Prof. Tran Diep Tuan, MD, PhD

Distinguished Professors and Colleagues,

On behalf of the organizers, we would like to convey to you our warmest greetings and cordial invitation to participate as a guest speaker at the 1st Translational Medicine Conference Vietnam (TRANSMED-VN), which will be held at the University of Medicine & Pharmacy at Ho Chi Minh City (UMP-HCMC) on Friday 19th August 2016.

UMP-HCMC and the Programme in Translational Immunology, IMCB, A* STAR of Singapore gather together to organize the 1ST TransMed-VN Conference aiming (1) to gather scientists to share their established research in the field of translational medicine of immuno and cell based therapies, (2) to promote collaborative basic and clinical research for novel therapies with Vietnam via UMP-HCMC.

UMP is truly honored to welcome Dr. John Connolly, Director of Program in Translational Immunology, Institute of Molecular and Cell Biology (IMCB) A* STAR as the Honorable Chair and Co-organizer of the 1st TransMed-VN Conference. Prof. John Connolly is a leading investigator of immunology within A* STAR. His team research is internationally acclaimed for major impacts on patient care via successful translation of modern human immunology using integrated, high quality core facilities and professionalism.

For Vietnam, the 1st TransMed Conference provides a major excitement for our much needed effort to promote translational biomedical research for medical universities as well as biomedical research laboratories across the country. There are a total of 12 medical

universities and schools in Vietnam with minimum translation of modern biotechnologies to hospitals and their patients. In the recent time, Vietnam has achieved a critical mass required for the establishment of a multi-disciplinary research and development in biotechnology; particularly in medical research, the strong tradition of medical practice, knowledge-based talents assure that we are capable of acquiring advanced biotechnologies to meet the future challenges for health care practice. Based on these developments, our vision for the future at UMP is to establish a Translational Medicine Program aiming at translation of new knowledge, mechanisms, and techniques generated by advances in basic science research into applications for prevention, diagnosis, and treatment of disease that is essential for innovation of Vietnam health care.

We welcome your interest and invite you to explore with us the possibilities for collaboration and partnership for the advancement of translational medicine in Vietnam, Asia and worldwide.

Thank you profusely for your attention and we look forward to welcoming you at UMP for this special event.

Prof. Tran Diep Tuan, MD, PhD

President

University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam

Prof. Vo Tan Son, MD, PhD

On behalf of our Center for Molecular Biomedicine, UMP, our scientist team, doctors, volunteers and friends, I am glad to welcome all participants of the 1st Translational Medicine Conference Vietnam.

To date, a significant progress has been achieved in basic science and clinical research. This success is a result of the ongoing substantive dialogue of doctors, scientists, policy-makers, charitable funds and patients. The choice of University of Medicine and Pharmacy Hochiminh city as a meeting place for translational medicine is not accidental. Our experience was one of the reason for this decision. Translation of such unique experience would enable the improvement of survival in those developing countries where results are still suboptimal despite of access to up-to-date medical resources.

We are looking forward to intensive work, interesting sections and professional discussions. I am sure that our work at this meeting will be very productive and inspirational and you will keep good memories of these days for a long time.

I hope the 1st Translational Medicine Conference Vietnam will reveal new leaders in biomedical field, bring together the scientists from the developed and developing countries, and give us opportunities for professional growth.

Sincerely yours,

Prof. Vo Tan Son, MD, PhD
Former President,
Head, Center for Molecular Biomedicine UMP-HCMC

Originally, University of Medicine and Pharmacy at HCMC (UMP) was a medical school that belonged to University of Saigon, which was founded in 1947 by French colonists in the period of French Indochina. Professor C. Massias was the first principal. It was at 28 Testard/Tran Quy Cap Street, District 3, Saigon (Vo Van Tan Street today). On 31 August 1961, under the authority of the government of the Republic of Vietnam the school was split into two: Saigon College of Medicine and Saigon College of Pharmacy. In 1964 Saigon College of Dentistry was founded from a division of the medical school.

The practice areas for fundamental sciences and basic medicine were around Saigon such as Pasteur Institute (used to learn about parasitic, micro-organism), Human Body Institute (for anatomy), Saigon Hospital (for chemistry). The Installation of Human Body Institute was used to learn about histology, physiology, illness, anatomy. Students of Medicine and Pharmacy studied at the main installation until 1961. The Faculty of Pharmacy was moved to Nam Ky Khoi Nghia Street.

On 16 November 1966, with the help of USAIDS and AMA (American Medical Association), the school was moved to Medicine Learning Center (Hong Bang Street, District 5) with well-equipped system, facility and students of Medicine and Dentistry have studied here up to date. It has the Main auditorium for 500 seats, three auditoriums with 300 seats each, library and labs.

On 27 October 1976, the government reorganised schools in Saigon University Institute. The three schools (Medicine, Pharmacy and Dentistry) were merged with a new name — University of Medicine and Pharmacy at HCMC. The first head office had two floors for offices, library, meeting room for lectures, and three side-by-side houses for studying. Although the new name does not reflect a fact that the dental school is a branch of the university system, it has been officially used until today.

In 1990, there was a decision from the school and Ministry of Health to build four more faculties and one hospital:

- 1994: Faculty of Fundamental Sciences
- 1998: Faculty of Traditional Medicine and Medicine Technique and Faculty of Nursing
- 1999: Faculty of Public Health
- 2000: University Medical Center

Center for Molecular Biomedicine
University of Medicine and Pharmacy at HCMC, Vietnam

Established since 2011, Center for Molecular Biomedicine is one of the leading research departments in University of Medicine and Pharmacy at HCMC. Molecular biology plays a significant role in medicine nowadays, with the understanding of molecular mechanism, the pathophysiology of certain diseases has been elucidated and proper treatments have been applied. CMB consists 6 groups for different research aspects: Stem cells, Genetic Disorders and Infectious Diseases, Cancer Research, Neuroscience, Functional Genomic, Immunotherapies.

