

PROFESSOR JUSTIN J. COOPER-WHITE

Professor Cooper-White currently holds positions of Associate Dean (Research) of the Faculty of Engineering, Architecture and IT (University of Queensland), Professor within the School of Chemical Engineering (University of Queensland), Group Leader within the Australian Institute for Bioengineering and Nanotechnology (University of Queensland) and Director of the Australian National Fabrication Facility (Queensland Node). Current research interests include the development of novel biomaterials and engineered surfaces for tissue engineered cartilage, bone, cardiac muscle and vascular systems, microbioreactors for stem cell expansion and differentiation, microfluidic devices for biofluid property measurement and early disease detection and the manufacture of microparticle delivery systems. He has authored or co-authored over 250 research publications and presentations and is often asked to present plenary, keynote and invited lectures at national and international conferences. Since gaining his Ph.D. in 2000, his career citations total to 1516, and he has an h-index of 22 (scopus, 28/11/11). He is the past President of both The Australasian Society for Biomaterials and Tissue Engineering and The Australian Society of Rheology, a consultant for a number of national and international companies, associate editor of the Korean-Australian Rheology Journal, on the editorial boards of Soft Materials, Biomicrofluidics and Rheologica Acta, and a reviewer for major international journals in his fields of expertise. He holds 7 Int. patents in the areas of formulation design for agriproducts, microbioreactors, particle synthesis using microfluidic devices and tissue engineering scaffolds.

Relevant employment history

- Professor. The University of Queensland, 2007-present
- Associate Professor, The University of Queensland, 2004-2006
- Senior Lecturer, The University of Melbourne, 2003-2004.
- Senior Research Fellow (Grade C), The University of Melbourne, 2001-2003.
- Research Manager, Particulate Fluids Processing Centre, The University of Melbourne, 2000-2003.
- Research Fellow Grade B, The University of Melbourne, Nov. 1999-2000.
- Senior Tutor, The University of Queensland, 1996- Nov. 1999.
- Senior Consultant (Process) Engineer, N.D. Harley Consulting Engineers, 1996-1999.
- Bitumen Engineer (Australia), Shell (Australia) Ltd., 1995-1996.
- Facilities Engineer/Manager, Shell (Australia) Ltd., 1994-1996.
- Process Engineer, Shell (Australia) Ltd., 1993-1994.
- Design Technologist, Shell (Australia) Ltd., 1992-1993.

Competitive and Industrial Research Funding (since 2001) – Total \$44.5 M

Sole or Lead Chief Investigator: Competitive \$35.5 M, Industrial \$1.5M

Joint Chief or Principle Investigator: \$7.5M

Professional Boards & Societies, Consultancies, Reviewer/Assessor

Committees

2006-2008 President, The Australasian Society for Biomaterials
2004-2006 Vice President, The Australian Society for Biomaterials
2002-2004 President, The Australian Society of Rheology,

Editor/Associate Editor

- Korean-Australian Rheology Journal

Editorial Boards

- Biomicrofluidics, Soft Materials, Rheologica Acta (term complete 2008-2010), Open Biomedical Journal.

Consultancies:

- Consultant for Rhodia (USA) Ltd. (2001-2007)
- Consultant for GBC Scientific (Australia) Ltd. (2002-current)
- Consultant for Nestec International (Switzerland) (2002-2006)
- Consultant for Micromachines Ltd. (Australia) (2002-2008)
- Consultant for Orica (Australia) Pty. Ltd. (2003 – 2005)
- Consultant for Unilever (UK) Ltd. (2003-current)
- Consultant for Mesoblast (Aus) Ltd. (2009-current)
- Consultant for Bolster Guinane Ltd. (2009-current)

Reviewer/Assessor

- ARC OzReader (2002 – current), NHMRC reviewer (2005 – current), Member of NHMRC CRE Review Panel (2011), reviewer of NSF and EPSRC grants since 2003.
- Reviewer for the following international journals: Langmuir, Colloids and Surfaces A: Physicochem. Eng. Aspects, Korean-Australian Rheology Journal, Physics of Fluids, Chemical Engineering Science, Polymer International, Journal of Rheology, The Journal of Physical Chemistry, Biomaterials, Tissue Engineering, Advanced Functional Materials, Lab on a Chip, Biomicrofluidics, Stem Cells, Stem Cells and Development.

Refereed Publications

Book Chapters:

1. Cao, Y., Croll, T. I., Cooper-White, J. J.(*), O' Connor, Andrea J., Stevens, Geoffrey W., 'Production and surface modification of polylactide-based polymeric scaffolds for soft tissue engineering', Hollander, A. P. and Hatton, P. V. (eds), Methods in Molecular Biology, Vol. 238: Biopolymer Methods in Tissue Engineering, 87-112, Humana Press, Totowa, New Jersey 2004. (*) – corresponding author
2. K. Y. Lee, J. J. Cooper-White, I. Keen, L. Grøndahl "Surface Modification using RF Oxygen Plasma in Tissue Engineering" in "Tissue Engineering: Roles, Materials and Applications" Ed: S. J. Barnes and L. P. Harris, Nova Publisher, 2008

Refereed Journal Papers:

1999

1. Cooper-White J.J. and Mackay M.E., 'Rheology of Poly (Lactides) – Effects of temperature and molecular weight on the viscoelasticity of Poly (*l* – Lactic Acid)', *Journal of Polymer Science - Part B - Polymer Physics*, 37 (15): 1803-1814, 1999.
2. Hong Ye, Cooper-White J.J., Mackay M.E., Hawker C.J., Malmstrom E. and Rehnberg N., 'A novel processing aid for polymer extrusion: Rheology and processing of polyethylene and hyperbranched polymer blends', *Journal of Rheology*, 43: (3) 781-793 1999.

2000

3. Hong Ye, Coombs S.J., Cooper-White J.J., Mackay M.E., Hawker C.J., and Malmstrom E., 'Film blowing of linear low density polyethylene blended with a novel hyperbranched polymer processing aid', *Polymer*, 41: (21) 7705-7713 2000.

2001

4. Rodd A.B., Cooper-White J.J., Dunstan D.E., and Boger D.V., 'Gel point studies for chemically modified biopolymer networks using small amplitude oscillatory rheometry', *Polymer*, 42: (1) 185-198 2001.
5. Rodd A.B., Cooper-White J.J., Dunstan D.E., Boger D.V., Concentration dependence of the gel point for a novel gelling system', *Polymer*, 42(8) 3923-3928 2001.
6. Gason S. J., Cooper-White J.J., Dunstan D. E., Boger D. V., 'A spectroscopic study of polyelectrolyte solutions under shear'. *Polymer*, 42(16), 6981-6989 2001.
7. Crooks R., Cooper-White J.J. and Boger D.V., 'The role of dynamic surface tension and elasticity on the dynamics of drop impact', *Chemical Engineering Science* 56: 5575-5592 2001.
8. Altmann N., Halley P.J., Cooper-White J.J., Lange J., 'The effects of silica fillers on the gelation and vitrification of highly filled epoxy-amine thermosets'. *Macromolecular Symposia*, 169 (Fillers and Filled Polymers), 171-177 2001.

