

Publications based on AFM 2003-2008

Maurstad, G., Danielsen, S. and Stokke, B. T. Analysis of compacted semiflexible polyanions visualized by AFM: Influence of chain stiffness on morphologies of polyelectrolyte complexes. *J. Phys. Chem. B.* **107** (2003): 8172 – 8180.

Sletmoen, M., Maurstad, G., Sikorski, P., Paulsen, B. S. and Stokke, B. T. Characterisation of bacterial polysaccharides: Steps towards single-molecular studies. *Carbohydrate Research* **23** (2003): 2459-2475.

Sletmoen, M., Skjåk-Bræk, G. and Stokke, B. T. Single-molecular pair unbinding studies of mannuronan C-5 epimerase AlgE4 and its polymer substrate. *Biomacromolecules* **5** (2004): 1288-1295.

Danielsen, S., Vårum, K. M. and Stokke, B. T. Structural analysis of chitosan mediated DNA condensation by AFM: Influence of chitosan molecular parameters. *Biomacromolecules* **5** (2004): 928-936.

Köping-Höggård, M., Vårum, K. M., Issa, M., Danielsen, S., Christensen, B. E., Stokke, B. T., and Artursson, P. A new approach to chitosan-mediated gene delivery based on easily dissociated chitosan polyplexes of highly defined chitosan oligomers. *Gene Therapy* **11** (2004): 1441-1452.

Maurstad, G. and Stokke, B.T. Metastable and stable states of xanthan polyelectrolyte complexes studied by atomic force microscopy. *Biopolymers* **74** (2004): 199-213.

Danielsen, S., Strand, S., Davies, C. deL. and Stokke, B. T. Glycosaminoglycan destabilization of DNA- chitosan polyplexes for gene delivery depends on chitosan chain length and GAG properties. *Biochim. Biophys. Acta - General Subjects* **1721** (2005): 44-54.

Danielsen, S., Maurstad, G. and Stokke, B. T. Polycation induced DNA condensation and polyplex stability in the presence of competing polyanions. *Biopolymers* **77** (2005): 86-97.

Sletmoen, M., Christensen, B. E. and Stokke, B.T. Probing macromolecular architectures of nanosized cyclic structures of (1,3)- β -D-glucans by AFM and SEC-MALLS. *Carbohydr. Res.* **340** (2005): 971-979.

Maurstad, G. Bausch, A. R., Sikorski, P. T. and Stokke, B. T. Electrostatically self-assembled multilayers of chitosan and xanthan studied by atomic force microscopy and micro-interferometry. *Macromolecular Symposia* **227** (2005): 161-172.

Sletmoen, M., Skjåk-Bræk, G. and Stokke, B. T. Mapping enzymatic functionalities of mannuronan C-5-epimerases and their modular units by dynamic force spectroscopy. *Carbohydr. Res.* **340** (2005): 2782-2795.

Maurstad, G. and Stokke, B. T. Toroids of stiff polyelectrolytes. *Curr. Opinion in Colloid and Interface Science* **10** (2005): 16-21.

Sletmoen, M. and Stokke, B. T. Structural properties of polyC-scleroglucan complexes. *Biopolymers* **79** (2005): 115-127 (also front cover illustration of the journal issue).

Sletmoen, M., Geissler, E. and Stokke, B. T. Determination of molecular parameters of linear and circular scleroglucan co-existing in ternary mixtures using light scattering. *Biomacromolecules* **7**(3) (2006): 858-865.

Sletmoen, M. and Stokke, B. T. Macromolecular motion at the nanoscale of enzymes working on polysaccharides. *Lecture Notes in Physics* **711** (2007):161-180.

Maurstad, G., Danielsen, S. and Stokke, B. T. The influence of charge density of chitosan in compacting polyanions DNA and xanthan. *Biomacromolecules* **8**(4) (2007): 1124-1130.

