# Agustín José Olivo

Graduate Research and Teaching Assistant
Department of Animal Science
Cornell University
616 N Cayuga St. | ajo54@cornell.edu

# **EDUCATION**

### Ph.D. in Animal Science

August 2020 – May 2024 (expected)

Animal Science Department, Cornell University, USA.

Advisor: Quirine Ketterings, Ph.D.

Research and extension project: development of sustainability indicators for the dairy industry.

Expected Completion: 2024.

**Master of Science in Mechanized Systems Management** (Minor: Natural Resources Science) August 2018 – May 2020 Biological Systems Engineering Department, University of Nebraska-Lincoln, USA.

Advisor: Amy Schmidt, Ph.D., P.E.

Thesis: On-Farm Research and Student Engagement to Assess and Promote Manure and Cedar Mulch as Land

Treatment Practices in Nebraska.

GPA: 4.0 / 4.0. - Expected Completion: May 2020.

Classes taken at UNL: Animal waste management; Statistical methods for research; Resource and environmental economics II; Soil, water and environmental chemistry; Soil microbiology; Sampling, data management and visualization; Design and analysis of research studies.

# **Bachelor of Science in Agricultural Engineering**

March 2012 – September 2017

5 Years Major - Emphasis: Environmental Management - College of Agricultural Sciences, National University of Córdoba, Argentina.

GPA (10 points scale): 9.55 / 10.

# RESEARCH AND EXTENSION EXPERIENCE

# **Agricultural Sustainability Science Intern**

Field to Market: The Alliance for Sustainable Agriculture - Science & Research Team

May 2020 – August 2020

- Conducted a review of more than 50 extension publications and papers along with eight interviews to fertility specialists from land-grant universities in the United States to identify research and extension gaps around nitrogen fertility recommendations for multiple crops.
- Collected and organized data from different public sources to be used in the calculation of the Field to Market 2021 national and state sustainable agriculture benchmarks.
- Conducted a review of literature about the current state and trends of water quality and biodiversity in agricultural settings at the national level. Also, a review of different sustainability reports from Field to Market members and stakeholders, to identify preferred strategies to report ag sustainability data.
- Participated in multiple webinars and activities executed by Field to Market between May and August, 2020 (June 2020 General Assembly, Sector calls, Cross-sector dialogue, Committees meetings, Science Advisory Council meetings, Field to Market Continuous Improvement Learning Academy)

### **Graduate Research Assistant**

University of Nebraska-Lincoln

August 2018 – May 2020

Advisor: Amy Schmidt, Ph.D., P.E.

Project: "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'".

- Led an on-farm research initiative in six different locations including 100 members within the state of Nebraska to promote recycling of animal manures as soil amendments among farmers and their advisors.
- Evaluated impact of application of agricultural waste products on soil health and crop yield (manure, mulch and coal ash).
- Developed curriculum with field and classroom activities, for 50 middle and high school students to participate in onfarm research across the state; students are being introduced to best practices for research and scientific communication.
- Designed and conducted laboratory scale projects to better understand the carbon and nitrogen dynamics of soils amended with organic products.
- Participated in multi-state project to develop a guide for conducting manure-related on-farm research, to be used in professional development training of extension educators.

- Mentored four undergraduate students working on research and extension projects.
- Cooperated with project to develop an educational activity for training of custom applicators of manure.

# **Undergraduate Capstone Thesis Project**

College of Agricultural Sciences, National University of Córdoba, Argentina. August 2016 – September 2017.

Title: "Evaluation of Environmental Management Strategies in a Group of Dairy Farms in the Southeast Region of the Province of Córdoba, Argentina".

- Surveyed environmental stewardship and animal welfare practices on 15 dairy farms.
- Evaluated technical and economic feasibility of the manure agronomic use in dairy farming.
- Developed a software application to support environmental stewardship among dairy farmers by expanding their understanding of regulatory requirements and best management practices.

# **Undergraduate Teaching and Research Assistant for Cell Biology**

College of Agricultural Sciences, National University of Córdoba, Argentina

May 2013 – June 2017

Research Projects:

- Evaluation of the effect of two harvest dates and staying time on swath, on the yield, granular and sanitary quality of peanut grains (2014 2017).
  - o Assisted with farm collection, laboratory processing, and analysis of peanut plants and grains.
  - o Completed physical, chemical and sanitarian tests of peanut grains according to different field treatments.
- Generation and transfer of technology of peanut seeds (*arachis hypogaea* L.): effect of *Trichoderma harzianum* and *bacillus subtilis* as bio-controllers of phytopathogenic fungi and plant growth promoters. (2017).
- Generation and transfer of technology of peanut seeds (*arachis hypogaea* L.): physiosanitary quality of peanut seeds and plants in response to the application of pre-treatments of bacillus, fungicide and polymers (2014 2015).
- Evaluation of the compatibility and efficiency of combined treatments of fungicide and inoculant applied in chickpea seeds (2013 – 2014).

