



**Illinois Wesleyan University**  
**Digital Commons @ IWU**

---

John Wesley Powell Student Research  
Conference

2012, 23rd Annual JWP Conference

---

Apr 14th, 2:35 PM - 3:35 PM

## Bacteriophage Genomes Annotation

Da Wang  
*Illinois Wesleyan University*

David Bollivar, Faculty Advisor  
*Illinois Wesleyan University*

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>

---

Wang, Da and Bollivar, Faculty Advisor, David, "Bacteriophage Genomes Annotation" (2012). *John Wesley Powell Student Research Conference*. 19.  
<https://digitalcommons.iwu.edu/jwprc/2012/posters2/19>

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact [digitalcommons@iwu.edu](mailto:digitalcommons@iwu.edu).

©Copyright is owned by the author of this document.

Poster Presentation P38

## **BACTERIOPHAGE GENOMES ANNOTATION**

Da Wang and David Bollivar\*

Biology Department, Illinois Wesleyan University

This project mainly focuses on analyzing the genomes functions of the bacteriophage Shrimp, which was purified and extracted in last semester. Shrimp is Myoviridae and belongs to the cluster C. After finishing the genome sequencing of Shrimp, we compared the similarity of those sequences to the known sequences by using DNA Master to predict the possible proteins that can be produced by Shrimp's genomes. BLAST and HHpred are used for searching our query protein sequence against all known predicted protein sequences to predict potential gene functions. The coding potential of open reading frames was detected by GeneMark. Aragorn helps to identify the locations and anticodons of tRNA genes in the Shrimp. After the annotation, although the functions of some parts of Shrimp were unknown, we found that Shrimp is very similar to phage Bxz1. The result will help the further identification of Shrimp.