

JAEHYUN AHN, PhD, MAB

University of Florida Institute of Food and Agricultural Sciences (UF/IFAS)

Department of Agricultural Education and Communication (AEC)

E-mail: jaehyunahn@ufl.edu | Phone: (979) 985-1658

SUMMARY

I am an assistant professor of artificial intelligence extension at UF/IFAS—AEC. Before joining, I worked as a research scientist at Texas A&M AgriLife Research. With a diverse academic background in agricultural education, economics, and public health, I have fostered transdisciplinary collaboration on projects and programs with the Howard G. Buffett Foundation (HGBF), the US Agency for International Development (USAID), the US Department of Agriculture (USDA), the US Department of Homeland Security (DHS) and the Texas A&M Institute of Data Science (TAMIDS). My work helps exchange inventive methodologies and ideas among academics, practitioners, and policymakers. As a co-principal investigator (co-PI), I secured two grants totaling \$815,000 in 2023.

EDUCATION AND TRAINING

- 2017 – 2021 **PhD**, Department of Agricultural Leadership Education, and Communications (ALEC), Texas A&M University
Dissertation: Agricultural leadership, family-planning communications, and education: Ghana, Liberia, and Senegal in West Africa
- 2017 – 2018 **Graduate Certificate (International Agriculture and Resource Management)**, Texas A&M College of Agriculture and Life Sciences
- 2013 – 2016 **Coursework Completed (PhD in Health Services Research, GPA: 3.65)**, Texas A&M University School of Public Health
- 2009 – 2012 **MAB (Master of Agribusiness)**, Texas A&M University
 - Dr. Jekuk Chang (Dongseo University President) wrote a recommendation letter for the MAB application.
- 2007 – 2009 **English Language Training for Academic Purposes**, English Language Institute at University of Texas at Arlington
 - Completing language training granted official teaching eligibility within the Department of Agricultural Economics at Texas A&M University.
- 2000 – 2007 **BA in Business**, Dongseo University, South Korea
- Spring 2006 **Exchange Student**, Shanghai University, China

APPOINTMENTS

- 2023 – Present **Assistant Professor of Artificial Intelligence Extension**, UF/IFAS—AEC

- 2023 – 2024 **Graduate Committee Faculty**, ALEC, Texas A&M University
- Nominated by Dr. Mathew Baker/Department Head for advising ALEC theses and dissertations.
- 2022 – 2024 **Research Scientist**, ALEC, Texas A&M University
- Collaborating with Dr. Mathew Baker/Department Head in ALEC research, grant proposals, and long-term research plan.
- 2021 – 2022 **Postdoctoral Research Associate**, ALEC, Texas A&M University
- 2021 – 2021 **Program Aide**, ALEC, Texas A&M University
- 2021 – 2022 **Adjunct Professor/Part-Time Faculty**, Agricultural Sciences (Ag Business), Blinn College (*Introduction to Agricultural Economics*)
- 2018 – 2021 **Alternative/Assistant Instructor**, Department of Agricultural Economics, Texas A&M University
- Occasionally substituted for primary instructor (*Food Security, Climate and Conflict, as well as Economics of Foreign Intervention, Conflict and Development*)
 - Administrative and pedagogical support for students and instructors.
- 2015 – 2018 **Graduate Teaching Assistant**
- Graded written assignments.
 - Administrative and pedagogical support for students and instructors.
- 2013 – 2021 **Graduate Research Fellow**, Center on Conflict and Development, Texas A&M University
- Collaborated with Dr. Edwin Price/Center Director in developing and managing partnership for Africa Rice Development with Rural Development Administration of South Korea, Africa Rice Center, and Alliance for a Green Revolution in Africa.
- 2012 – 2013 **Full-Time Research Fellow**, Norman Borlaug Institute for International Agriculture and Development, Texas A&M University

PUBLICATIONS (* Corresponding Author)

