

Environmental Protection Advisory Committee

Applicant Package - Citizen at Large

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Term 01 Jul 2024 - 30 Jun 2027

Positions Available 3

Number of applicants in this package 1

- Moser, Bettina

Name: Moser, Bettina

Address: 105 SW 41st Street, Gainesville, 32607

Email: BettinaAngela@netscape.net

Board Name: Environmental Protection Advisory Committee

Primary Phone:

352-660-9562

Please list any civic and professional accomplishments/honors, training or experience related to this appointment::

Civic and Professional Accomplishments Related to the Appointment: UNITED STATES PATENT 6,521,454: Baculoviruses, insecticidal compositions, and methods for control of invertebrates. Inventors: J. J. Becnel, T. Fukuda, B. A. Moser, A. Cockburn, S. E. White, A. H. Undeen. INVITED PRESENTATIONS Guest speaker at the "Symposium on Microbial Agents for Vector Control" of the Society of Vector Ecology to lecture on "Viral Pathogens of Culicidae & Other Medically Important Arthropods". Guest speaker at the "Symposium on Microbial Control of Fire Ants" of the Society of Invertebrate Pathology to lecture on "Microsporidian Pathogens of Fire Ants in North & South America". Guest speaker at the "Second Annual Pest Control Symposium" of the Florida Pest Control Association to lecture on "Insect Growth Regulators (IGRs) & Fleas". Guest speaker for the Zoëcon Corporation to lecture on "Cat Flea biology & its Control with Methoprene" at four different training courses for pest control operators. GRANTS Florida Department of Agriculture and Consumer Services (FDACS) grant for "Mosquito Larvicide Target Effects on Mosquitoes and Non-Target Effects on Honey Bees and Mosquito Fish". Recipient of two S. C. Johnson Research and Development Grants to study biocontrol agents of fire ants and agricultural pests. SCHOLARSHIPS AND AWARDS S. Herlong Graduate Assistantship Supplement recipient, awarded by the Institute of Food and Agricultural Sciences, UF, for the duration of the graduate studies. Creighton Memorial Award for Outstanding Students in Urban Entomology. Quadrille Ball Scholarship recipient, awarded by the Germanistic Society of America & the Institute of International Education, New York, NY. Scholarship recipient for one academic year, awarded by the Federation of German-American Clubs. STUDENT PRESENTATION AND POSTER AWARDS Honorable Mention in the student paper competition. Society for Invertebrate Pathology. 1995. Second prize in the student poster competition. Society for Invertebrate Pathology. 1993. Third prize in the student paper competition. Florida Entomological Society. 1990. Second prize in the student paper competition. Florida Entomological Society. 1988. Training or Experience Related to the Appointment: EUROFINS AGROSCIENCE SERVICES: Study director for EPA-required pesticide toxicity assays on beneficial insects such as pollinators (honey bees and bumble bees) and predatory biocontrol agents (green lacewings, two-spotted lady beetles and mealybug destroyers). US ARMY & ABC RESEARCH: Managed accredited water microbiology laboratory (ISO; NELAC) incl. analyses of potable&non-potable water. Advised clients on water testing results®ulatory compliance. Full management responsibility for hazardous materials/hazardous waste (HM/HW) storage&disposal to ensure environmental compliance. Increased safe storage capabilities of HM/HW & reduced amount of HM on site. CH2M HILL. US Air Force Europe (USAFE) contracts to provide services for environmental compliance and conservation at Bases in Europe. HW Site Inspections, HM Reduction&Prevention Studies, Compliance Site Inventory Studies, Integrated Natural Resources Management Plan Studies & Environmental Baseline Surveys for USAFE bases in Germany/Italy/UK. UNITED STATES DEPARTMENT OF AGRICULTURE (USDA). Specialized in biological pest control & invertebrate pathology to reduce use of chemicals harmful to environmental and public health. Focused on mosquito-pathogenic viruses as biocontrol agents for mosquitoes which transmit St. Louis encephalitis/West Nile virus/avian malaria. Co-discovered method for in vivo transmission of a virus. Discovery was pivotal for development of mass-production methods for this virus. Scientists could generate enough virus for subsequent biological control studies ONLY when mass production became available. Also researched effects of insecticides used for mosquito control on non-target honey bees. DEPARTMENT OF ENTOMOLOGY, UF. Specialized in biological pest control & invertebrate pathology to use microbes as biocontrol agents for pest insects. Focused on microsporidia lethal to red imported fire ants (RIFA). My data were necessary for subsequent release of these microsporidia into the environment as a self-sustaining biological control agent of RIFA. The microsporidia now occur throughout Southern US, effectively reducing RIFA. Researched fungi as biopesticides for agricultural pests & control of cat fleas with insect growth regulators as safe alternatives to broad-spectrum chemical insecticides.

