Daniel McKewn Jenkins
College of Tropical Agriculture and Human Resources
Plant and Environmental Protection Sciences
FTE Distribution: 30% I; 70% R; 0% E

Education

Degree	University	Major
Bachelors	Cornell University	Agricultural and Biological Engineering
Masters	Cornell University	Agricultural and Biological Engineering
PhD	University of California, Davis	Biological and Agricultural Engineering

Professional Appointments

Title	Employer	Dates Employed
Professor	University of Hawaii	July 2015 - Present
Associate Professor	University of Hawaii	July 2007 – June 2015
Assistant Professor	University of Hawaii	August 2002 – June 2007
Chief Technical Officer	Diagenetix, Inc	2010 - Present

Courses Taught (last 5 years excluding research and thesis credits)

Course Number and Title (credits)

BE 420 / EE 422 / MBBE 420 Sensors and Instrumentation for Biological Systems (3)
PEPS 437 Applied UAS Operations for Agriculture and Environment (3) (as PEPS 491 (1) SP 2024)- new course
BE 437 Biosystems Unit Operations (3) (taught for first time Fall 2022 to fill a deficiency in MBBE instructional resources)
BE 625 / PEPS 625 / MBBE 625 Biological Instrumentation (3)
MBBE 610 Graduate Seminar
PEPS 660 Graduate Seminar

Publications (reverse chronological order, primary mentored students**)**

Books

1. **Jenkins, D. M.** 2001 Manometric sensor to measure urea in milk for improvement of dairy cow nutritional management. Ph.D. Dissertation, University of California, Davis.

Conference Proceedings (published full papers only)

1. * Paryavi, M., K. Weiser, M. Melzer, R. Ghorbani, and **D. M. Jenkins**. 2023. RhinoCam IoT- a Distributed Trap-Surveillance System for Coconut Rhinoceros Beetle Connected to Cellular Network. ASABE Paper 2301349. ASABE International Meeting, Omaha, NE. https://doi.org/10.13031/aim.202301349
2. Rodriguez, R., J. K. Leary, and **D. M. Jenkins**. 2017. Enhancing invasive species control with unmanned aerial systems and herbicide ballistic technology. ASABE Paper #1700668. ASABE Annual International Meeting, Spokane, WA.
3. Diaz, L., **D. M. Jenkins**, Y. Li, T., T. McNealy, and T. R. Tzeng. 2017. Electroflotation of *Escherichia coli* 25922 improves detection rates by Loop-mediated isothermal amplification. ASABE Paper #1701064. ASABE Annual Infternational Meeting, Spokane, WA.
4. Rodriguez, R., **D. M. Jenkins**, J. K. Leary, K. Nolan, and B. Mahnken. 2016. Performance analysis of consumer grade GPS units for dynamic aerial applications. ASABE Paper #2460946. ASABE Annual International Meeting, Orlando, FL.
5. Rodriguez, R., J. K. Leary, **D. M. Jenkins**, and B. Mahnken. 2015. Spatial tracking analysis of operations characterizing performance of target treatment. ASABE Paper #2190119. ASABE Annual International Meeting, New Orleans, LA.
6. **Jenkins, D. M.**, Y. Li, R. Kubota, D. Garmire, and T. McNealy. Nanoparticle assisted biofilm disruption for rapid recovery and detection of bacterial pathogens. 2014. IEEE-NEMS Paper #328. IEEE Nano/ micro Engineered and Molecular Systems Conference, Waikiki, HI.

7. Rodriguez, R., **D. M. Jenkins**, J. Leary, and B. Mahnken. 2014. A custom GPS recording system for improving operational performance of aerially-deployed herbicide ballistic technology. ASABE Paper # 1899605. ASABE Annual International Meeting, Montreal, Canada.

8. Rodriguez, R., **D. M. Jenkins**, J. Leary. 2014. Performance evaluation of a GPS logger system for recording aerial-deployed herbicide ballistic technology operations. IEEE IcIAFS Paper #3346677. IEEE International Conference on Information and Automation for Sustainability, Colombo, Sri Lanka.

9. Kubota, R., N. Y. Kawabata, A. I. Miyamoto, A. M. Alvarez, M. A. Schell, C. Allen, and **D. M. Jenkins**. 2009. Engineering a real-time disposable platform for discrimination of sub-populations of *Ralstonia solanacearum*. ASABE Paper # 097412. ASABE Annual International Meeting, Reno, NV.

10. Teruel, M., A. Bhawuk, J. Reyes-de-Corcuera, and **D. M. Jenkins**. 2007. Modeling an validation of an unusual kinetic phenomenon during the enzymatic hydrolysis of lactose to glucose. ASABE Paper # 073017. ASABE Annual International Meeting, Minneapolis, MN.

11. C. Zhu, W.-W. Su, and **D. M. Jenkins, D. M**. 2007. A simple hybrid circuit for direct determination of fluorescence lifetimes. ASABE Paper # 073062. ASABE Annual International Meeting, Minneapolis, MN.

12. M. Safeeq, A. Fares, and **D. M. Jenkins**. 2006. Temperature dependent scaled voltage to improve the performance of single capacitance sensors. ASAE Paper # 062121. ASAE Annual International Meeting, Portland, OR.

13. **Jenkins, D. M.**, M. Kreuzer, B. Chami, G. Presting, A. Alvarez, and B. Liaw. 2005. Label free electrochemical detection of nucleic acid on a disposable electrode. ASAE Paper # 057029. ASAE Annual International Meeting, Tampa, FL.

14. **Jenkins, D. M.** 2005. Overshoot of chemical equilibrium recorded with a glucose electrode. ASAE Paper # 057023, ASAE Annual International Meeting, Tampa, FL.

15. **Jenkins, D. M.,** C. Zhu, and W.-W. Su. 2005. Comparison of prototype circuits for direct measurement of fluorescence lifetime. ASAE Paper # 053036, ASAE Annual International Meeting, Tampa, FL.

16. Krishnan, A. and **D. M. Jenkins.** 2005. A new psychrometric sensor for soil moisture. ASAE Paper 052181, ASAE Annual International Meeting, Tampa, FL.

17. **Jenkins, D. M.**, G. Cheney, S. Irei, A. Cheung, and W.-W. Su. 2004. Prototype detector for fluorescence lifetime. ASAE Paper # 043111, ASAE Annual International Meeting, Ottawa, Canada.

18. **Jenkins, D. M.** and A. Krishnan. 2004. Surface limitations for gas transport through a silicone film. ASAE Paper # 043052, ASAE Annual International Meeting, Ottawa, Canada.

19. **Jenkins, D. M.** and A. Krishnan. 2003. Improving dynamic performance and specificity in immersible dissolved gas biosensors. ASAE Paper # 037001, ASAE Annual International Meeting, Las Vegas, NV.

20. **Jenkins, D. M.** and M. J. Delwiche. 2001. Manometric sensors for on-line measurement of lactose, glucose, and dissolved gases. ASAE Paper # 013008, ASAE Annual International Meeting, Sacramento, CA.

21. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 2000. Application of an on-line pressure based sensor for milk urea. EurAgEng. Warwick, UK, 2000.

22. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 1999. On-line biosensor for measurement of milk urea in the dairy parlor. ASAE Paper # 993023, ASAE Annual International Meeting, Toronto, Canada.

23. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 1998. Automated biosensor for measurement of milk urea. EurAgEng Paper # 98-B-014, EurAgEng, Oslo, Norway.

Refereed Journal Publications

1. * Paryavi, M., K. Weiser, M. J. Melzer, R. Ghorbani, and **D. M. Jenkins**. 2025. Autonomous Cellular-Networked Surveillance System for Coconut Rhinoceros Beetle. *Computers and Electronics in Agriculture*. 235, 110310. https://doi.org/10.1016/j.compag.2025.110310.

2. * Paryavi, M., K. Weiser, M. J. Melzer, D. Crook, C. Ramadugu, and **D. M. Jenkins**. 2025. Programmable LED Array for Evaluating Artificial Light Sources to Improve Insect Trapping. *Insects*. 16(2). https://doi.org/10.3390/insects16020170.
3. * Montesinos S., G. Tyagi, A. Feng, E. Hampson, A. Adhikari, M. Minaai, L Wong, M. Haubner, S. Dobhal, D. Arizala, S. A. Andreason, D. Mollov, F. Ochoa-Corona, J. P. Bingham, J. Odani, **D. M. Jenkins**, L. M. Ma, J. Fletcher, J. P. Stack, M. Arif. 2024. Genome-guided, field-deployable loop-mediated isothermal amplification (LAMP) assay for specific detection of *Dickeya dadantii*. *Europe PMC.* (under review- preprint at bioRxiv, https://doi.org/10.1101/2024.05.04.592507).
4. * Marabella M., J. Howard, S. Bhandari, S. Do, M. Montoya-Pimolwatana, Y. Dou, S. Dobhal, D. Arizala, S. Montesinos, S. A. Andreason, F. M. Ochoa-Corona, J-P. Bingham, J. Odani, **D. M. Jenkins**, L. Ma, J. Fletcher, J. P. Stack, M. Arif. 2024. Loop-mediated Isothermal Amplification (LAMP) assay for reliable detection of *Xanthomonas axonopodis* pv. vasculorum. *Scientific Reports* (under review- preprint at bioRxiv, https://doi.org/10.1101/2024.02.07.579270).
5. * Rodriguez, R., **D. M. Jenkins**, J. K. Leary, and R. L. Perroy, 2024. A direct geolocation method for aerial imaging surveys of invasive plants. *International Journal of Environmental Science and Technology*. 21, 8375–8390. https://doi.org/10.1007/s13762-024-05579-8
6. * DeLude A., R. Wells, S. Boomla, S-C. Chuang, F. Urena, A. Shipman, N. Rubas, D. L. Kuehu, B. Bickerton, T. Peterson, S. Dobhal, D. Arizala, D. Klair, F. Ochoa-Corona, M. E. Ali, J. Odani, J. P. Bingham, **D. M. Jenkins**, J. Fletcher, J. P. Stack, A. M. Alvarez, M. Arif. 2022. Loop-mediated isothermal amplification (LAMP) assay for specific and rapid detection of *Dickeya fangzhongdai* targeting a unique genomic region. *Scientific Reports*. 12, 19193. https://doi.org/10.1038/s41598-022-22023-4.
7. * Rodriguez, R., J. K. Leary, and **D. M. Jenkins**. 2022. Herbicide Ballistic Technology for Unmanned Aircraft Systems. *Robotics*. 11(1), 22. 10.3390/robotics11010022
8. * Lee, B.-E., T. Kang, **D. M. Jenkins**, Y. Li, M. Wall, and S. Jun. 2021. A single-walled carbon nanotubes-based electrochemical impedance immunosensor for on-site detection of Listeria monocytogenes. *Journal of Food Science*, 87 (1), 280-288. 10.1111/1750-3841.15996
9. * Rodriguez, R., R. L. Perroy, J. K. Leary, **D. M. Jenkins**, M Panoff, T. Mandel, and P. Perez. 2021. Comparing interpretation of high-resolution aerial imagery by humans and Artificial Intelligence to detect an invasive tree species. *Remote Sensing* 13(17):3503. 10.3390/rs13173503
10. * **Jenkins, D.M.**, Watanabe, S., Haff, R.P., Melzer, M.J., Jackson, E., Liang, P.-S., 2021. Dose response of coconut rhinoceros beetle (Coleoptera: Scarabaeidae) to 92 kV x-ray irradiation. J. Appl. Entomol. 145, 1039–1049. https://doi.org/10.1111/jen.12930.
11. * Domingo, R., C. Perez, D. Klair, H. Vu, A. Candelario-Tochiki, X. Wang, A. Camson, J. N. Uy, M. Salameh, D. Arizala, S. Dobhal, G. Boluk, J.-P. Bingham, F. Ochoa-Corona, M. E. Ali, J. P. Stack, J. Fletcher, J. Odani, **D. M. Jenkins**, A. M. Alvarez, and M. Arif, M. 2021. Genome-informed loop-mediated isothermal amplification assay for specific detection of Pectobacterium parmentieri in infected potato tissues and soil. Sci. Rep. 11, 21948. https://doi.org/10.1038/s41598-021-01196-4.
12. * Diaz, L. M., B. E. Johnson, and **D. M. Jenkins**. 2021. Real-time optical analysis of a colorimetric LAMP assay for SARS-CoV-2 in saliva with a handheld instrument improves accuracy compared to endpoint assessment. *Journal of Biomolecular Techniques* Invited manuscript for special September issue on LAMP for SARS-CoV-2. https://doi.org/10.7171/jbt.21-3203-011.
13. * Diaz, L. M., Y. Li, and **D. M. Jenkins**. 2021. Chemical stabilization of *Escherischia coli* 25922 for enhanced recovery with a handheld electroflotation system and detection by loop-mediated isothermal amplification. *PLoS One* 16(1) e0244956. https://doi.org/10.1371/journal.pone.0244956.
14. * McLamore, E. S., E. Alocilja, C. Gomes, S. Gunasekaran, **D. M. Jenkins**, Y. Li, Y. Mao, S. R. Nugen, J. Reyes-de-Corcuera, P. Takhistov, O. Tsyusko, J. P. Cochran, T-R. Tzeng, J-Y. Yoon, C. Yu, and A. Zhou. 2021. Feast of Biosensors: Food, Environment, Agriculture, Science, and Technology for Biosensing in North America. *Biosensors and Bioelectronics* 178:113011. https://doi.org/10.1016/j.bios.2021.113011
15. McLamore, E., S. P. A. Datta, V. Morgan, N. Cavallaro, G. Kiker, **D. M. Jenkins**, Y. Rong, C. Gomes, J. Claussen, D. Vanegas, and E. Alocilja. 2019. SNAPS: Sensor Analytics Point Solutions for detection and decision support systems. *Sensors* 19(22): 4935. 10.3390/s19224935

16. **Jenkins, D. M.**, B. E. Lee, S. Jun, J. Reyes-de-Corcuera, and E. S. McLamore. 2019. ABE-Stat, a fully open-source and versatile wireless potentiostat project including electrochemical impedance spectroscopy. *Journal of the Electrochemical Society* 166(9): B3056-B3065. 10.1149/2.0061909jes

17. Diaz, L., Y. Li, R. Kubota, and **D. M. Jenkins**. 2019. Characterization of a portable, non-instrumented incubator for enrichment of *Escherischia coli* O157:H7 and *Salmonella* serovar Typhimurium and detection by Loop Mediated Isothermal Amplification (LAMP). *Food Protection Trends* 39(1): 40-50.

