

April 21, 2017

Dear California Association of Professional Scientists (CAPS),

We the undersigned are career state scientists working for California Department of Public Health, Vector-Borne Disease Section (VBDS). The mission of VBDS is to lead prevention, environmental surveillance, and epidemiological assessment of vector-borne diseases (infectious agents transmitted to humans from vertebrate and invertebrate animals) in California. Working closely with State and local partners, VBDS Public Health Biologists (PHBs) play a critical role in protecting the public from emerging, and often deadly, vector-borne diseases such as hantavirus, West Nile virus, Lyme disease, tick-borne relapsing fever, plague, Chikungunya, and Zika. PHBs require highly technical knowledge and abilities and routinely expose themselves to health hazards during field and laboratory activities.

We are regularly called upon as technical and subject matter experts to provide consultation and training to local, state, and federal agency personnel on vector-borne disease prevention, surveillance, and control. We are active throughout California in presenting research and surveillance findings to government agencies, at professional meetings, and regularly publish significant findings in peer-reviewed journals (see APPENDIX). Additionally, PHBs conduct highly technical field surveillance, which requires the use of safety suits, positive-pressure respirators, and decontamination practices equivalent to a biological safety level 3 to perform duties in a safe and effective manner. Since many vector-borne disease pathogens, such as plague and tularemia, are categorized as bioterrorism Category A agents, we must have the expertise to safely conduct our work/projects to understand the distribution and determinants of vector-borne disease threats. The specialized skills, analysis of surveillance data, and applied research collaborations, which have statewide scope and policy implications, warrant the inclusion of PHBs into the reclassification of Research Scientist.

We understand that CalHR recently resumed the reclassification project that was originally initiated in 2014, but was subsequently abandoned by CalHR in 2015. In the recent iteration of the Research Scientist classification proposed by CalHR (April 7, 2017), PHBs were not included in the consolidation. This omission is notable and troubling since PHBs conduct work that is comparable to work performed by Research Scientists. PHBs must have a thorough understanding of the complex nature of vector-borne diseases, including a working biological knowledge of a broad spectrum of arthropods, mammals, birds, reptiles, fish, and bacterial and viral pathogens. PHBs develop, initiate, and conduct applied research projects, laboratory projects and other technical evaluations independently and in collaboration with Research Scientists (Microbiological Sciences) and Public Health Microbiologists from state laboratories, federal government scientists, and university academics, among others. We collect and statistically analyze data, and draw conclusions on vector-borne disease organisms and ecological systems. Since our immediate management is comprised of Research Scientists (Epidemiology/Biostatistics), incorporating PHBs into the Research Scientist series would allow for both increased retention (less than a 30% retention rate of PHBs over the last 10 years) and upward mobility within VBDS and within related fields of CDPH.

CalHR needs to amend its offer to CAPS immediately so that PHBs can be properly reclassified into the Research Scientist classification. In 2014 and 2015, CAPS worked with PHBs to adopt language within the Research Scientist classification that would correctly include PHBs. We have the following suggested additions (underlined below) to CalHR's currently proposed Research Scientist (Biological Sciences) discipline to include work that PHBs conduct. Any or all of these additions would be

appropriate for including PHBs in the newly structured Research Scientist classification. "Incumbents conduct, analyze, and draw conclusions from biological research studies, experiments, or investigations of organisms, their environment, and ecological systems to provide diagnostics and identifications of organisms of potential agricultural, zoonotic, or environmental importance in order to safeguard agriculture, public health, and the environment, and to improve understanding of biodiversity, agriculture, disease ecology, and the environment." We respectfully ask that you share this letter and our concerns with the appropriate leadership in Sacramento. Your immediate action can make the essential difference in furthering the scientific impact of work conducted by PHBs at CDPH, and more importantly helping to protect the health of all Californians.

Sincerely,

See signature **page - page 3**.

Public Health Biologists
California Department of Public Health
Vector-Borne Disease Section

Attachments

Signature page - page 3.

APPENDIX: Peer-reviewed publications authored or co-authored by PHBs (in bold) - pages 4-6.

cc: Vicki Kramer, PhD, Chief, Vector-Borne Disease Section, CDPH
Susan Davey, Chief, Labor Relations Section, CDPH HR
Pam Manwiller, Deputy Director of Labor Relations, CalHR

APPENDIX:

Peer-reviewed publications since 2010 authored or co-authored by CAPS-represented PHBs (in bold).