Sletmoen, M., Maurstad, G. and Stokke, B. T. Potentials of bionanotechnology in the study and manufacturing of self-assembled biopolymer complexes and gels. *Food Hydrocolloids* **22**(1) (2008): 2-11.

Publications based on CLSM 2003-2008

Espevik, T., Latz, E., Lien, E., Monks, B. and Golenbock, D. T. Cell distributions and functions of Toll-like receptor 4 studied by fluorescent gene constructs. *Scand J Infect Dis.* **35**(9) (2003): 660-664.

Latz, E., Visintin, A., Lien, E., Fitzgerald, K. A., Espevik, T. and Golenbock, D. T. The LPS receptor generates inflammatory signals from the cell surface. *J Endotoxin Res.* **9**(6) (2003): 375-380.

Sandor, F., Latz, E., Re, F., Mandell, L., Repik, G., Golenbock, D. T., Espevik, T., Kurt-Jones, E. A. and Finberg, R. W. Importance of extra- and intracellular domains of TLR1 and TLR2 in Nf-kappa B signaling. *J Cell Biol.* **162**(6) (2003): 1099-1110.

Visintin, A., Latz, E., Monks, B. G., Espevik, T. and Golenbock, D. T. Lysines 128 and 132 enable lipopolysaccharide binding to MD-2, leading to Toll-like receptor-4 aggregation and signal transduction. *J Biol Chem.* **278**(48) (2003): 48313-48320.

Schjetne, K. W., Thompson, K. M., Nilsen, N., Flo, T. H., Fleckenstein, B., Iversen, J. G., Espevik, T. and Bogen, B. Cutting edge: link between innate and adaptive immunity: Toll-like receptor 2 internalizes antigen for presentation to CD4⁺ T cells and could be an efficient vaccine target. *J Immunol.* **171**(1) (2003): 32-36.

Aas, P. A., Otterlei, M., Falnes, P. Ø., Vågbø, C. B., Skorpen, F., Akbari, M., Sundheim, O., Bjørås, M., Slupphaug, G., Seeberg, E. and Krokan, H. E. Repair of alkylated DNA and RNA by AlkB and human homologues. *Nature* **421** (2003): 859-863.

Baynton, K., Otterlei, M., Bjørås, M., von Kobbe, C., Bohr, V. and Seeberg, E. WRN helicase interacts physically and functionally with the RAD52 recombination mediator protein. *J. Biol. Chem.* **278**(38) (2003): 36476-36486.

Stranden, M., Liblikas, I., König, W. A., Almaas, T. J., Borg-Karlson, A.-K. and Mustaparta, H. (-)-Germacrene D receptor neurones in three species of heliothine moths: structure-activity relationships. *J. Comp. Physiol.* **189**(7) (2003): 563-577.

Stranden, M., Røstelien, T., Liblikas, I., Almaas, T. J., Borg-Karlson, A.-K. and Mustaparta, H. Receptor neurones in three heliothine moths responding to floral and inducible plant volatiles. *Chemoecology* **13**(3) (2003): 143-154.

Strand, B. L., Mørch, Y. A., Espevik, T. and Skjåk-Bræk, G. Visualisation of alginate-polylysine-alginate microcapsules by confocal laser scanning microscopy. *Biotechnology and Bioengineering* **82**(4) (2003):386-394.

Rokstad, A. M., Strand, B., Rian, K., Steinkjer, B., Kulseng, B., Skjåk-Bræk, G. and Espevik, T. Evaluation of Different Types of Alginate Microcapsules as Bioreactors for Producing Endostatin. *Cell Transplantation* **12**(4) (2003): 351-36.

Rossiter, J. T., Jones, A. M. and Bones, A. M. A novel myrosinase-glucosinolate defense system in Cruciferous specialist aphids. In: Integrative Phytochemistry: from Ethnobotany to Molecular Ecology (Ed. John T. Romeo). Pergamon Press ISBN 0 08 044277 3. *Recent Advances in Phytochem* **37** (2003): 127-142.

