2015 Biomedical Engineering
Publications, Conferences and Book Chapters

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**Presentations/Conferences**


**Patents**


**FUNNELL, W. Robert J.**


**Presentations/Conferences**


**GALIANA, Henrietta**


**Presentations/Conferences**


**Patents**


Provisional US patent - Methods and Systems for short data segment filtering and signal classification with improved noise tolerance; I. Haji-Abolhassani & **H.L. Galiana**; filed August 21, 2015, assigned US 62 / 207,984m

**JUNCKER, David**


**Presentations/Conferences**


Additive manufacturing at the microscale: Microprobes, microfluidics and living tissue constructs. *Additive Manufacturing Seminar Series*, McGill University, November 17, 2015 (Invited Speaker)

Microfluidics-enabled technologies for biomarker discovery and point-of-care diagnostics: from research to spin-off. *BioConnect*, Montreal, Quebec, Canada, November 6, 2015 (Invited Speaker)

Microfluidics and digital nanodot arrays for ultrasensitive low cost and multiplexed single molecule immunoassays. *Seoul National University, Department of Chemistry*, Seoul, Korea, October 30, 2015 (Invited Speaker)


Microfluidics & Tissue Engineering in 1D, 2D & 3D, University of Toronto, Department of Mechanical Engineering, Toronto, Canada, August 26, 2015 (Invited Speaker)

Inventing, developing and applying microfluidic- and nano-technologies to neuroscience. Canadian Undergraduate Neuroscience Conference (CUNC), Canadian Association for Neuroscience and University of Alberta’s Neuroscience and Mental Health Institute, Edmonton, Canada, June 23, 2015 (Invited Speaker)

Microfluidic technologies for addressing key challenges in biomedical research and diagnostics. Journée Microfluidique, Laval University, May 27 2015 (Keynote presentation)


Laforte V., Gambaro K., Lo P. S., Dumeaux V., Rivet A., Mouhanna J., Kuta V., Park M., Basik M., Meterissian S. and Juncker D.: Targeted discovery of subtype-differentiating biomarkers for


MacNearney D., Chodavarapu V., and **Juncker D.**: UV Laser Writing of OSTE+ Neuronal Probes. *Integrated Sensor Systems Summer School*, Sherbrooke University, Sherbrooke, Quebec, Canada, June 1-2, 2015.


**KEARNEY, Robert E**
doi: 10.1016/j.jbiomech.2014.11.036

doi: 10.1002/ppul.23151

doi: 10.1091/mbc.e14-12-1632

doi: 10.1098/rsob.150080

doi: 10.1371/journal.pone.0134182

**Presentations/Conferences**


doi: 10.1016/j.ifacol.2015.12.265


**PRAKASH, Satya**


**Book Chapters**

**Presentations/Conferences**

*Global Commercialization Conference NJ Tech Council’s*, December 15, 2015 (Key Speaker & Chief Guest)

Health Food Section. “Probiotics and cancer” *Natural Health Product Research Society Meeting, London*, Canada, August 2015 (Keynote Speaker)

*China Canada Biomedicine New Technology Forum*, GP health Care Meeting Shandong, China, October 23-25, 2015 (Keynote Speaker)

**Patents**

Mexican Patent - Matrices covalentes, biodegradables para el, suministro de insulina por vía, oral dirigida al colon activado, por la microbiota y proceso para su obtención; Ana Luisa Martínez López, Elizabeth Carvajal Millán, Norberto Sotelo Cruz, Valérie Micard, Agustín Rascón Chu, **Satya Prakash**, Jaime Lizardi Mendoza, Yolanda, eticia López Franco, Rafael Carnnet Romero Alma Rosa Toledo; MX/a/2015/017857, filed 18 Dec 2015.

US Patent – Methods for synthesizing peptide-tagged pegylated chitosan; **Satya Prakash** and Meenakshi; Malhotra #62/254059, Filed November 11, 2015

China Patent - Therapeutic viral microparticles for promoting stent biofunctionality and wound healing in vertebrate individuals; **Satya Prakash** and Arghya Paul; application no 201480031705.8, Filed December 2nd, 2015

India Patent - Therapeutic viral microparticles for promoting stent biofunctionality and wound healing in vertebrate individuals; **Satya Prakash** and Arghya Paul; application no 10389/DELNP/2015, Filed November 9th, 2015

**TABRIZIAN, Maryam**


**Book Chapters**

Mina Mekhail, Laila Benameur, **Maryam Tabrizian***, Self---Assembled Nanostructures (SANs) in Biology and Engineering of Stem Cell Niches. Edited by Ajaykumar Vishwakarma and Jeffrey Karp, Elsevier, Inc.

**Presentations/Conferences**

“Injectable purine-based sponges as a potential therapy to target remyelination post-spinal cord injuries”, Pacifichem, HI, USA. December 15-20 2015, (Invited Speaker)

“Surface-enhanced Raman scattering nanoparticles for the detection and mapping of cardiovascular inflammatory biomarkers”, Pacifichem, HI, USA. December 15-20, 2015. (Invited Speaker)


“Rapidly Geling Injectable Sponges as a Potential Therapy to Target Remyelination Post-Spinal Cord Injuries”: Bioinspired molecular assemblies as protective and delivery systems, Orléan, France. September 9 to 7, 2015 (Keynote speaker)


**Patents**

European Patent -“Peristaltic Pump Microfluidic Separator” K. Li, T. Veres, T. Fatanat Didar, M. Tabrizian; Application 14776525.9 (Based on PCT/IB2014/060234), 2015

Provisional patent - “Injectable purine-crosslinked chitosan sponges containing pyrophosphatase for enhancing bone regeneration” L. Nayef, M. Mekhail, M. Tabrizian; August 2015.