James Phillips Publications (Updated April 2017)

Research Papers

C. O'Rourke, C. Lee-Reeves, R.A.L. Drake, G.W.W. Cameron, A.J. Loughlin & J.B. Phillips (2017) Adapting tissue engineered in vitro CNS models for high throughput study of neurodegeneration. Journal of Tissue Engineering DOI: 10.1177/2041731417697920

F. Gonzalez-Perez, S. Cobianchi, C. Heimann, J.B. Phillips, E. Udina, X. Navarro (2017) Stabilization, rolling and addition of other ECM proteins to collagen hydrogels improves regeneration in chitosan guides for long peripheral nerve gaps in rats. Neurosurgery 80, 465-474

K. Sanen, W. Martens, M. Georgiou, M. Ameloot, I. Lambrichts & J.B. Phillips (2017) Engineered neural tissue with Schwann cell differentiated human dental pulp stem cells: potential for peripheral nerve repair? Journal of Tissue Engineering and Regenerative Medicine doi: 10.1002/term.2249

F. Busuttil, A.A. Rahim & J.B. Phillips (2017) Combining gene and stem cell therapy for peripheral nerve tissue engineering. Stem Cells and Development 26, 231-238

R.H. Coy, O.R. Evans, J.B. Phillips & R.J. Shipley (2016). An integrated theoretical-experimental approach to accelerate translational tissue engineering. Journal of Tissue Engineering and Regenerative Medicine doi:10.1002/term.2346

R.D. Bartlett, D. Choi & J.B. Phillips (2016). Biomechanical properties of the spinal cord: implications for tissue engineering and clinical translation. Regenerative Medicine, 11, 659-673

K.S. Bhangra, F. Busuttil, J.B. Phillips & A.A. Rahim (2016). Using Stem Cells to Grow Artificial Tissue for Peripheral Nerve Repair. Stem Cells International, ID 7502178

S. Hashemian, C. O'Rourke, J.B. Phillips, I. Strömberg, S. Af Bjerkén (2015). Embryonic and mature astrocytes exert different effects on neuronal growth in rat ventral mesencephalic slice cultures. SpringerPlus 4, 558.

C. O'Rourke, R.A.L. Drake, G.W.W. Cameron, A.J. Loughlin, & J.B. Phillips (2015). Optimising contraction and alignment of cellular collagen hydrogels to achieve reliable and consistent engineered anisotropic tissue. Journal of Biomaterials Applications, 30, 599-607

M. Georgiou, J.P. Golding, A.J. Loughlin, P.J. Kingham & J.B. Phillips (2014). Engineered neural tissue with aligned, differentiated adipose-derived stem cells promotes peripheral nerve regeneration across a critical sized defect in rat sciatic nerve. Biomaterials, 37, 242-251.

R.T. Haw, C. K. Tong, A. Yew, H.C. Lee, J.B. Phillips and S. Vidyadaran (2014). A three-dimensional collagen construct to model lipopolysaccharide-induced activation of BV2 microglia. Journal of Neuroinflammation, 11, 134.

J.B. Phillips (2014). Building stable anisotropic tissues using cellular collagen gels. Organogenesis, 10, 6–8.

W. Martens, K. Sanen, M. Georgiou, T. Struys, A. Bronckaers, M. Ameloot, J.B. Phillips and I. Lambrichts (2014). Human dental pulp stem cells can differentiate into Schwann cells and promote and guide neurite outgrowth in an aligned tissue-engineered collagen construct in vitro. FASEB J 28, 1634-1643.

R. Gromnicova, H.A. Davies, P. Sreekanthreddy, I.A. Romero, T. Lund, I. Roitt, J.B. Phillips and D.K. Male (2013). Glucose-coated gold nanoparticles transfer across human brain endothelium and enter astrocytes in vitro. PLoS ONE, 8(12) article e81043.

E. East, N. Johns, M. Georgiou, J.P. Golding, A.J. Loughlin, P. Kingham and J.B. Phillips (2013). A 3D in vitro model reveals differences in the astrocyte response elicited by potential stem cell therapies for CNS injury. Regenerative Medicine, 8, 739–746.