Brembu, T., Winge, P., Seem, M. and Bones, A. M. NAPP and PIRP encode subunits of a putative WAVE regulatory protein complex involved in plant cell morphogenesis. *Plant Cell* **16** (2004): 2335-2349 (cover story).

Skiri, H. T., Galizia, C. G. and Mustaparta, H. Representation of primary plant odorants in the antennal lobe of the moth *Heliothis virescens* using calcium imaging. *Chemical Senses* **29** (2004): 253-267.

Thangstad, O. P., Gilde, B., Chadchawan, S., Seem, M., Husebye, H., Bradley, D. and Bones, A. M. Cell specific, cross-species expression of myrosinases in *Brassica napus*, *Arabidopsis thaliana* and *Nicotiana tabacum*. *Plant Molecular Biology* **54**(4) (2004): 597-611 (cover story).

Latz, E., Visintin, A., Espevik, T. and Golenbock, D. T. Mechanisms of TLR9 activation. *J Endotoxin Res.* **10**(6) (2004): 406-412.

Nilsen, N., Nonstad, U., Khan, N., Knetter, C. F., Akira, S., Sundan, A., Espevik, T. and Lien, E. Lipopolysaccharide and double-stranded RNA up-regulate toll-like receptor 2 independently of myeloid differentiation factor 88. *J Biol Chem.* **279**(38) (2004): 39727-39735.

Latz, E., Schoenemeyer, A., Visintin, A., Fitzgerald, K. A., Monks, B. G., Knetter, C. F., Lien, E., Nilsen, N. J., Espevik, T. and Golenbock, D. T. TLR9 signals after translocating from the ER to CpG DNA in the lysosome. *Nat Immunol.* **5**(2) (2004): 190-198.

Davies, C. de L., Lundstrøm, L. M., Frengen, J., Eikenes, L., Bruland, Ø., Kaalhus, O., Hjelstuen, M. H. B. and Brekken, C. Radiation improves the distribution and uptake of liposomal doxorubicin (Caelyx) in human osteosarcoma xenografts. *Cancer Res.* **64** (2004): 547-553.

Eikenes, L., Bruland, Ø. S., Brekken, C. and Davies, C. de L. Collagenase increases the transcapillary pressure gradient and improves the uptake and distribution of monoclonal antibodies in human osteosarcoma xenografts. *Cancer Res.* **64** (2004): 4768-47673.

Sharma, S., Otterlei, M., Sommers, J. A., Driscoll, H. C., Dianov, G. L., Kao, H.-U., Bambara, R. A. and Brosh, Jr, R. M. WRN helicase and Flap endonuclease 1 forms a complex upon replication arrest and together process branch-migrating DNA structures associated with the replication fork. *Mol Biol Cell* **15**(2) (2004): 734-50.

Fan, J., Otterlei, M., Wong, H.-K., Tomkinson, A. E. and Wilson D. M. III. XRCC1 co-localizes and physically interacts with PCNA. *Nucleic Acids Res.* **32**(7) (2004): 2193-2201.

Opresko, P., Otterlei, M., Graakjær, J., Bruheim, P., Dawut, L., Kølvrå, S. and Bohr, V. The Werner syndrome helicase and exonuclease cooperate to resolve telomeric D-loops in a manner regulated by TRF1 and TRF2. *Mol CELL* **14** (2004): 763-774.

Rø, T. B., Holt, R. U., Brenne, A. T., Hjorth-Hansen, H., Waage, A., Hjertner, O., Sundan, A. and Borset, M. Bone morphogenetic protein-5, -6 and -7 inhibit growth and induce apoptosis in human myeloma cells. *Oncogene* **23** (2004): 3024-3032.

