Reference

1. Brown, M. R. W., and Gilbert, P. (1993) Sensitivity of biofilms to antimicrobial agents, *Journal of applied bacteriology. Oxford 74*.
2. Newby, A. C., and George, S. J. (1993) Proposed roles for growth factors in mediating smooth muscle proliferation in vascular pathologies, *Cardiovasc Res 27*, 1173-1183.
3. Khardori, N., and Yassien, M. (1995) Biofilms in device-related infections, *Journal of Industrial Microbiology and Biotechnology 15*, 141-147.
4. Potera, C. (1996) Biofilms invade microbiology, *Science(Washington, D. C.) 273*, 1795-1797.
5. Pomerantz, J., and Blau, H. M. (2004) Nuclear reprogramming: a key to stem cell function in regenerative medicine, *Nature cell biology 6*, 810-816.
6. Rahaman, M. N., and Mao, J. J. (2005) Stem cell-based composite tissue constructs for regenerative medicine, *Biotechnology and bioengineering 91*, 261-284.
7. Stevens, M. M., and George, J. H. (2005) Exploring and engineering the cell surface interface, *SCIENCE-NEW YORK THEN WASHINGTON- 5751*, 1135.
8. Chen, C. S., Mrksich, M., Huang, S., Whitesides, G. M., and Ingber, D. E. (1997) Geometric control of cell life and death, *Science 276*, 1425.
9. Curtis, A., and Wilkinson, C. (1997) Topographical control of cells, *Biomaterials 18*, 1573-1583.
10. Flemming, R. G., Murphy, C. J., Abrams, G. A., Goodman, S. L., and Nealey, P. F. (1999) Effects of synthetic micro- and nano-structured surfaces on cell behavior, *Biomaterials 20*, 573-588.
11. Mrksich, M. (2002) What can surface chemistry do for cell biology?, *Current Opinion in Chemical Biology 6*, 794-797.
12. Sniadecki, N. J., Desai, R. A., Ruiz, S. A., and Chen, C. S. (2006) Nanotechnology for cell-substrate interactions, *Ann Biomed Eng 34*, 59-74.
13. Stevens, M. M., and George, J. H. (2005) Exploring and engineering the cell surface interface, *Science 310*, 1135-1138.
14. Dalby, M. J., Giannaras, D., Riehle, M. O., Gadegaard, N., Affrossman, S., and Curtis, A. S. (2004) Rapid fibroblast adhesion to 27nm high polymer demixed nano-topography, *Biomaterials 25*, 77-83.
15. Dalby, M. J., Riehle, M. O., Sutherland, D. S., Agheli, H., and Curtis, A. S. G. (2004) Fibroblast response to a controlled nanoenvironment produced by colloidal lithography, *Journal of Biomedical Materials Research 69*, 314-322.
16. Lee, J., Kang, B. S., Hicks, B., Chancellor, T. F., Chu, B. H., Wang, H. T., Keselowsky, B. G., Ren, F., and Lele, T. P. (2008) The control of cell adhesion and viability by zinc oxide nanorods, *Biomaterials 29*, 3743-3749.