M. Georgiou, S.C.J. Bunting, H.A. Davies, A.J. Loughlin, J.P. Golding and J.B. Phillips (2013). Engineered neural tissue for peripheral nerve repair. Biomaterials, 34, 7335–7343.

J.P. Golding, T. Wardhaugh, L. Patrick, M. Turner, J.B. Phillips, J.I. Bruce and S.G. Kimani (2013). Targeting tumour energy metabolism potentiates the cytotoxicity of 5-aminoluvulinic acid photodynamic therapy. British Journal of Cancer, 109, 976–982.

S.G. Kimani, T. Shmigol, S. Hammond, J.B. Phillips, J.I. Bruce, A.J. MacRobert, M. Malakhov and J.P. Golding (2012). Fully protected glycosylated Zinc (II) phthalocyanine shows high uptake and photodynamic cytotoxicity in MCF-7 cancer cells. Photochemistry and Photobiology, 89, 139-149.

K.E. Wright, A.J. MacRobert and J.B. Phillips (2012) Inhibition of specific cellular antioxidant pathways increases the sensitivity of neurons to meta-tetrahydroxyphenyl chlorin-mediated photodynamic therapy in a 3D co-culture model. Photochemistry and Photobiology, 88, 1539-1545.

E. East, J.P. Golding and J.B. Phillips (2012) Engineering an integrated cellular interface in 3-dimensional hydrogel cultures permits monitoring of reciprocal astrocyte and neuronal responses. Tissue Engineering Part C, 18, 526-536.

S.G. Kimani, J.B. Phillips, J.I. Bruce, A.J. MacRobert and J.P. Golding (2012) Antioxidant inhibitors potentiate the cytotoxicity of photodynamic therapy. Photochemistry and Photobiology, 88, 175-187.

S. Mason & J.B. Phillips (2011) An ultrastructural and biochemical analysis of collagen in rat peripheral nerves: the relationship between fibril diameter and mechanical properties. Journal of the Peripheral Nervous System, 16, 261-269.

E. East, D. Blum de Oliveira, J.P. Golding and J.B. Phillips (2010) Alignment of astrocytes increases neuronal growth in 3D collagen gels and is maintained following plastic compression to form a spinal cord repair conduit. Tissue Engineering Part A, 16, 3173-3183.

V.R. King, D. Hewazy, A. Alovskaya, J.B. Phillips, R.A. Brown and J.V. Priestley (2010) The neuroprotective effects of fibronectin mats and fibronectin peptides following spinal cord injury in the rat. Neuroscience, 168, 523-30.

E. East, J.P. Golding and J.B. Phillips (2009) A versatile 3D culture model facilitates monitoring of astrocytes undergoing reactive gliosis. Journal of Tissue Engineering and Regenerative Medicine, 3: 634-646.

K.E. Wright, E. Liniker, M. Loizidou, C. Moore, A.J. MacRobert and J.B. Phillips (2009) Peripheral neural cell sensitivity to mTHPC-mediated photodynamic therapy in a 3D in vitro model. British Journal of Cancer, 101, 658-665.

H. Kayhanian, S. Jones, J.B. Phillips, M. Lewis, R. Brown and V. Mudera (2009) Host muscle cell infiltration in cell-seeded plastic compressed collagen constructs. Journal of Tissue Engineering and Regenerative Medicine, 3, 72-75.

T. Wright, E. Green, J.B. Phillips, O. Kostyuk and R. Brown (2006) Characterisation of a "blanch-blush" mechano-response in palmer skin. Journal of Investigative Dermatology 126, 220-226.

V.R. King, J.B. Phillips, H. Hunt-Grubbe, R. Brown, and J.V. Priestley (2006) Characterization of non-neuronal elements within fibronectin mats implanted into the damaged spinal cord. Biomaterials 27, 485-496.

J.B. Phillips and B. Pearce (2005) Serum deprivation and re-addition: Effects on cyclooxygenase inhibitor sensitivity in cultured glia. Inflammopharmacology 13, 431-439.

G.A. Georgeu, E.T. Walbeehm, R. Tillett, R.A. Brown, A. Afoke and J.B. Phillips (2005) Nerve retraction: Contributions of peripheral nerve components and their response to tension. Cell & Tissue Research. 320, 229-234.

