

# ***Curriculum Vitae Professor John A. Hunt***

## **1.1 Personal details**

Name: Professor John Alan Hunt FBSE, FRSC  
Date of Birth: 14<sup>th</sup> May 1966  
Address: Medical Technologies and Advanced Materials, CELS Building, Clifton  
Campus, Nottingham Trent University, Nottingham, NG11 8NS  
Orcid ID: 0000-0002-5168-4778

## **1.2 Further/Higher education**

B.Sc. (Hons) Biology & Physics, First Class with Honours Nottingham Trent University	1985-1988
Ph.D. University of Liverpool	1988-1991
D.Sc. University of Liverpool	2006

## **Other relevant training and qualifications**

Diploma in Teaching and Learning in Higher Education Diploma University of Liverpool, 1999.

## **Membership of Professional Bodies**

Fellow of the Royal Society of Chemistry (FRSC) 2010 –  
FBSE International College of Fellows of Biomaterials Science and Engineering (ICF-BSE)  
2012 -

## **1.3 Awards**

The Jean Leray Award of the European Society for Biomaterials, September 1993.  
BioNow, Emerging Project Award November 2010 for new Culture substrates for Cell Culture.  
FBSE International College of Fellows of Biomaterials Science and Engineering (ICF-BSE) 2011  
Bassini award, International Hernia Society June 2012.  
Zachary Cope Medal, Royal College of Surgeons, February 2016.

## **1.4 Employment record**

1991-1997	Senior Research Assistant/Research Associate, Department of Clinical Engineering, University of Liverpool
1997-2003	Lecturer, Department of Clinical Engineering, University of Liverpool
2003-2005	Senior Lecturer, Department of Clinical Engineering, University of Liverpool
2005-2009	Reader, Department of Clinical Engineering, University of Liverpool
May 2007-	Head of Department, Head of Division, Head of Research Unit, University of Liverpool
2006-2015	Director of U.K. Centre for Tissue Engineering
April 2008-	Professor (Personal Chair) University of Liverpool
March 2016-	Honorary Academic Consultant Liverpool Heart & Chest NHS Foundation Trust
May 2017 -	Professor and Strategic Research Theme Lead, Nottingham Trent University
May 2017 -	Academic lead for The Medical Technologies Innovation Facility (MTIF Ltd), Nottingham Trent University
Dec 2018 -	Visiting Professor College of Biomedical Engineering, China Medical University, Taichung 40402, Taiwan

## **1.5 Teaching Experience**

### **1.51 Undergraduate Teaching**

- 2<sup>nd</sup> year module entitled Inflammation and Wound Healing, Pathology Module on MBCHB (class size 250 UoL, webcast live to 250 U. Lancaster and U. Central Lancashire to 200). Taught class.
- ENGG341 Project contact time 12 hours
- MBCH204 Research and scholarship contact time 25
- MBCH302 Research and scholarship contact time 75

### 1.5.2 Postgraduate Teaching

- MSc (Eng) biomedical engineering, course director 2006-2008.
- MRes IACD Frontiers in Science Module Lectures and tutorials. Taught. class size approx 30.
- MRes IACD Business and Commercialization Module Lectures. Taught. class size approx 45.
- MRes IACD Research Projects. One or two (Max.) per session. 3-5 per year.
- MSc Transfusion Medicine and Advanced Cell Therapies (European Masters): Online Masters Joint Degree awarded by the Universitat Autònoma de Barcelona and the Université de Liège. Distance Learning, online. Module IV: Cell and tissue therapies. Tissue Bank (15 ECTS). Class size approx. 60. per year
- MSc Molecular Biology with Biotechnology Module BSM-4107: Medical Biotechnology, Bangor University. Taught. Class size approx. 40.
- Mcmr003 research frontiers in clinical sciences 1 taught. Class size approx. 30 contact time 15.
- MSc (Eng) biomedical engineering taught. Class size approx. 7 contact time 1.
- Mcmr005 clinical sciences research project 1 contact time 40.
- Mcmr006 clinical sciences research project 2 contact time 40.
- Mcmr007 clinical sciences research project 3 contact time 40.
- Mcmr505 musculoskeletal biology research project 1 contact time 40.
- Mcmr506 musculoskeletal biology research project 2 contact time 40.
- Mcmr507 musculoskeletal biology research project 3 contact time 40.
- Phgy602 neuroscience - research project 2 contact time 45.
- Phth602 stem cells, tissues & disease - research project 2 contact time 45.
- U. Twente The Netherlands, Masters student research placement. 1 student for 9 months full time per year. 2008 -2016.