Peer-Reviewed Publications

- 2024 Friend, D.B., Boyd, B.L., Park, J., & **Ahn, J.** (In Press). Leadership in agricultural co-operatives: Identifying core competencies for effective governance. *Journal of Co-operative Organization and Management*. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.4330722>
- 2024 Ku, S., Haque, M.A., Jang, M., **Ahn, J.**, Choe, D., Jeon, J., & Park, M. The role of Bifidobacterium in longevity and the future of probiotics. *Food Science and Biotechnology*. <https://doi.org/10.1007/s10068-024-01631-y>
- 2024 Haque, M.A., Nath, N.D., Johnston, T.V., Haruna, S., **Ahn, J.**, Ovissipour, R., & Ku, S., Harnessing biotechnology for penicillin production: Opportunities and environmental considerations. *Science of the Total Environment*, 946, 174236. <https://doi.org/10.1016/j.scitotenv.2024.174236>

- 2023 **Ahn, J.***, Baker, M., & Herbert, B. The behavior of agricultural innovation diffusion: Altmetric evidence. Proceedings of ISSI 2023. *International Society for Scientometrics and Informetrics*, 2, 1–6. <https://doi.org/10.5281/zenodo.8349766>
- 2023 Strong, R., Sprayberry, S., Dooley, K., **Ahn, J.**, Richards, J., Kinsella, J., ... Ettekal, A. Sustaining global food systems with the intervention and adoption of youth digital livestock production curricula to professionally develop agents of change. *Sustainability*, 15(18), 13896. <https://doi.org/10.3390/su151813896>
- 2022 **Ahn, J.***, Briers, G.E., Baker, M.T., Price, E.C., Sohoulade Djebou, D. C., Strong, R., ... & Kibriya, S. Food security and agricultural challenges in west-African rural communities: A machine learning analysis. *International Journal of Food Properties*, 25(1), 827-844. <https://doi.org/10.1080/10942912.2022.2066124>
- 2022 **Ahn, J.***, Briers, G.E., Baker, M.T., Price, E., Strong, R., Piña, M., & Lu, P. Radio communications on family planning: Case of West Africa. *International Journal of Environmental Research and Public Health*, 19(8), 4577. <https://doi.org/10.3390/ijerph19084577>
- 2019 **Ahn, J.***, Briers, G.E., Kibriya, S., & Price, E.C. Case studies of female-headed farms and households in Liberia: A comparative analysis of Grand Bassa, Lofa, and Nimba counties. *The Journal of Agricultural Education and Extension*, 26(1). 19-35. <http://doi.org/10.1080/1389224X.2019.1693407>
- 2017 **Ahn, J.***, Pina, M., Briers, G.E., Kibriya, S.R., Price, E.C., Shinn, G.C., & Sohoulade, D. C. Rural Liberian mothers' helpless 'health' decisions. *Journal of Universality of Global Education Issues*, 4. <https://ugei-ojs-shsu.tdl.org/ugei/index.php/ugei/article/view/14>
- 2017 Sohoulade Djebou, D., Price, E.C., Kibriya, S., & **Ahn, J.** Comparative analysis of agricultural assets, incomes and food security of rural households in Ghana, Senegal and Liberia. *Agriculture*, 7(5), 38. <https://doi.org/10.3390/agriculture7050038>

Monograph

- 2016 Kibriya, S., Tkach, B., **Ahn, J.**, Valdez Gonzalez, N., Xu, Z., & Zhang, Y. (2016). *The effects of school-related gender-based violence on academic performance: Evidence from Botswana, Ghana, and South Africa*. USAID https://pdf.usaid.gov/pdf_docs/PBAAE489.pdf
- Cited by the United Nations General Assembly (July 30, 2018), United Nations Girls' Education Initiative (UNGEI), United Nations Educational, Scientific and Cultural Organization (UNESCO) (2017), United Nations Special Representative of the Secretary-General on Violence against Children (2016), World Health Organization (WHO) (2016), other non-UN-affiliated agencies and multinational research organizations.
 - **Most widely read ALEC publications (over 3,600 reads) on ResearchGate.**