2002

9. Cooper-White J.J.(*), Fagan J., Tirtaatmadja V., Lester D. and Boger D.V., 'Dynamics of drop formation for constant low viscosity elastic fluids', *Journal of Non-Newtonian Fluid Mechanics*, 106(1), 29-59 2002. (*) – corresponding author.
10. Cooper-White J.J.(*), Crooks R. and Boger D.V., 'A drop impact study of viscoelastic surfactant solutions', *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 210(1), 105-123 2002. (*) – corresponding author.
11. Cooper-White J.J.(*), Crooks R.C., Chockalingam K., Boger D.V., 'Dynamics of polymer-surfactant complexes: Elongational properties and drop impact behavior'. *Industrial & Engineering Chemistry Research*, 41(25), 6443-6459 2002. (*) – corresponding author.
12. Zainuddin, Cooper-White J.J., Hill D.J.T., 'Viscoelasticity of radiation-formed PVA/PVP hydrogel'. *Journal of Biomaterials Science, Polymer Edition*, 13(9), 1007-1020 2002.
13. Tirtaatmadja V., Cooper-White J.J.(*), Gason S., 'Shear-induced structure and dynamics of hydrophobically modified polymer in the presence of an anionic surfactant', *Korean-Australian Rheology Journal*, 14(4),189-201 2002. (*) – corresponding author.

2003

14. Hofer S.O.P., Knight K.M., Cooper-White J.J., O'Connor A.J., Perera J.M., Stevens G.W., Penington A.J., Knight K.R., Morrison W.A. and Messina A., "Increasing the volume of vascularised tissue formation in engineered constructs. An experimental study in rats", *Plastic and Reconstructive Surgery*, 111(3), 1186-92, 2003.
15. Roux, D.C., Cooper-White, J.J.(*), McKinley, G., Tirtaatmadja, V., 'Drop impact of Newtonian and elastic fluids', *Physics of Fluids*, 15 (9), S12, 2003. (*) – corresponding author.
16. Roux, D.C., Cooper-White, J.J.(*), McKinley, G., Tirtaatmadja, V., 'Drop impact of Newtonian and elastic fluids', *Physics of Fluids: Gallery of Fluids Winner* (Video on official www site of Physics of Fluids Journal), 2003. (*) – corresponding author.

2004

17. Croll, T., O'Connor A.J., Stevens G.W., Cooper-White, J.J.(*), 'Controllable surface modification of poly (lactic-co-glycolic acid) (PLGA) by hydrolysis or aminolysis I: physical, chemical and theoretical aspects', *Biomacromolecules*, 5 (2), 463-473 2004. (*) – corresponding author.

18. Roux, D.C. and Cooper-White, J.J.(*), 'Dynamics of water spreading on a glass surface', *J. of Colloid and Interface Science* 277 (2): 424-436 SEP 15 2004
19. Davidson, M.R., Cooper-White, J.J. and Tirtaatmadja, V., 'Shear-thinning drop formation', *ANZIAM J.* 45(E) ppC405--C418, 2004.
20. Cao, Y., Davidson, M.R., O'Connor, Stevens, G.W. and Cooper-White, J.J.(*), 'Architecture control of three dimensional polymeric scaffolds for soft tissue engineering I establishment and validation of numerical models', *J. of Biomedical Materials Research Part A* 71A (1): 81-89 OCT 1 2004. (*) – corresponding author.
21. MacRaid, C.A., Stewart, C.R., Mok, Y-F., Gunzburg, M.J., Perugini, M.A., Lawrence, L.J., Tirtaatmadja, V., Cooper-White, J.J. and Howlett, G.J., 'Non-fibrillar components of amyloid deposits mediate the self-association and tangling of amyloid fibrils', *Journal of Biological Chemistry*, 2004, 279 (20): 21038-21045.
22. Cronin, K.J., Messina, A., Knight, K.R., Cooper-White J.J., Stevens, G.W., Pennington, A.J., Morrison, W.A., 'New murine model of spontaneous autologous tissue engineering, combining an arteriovenous pedicle with matrix materials', *Plastic and Reconstructive Surgery*, 2004, 113(1):260-269.
23. Altmann, N.; Cooper-White, J. J. (*); Dunstan, D. E.; Stokes, J. R. Strong through to weak 'sheared' gels. *Journal of Non-Newtonian Fluid Mechanics*, 2004, 124(1-3), 129-136. (*) – corresponding author.

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24. Croll T., Jentz S., Mueller K., Davidson M., O'Connor A.J., Stevens G.W., Cooper-White J.J., 'Modelling of oxygen diffusion and cell growth in a porous, vascularising scaffold for soft tissue engineering applications', *Chemical Engineering Science*, 2005, 60(17), 4924-4934.
25. Rodd, L.E.; Scott, T.P.; Cooper-White, J.J.; McKinley, G.H. 'Capillary break-up rheometry of low-viscosity elastic fluids.' *Applied Rheology*, 2005, 15(1), 12-27.
26. Grillet, C., Domachuck, P., Eggleton, B., Cooper-White, J.J., Optofluidics enables compact tunable interferometer. *Laser Focus World*, 2005, 41(2), 100,102-103.
27. Domachuk, P.; Grillet, C.; Ta'eed, V.; Magi, E.; Bolger, J.; Eggleton, B. J.; Rodd, L. E.; Cooper-White, J.J. 'Microfluidic interferometer'. *Applied Physics Letters*, 2005, 86(2), 024103/1-024103/3.
28. Lubansky, A., Boger, D.V., Cooper-White, J.J., 'Batchelor's theory extended to elongated cylindrical or ellipsoidal particles' *Journal of Non-Newtonian Fluid Mechanics* 130 (1): 57-61 OCT 10 2005
29. Schwartz LW, Roux D, Cooper-White JJ, 'On the shapes of droplets that are sliding on a vertical wall', *Physica D – Nonlinear Phenomena* 209 (1-4): 236-244 SEP 15 2005
30. Davidson, M., Harvie, D. J. E., Cooper-White, J.J., "Flow focusing in microchannels", *ANZIAM Journal*, 46E, p. C47-C58, 2005.
31. Harvie, D. J. E., Davidson, M., Cooper-White, J.J., Rudman, M., "A parametric study of droplet deformation through a microfluidic contraction", *ANZIAM Journal*, 46, p. C150-C166, 2005.
32. Rodd, Lucy E.; Boger, D.V., Cooper-White, Justin J., McKinley, Gareth H., 'The inertio-elastic planar entry flow of low-viscosity elastic fluids in micro-fabricated geometries', *Journal of Non-Newtonian Fluid Mechanics*, 129, pp. 1-22, 2005.
33. Cao Y, Croll TI, Lees JG, Tuch, B., Cooper-White, J.J., "Scaffolds, stem cells, and tissue engineering: A potent combination!" **Invited review article** *Australian Journal of Chemistry* 58(10): 691-703 2005.

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34. Husny, J., Jin, H., Harvey, E., Cooper-White, J.J., 'The creation of drops in T-shaped microfluidic devices with the 'modified' laser-LIGA technique: I. Fabrication', *Smart Materials and Structures* 15 S117–S123 2006.