18. Larrea-Sarmiento, A., U. Dhakal, G. Boluk, L. Fatdal, A. Alvarez, A. Strayer, M. Paret, J. Jones, **D. M. Jenkins**, and M. Arif. 2018. Development of a genome-informed loop mediated isothermal amplification assay for rapid and specific detection of Xanthomonas euvesicatoria. *Scientific Reports* 8:14298. 10.1038/s41598-018-32295-4

19. **Jenkins, D. M.** and R. Kurasaki. 2018. ABE-VIEW: Android interface for wireless data acquisition and control. *Sensors* 18(8): 2647. 10.3390/s18082647

20. Diaz, L., **D. M. Jenkins**, Y. Li, T. McNealy, N. Walter, and R. Kubota. 2018. Electroflotation of *Escherichia coli* improves detection rates by Loop-mediated isothermal amplification. *Transactions of the American Society of Agricultural and Biological Engineers* 61(4): 1209-1220. 10.13031/trans.12510

21. Rodriguez, R., **D. M. Jenkins**, J. K. Leary, K. Nolan, and B. V. Mahnken. 2018. Performance analysis of different grades of handheld GPS units in manned helicopter operations. *IEEE Aerospace and Electronic Systems* 33(10): 14-20. 10.1109/MAES.2018.170125

22. Rodriguez, R., J. K. Leary, **D. M. Jenkins**, and B. V. Mahnken. 2016. Herbicide Ballistic Technology: spatial tracking analysis of operations characterizing performance of target treatment. *Transactions of the ASABE* 59(3): 803-809. 10.13031/trans.59.11474

23. Rodriguez, R., **D. M. Jenkins**, and J. Leary. 2015. Design and validation of a GPS logger system for recording aerially-deployed herbicide ballistic technology operations. *IEEE Sensors* 15(4): 2078-2086. 10.1109/JSEN.2014.2371896

24. Kubota, R. and **D. M. Jenkins**. 2015. Real-time multiplex applications of Loop Mediated AMPlification by Assimilating Probes. *International Journal of Molecular Sciences.* 16(3), 4786-4799. 10.3390/ijms16034786

25. Keremane, M. L., C. Ramadugu, E. Rodriguez, R. Kubota, S. Shibata, D. G. Hall, M. L. Roose, **D. M. Jenkins**, and R. F. Lee. 2015. A rapid field detection system for citrus huanglongbing associated '*Candidatus* Liberibacter asiaticus' from the psyllid vector, *Diaphorina citri* Kuwayama and its implications in disease management. *Crop Protection* 68:41-48. 10.1016/j.cropro.2014.10.026

26. **Jenkins, D. M.**, J. Jones, and R. Kubota. 2014. Evaluation of portable DNA-based technologies for identification of *Ralstonia solanacearum* race 3 biovar 2 in the field. 2014. *Biological Engineering Transactions* 7(2):83-96. 10.13031/bet7.10918

27. Yasuhara-Bell, J. H., R. Kubota, **D. M. Jenkins**, and A. M. Alvarez. 2013. Loop-mediated amplification of the *Clavibacter michiganensis* subsp. *michiganensis* micA gene is highly specific. *Phytopathology*. 103(12):1220-1226. 10.1094/PHYTO-03-13-0078-R

28. Marrero, G., K. L. Schneider, **D. M. Jenkins**, and A. M. Alvarez. 2013. Phylogeny and classification of *Dickeya* based on multilocus sequence analysis. *International Journal of Systematic and Evolutionary Microbiology*. 63(9):3524-3539. 10.1099/ijs.0.046490-0

29. Kubota, R., P. LaBarre, B. H. Weigl, and **D. M. Jenkins**. 2013. Molecular diagnostics in a teacup: non-instrumented nucleic acid amplification (NINA) for rapid, low cost detection of *Salmonella enterica*. *Chinese Science Bulletin*. 58(1):1-7.

30. Jenkins, D. A., P. E. Kendra, N. D. Epsky, W. S. Montgomery, R. R. Heath, **D. M. Jenkins**, and R. Goenaga. 2012. Antennal responses of West Indian and Caribbean fruit flies (*diptera: tephritidae*) to ammonium bicarbonate and putrescine. *Florida Entomologist*. 95(1):28-34. 10.1653/024.095.0106

31. **Jenkins, D. M.**, R. Kubota, J. Dong, Y. Li, and D. Higashiguchi. 2011. Low-cost handheld device for sequence-specific real-time LAMP-based detection of *Salmonella enterica*. *Biosensors and Bioelectronics* 30(1):255-260. 10.1016/j.bios.2011.09.020

32. Kubota, R., P. LaBarre, J. Singleton, A. Beddoe, B. H. Weigl, A. M. Alvarez, and **D. M. Jenkins**. 2011. Non-Instrumented Nucleic Acid Amplification (NINA) for rapid detection of *Ralstonia solanacearum* race 3 biovar 2. *Biological Engineering Transactions*. 4(2):69-80. 10.13031/2013.38508

33. † Kubota, R., A. M. Alvarez, and W.-W. Su, and **D. M. Jenkins**. 2011. FRET-based assimilating probe for sequence specific real-time monitoring of Loop Mediated isothermal AMPlification. *Biological Engineering Transactions*. 4(2):81-100. 10.13031/2013.38509

34. Yang, K., **D. M. Jenkins**, and W.-W. Su. 2011. Rapid concentration of bacteria using submicron magnetic ion exchangers for improving PCR-based multiplex pathogen detection. *Journal of Microbiological Methods*. 86(1):69-77. 10.1016/j.mimet.2011.03.018

35. Kubota, R., M. A. Schell, G. D. Peckham, J. Rue, A. M. Alvarez, C. Allen, and **D. M. Jenkins**. 2011. In silico genomic subtraction guides development of highly accurate, DNA-based diagnostics for *Ralstonia solanacearum* race 3 biovar 2 and blood disease bacterium. *Journal of General Plant Pathology*. 77(3):182-193. 10.1007/s10327-011-0305-2

36. Paret M. L., R. Kubota, **D. M. Jenkins**, and A. M. Alvarez. 2010. Survival of *Ralstonia solanacearum* race 4 in drainage water and soil, and detection with immunodiagnostic and DNA-based assays. *HortTechnology*. 20(3):539-548. 10.21273/HORTTECH.20.3.539