Papers Under Review

- 2024 **Ahn, J.***, Baker, M., Jamar, P., Strong, R. & Ku, P. Plant-based fermentation: A cultural and nutritional examination across continents. *Food Research International*.
- 2024 Haque, M.A., Rogerson, L., Nath, N.D., Haruna, S., **Ahn, J.**, Johnston, T.V., Lin, C.S.K., Chong, L., Na, L., Jang, M., & Ku, S. Sustainable Management and Valorization of Antibiotic Waste. *Chemical Engineering Journal*.
- 2024 Jamar, P. **Ahn, J.**, Landaverde, R., Kemp, D., Wald, D., Bhatti, S., & Bouchacourt, L. Is wasteful messaging effective? The effect of text-based and image-based emotional appeals on attitudes toward food waste and perceived source credibility. *Environment and Behavior*.
- 2023 **Ahn, J.***, Diaz-Manrique, M., & Wald, D. M. From sea to plate: Moral foundations and their role in consumer perceptions of genetically engineered salmon. *Food and Humanity*. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.4498377>
- **SSRN Top Ten download list for PsychRN: Feeding & Eating Disorders (Topic)**

GRANTS

Under Review

- 2024 US Department of Agriculture (USDA): Hispanic-Serving Institutions Education Grants Program (HIS), "Developing students' analytical and communication competencies for food and agriculture-related MCOs," August 2024 – July 2028, \$1,200,000 (co-PI)
- 2024 Texas Department of Agriculture (TDA): Specialty Crop Multi-State Grant Program, "From Texas fields to global tables: A comprehensive strategy for kimchi innovation and production," September 2024 – September 2027, \$1,000,000 (co-PI)

Funded

- 2023 US Department of Homeland Security (DHS) – Cross-Border Threat Screening and Supply Chain Defense (CBTS), "Systematic mapping of cross-border threats to enhance US agricultural security," August 2023 – August 2025 (with possible extension), approx. \$800,000 (co-PI)
- 2023 Texas A&M Institute of Data Science (TAMIDS) – "Big data analytics and visualization skills in the FANH sciences," August 2023 – August 2025, \$15,000 (co-PI)
- 2012 US Agency for International Development (USAID) Higher Education Solutions Network (HESN), "Foundation of Center on Conflict and Development," December 2012 – May 2021, \$26,000,000 across partnership activities of seven universities including Texas A&M University, The College of William & Mary, University of California, Berkeley, Duke University, Makerere University, Massachusetts Institute of Technology and Michigan State University (founding member and graduate fellow)

PRESENTATIONS

Webinar

- 2023 **Ahn, J.** "Climate change impacts on agriculture and food supply" in Korea Advanced Institute of Science and Technology (KAIST) Webinar, November 10.
- 2023 **Ahn, J.** "Climate change impacts on agriculture and food supply" in Korea Development Institute (KDI) School of Public Policy and Management Webinar, September 25.
- 2018 Kibriya, S., & **Ahn, J.** "Relationship between school violence and student violence in Botswana, Ghana, and South Africa" in Impact of Youth Violence and Bullying on Safe Learning Environments Webinar, July 31, Education in Crisis and Conflict Network (ECCN) of USAID.
<https://www.eccnetwork.net/events/webcast-understanding-negative-impact-peer-violence-and-bullying-safe-learning-environments>
- 2018 **Ahn, J.** "Improving Ghanaian, Liberian, and Senegalese women to be decision makers" in Deep Dive Presentation Webinar, August 13, Higher Education Solutions Network of USAID.
- 2017 **Ahn, J.** "Rice production in the Volta region" in Deep Dive Presentation Webinar, February 13, HESN of USAID.
- 2015 **Ahn, J.** "Improving nutrition and overall quality of life through agricultural cooperation" in Deep Dive Presentation Webinar, November 16, HESN of USAID.