35. Cao, Y., Mitchell, G., Messina, A., Thompson, E., Pennington, A., Morrison, W., O'Connor A.J., Stevens G.W., Cooper-White, J.J., 'The influence of architecture on degradation and vascularisation of three dimensional poly (lactic-co-glycolic acid) scaffolds invitro and in vivo', *Biomaterials* 27: 2854-2864 2006. IF=6.646
36. Cao, Y., Croll, T.I., O'Connor, A.J., Stevens, G.W., and Cooper-White, J.J., 'Systematic selection of solvents for the fabrication of 3D combined micro- and macroporous poly(lactic-co-glycolic acid) scaffold for soft tissue engineering', *Journal of Biomedical Materials: Polymer Edition*, 17(4): 369-402 2006.
37. Tirtaatmadja V., McKinley G., Cooper-White J.J., 'Drop formation and break-up of low viscosity elastic fluid: Effect of molecular weight and concentration', *Physics of Fluids*, 18 (4): Art. No. 043101 2006.
38. Harvie, D. J. E., Davidson, M., Cooper-White, J.J. Rudman, M., " A parametric study of droplet deformation through a microfluidic contraction: Low Viscosity Newtonian fluids", *Chemical Engineering Science*, 61 (15): 5149-5158 2006.
39. Rosengarten, G., Harvie, D.J.E., Cooper-White, J.J., 'Contact angle effects on microdroplet deformation using CFD', **Invited paper**, *Applied Mathematical Modelling Journal*, 30 (10): 1033-1042 2006.
40. Husny, J. and Cooper-White, J.J., 'Effects of elasticity of dynamics of drop formation in microchannels', **Invited paper**, *Journal of Non-Newtonian Fluid Mechanics*, 137 (1-3): 121-136 2006.
41. Davidson, M.R., Harvie, D., Cooper-White, J.J., "Simulations of Pendant Drop Formation of a Viscoelastic Liquid", *Korean-Australian Rheology Journal*, 18 (2):41-49 2006.
42. M.R. Davidson ,J.J. Cooper-White, 'Pendant drop formation of shear-thinning and yield stress fluids' **Invited paper** for *Special Edition of Applied Mathematical Modelling Journal*, 30 (11): 1392-1405 2006.
43. Vashi, A. V., Abberton, K.M., Thomas, G.P., Morrison, W.A., O'Connor, A.J., Cooper-White, J.J. and Thompson, E.W., 'Adipose tissue engineering based on the controlled release of Fibroblast Growth Factor-2 (FGF-2) in a collagen matrix' *Tissue Engineering*, 12 (11): 3035-3043 2006.
44. Rosengarten, G., Cooper-White, J.J., Metcalfe, G., 'Experimental and analytical study of the effect of contact angle on liquid convective heat transfer in microchannels', *Int. J. Heat and Mass Trans.*, 49 (21-22): 4161-4170 2006.
45. Prime E, Cooper-White, J.J., Qiao, G.G., "Coupling hydrophilic amine-containing molecules to the backbone of poly (epsilon-caprolactone)", **Invited article** *Australian Journal of Chemistry* 59(8): 534-538 2006.
46. Croll, T., O'Connor A.J., Stevens G.W., Cooper-White, J.J., 'A Blank slate? Layer-by-layer deposition of hyaluronic acid and chitosan onto various surfaces', *Biomacromolecules*, 7 (5): 1610-1622, 2006.

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47. Lees, J.G., Lim, S.A., Croll, T.I., Williams, G., Cooper-White, J.J., McQuade, L.R., Mathiyalaga, B., Tuch, B.E., 'Transplantation of 3D scaffolds seeded with human embryonic stem cells: biological features of surrogate tissue and teratoma-forming potential', *Regenerative Medicine*, 2 (3): 289-300 2007.
48. Harvie, D.J.E., Davidson, M.R., Cooper-White, J.J. and Rudman M., 'A parametric study of droplet deformation through a microfluidic contraction: Shear thinning liquids.' *Int. J. of Multiphase Fluids* 33 (5): 545-556 2007
49. Rowlands, A., Lim, S.A., Martin, D., Cooper-White, J.J., 'Polyurethane/ poly(lactic-co-glycolic) acid scaffolds fabricated by thermally induced phase separation', *Biomaterials*, 28 (12): 2109-2121 2007. IF=6.646

50. Lubansky AS, Boger DV, Servais C, Burbidge, A., Cooper-White, J.J., 'An approximate solution to flow through a contraction for high Trouton ratio fluids', *J. Non-Newt. Fluid Mech.*, 144 (2-3): 87-97 2007.
51. Rodd LE, Cooper-White JJ, Boger DV, McKinley, G., 'Role of elasticity number in the entry flow of dilute polymer solutions in micro-fabricated contraction geometries', *J. of Non-Newt. Fluid Mech.*, 143 (2-3): 170-191 2007.
52. Martens P, Blundo J, Nilasaroya A, Odell, R.A., Cooper-White, J.J., Poole-Warren, L., 'Effect of poly (vinyl alcohol) macromer chemistry and chain interactions on hydrogel mechanical properties', *Chemistry of Materials*, 19 (10): 2641-2648 2007.
53. Prime, E.L., Hamid, Z.A.A., Cooper-White, J.J., Qiao, G.G., 'Addition of biological functionality to poly(epsilon-caprolactone) films', *Biomacromolecules*, 8(8): 2416-2421 2007.
54. McKinley, G.H., Rodd, L.E., Oliverira, M.S.N., Cooper-White, J.J., 'Extensional flows of polymer solutions in microfluidic converging/diverging geometries', *J. Central South Uni. Of Tech.* 14: 6-9 Suppl. 1, AUG 2007.
55. Prime, E. L.; Cooper-White, J.J.; Qiao, G.G. 'Conjugation of bioactive groups to poly(lactic acid) and poly[(lactic acid)-co-(glycolic acid)] films'. *Macromolecular Bioscience*, 7(12), 1272-1279, 2007.
56. Rowlands A.S.; Hudson J.E.; Cooper-White J.J. 'From scrawny to brawny: the quest for neomusculogenesis; smart surfaces and scaffolds for muscle tissue engineering'. *Expert Reviews of Medical Devices*, 4(5), 709-28 2007.
57. Hong, Joung Sook, Shin, Su Jung, Lee, SangHoon, Wong, Edeline, Cooper-White, Justin, 'Spherical and cylindrical microencapsulation of living cells using microfluidic devices', *K-A Rheology J.* 19 (3) 157-164 2007.
58. Walewijk, A.; Cooper-White, J. J.; Dunstan, D. E. 'Adhesion measurements between alginate gel surfaces via texture analysis.' *Food Hydrocolloids*, 22(1), 91-96 2007.

2008

59. Vashi, A.V.; Keramidaris, E.; Abberton, K.M.; Morrison, W.A.; Wilson, J.L.; O'Connor, A.J.; Cooper-White, J.J.; Thompson, E.W. 'Adipose differentiation of bone marrow-derived mesenchymal stem cells using Pluronic F-127 hydrogel in vitro.' *Biomaterials*, 29(5), 573-579 2008. IF=6.646
60. Hines M, Nielsen L, Cooper-White, J., 'The hematopoietic stem cell niche: what are we trying to replicate?' *J. Chem. Tech. and Biotech.* 83 (4) 421-443 2008.
61. Rondeau, Elisabeth; Cooper-White, Justin J.. 'Biopolymer Microparticle and Nanoparticle Formation within a Microfluidic Device.' *Langmuir* 24(13), 6937-6945 2008.
62. Rowlands, Andrew S.; Cooper-White, Justin J.. 'Directing phenotype of vascular smooth muscle cells using electrically stimulated conducting polymer.' *Biomaterials* 29(34), 4510-4520 2008. IF=6.646
63. Harvie, D. J. E.; Cooper-White, J. J.; Davidson, M. R. 'Deformation of a viscoelastic droplet passing through a microfluidic contraction.' *Journal of Non-Newtonian Fluid Mechanics* 155(1-2), 67-79 2008.
64. Rowlands Andrew S; George Peter A; Cooper-White Justin J., 'Directing osteogenic and myogenic differentiation of MSCs: interplay of stiffness and adhesive ligand presentation.' *American journal of physiology. Cell physiology* 295(4), C1037-44 2008.
65. Duxenneuner, Manuela R.; Fischer, Peter; Windhab, Erich J.; Cooper-White, Justin J.. 'Extensional Properties of Hydroxypropyl Ether Guar Gum Solutions.' *Biomacromolecules* 9 (11) 2989-2996 2008.
66. Cao Y, Zhang B, Croll T, Rolfe, B., Campbell, J., Cooper-White, J.J., 'Engineering tissue tubes using a novel multilayered scaffolds in the rat peritoneal cavity'. *J. Biomed. Mat. Res. Part A.*, 3 719-727 2008.