Vision

Vietnam has achieved a critical mass required for the establishment of an international standard and multi-disciplinary research and development in biotechnology in the recent time; more importantly, Vietnam has resources and intrinsic qualities to develop biotechnology as a major workforce in modernization of the country. Particularly in medical research, the strong tradition of medical practice, knowledge-based talents assure that we are capable of acquiring advanced biotechnologies to meet the future challenges for health care practice. Vietnamese researchers have now ample opportunities in their investigations of major research subjects within Vietnam that could lead to discoveries and applications of great values not only important for improving health care of Vietnam, but also for contributing their share with the world scientific community.

Based on the above development, CMB vision forward the future at UMP is to establish Translational Medicine Program aiming for translation of the new knowledge, mechanisms, and techniques generated by advances in basic science research into applications for prevention, diagnosis, and treatment of disease is essential for innovation of health care.

Institute of Molecular and Cell Biology

CREATING AN INNOVATION ECONOMY

Institute of Molecular and Cell Biology
Agency for Science, Technology and Research (A*STAR), Singapore

The Agency for Science, Technology and Research (A*STAR) is Singapore's lead public sector agency that spearheads economic oriented research to advance scientific discovery and develop innovative technology. The agency oversees 14 biomedical sciences, and physical sciences and engineering research institutes, and six consortia & centre, which are located in Biopolis and Fusionopolis, as well as their immediate vicinity.

A*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners.

TABLES OF **CONTENTS**

INTERNATIONAL KEYNOTE SPEAKERS

John Edward Connolly, PhD
Director of Translational Immunology Programme
*Institute of Molecular and Cellular Biology (IMCB), A*STAR*

Dr. Connolly is a Senior Principal Investigator and Director for Translational Immunology at the Institute of Molecular and Cellular Biology (IMCB). Additionally, Dr. Connolly serves as Program Director for the A*STAR Program in Translational Research in Infectious Disease, a multi-disciplinary center focused on target discovery and vaccine development. As a human immunologist, his research interests focus on target discovery for immune modulation. An Adjunct Associate Professor of Immunology at Baylor University, he served on the Board of Governors for the Institute of Biomedical Sciences.

Dr. Connolly received his Ph.D. in Immunology from Dartmouth Medical School and studied human dendritic cell biology under Dr. Michael Fanger. During this time he was involved in the development of immunotherapeutic preclinical models and clinical trials for *Glioblastoma multiforme* (GBM). He moved to the Baylor Institute for Immunology Research, a fully translational research institute dedicated to rationally designed vaccines against cancer and infectious disease. Dr. Connolly served as the Director of Research Initiatives for the Baylor Research Institute, leading a large integrated translational research resource and multi-institutional programs that involved a number of international sites. During his tenure at Baylor, Dr. Connolly was the central core facility director of the NIAID Centers for Translational Research on Human Immunology and Biodefense, an NIH funded consortium of basic, translational research and clinical trials focused on vaccine design. Dr. Connolly is the past President of the Board of Directors of The American Cancer Society in N. Texas.

Prof. Ogan Gurel, MD, MPhil

Founder and Chief Executive Officer of NovumWaves
Samsung Advanced Institute of Health Sciences and Technology,
Sungkyunkwan University/Samsung Medical Center

I am the Founder and Chief Executive Officer of NovumWaves, Ltd., a new venture whose mission is to advance biomedical terahertz applications, as well as Visiting Professor at the Samsung Advanced Institute of Health Sciences and Technology (Sungkyunkwan University/Samsung Medical Center) with research interests in protein electrodynamics and terahertz medicine. Previously, I served as Chief Innovation Officer at Campus D, a Seoul-based startup incubator / Fab Lab and over four years as a Director in the CTO office and Open Innovation group at the Samsung Advanced Institute of Technology (SAIT). My nearly 30-year experience in healthcare spans multiple sectors: biomedical science, clinical medicine, strategy consulting, business development, executive management, marketing, and R&D, with direct expertise in medical devices, mobile health, healthcare IT, and medical imaging. Prior to surgical training at the Massachusetts General Hospital, I obtained an M.D. Alpha Omega Alpha from Columbia University where I worked in structural biology, served as a visiting researcher at the Institut Laue-Langevin in Grenoble, and obtained a Bachelor's in Biochemical Sciences cum laude from Harvard College.

Having authored 15 academic papers and conference proceedings and as a co-inventor of three patents, I have spoken at business and scientific conferences and seminars worldwide.

Prof. Phan Toan Thang, MD, PhD
Associate professor
YLL School of Medicine, National University of Singapore

A graduate of the Military Academy of Medicine, Hanoi, Vietnam in 1991. And A researcher at Department of Dermatology in Oxford, England.

He arrived in Singapore to join the Department of Plastic Surgery at the Singapore General Hospital. In mid-1998, Dr. Thang met Dr. Ivor Lim, a plastic surgery registrar at that time, and together they established the Skin Cell Research Group (currently Wound Healing and Stem Cell Research Group) focusing on skin and keloid scar biology. The Wound Healing and Stem Cell Research Group was the first group in the world to explore the role of epithelial-mesenchymal interactions in keloid pathogenesis, and is recognized today as one of the world leading groups in keloid and scar biology research. Dr Phan completed one and a half years of post-doctoral research at the Stanford University Children Surgical Research Laboratory, working with a world leading plastic surgery clinician-scientist, Professor Michael Longaker.

