



**Molecular Biotechnology Programme
Uppsala University School of Engineering**

| | | | |
|--|--|--|--|
| UPTEC X 01 026 | | Date of issue 2001-05 | |
| Author Lovisa Forssell | | | |
| Title (English) Curved micromachined surfaces in polymeric material for cell culturing | | | |
| Title (Swedish) | | | |
| Abstract <p>Earlier work has shown that human cells react to very small structures with sharp edges. In this Degree project, a method for production of well-defined curved micromachined structures in polycaprolactone (PCL) was developed. Human fibroblasts were cultured on these structures and fluorescence stained for actin. Cells were found to align to and stretch along the grooves.</p> | | | |
| Keywords <p>Micromachining, quartz, polycaprolactone, cytoskeleton, fibroblasts, fluorescence</p> | | | |
| Supervisors Fredrik Nikolajeff Materials Science Division, Uppsala University | | | |
| Examiner Karin Caldwell Center for Surface Biotechnology, Uppsala University | | | |
| Project name | | Sponsors | |
| Language English | | Security | |
| ISSN 1401-2138 | | Classification | |
| Supplementary bibliographical information | | Pages 18 | |
| Biology Education Centre Box 592 S-75124 Uppsala | Biomedical Center Tel +46 (0)18 4710000 | Husargatan 3 Uppsala Fax +46 (0)18 555217 | |