Webinar #10: HemeLB - Simulation of cardiovascular flow on high performance computers

CompBioMed

A Centre of Excellence in Computational Biomedicine

9 September 2019 Ipm CEST (I hour duration)

Register for free here: https://attendee.gotowebinar.com/register/9128715481636422923

Blood flow throughout the human body is an inherently complex and multiscale process, encompassing the fields of physics, chemistry, biology and medicine. Understanding and making reliable predictions about these flows as it occurs within a given individual could lead to significant improvements in decision making by healthcare professionals. This webinar will discuss HemeLB, a high performance lattice Boltzmann code developed within the Centre for Computational Science at UCL and optimised for solving blood flow problems. In particular, its capabilities and performance on some of the world's largest supercomputers will be discussed along with some examples of its use. This webinar is targeted towards researchers who are interested in learning about HemeLB and its use within the CompBioMed Centre of Excellence. In particular it should assist those wanting to model flows with the code.

> This is the 10th of a series of webinars organised by CompBioMed. Watch the full series on <u>www.compbiomed.eu/training</u>!

Dr Jon McCullough commenced as a Postdoctoral Research Associate within the Centre for Computational Science at UCL in 2019. Prior to this, he completed his PhD in Mechanical Engineering at The University of Queensland (Australia) studying the behaviour of thermal particle suspensions within the oil and gas industry. With his work partially funded by the CompBioMed Centre of Excellence, he has been focussed on continuing the development of the HemeLB code.



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