Standal, T., Hjorth-Hansen, H., Rasmussen, T., Dahl, I. M., Lenhoff, S., Brenne, A. T., Seidel, C., Baykov, V., Waage, A., Borset, M., Sundan, A. and Hjertner, O. Osteopontin is an adhesive factor for myeloma cells and is found in increased levels in plasma from patients with multiple myeloma. *Haematologica* **89**(2) (2004): 174-182.

Brenne, A. T., Romstad, L. H., Gimsing, P., Juliusson, G., Tureson, I., Romundstad, P., Borset, M., Sundan, A. and Waage, A. TNFR p55 predicts response to thalidomide in advanced multiple myeloma. *Hematologica* **89**(5) (2004): 552-556.

Hov, H., Fagerli, U.-M., Holt, R. U., Rø, T. B., Hjorth-Hansen, H., Baykov, V., Christensen, J. G., Waage, A., Sundan, A. and Borset, M. A selective c-Met inhibitor blocks an autocrine HGF growth loop in ANBL-6 cells and prevents migration and adhesion of myeloma cells. *Clin Cancer Res.* **10**(19) (2004): 6686-6694.

Kemi, O. J., Haram, P. M., Wisløff, U. and Ellingsen, Ø. Aerobic fitness is associated with cardiomyocyte contractile capacity and endothelial function in exercise training and detraining. *Circulation.* **109**(23) (2004): 2897-2904.

Manukyan, M., Triantafilou, K., Triantafilou, M., Mackie, A., Nilsen, N., Espevik, T., Wiesmüller, K. H., Ulmer, A. J. and Heine, H. Binding of lipopeptide to CD14 induces physical proximity of CD14, TLR2 and TLR1. *Eur J Immunol.* **35**(3) (2005): 911-921.

Luna, L., Rolseth, V., Hildrestrand, G. A., Otterlei, M., Dantzer, F., Bjørås M., and Seeberg, E. Dynamic relocation of hOGG1 during the cell cycle is disrupted in cells harbouring the hOGG1-Cys326 polymorphic variant. *Nucleic Acids Res.* **33**(6) (2005): 1813-24.

Kavli, B., Andersen, S., Otterlei, M., Liabakk, N. B., Imai, K., Fischer, A., Durandy, A., Krokan, H. E. and Slupphaug, G. B-cells from hyper-IgM patients carrying UNG-mutations lack ability to remove uracil from ss DNA and have elevated genome uracil. *J Exp Med.* **201**(12) (2005): 2011-21.

Richard, J. P. G., Otterlei, M. and Warbrick, E. In vivo interactions of human 66 DNA polymerase (delta) subunit with the DNA replication complex. *BMC Molecular Biology* **6** (2005): 17.

Eikenes, L., Tari, M., Tufto, I., Bruland, Ø. and Davies, C. de L. Hyaluronidase induces a transcapillary pressure gradient and improves the distribution and uptake of liposomal doxorubicin (CaelyxTM) in human osteosarcoma xenografts. *Br. J. Cancer* **93** (2005): 81-88.

Husebye, H., Artz, S., Burmeister, W., Härtel, F., Brandt, A., Rossiter, J. T. and Bones, A. M. The crystal structure at 1.1Å resolution of myrosinase from the aphid *Brevicoryne brassicae* shows its close similarity with β-glucosidases. *Insect Biochemistry and Molecular Biology* **35**(12) (2005): 1311-1320 (protein structure model selected as volume cover).

Rohloff, J. and Bones, A. M. Volatile profiling of *Arabidopsis thaliana* – Putative olfactory compounds in plant communication *Phytochemistry* **66** (2005): 1941-1955.

Brembu, T., Winge, P. and Bones, A. M. The small GTPase AtRAC2/ROP7 is specifically expressed during late stages of xylem differentiation in *Arabidopsis*. *Journal of Experimental Botany* **56** (2005): 2465-2476.

Zabala, M. de T., Grant, M., Bones, A. M., Bennett, R., Lim, Y. S., Kissen, R. and Rossiter, J. T. Characterisation of recombinant epithiospecifier protein and its over-expression in *Arabidopsis thaliana*. *Phytochemistry* **66** (2005): 859-867.

