



Microgravity and Cell Adherence

Guest Editor:

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Message from the Guest Editor

Cell adherence is changed when cells are exposed to microgravity. In human or animal cells, changes of adherence became especially apparent when scaffold-free organoid formation was investigated, which included the cells' detachment from the surface of the culture flasks, followed by three-dimensional aggregation. In this process, distinct proteins and genes coding for them contribute either to a cell's adherence to a substratum or to contact with neighboring cells. Furthermore, adhesion-dependent initiation of microbial biofilm formation can be triggered by microgravity-induced changes of gene expression patterns, protein accumulation, and carbohydrate metabolism.

Articles and reviews will be collected in which either the chemical/biochemical background of external signals is described, or cellular mechanisms are unveiled that up- or down-regulate the cells' adhesion to their environment under microgravity.





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Message from the Editor-in-Chief

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