

No.	Oral Presentations
1.	Richardson, C., Upadhyay, D., Mandjiny, S. and Holmes, L. (2020). Growth Kinetic Study of <i>Bacillus thuringiensis</i> under Various Conditions using Bioreactors. The State of North Carolina Undergraduate Research and Creativity Symposium (SNCURCS). East Carolina University. Saturday, Nov. 7, 2020.
2.	Ramos, R., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2019). The Effect of Carbohydrates on the Growth and Expressed Extracellular & Intracellular Proteins of <i>Photorhabdus luminescens</i> using 2L Sartorius Stedim Bioreactor. State of North Carolina Undergraduate Research and Creativity Symposium. Duke University, Raleigh, NC. November 23, 2019.
3.	Cade, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2019). The Effect of Increasing Carbohydrate Concentrations on Expressed Intracellular and Extracellular Proteins by the <i>Photorhabdus luminescens</i> Bacterium. North Carolina Academy of Science 116 th Annual Meeting. University of North Carolina at Wilmington. March 22-23, 2019.
4.	Mebens, E., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). <i>Photorhabdus luminescens</i> and <i>Xenorhabdus nematophilia</i> : The Effect of Virulent Properties Secreted by these Entomopathogenic bacteria on other Microbes. State of North Carolina Undergraduate Research and Creativity Symposium-2018. North Carolina State University. Raleigh, NC. November 10, 2018.
5.	Downs G., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Effects of Organic and Inorganic Fertilizers on the Growth of Entomopathogenic Bacteria. State of North Carolina Undergraduate Research and Creativity Symposium-2018. North Carolina State University. Raleigh, NC. November 10, 2018.
6.	Cade, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Effect of Carbohydrates on the Growth and Bioluminescence of <i>Photorhabdus luminescens</i> . North Carolina Academy of Science 115 th Annual Meeting. Wake Technical Community College. Raleigh, NC. March 23-24, 2018.
7.	Valencia, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Effects of Alternative Growth Media Composition on Beneficial Entomopathogenic Nematode Mass Production. North Carolina Academy of Science 115 th Annual Meeting. Wake Technical Community College. Raleigh, NC. March 23-24, 2018.
8.	Chavis, N., Mebens, E., Conway, K., Dong, X., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Axenic Culturing Protocol for <i>Xenorhabdus nematophila</i> from Insect Larva. State of North Carolina Undergraduate Research and Creativity Symposium - 2017 (SNCURCS). Campbell University. Buies Creek, NC. November 4, 2017.
9.	Downs G., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Comparing solid and liquid fermentation processes for the mass production of entomopathogenic nematodes.

	North Carolina American Society for Microbiology 2017 Meeting. North Carolina State University, Raleigh, NC. October 21, 2017.
10.	Valencia, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). <i>Steinernema carpocapsae</i> growth phase study using a 5L Sartorius Stedim Biostat® fermentation system. 8 th International Scientific Forum. The University of North Carolina at Pembroke. Pembroke, NC. September 7-8, 2017.
11.	Alsaidi, A., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Pilot-scale technology to commercialize beneficial nematodes using solid-state fermentation technology. 8 th International Scientific Forum. The University of North Carolina at Pembroke. Pembroke, NC. September 7-8, 2017.
12.	Chavis, N., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Waste water treatment plant processing at Pembroke, North Carolina, USA. 8 th International Scientific Forum. The University of North Carolina at Pembroke. Pembroke, NC. September 7-8, 2017.
13.	Valencia, J., Alsaidi, A., Upadhyay, D. and Holmes, L. (2017). Pilot-scale production and commercialization of an agricultural biocontrol product. Chancellor's challenge - 2017. Robeson County Innovation and Entrepreneurship Competition. The University of North Carolina at Pembroke. Pembroke, NC. April 20, 2017
14.	Alsaidi, A., Valencia, J., Upadhyay, D. and Holmes L. (2017). Mass production of the beneficial nematode <i>Steinernema carpocapsae</i> on solid media using solid state fermentation. North Carolina Academy of Science 114 th Annual Meeting. High Point University. High Point, NC. March 24-25, 2017.
15.	Gerdes, E., Upadhyay, D. and Holmes L. (2017). <i>Xenorhabdus nematophilus</i> Growth Kinetic Study using 2L A plus Sartorius Stedim Biostat® Fermentation System. North Carolina Academy of Science 114 th Annual Meeting. High Point University. High Point, NC. March 24-25, 2017.
16.	O'Campo, J., Upadhyay, D., Mandjiny, S., Bullard-Dillard, R., Frederick, J., and Holmes, L. (2017). <i>Photorhabdus luminescens</i> Phase II Cells Growth Kinetic Study Using a 2L A plus Sartorius Stedim Biostat® Fermentation System. 3 rd Pan-American Interdisciplinary Conference PIC. Buenos Aires, Argentina. February 15-16, 2017.
17.	Valencia, J., Alsaidi, A., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). <i>Heterorhabditis bacteriophora</i> : An Ecofriendly Biological Control Agent. State of North Carolina Undergraduate Research and Creativity Symposium - 2016 (SNCURCS). North Carolina Central University, Durham, NC. November 5, 2016.
18.	Parker, I., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). Effect of sugar concentration on the sugar utilization rate by the bacterium <i>Lactobacillus lactis</i> . State of North Carolina Undergraduate Research and Creativity Symposium - 2016 (SNCURCS). North Carolina Central University, Durham, NC. November 5, 2016.