J.B. Phillips, S. Bunting, S.M. Hall and R.A. Brown (2005) Neural tissue engineering: A self-organizing collagen guidance conduit. Tissue Engineering 11, 1611-1617.

J.B. Phillips, V.R. King, Z. Ward, R.A. Porter, J.V. Priestley and R.A. Brown (2004) Fluid shear in viscous fibronectin gels allows aggregation of fibrous materials for CNS tissue engineering. Biomaterials 25, 2769-2779.

V.R. King, J.B. Phillips, R.A. Brown, and J.V. Priestley (2004) The effects of treatment with antibodies to transforming growth factor β1 and β2 following spinal cord damage. Neuroscience 126, 173-183.

J.B. Phillips, X. Smit, N. De Zoysa, A. Afoke, and R.A. Brown (2004) Peripheral nerves exhibit localised heterogeneity of tensile properties during limb movement. Journal of Physiology 557, 879-87.

R.L. Tillett, A. Afoke, S.M. Hall, R.A. Brown and J.B. Phillips (2004) Investigating mechanical behaviour at a core-sheath interface in peripheral nerves. Journal of the Peripheral Nervous System 9, 255-262.

Authored/Edited book

J. Phillips (2008) Trauma, Repair and Recovery, Oxford University Press, ISBN9780199237340.

Chapters in books

J.B. Phillips 'Monitoring neuron and astrocyte interactions with a 3D cell culture system' in A.J. Murray (Ed) (2014), Axon Growth and Regeneration: Methods and Regeneration. Methods in Molecular Biology: Methods and Protocols, 1162. New York: Springer, pp. 113–124.

J.B. Phillips & R.A. Brown 'Micro-structured materials and mechanical cues in 3D collagen gels' in J W Haycock (Ed) (2011), 3D Cell Culture, Methods in Molecular Biology, Humana Press, pp183-196.

E. East and J.B. Phillips 'Tissue engineered cell culture models for nervous system research' in G N Greco (Ed) (2008), Tissue Engineering Research Trends, Nova, pp141-160.

R.A. Brown & J.B. Phillips 'Cell responses to biomimetic protein scaffolds used in tissue repair and engineering' in K W Jeon (Ed) (2007), International Review of Cytology, Academic Press, pp75-150.

A. Alovskaya, T. Alekseeva, J.B. Phillips, V. King and R.A. Brown 'Fibronectin, collagen, fibrin - components of extracellular matrix for nerve regeneration' in N. Ashammakhi, R.L. Reis & E. Chiellini (Eds) (2007), Topics in Tissue Engineering, Chapter 12, Expertissues (ebook).

J.B. Phillips 'Where does alcohol go in the body?' in L Smart (Ed) (2007) Alcohol and Human Health, Oxford University Press, pp53-61.

J.B. Phillips & T. Heller 'How alcohol causes short- and long-term harmful effects' in L Smart (Ed) (2007) Alcohol and Human Health, Oxford University Press, pp83-100.

Conference Papers (last 5 years only)

M.L.D. Rayner, J. Healy & J.B. Phillips (2016) Using advanced 3D engineered cell cultures to analyse the effect of drugs on peripheral nerve regeneration in vitro. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

K.S. Bhangra, A.G.E Day & J.B. Phillips (2016) Hypothermic storage of engineered neural tissue. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

C. Lee-Reeves, J.B. Phillips & C. O'Rourke (2016) Improving disease modelling for neurodegenerative drug development using engineered neural tissue with human iPSCs. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

R.N. Pradhan, J. Pape, M. Pavlou, J.B. Phillips & U. Cheema (2016) Three-dimensional tumour models to study metastatic cancer invasion through aligned stroma. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

F. Busuttil, M.P. Hughes, K.S. Bhangra, P.J. Kingham, J.B. Phillips & A.A. Rahim (2016) Enhancing peripheral nerve repair through tissue engineering and gene transfer. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

M. Plotczyk, K.S. Bhangra & J.B. Phillips (2016) Engineered neural tissue model of the Schwann cell response to hypoxia in vitro. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

J.S.L. Kirk, R.M. Hall, J.B. Phillips, G. Tronci, D. Wood, R.M. Hall & J.L. Tipper (2016) Development of a synthetic hydrogel system with tuneable mechanical properties to support a 3D spinal cord injury model. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

