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| Cardiovascular Biomechanics and Ultrasound Laboratory | logo_full_colour |
| National University of Singapore, Department of Biomedical Engineering |

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| |  | | --- | | Menu | | [Lab Home](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\LabHome.htm) | | [People](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\People.htm) | | [Research Projects](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\Research.htm) | | [Publications](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\Publications.htm) | | [Position Vacancy](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\Vacancy.htm) | |  | | **Research Focus** |
| The Cardiovascular Biomechanics and Ultrasound Laboratory (PI: Yap Choon Hwai) focuses on investigations of pre-natal cardiovascular biomechanics, including human fetal heart and small animal embryonic heart biomechanics, and placenta biomechanics. We strive to understand the fluid mechanical environment and myocardial tissue biomechanical environments of the fetal heart and blood vessels, so as to understand how these mechanical forces play a role in normal development, and how they can cause diseases.  Our second interest, which is a translational interest, is on developing technologies that can lead to blood pumps with low blood damage, using both materials and design strategies.  Details on Research Project [here](file:///C:\Users\ChoonHwai\Documents\GitHub\yaplab.github.io\Research.htm). |
|  | **News and Events** |
|  | Yap Lab and Poulikakos Lab jointly develop an advanced nano-tech enabled hemostatic patch that minimizes blood loss by repelling blood, enables fast clotting, and easy detachment after clotting. Check it out [here](https://bioengineeringcommunity.nature.com/users/263613-choon-hwai-yap/posts/57180-superhydrophobic-biomaterial-makes-an-ideal-gauze-rapid-bleeding-stoppage-and-easy-removal-after-healing-prevents-infections). |