Cameron Riviere, Associate Research Professor

The Robotics Institute and Department of Biomedical Engineering
Ph.D., 1995, Johns Hopkins University

Professor Riviere's research is focused on robotics to improve surgical manipulation accuracy and minimally invasive access, with a particular interest in robotic compensation of physiological motion. Projects include: Micron, a handheld robotic microsurgical instrument (pictured) that actively compensates for the hand tremor of the surgeon; HeartLander, an inchworm-type robot that crawls across the surface of the beating heart to perform surgery; and a novel technique for steering of flexible needles through the brain.

Professor Riviere also develops similar technologies for the suppression of pathological movement disorders in assistive computer and wheelchair interfaces. He has authored more than 30 journal articles and book chapters and holds three patents.

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