



## Postdoctoral Fellow in Cancer Biology and Biomedical Engineering

### Job description:

Postdoctoral position is available in the laboratory of Prof. Pilar de la Puente, Sanford Research, Sioux Falls to study dynamics of dysregulation of the extracellular matrix (ECM) composition in cancer. Dr. de la Puente lab's mission is focused on the engineering of translational and physiologically relevant preclinical cancer models to advance cancer research. (<https://delapuentelab.com/>). The de la Puente Lab develops translational and physiologically relevant preclinical cancer models as tools to recapitulate tumor behavior *ex vivo* ("out of the living") with an emphasis in cellular crosstalk, extracellular matrix remodeling, and spatial gradients. We focus on elucidating mechanisms driving chemoresistance and immune evasion in cancer and further developing novel treatment strategies to mitigate their occurrence. Our long-term goal is to accelerate and directly translate our significant insights to aid patients suffering from cancer.

### Requirements:

Interested candidate is expected to have recently obtained a PhD in Biomedical Engineering, Biology or similar discipline and be a first author on at least 1-2 publications in Cancer, cell-ECM mechanotransduction, and/or biomedical engineering applications. The main job duty is to perform research to understand the role of tumor extracellular matrix remodeling in cancer chemoresistance and to identify novel therapeutic targets by using patient-derived 3D cultures (Funding already secured). The translational research project leverages multi-disciplinary approach in cancer biology, bio-orthogonal metabolic labeling, biomedical engineering/tissue engineering, mechanotransduction signaling, OMICs, and high-throughput *in vitro* patient-derived models to probe complex biological processes and to pursue new therapeutic opportunities for cancer. Experience in 3D tissue cultures, confocal imaging and/or cancer biology is preferred. Excellent oral and written communication skills in English are required. Our laboratory is an inclusive and supportive environment, and we strongly encourage motivated individuals from historically excluded groups in science to apply.

### How to apply:

Please submit cover letter, CV, and contact information for 2-3 references combined into one PDF file by e-mail to: [pilar.puente@sanfordhealth.org](mailto:pilar.puente@sanfordhealth.org)

### Contact:

Pilar de la Puente, PhD; [pilar.puente@sanfordhealth.org](mailto:pilar.puente@sanfordhealth.org)  
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