University of Minnesota
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Abbott Workshop Series in Synthetic Organic and Medicinal Chemistry

Associate Professor
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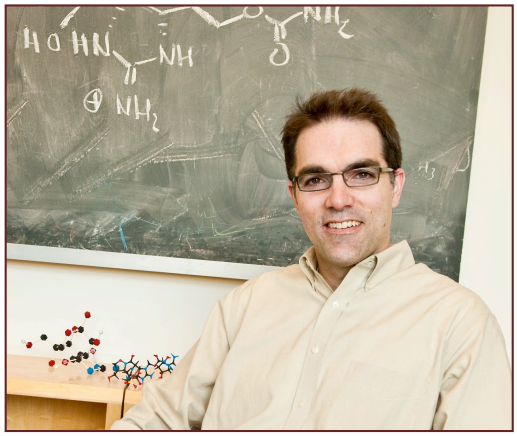
Research interests are based broadly
in methods development and chemical synthesis,
including the invention of new atom
and group transfer-type reaction processes.
http://www.stanford.edu/dept/chemistry/faculty/dubois/



Turning Toxins into Tools Through De Novo Chemical Synthesis

Abstract:
Marine neurotoxins can serve as important pharmacological tools for understanding protein function associated with the highly complex ionic mechanisms of electrical transmission in cells. The voltage-gated sodium ion channel is a primary site of action for many of these poisonous substances. Among such agents, tetrodotoxin, the guanidinium poison synonymous with the Japanese puffer fish, and saxitoxin are foremost. This lecture will attempt to illustrate how synthetic chemistry and molecular design, together with the tools of molecular biology and electrophysiology, can be used to explore dynamic processes associated with vg-Na^+ channel function.

4:15 p.m. Friday, March 11
331 Smith Hall

Host: Thomas Hoye

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