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67. Bongaerts, J., Cooper-White, J.J., Stokes, J., 'Low bio-fouling Chitosan-Hyaluronic Acid Multilayers with Ultra-Low Friction Coefficients', *Biomacromolecules* 10(5) 1287-12945 2009 .
68. Velayudhan, S., Martin, D., Cooper-White, J.J., Evaluation of dynamic creep properties of surgical mesh prostheses-Uniaxial fatigue. *J. Biomed. Mater. Res., Part B*, 91B(1) 287-296 2009.
69. Titmarsh, D., Cooper-White, J.J., Microbioreactor array for full-factorial analysis of provision of multiple soluble factors in cellular microenvironments. *Biotechnol. Bioeng.*, 104(6) 1240-1244 2009.
70. Miller, E., Cooper-White, J.J., The effects of chain conformation in the microfluidic entry flow of polymer-surfactant systems. *J. Non-Newtonian Fluid Mech.*, 160(1) 22-30 2009.
71. Jack, K.S., Velayudhan, S., Luckman, P., Trau, M., Grondahl, L., Cooper-White, J.J., The fabrication and characterization of biodegradable HA/PHBV nanoparticle-polymer composite scaffolds. *Acta Biomater.*, 5(7) 2657-2667 2009.
72. George, P.A., Doran, M.R., Croll, T.I., Munro, T.P., Cooper-White, J.J., Nanoscale presentation of cell adhesive molecules via block copolymer self-assembly. *Biomaterials*, 30(27) 4732-4737 2009. IF=6.646
73. George, P.A., Donose, B.C., Cooper-White, J.J., Self-assembling polystyrene-block-poly(ethylene oxide) copolymer surface coatings: Resistance to protein and cell adhesion. *Biomaterials*, 30(13) 2449-2456 2009. IF=6.646
74. George, P.A., Cooper-White J.J., Kinetically constrained block copolymer self-assembly a simple method to control domain size. *Eur. Polym. J.*, 45(4) 1065-1071 2009.
75. Doran, M.R., Mills, R.J., Parker, A.J., Landman, K.A., Cooper-White, J.J., A cell migration device that maintains a defined surface with no cellular damage during wound edge generation. *Lab Chip*, 9(16) 2364-2369 2009. IF=6.5
76. Doran, M.R., Markway, B.D., Croll, T.I., Sara, S., Munro, T.P., Cooper-White, J.J., Controlled presentation of recombinant proteins via a zinc-binding peptide-linker in two and three dimensional formats. *Biomaterials*, 30(34) 6614-6620 2009. IF=6.646
77. Doran, M.R., Markway, B.D., Aird, I.A., Rowlands, A.S., George, P.A., Nielsen, L.K., Cooper-White, J.J., Surface-bound stem cell factor and the promotion of hematopoietic cell expansion. *Biomaterials*, 30(25) 4047-4052 2009. IF=6.646
78. Chau, L., Doran, M., Cooper-White, J.J., A novel multishear microdevice for studying cell mechanics. *Lab Chip*, 9(13) 1897-1902 2009. IF=6.5
79. Wong, E.H-M, Rondeau, E., Cooper-White, J.J., A microfluidic-based method for the transfer of biopolymer particles from an oil phase to an aqueous phase. *Lab Chip*, 9(17) 2582-2590 2009. IF=6.5
80. Hong, J.S., Cooper-White, J.J., Drop formation of carbopol dispersions displaying yield stress, shear thinning and elastic properties in a flow-focusing microfluidic channel, *K-A Rheology J.* 21 (4) 268-280 2009

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81. Gao, S., Lees, J., Croll, T., George, P., Cooper-White, J.J., Tuch, B., 'Modeling the adhesion of human embryonic stem cells to poly(lactic-co-glycolic acid) surfaces in a 3-D environment', *J. Biomed. Mater. Res., Part A*, 92A(2) 683-692 2010.
82. George, P., Quinn, A.K., J.J. Cooper-White, Hierarchical scaffolds via combined macro- and micro-phase separation. *Biomaterials*, 31(4) 641-7 2010. IF=6.646
83. Rodd, L.E., Lee, D., Ahn, K.H., Cooper-White, J.J., 'The importance of downstream events in viscoelastic entry flows: Consequences of increasing the constriction length', In Press 28/1/2010 *J. Non-Newt. Fluid Mech.*.
84. Markway, B.D., Tan, G-K., Brooke, G., Hudson, J.E., Cooper-White, J.J., Doran, M.R., Enhanced Chondrogenic Differentiation of Human Bone Marrow-Derived Mesenchymal Stem Cells in Low Oxygen Environment Micropellet Cultures, in Press, 12/09, *Cell Transplantation*.

85. Doran, M., Frith, J.E., Prowse, A.B.J., Fitzpatrick, J., Wolvetang, E.J., Munro, T.P., Gray, P.P., Cooper-White, J.J., Defined high protein content surfaces for stem cell culture, *Biomaterials* 31 5137-5142 2010. IF=6.646
86. Tan, G-K., Dinnes, D.L., Butler, L., Cooper-White, J.J., Interactions between meniscal cells and a self assembled biomimetic surface composed of hyaluronic acid, chitosan and meniscal extracellular matrix molecules, *Biomaterials*, in press 01/05/10 IF=6.646
87. Tung-Liang Chung, Jennifer Turner, Nilay Thakar, Gabriel Kolle, Justin Cooper-White, Sean M Grimmond, Martin F. Pera, Ernst Wolvetang. Ascorbate Promotes Epigenetic activation of CD30 in Human Embryonic Stem Cells. (2010) *Stem Cells* (accepted). IF=7.741
88. Doran, M.R., Markway, B.D., Clark, A., Athanasas-Platsis, S., Brooke, G., Atkinson, K., Nielsen, L.K., Cooper-White, J.J., Membrane bioreactors enhance microenvironmental conditioning and tissue development. *Tissue Engineering Part C – Methods*, 16 (3), 407-415 2010.
89. Brown-Malker, S., Read, S., Rowlands, A., Cooper-White, J., Keller, J., Electrochemical quartz crystal microbalance to monitor biofilm growth and properties during bioelectrochemical system inoculation and load conditions. *ECS Transactions*, 28 (9), pp. 11-22 2010.
90. Hudson, J.E., Frith, J.E., Donose, B.C., Rondeau, E., Mills, R.J., Wolvetang, E.J., Brooke, G.P., Cooper-White, J.J. A synthetic elastomer based on acrylated polypropylene glycol triol with tunable modulus for tissue engineering applications. *Biomaterials*, 31 (31), pp. 7937-7947 2010.
91. Vaquette, C., Kahn, C., Frochot, C., Nouvel, C., Six, J.-L., De Isla, N., Luo, L.-H., Cooper-White, J., Rahouadj, R., Wang, X. Aligned poly(L-lactic-co-ε-caprolactone) electrospun microfibers and knitted structure: A novel composite scaffold for ligament tissue engineering. *Journal of Biomedical Materials Research - Part A*, 94 (4), pp. 1270-1282 2010.
92. Prowse, A.B.J., Doran, M.R., Cooper-White, J.J., Chong, F., Munro, T.P., Fitzpatrick, J., Chung, T.-L., Haylock, D.N., Gray, P.P., Wolvetang, E.J. Long term culture of human embryonic stem cells on recombinant vitronectin in ascorbate free media (2010) *Biomaterials*, 31 (32), pp. 8281-8288.

