

No.	Poster Presentations
1.	Richardson, C., Upadhyay, D., Mandjiny, S. and Holmes, L. (2020). Effect of Environmental Factors on Growth Kinetics of Biocontrol Agent <i>Bacillus thuringiensis</i> Bacterium using 2L and 5L A+ Sartorius Stedim Biostat® Fermentation Systems. North Carolina American Society for Microbiology 2018 annual meeting. UNCP. October 24, 2020.
2.	Richardson, C., Ramos, R., Butler, J., Upadhyay, D., Mandjiny, S., and Holmes, L. (2020). Effect of Environmental Factors on Growth Kinetics of Biocontrol Agent <i>Bacillus thuringiensis</i> Bacterium using 2L and 5L A+ Sartorius Stedim Biostat® A+ Fermentation Systems. Fourteenth Annual UNC Pembroke Undergraduate Research and Creativity Symposium. April 7, 2020
3.	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. North Carolina American Society for Microbiology 2019 annual meeting. North Carolina A&T State University, Greensboro, NC. October 19, 2019
4.	Cade, J., Upadhyay, D. and Holmes, L. (2019). The Effect of Increasing Carbohydrate Concentrations on Expressed Intracellular and Extracellular Proteins by the <i>Photorhabdus luminescens</i> Bacterium. PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 10, 2019
5.	Cade, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). Effectivity of varying carbohydrate concentration on the growth of the <i>Photorhabdus luminescens</i> bacterium. Annual Biomedical Research Conference for Minority Students (ABRCMS). Indianapolis, Indiana. November 14-17, 2018.
6.	Cade, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). Effectivity of carbohydrates on bacterial density and pigment production by entomopathogenic <i>Photorhabdus luminescens</i> . North Carolina American Society for Microbiology 2018 annual meeting. Asheville, NC. October 27, 2018.
7.	Mebens, E., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Effect of Virulent Properties Secreted by Entomopathogenic Nematodes Symbionts on other Bacteria. North Carolina American Society for Microbiology 2018 annual meeting. Asheville, NC. October 27, 2018.
8.	Downs G., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Effects of Various Organic and Inorganic Fertilizers on the Mortality Rate of Entomopathogenic Nematodes. North Carolina American Society for Microbiology 2018 annual meeting. Asheville, NC. October 27, 2018.
9.	Cade, J., Upadhyay, D. and Holmes, L. (2018). The Effect of Carbohydrates on the Growth and Bioluminescence of <i>Photorhabdus luminescens</i> . PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 11, 2018.

10.	Downs G., Upadhyay, D. and Holmes, L. (2018). Biological Pesticide Application and Technology Utilizing <i>Heterorhabditis bacteriophora</i> and <i>Steinernema carpocapsae</i> . PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 11, 2018.
11.	Mebens, E., Upadhyay, D., Chappelle, J. and Holmes, L. (2018). The Virulence Properties of <i>Photorhabdus luminescens</i> and Their Potential Application in Pest Management. PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 11, 2018.
12.	Valencia, J., Upadhyay, D. and Holmes, L. (2018). <i>In vitro</i> development and reproduction of the entomoparasitic nematode (EPN) <i>Steinernema carpocapsae</i> in monoxenic liquid culture. PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 11, 2018.
13.	Downs G., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2018). Biological Pesticide Application and Technology Utilizing <i>Heterorhabditis bacteriophora</i> and <i>Steinernema carpocapsae</i> . North Carolina Academy of Science 115 <sup>th</sup> Annual Meeting. Wake Technical Community College. Raleigh, NC. March 23-24, 2018.
14.	Mebens, E., Upadhyay, D., Chappelle, J., Mandjiny, S., Frederick, J. and Holmes, L. (2018). The Virulence Properties of <i>Photorhabdus luminescens</i> and Their Potential Application in Pest Management. North Carolina Academy of Science 115 <sup>th</sup> Annual Meeting. Wake Technical Community College. Raleigh, NC. March 23-24, 2018.
15.	Valencia, J., Upadhyay, D., Ghosh, N., McLeod, S., Mandjiny, S., Frederick, J. and Holmes, L. (2018). <i>In vitro</i> development and reproduction of the entomoparasitic nematode (EPN) <i>Steinernema carpocapsae</i> in monoxenic liquid culture. Texas Society for Microscopy 53 <sup>rd</sup> Annual Meeting. Denton, TX. February 22 - 24, 2018.
16.	Valencia, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Two efficient techniques to mass produce beneficial nematode <i>Steinernema carpocapsae</i> . Annual Biomedical Research Conference for Minority Students (ABRCMS). Phoenix, Arizona. November 1-4, 2017.
17.	Downs G., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Advantages and challenges of the two fermentation culturing platforms for beneficial nematodes. State of North Carolina Undergraduate Research and Creativity Symposium - 2017 (SNCURCS). Campbell University. Buies Creek, NC. November 4, 2017.
18.	Valencia, J., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Mass production of the biological control agent <i>Steinernema carpocapsae</i> in suspension liquid culture. North Carolina American Society for Microbiology 2016 Meeting. North Carolina State University, Raleigh, NC. October 21, 2017.
19.	Mebens, E., Chavis, N., Conway, K., Dong, X., Upadhyay, D., Mandjiny, S., Frederick, J. and Holmes, L. (2017). Isolation and purification of entomopathogenic bacteria <i>Xenorhabdus</i>