### 1.5.3 Past Teaching

- 2007-2008 M.Sc. Taught Postgraduate in Medical Engineering Course Director
- 1999-2008 M.Sc. Taught Postgraduate in Medical Engineering, module coordinator, responsible for course work, exams and delivery.
- 1997- 2009 B. Eng. in Clinical Engineering and Materials Science, BF92. Taught Undergraduate course module coordinator, responsible for course work, exams and delivery.

## 1.6 Summary of research and impact experience

### 1.6.1 Research Students

#### Details of higher degree students that have completed

	Rice, Judith, M.	200102	PHD Awarded
	Andrews, Kirstie, D.	200405	PHD Awarded
	Khassaf, Muna	200405	PHD Awarded
	Markkula, Tommi, K.	200304	PHD Awarded
Minho Uni	Marques, Alexandra	200405	PHD Awarded
	Jackson, Paul, V.	200405	PHD Awarded

	Walker, Rachael, V.	200405	PHD Awarded
	Callaghan, Jill, T.	200405	PHD Awarded
	Fujiyoshi, Keiko	200405	PHD Awarded
	Guidoin, Marie-France	200405	PHD Awarded
	Baldwin, Lisa, M.	200405	PHD Awarded
Man Uni	David Warde (Manchester)	200405	PHD Awarded
Minho Uni	Catarina Alves	200508	PHD Awarded
Man Uni	Nesta Hughes	200508	PHD Awarded
	Michael Loughran	200509	PHD Awarded
	Nicholas Bryan	200609	PHD Awarded
	Steven Thompson	200910	PHD Awarded
	Sandra Cachinho	200710	PHD Awarded
	Fiona Lewis	200811	PHD Awarded
	Sandra Fawcett	200912	PHD Awarded
	Theun van Veen, Hendrik	200910	PHD Awarded
	Rhiannon Morgan	201201	PHD Awarded
	Eleri Jones	201210	PHD Awarded
	Helen Ashwin	201117	PHD Awarded
	Sorzabal-Bellido, Ioritz	201417	PHD Awarded
Man Uni	Julen Zabala Mancebo	201417	PHD Awarded
	Ahmed Hussein (MD)	201618	MD Awarded
	Lee I-Ning	2015-2018	PHD Awarded
	Eve Rogers	2015-2018	PHD Awarded
	Bonilla, Eduardo	200978	PHD Awarded
	Nicholas Longridge	2016-2022	DDS Awarded

#### **Details of on-going higher degree candidates**

Christopher Battersby(MD)	201304	<i>(Submitted)</i>
Moad Fuad	2015-2018	<i>(Submitted)</i>
Ian Richards	2016-2020	
Naga Rama Mani Manohar Prasad	2017-2020	
Yunjie Hao	2017-2020	
Laura Bowker	2018-2021	
Wendy Balestri	2018-2021	
Hannah Manley	2019-2022	
Jessica Stanley	2020-2023	

### **1.6.2 Project Management and Administration**

#### **1.6.2.1 Current Grants / Funding Principal Investigator**

- Connecting Capability Fund (HEFCE), Business Impact by Design. 2018-2021 £4.898,000.

#### **1.6.2.2 Completed Grants / Funding**

##### Principle Investigator

- NIHR i4i Detection and Isolation of Circulating Tumour cells. 2012-2015 £495,000.
- Novel nanoscale definition materials for stem cell 2015-2017.China U.K. partnership. £45,000.
- Novel nanoscale osteoinductive coating for dental and orthopaedics 2014-2016.China U.K. partnership. £50,000.
- Stem Cells from Human Adipose Tissues Royal Liverpool and Broadgreen Hospitals