37. **Jenkins D. M.**, Song, C., S. Fares, H. Cheng, and D. Barrettino. 2009. Disposable thermostated electrode for temperature dependent electrochemical measurements. *Sensors and Actuators, B- Chemical*. 137(1):222-229. 10.1016/j.snb.2008.09.046

38. Kutin, R., A. Alvarez, and **D. M. Jenkins**. 2009. Detection of *Ralstonia solanacearum* in natural substrates using phage amplification integrated with real-time PCR assay. *Journal of Microbiological Methods*. 76(3):241-246. 10.1016/j.mimet.2008.11.008

39. Teruel, M. J., **D. M. Jenkins**, and J. I. Reyes de Corcuera. 2009. Crystallization of β-D-glucose and analysis with a simple glucose biosensor. *Journal of Chemical Education*. 86(8):959-961. 10.1021/ed086p959

40. Fares, A., M. Safeeq, and **D. M. Jenkins**. 2009. Adjusting temperature and salinity effects on single capacitance sensors. *Pedosphere*. 19(5):588-596. 10.1016/S1002-0160(09)60153-3

41. **Jenkins, D. M.**, M. J. Teruel, J. I. Reyes de Corcuera, and O. Young. 2008. Simultaneous determination of hydrolysis and mutarotation rates during the enzymatic hydrolysis of lactose. *Journal of Agricultural and Food Chemistry*. 56(18):8303-8308. https://doi.org/10.1021/jf801403n

42. Kutin, K., **D. M. Jenkins**, & D. Borthakur. 2008. Characterization of a *Corynebacterium* strain that can grow in medium containing up to 2 M nitrate. *Bioremediation Journal*. 12(3):168-172. https://doi.org/10.1080/10889860802262172

43. Kubota, R., **D. M. Jenkins**, B. Vine, and A. Alvarez. 2008. Detection of *Ralstonia solanacearum* by Loop-mediated isothermal AMPlification method (LAMP). *Phytopathology* 98(9):1045-1051. 10.1094/PHYTO-98-9-1045

44. **Jenkins, D. M.**, C. Zhu, and W. Su. 2008. A simple hybrid circuit for direct detection of fluorescence lifetimes. *Applied Engineering in Agriculture*. 24(2):259-263. 10.13031/2013.24257

45. D. A. Jenkins, E. Diaz, R. Goenaga, and **D. M. Jenkins**. 2008. Solar sterilization of abscised fruit: a cultural practice to reduce infestations of *Anastrepha* spp. around orchards. *The Journal of Agriculture of the University of Puerto Rico*. 92:197-206. 10.46429/jaupr.v92i3-4.2636

46. Fares, A., H. Hamdhani, and **D. M. Jenkins**. 2007. Temperature Dependent Scaled Frequency to Improve the Accuracy of Multisensor Capacitance Probes. *Soil Science Society of America Journal*. 71(3):894-900. 10.2136/sssaj2006.0420

47. **Jenkins, D. M.**, B. Chami, M. Kreuzer, G. Presting, A. Alvarez, and B. Y. Liaw. 2006. Hybridization probe for femtomolar quantification of selected nucleic acids on a disposable electrode. *Analytical Chemistry*. 78(7):2314-2318. 10.1021/ac051619s

48. **Jenkins, D. M.** 2004. Desorption as a rate limiting step for gas permeation through a polymer membrane. *Journal of Physical Chemistry, B*. 108(50):19,325-19,329. https://doi.org/10.1021/jp0477553

49. **Jenkins, D. M.** & D. A. Jenkins. 2003. Digital detector array for the study of non-specifically tagged bees and wasps. *Biosystems Engineering*. 86(3):295-303. 10.1016/j.biosystemseng.2003.08.006

† select paper award

50. **Jenkins, D. M.** & M. J. Delwiche. 2003. An immersible manometric sensor for measurement of humidity and enzyme mediated changes in dissolved gas. *Biosensors & Bioelectronics*. 18(9):1085-1093. 10.1016/S0956-5663(02)00141-0

51. **Jenkins, D. M.** & M. J. Delwiche. 2003. Adaptation of a manometric biosensor to measure glucose and lactose. *Biosensors & Bioelectronics.* 18(1):101-107. 10.1016/S0956-5663(02)00140-9

52. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 2002. Factors affecting the application of on-line milk urea sensing. *Transactions of the ASAE*. 45(5):1687-1695. 10.13031/2013.11031

53. **Jenkins, D. M.**, M. J. Delwiche and R. W. Claycomb. 2002. Electrically controlled sampler for milk component sensors. *Applied Engineering in Agriculture*. 18(3):373-378. 10.13031/2013.8588

54. **Jenkins, D. M.** & M. J. Delwiche. 2002. Manometric biosensor for on-line measurement of milk urea. *Biosensors & Bioelectronics*. 17(6-7):557-563. 10.1016/S0956-5663(02)00018-0

55. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 2000. Refinement of the pressure assay for milk urea nitrogen. *Journal of Dairy Science*. 83(9):2042-2048. 10.3168/jds.S0022-0302(00)75085-5

56. **Jenkins, D. M.**, M. J. Delwiche, E. J. DePeters, and R. H. BonDurant. 1999. Chemical assay of urea for automated sensing in milk. *Journal of Dairy Science*. 82(9):1999-2004. 10.3168/jds.S0022-0302(99)75436-6

Extension Publications

1. Rodriguez, R., J. K. Leary, and **D. M. Jenkins**. 2018. Supplement to CTAHR Aerial Pesticide Application for Unmanned Aerial System, Multirotor. CTAHR Extension Publications.

Creative Works (i.e., Extension Videos, Websites, Blogs, Creative Designs and Exhibitions, etc.)

Published apps (Note all published apps removed by Google in 2023 and 2024 for not having updates targeting latest AndroidOS versions)

1. *ABE-Stat*. https://play.google.com/store/apps/details?id=com.diagenetix.abestat&hl=en_US

This app was developed to interface wirelessly with a custom designed palm-sized "potentiostat" for making electrochemical measurements. The project was intended to support collaborators on USDA projects developing advanced electrochemistry based biological and chemical sensors for field use. Further details about this app (including links to open-source code, and open-source design files for the associated instrument) are available in an open access research article http://jes.ecsdl.org/content/166/9/B3056.full

2. *ABE-VIEW*. https://play.google.com/store/apps/details?id=com.uhmbe.DAQCTRL&hl=en_US

This app was originally developed to provide a generic wireless interface to student hardware projects in the Biological Engineering program at UH. Eventually in the spirit of the open source movement to support other cash-strapped programs, the app was made freely available on Google Play. Further details about this app (including links to open-source code, and open-source design files for the associated instrument) are also available in an open access research article https://www.mdpi.com/1424-8220/18/8/2647/htm

3. *HBT-TS*. https://play.google.com/store/apps/details?id=com.gps.hbt&hl=en_US

This app was developed to record operational data for "Herbicide Ballistic Technology" missions where herbicide is applied to invasive plants in remote landscapes of Hawaii from a helicopter (the app interfaces wirelessly to a small instrumented mounted on a paintball marker, that records the time, origin, and trajectory of every herbicide-containing capsule) This (free) app and associated hardware has been institutionalized in operations of the Hawaii Invasive Species Committees (HISC), which supported the development.