17. Choi, C. H., Hagvall, S. H., Wu, B. M., Dunn, J. C. Y., Beygui, R. E., and “Cj” Kim, C. J. (2007) Cell interaction with three-dimensional sharp-tip nanotopography, *Biomaterials 28*, 1672-1679.
18. Nur-E-Kamal, A., Ahmed, I., Kamal, J., Schindler, M., and Meiners, S. Three-dimensional nanofibrillar surfaces promote self-renewal in mouse embryonic stem cells, *Stem Cells*.
19. Kim, W., Ng, J. K., Kunitake, M. E., Conklin, B. R., and Yang, P. (2007) Interfacing silicon nanowires with mammalian cells, *J. Am. Chem. Soc 129*, 7228-7229.
20. Lim, I. A. (2004) Biocompatibility of stent materials, *Murj 11*, 34.
21. Santin, M., Mikhalovska, L., Lloyd, A. W., Mikhalovsky, S., Sigfrid, L., Denyer, S. P., Field, S., and Teer, D. (2004) In vitro host response assessment of biomaterials for cardiovascular stent manufacture, *Journal of materials science: materials in medicine 15*, 473-477.
22. Tung, R., Kaul, S., Diamond, G. A., and Shah, P. K. (2006) Narrative review: drug-eluting stents for the management of restenosis: a critical appraisal of the evidence, *Annals of internal medicine 144*, 913.
23. Wu C-T, K. F.-H., Hwang H-Y. (2006) Self-aligned tantalum oxide nanodot arrays through anodic alumina template., *Microelectronic Engineering 83*, 1567-1570
24. Pan, H. A., Hung, Y. C., Su, C. W., Tai, S. M., Chen, C. H., Ko, F. H., and Steve Huang, G. (2009) A Nanodot Array Modulates Cell Adhesion and Induces an Apoptosis-Like Abnormality in NIH-3T3 Cells, *Nanoscale Research Letters 4*, 903-912.
25. Whittaker, P., Boughner, D. R., and Kloner, R. A. (1991) Role of collagen in acute myocardial infarct expansion, *Circulation 84*, 2123.
26. Creemers, E., Cleutjens, J., Smits, J., Heymans, S., Moons, L., Collen, D., Daemen, M., and Carmeliet, P. (2000) Disruption of the plasminogen gene in mice abolishes wound healing after myocardial infarction, *American Journal of Pathology 156*, 1865.
27. Takeshita, K., Hayashi, M., Iino, S., Kondo, T., Inden, Y., Iwase, M., Kojima, T., Hirai, M., Ito, M., and Loskutoff, D. J. (2004) Increased expression of plasminogen activator inhibitor-1 in cardiomyocytes contributes to cardiac fibrosis after myocardial infarction, *American Journal of Pathology 164*, 449.
28. Partridge, M. A., and Marcantonio, E. E. (2006) Initiation of attachment and generation of mature focal adhesions by integrin-containing filopodia in cell spreading, *Mol Biol Cell 17*, 4237-4248.
29. Andersson, A. S., Backhed, F., von Euler, A., Richter-Dahlfors, A., Sutherland, D., and Kasemo, B. (2003) Nanoscale features influence epithelial cell morphology and cytokine production, *Biomaterials 24*, 3427-3436.
30. Erbil, H. Y. (2003) Transformation of a simple plastic into a superhydrophobic surface, *Science 299*, 1377.

31. Harris, M. B., Ju, H., Venema, V. J., Blackstone, M., and Venema, R. C. (2000) Role of heat shock protein 90 in bradykinin-stimulated endothelial nitric oxide release, *General Pharmacology: The Vascular System 35*, 165-170.
32. Ilangovan, G., Osinbowale, S., Bratasz, A., Bonar, M., Cardounel, A. J., Zweier, J. L., and Kuppusamy, P. (2004) Heat shock regulates the respiration of cardiac H9c2 cells through upregulation of nitric oxide synthase, *American Journal of Physiology- Cell Physiology 287*, C1472.
33. Ichikawa-Shindo, Y., Sakurai, T., Kamiyoshi, A., Kawate, H., Iinuma, N., Yoshizawa, T., Koyama, T., Fukuchi, J., Iimuro, S., and Moriyama, N. (2008) The GPCR modulator protein RAMP2 is essential for angiogenesis and vascular integrity, *Journal of Clinical Investigation 118*, 29-39.
34. Tanaka, K., Ashizawa, N., Kawano, H., Sato, O., Seto, S., Nishihara, E., Terazono, H., Isomoto, S., Shinohara, K., and Yano, K. (2007) Aldosterone induces circadian gene expression of clock genes in H9c2 cardiomyoblasts, *Heart and Vessels 22*, 254-260.
35. Laverriere, A. C., MacNeill, C., Mueller, C., Poelmann, R. E., Burch, J. B., and Evans, T. (1994) GATA-4/5/6, a subfamily of three transcription factors transcribed in developing heart and gut, *Journal of Biological Chemistry 269*, 23177.

List of Figures

Tables

Table 1. Primer sequences.