- NHS Trust 2016 £5,000. Brazilian Government Ph.D. academic visitor placement 2015-2016. £60,000.
- TSB Prototype to Product for Cell Capture and Immobilisation using photochemistry. 2012-2014. 290,000.
- Tissue healing in the bowel Royal Liverpool and Broadgreen Hospitals NHS Trust 2014-2015 £15,000.
- European Community (Belgium) REDONTAP. Tissue Engineering a Continuous supply of Red Blood cells. 2010-2014 £375000.00. (co-ordinator £2,748,949 through UoL to partners).
- Wellcome Trust Artist in residence 2011-2012 £32,150.
- Industry funded programme Biocompatibility. 2001-2014 £75470.00
- Industry funded Material Development. 2008-2012 £600000.00
- European Community (Belgium) Marie Curie Visiting Fellow £75,000 2010-2011.
- TSB/EPSC/DTI Technology Programme Spring 08-10. Cell Separation Device. £1,015,824.
- European Community (Belgium) JOINT(ed) project: Joined Education for Tissue Engineering: a multidisciplinary approach to regenerate joints. £104,590. 2006-2009.
- Industry funded programme Biodegradable coatings. 2005-2008 £88695.00
- Industry funded programme Biocompatibility. 2001-2008 £75470.00
- Industry funded programme Free Radical Reactions. 2007-2008 £45000.00
- Industry funded programme Material Development. 2008-2011 £600000.00
- Industry funded programme Genetic Conservation. 2008 £77000.00
- Industry funded programme Osteogenesis. 2008 £15000.00
- Whitaker Foundation International Fellowship USA, 2008 £40,000
- University of Minho (Portugal) Cellular investigations into biocompatibility of biodegradable starch based polymers. 1999-2006 £10183.00.
- Australian research council. The ARC research network for tissue engineering, contributing organisation, 2004-2009. £0 (came with no money).
- Boston scientific corporation (USA) rat subq implantation of biodegradable drug eluting stent coatings. 2004-2006 £88695.00
- Fidia Advanced Biopolymers (Italy) Adipogenesis using tissue engineering. 2005-2006 £8756.00.
- Mednova. Tissue engineering with polymer based materials. 2000 – 2003 £45,756.

#### Co investigator / not project PI

- Innovating Business by Design Research England Connecting Capability Fund. 2018-2021 £4,800,000.
- NIHR i4i Detection and Isolation of Circulating Tumour cells. 2012-2015 £495,000.
- Novel nanoscale definition materials for stem cell 2015-2017. China U.K. partnership. £45,000.
- Novel nanoscale osteoinductive coating for dental and orthopaedics 2014-2016. China U.K. partnership. £50,000.
- Innovate U.K. (BBSRC) Wound Triggered Synergistic Anti Biofilm Frameworks. 2016-2017. £100,000.
- Leverhulme Trust Control of Biological Responses by Isolated Synthetic Material Variables 2014-2017 £490,000.
- USA Military, CDRMP orthopaedic implants and infection 2014-2018 £75,470.00
- European Community (Belgium) THEGRAIL. Tissue Engineering a Cell Based Vascular Graft Therapy. 2012-2017 €885600.00.
- Petplan SiRNA therapies to Combat Arthritis in Dogs. 2011-2014 £280,000.
- European Community (Belgium) A systems approach to tissue engineering processes and products (STEPS). 2005-2009 £261475.00.

- Mersey Kidney Research. Bakran, Awwad, How and Hunt. Factors Predictive of Non-maturation of Arterio-Venous Fistulae for Haemodialysis. £7,000.
- BBSRC/EPSRC/MRC Tissue Engineering IRCol. 2001–2007 £9,700,000.
- MRC / EPSRC Institutional Discipline Bridging Award, £250,000. 2003-2006.
- European Community (Belgium) Interfacial guided osteogenesis in implant devices (IGOID). 2003-2005 £79160.00.
- European Community (Belgium) Silicone cross-linked polyurethane materials for thrombus and biodegradation resistant small-diameter vascular grafts and coating of blood contacting devices (SILCROTHANE). 2000-2005 £313071.00.
- European Community (Belgium) Novel technologies for soft tissue reconstruction : a tissue engineering solution based on biocompatible polymers and adipocytes-precursors cells (ADIPO-regeneration). 2000-2004 £77926.00.
- EPSRC. The Influence of Controlled Surface Chemical Modification on the Cellular Response to Biomaterials. January 1999 February 2002 £256,212. Ref. GR/M37486.
- EPSRC. A Dynamic Co-Culture Model of the Blood Vessel Wall for use in Vascular Research. £161,234. January 1999 – August 2002.
- North West Biomedical Funding Scheme: Evaluation of Adverse Patient Responses to Implanted Biomaterials. £75,387. January 1998 – August 2001.
- EPSRC. Case for New Appointees. Ph.D. Case Award. October 1997 – September 2000. Howmedica industrial partner.
- Starch based Polymers, University of Minho. £16,000. May 1998 – December 2006.
- JIF. Biomaterials and Tissue Engineering Laboratory, Joint Infrastructure Fund (GR/M61795), 1999, £3,233,190