4. *GPS_Field_Tags*. https://play.google.com/store/apps/details?id=com.diagenetix.gpsfieldtags&hl=en_US

This app was adapted from features of other apps (largely HBT-TS above and BioRanger below) to allow users to record tracks, and drop marks and record pictures of features / locations of interest in the terrain. It was

developed largely for personal use, and made freely available on Google Play as a possible public service to those working in conservation and other outdoor industries.

Unpublished Apps

5. *BioRanger*. This app is made to interface with the core technology sold by Diagenetix- the "BioRanger" instrument that can conduct quantitative fluorescence based isothermal assays of specific nucleic acid (DNA or RNA) sequences (i.e. for detection of specific pathogens or other organisms). This app is freely distributed by Diagenetix with the BioRanger instrument that users must buy from Diagenetix.
6. *Spray-Ball-TS*. This app is very similar to HBT-TS described above, but designed to record information including swath widths of herbicides sprayed from a spray boom instead of discrete projectiles from a paintball marker. This app again is highly specialized, was developed with support from HISC.
7. *Geiger-BT*. This app was developed to interface with a homemade Geiger counter, to monitor / record X-Ray exposure during experiments at UH related to characterizing effects of x-rays for control of invasive beetles (through use of a shielded field irradiator, or for sterile insect technique). The app was also used to attempt to calibrate the dose rate of in an x-ray imaging cabinet as a function of distance from source (and to measure beam attenuation in organic nesting materials), but this was unsuccessful due to limitations in the latency of the Geiger tube.
8. *Trap_Light_Interface*. This app was developed to facilitate programming of custom designed lighting circuits by non-engineer collaborators at other Universities. The miniature (rechargeable) battery operated lights are designed to be incorporated into customized insect traps, to investigate lighting preferences for improving trap efficacy. The app can control any of six unique LED lights (UV, blue, green, yellow, amber, or red), alone or in combination, to illuminate at different periods of night or day in relation to system measured sunset and sunrise times, with different intensities and or modulation (i.e. pulsing or sinusoidal variation in intensity). Again, this app is highly specialized, requires a custom circuit, and was written for research funded by USDA through the University of Hawaii, and was / is made freely available to collaborators).
9. *Flotation_Interface*. This app was developed exclusively for research use on a research project. It interfaces to a custom designed handheld cartridge, and controls the electrical characteristics and duration of current applied through sets of electrode arrays designed to generate microbubbles by electrolysis and capture and eject concentrated bacteria from disperse suspensions into an eluent (so that the bacteria can be more easily detected / enumerated).
10. *PRG_Incubator*. Several versions of this app have been developed, to support research needs at the University of Hawaii. One provides a graphical interface to control and record temperatures in incubators that could easily be improvised in the field with items from a typical grocery or drug store (to help enrich bacterial contaminants on food and water to facilitate detection / enumeration), another overrides controls on a commercial incubator and enable dynamic (variable over time following desired profiles) temperature control (including recording of actual temperatures to ensure quality control). Each implementation was highly specific to unique needs for research program(s).

Custom Hardware / Instrumentation (In Use Outside of PIs Lab)

11. *BioRanger*^{TM}: Handheld instrument for real-time / quantitative isothermal nucleic acid based amplification.
12. *ABE-Stat*: Palm sized high performance open-source potentiostat for versatile electrochemical measurements.
13. *Trap Light Mini*: Miniature field deployable multicolor LED array for testing insect lighting preferences for effective trapping (6 colored LEDs can individually be programmed to illuminate in several diurnal patterns based on observed daylight durations, with ability to modulate in different ways and with different frequencies).
14. *HBT-TS*: Miniature instrument to dynamically record and display origin and trajectory of projectiles with herbicide, deployed from aircraft systems to control incipient invasive plants in remote landscapes.
15. *Electroflotation Cartridge*: Handheld cartridge to enable electroflotation based concentration and recovery of pathogenic microorganisms from environmental water samples.
16. *Bee pheromone sprayer*: Field deployed device to automatically actuate a small pump for volatile bee alarm pheromones to deter wild elephants from human populated / cultivated areas.
17. *Wireless electronic control system for dynamically controlled nozzle*: (details proprietary).
18. *CRB-Cam*- autonomous surveillance system for remote monitoring of CRB traps.

Patent Filings

19. Sensor for components of a fluid (US Patent No. 6,287,851, awarded September 2001).

20. Sensor for analyzing components of fluids (US Patent No. 6,733,984, awarded 2004).

21. Disposable Electrode for Detection of Selected Nucleic Acid Sequences (disclosure, September 2005; utility patent filed September 2006).
22. A simple, rapid, and inexpensive circuit for direct measurement of luminescent lifetimes (disclosure, October 2006).
23. Automatic flush trigger for toilet-trained cats (utility patent filed January 2010).
24. Real-time isothermal sequence specific detection of DNA with non-contact temperature controller (disclosed January 2010 - Utility patent filed June 2011/ PCT/US2011/041540).
25. Sequence specific real-time monitoring of Loop Mediated Isothermal Amplification (LAMP). Disclosed June 2010. US application US61/357,428, international patents pending application WO2011163425A1)
26. Real-time microalgae harvesting efficiency monitoring system (disclosed September 2013).
27. Integrated global position system logging system for electro-pneumatic delivery applications (utility patent filed May 2014).
28. Hardware and mobile software for operation of portable instruments for nucleic acid amplification (2019, US Patent 10,203,284).
29. Method of detecting amplified nucleic acid molecules (2020, US Patent 10,830,702)
30. Point-of-care electroflotation of dispersed, low tolerance pathogens (disclosed July 2018; utility patent application filed July 2019 206339-0007-00WO; US Patent App. 17/259,647 2021).
31. Diagnostic card for automated sample handling in multiplexed molecular assays (disclosed May 2023; utility patent application 63/501,573)

Leadership Roles (Committees, Boards, Advisory, etc.)