Poster

- 2023 **Ahn, J.,** Baker, M., Parrella, J., Burton, D., & Landaverde, R. "Random Forest algorithms for county-level Supplemental Nutrition Assistance Program (SNAP) classifications," National American Association for Agricultural Education, May 15-18, Raleigh, NC.
- 2022 **Ahn, J.,** Zickafoose, A., Baker, M., Lu, P., Chambers, A., Parrella, J., & Leggette, H. "Agricultural innovations, diffusions and adoptions: 2009-2021," Southern Region American Association for Agricultural Education, February 13-15, New Orleans, LA.
- 2022 **Ahn, J.,** Zickafoose, A., & Baker, M. "Food security of farm households in impoverished west African countries: A case for decision trees?" Southern Region American Association for Agricultural Education, February 13-15, New Orleans, LA.
- 2022 **Ahn, J.,** Zickafoose, A., & Baker, M. "Random Forest algorithm for the identification of factors contributing to food security," Southern Region American Association for Agricultural Education, February 13-15, New Orleans, LA.
- 2022 Lu, P., Zickafoose, A., Parrella, J., Baker, M., Chambers, A., **Ahn, J.,** & Leggette, H. "Synthesis and computation of precise effects: A meta-analytical approach," Southern Region American Association for Agricultural Education, February 13-15, New Orleans, LA.

- 2020 **Ahn, J.**, & Briers, G. "Roles of extension services for Liberia's breadbasket," The Envisioning the Future of Extension Conference, March 4-5, International Food Policy Research Institute, Washington, DC.
- 2019 Briers, G., & **Ahn, J.** "Resilient leadership in agriculture: Roles of Ghanaian females," 35th Annual Conference of the Association for International Agricultural and Extension Education, April 1-4, Port of Spain, Trinidad and Tobago.
- **Awarded 1st Runner-up Poster Presentation – Professional Division**
- 2018 Briers, G., **Ahn, J.**, Strong, R., Piña, M., & Shinn, G. "Urbanization and ruralization: Sustainability issues in west Africa," 34th Annual Conference of the Association for International Agricultural and Extension Education, April 16-20, Merida, Mexico.
- 2017 **Ahn, J.**, Briers, G., Piña, M., & Shinn, G. "Young female decision-makers in Ghana, Senegal and Liberia," 5th Annual International Conference on Sustainable Development, September 18-20, Columbia University, New York City, NY.
- 2010 **Ahn, J.** "The impact of Starlink™ event on the US corn and sorghum market," 20th Annual Conference of the International Agribusiness Management Association, June 19-22, Boston, MA.

Oral

- 2024 **Ahn, J.**, Ettekal, A., Appiah, A., & Baker, M. "Seeds of the past, harvest of the future: Youth involvement in sub-Saharan African agriculture," 40th Annual Conference of the Association for International Agricultural and Extension Education, April 22-25, Orlando, FL.
- 2023 **Ahn, J.**, Baker, M., & Herbert, B. "The behavior of agricultural innovation diffusion: Altmetric evidence," 19th Biennial International Society of Scientometrics and Informetrics Conference, Indiana University, Bloomington, IN.
- 2023 Goebel, D., Briers, G., Cummings, S., Zanolini, B., & **Ahn, J.** "Returns from Texas 4-H and FFA livestock show projects: Perceptions of county extension agents, agricultural science teachers, and livestock exhibitor families," National American Association for Agricultural Education, May 15-18, Raleigh, NC.
- 2020 Briers, G., & **Ahn, J.** "Prediction of food insecurity in Ghana, Liberia and Senegal," 36th Annual Conference of the Association for International Agricultural and Extension Education, April 20-23, St. Petersburg, FL.
- 2018 **Ahn, J.**, Briers, G., & Piña, M. "Young female 'helpless' decision-makers in Ghana, Senegal, and Liberia," 5th Annual Universality of Global Education Issues Conference, March 1-2, Sam Houston State University, Huntsville, TX.
- 2017 **Ahn, J.**, Piña, M., & Briers, G. "Young mothers' helpless 'health' decisions in Liberia," 4th Annual Universality of Global Education Issues Conference, February 23-24, Sam Houston State University, The Woodlands, TX.