Dr Phan is author of more than 50 publications in international peer-reviewed journals, one book chapter, has 9 filed and pending patents and serves as a reviewer for prestigious international scientific journals as well as local and international research funding bodies. His recent innovative research work is the discovery of a novel source of stem cells from the umbilical cord lining membrane with translational potential for regenerative medicine, tissue engineering and cell-based therapy. Dr Phan is also a co-founder and shares holder of Singapore-based biotech start-up companies, CellResearch Corporation Pte Ltd and CordLabs Pte Ltd which were formed to commercialize cell research, scar, skin wound healing, as well as stem cell research and development.

Prof. Lee Man Ryul, PhD
Soon Chun Hyang Institute of Medi-bio Science (SIMS)
Soon Chun Hyang University, Republic of Korea

Educational Background or Degrees

Ph. D Biomedical Sciences **February 2009**

Graduate School, Hanyang University, Seoul, Republic of Korea

Thesis Title: miR-124a Governs Stemness Maintaining and Developmental Transition in Human Embryonic Stem Cells.

M.S. Biomedical Sciences & Engineering **February 2004**

Graduate School, Korea University, Seoul, Republic of Korea

Thesis Title: Decursin Reduces Hing Glucose-induced Diabetic Nephropathy Through PKC Regulation in RMCs

B.S. KonKuk University, Seoul, Republic of Korea **February 2002**

Positions and Employment

1995. Sep. – 1997. Nov Military Service, Korea
1996. Mar – 2003. Aug Teaching assistant (HPLC) Korea University, Seoul, Korea
1997. Apr – 2006. May Research assistant, Hanyang University, Seoul, Korea
1998. Mar – 2008. Aug Research assistant, Hanyang University, Seoul, Korea
1999. July- 2015.02.28 Postdoctoral follow, School of Medicine, Indiana University, USA

Liem Phan, PhD
Co Founder, CEO, and President
Orchid Magic IncD Anderson, Texas USA

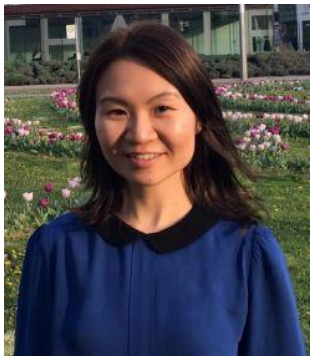
My goal is to contribute my part to the fight against cancer. This is a devastating disease claiming the lives of more than 8 million patients and affecting millions of families worldwide every year. I am working every day on making that dream come true by focusing on the following paths:

1. **Cancer Research and Therapy Development:** Cancer is a very complicated disease with continuous changes, mutations, and evolution. To win the battle against cancer, we need to understand this disease. Therefore, I am dedicating most of my time to carry out cancer research projects at MD Anderson Cancer Center, Houston, Texas, US as a postdoctoral fellow. I am studying 1/ How cancer cells produce energy 2/ How we can effectively and precisely shut down that process to starve and eliminate cancer cells without damaging normal cells.

2. Cancer prevention: Due to the difficulty of cancer treatment, it is important to prevent this disease. In fact, 2/3 of all cancer cases are preventable. Therefore, we have established a startup named Orchid Magic Inc. Our team focuses on 1/ Raising public awareness about cancer prevention 2/ Providing the community with healthy and delicious smoothies and juices made from fruits and natural ingredients that have been proven to lower the risk for cancer.

3. Volunteer activities: I have been supporting multiple volunteer projects to help the community. I am serving as the Editor-in-Chief of Vietnam Journal of Science, an Advisor for Vietnam Education Foundation Fellows Association (VEFFA), an Editor for Progress in Stem Cells journal, an Editor for Biomedical Research and Therapy journal, the Managing Editor of Cancer Hallmarks, an Advisor for Vietnamese Students and Professionals Association in the US, an Advisor for VEFFA Fellowship Program, a member of VN Bookdrive and VEFFA Mentoring Program, among others.

In short, my goal is to help eliminate cancer and I am diligently working on multiple projects to make that dream come true.



Saren Koh, PhD

Scientific Director of Lion TCR Pte. Ltd., Singapore

Sarene is the Scientific Director of Lion TCR Pte. Ltd., a new Singapore clinical stage biotechnology company that is focused on T cell receptor-redirected T cell immunotherapy for viral related cancers and infectious diseases. Sarene graduated with first class honours in Biological Sciences from Nanyang Technological University in 2007. She was then awarded the Agency of Science, Technology and Research (A*STAR) Graduate Overseas Scholarship in 2008 to pursue a PhD in Medical Science at Karolinska Institutet, where she trained under the guidance of two renowned leaders in the hepatitis field – Professor Matti Sällberg and Professor Antonio Bertoletti. During her PhD, Sarene focused her work on developing a new immune therapeutic strategy using T cell receptor-redirected T cells for treatment of hepatitis B virus (HBV)-related hepatocellular carcinoma. Prior to joining Lion TCR Pte. Ltd., Sarene was a post-doctoral fellow in the laboratory of Professor Antonio Bertoletti at the Singapore Institute for Clinical Sciences and Duke-NUS Graduate Medical School from 2013 to 2015. Her scientific interests continue to be T cell immunotherapy, in particular the development of these engineered T cells as antivirals and their translation to the clinic for treatment of chronic hepatitis B infection and HBV-related hepatocellular carcinoma.

