



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

Solid-Phase Peptide Synthesis

Elisabeth Sonta

Illinois Wesleyan University

Brian Brennan, Faculty Advisor

Illinois Wesleyan University

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



Part of the [Chemistry Commons](#)

Sonta, Elisabeth and Brennan, Faculty Advisor, Brian, "Solid-Phase Peptide Synthesis" (2011). *John Wesley Powell Student Research Conference*. 23.
<https://digitalcommons.iwu.edu/jwprc/2011/posters/23>

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.

©Copyright is owned by the author of this document.

Poster Presentation P47

SOLID-PHASE PEPTIDE SYNTHESIS

Elisabeth Sonta and Brian Brennan*
Chemistry Department, Illinois Wesleyan University

Sickle cell disease is a genetically inherited blood disorder that leads to the aggregation of hemoglobin in the absence of oxygen. This aggregation leads to the formation of the characteristic sickled shape of red blood cells, which is the cause of the symptoms of the disease. There are currently few treatments for the disorder, with the only cure being a risky bone marrow transplant. Previous studies in the lab have determined fifteen peptides that bind to deoxygenated hemoglobin; these peptides may prevent the aggregation of hemoglobin and therefore the sickled shape of the red blood cell. My research is focused on the synthesis and purification of these peptides for their use in future studies involving their interaction with deoxygenated hemoglobin. The results of this study will be presented.