2016

- Billeter SA**, Vissotto de Paiva Diniz pp, Jett LA, Wournell AL, Kjemtrup AM, Padgett KA, **Hardstone-Yoshimizu M**, **Metzger ME**, Barr MC. Detection of Rickettsia Species in Fleas Collected from Cats in Regions Endemic and Nonendemic for Flea-Borne Rickettsioses in California. *Vector-borne and Zoonotic Diseases*. 2016. 16:151.
- Danforth M, Novak M, Petersen J, Mead P, Kingry L, Weinburke M, Buttke D, Hacker G, Tucker J, **Niemela M**, **Jackson B**, Padgett K, **Liebman K**, Vugia D, Kramer V. Investigation of Response to 2 Plague Cases, Yosemite National Park, California, USA, 2015. *Emerging Infectious Diseases*. 2016. 22:2045.
- Feiszli T**, Padgett K, Simpson J, Barker CM, Fang Y, Salas M, Foss L, Messenger S, Kramer V. Surveillance for Mosquito-borne Encephalitis Virus Activity in California, 2015. *Proceedings and Papers of the 84th Annual Conference of the Mosquito and Vector Control Association of California*. 2016. 84:124.
- Osikowicz LM, Billeter SA, Rizzo MF, Rood MP, Freeman AN, Burns JE, Hu R, Juieng P, Loparez V, Kosoy M. Distribution and diversity of *Bartonella washoensis* strains in ground squirrels from California and their potential link to human cases. *Vector-borne and Zoonotic Diseases*. 2016. 16:683.
- Padgett KA, **Bonilla D**, Ereemeeva ME, Glaser C, Lane RS, Cole-Parse C, **Castro MB**, Messenger S, Espinosa A, Hacker J, Kjemtrup A, Ryan B, Scott J, Hu R, **Yoshimizu MH**, Dasch GA, Kramer V. The Eco-epidemiology of Pacific Coast Tick Fever in California. *PLOS Neglected Tropical Diseases*. 2016. 10:1.
- Shender L, **Niemela M**, Conrad P, Goldstein T, Mazet J. Habitat Management to Reduce Human Exposure to *Trypanosoma cruzi* and Western Conenose Bugs (*Triatoma protracta*). *EcoHealth*. 2016. 13:525.

2015

- Feiszli T**, Padgett K, Simpson J, Barker CM, Fang Y, Reisen WK, Salas M, Foss L, Messenger S, Kramer V. Surveillance for Mosquito-borne Encephalitis Virus Activity in California, 2014. *Proceedings and Papers of the 83st Annual Conference of the Mosquito and Vector Control Association of California*. 2015. 83:98.
- Foss L, Padgett K, Reisen WK, Kjemtrup A, **Ogawa J**, Kramer V. West Nile Virus-Related Trends in Avian Mortality in California, USA. 2003-2012. *J Wildl Dis*. 2015; 51 (3):576-588.
- Parse CC, Kramer V, **Yoshimizu MH**, **Metzger M**, Hu R, Padgett K, Vugia DJ. Public Health Response to *Aedes aegypti* and *Ae. albopictus* Mosquitoes Invading California, USA. *Emerging Infectious Diseases*. 2015. 21:1827.
- Salkeld D**, Padgett KA, Jones JH, Antolin MF. A Public Health Perspective on Patterns of Biodiversity and Zoonotic Disease [Letter]. *Proceedings of the National Academy of Sciences*. 2015. 112:146.

2014

- Bonilla D**, Cole-Parse C, Kjemtrup AM, Osikowicz L, Kosoy M. Risk factors for human lice and bartonellosis among the homeless, San Francisco, California, USA. *Emerging Infectious Diseases*. 2014. 20:1645.
- Feiszli T**, Padgett KA, Park B, Barker CM, Fang Y, Reisen WK, Salas M, Shimabukuro K, Foss L, Kramer V. Surveillance for Mosquito-Borne Encephalitis Virus Activity in California, 2013. *Proceedings and Papers of the 82nd Annual Conference of the Mosquito and Vector Control Association of California*. 2014. 82:15.
- Gloria-Soria A, Brown JE, Kramer V, **Hardstone Yoshimizu M**, Powell JR. Origin of the dengue fever mosquito, *Aedes aegypti*, in California. *PLoS Neglected Tropical Diseases*. 2014. 8:e3029.

