



## CENTER FOR NANOHYBRID FUNCTIONAL MATERIALS

**MONDAY**  
**APRIL 14, 2014**  
**2:30 – 4:30 PM**  
**W213 NEBRASKA HALL**  
**UNL**



## **Dr. Jason Bartz**

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Associate Dean of Academic & Faculty Affairs  
School of Medicine, Creighton University, Omaha Nebraska

### **The role of strain interference in prion evolution**

Prions are transmissible agents comprised of a misfolded protein PrP<sup>Sc</sup> that is posttranslationally derived from the normal isoform PrP<sup>C</sup>. Prion strains are operationally defined by differences in the distribution and intensity of spongiform degeneration and distribution of PrP<sup>Sc</sup> in the CNS. The mechanism by which prion strains are encoded is not known, however, current evidence suggests that the conformation of PrP<sup>Sc</sup> encodes prion strain diversity. In natural prion disease more than one prion strain can exist in an individual. Prion strains, when present in the same host, can interfere with each other, a process that may be important during prion adaptation following interspecies transmission. While the parameters that influence prion strain interference are beginning to be described, the mechanism responsible for strain interference is not known.

Seminar hosted by Dr. Tino Hofmann, UNL Department of Electrical Engineering



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