Panel Presentations

- 2019 **Ahn, J.**, Baker, M., Davis, T., & Kurten, J. "Sustaining culture while raising consciousness: Four case studies of women and education," Moderated by Dr. Manuel Piña, Jr., 6th Annual Universality of Global Education Issues Conference, February 28-March 1, Sam Houston State University, Huntsville, TX.
- 2018 **Ahn, J.**, Coleman, L., Davis, T., & Kurten, J. "Gender equity and cultural autonomy: Implications for sustainable development," Moderated by Dr. Manuel Piña, Jr., Annual Sustainability and Development Conference, November 9-11, University of Michigan, Ann Arbor, MI.

Community Poster Presentation

- 2016-2017 **Ahn, J.** "Health eating information," Prevention of Diabetes and Dialysis through Education and Resource (POD2ER).
- POD2ER is a unique community project providing type-2 diabetes information and preventive screening in Hidalgo County, TX.

AWARDS, SCHOLARSHIPS AND CERTIFICATE

Employee Award

- 2022 **Dean's one-time merit award**, Texas A&M College of Agriculture and Life Sciences.

Academic Awards

- 2020 **Travel award**, Department of Agricultural Leadership, Education, and Communications, Texas A&M University.
- 2018 **Travel award**, Department of Agricultural Leadership, Education, and Communications, Texas A&M University.
- 2017 **Travel award**, Office of Graduate Studies and Professional Studies, Texas A&M University.
- 2017 **Travel award**, Registration fee and partial stipend covered for the 4th Universality of Global Education Issues Conference, Department of Education, Sam Houston State University, Huntsville, TX.
- 2015 **Travel award**, Registration fee and full stipend covered for the 6th President George H.W. Bush China-US Relations Conference, May 11-13, Houston, TX.
- 2010 **Travel grant**, International Food and Agribusiness Management Association.
Travel scholarship, Graduate Student Association, College Station, TX.

Scholarships

- 2011 **Department scholarship**, Department of Agricultural Economics, Texas A&M University
- 2010 **Industry scholarship**, Novus International, Inc.
- 2009 **Department scholarship**, Department of Agricultural Economics, Texas A&M University

- 2006 **Department full scholarship**, Department of International Trade, Dongseo University
- 2005 **Department full scholarship**, Department of International Trade, Dongseo University

PROFESSIONAL SERVICES

Consultancy

- 2017 Li, Y., Palma, M. A., & Xu, Z. P. (2017). Impacts of playing after school on academic performance: A propensity score matching approach. *Education Economics*, 25(6), 575-589. <https://doi.org/10.1080/09645292.2017.1311301>
- Jaehyun Ahn in Acknowledgement.
- 2012 Agricultural development in Kurdistan, Iraq: Factors in post-conflict recovery (\$50,000 for three months).

Governmental Service

- 2005 Protocol planning and coordination for cabinet-level officials from Australia, New Zealand and China in Busan, South Korea during November 18-19 Asia-Pacific Economic Cooperation (APEC) meetings.