Brembu, T., Winge, P. and Bones, A. M. Catching the WAVE of actin cytoskeleton regulation. *Journal of Plant Growth Regulation* **24** (2005): 55-66 (cover story).

Skiri, H. T., Strandén M., Sandoz J. C., Menzel, R. and Mustaparta H. Associative learning of plant odorants activating the same or different receptor neurones in the moth *Heliothis virescens*. *J Exp Biol.* **208** (2005): 787-796.

Berg, B. G., Almaas, T. J., Mustaparta, H. and Bjaalie, J. G. Projections of male-specific receptor neurons in the antennal lobe of the oriental tobacco budworm moth, *Helicoverpa assulta*: A unique glomerular organization among related species. *J. Comp. Neurol.* **486** (2005): 209-220.

Skiri, H. T., Rø, H., Berg, B. G. and Mustaparta, H. Consistent organization of glomeruli in the antennal lobes of related species of heliothine moths. *J. Comp. Neurol.* **491** (2005): 367-380.

Kemi, O. J., Haram, P. M., Loennechen, J. P., Osnes, J. B., Skomedal, T., Wisløff, U. and Ellingsen, Ø. Moderate vs. high exercise intensity: Differential effects on aerobic fitness, cardiomyocyte contractility, and endothelial function. *Cardiovasc Res.* **67**(1) (2005):161-172.

Wisløff, U., Najjar, S. M., Ellingsen, Ø., Haram, P. M., Swoap, S., Fernström, M., Rezaei, K., Al-Share, Q., Koch, L. G. and Britton, S. L. Cardiovascular risk factors from artificial selection of aerobic capacity in rats. *Science* **307**(5708) (2005): 418-420.

Sørmo, C. G., Leiros, I., Brembu, T., Winge, P., Os, V. and Bones, A. M. The crystal structure of Arabidopsis thaliana RAC7/ROP9: The first RAS superfamily GTPase from the plant kingdom. *Phytochemistry* **67**(21) (2006): 2332-2340.

Brembu, T., Winge, P., Bones, A. M. and Yang, Z. A RHOse by any other name: a comparative analysis of animal and plant Rho GTPases. *Cell Research* **16** (2006): 435-445.

Bones, A. M. and Rossiter, J. T. Enzymic and chemically induced decomposition of glucosinolates. *Phytochemistry* **67**(11) (2006):1053-1067.

Jørgensen, K., Kvello, P., Almaas, T. J. and Mustaparta H. Two closely located areas in the suboesophageal ganglion and the tritocerebrum receive projections of gustatory receptor neurons located on the antennae and the proboscis in the moth *Heliothis virescens*. *J Comp. Neurol.* **496** (2006): 121-134.

Kvello, P., Almaas, T. J. and Mustaparta, H. A confined taste area in a lepidopteran brain. *Arthropod Structure and Development* , **35** (2006): 35-45.

Nilsson, P., Hammarström, P., Ahlgren, F., Herland, A., Schnell, E. A., Lindgren, M., Westermark, G. and Inganæs, O. Conjugated polyelectrolytes - conformation sensitive optical probes for staining and characterization of amyloid deposits. *ChemBioChem* **7**(7) (2006): 1096-1104.

Rokstad, A. M., Donati, I., Borgogna, M., Oberholzer, J., Strand, B. L., Espevik, T. and Skjåk-Bræk, G. Cell-compatible covalently reinforced beads obtained from a chemoenzymatically engineered alginate. *Biomaterials* **27**(27) (2006): 4726-4737.

Berg, B. G., Schachtner, J. and Homberg, U. Distribution of tachykinin-related peptides in the primary olfactory centre of the heliothine moth *Heliothis virescens*. *Chemical Senses* **31**(8) (2006): E8-E8.

