

Award Category: Graduate Student Award
Annie Rich

Nominator Name: Kris Braman
Nominator Company/Affiliation: University of Georgia
Nominator Title: Professor and Head
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Proposed Category (choose 1) Masters Student

Nominee Name of Individual: Annie Rich
Nominee Affiliation (if applicable): Professor and Head
Nominee Title (if applicable):
Nominee Email: aerich@uga.edu
Nominee Phone: 706-583-8043

Provide a Letter of Nomination from the candidate's department head/chair, faculty advisor, or a faculty member familiar with the student's performance. This letter is no more than two (2) pages in length and should be pasted into this box.

June 26, 2017 Selection Committee International IPM Graduate Student Award Dear Members of the Selection Committee: I am delighted to nominate Ms. Annie Rich for consideration as a recipient for the 2018 International IPM award in the new category of Graduate Student (MS) Awards. Ms. Rich holds a BS in Biology and a BS in Animal Science from the University of Georgia. She is currently pursuing the MS degree in Veterinary Entomology in our Department under the very capable direction of Dr. Nancy Hinkle. She anticipates a May 2018 graduation. I consider her to be one of our most promising students. Let me mention a few specifics: Academic performance in graduate school: Ms. Rich is a very solid student having completed most of her coursework and earning a 3.45/4.00 overall GPA while also serving as a Biology TA, conducting her research and establishing an excellent record in extension and outreach. She is determined to acquire knowledge that will help her achieve her IPM-related goals and to that end will be taking a very rigorous parasitology course next semester not required but that she deems beneficial to her future goals. IPM fieldwork experience: Ms. Rich's fieldwork in Veterinary Entomology has involved several projects with IPM aspects. Her thesis project focus is on malaria mosquito control including use of endectocide treated cattle for mosquito and biting midge control. In this novel project, LongRange eprinomectin, an injectable drug that has been labeled for control of endoparasites and Sarcoptes mites in beef cattle is being tested for efficacy in managing Anopheles quadrimaculatus, the North American malaria mosquito, and Culicoides sonorensis, the biting midge vector of bluetongue virus. She also is involved in a stable fly phenology project, a horn fly control project, and use of standard and alternative methods to manage darkling beetles in poultry houses that can be disease vectors, damage structures and negatively impact poultry production. Annie is in the field constantly. Research, relevance to IPM, and realized or potential impacts to the field of IPM

Implications are for control of these vectors by treatment of animals in disease afflicted regions. Treated cattle in malaria stricken agricultural areas may be utilized as a live barrier to transmission of malaria by these mosquitoes to humans. Treatment of animals affected by bluetongue may reduce populations capable of transmission, providing long-term protection by this eprinomectin formulation. Involvement in IPM delivery to stakeholders The projects mentioned previously have involved coordination with extension agents and producers. They have been supported by the associated commodity groups. Annie regularly reports to and receives input from interested stakeholder groups, including the Mosquito Control Association, the Georgia Pest Control Association and the Cattleman's Association. Extension publication record: Rich, Annie E., Nancy C. Hinkle. "Stable Flies Torment Cattle". Apr. 2016: 64-65. Georgia Cattleman's Association Magazine. Rich, Annie E., Nancy C. Hinkle. 2016. "Beef Cattle". Georgia Pest Management Handbook. Rich, Annie E., Nancy C. Hinkle. "Horn Flies and Herd Health." Apr. 2015: 50-51. Georgia Cattleman's Association Magazine. Rich, Annie E., Nancy C. Hinkle. 2015. "Beef Cattle". Georgia Pest Management Handbook. Research publication record: Annie's MS thesis projects are still ongoing and I have every confidence that she will move the results of her research into refereed journal publications in a very timely way. Teaching assistantship record: Spring 2017 Biology Graduate Lab Assistant (TA) -Teacher of Record Presentation record (posters, oral, papers, and abstracts) Annie has given 13 oral, 4 poster, 6 community and media presentations at local, state, regional and national meetings. Her most recent presentations included: Rich, Annie E., Nancy C. Hinkle, Seth Irish. "Cows or Killers? Eprinomectin and Zooprophyllaxis for Control of Anopheles quadrimaculatus and Culicoides sonorensis." Georgia Entomological Society, Jekyll Island, GA. April 2017. Rich, Annie E., Nancy C. Hinkle, Seth Irish. "Implications of Long Range Eprinomectin Injectable as a Control Measure for Disease Vectoring Dipterans, Anopheles quadrimaculatus and Culicoides sonorensis." Southeastern Branch ESA Meeting, Memphis, TN. March 2017. Rich, Annie E., Nancy C. Hinkle, Seth Irish. "Eprinomectin's Role Fighting Malaria: A Beef Cattle Endectocide and Its Effect on Anopheles Mosquitoes." American Mosquito Control Association Meeting, San Diego, CA. February 2017. Rich, Annie E., Nancy C. Hinkle, Seth Irish. "Zooprophyllaxis in the War on Malaria." Georgia Pest Control Association Meeting, Athens, Georgia, January 12, 2017. Rich, Annie E., Nancy C. Hinkle, Seth Irish. "Zooprophyllaxis and Endectocides: Using Cattle in the War on Malaria." International Congress of Entomology, Orlando, Florida, September 2016. Awards and grants: Annie has earned the following awards and scholarships in 2016/2017: Pi Chi Omega Pest Control Fraternity Research Scholarship, AMCA Industry Shadowing Program and Scholarship, H.O. Lund Outstanding M.S. Student in Outreach & Service, Student Travel Scholarship: Livestock Insect Workers' Conference, Harry Hoogstraal Scholarship: OSU Acarology Program In my assessment as Department Head, Annie Rich has distinguished herself numerous times for her abilities, expertise, enthusiasm, passion for outreach, service to the Department and our discipline, collegiality and leadership. She is completely engaged in development and delivery of IPM related to her subdiscipline. I hope you will also perceive her as a worthy recipient of this award. Sincerely, S. Kristine Braman, Professor and Head

