

DRUG DELIVERY SOLUTIONS FOR PROTEIN THERAPEUTICS IN THE BIOTECHNOLOGY INDUSTRY

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Lecture: 2:30-3:30 p.m., PAA A110

Reception at 3:30 p.m. in Benson Lobby

Abstract

Engineering the delivery of a protein to sites of action in the body provides powerful means to create or improve its therapeutic value. This can be achieved by chemically or physically combining moieties that provide targeting, controlled release, or effector functions. Case studies will include site specific PEGylation of interferon beta as a long-acting multiple sclerosis treatment and development of Optide targeting peptides. This talk will illustrate the breadth of technical and leadership roles that a chemical engineer may encounter in the biotechnology industry.

Speaker Biography

Natalie Winblade Nairn earned her B.S.Ch.E. from the UW Chemical Engineering Department. She then earned a M.S. and a Ph.D. in Chemical Engineering from California Institute of Technology. She performed her graduate work with Professor Jeffrey Hubbell and as a visiting scholar at UW with Professor Allan Hoffman. She has spent her career developing drug delivery solutions for therapeutic proteins and peptides in the Seattle biotechnology industry. Her work has included design of bioconjugates and targeted therapies, process development for GMP manufacturing, intellectual property evaluation, and managing research groups and corporate partnerships. Following positions at Allozyme and Corixa, her current position is Director of Formulation Development at Blaze Biosciences.