Mørch, Y. A., Donati, I., Strand, B. L. and Skjåk-Bræk, G. Effect of Ca^{2+} , Ba^{2+} and Sr^{2+} on alginate microbeads. *Biomacromolecules* **7**(5) (2006): 1471-1480.

Mustaparta, H., Rø, H., Berg, B. G. and Strandén, M. Organisation of the olfactory pathway in the moth brain. *Chemical Senses* **31**(8) (2006): E82-E82.

Otterlei, M., Bruheim, P., Ahn, B., Karamakar, Bussen, W., Baynton, K. and Bohr, V. WRN syndrome protein participates in a complex with RAD51, RAD54, RAD54B and ATR in response to intrastrand crosslink repair. *J. Cell. Sci.* **119**(24) (2006): 5137-46.

Bohnhorst, J., Rasmussen, T., Moen, S. H., Flottum, M., Knutsen, L., Borset, M., Espevik, T. and Sundan, A. Toll-like receptors mediate proliferation and survival of multiple myeloma cells. *Leukemia* **20**(6) (2006): 1138-1144.

Johnsen, I. B., Nguyen, T. T., Ringdal, M., Tryggestad, A. M., Bakke, O., Lien, E., Espevik, T. and Anthonsen, M. W. Toll-like receptor 3 associates with c-Src tyrosine kinase on endosomes to initiate antiviral signaling. *EMBO J.* **25**(14) (2006): 3335-3346.

Husebye, H., Halaas, Ø., Stenmark, H., Tunheim, G., Sandanger, Ø., Bogen, B., Brech, A., Latz, E. and Espevik, T. Endocytic pathways regulate Toll-like receptor 4 signaling and link innate and adaptive immunity. *EMBO J.* **25**(4) (2006): 683-692.

Kemi, O. J., Arbo, I., Høydal, M. A., Loennechen, J. P., Wisløff, U., Smith, G. L. and Ellingsen, Ø. Reduced pH and contractility in failing rat cardiomyocytes. *Acta Physiol (Oxf)*. **188**(3-4) (2006): 185-193.

Kazana, E., Pope, T. W., Tibbles, L., Bridges, M., Pickett, J. A., Bones, A. M., Powell, G. and Rossiter, J. T. The cabbage aphid: a walking mustard oil bomb. *Proc. Biol. Sci.* **274**(1623) (2007): 2271-2277.

Tufto, I., Eikenes, L., Brekken, C., Hansen, R., Byberg, D., Nygaard, K. H. H. and Davies, C. de L. Tumor microvascular response to injection of collagenase or hyaluronidase: Assessment by confocal laser scanning microscopy and contrast-enhanced MRI. *Anticancer Res.* **27** (2007): 1475-1482.

Standal, T., Abildgaard, N., Fagerli, U.-M., Stordal, B., Hjertner, O., Borset, M. and Sundan, A. HGF inhibits BMP-induced osteoblastogenesis; implications for the bone disease of multiple myeloma. *Blood* **109**(7) (2007): 3024-3030.

Akbari M., Otterlei, M. and Krokan, H. Nuclear, but not mitochondrial uracil-DNA glycosylase forms repair complexes. *Neuroscience*. **145**(4) (2007): 1201-1212.

Erikson, A., Örtengren, J., Hompland, T., Davies C. de L. and Lindgren, M. Quantification of the second-order nonlinear susceptibility of collagen I using a laser scanning microscope. *J. Biomed. Opt.* **12**(4) (2007): 044002.

Lilledahl, M. B., Haugen, O. A., Davies, C. de L. and Svaasand, L. O. Characterization of vulnerable plaque by multiphoton microscopy. *J. Biomed. Opt.* **12**(4) (2007): 044005.

Berg, B. G., Schachtner, J., Utz, S. and Homberg, U. Distribution of neuropeptides in the primary olfactory centre of the heliothine moth *Heliothis virescens*. *Cell and Tissue Research* **327** (2007): 385-398.