- CTAHR Faculty Senate Executive Committee, 2022 – 2024 (Vice Chair 2022/2023; Chair 2023/2024)
- Search Committee, 2023 (Bioprocess Engineer / MBBE)
- Department Personnel Committee, PEPS, 2023, 2024
- UH Manoa Tenure and Promotion Review Committee Convener, 2022/2023
- MBBE Department Personnel Committee: 2021-2022
- Search Committee, 2 BE faculty positions, MBBE, 2020 (service / positions canceled)
- UH Manoa Tenure and Promotion Review Committee Chair, 2019
- CTAHR Faculty Senate (Personnel Committee), 2019 – 2021
- ASABE Information Technology, Sensors, and Control Systems (ITSC) Community Chair, 2020
- ASABE Information Technology, Sensors, and Control Systems (ITSC) Programming Chair, 2019 Annual International Meeting
- Multistate / NIMMS Project NC-1194 (Nanotechnology and Biosensors) rotating secretary / vice chair / chair, 2018 – 2021; 2010 – 2013
- ASABE Biosensors Committee Officer (rotating secretary / vice chair / chair), 2016 – 2019, 2007 – 2010
- MBBE Department Personnel Committee, 2015 – 2017 (committee chair for 2015 / 2016), 2020 – present.
- MBBE Search Committee, Junior Specialist, BE program, 2016 / 2017
- UH Manoa Tenure and Promotion Review Committee, 2016
- CTAHR Faculty Senate Chair (2014/ 2015 Academic Year)
- Search Committee, CTAHR Associate Dean for Research (2014)

- Chair/ Local Host/ co-Organizer, Multi State Project NC-1194 (Nanotechnology and Biosensors) annual meeting, held in conjunction with IEEE-NEMS, Waikiki, April 13 - 16, 2014
- CTAHR Faculty Senate Executive Committee Secretary (Fall 2012 - Spring 2014)
- Manoa Assessment Committee, (2011 - 2014)
- UH Manoa Faculty Senate, (2009 - 2011), served on Committee for Academic Policy and Planning.
- Biological Engineering Program Chair, (2004 - 2011). Managed program, course scheduling, program meetings, and interfaced with Industry Advisory Board for program to make sure program maintained currency and relevancy. Shepharded program through internal program review (2007) and reaccreditation by ABET (2009)
- Biological Engineering Academic Advisor, (2004 - 2011)- for all undergraduate Biol. Engr. majors
- De Facto Assessment Chair, Biological Engineering Program, (2007 - 2011), largely devised and implemented comprehensive assessment process to ensure continuous improvement, and ensure compliance with ABET expectations for program accreditation.
- CTAHR Faculty Senate, (2007 - 2009).
- Manoa Distance Learning Committee (2006).

Graduate Students

Category	Current Number of Students	Number Graduated (Career)
Chair of Master's Committees	1	5
Chair of PhD Committees	1	3
Member of Master's Committees	1	7
Member of PhD Committees	1	8

Grant Support (last 5 years: total ~$16.06M; as PI $623,383; total to lab ~$1.9M)

Title of Grant: Response to Coconut Rhinoceros Beetle in Hawaii.
Source of Grant: Department of Defence- Naval Facilities Engineering Command
Total Dollar Value (Your share of the grant value): $511,222 (~$30,000)
Dates of Grant: 2024 - 2029
Role (PI, CoPI): co-PI

Title of Grant: Response to Coconut Rhinoceros Beetle in Hawaii.
Source of Grant: USDA-APHIS
Total Dollar Value (Your share of the grant value): $1,444,622 (~$100,000)
Dates of Grant: 2024 - 2025
Role (PI, CoPI): co-PI

Title of Grant: Statewide Management of Coconut Rhinoceros Beetle.
Source of Grant: Hawaii DOA
Total Dollar Value (Your share of the grant value): $259,833 (~$30,000)
Dates of Grant: 2024 - 2025
Role (PI, CoPI): co-PI

Title of Grant: Cultivating The Nextgen Of Diverse Biosecurity Professionals Through A Pacific-Continental Network (PaCoN).
Source of Grant: USDA-NIFA
Total Dollar Value (Your share of the grant value): $7,361,149 (~$750,000)
Dates of Grant: 2023 - 2028
Role (PI, CoPI): co-PI

Title of Grant: Response to Coconut Rhinoceros Beetle in Hawaii.
Source of Grant: USDA-APHIS
Total Dollar Value (Your share of the grant value): $2,530,282 (~$100,000)
Dates of Grant: 2023 - 2024

Role (PI, CoPI): co-PI

Title of Grant: Portable Scaled Sample Preparation Device for Concentration and Recovery of Bacterial Contaminants.
Source of Grant: NIH-SBIR
Total Dollar Value (Your share of the grant value): $85,603 (all)
Dates of Grant: 2023 - 2024
Role (PI, CoPI): PI (sub-contract)

Title of Grant: Survey and Management of Coconut Rhinoceros Beetle to Protect the Watershed above Pearl Harbor.
Source of Grant: Hawaii DLNR
Total Dollar Value (Your share of the grant value): $449,021 ($40,000)
Dates of Grant: 2023 - 2026
Role (PI, CoPI): co-PI

Title of Grant: Development of an automated diagnostic platform for SARS-CoV-2 monitoring in vulnerable areas.
Source of Grant: NIH
Total Dollar Value (Your share of the grant value): $60,820 (all)
Dates of Grant: 2020 - 2023
Role (PI, CoPI): PI

Title of Grant: Dynamically Controlled Nozzle for Precision Agricultural Spraying.
Source of Grant: USDA-SBIR phase I (sub-award through Ogive Technologies)
Total Dollar Value (Your share of the grant value): ~$120,000 ($10,000)
Dates of Grant: 2021 - 2022
Role (PI, CoPI): PI (of sub-contract)

Title of Grant: Response to Coconut Rhinoceros Beetle in Hawaii.
Source of Grant: USDA-APHIS
Total Dollar Value (Your share of the grant value): $2,530,282 (~$100,000)
Dates of Grant: 2021 - 2022
Role (PI, CoPI): co-PI

Title of Grant: CRB Research (remote surveillance)
Source of Grant: USDA-APHIS
Total Dollar Value (Your share of the grant value): $260,815 (~$100,000)
Dates of Grant: 2019 - 2021
Role (PI, CoPI): co-PI

Title of Grant: A Rapid DNA-based Test for Enterococcus Enables Onsite Detection of Fecal Indicators in Hawaii
Source of Grant: Surfrider Foundation
Total Dollar Value (Your share of the grant value): $62,500 (total with 2 extensions)
Dates of Grant: 2020 - 2022
Role (PI, CoPI): PI

Title of Grant: Building Research and Technology Capacity for Herbicide Ballistic Technology on Unmanned Aircraft Systems
Source of Grant: Hawaii Invasive Species Council
Total Dollar Value (Your share of the grant value): $58,493 (all)
Dates of Grant: 2018 - 2021
Role (PI, CoPI): PI

Title of Grant: Integrating Herbicide Ballistic Technology with Unmanned Aircraft Systems for enhancing invasive plant species management
Source of Grant: USFS-STDP
Total Dollar Value (Your share of the grant value): $126,448 (all)

Dates of Grant: 2017 - 2019
Role (PI, CoPI): PI

Title of Grant: Characterization of Liberibacter populations and development of field detection system for citrus huanglongbing
Source of Grant: USDA-SCRI
Total Dollar Value (Your share of the grant value): $248,519 (all)
Dates of Grant: 2014-2019
Role (PI, CoPI): PI

Presentations at Conferences / Invited Professional Venues (last 15 years; presenter designated with *)
Title: Hawaii Drone Hui- Updates on Drone Uses for Conservation in Hawaii
Authors: D. M. Jenkins*
Name of Conference: 2025 Oahu Weed Control and Restoration Workshop
Location: Pearl City, HI
Date of Presentation: April 14, 2025