# **Team Member for Extension Project**

College of Agricultural Sciences, National University of Córdoba, Argentina

May 2017 – December 2017

• Developed and conducted activities with students in two high schools from rural towns to promote the consumption of alternative meats.

### **Undergraduate Research Assistant for Plant Breeding**

College of Agricultural Sciences, National University of Córdoba, Argentina

December 2014 – December 2015

Research Project:

- Evaluation of morpho-physiological characters in experimental maize hybrids, in late sowing.
  - o Conducted a field study to evaluate the morpho-physiological characteristics of 10 corn hybrids.
  - o Performed plant and grain-related measurements.

# TEACHING EXPERIENCE

### **Course Instructor**

College of Agricultural Sciences, National University of Córdoba, Argentina

September 2017 – July 2018

- Prepared teaching materials and facilitated weekly classes of Cell Biology and Introductory Mathematics (15 and 25 students), and assisted in integrating new technologies into the classroom.
- Participated as a collaborator in field and laboratory research projects, measuring physiological and disease resistance variables impacting peanut crops yield, under different management practices.
- Lead a research project that investigated the use of smartphones in 16 sessions of cell biology, including 270 freshman students, and its impact in the students' learning experience and overall performance in the course.
- Co-authored textbook for introductory college biology *Biología Celular en las Ciencias Agropecuarias (Cell biology in agricultural sciences)*. 2018. Pérez, M.A; Kopp, S.; Cuggino, S.; Uliana, A.; Illa, C.; González, C.; Sebastián y Pérez, M.; **Olivo**, **A.**; Bressano, M.; y Gamba, J. ISBN 978-987-46766-1-0. Cordoba, Argentina).

# Student Teaching and Research Assistant for Cell Biology

College of Agricultural Sciences, National University of Córdoba, Argentina

May 2013 – June 2017

• Arranged all necessary materials for classes and assist with any classroom facilitation, teaching and researching.

Interviewer in the teaching assistant application process for Genetics and Botanic courses

College of Agricultural Sciences, National University of Córdoba, Argentina

2015 - 2016

### ADMINISTRATIVE EXPERIENCE

# **Undersecretary of Students Affairs**

College of Agricultural Sciences, National University of Córdoba, Argentina

September 2017 – July 2018

- Led weekly meetings for an interdisciplinary advisory team in administering professional development and scholarship programs for students, and facilitated cooperation between the university (faculty members and students) and private companies to provide new professional training opportunities for students.
- Contributed and audited the work plan for 8 undergraduate students doing peer-coaching at the freshman level.
- Supervised 3 employees within the Office of Student Affairs, and administered the Office's social media accounts.
- Collaborated with the College engagement and recruitment efforts in high schools within the province of Córdoba, Argentina.
- Developed new training programs to assist instructors in adoption of new teaching technologies, and teaching and research assistants in their regular duties within the institution.
- Coordinated use of classrooms and class schedules for the College, and the implementation of a general health check program for freshman students.

# LEADERSHIP, INVOLVEMENT AND SERVICE

# Secretary, NRES-27 Ag By-products & Mortality Management Systems Committee

American Society of Agricultural and Biological Engineers

July 2020 - Present

# **Member of Global Shapers Community**

World Economic Forum's Organization for Young Leaders world-wide

October 2017 - Present

- Currently lead a project to improve the access of high school students from small towns in Córdoba, Argentina to the University, using a video calls platform that connects college students with senior students in high school.
- As a part of a team of local leaders, identify opportunities to improve economic and educational outcomes for disadvantaged youth in keeping with the UN's sustainable development goals.
- Develop a project to improve selling abilities of low income individuals for a foundation who assists these people in improving their circumstances.

# Member of "Masters Argentina"

Organization of Argentine students enrolled in masters' programs in the USA and Europe October 2019 – March 2020

• Collaborated in the team organizing the "Masters Argentina" annual conference, the organization's largest event, where members meet with multiple leaders from Argentina to debate about the country's reality and challenges.

## President, Biological Systems Engineering Graduate Students Association

Biological Systems Engineering Department, University of Nebraska - Lincoln

May 2019 – May 2020

- Run two monthly meetings for officers and general members of the organization.
- Coordinated the planning and execution of professional development, fundraising and social events.