19.	Issa, N., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). Elementary Kinetic Analysis of Beef Liver Lactate Dehydrogenase. State of North Carolina Undergraduate Research and Creativity Symposium - 2016 (SNCURCS). North Carolina Central University, Durham, NC. November 5, 2016.
20.	Holmes, L., Gerdes, E., Upadhyay, D., Mandjiny, S., Bullard- Dillard, R., Storms, M. and Menefee, M. (2016). <i>Heterorhabditis bacteriophora</i> : Ecofriendly Biological Control Agent. 5 th Eurasian Multidisciplinary Forum, EMF 2016. Grigol Robakidze University. Tbilisi, Georgia. October 27-28, 2016.
21.	O'Campo, J., Upadhyay, D., and Holmes, L. (2016). Optimization of <i>Xenorhabdus nematophilus</i> Bacterial Growth Through Variation of Original Yoo Media Using a 5 Liter Sartorius Stedim Bioreactor. North Carolina American Society for Microbiology 2016 Meeting. The University of North Carolina at Wilmington, NC. October 1, 2016.
22.	Issa, N., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). The Purification and Kinetic Analysis of Lactate Dehydrogenase Extracted from Beef Liver. North Carolina American Society for Microbiology 2016 Meeting. The University of North Carolina at Wilmington, NC. October 1, 2016.
23.	Gerdes, E., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). Variation of Yoo Media for Optimization of <i>Photorhabdus luminescens</i> Phase I Bacterial Growth Using a 2 Liter Sartorius Stedim Bioreactor North Carolina American Society for Microbiology 2016 Meeting. The University of North Carolina at Wilmington, NC. October 1, 2016.
24.	O'Campo, J., Gulley K., Upadhyay, D. and Holmes, L. (2016). Optimization of Biocontrol Bacteria Growth using a Bioreactor. 7 th Farm Bureau Bio-Ag Symposium. The University of North Carolina at Pembroke, NC. Date: April 7, 2016.
25.	Wells, N., Upadhyay, D. and Holmes, L. (2016). Biological Control of Agriculture Insect Pests. North Carolina Academy of Science 113 th Annual Meeting. Methodist University. Fayetteville, NC. Date: April 1-2, 2016.
26.	Gerdes, E., Upadhyay, D. and Holmes, L. (2016). <i>Heterorhabditis bacteriophora</i> : Ecofriendly Biological Control Agent. North Carolina Academy of Science 113 th Annual Meeting. Methodist University. Fayetteville, NC. Date: April 1-2, 2016.
27.	O'Campo, J., Gulley K., Upadhyay, D. and Holmes, L. (2015). Effect of Environmental Factors on Growth Kinetics of <i>Photorhabdus luminescens</i> using a 2 L Sartorius Stedim Biostat® A+ Bioreactor. State of North Carolina Undergraduate Research and Creativity Symposium - 2015 (SNCURCS). High Point University, High Point, NC. Date: November 14, 2015.
28.	Issa, M., Issa, N., Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Heterorhabditis bacteriophora</i> : Ecofriendly Biological Control Agent. State of North Carolina Undergraduate Research and Creativity Symposium - 2015 (SNCURCS). High Point University, High Point, NC. Date: November 14, 2015.

