



Illinois Wesleyan University Digital Commons @ IWU

John Wesley Powell Student Research
Conference

2016, 27th Annual JWP Conference

Apr 16th, 9:00 AM - 10:00 AM

Isolation and Characterization of Six Novel *Rhodobacter Capsulatus* Bacteriophages

Addison Ely

Illinois Wesleyan University

Alexandria Paradis

Illinois Wesleyan University

Brook Koebele

Illinois Wesleyan University

Richard Alvey, Faculty Advisor

Illinois Wesleyan University

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

 Part of the [Biology Commons](#), and the [Education Commons](#)

Ely, Addison; Paradis, Alexandria; Koebele, Brook; and Alvey, Faculty Advisor, Richard, "Isolation and Characterization of Six Novel *Rhodobacter Capsulatus* Bacteriophages" (2016). *John Wesley Powell Student Research Conference*. 5.
<http://digitalcommons.iwu.edu/jwprc/2016/posters/5>

This Event is brought to you for free and open access by The Ames Library, the Andrew W. Mellon Center for Curricular and Faculty Development, the Office of the Provost and the Office of the President. It has been accepted for inclusion in Digital Commons @ IWU by the faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation P9

**ISOLATION AND CHARACTERIZATION OF SIX NOVEL
RHODOBACTER CAPSULATUS BACTERIOPHAGES**

Addison Ely, Alexandria Paradis, Brook Koebele, and Richard Alvey*
Biology Department, Illinois Wesleyan University

Rhodobacter capsulatus is a photosynthetic bacterium that is used frequently as a model system in studying the genetics of photosynthesis, but historically has not been used in bacteriophage studies. In order to broaden our knowledge of phages that infect *R. capsulatus* six new bacteriophages were isolated, expanding the total number of RC-bacteriophages to twelve. Although these new phages were found in various but similar freshwater environments, each displayed unique characteristics. These included plaque morphology, host range infectivity, and immunity. After isolation and purification of the bacteriophages, DNA was obtained from three, and sent to North Carolina State University for sequencing.