	<i>nematophila</i> from larval <i>Galleria mellonella</i> . North Carolina American Society for Microbiology 2016 Meeting. North Carolina State University, Raleigh, NC. October 21, 2017.
20.	Valencia, J., Alsaidi, A., Upadhyay, D. and Holmes, L. (2017). Solid state fermentation study of beneficial nematode <i>Steinernema carpocapsae</i> . PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 12, 2017.
21.	Gerdes, E., Upadhyay, D. and Holmes, L. (2017). Fermentation study of <i>Xenorhabdus nematophilus</i> in a bioreactor. PURC Symposium. The University of North Carolina at Pembroke. Pembroke, NC. April 12, 2017.
22.	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> . NC Space Grant Annual Student Symposium. North Carolina Central University, Durham, NC. November 5, 2016.
23.	Issa, N., Patak, B., Taylor, K., Upadhyay, D. and Holmes, L. (2016). The Purification and Kinetic Analysis of Lactate Dehydrogenase from Beef Liver. NC Space Grant Annual Student Symposium. North Carolina Central University, Durham, NC. November 5, 2016.
24.	O'Campo, J., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). Fermentation Study of <i>Xenorhabdus nematophilus</i> in a bioreactor. State of North Carolina Undergraduate Research and Creativity Symposium (SNCURCS). North Carolina Central University, Durham, NC. November 5, 2016.
25.	Gerdes, E., Upadhyay, D., Mandjiny, S. and Holmes, L. (2016). Fermentation Study of <i>Photorhabdus luminescens</i> in a bioreactor. State of North Carolina Undergraduate Research and Creativity Symposium (SNCURCS). North Carolina Central University, Durham, NC. November 5, 2016.
26.	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> . North Carolina American Society for Microbiology 2016 Meeting. The University of North Carolina at Wilmington, NC. October 1, 2016.
27.	Alsaidi, A., Valencia, J., Gerdes, E., Upadhyay, D., Mandjiny, S. and Holmes L. (2016). <i>Heterorhabditis bacteriophora</i> : Farmer's Friendly, Alternative Chemical Pesticides. North Carolina American Society for Microbiology 2016 Meeting. The University of North Carolina at Wilmington, NC. October 1, 2016.
28.	Issa, M., Patak, B., Taylor, K., Upadhyay, D. and Holmes, L. (2016). The Purification and Kinetic Analysis of Lactate Dehydrogenase from Beef Liver. 14 <sup>th</sup> Annual Disparities in Health in America: Working Toward Social Justice Workshop. Houston, Texas. June 20-24, 2016.
29.	Issa, M., Patak, B., Taylor, K., Upadhyay, D. and Holmes, L. (2016). The Purification and Kinetic Analysis of Lactate Dehydrogenase from Beef Liver. 10 <sup>th</sup> Annual UNC Pembroke Undergraduate Research and Creativity Center Symposium. Pembroke, NC. April 13, 2016.

