

2<sup>ND</sup> AMED/A\*STAR-JOINT WORKSHOP

# Stem Cell & Immune Cell Therapy

2019

参加費無料

2.26 Tue 9:00 - 19:00  
 Doors open 8:30 - / Reception 18:00-19:00

Nihonbashi Life Science Building 2F Conference Room 201

同時  
通訳有

Prof Hiroshi SHUKU



Prof HONG Wanjin



Prof Kenya OZAWA



Prof Antonio Bertoletti

医学・医療の進歩に伴い、これまでの医薬品・医療機器とは全く異なった細胞を使ったアプローチで、がん・難病などを治療することが可能になってきました。しかしながら、比較的新しい治療法であり、生きた細胞を治療に使うためには、効果の有効性、安全面、製造面でまだ多くの課題があります。

本ワークショップでは、シンガポールと日本から各9名の教授や研究者などの専門家を迎える、「幹細胞・免疫細胞治療」をテーマとし、①基礎研究から臨床応用への広がり、②細胞を用いた免疫療法開発の現状と課題、③前臨床評価（新規アプローチの開発、細胞・組織加工製品等の評価方法論、細胞治療の応用に向けての規制の枠組み）の3つのセッションにおいて、両国の最新の事例を基に今後の開発について討論していただきます。

定員

120名

※定員に達し次第申し込みを締め切り致します

会費

無料

申込先

下記サイトよりお申込み下さい。  
<http://2019amed-astar.peatix.com>

お問合せ

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主催

国立研究開発法人日本医療研究開発機構(AMED)

共催

シンガポール科学技術研究庁 (A\*STAR)  
一般社団法人ライフサイエンス・イノベーション・ネットワーク・ジャパン (LINK-J)

会場

日本橋ライフサイエンスビルディング 2階

〒103-0023 東京都中央区日本橋本町2-3-11  
東京メトロ銀座線・半蔵門線「三越前」駅 A6 出口  
より徒歩3分

# Stem Cell & Immune Cell Therapy

Program (2019.02.26)

## Opening Remark

9:00- 9:05 Dr Makoto SUEMATSU (President, AMED)

9:05 - 9:10 Dr Benjamin SEET (Executive Director, A\*STAR BMRC)

9:10 - 9:15 Introductions – Co-chairs (Prof Hiroshi SHIKU & Prof HONG Wanjin)

## Session I: Basic Research to Clinical Applications of Stem Cells Chair: Prof Hiroshi SHIKU (Japan) , Prof Zee UPTON (Singapore)

9:15 - 9:45 <Keynote Lecture> MSC accumulation at tumor sites and its mechanisms

Prof Keiya OZAWA (Professor Emeritus, Jichi Medical University, Visiting Professor, Division of Immuno-Gene & Cell Therapy (Takara Bio)

9:45 - 10:05 Bioengineered Tissue Matrix Programme

Prof Zee UPTON (Executive Director, A\*STAR Institute of Medical Biology)

10:05 - 10:25 Basic Research to Clinical Applications of Stem Cell extracellular vesicles

Dr LIM Sai KIANG (Research Director, A\*STAR Institute of Medical Biology)

10:25 - 10:45 Adipose-derived Mesenchymal Stem Cells: Potential for Metabolic Therapeutics

Dr Shigeki SUGII (Group Leader, A\*STAR Singapore BioImaging Consortium)

10:45 - 11:05 Poster session/Coffee Break (20min)

## Session II: Cell-Based Immunotherapies Chair: Prof Keiya OZAWA (Japan) , Prof Antonio BERTOLETTI (Singapore)

11:05 - 11:35 <Keynote Lecture> T cell immunotherapy for HBV infection and HBV-related HCC

Prof Antonio BERTOLETTI (Professor, Emerging Infectious Diseases Programme, Duke-NUS Medical School)

11:35 - 11:55 Clinical Development of NY-ESO-1 siTCR T Therapy in Japan

Dr Masanobu KIMURA (Director, President of Medecine Business Unit Clinical Development Department Takara Bio Inc.)

