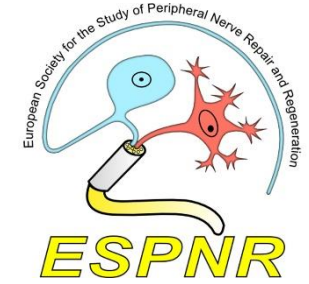


ISPNR: 6th International Symposium on Peripheral Nerve Regeneration



Wednesday 6th July

7:00-9:00 pm Welcome drinks at the Grant Museum

Thursday 7th July

8:30 – 9:00 Registration

9:00 – 9:15 Welcome and introduction

9:15 – 10:55 **Session 1: Cell and Molecular Part I**
Chairs: James Phillips and Rebecca Powell

Rebecca Shipley and James Phillips

Keynote Lecture 1: The multicellular complexity of peripheral nerve regeneration

Prof Alison Lloyd

Preferential regeneration and collateral dynamics of motor and sensory neurons after nerve injury in mice

Sara Bolívar Martín

Intrinsic neuronal activation of CXCR4 in regulation of regeneration program of the primary sensory neurons

Petr Dubový

PDGFR α expressing fibroblasts in epineurium promote the repair of the lesion site after peripheral nerve injury by enhancing endothelial cell migration via CHRDL1 secretion

Masato Hara

An Innovative Technique for Stabilising and Aligning Endothelial Cells Within Nerve Repair Conduits

Poppy Smith

10:55 – 11:20 Coffee break

11:20 - 12:50 **Session 2: Cell and Molecular Part II**
Chairs: Kirsten Haastert-Talini and Poppy Smith

Using mouse and zebrafish models to study nerve injury and repair

Peter Arthur-Farraj

Towards production of tailored nerve guidance conduits by elucidating the interactions between spider silk and Schwann cells

Aida Naghilou

Engineered aligned nerve constructs formed using conditionally immortalised Schwann cells differentiated from human iPSCs

Rebecca Powell

The role of class IIa HDACs in aged Schwann cells and regeneration of the aged peripheral nerve

Jose Antonio Gomez-Sanchez

Electromagnetic challenges to Schwann cell: friend or foe for peripheral nerve regeneration?

Valerio Magnaghi

Minocycline in nerve regeneration: insights from in vitro experiments

Owein Guillemot-Legrís

1:00 - 2:00 Lunch

1:30 - 2:30 Poster session 1

2:30 - 4:50	Session 3: Emerging Technologies and multidisciplinary approaches Chairs: Rebecca Shipley and Simão Laranjeira	2:30- 3:10	Keynote lecture 2: Extracorporeal shockwave therapy of peripheral nerves and 3D imaging of nervous tissue Dr David Hercher Gut-PNS axis: a new interaction between gut microbiota and peripheral nervous system <i>Giulia Ronchi</i> Sutureless Nerve Coaptation Leveraging a Bioinspired Light-Activated Polymer Platform: Poly Glycerol Sebacate Acrylate (PGSA) <i>Dominic Power</i>
		3:10 - 3:25	
		3:25 - 3:40	
3:40 – 3:50	Break	3:50 -4:05	Mathematical modelling of regenerative angiogenesis to define strategies for peripheral nerve repair <i>Maxime Berg</i> Automated Calculation of Functional Recovery Metrics for Nerve Injury Repair using Convolution Neuronal Networks <i>Simão Laranjeira</i> Changes in sciatic nerve histomorphometric parameters of the porcine sciatic nerve depending on preservation conditions after traumatic limb amputation <i>Kirsten Haastert-Talini</i> Animal Models for Peripheral Nerve Regeneration - It's Time to Grow Up <i>Rui Alvites</i> <i>Rebecca Shipley and James Phillips</i>
	4:05 - 4:20		
	4:20 - 4:35		
	4:35 – 4:50		
4:50 - 5:00	Close		
5:00 – 7:00	Networking session including entertainment and ESPNR assembly		
7:30	Dinner event		
Friday 8th July			
9:00 – 9:10	Introduction		<i>Rebecca Shipley and James Phillips</i>
9:10 – 10:35	Session 4: Biomaterials and Tissue Engineering Part I Chairs: Victor Carriel and Maxime Berg	9:10 – 9:50	Keynote Lecture 3 - Nano-engineered platforms for peripheral nerve regeneration Prof Orit Shefi Next-generation bioactivated devices for peripheral nerve injury recovery: a comparative pre-clinical study <i>Elena Stocco</i> Development of chitosan microstructured and functionalized membranes for improving regenerative capabilities of peripheral nervous cells <i>Federica Fregnan</i> Strategies to improve the regeneration of prostatic nerves after radical prostatectomy <i>Luisa Muratori</i>
		9:50 - 10:05	
		10:05 - 10:20	
		10:20 - 10:35	
10:35 - 11:00	Coffee break		
11:00 - 12:15	Session 5: Biomaterials and Tissue Engineering Part II Chairs: Lars Dahlin and Holly Gregory	11:00 - 11:15	Neural Tissue Engineering using Conductive Biomaterials <i>Ryan Trueman</i> Modified Amino-silane coated Polycaprolactone for Peripheral Nerve Repair <i>Caroline S. Taylor</i> In vivo preclinical evaluation of acellular nerve allografts generated by a new chemo-enzymatic decellularization method <i>Óscar Garcia</i> Graphene and WS2 as neuronal interfaces: effect on cell viability, neurite outgrowth and electrophysiological properties <i>Domenica Convertino</i> Graphene-based electrode for interfacing the peripheral nerve in neuroprostheses <i>Xavier Navarro</i>
		11:15 - 11:30	
		11:30 - 11:45	
		11:45 - 12:00	
		12:00 - 12:15	

12:15 - 1:15	Lunch		
12:45 - 1:45	Poster session 2		
1:45 - 3:25	Session 6: Regenerative Therapies Chairs: Stefania Raimondo and Ryan Trueman	1:45 - 2:25	Keynote Lecture 4: Electrical stimulation of peripheral nerves promotes regeneration after peripheral and central nerve injuries <i>Prof Tessa Gordon</i> Heat shock proteins in the posterior interosseus nerve among subjects with type 1 and type 2 diabetes compared to healthy controls – indicators for neuroprotection?
		2:25 - 2:40	<i>Lars Dahlin</i> Sandwich-structured electrospun biomaterials with encapsulated therapeutics and aligned architecture for treatment of peripheral nerve injury
		2:40 - 2:55	<i>Holly Gregory</i> Correlation between PPAR γ affinity and ability of candidate drugs to promote nerve regeneration
		2:55 - 3:10	<i>Melissa Rayner</i> Blood vessels: the red carpet walked by “repair” Schwann cells to colonize nerve conduits
		3:10 - 3:25	<i>Giovanna Gambarotta</i>
3:25 - 3:55	Coffee break		
3:55 - 5:20	Session 7: Clinical translation Chairs: Tom Quick and Melissa Rayner	3:55 - 4:35	Keynote Lecture 5: Translational Research in Peripheral Nerve Surgery: A Personal Journey <i>Mr Dominic Power</i> Volumetric MRI is a promising outcome measure of muscle reinnervation
		4:35 - 4:50	<i>Matthew Wilcox</i> The lived experience of motor recovery of elbow flexion via nerve transfer: A phenomenological analysis
		4:50 - 5:05	<i>Hazel Brown</i> An assessment of fatigue and co-contraction following nerve transfer to reanimate elbow flexors
		5:05 - 5:20	<i>Tom Quick</i>
5:30 - 6:00	Prizes and closing remarks		<i>Rebecca Shipley and James Phillips</i>