

# PRESS RELEASE

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# Important findings on Molecular Embryology Published from the University of Cyprus

## Implications for genetic diseases and cancer

Important findings were recently announced from the Laboratory of Developmental Biology and Nanobiotechnology of the University of Cyprus (<a href="http://www2.ucy.ac.cy/~skourip/index.htm">http://www2.ucy.ac.cy/~skourip/index.htm</a>). A research team composed of the PhD candidate Nicoletta Petridou and Assistant Professor Dr Paris A. Skourides identified novel roles of the Focal Adhesion Kinase (FAK) in spindle orientation and cell division. The findings were published in the prestigious journal Nature Communications.

Specifically the team showed that FAK is a crucial regulator of cell division and is required for the proper orientation of cell division in cultured cells and in vertebrate tissues and organs. Orientation of cell division is a very important process both for proper development of embryonic tissues and organs as well as for the maintenance of tissues and organs in adults. Loss of the ability to orient cell division results in severe developmental defects in the embryo and is responsible for a number of diseases in adults including neurological disorders like Huntington's as well as others like polycystic kidney disease. Importantly, loss of division orientation is involved in tumor progression and metastasis which in combination with FAK's established role in tumorigenesis emphasizes the significance of these findings.