2011

93. Hudson, J.E., Mills' R.J., Frith, J.E., Brooke, G., Jaramillo-Ferrada, P., Wolvetang, E.J., Cooper-White, J.J., A Defined Media and Substrate for Expansion of Human Mesenchymal Stromal Cell Progenitors that Enriches for Osteo- and Chondro-genic Precursors, in Press, *Stem Cells and Development*, 20 (1), pp. 77-87 2011. IF=3.273
94. Koliandris, A.-L., Rondeau, E., Hewson, L., Hort, J., Taylor, A.J., Cooper-White, J., Wolf, B. Food grade Boger fluids for sensory studies. *Applied Rheology*, 21 (1), art. no. 13777, 2011.
95. Frith, J.E., Hudson, J.E., Cooper-White, J.J. Conference Scene: A bright future for tissue engineering and regenerative medicine in the Asia Pacific region. *Regenerative Medicine*, 6 (2), pp. 167-170 2011.
96. Gao, S.Y., Wong, J.C.Y., Lees, J.G., Best, M.B., Wang, R., George, P.A., Cooper-White, J.J., Tuch, B.E. The generation of definitive endoderm from human embryonic stem cells on 3D biodegradable poly(lactic-coglycolic acid) scaffolds and its comparison to those generated on 2D monolayer cultures. *Open Stem Cell Journal*, 3, pp. 23-27 2011.
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99. Go, D.P., Gras, S.L., Mitra, D., Nguyen, T.H., Stevens, G.W., Cooper-White, J.J., O'Connor, A.J. Multilayered microspheres for the controlled release of growth factors in tissue engineering. *Biomacromolecules*, 12 (5), pp. 1494-1503 2011.
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- a vascularized pedicled fat flap inside a chamber. *Plastic and Reconstructive Surgery*, 127 (6), pp. 2283-2292 2011.
102. Tan, G.-K., Dinnes, D.L.M., Cooper-White, J.J. Modulation of collagen II fiber formation in 3-D porous scaffold environments. *Acta Biomaterialia*, 7 (7), pp. 2804-2816.
 103. Zhao, C.-X., Miller, E., Cooper-White, J.J., Middelberg, A.P.J. Effects of fluid-fluid interfacial elasticity on droplet formation in microfluidic devices. *AIChE Journal*, 57 (7), pp. 1669-1677 2011.
 104. Tan, G.-K., Dinnes, D.L.M., Myers, P.T., Cooper-White, J.J. Effects of biomimetic surfaces and oxygen tension on redifferentiation of passaged human fibrochondrocytes in 2D and 3D cultures. *Biomaterials*, 32 (24), pp. 5600-5614 2011.
 105. Cameron, Andrew.R., Frith, Jessica.E., Cooper-White, Justin.J. The influence of substrate creep on mesenchymal stem cell behaviour and phenotype. *Biomaterials*, 32 (26), pp. 5979-5993 2011.
 106. Luk, J.Z., Rondeau, E., Trau, M., Cooper-White, J., Grøndahl, L. Characterisation of amine functionalized poly(3-hydroxybuturate-co-3-hydroxyvalerate) surfaces. *Polymer* 52 (15), pp. 3251-3258 2011.
 107. Zhao, C.-X., Miller, E., Cooper-White, J.J., Middelberg, A.P.J., Effects of fluid-fluid interfacial elasticity on droplet formation in microfluidic devices. *AIChE Journal* 57(7), pp. 1669-1677 2011.
 108. Hudson, J.E., Brooke, G., Blair, C., Wolvetang, E., Cooper-White, J.J., Development of myocardial constructs using modulus-matched acrylated polypropylene glycol triol substrate and different nonmyocyte cell populations. *Tissue Engineering - Part A*, 17 (17-18), pp. 2279-2289 2011.
 109. Chau, L.T., Rolfe, B.E., Cooper-White, J.J., A microdevice for the creation of patent, three-dimensional endothelial cell-based microcirculatory networks. *Biomicrofluidics*, 5 (3), art. no. 034115, 2011.
 110. Mills, R.J., Frith, J.E., Hudson, J.E., Cooper-White, J.J., Effect of geometric challenges on cell migration. *Tissue Engineering - Part C: Methods*, 17 (10), pp. 999-1010 2011.
 111. Punyadeera, C., Dimeski, G., Kostner, K., Beyerlein, P., Cooper-White, J., One-step homogeneous C-reactive protein assay for saliva. *Journal of Immunological Methods*, 373 (1-2), pp. 19-25 2011.
 112. Titmarsh, D., Hidalgo, A., Turner, J., Wolvetang, E., Cooper-White, J., Optimization of flowrate for expansion of human embryonic stem cells in perfusion microbioreactors. *Biotechnology and Bioengineering*, 108 (12), pp. 2894-2904 2011.

Refereed Conference Papers (up to 2005):

1. Cooper-White J.J. and Mackay M.E., 'Rheology of Poly (Lactic Acid): High Shear Stress Slip and General Viscoelastic Behaviour', Proc. of 70th Annual Meeting of the Society of Rheology (USA), Monterey (CA), October 1998.
2. Cooper-White J.J. and Mackay M.E., 'Rheology & Thermodynamics of Poly (Lactic Acid) Blends: Effects of Composition, Molecular Weight and Pressure'. Proc. of 23rd Australian Polymer Symposium, The Royal Australian Chemical Institute, Geelong (VIC), November 1999.
3. Rodd A.B., Cooper-White J.J., Dunstan D.E., Boger D.V., 'Gel point studies for a novel biopolymer-crosslinker gelling system'. Proceedings of the International Congress on Rheology, 13th, Cambridge, United Kingdom, 4, 389-391, August 2000.
4. He Y., Cooper-White J.J., Howes T. & Litster J.D., 'Stabilisation Characteristics of Polymeric Surface-Active Materials', Proc. of 6th World Congress of Chemical Engineering, Melbourne (VIC), Australia, September 2001.
5. Whyte D.S., Cooper-White J.J., Davidson M., Lundqvist A. and Schaerringer P., 'Deformation of a droplet passing through a contraction'. FED (American Society of Mechanical Engineers), [257-1](B, Proceedings of the 2002 ASME Joint U.S.-European Fluids Engineering Conference), 773-779, 2002.
6. Davidson, M., Cooper-White, J.J., Tirtaatmadja, V., 'Shear-thinning drop formation', Proc. of the Computational Techniques and Applications Conference CTAC2003, Sydney, Australia, July 7-9 2003.

