



The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Eastern Regional Research Center in Wyndmoor, Pennsylvania seeks a POSTDOCTORAL RESEARCH ASSOCIATE, GS-11/12 (\$70,275.00 to \$109,505.00 annually commensurate with experience). The Research Associate will study the applicability of bio-based antimicrobials and natural products to enhance microbial safety of various foods while maintaining product quality and extending shelf-life. Utilizing the antimicrobial property and versatility of our patented bio-based products, the materials after proper modification and formulation will be evaluated to inactivate pathogenic and spoilage microorganisms on food and food contact surface. The materials may be combined with other natural and bio-based materials to achieve synergistic effects. Antimicrobial mechanisms will be elucidated by assessing damages on membrane and DNA, and biomolecular activities in relationship to chemical structure of the bio-based products using various instrumental and molecular tools. This position is funded for two (2) years with a desired start date in July, 2021 or when a suitable candidate is found. The selectee is eligible for the following benefits: Federal Employee Retirement System (FERS), Federal Employee Group Life Insurance program (FEGLI), Federal Employee Health Benefits (FEHB) program, and the Thrift Savings Plan (TSP).

Qualified candidates should have at least 1 year of experience in working with foodborne pathogens in BSL2 labs/food microbiology aseptic techniques; proficiency in statistical software such as SAS; excellent oral and written communication skills; strong interpersonal and teamwork skills – ability to be self-motivated and to work both independently and in a team environment. Candidates with experience/familiarity with chemistry, polymer science and engineering, packaging in addition to microbiology are preferred. A doctoral degree in Microbiology, Food Science, Biological Sciences, Animal Sciences, or relevant field is required for this position. Candidates shall be recent graduates who received a Ph.D. within 4 years of hiring date. The position is open to U.S. citizens and permanent residents who meet the criteria outlined in 8 U.S.C. 1324b(a)(3)(B).

Interested candidates should send their cover letters, resume/CV, and references to Dr. Xuetong Fan via email to [Xuetong.Fan@usda.gov](mailto:Xuetong.Fan@usda.gov). For additional information or questions, Dr. Fan can be reached (215) 836-3785.

*USDA is an Equal Opportunity Employer and Provider*