## Agenda

## AI and Machine Learning SCINet Conference: Current Uses and Potential to Solve Complex Problems in Agriculture George Washington Carver Center GWCC 4-2223 September 19-20, 2019, Beltsville, MD

## **Posters**

| Authors                       | Affiliation                           | Title  |
|-------------------------------|---------------------------------------|--|
| Branstetter, Michael          | USDA ARS PWA Pollinating              | Artificial Intelligence in Native Bee                    |
| Michael.branstetter@usda.gov  | Insects Research Unit (PIRU), Utah    | Identification and Delimitation                          |
|                               | State University, Logan UT            |  |
| Chin, Elizabeth et al.        | USDA ARS Western Human                | Nutrient estimation from 24-hour food                    |
| Elizabeth.Chin@usda.gov       | Nutrition Research Center, Immunity   | recalls using machine learning and                       |
|                               | and Disease Prevention Research,      | database mapping: a case study with                      |
|                               | Davis, CA                             | lactose  |
| Fukagawa, Naomi               | Beltsville Human Nutrition Research   | Li et. al: Grouping of Plant Foods Based                 |
| naomi.fukagawa@usda.gov       | Center, Beltsville, MD                | on Similarities of Micronutrients for                    |
|                               |                                       | Improving Dietary Variety                                |
|                               |                                       | Ahuja et al.: Developing an Ingredient                   |
|                               |                                       | Dataset of Commercially Packaged                         |
|                               |                                       | Retail Foods, Using the USDA Branded                     |
|                               |                                       | Food Products Database, Illustrated                      |
|                               |                                       | with Food Category 'Cookies'                             |
| Haley, Bradd et al.           | Beltsville Agricultural Research      | Antimicrobial Resistance of Salmonella                   |
| bradd.haley@usda.gov          | Center, Environmental Microbial &     | and E. coli from Dairy Animals                           |
|                               | Food Safety Lab, Beltsville, MD       |  |
| Hartman, Glen et al.          | Soybean/maize Germplasm,              | Laboratory for Soybean Disease and                       |
| Glen.hartman@usda.gov         | Pathology, and Genetics Research,     | Pest Research  |
|                               | Urbana, IL                            |  |
| Heilman, Phil et al.          | Southwest Watershed Research          | Machine learning to better understand                    |
| phil.heilman@usda.gov         | Center, Tucson, AZ                    | rangeland vegetation from plot to                        |
|                               |                                       | MLRA scale   |
| Pachepsky, Yakov et al.       | Beltsville Agricultural Research      | AI and ML in the EMFSL research of                       |
| yakov.pachepsky@usda.gov      | Center, Environmental Microbial &     | microbial quality of irrigation waters                   |
| B C d' + 1                    | Food Safety Lab, Beltsville, MD       | MDC D ( 14 C1 D)   |
| Parr, Cynthia et al.          | National Agricultural Library,        | NLP for Data and Article Discovery and                   |
| Cynthia.Parr@usda.gov         | Beltsville, MD                        | ARS Program Portfolio Analysis                           |
| Penning, Bryan et al.         | Corn, Soybean and Wheat Quality       | Roles for Machine Learning to Identify                   |
| bryan.penning@usda.gov        | Research, Wooster, OH                 | Genes in Complex Flour Quality Traits                    |
| Peters, Debra et al.          | Jamada Eva Danga Lag Currer           | of Soft Winter Wheat Greening of North American Deserts: |
| Deb.peters@usda.gov           | Jornada Exp. Range, Las Cruces,<br>NM | Predicting Grass Responses using AI                      |
| Deo.peters(w/usda.gov         | INIVI                                 | Technologies   |
| Sattler, Scott et al.         | Wheat, Sorghum and Forage             | Tailoring monolignol biosynthesis in                     |
| scott.sattler@usda.gov        | Research, Lincoln, NE                 | sorghum (Sorghum bicolor) for                            |
| scon.samer(w,usua.gov         | Research, Lincoln, NE                 | emerging bioenergy and bioproduct                        |
|                               |                                       | applications   |
| Savoy, Heather et al.         | Jornada Exp. Range, Las Cruces,       | The DASH Portal: a gateway to                            |
| Heather.savoy@usda.gov        | NM                                    | simplified access and integration for                    |
| Treatier but of Washington    |                                       | long-term ecological data                                |
| Sohoulande, Clement et al.    | Coastal Plain Soil, Water and Plant   | Multi-Scale Water and Nutrients                          |
| clement.sohoulande@usda.gov   | Conservation Research, Florence, SC   | Modeling for a Sustainable Agriculture                   |
| oroment.sonourande(w,usua.gov | Conservation Research, Florence, SC   | 1410doining for a busialitable Agriculture               |

| Sudduth, Ken et al.        | Cropping Systems and Water       | Adjusting Fertilizer Recommendations    |
|----------------------------|----------------------------------|---|
| Ken.Sudduth@usda.gov       | Quality Research Unit, Columbia, | using Soil Health Measurements          |
|                            | MO                               |   |
| Woodward-Greene, Jennifer  | National Agricultural Library,   | Kiani, et al.: Improving the Search for |
| jennifer.woodward@usda.gov | Beltsville, MD                   | Animal Use Alternatives                 |
| Veum, Kristen et al.       | Cropping Systems and Water       | Proximal soil sensing and sensor data   |
| kristen.veum@usda.gov      | Quality Research, Columbia, MO   | fusion for soil health assessment       |