30.	Issa, M., Issa, N., Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Heterorhabditis bacteriophora</i> : Ecofriendly Biological Control Agent. NCLSAMP – 2015 Annual Research Conference. University of North Carolina at Pembroke, NC. October 31, 2015.
31.	Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Photorhabdus luminescens</i> : Virulent Properties and Agricultural Applications. NCLSAMP – 2015 Annual Research Conference. University of North Carolina at Pembroke, NC. October 31, 2015.
32.	Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Photorhabdus luminescens</i> : Virulent Properties and Agricultural Applications. North Carolina American Society for Microbiology 2015 Meeting. North Carolina State University. Raleigh, NC. October 3, 2015.
33.	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. North Carolina American Society for Microbiology 2015 Meeting. North Carolina State University. Raleigh, NC. October 3, 2015.
34.	Issa, M., Issa, N., Gerdes, E., Upadhyay, D. and Holmes, L. (2015). <i>Heterorhabditis bacteriophora</i> : Ecofriendly Biological Control Agent. North Carolina American Society for Microbiology 2015 Meeting. North Carolina State University. Raleigh, NC. October 3, 2015.
35.	Johnson, M., Upadhyay, D. and Holmes, L. (2014). Mass Production of the Beneficial Nematode. North Carolina Section American Chemical Society (NC-ACS). Duke University. Durham, NC. Date: November 7, 2014.
36.	Sampson, J., Subidias, L., Fennel, I., Lawson, S., Upadhyay, D. and Holmes, L. (2014). The Effect of Microgravity on <i>Psuedomonas fluorescens</i> and Pyoverdine fluorescence. North Carolina Section American Chemical Society (NC-ACS). Duke University. Durham, NC. Date: November 7, 2014.
37.	Sampson, J., Subidias, L., Fennel, I., Lawson, S., Upadhyay, D. and Holmes, L. (2014). The Effect of Microgravity on <i>Psuedomonas fluorescens</i> and Pyoverdine fluorescence. State of North Carolina Undergraduate Research & Creativity Symposium (SNCURCS). North Carolina State University. Raleigh, NC. Date: November 21, 2014.
38.	Yao, L., Kooliyottil, R. and Holmes, L. (2014). Production and evaluation of nisin secreted by the lactic acid bacterium <i>Lactococcus lactis</i> for use as an antibacterial food preservative. 8th Annual UNC Pembroke Undergraduate Research and Creativity Center Symposium. Pembroke, NC. April 2, 2014.
39.	Bowen, M., Inman, F. and Holmes, L. (2014). Bioactivity of purified antibacterials secreted by entomopathogenic bacteria <i>Xenorhabdus nematophila</i> and <i>Photorhabdus luminescens</i> . 8th Annual UNC Pembroke Undergraduate Research and Creativity Center Symposium. Pembroke, NC. April 2, 2014.

40.	Bowen, M., Inman, F. and Holmes, L. (2014). Simulated Microgravity and its Effects on Feeding Habits of the Giant Amoeba <i>Chaos carolinensis</i> . 8th Annual UNC Pembroke Undergraduate Research and Creativity Center Symposium. Pembroke, NC. April 2, 2014.
41.	Patterson, W., Inman, F. and Holmes, L. (2014). Behavioral response of insect larvae to bioluminescence produced by the bacterium <i>Photorhabdus luminescens</i> cultivated by in vitro and in vivo methods. 8th Annual UNC Pembroke Undergraduate Research and Creativity Center Symposium. Pembroke, NC. April 2, 2014.
42.	Bowen, M. and Holmes, L. (2013). Effect of simulated microgravity on the bacterial characteristics of nematode symbiont <i>Photorhabdus luminescens</i> . NC Academy of Science 110th Annual Meeting. The University of North Carolina at Pembroke, NC, USA: April 5-6, 2013.
43.	Bowen, M. and Holmes, L. (2012). Microbial Kinetics of Glucose Utilization in <i>Photorhabdus luminescens</i> North Carolina American Society for Microbiology 2012 Meeting. North Carolina State University. Raleigh, NC. October 6, 2012.