L. Thanabalasundaram, L. Stevanato, A.G.E. Day, C. Murray-Dunning, E. Grace, G. Cameron, J. Sinden & J.B. Phillips (2016) Viability and phenotype of differentiated CTX human neural stem cells in aligned RAFT-stabilised collagen hydrogels for nerve tissue engineering. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

C. Kayal, R. Shipley & J.B. Phillips (2016) Effect of collagen gel concentration gradients on neurite elongation. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

C. O'Rourke, T. Eriksson & J.B. Phillips (2016) Development of an in vitro model of reactive gliosis using stabilized collagen gels with defined and monitored stiffness environments. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

R.H. Coy, G. Kennedy, C. Kayal, C. O'Rourke, P.J. Kingham, J.B. Phillips & R.J. Shipley (2016) A mathematical model informed by in vitro experiments to advance engineered nerve repair construct design. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

K. Sanen, W. Martens, T. Vangansewinkel, M. Georgiou, M. Ameloot, I. Lambrichts, J. Phillips (2016) Engineered Neural Tissue with Human Dental Pulp Stem Cells: Potential for Peripheral Nerve Repair? *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

G. Kennedy, R.H. Coy, C. Kayal, C. O'Rourke, P.J. Kingham, R.J. Shipley & J.B. Phillips (2016) In vitro experiments to inform cell seeding strategies and parameterize a mathematical model for peripheral nerve repair. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

R.D. Bartlett, D. Choi, J.B. Phillips (2016) Mapping the viscoelastic mechanical properties of spinal cord tissue: implications for regenerative medicine and tissue engineering in the CNS. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

L. Zilic, S.P. Wilshaw, J.B. Phillips & J.W. Haycock (2016) Development of an acellular porcine peripheral nerve graft. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

A.K. Kureshi, C. Putri, J.B. Phillips, J.L. Funderburgh & J.T. Daniels (2016) RAFT tissue equivalents: 3D biomimetic disease tissue model of keratoconus. *Tissue & Cell Engineering Society, 4-6 July 2016, London, UK.*

J.B. Phillips (2016) Artificial nervous system tissues to model and repair the central nervous system. *TERMIS EU, 28 June – 1 July 2016, Uppsala, Sweden*.

J.B. Phillips (2016) Construction of engineered neural tissue using clinically relevant materials and cells. *TERMIS EU, 28 June – 1 July 2016, Uppsala, Sweden*.

R.H. Coy, G. Kennedy, C. Kayal, P.J. Kingham, J.B. Phillips, R.J. Shipley & C. O'Rourke (2016) A joint theoretical-experimental approach to investigate the effects of low oxygen environments upon therapeutic cell viability and VEGF production. *TERMIS EU, 28 June – 1 July 2016, Uppsala, Sweden*.

M.L.D. Rayner, R. Evans, J. Healy, J.B. Phillips (2016) Development of an advanced 3D-engineered neuronal cell culture as a screening tool for drugs promoting peripheral nerve regeneration. *TERMIS EU, 28 June – 1 July 2016, Uppsala, Sweden.*

R.J. Shipley, R.H. Coy, G. Kennedy, C. Kayal, P.J. Kingham & J.B. Phillips (2015) A mathematical model with the capacity to direct and accelerate the design of cellular peripheral nerve repair conduits. *International Symposium on Peripheral Nerve Regeneration, 24-25 Sept, Hannover, Germany.*

F. Gonzales-Perez, S. Cobianchi, J. Hernandez, C. Barwig, T. Freier, J.B. Phillips, E. Udina & X. Navarro (2015) Functionalization of artificial nerve guides to promote peripheral nerve regeneration. *International Symposium on Peripheral Nerve Regeneration, 24-25 Sept, Hannover, Germany.*

K.S. Bhangra, A.G.E. Day & J.B. Phillips (2015) Hypothermic and cryogenic preservation of engineered neural tissue *International Symposium on Peripheral Nerve Regeneration, 24-25 Sept, Hannover, Germany.*