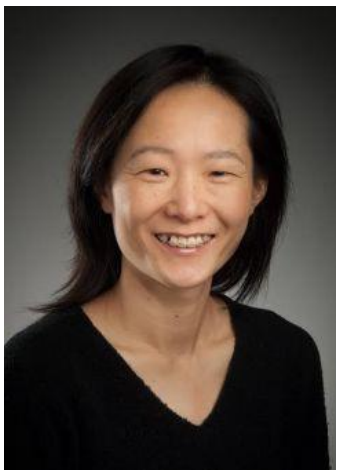
Shigeki Sugii, PhD

Group Leader of Fat Metabolism and Stem Cell Group
Singapore Bioimaging Consortium (SBIC)

Dr. Shigeki Sugii holds a joint appointment as Group Leader at Singapore Bioimaging Consortium (SBIC) and as Assistant Professor at Duke-NUS Medical School since 2011. He is also an Adjunct Assistant Professor at the Lee Kong Chian School of Medicine at NTU. He currently serves an executive committee member (Treasurer) of Stem Cell Society Singapore. Dr. Sugii graduated with B.S. from Kyoto University, Japan and received his Ph.D. at Dartmouth Medical School, USA. He then moved to the Salk Institute for Biological Studies and Howard Hughes Medical Institute, USA to conduct his postdoctoral research with Professor Ronald Evans. At Salk / HHMI, he studied roles of nuclear receptor superfamily in adipocyte physiology and induced pluripotency of adipose-derived stem cells. His current research interests include studies of metabolic reprogramming in adipose-derived stem cells and their clinical applications for metabolic diseases.

Leigh Jones, PhD
Agency for Science, Technology and Research
*Institute of Molecular and Cell biology, A*STAR*

Dr. Jones has over twelve years of experience in immunological research across a number of fields including innate and adaptive immunity, mucosal and dermal immunology, allergy and asthma, autoimmunity and infectious disease. She received her Ph.D. in Immuno-parasitology from the University of Strathclyde, U.K. studying modulation of the innate immune response during infection with protozoan parasites. She then moved to the Scottish Agricultural College in Edinburgh where she worked on non-chemotherapeutic means of parasite control in sheep. Dr. Jones moved to Singapore in 2010 to work at the Singapore Immunology Network, A*STAR in the lab of Dr. Maria Lafaille where she investigated the role of IL-21 in the gastrointestinal mucosa using a reporter mouse model. In 2015, Dr. Jones moved to Dr. John Connolly's lab at IMCB, A*STAR where she works on a wide range of translational human immunology projects such as identifying immune correlates of protection during influenza vaccination and investigating the immune-microenvironment of the hair follicle.



Noriko Shimasaki, MD
Director of Immune Cell Engineering
Department of Paediatrics, Yong Loo Lin School of Medicine,
National University of Singapore, Singapore

Dr. Noriko Shimasaki obtained her medical degree in Japan. She completed her pediatric intern at Keio University School of Medicine and her clinical fellowship in pediatrics at Shimizu Municipal Hospital, before she was a faculty member in Department of Pediatrics at Keio University School of Medicine, where she cared for patients with pediatric cancer as a pediatric oncologist. After her clinical service for five years and a research fellowship at the Karolinska Institute in Sweden, she trained in the laboratory of Dr. Dario Campana at St. Jude Children's Research Hospital (Memphis, TN) first and then at the Yong Loo Lin School of Medicine, National University of Singapore, where she currently is the Director of Immune Cell Engineering. Dr. Shimasaki's main interest is translational research, focusing on developing new methods for cell therapy for cancer. Her group prepares genetically-engineered immune cells for cancer treatment.

UMP & PARTNERING SPEAKERS

Not available at time of print

Prof. Nguyen Hoang Bac, MD, PhD
Director, University Medical Center, HCMC VN

Not available at time of print

Prof. Nguyen Huy Hoang, PhD
Director, Human Genome Insitute, Hanoi VN

Prof. Cung Thi Tuyet Anh, MD, PhD
Department of Oncology
University of Medicine and Pharmacy at HCMC, VN

Ass. Prof. CUNG THI TUYET ANH is currently Lecturer of the Department of Oncology at the Ho Chi Minh City (UMP) at HCMC and Consultant of the Department of Radiation Therapy at the HCMC Oncology Hospital.

She graduated from the UMP in 1984 and started working in the radiotherapy specialty since 1988. She was then resident in the Department of Radiation Therapy of the Centre Hospitalier Universitaire de Grenoble, France in 1989-1990 and resident in the Department of Radiation Oncology of the Institut Gustave Roussy, Villejuif, France in 1996.

Dr Tuyet Anh has published over 50 publications related to radiation treatment of different cancers such as breast, brain tumors, rectal and anal cancers, malignant lymphomas and cancers in children. Dr Tuyet Anh and her collaborators had implemented the protocole of Postoperative Hypofractionated Radiotherapy for breast cancer at the HCM City Oncology Hospital which yields good outcome and convenience for the patients. She is also devoted to set-up the first Training Programme for Radiation Therapy Technicians (RTTs) at the Medical Technology School of the UMP, and Regular Training Course for RTTs at the HCM City Oncology Hospital. As lecturer and active member of the Vietnam Cancer Society, she has been organizing, since 2014, periodic CME and seminars in Oncology for postgraduate students of the UMP and for young oncologists.