7. Davidson, M., Cooper-White, J.J., 'Numerical prediction of shear-thinning drop formation', Proc. of the Third International Conference on CFD in the Minerals and Process Industries, CSIRO, Melbourne, Australia, 10-12 December 2003.
8. Husny, J., Jin, H., Harvey, E., Cooper-White, J.J.(*), 'Drop formation in T-shaped microchannels', Proc. SPIE 2003, Perth, Australia 10-12 December 2003. (*) – corresponding author.
9. Rodd, L.E., Huntington, S., Boger, D.V., Cooper-White, J.J.(*), 'Effect of surface charge and hydrophobicity on flows in cylindrical microchannels', Proc. SPIE 2004, 5275 (BioMEMs and nanotechnology), 114-122. (*) – corresponding author.
10. Cao, Y., Davidson, M.R., O'Connor, A.J., Stevens, G.W., Cooper-White J.J.(*), Architecture control of three dimensional poly(D,L-lactic-co-glycolic acid) scaffolds for soft tissue engineering: establishment and validation of numerical models. In Proceedings of International Conference on Materials for Advanced Technologies, ICMAT 2003, Singapore. (*) – corresponding author.
11. Cao, Y., Cooper-White J.J.(*), O'Connor, A.J., Stevens, G.W., Process control and model prediction of architecture of 3D poly(D,L-lactic-co-glycolic acid) scaffolds for tissue engineering. In Proceedings of 13th Annual Conference of Australian Society for Biomaterials. 2003. Brisbane, Australia. (*) – corresponding author.
12. Cooper-White, J.J.(*), Cao, Y., Croll, T.I., O'Conner, A.J., Qiao, G., Stevens, G.W., Soft tissue engineering for organ replacement: design and manufacture of 3D biomimetic, biodegradable polymer scaffolds. In Proceedings of 31st Australian Chemical Engineering Conference, CHEMECA 2003, Adelaide, Australia. (*) – corresponding author.
13. Croll, T.I., Cooper-White, J.J., O'Connor, A.J., Stevens, G.W., 2003, A simple, mild, wet-chemical approach to surface modification of poly(lactic-co-glycolic acid) (PLGA), Australian Society for Biomaterials Conference Abstracts, March 2003
14. Grillet, C., Domachuk, P., Ta'eed, V., Rodd, L.E., Mägi, E., Bolger, J., Cooper-White, J.J., Eggleton, B.J., 'Microfluidic Tunable Interferometer', Proc. of 8th International Conference in Optics within Life Sciences, Melbourne, November 28th –December 1st 2004.
15. D.J.E. Harvie, M.R. Davidson, J.J. Cooper-White, M.J. Rudman, 'A numerical parametric study of droplet deformation through a microfluidic contraction', Proc. Of Computational Techniques and Applications (CTAC) 2004, 27 September – 1 October Melbourne, 2004.
16. Davidson, M.R., Harvie D.J.E., Cooper-White, J.J., 'Flow focusing in microchannels', Proc. Of Computational Techniques and Applications (CTAC) 2004, 27 September – 1 October Melbourne, 2004.
17. Rosengarten, G., Harvie, D.J.E., Cooper-White, J.J., 'Using CFD to study the effect of contact angle on microdroplet deformation', Proc. Of Computational Techniques and Applications (CTAC) 2004, 27 September – 1 October Melbourne, 2004.
18. D.J.E. Harvie, M.R. Davidson, J.J. Cooper-White, 'Simulating the Deformation of Newtonian and Non-Newtonian Drops through a Micro-Fluidic Contraction', Proc. of 15th Australasian Fluid Mechanics Conference, The University of Sydney, Sydney, Australia, 13-17 December 2004
19. G. Rosengarten, J. Cooper-White, G. Metcalf, 'Design Issues with Heat Exchangers for Microfluidics', Proc. of 15th Australasian Fluid Mechanics Conference, The University of Sydney, Sydney, Australia, 13-17 December 2004.
20. Husny, J. and Cooper-White, J.J., "Effect of fluid elasticity on the dynamics of drop formation in microchannel flows", 9th International Conference on Miniaturised Systems for Chemistry and Life Sciences (microTAS), Boston, USA., October 9-13 2005 p. 124 Volume 1.
21. Rodd, L.E., Cooper-White, J.J., Boger, D.V., McKinley, G.H., "Inducing strong viscoelastic effects in low viscosity, dilute polymer solutions using complex microfluidic geometries", 9th International Conference on Miniaturised Systems for Chemistry and Life Sciences (microTAS), Boston, USA., October 9-13 2005 p. 1115, Volume 2.
22. McKinley, G.H., Rodd, L.E., Oliveira, M.S.N. and Cooper-White, J.J., Extensional Flows of Polymer Solutions in Microfluidic Converging/Diverging Geometries, *Advances in Rheology and its*

Applications (Proceedings of 4th Pacific Rim Conference on Rheology) ,Vol.1, Y. S. Luo, Q. Rao and Y. Xu (ed.) 2005.

Patents

- Worldwide patent entitled 'Spray Composition having a deposition control agent', Crooks, R., Cooper-White, J.J., Roux-Jallet, V., Smith, F.G., Douglass, A., Coret, J.M. (Rhodia, Inc., USA) PCT Int. Appl. (2006) WO2006014348;
- Cooper-White, J.J., Cao, Y.. Production of porous polymer structures for use in tissue engineering. PCT Int. Appl. (2007) WO2007115368;
- Cooper-White, J.J., Cao, Y., Rowlands, R.. Production of porous polymer blend structures for scaffold. PCT Int. Appl. (2007) WO2007115367;
- Cooper-White, J.J.; Doran, M. Microbioreactor. PCT Int. Appl.(2008) WO2008028241;
- Cooper-White, J.J.; Croll, T. Scaffold treatment - device and method. PCT Int. Appl.(2008) WO2008017128;
- Cooper-White, J.J.; Rondeau, E. Nanofoundry. PCT Int. Appl. (2008) WO2008116261.
- Cooper-White, J.J., Doran, M., Mills, R., Cell Migration Device PCT Nat. Appl. (2009) PCT/AU2010/000011;
- Cooper-White, J.J., George, P., Croll, T., Block copolymer blends PCT Nat. Appl. (2010) PCT/AU2010/000405;
- Cooper-White, J.J., Titmarsh, D., Microbioreactor array, Prov. Patent 2011903773 (2011)

Industrial Reports

- Annual and quarterly reports to Rhodia (USA) Ltd. for the 'Skipper' project (2001 – 2003)
- Annual and quarterly reports to Unilever (UK) Ltd. for the 'Fluid Gels' project (2002 – 2003)
- Annual and quarterly reports for Nestec International Ltd. for the 'Extensional properties of food emulsions' project (2002 – 2004)
- Report to GBC Scientific Ltd. for assessment of the Micro Fourier Rheometer (2002)
- Report to Micromachines Ltd. for assessment of the Micromachines Ltd. microturbine (2003)
- Annual and quarterly reports to Unilever (UK) Ltd. for the 'encapsulation of energy substrates' project (2004 – 2007)
- Reports to Unilever (UK) Ltd. for development of microfluidic system for saliva (2008-2011)
- Reports to Bolster Ltd. for development of encapsulation system for animal feed (2010, 2010, 2011)
- Reports to SkillPro Ltd. for development of stone dust replacement technology for Mine Explosion retardants (2010, 2010).

