

## Case Study: BioMedware

### Technology

Microsoft DevStudio C++  
Microsoft SourceSafe  
Standard Template  
Libraries (STL)

### Features

Supplemental Services  
Off-Site Development  
Direct Contact with  
End-Users  
Integration of Complex  
Mathematic Modeling

## Non-Typeable *Haemophilus influenzae* (NTHi) Study for University of Michigan

### *THE CHALLENGE*

BioMedware is a research-focused company that develops software for biostatistics and geographic analysis, emphasizing human health and environment. Since its inception in 1994, BioMedware has garnered several million dollars in grants and funding in these areas.

The University of Michigan School of Public Health in Ann Arbor became interested in BioMedware's ongoing work in modeling disease transmission systems. It had a direct application to one of its internal projects: a study on NTHi vaccination strategies. So, it suggested a partnership to allow its team to begin using the research immediately.

The offer was an excellent opportunity for BioMedware, but the varying and sometimes unpredictable development schedule made it difficult for the company to schedule the work alongside its other projects.

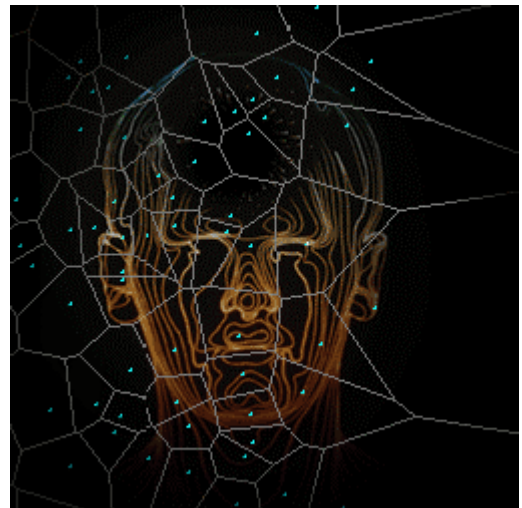
### *THE SOLUTION*

Cimulus worked with BioMedware to provide off-site development services on an as-needed basis for the NTHi project. To minimize the learning curve, Cimulus assigned a specific developer to the work and gave both teams direct access to him via e-mail and telephone.

The work was typically scheduled in short blocks and with little notice, generally 1-2 weeks to be delivered ASAP. Meetings and design sessions held at BioMedware allowed the team to communicate effectively, but since the development work was performed at Cimulus, there was no need for BioMedware to set up a new workstation. The work initially focused on the user interface only, but as Cimulus' developer learned more about the science behind the application, he became more involved with the deeper development and requirements for both teams.

### *BENEFITS*

With Cimulus' development support, BioMedware has been able to keep its core team members focused on the company's primary research, while still providing the support needed by the University team. With the direct access, BioMedware was able to offload some of the project's communication overhead to Cimulus, further reducing its internal workload. Most importantly, BioMedware now has access to a local, on-demand domain expert on the NTHi simulation program.



*Geoffrey Jacquez, President of BioMedware, said "We think of Cimulus as more of a partner than a contractor. They have consistently delivered high-quality work and have been very accommodating to an unpredictable schedule."*