C. Murray-Dunning, A.G. Day, M. Georgiou, R.A. Drake, G. Cameron, N. Grace, L. Thanabalasundaram, L. Stevanato, J. Sinden & J.B. Phillips (2015) Production and Characterisation of Engineered Neural Tissue Made using CTX Human Neural Stem Cells. *TERMIS World Congress, 8-11 September 2015, Boston, MA, USA*

C.M. O'Rourke, A.J. Loughlin & J.B. Phillips (2015) Using a 3D Co-culture Model to Simulate Hypoxic-ischemic CNS Injury. *TERMIS World Congress, 8-11 September 2015, Boston, MA, USA*

C.M. O'Rourke, A.J. MacRobert, J.B. Phillips & J.H. Woodhams (2015) Using Tissue Engineered 3D Co-culture Models to Investigate the Effects of Photochemical Internalisation on Nervous System Cells. *TERMIS World Congress, 8-11 September 2015, Boston, MA, USA*

C. Murray-Dunning, L. Thanabalasundaram, A.G.E. Day, N. Vysokov, J. Sinden, L. Stevenato & J.B. Phillips (2015) Differentiated CTX human neural stem cells adopt a glial phenotype in RAFT-stabilised collagen hydrogels suitable for nerve tissue engineering. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK*.

R. Angus, C. O'Rourke, A. Michael-Titus, J.B. Phillips (2015) Focal mechanical injury induces astrogliosis in a 3D tissue engineered culture model. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

A.G.E. Day, K.S. Bhangra, C. Murray-Dunning, L. Thanabalasundaram, N. Grace, G. Cameron, L. Stevanato, J. Sinden & J.B. Phillips (2015) Hypothermic and cryogenic preservation of artificial neural tissue made using differentiated CTX human neural stem cells in collagen gels. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

C. Lee-Reeves, J.B. Phillips, C. O'Rourke (2015) Development of a tissue engineered co-culture model to study neurodegeneration. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

K. Sanen, R. Paesen, W. Martens, S. Luyck, J.B. Phillips, I. Lambrichts & M. Ameloot (2015) Label-free monitoring of cell-seeded collagen type I hydrogels reveals marked changes in extracellular architecture over time. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

R.J. Shipley, R.H. Coy, T. Evans, O.R. Evans, G. Kennedy, D. Hodgson & J.B. Phillips (2015) Mathematical models as a tool to direct the spatial distribution of cells and materials in tissue-engineering conduits for peripheral nerve repair. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

R.H. Coy, J.B. Phillips & R.J. Shipley (2015) A mathematical model with the capacity to direct and accelerate the design of cellular peripheral nerve repair conduits. *Tissue & Cell Engineering Society, 19-21 July 2015, Southampton, UK.*

K. Sanen, R. Paesen, W. Martens, I. Lambrichts, J.B. Phillips & M. Ameloot (2014). Label free optical imaging of engineered neural tissue formation by second harmonic signals from collagen type I. International Microscopy Congress, 7-12 September 2014, Prague, Czech Republic.

C. O'Rourke, R. Drake, A.J. Loughlin & J.B. Phillips (2014). Adapting aligned, stabilised 3D tissues for large-scale neurobiological research. Tissue and Cell Engineering Society Annual Conference 2014, 2-4 July 2014, Newcastle, p. 29.

C. O'Rourke, A.J. Loughlin, R. Drake and J.B. Phillips (2014). Development of stabilised aligned CNS co-culture technology to model the behaviour of a range of neural cell types. 3D Cell Culture 2014, 25-27 June 2014, Freiburg, Germany

C. O'Rourke, R. Drake, A.J. Loughlin and J.B. Phillips (2013). Adapting aligned stabilised hydrogels to facilitate large scale drug screening and neurobiological research. Future Investigators Of Regenerative Medicine Symposium, 30 Sept – 03 Oct, 2013, Platja d'Aro, Spain.

K. Sanen, W. Martens, M. Georgiou, J.B. Phillips, I. Lambrichts and M. Ameloot (2013). Aligned Schwann cells derived from human dental pulp stem cells direct neurite growth in a tissue engineered collagen construct. XI European Meeting on Glial Cells in Health and Disease, 3-6 July 2013, Berlin, Germany.