Title: Wireless Trap Surveillance, Remotely Piloted Aerial Pesticide Application, and Light Mediated Behavior Modification- New Tools for Management of Coconut Rhinoceros Beetle.
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Paryavi, M. Melzer, and K. Weisser
Name of Conference: USDA-APHIS-PPQ S&T, Domestic and Emergency Scientific Support Webinar Series
Location: Raleigh, NC (virtual)
Date of Presentation: December 20, 2024

Title: Affordable and Scalable Microfluidics and Instrumentation for Molecular Diagnostics.
Authors (put an asterisk on the presenter): D. M. Jenkins*
Name of Conference: IEEE-NANOMED
Location: Honolulu, HI
Date of Presentation: December 5, 2024

Title: Remotely Piloted Aerial Pesticide Application.
Authors (put an asterisk on the presenter): D. M. Jenkins*
Name of Conference: HI DOA Pesticides Branch 2024 Workshop
Location: Honolulu, HI
Date of Presentation: November 20, 2024

Title: Automated Delineation of Coconut Rhinoceros Beetle With a Distributed Surveillance System and Machine Vision Tools.
Authors (put an asterisk on the presenter): M. Paryavi, A. Li, and D. M. Jenkins*
Name of Conference: International Symposium for Applied Sciences
Location: Ho Chi Minh City, Vietnam
Date of Presentation: October 18, 2024

Title: Remote Surveillance and Aerial Pesticide Application for CRB Delineation and Control.
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Paryavi, M. Melzer, and K. Weisser
Name of Conference: 2024 International CRB Symposium
Location: Honolulu, HI (and virtual)
Date of Presentation: September 11, 2024

Title: Lighting preferences of Coconut Rhinoceros Beetle in pheromone-based panel traps.
Authors (put an asterisk on the presenter): M. Paryavi* , K. Weiser, M. Melzer, D. M. Jenkins,
Name of Conference: ASABE Annual International Meeting, Presentation 2401525
Location: Anaheim, CA
Date of Presentation: July 30, 2024

Title: RhinoCam: Deployment progress and outcomes of a distributed surveillance system for Coconut Rhinoceros Beetle.
Authors (put an asterisk on the presenter): M. Paryavi* , K. Weiser, M. Melzer, R. Ghorbani,D. M. Jenkins,
Name of Conference: ASABE Annual International Meeting, Presentation 2401524
Location: Anaheim, CA
Date of Presentation: July 29, 2024

Title: New Tools for CRB Management: Embedded Surveillance, Artificial Lighting, and Aerial Pesticide Application.
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Paryavi, M. Melzer, and K. Weisser
Name of Conference: 2024 CTAHR Symposium
Location: Honolulu, HI
Date of Presentation: April 11, 2024

Title: Spot Treatment of Cypermethrin into Palm Crowns to Control Coconut Rhinoceros Beetle.
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Paryavi, K. Weiser, M. Melzer,
Name of Conference: Remotely Piloted Aerial Application Systems 2023 Workshop
Location: Davis, CA
Date of Presentation: October 4, 2023

Title: Scalable diagnostic card for multiplexed detection of isothermal gene-based amplification.
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Paryavi, M. Arif, S. Dobhal, W. Lau, and J. Umeno
Name of Conference: ASABE Annual International Meeting, Presentation 2300856
Location: Omaha, NE
Date of Presentation: July 11, 2023

Title: Aerial pesticide application for control of adult Coconut Rhinoceros Beetle in palm trees.
Authors (put an asterisk on the presenter): M. Paryavi*, K. Weiser, M. Melzer, and D. M. Jenkins
Name of Conference: ASABE Annual International Meeting, Presentation 2300868
Location: Omaha, NE
Date of Presentation: July 12, 2023

Title: ABLE-Stat, advancing functionalities and performance of an open-source potentiostat project.
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, D. Vanegas B-E Lee, J. Reyes-De-Corcuera, and S. Jun
Name of Conference: ASABE Annual International Meeting, Presentation 2301287
Location: Omaha, NE
Date of Presentation: July 10, 2023

Title: Rhinocam- a distributed trap-surveillance system for Coconut Rhinoceros Beetle connected to cellular network.
Authors (put an asterisk on the presenter): M. Paryavi*, K. Weiser, M. Melzer, R. Ghorbani, and D. M. Jenkins
Name of Conference: ASABE Annual International Meeting, Presentation 2301349
Location: Omaha, NE
Date of Presentation: July 11, 2023

Title: Machine vision tools for delimiting distribution of coconut rhinoceros beetle on the island of Oahu.
Authors (put an asterisk on the presenter): M. Paryavi, K. Weiser, M. Melzer, R. Ghorbani, and D. M. Jenkins*
Name of Conference: ASABE Annual International Meeting
Location: (Remote)
Date of Presentation: July 12, 2021

Title: Scalable diagnostic card for multiplexed LAMP-based optical gene detection.
Authors (put an asterisk on the presenter): D. M. Jenkins*, L. M. Diaz, M. Melzer, M. Arif
Name of Conference: ASABE Annual International Meeting
Location: (Remote)

Date of Presentation: July 12, 2021

Title: Real-time optical analysis of a colorimetric LAMP assay for SARS-CoV-2 in saliva.
Authors (put an asterisk on the presenter): L. Diaz, B. Johnson, and D. M. Jenkins*
Name of Conference: ASABE Annual International Meeting
Location: (Remote)
Date of Presentation: July 13, 2021

Title: Machine vision tools for delimiting distribution of coconut rhinoceros beetle on the island of Oahu.
Authors (put an asterisk on the presenter): M. Paryavi*, K. Weiser, M. Melzer, R. Ghorbani, Y. Zheng, and D. M. Jenkins
Name of Conference: Hawaii Conservation Conference
Location: (Remote)
Date of Presentation: July 27, 2021

Title: Disruptive technologies in disaster and resiliency management.
Authors (put an asterisk on the presenter): D. M. Jenkins*
Name of Conference: Future Focus Conference
Location: Waikiki, HI
Date of Presentation: October 15, 2019

Title: ABE-Stat II: New applications and upgraded hardware for improved performance
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, S. Jun, and J. Reyes-de-Corcuera
Name of Conference: ASABE Annual International Meeting
Location: Boston, MA
Date of Presentation: July 10, 2019

Title: Image-based automated trap surveillance for Coconut Rhinoceros Beetle
Authors (put an asterisk on the presenter): D. M. Jenkins*, M. Melzer
Name of Conference: ASABE Annual International Meeting
Location: Boston, MA
Date of Presentation: July 9, 2019

Title: A novel loop-mediated isothermal amplification (LAMP) assay using Cycling Probe and RNaseH II can detect SNPs determining races in *Fusarium oxysporium* sp.
Authors (put an asterisk on the presenter): L. Diaz*, R. Kubota, D. M. Jenkins
Name of Conference: ASABE Annual International Meeting
Location: Boston, MA
Date of Presentation: July 8, 2019