### **1.6.3 Industrial Collaboration**

#### **1.6.3.1 Research projects**

- EU funded commercial collaboration: Development of a hybrid bio-artificial ligament
- EU funded commercial collaboration: Adipocyte Tissue Engineering
- EU funded commercial collaboration: Red Blood Cell Tissue Engineering
- U.K. Commercially sponsored student: Bone fillers.
- U.K. NIHR funded CTC diagnostic
- U.K. TSB funded cell selector sorter research tool
- U.S. Commercially sponsored: Material Degradation
- U.K. Research council funded commercial collaboration: Cell medical health diagnostics.
- EU funded training network: Tissue Engineering Solutions for Cardiovascular Surgery (TECAS)
- Taiwan Medical University: Osteogenic 3D Printed Biomaterials
- Fujian University of Traditional Chinese Medicine China
- Sichuan University Research Center for Nano Biomaterials, China
- Peking University China
- Jiangsu Alliances Bioscience Co. Ltd. China
- Changzhou Waston Bioscience Co., Ltd China
- Huazhong University of Science and Technology China

### **1.7 Summary of professional practice and related experience**

- Executive management committee Regener8, N8 Research Centre 2007 - 2016
- Chairman and Committee member of Analytical Biosciences Group, The Royal Society of Chemistry 2004 –
- Treasurer and committee member International College of Fellows of Biomaterials Science and Engineering (ICF-BSE) 2016 –

- Honorary Academic Consultant Liverpool Heart & Chest NHS Foundation Trust March 2016 -
- Associate Governor at Upton Hall Grammar School for Girls with a special interest in the education in the STEM subjects 2016 – 2020.

## **1.8 Leadership, professional and collegial experience**

### **1.8.1 Committee memberships and memberships of professional bodies**

- Regener8, Regenerative Medicine N8 funded centre, historically a Steering Committee Member, then on the task and finishing team 2007 - 2016
- Chairman of the Committee of Analytical Biosciences Group, The Royal Society of Chemistry 2004 –
- Steering committee member and elected treasurer, International College of Fellows of Biomaterials Science and Engineering (ICF-BSE) 2016 -
- Athena Swan Panel Review member 2014-
- Wellcome Trust Innovations Advisory Group 2012 –
- Review Committee Biomedical Engineering, Academy of Finland, Biomedical Engineering, Suomen Akatemia / Academy of Finland 2004 –
- Science, Engineering, Technology and Mathematics Network STEMNET ambassador 2010 -
- MerseySTEM ambassador 2012 -
- BBSRC review panel committee C member 2009 – 2017
- EPSRC Review College member 2016 -
- External Referee of the ERC Consolidator EU Funding Scheme 2012 -
- Expert Panel member for EU Marie Curie Fellowship Schemes 2012 -
- Expert Panel member for EU – China Funding Scheme 2012 -
- International Board Member for Journal Biomaterials 2002 –
- Editorial Board Biomedicine 2017-
- Subject Editor for Biomaterials and Nanotechnology in International Journal of Artificial Organs 2008 -
- International Review Board for European Cells and Materials 2002 -
- Reviewer for BBSRC, MRC, EPSRC, European Society for Biomaterials, The Swiss National Science Foundation, FNSNF, The British Council in France, The Natural Sciences and Engineering Research Council of Canada, The Irish Research Academy, The Leverhulme Trust, The Wellcome Trust, The Portuguese Science Foundation.

### **1.8.2 Past and present Departmental, Faculty, University Roles**

2006-2007	Acting Head of Department of Clinical Engineering.
2007-2012	Head of Department of Clinical Engineering, became a Division 2010 then in 2012 a Research Unit
2006-2015	Director of U.K. Centre for Tissue Engineering
2007-2008	M.Sc. Taught Postgraduate in Medical Engineering Course Director
2008-2014	UoL Knowledge Exchange consultation committee member, KE via Consultancy working group to inform to Senate protocols, procedures and ordinances for the correct UoL annual HE-BCI and also to establish CONSULT.
2010-2015	Faculty Theme Champion for Materials for the Future Research Theme
2008-2012	Human Materials Information Officer for Clinical Engineering
2005-2011	Institute for Nanoscale Science, Engineering and Technology (LINSET), Management Committee
2011-2014	Technology Directorate strategy group member
2011-2015	The HLS Faculty academic member of the University Intellectual property operations team

2016 - Centre for the Humanities and Social Sciences of Health, Medicine and Technology (CHSSoHMT) Management Group and Arts in the Lab: theme lead.