Plenary, Keynote and Invited Presentations (2001-2011)

- Plenary Speaker, Australian Colloids and Surface Science Student Conference, Bendigo, February (2001).
- Plenary Speaker, Korean Society of Rheology Meeting, Seoul, Korea, November (2001).
- Invited Speaker, Department of Chemical Engineering, Monash University, October (2001)
- Invited Keynote Speaker, Polymers in Biotechnology Symposium, AusBiotech (2002).
- Invited Keynote Speaker, Australian Society of Biophysics Annual Meeting, September (2002).
- Invited Keynote Speaker, The Small Technology Revolution, MiniFAB Ltd. and the CRC for Microtechnology, November (2002)
- Invited Keynote Speaker, Macromolecular approaches to advanced biomaterials engineering systems, NATO ADVANCED RESEARCH WORKSHOP, Sofia (Bulgaria), November (2003)
- Invited Keynote Speaker, Centre for Biomedical Engineering, University of Adelaide, March (2003)
- Invited Keynote Speaker, 36th Annual AIFST Convention: Food – leading the way, Melbourne, August (2003)

- Keynote Speaker, Australian Polymer Symposium, Adelaide, December (2004)
- Keynote Speaker, CTAC 2004, Melbourne, September (2004)
- Plenary Speaker, Australian Society of Biomaterials 9th Annual Meeting, Victor Harbour, SA, February (2005).
- Plenary Speaker, BioNano – The next frontier, The University of Queensland, Brisbane December (2005)
- Keynote Speaker, NSW Stem Cell Symposium, Australian Technology Park, Redfern, February (2005)
- Plenary Speaker, British Society of Rheology Meeting on Rheometry, Wales, April (2006).
- Keynote Speaker, International Symposium on Electromaterials Science, University of Wollongong, February (2006)
- Keynote Speaker, Australian-Japan Symposium on Nanomaterials and Nanochemistry, The University of Queensland, Brisbane, February (2006)
- Keynote Speaker, MMRI Stem Cell Symposium 2006, Mater Medical Research Institute, Brisbane, March (2006)
- Plenary Speaker, Food Microstructure, Masterfoods International Conference, Verden, Germany September (2007)
- Keynote Speaker, Swiss Society of Rheology Annual Meeting, Lausanne, Switzerland, November (2007)
- Keynote Speaker, Nano2007, St. Gallen, Switzerland, September (2007)
- Invited speaker, University of Wales, Swansea, Wales November (2007)
- Invited speaker, Kroto Institute, University of Sheffield, UK, August (2007)
- Invited speaker, University of Nottingham, Nottingham UK August (2007)
- Invited speaker, ETH Zurich, Switzerland, December (2007)
- Keynote Speaker, Complex Fluids in Complex Flows International Symposium, University of Liverpool, UK, March (2008)
- Keynote Speaker, International Symposium on Nanobionics, University of Wollongong, Australia, June (2008)
- Keynote Speaker, International Congress on Rheology, Monterey CA, USA, August (2008)
- Keynote Speaker, Complex Fluids and Microfluidics International Workshop, Melbourne, Australia, September (2008).
- Keynote Speaker, ASTAR CCO Workshop on Biomaterials, Biopolis, Singapore, December (2008).
- Keynote, Indo-Australian Discussion Meeting on New Biomedical Devices, New Dehli, India (sponsored by AATSE (Australia) and Department of Biotechnology (India)), February 2009
- Keynote, Mater Medical Research Institute Stem Cell Symposium, Brisbane, May 2009
- Keynote, ComBio 2009, Christchurch, New Zealand, December 2009
- Invited, Institute of Biomedical Engineering, University of Oxford, Oxford, February 2009
- Invited, Unilever Research (Colworth House), U.K., February 2009
- Invited, iNano Institute, Aarhus University, Aarhus, Denmark, March 2009
- Invited, Australian-New Zealand Microfluidics Meeting, Melbourne, Australia, April 2009
- Invited, Philips Research (Eindhoven), Netherlands, June 2009
- Invited, Biomedical Engineering Seminar Series, University of Sydney, Sydney, October 2009
- Invited, Bioengineering Insitute Seminar Series, Politecnico di Milano, Italy, December 2009
- Invited Lecture, Future Materials Symposium Series, Brisbane, March 2010
- Invited Lecture, University of Washington, Seattle, May 2010
- Keynote, Pacific Rim Conference on Rheology, Sapporo, Japan, August 2010
- Invited Lecture, University of Hokkaido, Sapporo, August, 2010.
- Invited, Biomedical Engineering Seminar Series, University of Sydney, Sydney, September 2010

- Keynote, CHEMECA, Adelaide, September, 2010
- Invited, UQMS Research Colloquium, Brisbane, October, 2010
- Invited, National University Ireland (Galway), October 2010
- Invited Lecture Series, Lab on a Chip Postgraduate Short Course, Politecnico di Milano, Italy, October 2010
- Invited, CRC Smart Surfaces Symposium, Brisbane, November 2010
- Invited, PacifiChem Meeting, Honolulu, Hawaii, December 2010
- Invited, Universidad de Chile, Faculty of Medicine, Santiago, Chile May 2011
- Keynote, ISMM 2011, Seoul, Korea, June 2011
- Keynote, ICMAT 2011, Singapore, June 2011
- Keynote, International Symposium on Nanomedicine, Sydney, Australia July 2011
- Invited, National University of Ireland (Maynooth), Ireland September 2011
- Keynote, 3rd Asian Biomaterial Congress, Busan, Korea September 2011
- Invited, Seoul National University, Chemical Engineering Department, September 2011
- Invited, Korea University, School of Medicine, September 2011

Other presentations (before 2007):

- Lim, S.A., Doran, M., O'Connor, A.J., Cooper-White, J.J., "Effect of scaffold morphology of cell growth", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Setiawan, L., Monteiro, M., Cooper-White, J.J., "Phase Diagram of amphiphilic diblock copolymers of poly(styrene-co-acrylic acid) in dioxane-water mixtures" Australasian Polymer Society, Rotorua, New Zealand, February 5-9 2006.
- Hadisaputra, H.I., O'Connor, A.J., Cooper-White, J.J., "Gelation Kinetics of Alginate Hydrogels: Effects of PEG cross-linker Concentration, Arm Length, Arm Number and Salt Concentration", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Rowlands, A., Lim, S.A., Martin, D., Cooper-White, J.J., "Polyurethane/Poly(lactic-co-glycolic acid) Composite Scaffolds for Tissue Engineering Applications", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Prime, E., Cooper-White, J.J., Solomon, D., Qaio, G.G., "Functional copolymers for tissue engineering applications", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Martens, P., Mawad, D., Cooper-White, J.J., Poole-Warren, L., "Understanding hydrogel network structure through the use of mechanics", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Ko, H.C.H, Lim, S.A., Cooper-White, J.J., Milthorpe, B., Poole-Warren, L., McFarland, C., "Growing Vascular Templates *In Vitro*: Cell Seeding", Australasian Society for Biomaterials, Rotorua, New Zealand, February 5-9 2006.
- Croll, T.I., Cao, Y., Lim, S.A., Rowlands, A., O'Connor, A.J., Cooper-White, J.J., "Microenvironmental control through nanomanipulation – Tailoring scaffolds for tissue generation", **Plenary Presentation**, BioNano – The Next Frontier Conference, Brisbane, Queensland, Australia, December 4-6 2005.
- Lim, S.A., Doran, M., O'Connor, A.J., Cooper-White, J.J., "Effect of scaffold morphology of cell growth", BioNano – The Next Frontier Conference, Brisbane, Queensland, Australia, December 4-6 2005.
- Setiawan, L., Monteiro, M., Cooper-White, J.J., "Phase Diagram of amphiphilic diblock copolymers of poly(styrene-co-acrylic acid) in dioxane-water mixtures", BioNano – The Next Frontier Conference, Brisbane, Queensland, Australia, December 4-6 2005.

