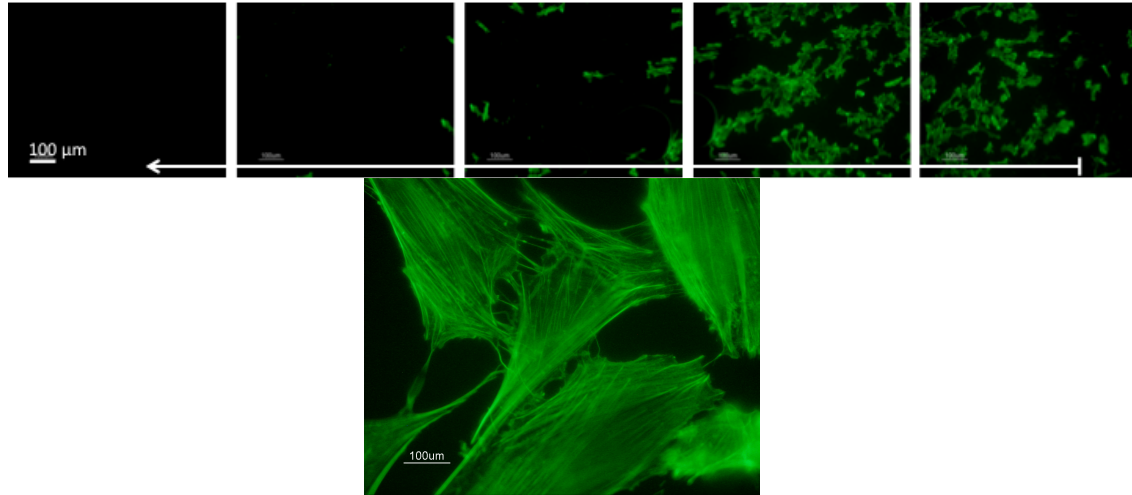


Cells grow on gradient surfaces

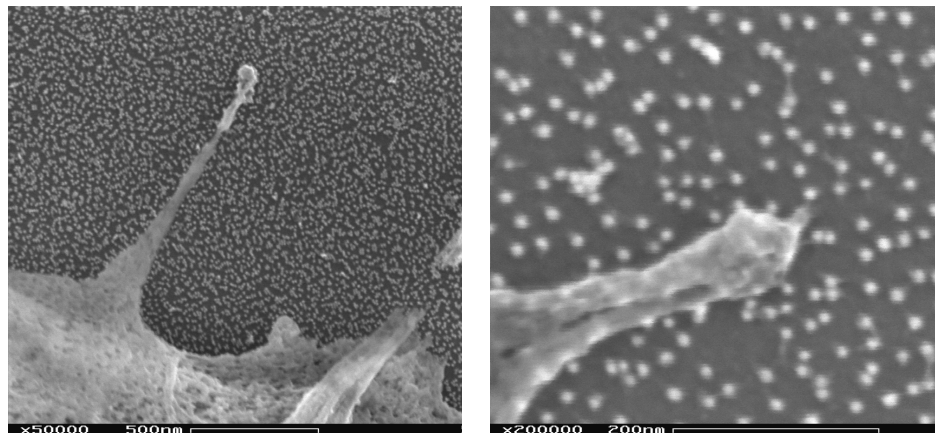
Cline Nano Gradients are here used to visualize the gradient effect on cell growth.



3T3-cells on a RGD gradient. The number of cells attached to the surface depends on the gradient properties. The arrow depicts a decreasing gradient of RGD.

Do cells attach to the gradient surface?

Functionalizing the surface by binding suitable proteins etc. to and/or between the gold nanoparticles (AuNP) creates good conditions for cell growth. The ability for cells to attach to the surface depends on the surroundings. In this case RGD was bound to AuNP and PEG covered the glass surface between the particles. This, however, is just one of countless functionalization possibilities.



SEM images showing cells growing on the gradient surface without any sign of influencing the position of the AuNPs.

Do the cells influence the gradient pattern?

After growing cells on the gradient surface and studying the result using SEM there were no evidence of cells causing the AuNPs to aggregate, change position, or any other gradient altering interaction.

Cline Nano Gradients visit <http://clinescientific.com/?page=162>