Clinical Context
Pulmonary hypertension (PH) is a condition of increased blood pressure within the arteries of the lungs. Symptoms include shortness of breath, syncope, tiredness, chest pain, swelling of the legs, and a fast heartbeat. The cause is often unknown, and the underlying mechanism typically involves inflammation of the arteries in the lungs. In order to diagnose and follow-up patients, it is important to be able to quantify the pressure within the pulmonary artery. However, this is an invasive measurement done with catheters, which limits its use.

Position Description
The aim of this project is to develop machine learning tools to estimate the pulmonary artery pressure non-invasively based on imaging and modelling. This will be done in collaboration with clinicians experts in pulmonary hypertension. This work could lead to a new non-invasive method to estimate pressure. This internship position will be at Inria, the French Institute for Research in Computer Science and Mathematics, in the Epione research team of the Inria Sophia Antipolis - Méditerranée Research Centre, located on the French Riviera.

Searched profile
- Biomedical engineering, computer science, applied mathematics (MSc level)
- Eager to work in the medical field, to learn and take initiatives
- Fluent in English (Reading, Writing, Speaking)

Job location: Inria Sophia Antipolis, 2004 route des lucioles, 06 902 Sophia Antipolis, France
Contract: 6 months
Start: ASAP
Salary: gross remuneration of 1445 Euros/month (net is about 1182 Euros)
Send resume & motivation letter: maxime.sermesant@inria.fr