- Nunez J, Fritz CL, Knust B, Buttke D, Enge B, Novak MG, Kramer V, Osadebe L, Messenger S, Albarifio CG, Stroher U, **Niemela M**, Amman BR, Wong D, Manning CR, Nichol ST, Rollin PE, Xia D, Watt JP, Vugia DJ. Hantavirus infections among overnight visitors to Yosemite National Park, California, USA, 2012. *Emerging Infectious Diseases*. 2014. 20:386.
- Padgett **K**, **Bonilla D**, Kjemtrup **A**, **Vilcins I**, **Yoshimizu M**, Hui L, Sola, M, Quintana M, Kramer V. Large scale spatial risk and comparative prevalence of *Borrelia miyamotoi* and *Borrelia burgdorferi* sensu lato in *Ixodes pacificus*. *PLoS ONE*. 2014. 9:e110853.
- Salkeld DJ**, **Castro MB**, **Bonilla D**, Kjemtrup A, Kramer VL, Lane RS, Padgett KA. Seasonal activity patterns of the western black-legged tick, *Ixodes pacificus*, in relation to onset of human Lyme disease in northwestern California. *Ticks and Tick-borne Diseases*. 2014. 5:790.

2013

- Bonilla DL, Durden LA, Eremeeva ME, Dasch GA. The Biology and Taxonomy of Head and Body Lice - Implications for Louse-Borne Disease Prevention. *PLOS Pathogens*. 2013. 9:e1003724.
- Feiszli T**, Padgett KA, Park B, Eldridge B, Fang Y, Reisen WK, Yen C, Foss L, Kramer V. Surveillance for Mosquito-borne Encephalitis Virus Activity in California, 2012. *Proceedings and Papers of the 81st Annual Conference of the Mosquito and Vector Control Association of California*. 2013. 81:50.
- Hardstone Yoshimizu M**. Insecticide Resistance and Impacts on Successful Mosquito Control. *Proceedings and Papers of the 81st Annual Conference of the Mosquito and Vector Control Association of California*. 2013. 81:74.
- Salkeld DJ**, Padgett KA, Jones JH. A meta-analysis suggesting that the relationship between biodiversity and risk of zoonotic pathogen transmission is idiosyncratic. *Ecology Letters*. 2013. 16:679.
- Zhong D, Lo E, Hu R, **Metzger ME**, Cummings R, Bonizzoni, M, Fujioka, KK, Sorvillo, TE, Kluh S, Healy SP, Fredregill C, Kramer VL, Chen X, Yan G. Genetic Analysis of Invasive *Aedes albopictus* Populations in Los Angeles County, California and Its Potential Public Health Impact. *PLoS One*. 2013. 8:e68586.

2012

- Abramowicz KF, Wekesa JW, Nwadike CN, Zambrano ML, Karpathy SE, Cecil D, **Burns J**, Hu R, Eremeeva ME. *Rickettsia felis* in cat fleas, *Ctenocephalides felis* parasitizing opossums, San Bernardino County, California. *Medical and Veterinary Entomology*. 2012. 26:458.
- Feiszli T, Padgett K, Park B, Eldridge B, Fang Y, Reisen WK, Jean-Yen C, Foss L, Kramer V. Surveillance for Mosquito-borne Encephalitis Virus Activity in California, 2011. *Proceedings and Papers of the 80th Annual Conference of the Mosquito and Vector Control Association of California*. 2012.
- Metzger ME**, Hu R. Asian tiger mosquito (*Aedes albopictus*) symposium: An introduction. *Proceedings and Papers of the 80th Annual Conference of the Mosquito and Vector Control Association of California*. 2012. 80:24.
- Metzger ME**, Hu R. History of *Aedes albopictus* introductions into California. *Proceedings and Papers of the 80th Annual Conference of the Mosquito and Vector Control Association of California*. 2012. 80:25.

2011

- Feiszli T, Padgett K, Park B, Eldridge B, Fang Y, Reisen WK, Jean C, Parker E, Glover J, Kramer V. Surveillance for mosquito-borne encephalitis virus activity in California, 2010. *Proceedings and Papers of the 79th Annual Conference of the Mosquito and Vector Control Association of California*. 2011.
- Harbison JE, Metzger **ME**, Hu R. Seasonal oviposition of *Culex quinquefasciatus* in proprietary belowground stormwater treatment systems in an urban area of southern California. *Journal of Vector Ecology*. 2011. 36:224.

