

**BORSA DE CURRÍCULUMS VITAE**  
**PER A**  
**POSICIÓ POSTDOCTORAL**  
**(Ref. 2034 - CRESPO)**

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**S'OFEREIX:**

Una posició Postdoctoral per a incorporar-se al Grup de Recerca en Nefropaties (GREN), dins del Programa de Recerca Clínica Translacional de l'Institut Hospital del Mar d'investigacions Mèdiques (IMIM) en el àrea de recerca en immunologia del trasplantament dins del projecte "Antibody-mediated rejection and graft-loss: improved characterization of risk before and after kidney transplantation" amb financiació competitiva. Investigadora principal: Dra. Marta Crespo Barrio.

La incorporació està supeditada a la presentació del candidat a convocatòries d'ajuts en Recursos Humans.

**Requisits dels candidats:**

- Tenir un PhD en immunologia
- Preferible:
  - Experiència en immunologia del trasplantament.
  - Coneixements de tècniques de laboratori, citometria de flux i cultius cel·lulars especialment.
- Bon nivell d'anglès parlat i escrit.

**Resum del projecte:**

**Antibody-mediated rejection and graft-loss: improved characterization of risk before and after kidney transplantation**

Antibody-mediated rejection (ABMR) with donor-specific antibodies (DSA) is a leading cause of graft-loss after kidney transplantation (KT) with no treatment better than prevention. HLA DSA at KT are a strong risk-factor for ABMR. New sensitive techniques have increased HLA antibody (ab) detection. KT avoiding HLA DSA has become more difficult for patients with ab, diminishing opportunities (virtually impossible KT for some) or assuming an ill-defined higher risk of ABMR with KT across intended or unintended HLA DSA. Besides, antibody-mediated damage may occur

in the presence of less known non-HLA ab or without ab. This often showing microvascular inflammation (MVI), an orphan entity with distinct prognosis. In a prospective cohort of 600 KT clinically followed since 2013 with fresh/frozen serum samples & peripheral lymphocytes, and biopsies (1&3 years) with and without ABMR/MVI, we will identify biomarkers that better predict and characterize ABMR/MVI and outcomes (graft-loss, patient-death). We will adequately define the impact of HLA DSA before KT combining epitope analysis, MFI and complement "activation", as well as non-HLA companion ab. We will further investigate sensitization by detecting DSA producing memory B cells (mB) in KT with well-defined events (pregnancies&KT). After KT, we will also delineate HLA, non-HLA DSA and mB, and biopsies to compare ABMR/MVI and no rejection to assess lymphocyte subset participation (as therapeutic targets) and prognosis. Understanding risk, damage progress and the potential to interfere ABMR or MVI before and after KT will let the transplant community consider which risks are cost-effective to offer safer opportunities to persons with organ failure awaiting transplantation, specially highly sensitized, or already transplanted.

**Per a més informació i presentació de CV i còpia de l'expedient acadèmic, contactar amb**

**[mcrespo@psmar.cat](mailto:mcrespo@psmar.cat)**

**Data límit de presentació de CV: 15 de gener de 2021**