# Member of the UNL Graduate Student Assembly – Representative for the Department of Biological Systems Engineering.

University of Nebraska - Lincoln

August 2019 – May 2020

• Member of the Professional Development Committee within the Graduate Student Assembly.

# Member of the CASNR Student Advisory Board

College of Agricultural Sciences and Natural Resources, University of Nebraska Lincoln

April 2019 - May 2020

• Participated in monthly meetings in the CASNR Curriculum Committee.

# Participant in the Program "Skype a Scientist"

November 2019

• Delivered a presentation via Zoom about general science concepts to 2<sup>nd</sup> grade students in a school in Illinois, USA.

# Speaker at Orientation Panel for Incoming Graduate Students at UNL

University of Nebraska-Lincoln

August 2019

# **Speaker at CASNR Annual Faculty/Staff Meeting**

College of Agricultural Sciences and Natural Resources, University of Nebraska-Lincoln

August 2019

# Finalist at Science Slam Competition

University of Nebraska-Lincoln – Nebraska MRSEC

March 2019

# Global Ambassador Leader

University of Nebraska Lincoln

February 2019 – March 2019

2019 UNL Argentina Friends of Fulbright Program – Office of Global Strategies at UNL.

- Coordinated a group of ten UNL graduate and undergraduate students to facilitate networking opportunities with Argentinian Fulbright students.
- Organized social and cultural events for exchange students, as well as academic seminars for them to get a deeper understanding of graduate school at UNL.

### Student Government Leader and Member of Board of Directors

College of Agricultural Sciences, National University of Córdoba, Argentina

2015 - 2017

- Voting member of the Board, advising on topics such as creation of new degrees, the College dean's election system, teacher's hires and promotions, improvement of student's professional training opportunities, and coordination of student government elections.
- Developed four projects to improve student professional training programs.
- Served as a leader in student governing body, organized weekly meetings, spoke in public debates, assisted in development of the student government's budget, organized academic conferences and trips for students.

### Team Member in the "Latin-American Rally of Innovation" (Hackathon)

College of Exact, Physics and Natural Sciences, National University of Córdoba, Argentina

2016

• Participated as a team member in a 24 hours competition to develop a game for blind children.

# Team Leader in the "Garra XIV" simulation model

Military Aviation School, Córdoba, Argentina

May 2016 – October 2016

• Developed and implemented a simulation model of an international conflict for 50 players, as a part of a leading team composed by undergraduate students of Law School, Journalism, Medical School, Red Cross and members of the Military Aviation School.

# HONORS AND AWARDS

### 2020 Educational Aids Blue Ribbon Award

American Society of Agricultural and Biological Engineers

2020

• Recognition for Agustin Olivo, Amy M. Schmidt, Richard Koelsch and Jennifer Keshwani for producing an exceptional educational aid, titled "What is going on under our feet? Soil Biology Inspection Guide for Students".

# 2019-2020 Outstanding Graduate Research & Creative Activities Award

University of Nebraska - Lincoln

2020

# 2020 Student Luminary Award

University of Nebraska - Lincoln

2020

• Recognition for students because of their "extraordinary leadership, service and academic excellence as well as a sincere and dedicated commitment to ensure everyone feels like a valuable member of the campus community."

### **Inspire Award**

Biological Systems Engineering Department, University of Nebraska - Lincoln

2019

• Recognition of students in the department whose service, effort and determination have been an inspiration to others.

### **Fulbright Student Program**

Academic program at University of Nebraska-Lincoln, Nebraska, USA

January 2017 – February 2017

- Selected among undergraduate students from universities in Argentina according to academic performance in college, previous distinctions, research, extension and teaching experience, as well as institutional involvement in and out of campus.
- Courses taken at UNL: Leadership, Social Change, Agriculture and Innovation Seminars.

# **Argentine Flag Bearer**

College of Agricultural Sciences, National University of Córdoba, Argentina

2016 - 2017

 Award in recognition for the highest GPA among all fifth year students enrolled in all the undergraduate programs in the college.

# **Argentine Flag Escort**

College of Agricultural Sciences, National University of Córdoba, Argentina

2015 - 2016

 Award in recognition for the highest GPA among all fourth year students enrolled in all the undergraduate programs in the college.

# **Recognition of Academic Merit**

College of Agricultural Sciences, National University of Córdoba, Argentina

2016

• Award given to ten outstanding members in the college's history.

# **SKILLS**

### Languages

Spanish: Native speaker

English: Fluent

- TOEFL Exam. Total score: 106 / 120 (Reading: 30/30; Listening: 27/30; Speaking: 26/30; Writing: 23/30) (December, 2017).
- Preliminary English Test (P.E.T.) Cambridge exam (ESOL Examinations). Grade: Pass with merit (November, 2011).
- Key English Test (K.E.T.) Cambridge exam (ESOL Examinations). Grade: Pass with merit (November, 2010). *Portuguese:* Conversational Proficiency.