2016 - Athena Swan internal review group

2017 - Strategic Research Theme Lead for Medical Technologies and Advanced Materials

2017 - Academic lead for Medical Technologies Innovation Facility

2017 - Member of University Research Committee, Academic Research Leadership Team, College Management Team and College Research Leadership Team

## **1.9 Invitations to speak (at conferences, international meetings, etc.).**

### **1.9.1 Invitations to speak in the last 6 years**

- Keynote Speaker European Muscle Conference Canterbury, September 2019.
- Keynote Speaker European Society for Biomaterials, Dusseldorf, September 2019.
- Keynote Speaker Ionescu University and SCTS Annual Meeting and CT Forum in London Society for Cardiothoracic Surgery Annual Meeting London March 2019.
- Invited Speaker China Medical University, Taiwan. December 2018.
- Invited Speaker Asia University, Taiwan. December 2018.
- Keynote Speaker Visualisation and the Visual Field, National Centre for Research Methodology (NCRM) Autumn School, Manchester, November 2018.
- Keynote Speaker Visual Fields NCRM Innovation Event, National Centre for Research Methodology (NCRM), Manchester, January 2018.
- Keynote Presentation at the Joint CDTs in Regenerative Medicine. Leeds October 2017.
- Invited Speaker China Medical University, Taiwan. November 2017.
- Invited Speaker Asia University, Taiwan. November 2017.
- Stem Cell Therapies, Tissue Engineering and Regenerative Medicine: Approaches to Repairing People, Especially Elite Sports People by Regeneration. University of St. Marks and St. John Plymouth March 2017.
- Stem Cell Therapies are we there yet ? Open Public Lecture West Kirby Arts Centre February 2017.
- Providing the Time and the Space for Regenerative Therapies to be Efficacious. Centre for Regenerative Medicine, University of Edinburgh January 2017.
- Advancement in 3D Scaffold and  $\mu$ Contact Fluidic Printings in Regenerative Medicine The Chinese University of Hong Kong 12-16 December 2016.
- U.K. Society for Biomaterials, Invited speaker for European Impact in the field London 30<sup>th</sup> June 2016.
- ICF-BSE Fellows Debate World Biomaterials Congress, Montreal May 2016.
- Zachary Cope Medal and lecture, Royal College of Surgeons of England, London 7<sup>th</sup> January 2016
- Keynote speaker, Medtronic European Scientific meeting Trevoux 16<sup>th</sup>-17<sup>th</sup> November 2015.
- Keynote speaker, The U.K. Pelvic Floor Society, Manchester 5<sup>th</sup>-6<sup>th</sup> November 2015.
- Keynote speaker, TERM STEM 2015, Guimarães, Portugal, 2<sup>nd</sup>- 3<sup>rd</sup> July 2015
- Keynote speaker, European Society Surgical Research, Liverpool 10<sup>th</sup>-13<sup>th</sup> June 2015.
- Keynote speaker, International Medicine Conference, Taipei, 16<sup>th</sup>-23<sup>rd</sup> May 2015.
- Keynote dinner speaker, Health is Wealth conference, Liverpool 21<sup>st</sup>-22<sup>nd</sup> January 2015.
- Keynote speaker, British Association for Tissue Banking (BATB), 13<sup>th</sup>-15<sup>th</sup> May 2014.
- Keynote speaker, 7th Annual National Pelvic Floor meeting, Bristol, 10th-11th October 2013.
- Keynote speaker, EURO BioMat 2013, Weimar 23<sup>rd</sup> – 24<sup>th</sup> April 2013.
- Keynote speaker, Single Cell Analysis Europe, Barcelona, Spain 5<sup>th</sup> – 6<sup>th</sup> Mar 2013.
- Keynote speaker, 1st Mexican meeting for Dental pulp Stem Cells, Mexico City, 20<sup>th</sup> March 2013.

- Invited Speaker, PharmSci 2012, Nottingham, 12<sup>th</sup> September 2012.
- Invited Speaker Developments in Bioreactor technology, Culturing Stem Cells. Applikon Biotechnology Seminar program Wageningen, June 12<sup>th</sup> June 2012.
- Keynote Speaker, The Royal Society of Chemistry Annual General Meeting of the Analytical Biosciences group, UCL 26<sup>th</sup> January 2012.
- Invited Speaker, EU-FP7 Symposium, Liverpool, 16<sup>th</sup> November 2011.
- Invited Speaker, Inflammaday 2 Conference, Lyon June 2011.
- Keynote Speaker, The Netherlands High throughput screening of biomaterials-shaping a new research area Conference, Amsterdam, 14 and 15 April 2011.