M. Georgiou, J.P. Golding, A.J. Loughlin, & J.B. Phillips (2013). Fabrication of an endoneurium using engineered neural tissue within a peripheral nerve repair conduit. Tissue Engineering and Regenerative Medicine International Society - EU Meeting, 17-20 June 2013, Istanbul, Turkey.

J.B. Phillips (2013). Engineered neural tissue as a substitute for the autograft in peripheral nerve repair. Tissue Engineering and Regenerative Medicine International Society - EU Meeting, 17-20 June 2013, Istanbul, Turkey

C. O'Rourke, A.J. Loughlin, R. Drake and J.B. Phillips (2013). A multi-well plate model of reactive gliosis for high throughput screening of potential CNS therapies. BNA Festival of Neuroscience, 07-10 April 2013, London.

C. O'Rourke, A.J. Loughlin, R. Drake and J.B. Phillips (2012). Stabilisation of hydrogels containing neural cells to form CNS tissue models for monitoring neuronal and glial cell behaviour in vitro. Neuroscience 2012, 13 - 17 October 2012, New Orleans

M. Georgiou, S. Bunting, J.P. Golding, A.J. Loughlin and J.B. Phillips (2012). A living replacement tissue for peripheral nerve that can enhance regeneration in vitro and in vivo. Tissue Engineering and Regenerative Medicine International Society - World Congress 2012, 5 - 8 September 2012, Vienna, Austria

J.B. Phillips and R. Drake (2012). Novel technology for simple assembly of aligned 3D cellular collagen materials for tissue engineering. Tissue Engineering and Regenerative Medicine International Society - World Congress 2012, 5 - 8 September 2012, Vienna, Austria.

M. Georgiou, P. Kingham, S. Bunting, J.P. Golding, A.J. Loughlin and J.B. Phillips (2012). A nerve repair conduit containing differentiated adipose-derived stem cells within engineered neural tissue can support and guide neuronal growth in vitro and in vivo. Tissue Engineering and Regenerative Medicine International Society - World Congress 2012, 5 - 8 September 2012, Vienna, Austria.

C. O'Rourke, A.J. Loughlin, R. Drake and J.B. Phillips (2012). Optimising glial cell alignment in 3D culture to facilitate the development of neural tissue models for CNS research. Tissue Engineering and Regenerative Medicine International Society - World Congress 2012, 5 - 8 September 2012, Austria, Vienna

M. Georgiou, P. Kingham, J.P. Golding, A.J. Loughlin and J.B. Phillips (2012). Engineered neural tissue with columns of aligned Schwann cell-like cells from differentiated adipose-derived stem cells can support and guide neuronal growth in vitro. 3rd International Conference on Stem Cell Engineering "Designing Cellular Therapies", 29 April - 02 May 2012, Seattle, US.

M. Georgiou, A.J. Loughlin, J.P. Golding, P.J. Kingham & J.B. Phillips (2012). Engineered neural tissue with aligned Schwann cells supports neuronal regeneration in vivo and can be assembled using differentiated adipose-derived stem cells. Tissue and Cell Engineering Society, 4-6 July, Liverpool, UK.

N. Johns, E. East, J.P. Golding, A.J. Loughlin & J.B.Phillips (2012). Astrocytes expressing GFP in 3D collagen gels provide an effective model for screening the glial response to potential CNS cell therapies. Tissue and Cell Engineering Society, 4-6 July, Liverpool, UK.

E. Osei, L. Evans, J.B. Phillips & A.J. Loughlin (2012). Developing a 3D co-culture model to simulate perinatal hypoxic-ischaemic brain injury in preterm infants. Tissue and Cell Engineering Society, 4-6 July, Liverpool, UK.

C.M. O'Rourke, A.J. Loughlin, R. Drake & J.B. Phillips (2012). Defining glial cell self-alignment parameters for 3D CNS tissue models. Tissue and Cell Engineering Society, 4-6 July, Liverpool, UK.

J.B. Phillips & A.J. Loughlin (2011). Monitoring glial cell behaviour and neuron-glial interactions in 3D hydrogel and aggregate culture systems. In: 10th European Meeting on Glial Cells in Health and Disease, 13-17 September 2011, Prague, Czech Republic.

