**Scheda di Offerta Tesi**

**Titolo (provvisorio):** Determinants of Renal Tissue Oxygenation as Measured with BOLD-MRI in Chronic Kidney Disease

**Relatore/i:** Fato Marco Massimo, Benedetta Toselli (DIBRIS), Beatrice Damasio (Gaslini)

**E-mail:** marco.fato@unige.it

**Indirizzo:** Viale Causa 13 - Piano -1

**Tel.:** (+39) 010 353-2789

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**Motivazione e campo di applicazione**

Experimentally renal tissue hypoxia appears to play an important role in the pathogenesis of chronic kidney disease (CKD).

**Obiettivi generali e principali attività**

In this study we measured renal tissue oxygenation and its determinants in humans using blood oxygenation level-dependent magnetic resonance imaging (BOLD-MRI) under standardized hydration conditions. Different coronal slices were selected, and a multi gradient echo sequence was used to acquire T2* weighted images.

**Obiettivi di apprendimento (strumenti tecnici e analitici, metodologie sperimentali)**

- study different tools and methods of applying BOLD-MRI analysis on CKD
- select best tool for BOLD-MRI analysis and test feasibility on images of children and neonates

**Luogo/i in cui si svolgerà il lavoro:** DIBRIS - Gaslini

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**Informazioni aggiuntive**

**Numero massimo di studenti:** 1