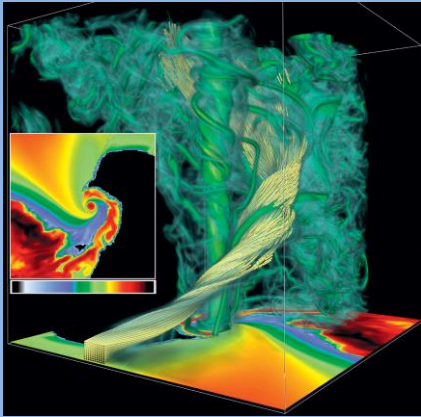


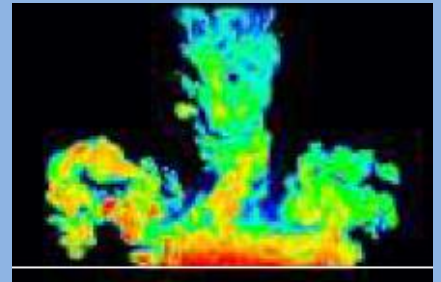
Funded Graduate Research Opportunities in Fluid Mechanics at Western University

Are you a Canadian citizen or Permanent Resident interested in gaining a research Masters or PhD degree? Our Advanced Fluid Mechanics Research Group has fully-funded positions for new, energetic and curious graduate students in the areas of Environmental Fluid Mechanics and Human Health, starting in either May or September 2018. Here are just some of our research topics:



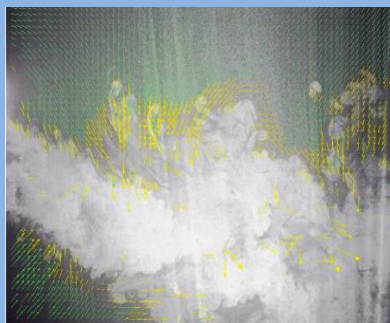
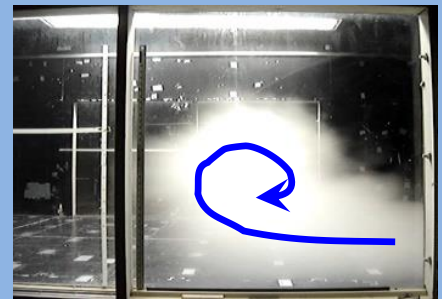
Evolution and engineering impact of thunderstorm tornadoes (left) and downbursts (right)

To understand the process of formation of these severe weather events and how they can cause failure of structures we conduct laboratory experiments and the world's largest supercomputer simulations of tornado and downburst-producing storms.



Pulsed wall jets for mixing and flow control

We conduct laboratory experiments to understand the factors influencing the formation and decay of the large-scale vortex that forms in a two-dimensional pulsed wall jet issuing from a slot.

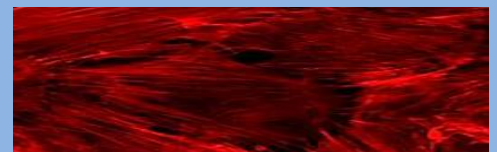
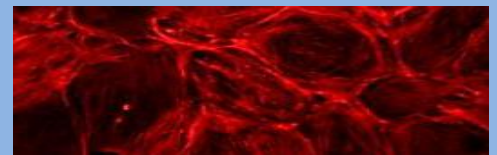


Human cough jets and person-to-person transmission of influenza virus

In this multi-university project we conduct laboratory experiments with human subjects to quantify and model the airflow in coughs, together with the viral droplets produced during coughing, in order to understand how airborne virus from an infected host may be inhaled nearby people.

The role of blood flow shear stresses in the development of arterial disease

Laboratory experiments using cultured endothelial (artery wall) cells exposed to different pulsatile flows are being used to understand how abnormal wall shear stresses, at bends and bifurcations, for example, can lead to the onset and progression of the narrowing of arteries (stenosis). The two photos alongside show the cell structures under two different experimentally-simulated blood flow conditions.



If you are interested in any of these opportunities or want to know more about our research areas please contact Dr Eric Savory at: esavory@uwo.ca including a copy of your CV if you wish. Come and join our friendly team - we look forward to hearing from you!