Prof. Tran Le Bao Ha, PhD
Department of Physiology,
Animal Biotechnology Laboratory of Tissue Engineering & Biomedical Materials,
University of Science, VNU – HCMC

Not available at time of print

Tran Dang Xuan Tung, MD, MSc
Head, Surgical & Stem Cell Therapy Unit
Van Hanh Hospital, HCMC VN

Dr. Tran received his MD from Pham Ngoc Thach University of Medicine in 2008 and post training in orthopedic surgery. Due to his strong interest in medical science, Dr. Tran has engaged in various research projects including obtaining his Master Degree at UMP in 2011. Subsequently, he is committed to stem cell research and applications at his hospital.

For future planning, he aims to develop more stem cell-based therapies; in particular, he is very interested in MSC from different sources such as adipocyte, cord blood, cord membrane, bone marrow and their applications in treatment degenerative disorders of bones, lungs and others as his expertise developed.

Dr. Tran is a distinguished physician of Van Hanh hospital, yet he is among the youngest leaders in medical practice in the stem cell therapies of HCM City. Dr. Tran is currently the Chief of Trauma and Orthopedic Department, VanHanh Hospital in Ho chi Minh City (HCM). In this capacity, Dr. Tung has made various achievements. He is among the first to develop ADSC treatments for joint problems at the hospital. This was achieved via combination of his expertise in orthopedic surgery and the stem cell technology of the Stem Cell Laboratory of the University of Science of HCM. His strong enthusiasm for stem cell and dedication for the patients are highly admired and supported by colleagues and the SC community OF HCM City.

Nguyen Dinh Hoa, MD, PhD

Spinal department in Institute of Othopeadic & Trauma Surgery
Viet Duc Hospital, Hanoi VN

2015: Ph.D Postgraduate Medical Degree

2011 – 2015: Studying and PhD in Ha Noi Medical University

2011 – 2014: Worked as surgeon in Orthopaedic Spine Department of Viet Duc University Hospital.

July 2012 – September 2012. Observation in Iowa Hospital with Professer Weint Stein in US

2012 – 2014: Worked as Secretary for National Project about bone marrow stem cell for spinal cord injury.

2012 – 2014: Worked as Secretary for Medicine Ministry Clinical Trial Project about Adipose Derived stem cell for spinal cord injury treatment.

2009 – 2011: Worked as member of National Project about disc herniation disease.

2007 – 2011: Studying and internship working as resident doctor, specialising in surgery in Viet Duc University Hospital Graduated and followed the training courses for general surgery in all departments in VietDuc University Hospital

2001 – 2007: Trained at Hanoi Medical University, Hanoi, Vietnam
Learning medical basic knowledge at university and practise at hospitals in Hanoi

PROFESSIONAL AFFILIATION:

– Vietnam Orthopaedic Association

– Neurosurgical Society of Vietnam

– Vietnam Surgical Association

Truong Hai Nhung, PhD

Vice Director of Stem cell Research and Application Laboratory,
Vice Dean of Biology and Biotechnology Faculty,
University of Science, HCMC VN

Education

Truong Hai Nhung has pursued Ph.D. program in Human and Animal Physiology at the University of Science, VNU-HCM, 2016.

Summary of Experience

Dr. Truong has served as lecturer and senior researcher at University of Science, as well as the Vice Director of Stem Cell Research and Application Laboratory, and Vice Dean of Biology and Biotechnology Faculty. She is involved in national scientific organization as general secretary of Ho Chi Minh City Stem Cell Society.

She has an accomplished record of high quality research in stem cell development at the Laboratory of Stem Cell Research and Application starting in 2007. She is the author and co-author of one intra-national book, 2 book chapters and more than 20 scientific publications. She acquired an interest in applications of stem cell in mouse model of hepatic fibrosis, which serve the basis for her graduating thesis. She plans to continue to pursue her current scientific investigation in liver regenerative medicine. Her research interests include stem cell therapy, gene therapy and immunotherapy.

Bui Chi Bao, PhD
Center for Molecular Biomedicine
University of Medicine and Pharmacy at HCMC VN

Education

2005 - B.Sc at University of Natural Sciences, Vietnam. 2007 - MSc at Sungkyungkwan School of Medicine, Korea. 2011 - PhD at Sungkyungkwan School of Medicine, Korea. 2011 - Post-doc at Samsung Medical Center, South Korea.

Personal Statement

I have been exploring the molecular events associated with the cancer research. The current main goals of my research are: 1) to develop the next generation sequencing to identify novel genes that are important for childhood cancer; 2) to understand the underlying molecular biomarkers that lead to these changes; and 3) to characterize novel mutations and targets for therapy.

Research Experience

2012 – now Associate Research, Center of Molecular Biomedicine.
2013 – now Adjunct Instructor, Laboratory of Molecular Pediatric Cancer, Children Hospital 2,
2014 Cancer panel platform for next-generation sequencing – Blizard Institute, Queen Mary University of London.
11/2012 Participation in “New Directions in Chronic Myelogenous Leukemia” National Comprehensive Cancer Network.
2011-2012 Post-doctoral Fellow at Samsung Medical Center, Supervisor: Prof. Shin Jaekyoon

Publication

Scholarly Book Chapters:

Nguyen Thi Lang, Bui Chi Buu, Bui Chi Bao. Genomics and proteomics in pediatric cancers (1st edition) Educational Vietnam Press 9-2014.

Articles: Dr. Bao have been more than 26 publication on Biomedicine journal and Sciencetific Conference In Viet Nam and International.

