

## In memory / En souvenir de

On 14 July 2019, Dr Jordan Lewis Burke lost his battle with cancer. With his passing, the forest entomology community lost a rising star.

Jordan was born in Washington, D.C., on 8 November 1982, and lived in Alexandria, Virginia, where he attended T.C. Williams High School. He received his Bachelor of Science in Entomology (2009) and Master of Science in Forestry (2011) degrees from the University of Georgia. For his Master's research, Jordan worked in the Gandhi Forest Entomology Lab where he studied the effects of prescribed fire and subcortical beetles on southern pines in Georgia. This research instilled in him a passion for bark beetles which he brought with him to the Forest Insect Disturbance Ecology Lab (FIDEL), within the University of British Columbia's Faculty of Forestry, where he completed a PhD in Forest Entomology in 2016.

Jordan's love of forest entomology was matched by his aptitude for research, ability to solve complex problems and unwillingness to back down from a challenge. His doctoral project comprised a mix of detailed lab work and demanding field research in remote areas. He focussed on the consequences of climate-induced range expansion by the mountain pine beetle in western North America, and his research advanced our knowledge of bark beetle ecology and dynamics in several fundamental ways. He showed that due to differential rates of post-glacial recolonization of western North America by the mountain pine beetle and lodgepole pine, southern populations of lodgepole with long-term interactions with the beetle express specific defenses against beetle attacks that are largely absent from evolutionarily naïve host populations growing further north. He also found that the basis for the eruptive dynamic characteristic of mountain pine beetle outbreaks arises from context-dependent maternal effects where offspring of females from sub-outbreak populations avoid vigorous host trees, but the offspring from epidemic females prefer those trees given their capacity to overwhelm them via mass attacks. Following completion of his PhD, Jordan remained as a post-doctoral fellow in FIDEL where he continued his work with the mountain pine beetle, studying its capacity to persist in newly invaded pine forests.

In addition to his excitement for research, Jordan's enthusiasm extended to teaching. He began as a teaching assistant and then took on several roles as a sessional instructor within UBC's Faculty of Forestry where he taught both classroom and field-based courses. His passion for science in general, and entomology specifically, was absolutely infectious and his students loved him. He had an amazing ability to make any aspect of forest entomology sound fascinating, and FIDEL was soon bursting with undergraduate volunteers. His commitment to his students went well beyond teaching. Whether he was solving "existential crises" for students by searching out lost cell phones in the woods, providing additional instruction after class or labs, or supervising the research of undergraduate honours students, Jordan's dedication to mentorship was unparalleled.

Jordan's commitment to research and mentorship, coupled with his positive, outgoing personality made him a natural leader in the lab. His willingness to help in any aspect of a study,



**Jordan L. Burke  
(1982 – 2019)**

no matter how tedious or repetitive, made him integral to virtually all FIDEL projects. His participation also provided him with fresh insights into ongoing research that he would then use in constructive discussions and debates with fellow students and research staff concerning study design, methods, data analyses and interpretation. Jordan's love of discourse continued outside the lab, and he was often found deep in discussions regarding intricacies of the latest forest entomology research project with diverse colleagues, faculty members and even administrative staff throughout the Faculty of Forestry.

Jordan's interests in forest entomology also extended beyond academia. He was a member of the Entomological Societies of America, Canada and British Columbia. He was also deeply involved in the annual Western Forest Insect Work Conference where he served on the Technology Committee as webmaster for several years.

Jordan was exuberant about everything he did. He loved sharing his latest ideas with everyone, and was fearless in thinking outside the box. He was always willing to volunteer his time, and had a seemingly endless source of positive energy that affected everyone around him. Few people were more fun to be with at meetings, and he was always the focal point of extracurricular activities. He is missed tremendously by all those he touched.

Jordan is survived by his wife, Caleigh Minshall, his mother April L. Burke, his father Garrett C. Burke, his sister Liz Burke, his step-father Richard Flynt, and his step-mother Laura Budniakiewicz. Please visit <https://memorial.support.ubc.ca/jordan-burke/> for a description of the UBC Faculty of Forestry scholarship that has been established in Jordan's honor to financially assist future graduate students at UBC who excel in teaching and inspiring students.

Allan Carroll, Forestry, University of British Columbia

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