# New UMass Dartmouth Facility to House Botulinum Center; 'Omics Tools to Play Role

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By a Genome Web staff reporter

NEW YORK (Genome Web News) — Genomics and bioinformatics tools will play a role in a newly opened research facility at the University of Massachusetts Dartmouth that will house the National Botulinum Center, the school said recently.

Programs to be conducted at the 22,000-square-foot Botulinum Center involve genomics, bioinformatics, enzyme studies, cellular trafficking, and structural biology research.

Half of the new facility, which is regulated by the Centers for Disease Control and Prevention and the US Department of Agriculture, will be devoted to the Botulinum Center. The Center will also house several biotech labs, the school said.

UMass Professor Bal Ram Singh, director of the Botulinum Center, will lead the botulism studies at the new facility. Singh currently is involved in collaborations with other researchers using genomics, bioinformatics, and other molecular and cellular approaches to study botulism, the rare but paralytic disease caused by the nerve toxin Botulinum, which is produced by the bacterium *Clostridium botulinum*.

UMass Professor Bal Ram Singh, one of the nation's leading experts on botulism, leads the National Botulinum Center at the university and has been working on similar projects at the university for the last 17 years.

Beside the CDC and DOE, the Center’s government collaborators include the National Institutes of Health, the Department of Defense, the Food and Drug Administration.

It also includes alliances with private companies and other academic centers, including Mass General, MIT, Tufts University, UMass Lowell, Harvard Medical School, Newton Photonics, BioTell, and Microbiotix.

UMass said the inspiration for the facility was UMass' plan to focus “on developing detection strategies, cures, and treatments for botulism, one of the leading bio-terrorism threats identified by the US government.