Peer Review Experience

- 2019 – 2023 African Development Review, BMC Nutrition, BMC Public Health, Cogent Business & Management, Food and Humanity, Human Ecology, Journal of Business and Socio-economic Development, Journal of Cleaner Production, MDPI (4 Journals), PLOS Sustainability and Transformation, Qeios, Scientific Reports, Violence against Women, and World Development

PROFESSIONAL AFFILIATIONS

- 2023 – Present Board Member Nominee, International Society for Scientometrics and Informetrics
- 2023 – Present American Psychological Association
- 2022 – Present American Association for Agricultural Education
- 2018 – Present The Association for International Agricultural and Extension Education
- 2015 – 2017 The American Association for the Advancement of Science/Science Program for Excellence in Science. (Nominated by Former Dean Dr. Jay E. Maddock of Texas A&M University School of Public Health.)
- 2010 – 2011 International Food and Agribusiness Management Association

SOFTWARE PROFICIENCY

Stata, R, Python, Pajek, SAS, TIBCO Statistica, VantagePoint, VOSviewer, Simetar (MS Excel Add-In: Simulation & Econometrics to Analyze Risk) | MS Office: Word, Excel, PowerPoint

RESEARCH AND TEACHING INTERESTS

Agricultural Innovation and Diffusion | Artificial Intelligence and Machine Learning in Agriculture | Food and Agricultural Defense/Security | Food Security | Science Communication and Extension

RESEARCH METHODOLOGICAL INTERESTS

Artificial Intelligence (AI) Powered Analytics | Machine Learning | Linguistic Analysis | Social Network Analysis | Survey Designs and Applications | Experimental and Quasi-experimental Research

CURRENT PROJECTS FOR PUBLICATION

Global Agricultural Innovation | Fermented Foods | GM Foods

MEDIA COVERAGE

- April 11, 2024 Featured in Morning Ag Clips | America's #1 Ag News Source "Texas A&M team working with Homeland Security to protect US food supply chain from threats," <https://www.morningagclips.com/texas-am-team-working-with-homeland-security-to-protect-us-food-supply-chain-from-threats>
- April 9, 2024 Featured in AgriLife Today "Texas A&M team working with Homeland Security to protect US food supply chain from threats," Texas A&M University, <https://agriflifelife.tamu.edu/2024/04/09/texas-am-team-working-with-homeland-security-to-protect-us-food-supply-chain-from-threats>
- August 12, 2019 Featured in the video "Graduate programs in the Department of Agricultural Leadership, Education and Communications," Texas A&M University, <https://alec.tamu.edu/2019/10/15/2019graduatesymposium>
- June 23, 2014 "Making progress with international cooperation in agriculture," Arirang TV.
 - Arirang TV is a global English-language TV network based in South Korea. It broadcasts to about 144 million households worldwide through eight satellites. <https://www.youtube.com/watch?v=7auRPS53t5U&list=PLbf-dHbvCRqbpoSqE7Lq9UNpilaoiIo0m>

PERSONAL INFORMATION

Languages Korean (Native), English (Fluent in oral and written communication and presentation skills)

Nationality South Korea

REFERENCES

Dr. Mathew Baker

Professor and Department Head,
Department of Agricultural
Leadership, Education, and
Communications

Former Supervisor

Phone: (979) 845-6944

Mathew.Baker@ag.tamu.edu

Dr. Gary Briers

Professor, Department of
Agricultural Leadership,
Education, and Communications
Senior Scientist, Norman
Borlaug Institute for
International Agriculture

Dissertation Chair

Phone: (979) 862-3000

Gary.Briers@ag.tamu.edu

Dr. Edwin Price

*Howard G. Buffett Endowed
Chair on Conflict and
Development
Professor,* Department of
Agricultural Economics

Former Employer

Phone: (979) 845-3270

Edwin.Price@ag.tamu.edu

Dr. Robert Strong

*Associate Professor, Department
of Agricultural Leadership,
Education, and Communications*

Dissertation Member and Advisor

Phone: (979) 845-1139

robert.strongjr@ag.tamu.edu

Dr. Zhihong Xu

*Associate Professor, Department
of Agricultural Leadership,
Education, and Communications*

Principal Investigator in Grants

Phone: (979) 862-3707

zhihong.xu@ag.tamu.edu