11:55 - 12:15 T cell therapy for Solid Tumours : Don't Stop Thinking about Tomorrow

A/Prof TOH Han Chong (Deputy Director, National Cancer Centre, Singapore)

12:15 - 12:35 Innovative technologies to make CAR-T cells a potent killer against solid tumors

Prof Koji TAMADA (Yamaguchi University Graduate School of Medicine, Department of Immunology)

12:35- Lunch break (60min)

13:00 - 13:30 Poster session

## Session III: Pre-Clinical Evaluation

### III-a: Development of novel approach Chair: Prof Koji TAMADA (Japan) , Prof John CONNOLLY (Singapore)

13:35 - 13:55 Clinical Development of novel TCR-gene engineered T cell therapy

Prof Hiroaki IKEDA (Nagasaki University Graduate School of Biomedical Sciences, Department of Oncology)

13:55 - 14:15 Glycosaminoglycans as adjuvants for enhancing the potency of mesenchymal stem cell products

Prof Simon COOL (Senior Principal Investigator, A\*STAR Institute of Medical Biology)

14:15 - 14:35 Developing non-viral CAR T cell therapy using piggyBac Transposons

Prof Yozo NAKAZAWA (Shinshu University, Department of Paediatric, School of Medicine)

14:35 - 14:55 Developing imaging-based technologies for tracking cellular therapies

Dr Ann-Marie CHACKO (Assistant Professor, Cancer and Stem Cell Programme Duke-NUS Medical School)

14:55 - 15:15 Regeneration of tumor antigen-specific T cells using the iPSC technology -Toward the development of "off-the-shelf T cells"

Prof Hiroshi KAWAMOTO (Institute for Frontier Medical Sciences, Kyoto University)

### III-b: Metrology of safety, potency and critical quality attributes for cell therapeutic products

Chair: Prof Hiroaki IKEDA (Japan) , Prof Simon COOL (Singapore)

15:15 - 15:35 Adoptive T-cell therapy using autologous tumor infiltrating T cells in melanoma and cervical cancer

Prof Yutaka KAWAKAMI (Keio University, Graduate School of Medicine, Institute for Advanced Medical Research, Division of Cellular Signalling)

15:35 - 15:55 VSTs as a platform for solid tumor immunotherapy

Prof John E CONNOLLY (Senior Principal Investigator, A\*STAR Institute of Molecular Cell Biology)

15:55 - 16:15 Defining MSC sEV: SOCRATES, ISEV, ISCT and ISBT position

Dr LIM Sai Kiang (Research Director, A\*STAR Institute of Medical Biology)

16:15 - 16:35 Poster session/Coffee Break (20min)

### III-c: Towards the application of cell therapy

- Defining quality & safety standards - Governance of cell therapy for clinical use (sharing regulatory framework from Japan and Singapore)  
Chair: Prof Yutaka KAWAKAMI (Japan) , Dr Mickey KOH (Singapore)

16:35 - 16:55 Safety and efficacy of cultured (expanded) bone marrow-derived stem cells for cartilage repair --- 14-year follow-up

Prof James HUI (Director of Clinical Services Department of Orthopaedic Surgery National University Health System, Singapore)

16:55 - 17:15 Cell therapy Initiatives in Singapore and Worldwide : trials, regulation and harmonization

Dr Mickey KOH (Programme and Medical Director, Health Science Authority, Singapore Programme Director – Stem Cell Transplantation, St George's Hospital and Medical School)

17:15 - 17:35 Update on Regulatory Aspect of Regenerative Medical Products in Japan

Dr Yoshiaki MARUYAMA (Review Director, Office of Cellular and Tissue-based Products PMDA, Japan)

17:35 - 17:40 Closing Remark Prof Hiroshi SHIKU (Japan)

18:00 - 19:00 Reception Foyer at 10th floor Nihonbashi Life Science Building (Supported by LINK-J)