#### **1.10 Industrial collaboration (consultancies, patents, etc.)**

##### **1.10.1 Patents**

1. siRNA therapeutic for canine osteoarthritis Inventor: Hunt John A [GB] INNES John [GB] WO 2015/128651 PCT/GB2015/050552. PCT September 2015.
2. Osteoinductive Materials Inventor:HUNT JOHN A [GB] CURRAN JUDITH M [GB] WO2015/015189. Priority date 2013-07-29.
3. Patterned surfaces and methods of use for stem cell culture Inventor:HUNT JOHN A [GB] CURRAN JUDITH M [GB] (+5) Applicant:NANOINK INC [US] ULIVE ENTPR LTD [GB] (+7) CPC:C12N2533/20 C12N2535/10 C12N5/0075 (+3) IPC: C12N5/00 C12N5/077 Publication info: WO2011088379 (A1) 2011-07-21 Priority date: 2010-01-14
4. Materials and methods for cell growth Inventor: HUNT JOHN A [GB] CURRAN JUDITH M [GB] (+2) Applicant: ULIVE ENTPR LTD CPC: C12N2533/12 C12N2533/14 C12N2535/10 (+2) IPC: A61F2/00 C12N11/02 C12N11/14 (+1) Publication info: US2010040661 (A1) 2010-02-18 Priority date: 2008-07-12

#### **1.11 Other relevant activities (both within and outside the University, including applied aspects of the subject).**

##### **1.11.1 Conference Organising Host/Chair**

- 7<sup>th</sup> Royal Society of Chemistry, Analytical Biosciences Early Career Researchers Meeting. University of Glasgow, March 2020.
- 6<sup>th</sup> Royal Society of Chemistry, Analytical Biosciences Early Career Researchers Meeting. University of Cambridge, March 2019.
- 3<sup>rd</sup> Royal Society of Chemistry, Analytical Biosciences Early Career Researchers Meeting. Clinical Engineering, UK Centre for Tissue Engineering, 16<sup>th</sup>-17<sup>th</sup> March 2016.
- European Society for Surgical Research, Liverpool University Teaching Hub, 10<sup>th</sup>-13<sup>th</sup> July 2015.
- European Society for Biomaterials, BT Convention Centre, 1<sup>st</sup>- 3<sup>rd</sup> September 2014. The greatest number of delegates at an ESB meeting ever.
- 2<sup>nd</sup> Royal Society of Chemistry, Analytical Biosciences Early Career Researchers Meeting. Clinical Engineering, UK Centre for Tissue Engineering, 3<sup>rd</sup> – 4<sup>th</sup> December 2013.
- Advances in In Vitro Cell and Tissue Culture, Annual European Conference Foresight Centre University of Liverpool 21<sup>st</sup>-22<sup>nd</sup> May 2013.
- U.K. Tissue and Cells Engineering Society, Annual Conference Foresight Centre University of Liverpool 5<sup>th</sup>-6<sup>th</sup> July 2012.
- 1<sup>st</sup> Royal Society of Chemistry, Analytical Biosciences Early Career Researchers Meeting. Clinical Engineering, UK Centre for Tissue Engineering, 20<sup>th</sup> -21<sup>st</sup> June 2012.
- EPSRC Pathways to Impact Technical Workshop in the Derivation and Purification of Cells. Clinical Engineering, May 2011.