French: Beginner Proficiency.

# **Software Management**

Experience with R, SAS, ModFlow and Sigma Plot.

# PROFESSIONAL MEMBERSHIPS

• Member of the American Society of Agricultural and Biological Engineers (ASABE).

May 2019 - Present

# **SCHOLARLY ACTIVITIES**

# **Conference Posters**

- Henning, E.; Olivo, A.; Schmidt, A.; Schott, L. Degradation of co-mingled cedar woodchips and livestock manure and its impact on soil health. 2020 ASABE Annual International Virtual Meeting. July, 2020.
- Olivo, A., Schmidt, A., Koelsch, R., Schott, L., Howard, L., Ingram, T., Lesoing, G., Nygren, A., Saner, R., Timmerman, A., Whitney, T. On-Farm Research and Student Engagement to Assess and Promote Manure and Mulch as Land Treatment Practices in Nebraska. Water for Food Institute Global Conference. Lincoln, NE. April, 2019.
- Olivo, A., Schmidt, A., Koelsch, R., Schott, L., Howard, L., Ingram, T., Lesoing, G., Nygren, A., Saner, R., Timmerman, A., Whitney, T. On-Farm Research and Student Engagement to Assess and Promote Manure and Mulch as Land Treatment Practices in Nebraska. Waste to Worth Conference. Minneapolis, MN. April, 2019.
- González C, Olivo A, Uliana A, Cuggino S, Gamba J, Sebastián y Pérez M, Alba D, Pérez M A. Smart Phones as Pedagogical Tools for Students in the First Year of College. VII Congreso Nacional y VI Congreso Internacional de Enseñanza de las Ciencias Agropecuarias. November, 2018.
- González, C.; Uliana, A.; Olivo, A.; Illa, C.; Kopp, S.; Manera, G.; Bressano, M.; Mondino, M.; Pérez, A. Smart-Phones, new method for formative evaluation in college students. VII Congreso Nacional y VI Congreso Internacional de Enseñanza de las Ciencias Agropecuarias. November, 2018.
- Olivo, A., Illa, C.; Gamba, J.; Sebastián y Pérez, M.; Yadarola, P.; Pérez, M.A. Evaluation of Peanut Varieties With Different Growing Pattern, Planted in the Central-North Region of Cordoba, Argentina. 33° Jornada Nacional de Maní. October, 2018.
- Pelissero, J.P.; **Olivo, A.** Evaluation of Environmental Management in a Group of Dairy Farms in the Southeast Region of the Province of Córdoba, Argentina. VII Jornadas Integradas de Investigación, Extensión y Enseñanza de las Ciencias Agropecuarias en la FCA. November, 2017.
- Olivo, A.; Pelissero, J.P. "Evaluation of Technical and Economic Feasibility of the Agronomic Reuse of Manure, in an Average Dairy Farm in the Province of Córdoba, Argentina". VII Jornadas Integradas de Investigación, Extensión y Enseñanza de las Ciencias Agropecuarias en la FCA. November, 2017.
- Olivo, A.; Pelissero, J.P. Software Tool for Environmental Management in Dairy Farms: EcoTambo. "Vincular Córdoba", congress of public private articulation for the innovation. Córdoba. October, 2017
- Illa, C.; Olivo, A.; Tolosa, M.; Kopp, S.; Pérez, M.A. Germination of Peanut Seeds Treated With Polymers: Evaluation of Water Absorption in Two Water Conditions. VII Jornadas Integradas de Investigación, Extensión y Enseñanza de las Ciencias Agropecuarias en la FCA. November, 2017.
- Illa C.; Sebastián y Pérez, M.; Olivo, A.; Cuggino, S.; Gamba, J.; Bonzano, L.; Pérez, M.A. Effect of the Application of Professional Treatments of Fungicides, Polymers, Inoculants and *bacillus subtilis* Applied in Peanut Seeds, on Field Performance From Emergence to Harvest". VII Jornadas Integradas de Investigación, Extensión y Enseñanza de las Ciencias Agropecuarias en la FCA. November, 2017.
- Meyer Paz, R.; Roldan, Ma. G.; Romero, Ma. G.; Luna, O.; Bocco, R.; Atienza, Ma. B.; Gómez González, Ma. C.;
   Olivo, A.; Maldonado, E.; Gutierrez, T.; Herrera, S.; Juarez, V.; Rasetto, F.; Tiranti, I.; Bonell, L.; Caminos, A.;
   Perovic, N.; Solla E.; Caminos F.; Pessini, G.; Cachero Camara, V. Meat, From Farm to Dish Extension Project. X Jornadas Interdisciplinarias de Estudios Agrarios y Agroindustriales Argentinos y Latinoamericanos. November, 2017.

