

# Enabling Partner for your Influenza Biological Product Development Project

Benchmark Biolabs (BBL), a contract development company with experienced staff in the areas of R&D, clinical studies, regulatory, QA, QC, and manufacturing (including process development and scale up). Our senior staff have years of experience with multinational pharmaceutical companies and understand the application of industrial science in moving assets toward commercialization.

BBL is particularly skilled in the area of influenza. Operating a BSL-3 facility which is permitted for select agent work, we offer collaboration in both bench and clinical studies. We have assays utilizing equine, turkey, and chicken red blood cells as well as experience with tissue culture, serum neutralization, and real-time quantitative PCR. Our staff has experience working with whole virus as well as a variety of subunit expression systems (including viral and bacterial vectors) with the ability to conduct testing both in cell culture and in vivo.

BBL has a number of challenge models in place for multiple species—including isolators in place should this be of benefit to your study preferences. These models include work with low path avian influenza, high path avian influenza, and H1N1. In house, we have a variety of H5N1 serotypes including 2 Vietnam, Canadian, and Mexican isolates, H1N1 serotypes including California, Mexican, and recombinant reassortments, and a number of other strains. We also enjoy a good relationship with CDC and thus would be able to acquire strains that may be preferred by your company.

With regard to manufacturing, we have practical experience in a variety of expression systems in both tissue culture and egg production. BBL is particularly adept at process improvement and scale up with experience in adapting production to vessels as large as 20,000 liters.

Importantly, BBL has the ability to act quickly and be responsive to your needs. All of our activities are scalable so we expect to be able to accommodate your needs in an appropriate manner.

For more information, please contact [toverbay@benchmarkbiolabs.com](mailto:toverbay@benchmarkbiolabs.com) for specific information regarding your needs and project.