## ***Section 2 - Publications and Submitted Papers***

### **2.1 Books and Chapter Publications**



1. Danoux C. Tare R Smith J Bradley M. Hunt J.A. Oreffo R. Habibovic P. *Materiomics*. Chapter 9 Development of materials for regenerative medicine: from clinical need to clinical application. Cambridge University Press. 2013. 151-168.
2. Hunt J.A. Chen R. Williams D.F. Bayon Y. *Surgical Materials*, in Ullmanns Encyclopedia of Industrial Chemistry. 2012. Wiley-VCH GmbH and Co. 10.1002/14356007.
3. Rhodes N.P. Hunt J.A. Induction of soft-tissue regeneration using hydrogels optimized for inflammatory response. *Handbook of Intelligent Scaffolds for Tissue Engineering and Regenerative Medicine*. Pan Stanford Publishing. 99-110. 2012.
4. Loughran M.J. and Hunt J.A. Stem cells for disc regeneration, In *Biomaterials for spinal surgery*, Edited by L Ambrosio and E Tanner, Woodhead Publishing Series in Biomaterials No. 39. 2012. Woodhead Publishing Limited. ISBN 9781845699864
5. Curran J.M. Hunt J.A. 4.405 - Leukocyte–Biomaterial Interaction In Vitro, In: Editor-in-Chief: Paul Ducheyne, Editor(s)-in-Chief, *Comprehensive Biomaterials*, Elsevier, Oxford, 2011, Pages 49-62, ISBN 9780080552941, 10.1016/B978-0-08-055294-1.00005-2.
6. Hunt J.A. The Delivery of Stem Cells as Medical Therapies. Pp27-29 *CCRA Year Book 2009/2010*.
7. Hunt J.A. The Need for Regenerative Medical Therapies. Pp10-12. *RegeNer8 Newsletter*. September 2010.
8. K.Andrews. J.A. Hunt. *Vascular Grafts, Cellular Response to Biomaterials*, Edited by Dr Lucy Di Silvio. Woodhead Publishing Limited. 258-270. 2009.
9. Hunt, J.A. Cachinho, S. *Biomaterials immune response*. Edited by G. Wnek and G. Bowlin. *Encyclopedia of Biomaterials and Biomedical Engineering 2<sup>nd</sup> Edition Volume 1*. Informa Healthcare, 262-269. 2008.
10. Hunt J A. *Fitter Better Stronger Faster*. In: Hauser J ed(s). *SK Interfaces*. Liverpool, Liverpool University Press. 2008.
11. Vince, D.G. Hunt, J.A. Williams D.F. Quantitative assessment of the tissue response to implanted biomaterials. *The Biomaterials: Silver Jubilee Compendium: The Best Papers Published in Biomaterials 1980–2004*. Edited by: D.F. Williams Elsevier Ltd. 73-78. 2006.
12. Gartland A. Buckley K A. Dillon J B. Curran J.M. Hunt J A. Gallagher J A. *Methods in Molecular Medicine*. 2nd edition. Edited by J Picot. *Human Cell Culture Protocols: Isolation and Culture of Human Osteoblasts*. Humana Press Totowa, New Jersey. 107. 29-54. 2005.
13. Hunt J.A. *Encyclopaedia of Biomaterials and Biomedical Engineering*. Editors G.E. Wnek and G.L. Bowlin. Chapter Foreign Body Response. Marcel Dekker, New York, 641-648. 2004.
14. Hunt J.A. Application of Microscopic Methods for the Detection of Cell Attachment to Polymers. Chapter 16, *Biopolymer Methods in Tissue Engineering*. Editors Hatton, P. and Hollander, A. Humana Press Inc. Totowa. 207-216. 2004.
15. Marques, A.P. Hunt, J.A. Reis, R.L. Mediation of the cytokine network in the implantation of orthopaedic devices. Ed: R. L. Reis and J. San Roman. *Biodegradable Systems In Tissue Engineering and Regenerative Medicine*, CRC Press, Boca Raton, USA 377-397. 2004.
16. Marques, A.P. Hunt, J.A. Reis, R.L. Natural origin degradable materials: the barrier or the passage through the immune system? Ed: R. L. Reis and J. San Roman. *Biodegradable Systems In Tissue Engineering and Regenerative Medicine*, CRC Press, Boca Raton, USA 355-375. 2004.
17. Hunt J.A. *Encyclopaedia of Materials: Science and Technology*. Editor D.F. Williams. Chapter; Inflammation. Elsevier Science, Amsterdam. 4068-4075. 2001.

## 2.2 Peer Reviewed Journal Publications

1. Pan, G.; Lyu, T.; Hunt, J. An Alternative to Ventilators to Support Critical COVID-19 Patients . April 2020, 2020040210 (doi: 10.20944/preprints202004.0210.v1).
2. Rogers, E.H. Hunt J.A. Pekovic-Vaughan V. Adult stem cell maintenance and tissue regeneration around the clock: do impaired stem cell clocks drive age-associated tissue degeneration? *Biogerontology*. December 2018, Volume 19, Issue 6, pp 497–517. DOI: 10.1007/s10522-018-9772-6
3. Koduri M.P. S Goudar V. Shao Y.W. Hunt J.A. Henstock J.R. Curran J. Tseng F.G. Fluorescence-Based Nano-Oxygen Particles for Spatiometric Monitoring of Cell Physiological Conditions. *ACS Appl Mater Interfaces*. 2018 Sep 12;10(36):30163-30171. doi: 10.1021/acsami.8b10715.
4. Rogers, E.H. Pekovic-Vaughan V. Hunt J.A. Mechanical stretch and chronotherapeutic techniques for progenitor cell transplantation and biomaterials. *BioMedicine* 2018, September 2018, V8, N3, 3-12. DOI: 10.1051/bmrcn/2018080314.
5. Lee, I. N., Hosford, J., Wang, S., Hunt, J. A., Curran, J. M., Heath, W. P., Wong, L. S. Large-area Scanning Probe Nanolithography Facilitated by Automated Alignment and Its Application to Substrate Fabrication for Cell Culture Studies. *J. Vis. Exp.* 2018, 136, e56967. doi:10.3791/56967
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### 2.3 Theses

Cell Material Homeostasis; D.Sc. thesis.Division of Clinical Engineering, University of Liverpool, 2006.

