Research Fellow in Computational Fluid Modeling

Join the Dana-Farber Cancer Institute in Boston as a postdoctoral fellow in developing multiscale models to study the underlying mechanisms driving cancer metastasis.

Cancer represents one of the biggest problems for modern societies. Metastasis is a key factor in over 90% of cancer-related deaths; however, predicting the location of secondary sites is still an important open question. We are interested in questions that are of crucial importance for cancer research, and we use mathematical and computational techniques to approach them. In particular, we are coupling a kinetic representation of fluid mechanics with a deformable representation of the suspended bodies and vessel walls to create patient-specific models of hemodynamics. Such models are extremely computationally intense and require use of large-scale supercomputers. Please visit http://amandarandles.com for more information.

The successful candidate will have:
- Ph.D. in Physics, Applied Mathematics, Scientific Computing or Computational Biology, and an interest in cancer biology.
- Strong programming skills
- Demonstrated effective verbal and written communication skills necessary to author technical and scientific reports and papers and to deliver scientific presentations.
- Publication record in peer-reviewed journals and/or conferences.
- Experience with the lattice Boltzmann or immersed boundary methods preferred.

Send a CV and arrange for three letters of recommendation to be sent to arandles@jimmy.harvard.edu by December 15th, 2014 with using "MODELING POSTDOC" in the subject line and join us in Boston.