- Husny, J. and Cooper-White, J.J., “The effect of elasticity on the dynamics of microchannel-based drop formation”, 77th Annual Meeting of the Society of Rheology, Vancouver, Canada, October 16-20 2005.
- Rodd, L.E., Cooper-White, J.J., Boger, D.V., McKinley, G.H., “Inertioelastic phenomena in complex flows in microfluidic devices”, 77th Annual Meeting of the Society of Rheology, Vancouver, Canada, October 16-20 2005.
- Hadisaputra, H.I., O’Connor, A.J., Cooper-White, J.J., “Gelation Kinetics of Alginate Hydrogels: Effects of PEG cross-linker Concentration, Arm Length, Arm Number and Salt Concentration”, 77th Annual Meeting of the Society of Rheology, Vancouver, Canada, October 16-20 2005.
- Altmann, N., Stokes, J., Dunstan, D.E., Cooper-White, J.J., “Strong through to weak sheared gels”, 77th Annual Meeting of the Society of Rheology, Vancouver, Canada, October 16-20 2005.
- Lim, S.A., O’Connor, A.J., Cooper-White, J.J., “Selecting Solvent -Nonsolvent Pairs for Producing Biodegradable Scaffolds”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Hadisaputra, H.I., O’Connor, A.J., Cooper-White, J.J., “Multiple-Functionality Hydrogel: One Step Forward Towards Mimicking the Extracellular Matrix”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Husny, J. and Cooper-White, J.J., “Effect of fluid elasticity on the dynamics of drop formation in microchannel flows”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Rodd, L.E., Cooper-White, J.J., Boger, D.V., McKinley, G.H., “Enhancing the elasticity of low viscosity polymer solutions using complex microfluidic geometries”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Lubansky, A., Boger, D.V., Cooper-White, J.J., “An Approximate Solution to flow through a contraction for high Trouton ratio fluids”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Harvie, D., Davidson, M.R., Cooper-White, J.J., “Pendant Drop Formation of a Visco-elastic Liquid”, Australian-Korean Rheology Conference, Cairns, Queensland Australia, July 17-20 2005.
- Oliviera, M.S.N., Rodd, L.E., Cooper-White, J.J., McKinley, G.H., “Extensional flows of dilute polymer solutions in microfluidic geometries”, XIVth International Workshop on Numerical Methods for Non-Newtonian Flows, June 12-15, Santa Fe, New Mexico U.S.A.
- Rodd, L.E., Boger, D.V., Cooper-White, J.J., McKinley, G.H., “The interplay of fluid inertia and fluid viscoelasticity in complex microfluidic flows”, 2005 APS Meeting, Los Angeles, USA March 21-25 2005.
- Lubansky, A.S., Boger, D.V., Cooper-White, J.J., “An approximate solution to flow through a contraction for high trouton ratio fluids” 76th Annual Meeting of the Society of Rheology, Lubbock (Texas), USA., February 14-17 2005.
- Cooper-White, J.J., **Plenary Presentation**, “ Simple flows of simple fluids”, Institute of Non-Newtonian Fluid Mechanics and the British Society of Rheology Conference on Extensional Flows, March 22-23, Lake Vernwy, Wales U.K., 2005
- Cooper-White, J.J., **Plenary Presentation**, “ Scaffolds for soft tissue engineering”, Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.
- Cao, Y., Croll, T.I., O’Connor, A.J., Stevens, G.W. and Cooper-White, J.J. “Systematic Selection of Solvents for the Fabrication of 3D Combined Macro and Microporous Polymeric Scaffolds for Soft Tissue Engineering” Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.
- Croll, T.I., O’Connor, A.J. , Stevens, G.W. and Cooper-White, J.J. “Layer-By-Layer Modification Of Poly(Lactic-Co-Glycolic Acid) With Biocompatible Polyelectrolytes” Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.

- Lim, S.A., O'Connor, A.J., Cooper-White, J.J., "Selecting Solvent -Nonsolvent Pairs for Producing Biodegradable Scaffolds" Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.
- Hadisaputra, H.I., O'Connor, A.J., Cooper-White, J.J., "Multiple-Functionality Hydrogel: One Step Forward Towards Mimicking the Extracellular Matrix" Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.
- Nguyen, H., Cooper-White, J.J., Stevens, G.W., O'Connor, A.J., "Effect of pore size on Cell Growth in Biodegradable Scaffolds" Australian Society for Biomaterials 15th Annual Conference, Victor Harbour, South Australia, March 2005.
- Croll, T. I., O'Connor, A. J., Stevens, G. W., Cooper-White, J. J., "Layer-by-layer modification of poly(lactic-co-glycolic acid) with biocompatible polyelectrolytes" 27th Australasian Polymer Symposium, Adelaide, November 2004.
- Lim, S.A., O'Connor, A.J., Cooper-White, J.J., Understanding Phase Separation Behaviour for Polymer-Solvent-Nonsolvent Systems, 27th Australasian Polymer Symposium, Adelaide, November 2004.
- Croll, T.I., O'Connor, A.J., Stevens, G.W., Griesser, H.J., Cooper-White, J.J., "Assembly of an Artificial Extracellular Matrix on the Surface of Poly(lactic-co-glycolic acid) Scaffolds" Matrix Biology Society of Australia and New Zealand Annual Meeting, September 23-26, 2004, Rottnest Island, Western Australia.
- Lim, S.A., , O'Connor, A.J., Stevens, G.W., Cooper-White, J.J., "Fabrication of 3D PLGA Scaffolds with Controlled Microstructure via TIPS Techniques" Poster presentation, 7th World Biomaterials Congress, Sydney, May 2004.
- Hadisaputra, H.I., O'Connor, A.J., Stevens, G.W., Cooper-White, J.J., "Characterising the Architecture and Gelation Kinetics of Protein-based Gels for Tissue Engineering" Poster presentation, 7th World Biomaterials Congress, Sydney, May 2004.
- Cao, Y., Croll, T.I., O'Connor A.J., Stevens G.W., Cooper-White, J.J., "Systematic Selection of Solvents for the Fabrication of 3D PLGA Scaffolds for Tissue Engineering" Poster presentation, 7th World Biomaterials Congress, Sydney, May 2004.
- Croll, T.I., O'Connor, A.J., Stevens, G.W., Cooper-White, J.J., "Surface Modification of PLGA by Controlled Hydrolysis or Aminolysis" 7th World Biomaterials Congress, Sydney, May 2004.
- Croll, T.I., O'Connor, A.J., Stevens, G.W., Cooper-White, J.J., 24th Australian Colloid and Surface Science Student Conference, Sunset Cove, South Australia, February 2004.
- L. E. Rodd, S. T. Huntington, K. Lyttikainen, D. V. Boger, J. J. Cooper-White "Quantifying Surface Effects on Newtonian Laminar Flows in Circular Microchannels" The Annual Society of Rheology Meeting, Pittsburgh, Pennsylvania, US, (2003)
- Cao, Y., Croll, T., O'Connor, A.J., Qiao, G, Stevens, G.W., Cooper-White, J.J., "Biodegradable biomimetic scaffolds for soft tissue engineering" 26th Australasian Polymer Symposium, Noosa, Australia, 13-17th July, 2003 (poster presentation).
- Cao Y, Davidson MR, O'Connor AJ, Stevens GW, Cooper-White JJ. "Architecture control of three dimensional poly(D,L-lactic-co-glycolic acid) scaffolds for soft tissue engineering: establishment and validation of numerical models" in Proceedings of International Conference on Materials for Advanced Technologies, ICMAT 2003, Singapore, December 2003..
- Cao, Y., Cooper-White, J.J., Davidson, M.R., O'Connor, A.J., Stevens, G.W., "Process control and model prediction of macroporous architecture of 3D Poly (DL-lactic-co-glycolic acid) scaffolds" Australian Society for Biomaterials 13th Annual Conference, Brisbane, March 2003.
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