Title: Evaluating lighting preferences to enhance trapping efficacy of Asian Citrus Psyllid
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Kubota, M. Roose, M. Keremane, C. Ramadugu
Name of Conference: International Research Conference for HuangLongBing (IRCHLB)
Location: Riverside, CA
Date of Presentation: March 12, 2019

Title: ABE-Stat: A palm-sized, wireless, open-source potentiostat for high-performance electrochemical measurements
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, S. Jun, J. Reyes-de-Corcuera
Name of Conference: IEEE Nanomed
Location: Waikiki, HI
Date of Presentation: December 3, 2018

Title: Decision support for food safety / security, and conservation of natural resources.
Authors (put an asterisk on the presenter): D. M. Jenkins*
Name of Conference: Future Focus Conference

Location: Waikiki, HI
Date of Presentation: October 10, 2018

Title: ABE-Stat: A palm-sized, wireless, open-source potentiostat for high-performance electrochemical measurements
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, S. Jun, J. Reyes-de-Corcuera
Name of Conference: AiMES Joint ECS and SMEQ International Meeting
Location: Cancún, Mexico
Date of Presentation: October 2, 2018

Title: Evaluation of lighting preference to enhance trap catch of Asian Citrus Psyllid and Coconut Rhinoceros Beetle
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Kubota, M. Roose, M. Keremane, C. Ramadugu, M. Melzer, S. Watanabe
Name of Conference: ASABE International Meeting
Location: Detroit, MI
Date of Presentation: July 31, 2018

Title: ABE-Stat: A palm-sized, wireless, open-source potentiostat for high-performance electrochemical measurements
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, S. Jun, J. Reyes-de-Corcuera
Name of Conference: ASABE International Meeting
Location: Detroit, MI
Date of Presentation: July 31, 2018

Title: Evaluation of x-ray irradiation as a non-chemical method of control and management of Coconut Rhinoceros Beetle
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Haff, S. Watanabe, M. Melzer
Name of Conference: ASABE International Meeting
Location: Detroit, MI
Date of Presentation: July 31, 2018

Title: ABE-Stat: A palm-sized, wireless, open-source potentiostat for high-performance electrochemical measurements
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. McLamore, S. Jun, J. Reyes-de-Corcuera
Name of Conference: Gordon Research Conference for Nanoscale Science and Engineering for Agriculture and the Environment
Location: South Hadey, MA
Date of Presentation: June 3, 2018

Title: Recovery of concentrated microbial pathogens using a portable electroflotation system
Authors (put an asterisk on the presenter): L. Diaz*, D. M. Jenkins, T. R. Tzeng, T. McNealy.
Name of Conference: ASABE Annual International Meeting
Location: Orlando, FL
Date of Presentation: July 19, 2016

Title: A low-cost portable platform for ag diagnostics
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Kubota.
Name of Conference: ASABE Annual International Meeting
Location: Orlando, FL
Date of Presentation: July 20, 2016

Title: A general purpose wireless data acquisition and control system with flexible Android interface
Authors (put an asterisk on the presenter): D. M. Jenkins*, J. Reyes-de-Corcuera.
Name of Conference: ASABE Annual International Meeting
Location: Orlando, FL
Date of Presentation: July 19, 2016

Title: Rapid recovery and concentration of bacterial pathogens using portable electroflotation cartridge
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. Horowitz, T. McNealy.
Name of Conference: ASABE Annual International Meeting
Location: New Orleans, LA
Date of Presentation: July 27, 2015

Title: A custom GPS recording system for improving operational performance of aerially-deployed herbicide ballistic technology
Authors (put an asterisk on the presenter): R. Rodriguez*, J. Leary, B. Mahnken, D. M. Jenkins
Name of Conference: ASABE Annual International Meeting
Location: Montreal, Canada
Date of Presentation: July 14, 2014

Title: Portable diagnostic platform for real-time LAMP based typing of *Ralstonia solanacearum* in the field
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Kubota, A. Alvarez, C. Allen
Name of Conference: ASABE Annual International Meeting
Location: Montreal, Canada
Date of Presentation: July 14, 2014

Title: Nanoparticle assisted biofilm disruption and recovery of food-borne pathogens using electroflotation
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. Horwitz, T. McNealy
Name of Conference: ASABE Annual International Meeting
Location: Montreal, Canada
Date of Presentation: July 14, 2014

Title: Nanoparticle assisted biofilm disruption and recovery of food-borne pathogens using electroflotation
Authors (put an asterisk on the presenter): D. M. Jenkins*, E. Horwitz, T. McNealy
Name of Conference: IEEE Nano/ micro Engineered and Molecular Systems Conference
Location: Waikiki, HI
Date of Presentation: April 14, 2014

Title: Non Instrumented Nucleic Acid Amplification (NINA) for rapid detection of food and agricultural pathogens
Authors (put an asterisk on the presenter): D. M. Jenkins*, R. Kubota
Name of Conference: International Symposium on Applications of Nanotechnology and Biosensors for Agriculture and Food
Location: Hangzhou, China
Date of Presentation: April 14, 2011

Title: Simple, rapid, and specific DNA-based diagnostics for detection of the bacterial wilt pathogen *Ralstonia solanacearum* race 3 biovar 2
Authors (put an asterisk on the presenter): R. Kubota*, D. M. Jenkins, A. Alvarez, C. Allen
Name of Conference: Annual International Meeting of the American Phytopathology Society
Location: Nashville, TN
Date of Presentation: August 9, 2010

Title: Sequence specific real-time monitoring of loop-mediated isothermal amplification (LAMP) using FRET-based probe for detection of the bacterial wilt pathogen *Ralstonia solanacearum* race 3 biovar 2
Authors (put an asterisk on the presenter): R. Kubota*, D. M. Jenkins, A. Alvarez, C. Allen
Name of Conference: Annual International Meeting of the American Phytopathology Society
Location: Nashville, TN
Date of Presentation: August 9, 2010

Title: Engineering a real-time disposable platform for discrimination of sub-populations of *Ralstonia solanacearum*
Authors (put an asterisk on the presenter): R. Kubota*, D. M. Jenkins, A. Alvarez, C. Allen
Name of Conference: ASABE Annual International Meeting

Location: Reno, NV
Date of Presentation: 2009

Title: Design and performance of automated flushing systems for toilet trained cats
Authors (put an asterisk on the presenter): D. M. Jenkins*
Name of Conference: ASABE Annual International Meeting
Location: Reno, NV
Date of Presentation: 2009

Title: Application of molecular beacons for the sequence specific confirmation and direct detection of Loop-mediated isothermal AMPlification (LAMP) amplicons from the bacterial wilt pathogen *Ralstonia solanacearum*
Authors (put an asterisk on the presenter): R. Kubota*, D. M. Jenkins, A. Alvarez, C. Allen
Name of Conference: Annual International Meeting of the American Phytopathology Society
Location: Portland, OR
Date of Presentation: 2009