M. Georgiou, E. East, A.J. Loughlin J.P. Golding and J.B. Phillips (2011). Aligned Schwann cells within 3D tissue-like gels provide guidance to regenerating neurites. In: 10th European Meeting on Glial Cells in Health and Disease, 13-17 September 2011, Prague, Czech Republic.

J.B. Phillips (2011). A tissue engineered 3D culture model for studying damage and repair in peripheral nerves. In: 2011 Meeting of the Peripheral Nerve Society, June 25 - 29, 2011, Potomac, Maryland.

M. Georgiou, E. East, A.J. Loughlin J.P. Golding and J.B. Phillips (2011). A tissue engineered collagen conduit containing columns of aligned Schwann cells supports neuronal regeneration in vitro. In: 2011 Meeting of the Peripheral Nerve Society, June 25 - 29, 2011, Potomac, Maryland.

J.B. Phillips & S. Mason (2011). An ultrastructural and histological investigation of structural features related to biomechanical properties of human peripheral nerves at joint and non joint regions. In: 2011 Meeting of the Peripheral Nerve Society, June 25 - 29, 2011, Potomac, Maryland.

M. Georgiou, E. East, J. Loughlin, J.P. Golding & J.B. Phillips (2010) Schwann cells in collagen gels survive plastic compression and maintain their alignment: development of a cellular biomaterial for peripheral nerve repair. Tissue and Cell Engineering Society, 28-30th July, Manchester, UK.

E. East, J.P. Golding & J.B. Phillips (2010) Development of an integrated collagen gel system for studying cellular interfaces following spinal cord injury. Tissue and Cell Engineering Society, 28-30th July, Manchester, UK.

S. Mason & J.B. Phillips (2010) Investigating the role of collagen in the biomechanical behaviour of peripheral nerves. Tissue and Cell Engineering Society, 28-30th July, Manchester, UK.

E. East, M. Georgiou, A.J. Loughlin, J.P. Golding & J.B. Phillips (2010) Plastic compression of aligned cellular collagen gels for nervous system, repair. Tissue Engineering and Regenerative Medicine International Society, June 13-17, Galway, Ireland.

S. Mason & J.B. Phillips (2010) Collagen fibril diameter variation correlates with biomechanical heterogeneity in peripheral nerves. In: Proceedings of the International Anatomical Sciences and Cell Biology Conference, 26 - 29 May 2010, Singapore.

J.B. Phillips (2009) The role of cellular antioxidant pathways in protecting neurons during photodynamic therapy. First International Conference On Metal Chelation in Biology & Medicine. December 11-14, Bath, UK.

E. East & J.B. Phillips (2009) Tissue engineered culture models to understand nervous system damage and repair. Royal Society of Chemistry Centenery Event, The Open University, December 2nd, Milton Keynes, UK.

S. Mason, J. Harle& J.B. Phillips (2009) Region-specific variation in peripheral nerves: an electron microscopy study. Biomedical Science Congress, September 28-30th, Birmingham, UK.

S. Kimani, J.B. Phillips, J.I. Bruce, A.J. MacRobert & J.P. Golding (2009) Potentiation of ALPcS2 mediated Photodynamic therapy (PDT) by energy metabolism inhibitors in human tumour cell lines.

European Society for Photobiology & European Platform for Photodynamic Medicine. P752, September 5-10, Wroclaw, Poland.

K.E. Wright, A.J. MacRobert & J.B. Phillips (2009) Mammalian sensory neurons in 3D culture retain their regenerative functionality after surviving mTHPC-mediated PDT. European Society for Photobiology & European Platform for Photodynamic Medicine. P741, September 5-10, Wroclaw, Poland.

K.E. Wright, A.J. MacRobert & J.B. Phillips (2009) Cellular antioxidant pathways protect mammalian sensory neurons in 3D culture from mTHPC mediated PDT. European Society for Photobiology & European Platform for Photodynamic Medicine. OC108, September 5-10, Wroclaw, Poland.

A.J. Loughlin, E. East, J.P. Golding & J.B. Phillips (2009) Developing a 3D culture model of CNS myelination. European Meeting on Glial Cells in Health and Disease, Glia, 57(S13), S119., September 8-10, Paris, France.