Quantification of the Soft Tissue Response to Implanted Materials ; Ph.D. thesis, Department of Clinical Engineering, University of Liverpool, 1991.

### 2.4 Public Engagement with Science

- Contributor and Filmed as part of The first 3D Film Documentary on the Human Body. I-Human 3D Film bought by Sky Movies 2010.
- 3D Printing the Future Museum of Science and Industry Manchester March 2015 - September 2015 <http://www.mosi.org.uk/whats-on/3d-printing-the-future.aspx>
- 3D Printing the Future Science Museum London October 2013-September 2014 [http://www.sciencemuseum.org.uk/visitmuseum/3D\\_printer\\_exhibition.aspx](http://www.sciencemuseum.org.uk/visitmuseum/3D_printer_exhibition.aspx)
- 3D Printing the Future Documentary film <http://chocolatefilms.com/channel/film/john-hunt-questions-3d-printed-organs-could-make-you-immortal>
- 3D Printing the Future Documentary film <http://www.3ders.org/articles/20131010-3d-printing-reality-myths-about-3d-printing-busted.html>
- London Science Museum online resource film 3D Printing the Future Documentary film [https://www.youtube.com/playlist?list=PLwx8\\_TBZ6z\\_mEnMy3T1YaC28OROc2OEta](https://www.youtube.com/playlist?list=PLwx8_TBZ6z_mEnMy3T1YaC28OROc2OEta)
- Public live televised debate, FACT Liverpool 2009.
- Media interviews broadcast for Sky, BBC TV and BBC Radio, Danish Radio, French Radio, Brazil TV, The Lancet, Nature. (Even got one of my newspaper headlines used on “Have I got news for you”)
- Media coverage in tabloid newspapers: The Mail, The Times, The Guardian, The Sunday Times. Locally in the Echo business post. There are many possibly hundreds:
  - <http://www.pharmaceutical-technology.com/features/feature-bioprinting-regenerative-revolution-technology/feature-bioprinting-regenerative-revolution-technology-1.html>
  - <http://www.telegraph.co.uk/technology/10276458/How-do-you-3D-print-a-heart.html>
  - [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62356-9/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62356-9/fulltext)
  - <http://www.telegraph.co.uk/science/science-news/10372598/A-vision-of-how-3D-printing-may-change-the-world-unveiled-Science-Museum.html>
  - <http://www.thesuperposition.org/tag/pigsbladderfootball/>
  - <http://www.ithornet.com/a-vision-of-how-3d-printing-may-change-the-world-unveiled-science-museum/>
- Judge at the Big Bang North West 2013 June 2013
- Judge for the Nuffield foundation awards October 2013
- BA Festival of Science September 2008, National Science Exhibition for Schools

## 2.5 Science with Art

- Heirloom Public exhibition Medical Museum Copenhagen 04/16-09/16
- Heirloom Public exhibition Sol, Korea 09/16
- Heirloom Public exhibition Waag Society Amsterdam 09/16 – 10/16
- Heirloom Public exhibition There’s no Such Thing as Gravity. Fact Liverpool 11/16-02/17
- Host and organiser AND festival workshop October 2013 <http://www.andfestival.org.uk/events/how-to-make-art-in-a-toxic-environment/>
- John O’Shea with Wellcome Trust funding was an artist in residence with John Hunt <http://pigsbladderfootball.com>. Exhibited in many places including AND 2012 <http://www.andfestival.org.uk/events/pigs-bladder/>. <http://www.flickr.com/photos/johnoshea/sets/72157631507515738/show/>.
- 2010 Jens Hauser as the technical science hands on consultant helping to keep life in installations for the exhibition *Sk-interfaces* which showed at the Casino Luxembourg (<http://www.casino-luxembourg.lu/en/Agenda/sk-interfaces-Exploding-borders-in-art-technology-and-society>).

- 2008 when Liverpool was the European Capital of Culture for the exhibition of the *Sk-interfaces* at FACT John collaborated with many of the artists requiring to bring their works to life using laboratory facilities, then he followed the pieces down to FACT and supported their living state throughout the show <http://www.fact.co.uk/projects/sk-interfaces.aspx?selection=Exhibition&when=previous>
- 2008 *Sk-interfaces* at FACT <http://www.fact.co.uk/projects/sk-interfaces/the-tissue-culture-art-project-oron-cattes-and-lonat-zurr-victimless-leather.aspx>
- 2008 *Sk-interfaces* at FACT <http://www.fact.co.uk/projects/sk-interfaces/orlan-harlequin-coat.aspx>

*This CV is not a complete record but is approximately a 90% complete and total record and then additionally excludes conference proceedings and published abstracts as by 2010 there were over 600.*