

Ireland-Japan Biomaterials & Tissue Engineering Meeting

Wednesday 22nd, Thursday 23rd June 2016

Meyrick Hotel, Galway, Ireland

Wednesday 22nd June 2016

- 09.00 – 09.15 Prof James Browne
President, National University of Ireland, Galway
Welcome and opening
- 09.15 – 09.30 Her Excellency, Ms Mari Miyoshi, Ambassador of Japan to Ireland
Embassy of Japan in Ireland
Special address
- 09.30 – 09.45 Dr Dara Dunican
Programme Manager, Science Foundation Ireland
SFI and international collaborations
- 09.45 – 10.00 Dr Ann Ryan
Head of Research, Research Office, National University of Ireland, Galway
Research at NUI Galway
- 10.00 – 10.15 Prof Nobuo Ueno
Director, Japan Society for the Promotion of Science, London, UK
Overview of institutional and group programmes
- 10.15 – 10.30 Ms Yumiko Kusune
International Programme Associate, Japan Society for the Promotion of
Science, London, UK
Japan Society for the Promotion of Science fellowship programmes
- 10.30 – 11.00 Coffee Break**

- 11.00 – 11.20 Prof Yasuhiko Tabata
Kyoto University, Kyoto, Japan
Biomaterials technology indispensable to realize regeneration therapy and research
- 11.20 – 11.40 Dr Yury Rochev
National University of Ireland Galway, Ireland
An implantable thermo-responsive drug delivery system
- 11.40 – 12.00 Prof Ed Lavelle
Trinity College Dublin, Ireland
Particulate vaccine adjuvants and their mode of action
- 12.00 – 12.15 Diana Gaspar
National University of Ireland Galway, Galway, Ireland
Tenogenic phenotype maintenance and differentiation using macromolecular crowding and mechanical loading
- 12.15 – 12.30 Isma Liza
National University of Ireland Galway, Ireland
Modulation of inflammation, neuro-trophins, glycosylation, sensory nerve innervation and pain in intervertebral disc degeneration using a therapeutic hyaluronic acid hydrogel
- 12.30 – 14.00 Lunch Break**

- 14.00 – 14.20 Prof Hisatoshi Kobayashi
National Institutes for Materials Science, Ibaraki, Japan
Nano-fibrous materials for tissue regeneration
- 14.20 – 14.40 Prof Tofail Syed
University of Limerick, Ireland
First principle design of materials and interfaces
- 14.40 – 15.00 Dr Ted Vaughan
National University of Ireland Galway, Ireland
A computational model of cellular mechano-sensation in three-dimensional culture environments
- 15.00 – 15.15 Matthew G. Haugh
Royal College of Surgeons in Ireland, Dublin, Ireland
A recombinant biomaterials approach to study cell-matrix interactions
- 15.15 – 15.30 Asrizal A. Rahman
National University of Ireland Galway, Ireland
*Modification of living diatom, *Thalassiosira weissflogii*, by calcium precursor as a sacrificial template for development of artificial antigen presenting cell*
- 15.30 – 16.00 Coffee Break**

- 16.00 – 16.20 Prof Yukio Nagasaki
University of Tsukuba, Ibaraki, Japan
Design of new redox polymer for high performance medical treatment and therapy
- 16.20 – 16.40 Dr Alan O’Riordan
Tyndall Institute, Cork, Ireland
Advanced on-chip nano-sensor devices for disease monitoring and detection
- 16.40 – 17.00 Dr Manus Biggs
National University of Ireland Galway, Ireland
Pizo-electric scaffolds in regenerative medicine
- 17.00 – 17.15 Sarah Guerin
University of Limerick, Ireland
Decoding electro-active organic materials using solid-state physics
- 17.15 – 17.30 Filipa Lebre
Trinity College Dublin, Ireland
Size regulates the immune responses triggered by hydroxyapatite particles
- 18.00 – 20.00 Wine Reception & Canapes**

Thursday 23rd June 2016

- 09.00 – 09.20 Prof Takamaro Kikkawa
Hiroshima University, Hiroshima, Japan
A radar-based breast cancer detection system using CMOS integrated circuits
- 09.20 – 09.40 Dr Martin O'Halloran
National University of Ireland Galway, Galway, Ireland
Broadband dielectric spectroscopy as a platform for low cost medical device development
- 09.40 – 10.00 Dr Katie Ryan
University College Cork, Cork, Ireland
Inorganic materials in drug delivery and tissue engineering
- 10.00 – 10.15 Juhi Samal
National University of Ireland Galway, Galway, Ireland
Fibrin-based hollow reservoirs for controlled delivery of neurotrophic factors to the brain
- 10.15 – 10.30 Tomas Gonzalez-Fernandez
Trinity College Dublin, Dublin, Ireland
Gene activated hydrogels for the bio-fabrication of 3d printed constructs for osteochondral regeneration
- 10.30 – 11.00 Coffee Break**

- 11.00 – 11.20 Prof Akio Kishida
Tokyo Medical and Dental University, Tokyo, Japan
Biological tissues as new biomaterials
- 11.20 – 11.40 Prof Timothy O'Brien
National University of Ireland Galway, Galway, Ireland
Clinical translation of mesenchymal stem cells in regenerative medicine
- 11.40 – 12.00 Prof Dermot Brougham
University College Dublin, Dublin, Ireland
Magnetic nanoparticles and nanoparticle assemblies: Components for next-generation responsive materials for biomedical applications
- 12.00 – 12.15 Christos Tapeinos
National University of Ireland Galway, Galway, Ireland
Targeting reactive oxygen species with collagen based microstructures
- 12.15 – 12.30 Christina N. M. Ryan
National University of Ireland Galway, Galway, Ireland
Multifactorial approaches for tenogenic phenotype maintenance
- 12.30 – 14.00 Lunch Break**

- 14.00 – 14.20 Prof Keiji Itaka
The University of Tokyo, Tokyo, Japan
mRNA delivery using nano drug delivery systems for intractable diseases and regenerative medicine
- 14.20 – 14.40 Prof Yoshihiro Ito
RIKEN, Saitama, Japan
Bioinspired binding growth factors for bioactive interfaces
- 14.40 – 14.55 Eduardo Ruiz-Hernandez
Royal College of Surgeons in Ireland, Dublin, Ireland
Injectable implants to reverse disease
- 14.55 – 15.10 Nathalie Barroca
Queen's University Belfast, Belfast, Northern Ireland
Electrical polarization in PLLA for tissue engineering approaches
- 15.10 – 15.30 Prof Abhay Pandit
National University of Ireland Galway, Galway, Ireland
Medical device research in Ireland and Closing Remarks

Organisers / Sponsors / Hosts:

Science Foundation Ireland (SFI) – International Strategic Cooperation Award (ISCA) Programme with Japan; <http://irelandjapanresearch.com>

Regenerative, Modular & Developmental Engineering Laboratory (REMODEL); www.remodel.ie

Science Foundation Ireland (SFI) Centre for Research in Medical Devices (CÚRAM); www.curamdevices.ie

National University of Ireland Galway; www.nuigalway.ie

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