E. East, D. Blum de Oliveira, J.P. Golding & J.B. Phillips (2009) Astrocyte alignment increases neurite outgrowth in a 3D cell culture model. European Meeting on Glial Cells in Health and Disease, Glia, 57(S13), S159., September 8-10, Paris, France.

E. East, D. Blum de Oliveira, J.P. Golding & J.B. Phillips (2009) Astrocyte alignment in 3D collagen gels increases neurite outgrowth; Implications for improving spinal cord repair. Tissue and Cell Engineering Society, 8-10th July, Glasgow.

K.E. Wright & J.B. Phillips (2009) Regenerative Capacity of Cultured Neurons Following Photodynamic Therapy in a 3D Collagen Gel Culture System. Tissue and Cell Engineering Society, 8-10th July, Glasgow.

S. Mason, J. Harle, & J.B. Phillips (2009) Characterising regional ultrastructure in peripheral nerves. Tissue and Cell Engineering Society, 8-10th July, Glasgow.

J.B. Phillips, E. East, & J.P. Golding (2008) Monitoring reactive gliosis in 3-dimensional astrocyte cultures; a model of spinal cord damage. Society for Neuroscience, Nov 2008, Washington DC.

K.E. Wright, A.J. MacRobert & J.B. Phillips (2008) Differences in sensitivity to mTHPC-mediated photodynamic therapy of neurons, glial cells and MCF-7 cells in a 3-dimensional cell culture model. In: Photodynamic Therapy and Photodiagnosis in Clinical Practice, 7- 11 October 2008, Brixen, Italy.

E. East, J.P. Golding & J.B. Phillips (2008) Modelling the injured spinal cord using 3-dimensional cell cultures; strategies for improving tissue engineered repair. European Cells and Materials, 16(Supplement 3), p. 51.

H. Kayhanian, S. Jones, J. Phillips, M. Lewis & V. Mudera (2008) Innervation and Muscle Cell Infiltration of Plastic Compressed Collagen Constructs. European Cells and Materials, 16(Supplement 3), p. 68.

S. Mason, J. Harle & J.B. Phillips (2008) Investigating the role of collagen in peripheral nerve biomechanics. European Cells and Materials, 16(Supplement 3), p. 80.

K.E. Wright, A.J. MacRobert & J.B. Phillips (2008) Assessing the Effect of Photodynamic Therapy on Peripheral Nerve and Cancer Cells Using a Thin Tissue Engineered Collagen Culture Model. European Cells and Materials, 16(Supplement 3), p. 13.

E. East, J.P. Golding & J.B. Phillips (2007) Modelling of the injured spinal cord using 3-dimensional cell cultures; strategies for improving tissue engineered repair. Society for Neuroscience, Nov 2007, San Diego, California.

K.E. Wright, A.J. MacRobert & J.B. Phillips (2007) Intracellular localisation of mTHPC and effect of photodynamic therapy in cells of the mammalian peripheral nervous system. European Society for Photobiology, September 2007, Bath, UK.

E. East, J.P. Golding & J.B. Phillips (2007) Development of a 3-dimensional in vitro model to study reactive gliosis following nervous system injury. Tissue Engineering and Regenerative Medicine International Society - EU Chapter meeting 2007, September 2007, London, UK.

E. East, J.P. Golding, & J.B. Phillips (2007) Increased GFAP immunoreactivity by astrocytes in response to contact with dorsal root ganglia cells in a 3D culture model. Glial cells in health and disease, September 2007, London, UK.

K. Lazenby & J.B. Phillips (2006) Astrocyte responses to dorsal root ganglia in 3-dimensional co-culture models. Tissue and Cell Engineering Society, July 2006, Sheffield, UK

K.E. Wright, E Liniker, A.J. MacRobert, R.A. Brown, M.J. Saffrey & J.B. Phillips (2006) Investigating the effect of photodynamic therapy on nerves using tissue engineered culture models. Tissue and Cell Engineering Society, July 2006, Sheffield, U.K.

K.E. Wright, E. Liniker, A.J. MacRobert, M.J. Saffrey, R.A. Brown & J.B. Phillips (2006) Use of a tissue engineered model to investigate the effects of photodynamic therapy on peripheral nerves. Tissue Engineering & Regenerative Medicine International Society, European Chapter Meeting 2006, Rotterdam, The Netherlands.