PROGRAMS

Date: 08:00 am-5:45 pm, Friday 19th August, 2016

Venue: UMC-HCMC 3rd Floor, 215 Hong Bang Street, District 5, HCMC, Vietnam

MORNING SESSION

08:00 – 08:30 am	Registration
08:30 – 09:00 am	Welcome remarks by the President of UMP & Prof. John Connolly
09:00 – 10:00 am	**John Connolly** A Singapore Perspective on Translational Research: Immunotherapy in the Treatment of Nasopharyngeal Carcinoma
10:00 – 10:30 am	**Ogan Gurel** Building Translational Teaching & Research for Developing Countries
10:30 – 11:00 am	**Phan Toan Thang** Translational Research in Stem Cell Therapy: A Successful Story of Singapore-based
11:00 – 11:15 am	COFFEE BREAK
11:15 – 11:45 am	**Shigeki Sugii** Potential for Metabolic Reprogramming of Adipose-derived Stem Cells
11:45 – 12:15 pm	**Nguyen Huy Hoang** Translational Genomic Medicine in the Vietnam Institute of Genome Research: Current Status, Achievements and Future Application Perspective

LUNCH BREAK AND POSTER SESSION

12:15 – 1:30 pm

[Perkin Elmer] Chris Johnson: “Imaging Tools in Translational Research – Phenotyping Tissue Microenvironments”

[NanoString] Jimmy Toh: “3D Biology“

AFTERNOON SESSION

01:30 – 2:00 pm **Nguyen Hoang Bac**

The Roles of UMC (UMP Medical Center) in Translational Medicine in HCM City

SESSION I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

02:00 – 02:20 pm **Cung Tuyet Anh**

Epidemiology of Cancer and Cancer Treatments in Vietnam

02:20 – 02:40 pm **Noriko Shimasaki**

Immune cell engineering for cancer therapy

02:40 – 03:00 pm **Bui Chi Bao**

Intergrative genome scale analysis identifies epigenetic deregulation in poor outcome neuroblastoma

03:00 – 03:20 pm **Nguyen Thi Xuan**

The regulation of dendritic cell mediated immune response by Klothor

03:20 – 03:40 pm **Tran Dang Xuan Tung**

Comparative clinical observation of arthroscopic microfracture in the presence and absence of a stromal vascular fraction injection for osteoarthritis

03:40 – 04:00 pm **Leigh Jones**

Encountering with Vietnam Biomedical Sciences

SESSION II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

02:00 – 02:20 pm **Phan Liem**

I dentifying new targets for adrenocortical carcinoma therapy innovation

02:20 – 02:40 pm **Truong Hai Nhung**

Mesenchymal stem cell: a potential therapy for liver cirrhosis treatment”

02:40 – 03:00 pm **Tran Le Bao Ha**

Novel Scaffolder: Acellular Adipose Matrix (AAM) from human Adipose tissues

03:00 – 03:20 pm **Saren Koh**

Immunotherapy of Hepatocellular Carcinoma Using T cells Redirected Against Hepatitis B Virus

03:20 – 03:40 pm **Nguyen Dinh Hoa**

Phase II study of Autologous Adipose-Derived Mesenchymal Stem cells from Transplantation for Acute Spinal Cord injury completely

03:40 – 04:00 pm **Lee Man Ryul**

Derivation of Endothelial colony Forming Cells (ECFC) from Induced Pluripotent Cells to Engineer human blood vessel

04:00 – 04:30 pm **Q&A AND COFFEE BREAK**

04:30 – 05:30 pm **ROUND TABLE DISCUSSION**

Hosted by Profs. Tran Diep Tuan, John Connolly & Dr. Thai Nguyen; participants: representatives of medical universities/institutes and UMP-HCMC/ A*STAR faculties on avenues for collaboration and planning for the 2nd TransMed-VN

05:30 – 05:45 pm **MOU signing & closing remark**

06:30 – 08:30 pm **Banquet to welcome TransMed-VN delegates and participants hosted by Madame Truong Nhi.**

POSTER SESSION

Official time 12 am – 01:30 pm, and open throughout the conference.

POST CONFERENCE EVENTS 20 August 2016

– Tour to Ben Tre sponsored by ForeverGreen Resort (http://forevergreenresort.com/giai-tri)

– Publishing a proceeding for the inaugural event of the 1st TransMed-VN

1ST TRANSMED-VN CONFERENCE 2016

ORAL PRESENTATION

Morning session

Time: 09:00 – 10:00 am

Immunotherapy in the Treatment of Nasopharyngeal Carcinoma;

A Singapore Perspective

John Edward Connolly

*Director of Translational Immunology Programme, Institute of Molecular and Cell Biology, A*STAR*

Abstract

Epstein-Barr virus (EBV)-positive nasopharyngeal carcinoma (NPC) represents a significant health-care problem for South-East Asia. The incidence rate of NPC in South-East Asian males is 10 to 21.4 per 100,000. Current therapies are for metastatic disease are limited. Cellular immunotherapies have broadly focused on two strategies: Dendritic Cell (DC) vaccination and cytotoxic-T-lymphocyte (CTL) infusion. Both strategies have failed to provoke a long lasting response and have shown limited efficacy in clearing tumors. Recent results from our Phase II clinical trial, consisting of treatment with gemcitabine and carboplatin for four cycles, followed by adoptive transfer of autologous EBV specific CD8 T-cells has shown remarkable efficacy. The two- and three-year overall survival was 62.9 and 37.1% respectively, representing the best response rates for treatment of advanced NPC. Using data from the Phase II trial, we have undertaken deep immune phenotyping and functional analysis to determine the immune status of CTL recipients and investigate how these factors influence and determine successful therapy. An examination of the systemic, cellular and local immune environment during the course of treatment has yielded a series of predictive biomarkers correlating with immunogenicity, response to therapy and overall survival on trial. An analysis of antigen specific T-cells have identified anti-viral responses with positive prognostic value. Differences in the immunosuppressive state of the patient's activated regulatory T-cells (Tregs) and the expansion or contraction of the myeloid-derived suppressor cell (MDSC) compartment, point to a mechanism of action for the therapy. Building from these studies, an international phase III clinical trial is currently underway.