29.	Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Photorhabdus luminescens</i> : Virulent Properties and Agricultural Applications. State of North Carolina Undergraduate Research and Creativity Symposium - 2015 (SNCURCS). High Point University, High Point, NC. Date: November 14, 2015.
30.	Upadhyay, D. and Holmes, L. (2015). Mass Production of Beneficial Nematodes Using Fermentation Technology. 6 th Annual Farm Bureau Bio-Ag Symposium. University of North Carolina at Pembroke. Pembroke, NC. Date: April 16, 2015.
31.	Johnson, M., Upadhyay, D. and Holmes, L. (2015). Growing Beneficial Nematodes. 6 th Annual Farm Bureau Bio-Ag Symposium. University of North Carolina at Pembroke. Pembroke, NC. Date: April 16, 2015.
32.	Sampson, J., Upadhyay, D. and Holmes, L. (2015). <i>Pseudomonas fluorescens</i> and Pyoverdine in Agriculture. 6 th Annual Farm Bureau Bio-Ag Symposium. University of North Carolina at Pembroke. Pembroke, NC. Date: April 16, 2015.
33.	Patterson, W., Upadhyay, D. and Holmes, L. (2014). Comparison of Growth Kinetics Models Using <i>Pseudomonas fluorescens</i> . North Carolina American Society for Microbiology 2014 Meeting. Appalachian State University. Boone, NC. September 27, 2014.
34.	Johnson, M., Upadhyay, D. and Holmes, L. (2014). Mass Production of the Beneficial Nematode <i>Heterorhabditis bacteriophora</i> and its Bacterial Symbiont <i>Photorhabdus luminescens</i> on Solid Media Using Fermentation Technology. State of North Carolina Undergraduate Research & Creativity Symposium (SNCURCS). North Carolina State University. Raleigh, NC. November 21, 2014.
35.	Upadhyay, D. and Holmes, L. (2013). Lab scale In-vitro mass production of entomopathogenic nematode (EPN) <i>Heterorhabditis bacteriophora</i> using liquid culture fermentation technology. North Carolina American Society for Microbiology 2013 Meeting. East Carolina University, Greenville, NC, USA: October 26, 2013.
36.	Upadhyay, D. and Holmes, L. (2013). In-vitro mass production of entomoparasitic nematode <i>Steinernema carpocapsae</i> utilizing a fed-batch culture process. NC Academy of Science 110th Annual Meeting. The University of North Carolina at Pembroke, NC, USA: April 5-6, 2013.
37.	Upadhyay, D. and Holmes, L. (2013). Critical aspect in the mass production technology of beneficial nematodes. AISES region 7 conference. The University of North Carolina at Pembroke, NC, USA: February 23, 2013.
38.	Kooliyottil, R. and Holmes, L. (2013). <i>Rhodospirillum rubrum</i> : A purple non-sulfur photosynthetic bacteria with diverse metabolic adaptations. North Carolina American Society for Microbiology 2013 Meeting. East Carolina University, Greenville, NC, USA: October 26, 2013.

39.	Singh, S. and Holmes, L. (2013). Modelling growth of a nisin producing lactic acid bacteria <i>Streptococcus lactis</i> NCIM 2114 by using different growth sigmoidal functions. North Carolina American Society for Microbiology 2013 Meeting. East Carolina University, Greenville, NC, USA: October 26, 2013.
40.	Vellaisamy, M. and Holmes, L. (2013). Unravelling the mechanism of biodegradation of gossypol by fungal cultures. American Society for Microbiology 2013 Meeting. East Carolina University, Greenville, NC, USA: October 26, 2013.
41.	Holmes, L., Prasanna B. and Inman F. (2013). Growth kinetics of <i>Photobacterium luminescens</i> in batch fermentation. NC Academy of Science 110th Annual Meeting. The University of North Carolina at Pembroke, NC, USA: April 5-6, 2013.
42.	Rinu, K., Inman III, F. and Holmes, L. (2013). A comparative analysis of entomoparasitic nematodes <i>Heterorhabditis bacteriophora</i> and <i>Steinernema carpocapsae</i> . NC Academy of Science 110th Annual Meeting. The University of North Carolina at Pembroke, NC, USA: April 5-6, 2013.
43.	Inman, F. and Holmes, L. (2013). The potential of antibacterial compounds produced by entomopathogenic bacteria for use as effective countermeasures against bacterial infections. NC Academy of Science 110th Annual Meeting. The University of North Carolina at Pembroke, NC, USA: April 5-6, 2013.
44.	Menefee, M., Holmes, L. D. and Inman III, F. L. (2013). Developing entrepreneurship and innovation in rural southeastern North Carolina: An update. Paper presented at the Open 2013 National Meeting of the National Collegiate Inventors and Innovators Alliance, Washington, D.C.
45.	Menefee, M. and Holmes, L. (2012). Developing entrepreneurship and innovation in rural southeastern North Carolina. Paper presented at the Open 2012 National Meeting of the National Collegiate Inventors and Innovators Alliance, San Francisco, C.A.
46.	Holmes, L. (2012). Mass Production of the Beneficial Nematode <i>Heterorhabditis bacteriophora</i> Utilizing Fermentation Technology. North Carolina American Society for Microbiology 2012 Meeting. North Carolina State University. Raleigh, NC. October 6, 2012.
47.	Inman, F. and Holmes, L. (2012). Liquid Media Development for the Mass Production of the Entomoparasitic Nematode <i>Heterorhabditis bacteriophora</i> . North Carolina American Society for Microbiology 2012 Meeting. North Carolina State University. Raleigh, NC. October 6, 2012.
48.	Kooliyottil, R. and Holmes, L. (2012). Critical Aspects in the Mass Production of Beneficial Nematodes. North Carolina American Society for Microbiology 2012 Meeting. North Carolina State University. Raleigh, NC. October 6, 2012.