1. How has this nominee demonstrated strong potential of providing leadership in IPM? Please expound on their work through fieldwork, data collection, experimental design, teaching, outreach, or other support for research, extension, and/or education IPM projects. (500 words or less).

Annie Rich regularly assumes the mantle of leadership and service. Examples include: UGA Lund Club Treasurer, Young Scholar Mentor, Great Southland Stampede Rodeo Vendor Chairman, UGA Cattleman's Chapter Food Chairman, Sigma Alpha Professional Agricultural Sorority Historian. As I write this today she is in Savannah at the Livestock Insect Worker Conference that she helped organize with her mentor. I think you might best see her potential if I share her own words: While I like to think of myself as a "mosquito girl", my time as a master's student at the University of Georgia has provided me with the opportunity to work with a diverse number of urban pests. Beginning with my time as an undergraduate student worker, I have identified biting Northern Fowl Mites that may find their way inside homes at the end of nesting seasons, collected and identified common household flies for bacterial assays, and participated in tick and brown recluse spider surveys. During my master's program in medical and veterinary entomology, I again found significant overlap with urban entomology in my research. My thesis is focused on mosquito control, and I have assisted with stable fly phenology studies. I also continued studies on the life history of northern fowl mites in residential and recreational developments. Courses such as integrated pest management and medical entomology have given me a greater appreciation for the importance of IPM and the lives and wellbeing it may cost us if urban and medical entomologists do not continue to further the science of pest control. In addition to my passion for many pest insects "and their destruction" I have developed an intense interest in public outreach and education. I believe that gaining the public's respect is extremely important. Thus, I find that my primary passion is translating our research and knowledge into language the public understands, as well as finding new and effective ways to maintain active communication with the community. With my background in research during my master's, my teaching assistantship experience, and my plentiful public outreach experience, I would like to use my skills to begin closing the rift that seems to lie between the confidence of the public and professional pest control. I have already begun advocating for the profession through talks at many conferences, and talks with students of all ages about backyard mosquito control. Other skills that make me unique and useful to the field of urban entomology are experience with delusory parasitosis patients, who believe that their issues fall under urban pest problems, and my identification skills. I have attended a mosquito identification workshop as well as the OSU acarology program, and took intensive taxonomy and physiology courses that help to insure that I can properly identify pests in field and applied settings. Identification is, after all, the key to a good integrated pest management approach!

2. How has this nominee shown his or her ability to work with others and/or team build for a project using IPM? (500 words or less).

Annie routinely coordinates with members of her lab, her mentor in Entomology and other faculty in related disciplines, county agents, producers, farm crew and others for not only her thesis project but also in facilitating the projects of other students. Her work requires considerable coordination and critical timing for active mosquitos, available treatments and host animals. I watch with envy as Annie manages all those moving parts with grace, fortitude and a perpetually cheery disposition. I believe her unique gifts will serve her well in achieving her goals in translating our research and knowledge into language the public understands, as well as finding new and effective ways to maintain active linkage with the community to improve and elevate stakeholder understanding and appreciation of our science.