Project title: Scientific Computing and Computer Visualization for Biotransport

Advisor: Prof. Andreas Linnering – Department of Chemical Engineering and Bioengineering

Project Description:
The Laboratory for Product and Process Design at the Departments of Chemical Engineering & Bioengineering, University of Illinois at Chicago, seeks outstanding students for a position as a Research Assistant (Computer Science) in the area of scientific computing and computer visualization of transport processes in the human brain. Research projects are sponsored by the National Institute of Health and National Science Foundation. Our research involves an interdisciplinary collaboration with a team of neurosurgeons and MRI physicists at the Brain Research Imaging Center (BRIC) University of Chicago. The project aims at developing a better understanding of (a) targeted delivery of drugs to the human brain (b) and intracranial dynamics of blood and cerebrospinal fluid flow.

More details can be found in the following documents:

Drug Delivery into the Human Brain

Hydrodynamics of the Human Brain

Candidates should have demonstrated experience in computer visualization, object oriented programming, scientific computing or programming of finite elements methods. Computing experience with commercial software like VTK, ITK or image reconstruction tools is a plus. Applications from all branches of engineering, computer science and applied mathematics are welcome.
Interested students please send your applications including a curriculum vitae and one reference to:

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