Morning session

Time: 10:00 – 10:30 am

Building Translational Teaching & Research for Developing Countries

Ogan Gurel

Founder and Chief Executive Officer of NovumWaves, Samsung Advanced Institute of Health Sciences and Technology, Sungkyunkwan University/Samsung Medical Center

Not available at time of print

Morning session

Time: 10:30 – 11:00 am

Translational Research in Stem Cell Therapy: A Successful Story of Singapore-based CellResearch Corp

Phan Toan Thang

Associate professor, YLL School of Medicine, National University of Singapore

Abstract

Bringing stem cell therapy research from lab to bedside and market faces many challenges ranging from ethical and religious controversial, healthcare regulation, high standard bio-manufacturing to patient affordability or insurance reimbursement. Taking all these points into consideration, it appears that stem cells derived from human umbilical cord membrane tissue or CLSC are the ideal source of stem cells that can make translational stem cell therapy happen in reality. Every month, tens of thousand of umbilical cord tissue units are collected and cryopreserved in US, EU and Asia together with cord blood for future use as the source of autologous stem cell transplant. With regards of allogenic stem cell therapy, freely donated umbilical cord tissue samples are easily and inexpensively collected and qualified in the Colorado Cord Blood Bank.

With billions of stem cells isolated from a single cord membrane tissue at low passages in FDA-licensed GMP Stem Cell Facility in Colorado, the cost of CLSC products can be potentially lower and make more affordable to healthcare receivers.

Translational stem cell therapy is an expensive game and highly capital intensive. To keep it sustainable and make it profitable is another big challenge. Over 30 mins of presentation and discussion, the author will share with audience his story to make CellResearch Corp become a most successful stem cell biotech company in Singapore with today valuation of $700mil.

Morning session

Time: 11:15– 11:45 am

Potential for Metabolic Reprogramming of Adipose-derived Stem Cells

Shigeki Sugii

Group Leader of Fat Metabolism and Stem Cell Group, Singapore Bioimaging Consortium

Abstract

Adipose tissue is an expandable and readily attainable source of proliferating, multipotent adipose-derived stem cells (ASCs), holding great therapeutic potentials. However, more work is necessary to fully understand biological properties of ASCs and explore novel approaches for using or targeting ASCs in a direction to make them suitable for therapy. By comprehensive image-based high content screening, we identified novel fat-depot specific cell surface markers, CD10 and CD200, which can predict how well ASCs can differentiate into mature functional adipocytes. Through another study on whole genome-wide gene expression analyses, we identified novel pathways of retinoid metabolism and oxidative stress. High level of retinoic acid negatively affects early stage of adipogenic differentiation of ASCs, which can be reversed by antagonism of retinoic acid receptors. Similarly it was found that high oxidative stress associated with ageing or visceral obesity affect ASC's ability for differentiation, proliferation, migration and/or senescence. Treatment with anti-oxidants was found to be effective in reducing reactive oxygen species and improving these ASC properties. Collectively, these results suggest that stem cells can be cellular targets for improving quality of fat tissue and adipocytes through use of specific cell surface markers, modulating RA pathway, or reversal of oxidative stress. These molecular markers and factors may be useful for future metabolic reprogramming studies in different approaches: bioimaging, screening for improved adipocyte development, or reprogramming into induced pluripotent stem (iPS) cells.

Morning session

Time: 11:45– 12:15 pm

Translational Genomic Medicine In Institute Of Genome Research: Current Status, Achievements And Future Application Perspectives

Nguyen Huy Hoang, Le Bac Viet, Nguyen Thi Kim Lien, Tran Phuong Thao, Nguyen Thu Hien, Nguyen Thi Thanh Ngan

Institute of Genome Research, Vietnam Academy of Science and Technology, Vietnam

Abstract

Nowadays, the tremendous advances in science and technology have dramatically changed the life in the world. In over the last several decades, the emergence of Genomic Medicine (ordinarily known as Medical Genetics) has significantly improved human health and living age. Thanks to a great number of studies on this area, many human inheritable diseases/disorders which were previous identified to be incurable have been discovered. Based on these initially findings on mechanism of diseases associated to human genome, clinical expressions of patients have been elucidated and treatment therapies as well as drugs pathways have been ever-increasingly explored and applied in hospitals. At the present, in Vietnam, Translational Genomic Medicine is a leading research direction in the field of biomedical science. Up to now, a lot of achievements have been obtained by Vietnamese scientists and doctors in researches of many human dangerous diseases. At Institute of Genome Research, as one of the leading institutions focusing on human diseases regarding to genome, we have successfully investigated in many human rare congenital diseases caused by monogenic or polygenic mutations (congenital adrenal hyperplasia, congenital of dumb and deafness, aldosterone disorder, autism spectrum disorder), genetic variation due to chemicals exposure (arsenic, dioxin). Moreover, my institute has strong collaborations with hospitals, universities, institutions, centers inside as well as outside Vietnam in basic biomedical research projects to find out the mechanisms of novel and rare diseases/disorders in humans, especially on newborn and children. In the future, with the arising of next generation sequencing technology, the main objective of my institute will be approaching this technology to identify whole genome sequencing of all kinds of Vietnamese population which can be exploited as a reference sequence applying in disease diagnosis and treatment for Vietnamese people. Furthermore, another important objective is opening a new research trending in immunology, stem cells as well as oncology related to genome. The success of these aims will considerably enhance health standard of Vietnamese people and contribute significantly in Genomic Medicine area of the world.