- Illa, C.; Olivo, A.; Gamba, J.; Sebastián y Pérez, M.; Trossero, D.; Pérez, M.A. Peanut Production in The Central North Region of Córdoba, Argentina: Evaluation of the Effect of Applying Combined Treatments of Fungicide and Inoculant in the Seeds, Versus Applying it in the Groove. 32° Jornada Nacional de Maní. October, 2017.
- Illa, C.; Avanzini, G.; Sebastián y Pérez, M.; **Olivo, A.**; Cuggino, S.; Gamba, J.; Bonzano, L.; Pérez, M.A. Effect of Fungicides, Polymers, Inoculants and *bacillus subtilis* Treatments Applied on Peanut Seeds, Over the Plant's Response in the Field, from Emergency to Harvesting. 31° Jornada Nacional de Maní. October, 2016.
- Olivo, A.; Mohuanna, S.; Dagotto, S.; Llop, A.; Luna, O.; Clemente J. P. "Formador de Formadores" Program for teaching assistants, in the College of Agricultural Sciences, National University of Cordoba. VI Congreso Nacional y V Congreso Internacional de Enseñanza de las Ciencias Agropecuarias. September, 2016.
- Biasutti, C., De la Torre, M. V., Bongianino, N., **Olivo, A**. Evaluation of Corn Hybrids Performance in Late Planting Dates. VI Jornadas Integradas de Investigación y Extensión de la FCA. November, 2015.
- Olivo, A. Evaluation of the Efficiency of Alternative Herbicides in Graminicides and Glyphosate Resistant Sorghum Weed (*sorghun halepense* (L.) Pers.). Top Ciencia 2015. July, 2015.
- Sebastián y Pérez, M.; Illa, C.; Cuggino, S.; Tini, G.; **Olivo, A.**; Martin, M.P.; Pérez, M.A. Evaluation of the Effect of Two Harvest Dates and Stay Time on Swath for Peanut Plants (*arachis hypogaea* L.), on the Quality of the Peanut Grain. 30° Jornada Nacional de Maní. October, 2015.
- Illa, C.; Novo, R.; Koop, S.; Olivo, A.; Montaño González, E.; Pérez, M. A. 2014. Laboratory and Field Evaluation of Different Professional Treatments Applied on Peanut Seeds (*arachis hipogaea* L.)". 29° Jornada Nacional de Maní. October, 2014.
- Sebastián y Pérez, M.; Illa, C.; Ulliarte, A.; Tini, G.; **Olivo, A.**; Pérez, M.A. "Effect of Successive Harvesting Dates for Peanut Plants (*arachis hipogaea* L.), Over the Size, Maturity and Yield of Grains". 29° Jornada Nacional de Maní. October, 2014.

# **Oral Presentations**

- Olivo, A.; Schmidt, A.; Koelsch, R.; Henning, E.; Howard, L.; Ingram, T.; Lesoing, G.; Nygren, A.; Saner, R.; Sivits, S.; Timmerman, A.; Krienke, B.; Whitney, T. On-farm research to assess the use of manure, woody-biomass and coal char as land treatment practices to improve agricultural soil health in Nebraska. 2020 ASABE Annual International Virtual Meeting. July, 2020.
- Oral presentations about research findings in the project "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'", during annual meetings of the Nebraska On-Farm Research Network at 4 locations. February, 2020.
- Oral presentations about the project "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'", including on-farm research and soil health concepts at Johnson-Brock High School. Johnson, NE. November, 2019.
- Oral presentations about the project "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'", including on-farm research and soil health concepts at Ogallala High School. Ogallala, NE. October, 2019.
- Oral presentation about the project "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'", in the 17th Natural Resources Districts Basin Tour. Ord, NE. June, 2019.
- Oral presentation about the project "Transforming Manure and Cedar Mulch from 'Waste' to 'Worth'", in the "South Brule Open House", organized by Nebraska Extension. Brule, NE. August, 2019.
- Olivo, Agustin and Koelsch, Richard. How can animal manure help my soils be healthier and more productive? water.unl.edu/category/animal-manure-management. Lincoln, NE. May, 2019.
- Olivo, Agustin. Radio interview for the "Nebraska Extension Almanac" about the article "How can animal manure help my soils be healthier and more productive?" Lincoln, NE. June, 2019.