VOLUNTEER FOR ENVIRONMENTAL ORGANIZATIONS including Santa Fe Audubon Society & Alachua County Env. Protection Dept.

Please list any current/previous Advisory Board appointments:

EPAC

What Contributions do you feel you could make if you were selected to this board?:

PASSION | DEDICATION | THOROUGHNESS | SKILLFULNESS | CREATIVE THINKING | PROBLEM-SOLVING | READY TO TACKLE NEW CHALLENGES | TEAM-WORKING | PERSEVERANCE. I would be a reliable and talented member of EPAC, and I stand ready to serve. I like to think big, and I want to be part of bringing E. O. Wilson's vision of Half-Earth to life in Alachua County while integrating environmental and economic needs in a win-win situation for all. I offer to the Board: (1) PASSION FOR AND DEDICATION TO ENVIRONMENTAL PROTECTION. I have long-standing interests in Biology and Conservation and 40+ years of professional and volunteer experiences in environmental protection and outreach and education efforts. (2) KNOWLEDGE, SKILLS AND EXPERTISE acquired through environmental and public health positions in corporate, military, government, and academic settings to (a) identify areas of environmental concern in Alachua County and to (b) develop strategies & solutions for preventing, stopping and reversing negative environmental impacts; and to (c) develop and prepare outreach and educational events to inform about/discuss environmental challenges facing Alachua County.

Please Agree with the following statements:

I understand this application is the property of Alachua County and subject to public records laws. I hereby certify that the statements made on this application are true and correct. I understand that Appointees to advisory board/committees are required to attend scheduled meetings as specified in the "Guidelines for Citizen Advisory Boards and Committees". I understand that some boards and committees require Financial Disclosure (Chapter 112, Florida Statutes) and I am willing to file if required. I affirm that my personal and business (if applicable) affairs within Alachua County are in substantial compliance with all county regulatory and taxing authorities rules and regulations?:

Yes

Note: This question is for the Gainesville-Alachua County Airport Authority Board

Do you currently hold any publicly elected office in the State of Florida?:

No

Employer :

Eurofins Agrosience Services

Occupation:

Staff Scientist and Study Director

Are you currently serving, or have you ever served, on an Alachua County advisory board? :

Yes

If yes, please list board(s):

EPAC

Time of Submission: 05/19/24 11:08:40 PM

Attachments

- Bettina_Moser_Resume_EPAC_2024_Short.pdf

BETTINA A. MOSER, PH.D.

105 SW 41st Street; Gainesville FL 32607

☎ 1-352-660-9562; Bettinaangela@netscape.net

EDUCATION

Ph.D. Entomology and Microbiology. University of Florida, Gainesville, FL.

M.S. Entomology. University of Florida, Gainesville, FL.

B.S. Biology, Minor in Persian. Freie Universität Berlin, Berlin, Germany.

SKILLS SUMMARY

I am a biologist, entomologist, microbiologist and biotechnology professional with 20+ years of international experience in research, corporate, academic and U.S. military settings and highly integrative technical, regulatory and managerial skills. This diverse background has prepared me to excel in many interdisciplinary areas of the life sciences, and my expertise encompasses the development and implementation of methods and programs across different industries (environment, food, healthcare) to advance environmental and public health. My knowledge, skills, and expertise include:

- GLP- and non-GLP EPA-mandated pesticide toxicity assays on beneficial insects such as pollinators and predatory insects used as biocontrol agents.
- Biological control of agricultural and public health insect pests.
- Microbial analysis of potable and non-potable water.
- Hazardous waste and hazardous materials storage and disposal.
- Accreditation and regulatory compliance (EPA, FDA, NELAC, ISO).
- Excellent writing and communication skills for interactions with professionals and the public.
- Outreach and education.

EMPLOYMENT HISTORY

Staff Scientist and Study Director.

Eurofins Agrosience Services, Alachua, FL.

2021 - present

Research Associate.

Department of Entomology and Nematology. University of Florida, Gainesville, FL.

2019-2000

Personal Caretaker.

Family emergency.

2016-2019

Senior Instructor.

Center of Excellence for Regenerative Health Biotechnology (CERHB), University of Florida, Gainesville, FL.

2013 - 2016

Water Laboratory Manager & Extraneous Matter Expert.

ABC Research Laboratories, Gainesville, FL.

2012 - 2013

Consultant and Principal Scientist.

Banyan Biomarkers, Alachua, FL.

2010 - 2011

Chief of the Food Microbiology Laboratory Division.

