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**Interfacial curvature effects in the self-assembly and responsiveness in polypeptide-based triblock copolymers** DANIEL SAVIN, JACOB RAY, ASHLEY JOHNSON, JACK LY, CHARLES EASTERLING, The University of Southern Mississippi — The self-assembly of amphiphilic block copolymers is dictated primarily by the balance between the hydrophobic core volume and the hydrophilic corona. In these studies, ABA and BAB triblock copolymers containing poly(lysine) (PK) and poly(propylene oxide) were synthesized and their solution properties studied using dynamic light scattering, circular dichroism spectroscopy and transmission electron microscopy. This talk will present some recent studies in solution morphology transitions that occur in these materials as a result of the helix-coil transition and associated charge-charge interactions. The solution properties and responsiveness of these novel materials will be discussed in terms of their ability to encapsulate and deliver cancer therapeutics.

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