Rø, H., Müller, D. and Mustaparta, H. Anatomical Organization of Antennal Lobe Projection Neurons in the Moth *Heliothis virescens*. *Journal of Comparative Neurology* **500**(4) (2007): 658-675.

Mørch, Y. A., Donati, I., Strand, B. L. and Skjåk-Bræk, G. Molecular engineering as an approach to design new functional properties of alginate. *Biomacromolecules* **8** (2007): 2809-2814.

Latz, E., Verma, A., Visintin, A., Gong, M., Sirois, C. M., Klein, D. C. G., Monks, B. G., McKnight, C. J., Lamphier, M. S., Duprex, W. P., Espevik, T. and Golenbock, D. T. Ligand-induced conformational changes allosterically activate Toll-like receptor 9. *Nature Immunology* **8** (2007): 772-779.

Halaas, O., Husebye, H. and Espevik, T. The journey of Toll-like receptors in the cell. *Adv Exp Med Biol.* **598** (2007): 35-48.

Kemi, O. J., Ellingsen, Ø., Ceci, M., Grimaldi, S., Smith, G. L., Condorelli, G. and Wisløff, U. Aerobic interval training enhances cardiomyocyte contractility and Ca²⁺ cycling by phosphorylation of CaMKII and Thr-17 of phospholamban. *J Mol Cell Cardiol.* **43**(3) (2007): 354-61.

Adams, V., Linke, A., Wisløff, U., Doring, C., Erbs, S., Krankel, N., Witt, C. C., Labeit, S., Muller-Werdan, U., Schuler, G. and Hambrecht, R. Myocardial expression of Murf-1 and MAFbx after induction of chronic heart failure: Effect on myocardial contractility. *Cardiovasc Res.* **73**(1) (2007): 120-129.

Kemi, O. J., Ellingsen, Ø., Ceci, M., Grimaldi, S., Smith, G. L., Condorelli, G. and Wisløff, U. Aerobic interval training enhances cardiomyocyte contractility and Ca(2+) cycling by phosphorylation of CaMKII and Thr-17 of phospholamban. *J Mol Cell Cardiol.* **43** (2007): 354–361.

Bye, A., Langaas, M., Høydal, M. A., Kemi, O. J., Heinrich, G., Koch, L. G., Britton, S. L., Najjar, S. M., Ellingsen, Ø. and Wisløff, U. Aerobic capacity-dependent differences in cardiac gene expression. *Physiol Genomics.* (2008) (Epub ahead of print).

Schnell, E. A., Eikenes, L., Tufto, I., Erikson, A., Juthajan, A., Lindgren, M. and Davies, C. de L. Diffusion measured by fluorescence recovery after photobleaching based on multi-photon excitation laser scanning microscopy. *J Biomed Optics* (submitted 2008).

Erikson, A., Andersen, H. N., Næss, S. N. and Davies, C. de L. Physical and chemical modifications of collagen gels: Impact on diffusion. *Biopolymers* **89**(2) (2008):135-143.

Hagen, L., Kavli, B., Sousa, M. M., Torseth, K., Liabakk, N. B., Sundheim, O., Pena-Diaz, J., Otterlei, M., Hørning, O., Jensen, O. N., Krokan, H. E. and Slupphaug, G. Cell cycle-specific UNG2 phosphorylations regulate protein turnover, activity and association with RPA. *The EMBO J.* **27**(1) (2008): 51-61.

Fagerli, U.-M., Holt, R. U., Holien, T., Vaatsveen, T. K., Zahn, F., Egeberg, K. W., Barlogie, B., Waage, A., Aarset, H., Dai, H. Y., Shaughnessy Jr, J. D., Sundan, A. and Børset, M. Overexpression and involvement in migration by the metastasis-associated phosphatase PRL-3 in human myeloma cells. *Blood* **111**(2) (2008): 806-815.