United States Army Public Health Command Region Europe (USAPHCR-EUROPE), formerly

2003 - 2011

Veterinary Laboratory Europe (VLE), Landstuhl, Germany.	
Biologist - Project Management. CH2M Hill, Kaiserslautern, Germany.	2001 - 2002
Postdoctoral Research Geneticist. United States Department of Agriculture, Center for Medical, Agricultural, & Veterinary Entomology (USDA, CMAVE), Gainesville, FL.	1996 - 2000
Graduate Research and Teaching Assistant. Department of Entomology and Nematology, University of Florida, Gainesville, FL.	1987 - 1995

TRAINING OR EXPERIENCE RELATED TO THIS APPOINTMENT

UNIVERSITY OF FLORIDA – CENTER OF EXCELLENCE FOR REGENERATIVE HEALTH BIOTECHNOLOGY

- Full management responsibility of the teaching laboratory including day-to-day operations, hazardous materials/hazardous waste storage and disposal, adherence to occupational health and safety regulations, inventory, budget and purchase of supplies and equipment, and equipment maintenance.
- Developed and conducted novel short courses relevant to healthcare biotechnology. Taught 40+ lectures and procedures to hundreds of students of diverse cultural and educational backgrounds including Ph.D. and M.D. professionals, postdoctoral researchers, graduate, undergraduate, and high-school students.
- Provided training to CERHB’s contract manufacturing professionals to ensure regulatory compliance, highest quality Good Manufacturing Procedures and finished products, as well as complete client satisfaction.

ABC RESEARCH

- Developed and implemented regulatory-compliant Standard Operating Procedures for potable and non-potable water testing. Trained technicians in water testing methodologies.
- Advised clients on water testing results and regulatory compliance.
- Managed the National Environmental Laboratory Accreditation Conference (NELAC) accredited water microbiology laboratory including sample analyses, inventory and purchase of supplies and equipment, hazardous materials/hazardous waste storage and disposal, and enforcement of occupational health and safety rules.

BANYAN BIOMARKERS

- Managed Banyan Biomarker’s diagnostic laboratory including sample analyses, inventory and purchase of supplies and equipment, hazardous materials/hazardous waste storage and disposal, and enforcement of occupational health and safety rules.

UNITED STATES ARMY – VETERINARY LABORATORY EUROPE

- Microbiological food and bottled water analyses in support of U.S. military operations in Europe, the Middle East, and Africa.
- Advised clients on food and water testing results and regulatory compliance.
- Full management responsibility for the ISO 17025 accredited food microbiology laboratory including day-to-day operations, inventory, budget and purchase of supplies and equipment, and equipment maintenance.
- Full management responsibility for hazardous materials/hazardous waste (HM/HW) storage and disposal for all three VLE Divisions to ensure environmental compliance. The VLE Divisions were the Food Microbiology, the Food Chemistry, and the Veterinary Pathology Division. Increased safe storage capabilities of HM/HW and reduced amount of HM on site.
- Full management responsibility for occupational health and safety at the Food Microbiology Division.

- Supervised and trained enlisted soldiers to become food microbiology laboratory technicians. Developed and implemented new Standard Operating Procedures and training routines, increasing skills, profitability, and regulatory compliance of technicians.

CH2M HILL

- Hazardous Waste Site Inspections and Hazardous Materials Reduction/Prevention Studies at Ramstein Air Base, Germany.
- Compliance Site Inventory Studies at United States Air Force Europe (USAFE) bases in Germany, Italy, and the UK.
- Integrated Natural Resources Management Plan Studies at USAFE bases in the United Kingdom and Italy.
- Environmental Baseline Surveys at USAFE bases in the United Kingdom and Italy.
- Developed good relationships with clients and increased quality of reports, resulting in new contracts.

UNITED STATES DEPARTMENT OF AGRICULTURE – CENTER FOR MEDICAL, AGRICULTURAL, AND VETERINARY ENTOMOLOGY

- Research on biological control of mosquitoes with viruses.
- Full management responsibility for the molecular laboratory in the Mosquito and Fly Research Unit including daily operations of the laboratory, equipment purchase and maintenance, ordering supplies and maintaining an inventory, hazardous materials/hazardous waste storage and disposal, and enforcement of occupational health and safety rules.

UNIVERSITY OF FLORIDA – DEPARTMENT OF ENTOMOLOGY AND NEMATOLOGY

- Research on biological control of insects with microsporidia and fungi.
- Performed LD₅₀ studies with various broad-spectrum chemical insecticides on pest insects as a measure of mean lethal dose and acute toxicity of the test substances.
- Responsible for safe storage and disposal of pesticides as well as adherence to occupational health and safety standards.

REFERENCES

Upon request.