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**Magnetic Resonance Elastography of the lung  
with hyperpolarised helium-3**

**PhD position**

**Duration 3 years – European Union Marie Curie Studentship**

**Graduate or Master Physicists** with a strong theoretical and experimental background, knowledge, or interest in fields related to acoustics, ultrasounds, fluid mechanics, magnetic resonance, electronics and programming. The research work aims at the measurement of the regional viscoelastic properties of the lung. The PhD student will initiate elastography of the lung by magnetic resonance of helium-3 atoms as an original means to study and characterise obstructive diseases of the airways like asthma or emphysema or diseases like interstitial fibrosis or cancer.

The project is funded as part of the EU Framework 6 Polarised Helium Imaging for Lungs Network (PHELINET) and the student will be encouraged to participate in ongoing collaborations with other researchers across Europe with multiple opportunities to visit leading international laboratories and to attend taught summer schools.

Starting date: September 2007

For more information on the helium-3 project please visit [www.u-psud.fr/u2r2m](http://www.u-psud.fr/u2r2m)

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