.E.**, M. Caswell, S.R. Gliessman & R. Cohen (2017) *Integrando la agroecología y la investigación acción participativa (IAP): Principios y características/Integrating agroecology and participatory action Research (PAR): Principles and characteristics*. Paper presented at the IV Congress of the Latin American Scientific Society for Agroecology (SOCLA)/X Congresso Brasileiro de Agroecologia. 10-15 September. Brasília, Brazil.

2. **Méndez, V.E.** (2017) Agroecology, food sovereignty and sustainability: Challenges and possibilities. Invited Panelist. Farm to Plate Conference. 11-13 May. Ithaca, New York.
3. **Méndez, V.E.** (2017) Integrating Agroecology and Participatory Action Research (PAR): Principles, Characteristics and Key Lessons. Invited Seminar. Centre for Critical Development Studies. March 28. University of Toronto, Scarborough, Canada.
4. **Méndez, V. E.** (2017) Agroecology and Participatory Action Research (PAR): Critical Lessons and Reflections for the Future. Invited Seminar. Berkeley Food Institute and Center for Diversified Farming Systems February 6. University of California, Berkeley.
5. **Méndez, V. E.** (2016) Agroecology and Participatory Action Research (PAR): Lessons and Reflections from Vermont and Latin America. Hub Vogelmann Award for Excellence in Research Scholarship Ceremony Presentation. September 12. University of Vermont, Burlington, VT.
6. **Méndez, V. E.** (2016) Analizando la resiliencia en comunidades cafetaleras de Honduras, Nicaragua y Haití/Analyzing resilience of coffee communities in Honduras, Nicaragua and Haiti. **Invited** presentation for the Coffee Resilience Forum. Lutheran World Relief/USAID/Root Capital/CIAT. September 21-22. Managua, Nicaragua.
7. ***Méndez, V. E.** (2016) Incorporating justice concerns in transdisciplinary and participatory agroecology. **Invited** Paper to the Panel 'The Agroecology of Justice: Conceptualization and Evaluation'. International Sociological Association (ISA) Conference. August 10-14. Toronto, Canada.
8. ***Méndez, V. E.** (2016) Applying transdisciplinary and participatory approaches in agroecology. **Invited** Paper to the Panel 'The Justice of Agroecology: Practice and Politics'. International Rural Sociological Association (IRSA) World Congress. August 10-14. Toronto, Canada.
9. **Méndez, V. E.** (2016) Assessing resilience in coffee-dependent communities of Honduras, Haiti and Nicaragua. Sustainability Lecture Series. Specialty Coffee Association of America Annual Expo. April 14-17. Atlanta, Georgia.
10. **Méndez, V. E.** (2015) Evolution of agroecology as a transdisciplinary, participatory and action-oriented approach. **Invited** presentation. International Agroecology Shortcourse: Agroecology, a global movement, tracing our roots and looking forward. July 12-25. University of California, Santa Cruz.
11. **Méndez, V. E.** (2015) Participatory action research and agroecology: Lessons for food justice initiatives. **Invited** presentation. Food Justice: Building Community-Academic Partnerships Conference. June 4-6. Union of Concerned Scientists.
12. **Méndez, V. E. & M.C. Caswell** (2015) Revisiting the thin months – A longitudinal study of food security & livelihoods in Mesoamerican coffee cooperatives. Gund Institute for Ecological Economics Seminar. January 23.
13. **Méndez, V. E.** (2014) Participatory Action Research and Agroecology: Reflections on a process with smallholder coffee farmers in Mesoamerica. UVM Food Systems Initiative Seminar. December 1.
14. **Méndez, V. E.** (2014) Revisiting the thin months – A longitudinal study of food security & livelihoods in Mesoamerican coffee cooperatives. Gund Slam. November 23.
15. **Méndez, V. E.** (2014) *Agroecología, seguridad alimentaria y cambio climático en comunidades caficultoras de Mesoamérica* [Agroecology, food security and climate change in coffee communities of Mesoamerica]. **Invited** Seminar. Environment for Development Initiative (EfD) Central America Seminar Series. Tropical Agriculture Research and Education Center (CATIE), Costa Rica. April 29.
16. **Méndez, V. E.** (2014) *Investigación Acción Participativa Agroecológica (IAPA) sobre Seguridad y Soberanía Alimentaria en Zonas Cafetaleras de Mesoamérica* [Participatory action research on food security and sovereignty in coffee zones of Mesoamerica]. **Invited** Panelist. International Forum on Food Security in Coffee Areas. National University, Heredia, Costa Rica. April 23.
17. ***Fernandez, M., V.E. Méndez & C. Bacon** (2013) Seasonal hunger in coffee communities: Integrated analysis of livelihoods, agroecology, and food sovereignty with smallholders of Mexico and Nicaragua. Food Sovereignty: A Critical Dialogue Conference. Yale University Agrarian Studies Program. September 14-15.

18. **Méndez, V. E.** (2013) *Tackling key challenges and opportunities in changing research and policy across the food system*. **Invited** Panelist. Berkeley Food Institute Inaugural Symposium. May 6-7.
19. **Méndez, V. E.** (2012) *Environmental conservation in smallholder coffee cooperatives of Mesoamerica: challenges and opportunities*. **Invited** Presentation to the Duke University's Nicholas Institute for Environmental Policy Solutions. Environmental Institutions Seminar Series. November 30.
20. ***Méndez, V. E.**, S. Castro-Tanzi⁺, K. Goodall⁺, K.S. Morris⁺, C.M. Bacon, P. Läderach, P., W.B. Morris⁺, M.U. Georgeoglou-Laxalde and E.K. Wollenberg (2012) *Climate Mitigation and Smallholder Livelihoods in Coffee Landscapes: Synergies and Tradeoffs*. Session II: Market Movements of the Symposium 'Surviving 2012: Global environmental change, sociopolitical challenges and prospects for constructive engagements. Annual Meeting of the Association of American Geographers. February 24-28. NYC, NY.
21. ***Méndez, V.E.** & M.B. Olson (2012) *Climate change mitigation, agrobiodiversity and livelihoods in coffee landscapes*. Invited Panelist in the Session titled '**Biodiversity and Food in the Context of Development and Climate Change**'. Annual Meeting of the Association of American Geographers (AAG). February 24-28. NYC, NY.
22. **Méndez, V.E.** (2011) *Participatory action research in agroecology for food sovereignty*. Invited Presentation. Forum on food security and sovereignty in coffee regions. August 10-12. Matagalpa, Nicaragua.
23. **Méndez, V.E.** & K.L. Nordstrom (2011) *Sustainability education initiatives at the University of Vermont*. Invited poster presentation and participation in the institute. Engaged Interdisciplinary Learning in Sustainability Summer Institute. June 27-30. University of California, Santa Cruz, CA. Meeting. August 3-8, Albuquerque, New Mexico.