- Harbison JE, Metzger ME, Hu R.** Urban water quality regulations and mosquito control: finding common ground via interagency partnerships. Proceedings of the Northeastern Mosquito Control Association. 2011. 56:11.
- Harbison JE, Metzger ME, Hu R. Design and installation considerations to reduce mosquito production and improve inspection and control procedures in below-ground stormwater treatment systems. Proceedings of the New Jersey Mosquito Control Association. 2011. 98:67.
- Metzger ME, Harbison JE, Hu R. Discovery of vector mosquito (Diptera: Culicidae) in newly installed above-and below-ground stormwater treatment systems in San Diego County, California. Journal of Medical Entomology. 2011. 48:1136-
- Padgett KA, Bonilla DL. Novel exposure sites for nymphal *Ixodes pacificus* within picnic areas. Ticks and Tick-Borne Diseases. 2011. 2:191.
- Pakingan MJ, Kjemtrup A, Koehler J, Kramer V, Bonilla D. Trench fever re-emergence in the "Urban Jungle". Infectious Disease News. 2011. 24:5.
- Wright SA, Tucker JR, Donohue AM, Castro MB, Kelly KL, Novak MG, Macedo PA. Distribution of *Ixodes pacificus* (Acari: Ixodidae) and detection of *Borrelia burgdorferi* in larvae feeding on Oregon Junco. Journal of Medical Entomology. 2011. 48:852.

2010

- Eiszli T, Padgett KA, Husted S, Park B, Eldridge B, Fang Y, Reisen WK, Jean C, Parker E, Glover J, Kramer VL.** Surveillance for Mosquito-borne Encephalitis Virus Activity in California, 2009. Proceedings and Papers of the 78th Annual Conference of the Mosquito and Vector Control Association of California. 2010.
- Ganong SA, Howard T, **Burns JE.** High Altitude West Nile Virus and Mosquito Surveillance in Mammoth Lakes, CA. Proceedings and Papers of the 78th Annual Conference of the Mosquito and Vector Control Association of California. 2010. 78:61.
- Harbison JE, Metzger ME. We Want You to Fight Stormwater Mosquitoes: A Call for Interagency and Interdisciplinary Collaboration. Stormwater. 2010. 11:22.
- Harbison JE, Metzger ME, Neumann CG, Galati O, Hu R, Kramer VL. The Need for Collaboration among Government Agencies to Reduce Mosquito Production in Mandated Stormwater Structures. Journal of the American Mosquito Control Association. 2010. 26:198.
- Harbison JE, Metzger ME, Hu R.** Association between *Culex quinquefasciatus* (Diptera: Culicidae) Oviposition and Structural Features of Belowground Stormwater Treatment Devices. Journal of Medical Entomology. 2010. 47:67.
- Howard T, Novak MG, Kramer VL, **Bronson LR.** Public Health Pesticide Use in California: A Comparative Summary. Journal of the American Mosquito Control Association. 2010. 26:349.
- Ogawa JR, Novak MG.** Western Tree-hole Mosquito. The Current. 2010. Spring:15.
- Shapiro MR, Fritz CL, Tait K, Paddock CD, Nicholson WL, Abramowicz KF, Karpathy SE, Dasch GA, Sumner JW, Adem PV, Scott JJ, Padgett KA, Zaki SR, Eremeeva ME. *Rickettsia* 364D: A Newly Recognized Cause of Eschar-Associated Illness in California. Clinical Infectious Diseases. 2010. 50:541.
- Smith R, Tucker JR, Wilson BA, Iovyer JR. Plague Studies in California: A Review of Long-Term Disease Activity, Flea-Host Relationships and Plague Ecology in the Coniferous Forests of the Southern Cascades and Northern Sierra Nevada Mountains. Journal of Vector Ecology. 2010. 35:1.
- Wekesa JW, Nwadike CN, Hu R, **Burns J, Abramowicz KF, Eremeeva ME.** Flea-borne *Rickettsia* in San Bernardino County, California. Proceedings and Papers of the 78th Annual Conference of the Mosquito and Vector Control Association of California. 2010. 78:120.