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RESEARCH INTERESTS

The main emphasis of my research is in the area of oral solid dosage forms. This research involves developing systematic methods for formulating controlled and immediate release tablets. Formulation of Nutritional Supplements and Botanical Products: As an extension of this formulation research, we are also examining the formulation of folic acid containing multivitamin and mineral supplements and several other botanical supplements. Process Analytical Technology (PAT): The goal of this research is to find the best practices for Near Infrared (NIR) spectroscopic monitoring of the different unit operations involved in tablet product. Film coating polymers: we examine the interactions between common excipients and the film coating polymers and film coating dispersions.

Publications

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Adam A. Dinerman, Joseph Cappello, Hamid Ghandehari, Stephen W. Hoag, "Swelling Behavior of a Genetically Engineered Silk-Elastinlike Hydrogel" *Biomaterials* **23**(21): 4203-4210 (2002).

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Brian Du and Stephen W. Hoag, "The Influence of Excipients on the Stability of the Moisture Sensitive Drugs Aspirin and Niacinamide: Comparison of Tablets Containing Lactose Monohydrate with Tablets Containing Anhydrous Lactose" *Pharm. Dev. Tech.* **6**(2):159-166 (2001).

Nasser N. Nyamweya and Stephen W. Hoag, "Assessment of Polymer-Polymer Interactions in Blends of HPMC and Film Forming Polymers by Modulated Temperature Differential Scanning Calorimetry Simulator" *Pharm. Res.* **17**(5):625-631 (2000).