Afternoon session

Time: 01:30 – 2:00

The Roles of UMC (UMP Medical Center) in Translational Medicine in HCM City

Nguyen Hoang Bac

Director, University Medical Center, HCMC VN

Not available at time of print

Session I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

Time: 02:00 – 02:20 pm

Epidemiology of Cancer and Cancer Treatments in Vietnam

Cung Tuyet Anh

Department of Oncology, University of Medicine and Pharmacy at HCMC VN

Not available at time of print

Session I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

Time: 02:20 – 02:40 pm

Immune Cell Engineering For Cancer Therapy

Noriko Shamisaki

Director of Immune Cell Engineering, Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Abstract

The clinical efficacy of immune cell-based therapy of cancer has been recently demonstrated by the results of trials with chimeric antigen receptor (CAR)-expressing T lymphocytes. Infusion of autologous CAR-T cells produced remarkable responses in patients with leukemia or lymphoma. Our laboratory developed several methods for ex vivo expansion and genetic modification of immune cells (T lymphocytes and NK cells). These methods have been translated into large-scale procedures which support 6 clinical trials currently open in Singapore for patients with different tumor types. The GMP procedures implemented to generate the cell products for these trials will be discussed.

Session I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

Time: 02:40 – 03:00 pm

Intergrative genome scale analysis identifies epigenetic deregulation in poor outcome neuroblastoma

Bui Chi Bao

Center for Molecular Biomedicine, University of Medicine and Pharmacy at HCMC, VN

Abstract

The genomics revolution has revealed remarkably simple genomes as a defining feature of many pediatric cancers. These cancers are often driven by key initiating events involving aberrant transcription factors or abnormalities of epigenetic regulators. For example, MYCN amplification in neuroblastoma is a well described recurrent abnormality and poor prognostic marker; EWS/ETS rearrangements are a defining feature of the pediatric solid tumor Ewing sarcoma, MLL-rearrangements are commonly found in infant leukemia; mutations in histone H3.3 have been recognized as initiating events in pediatric glioblastoma; and more recently, ARID1A/1B in SWI/SNF complexes is frequently mutated in neuroblastoma leading to loss expression suggesting the role in the control of cell proliferation and tumor suppression. We are talking a collaborative, integrated genomic approach to identifying new dependencies in pediatric cancers through the application of functional and chemical genomic approaches. Specifically, genomically characterized pediatric cancer cell lines are screened using genome-wide shRNA and CRISPR/Cas9 and bioactive chemical libraries to connect disease lineage or genotype with response. High-risk pediatric cancers, including neuroblastoma, were nominated as top priority diseases for screening. Emerging target scoring in this screening effort in MYCN-amplified neuroblastoma will be presented.

Session I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

Time: 03:20 – 03:40 pm

Comparative clinical observation of arthroscopic microfracture in the presence and absence of a stromal vascular fraction injection for osteoarthritis

Phu Dinh Nguyen[1], **Tung Dang-Xuan Tran**[2], Huynh Ton-Ngoc Nguyen[1], Hieu Trung Vu[1], Phuong Thi-Bich Le[2], Nhan Lu-Chinh Phan[3], Ngoc Bich Vu[3], Ngoc Kim Phan[3], Phuc Van Pham[3].

[1] 115 Hospital, Ho Chi Minh city, Viet Nam
[2] Van Hanh General Hospital Ho Chi Minh city, Viet Nam
[3] Laboratory of Stem Cell Research and Application, University of Science, Viet Nam National University Ho Chi Minh city, Viet Nam

Abstract

Osteoarthritis (OA) is a degenerative cartilage disease that involves the immune system, with characteristic local inflammatory reactions. Consequently, many studies have been performed over a prolonged period to identify suitable prevention and treatment interventions.

In recent years, both arthroscopic microfracture (AM) and stem cell therapy have been used clinically to treat OA. This study aimed to evaluate the clinical effects of AM in the presence and absence of a stromal vascular fraction (SVF) injection for OA. Thirty grade II and III (Lawrence scale) OA patients participated in this study. Placebo group patients (n = 15) received AM alone; treatment group patients (n = 15) received AM and an adipose tissue-derived SVF injection. The SVF was suspended in platelet rich plasma (PRP) prior to injection into the joint. Patient groups were monitored and scored by WOMAC, Lysholm, VAS, and modified Outerbridge classification, and bone marrow edema was assessed pre-treatment and at 6, 12 and 18 months post-treatment. Patients were also evaluated for knee activity (joint motion amplitude) and side/adverse effects relating to surgery and stem cell injection.

Treatment efficacy was significantly different between placebo and treatment groups. All treatment group patients had significantly reduced pain and WOMAC scores, and clearly increased Lysholm and VAS scores compared with the placebo group. These findings suggested that the SVF/PRP injection efficiently improved OA after 18 months. This study will be continuously monitored for 24 months. The registration number of this clinical trial is NCT02142842.

Keywords: Osteoarthritis, stromal vascular fraction, platelet rich plasma,

Session I: Chairmen: Prof. John E.Connolly And Prof. Truong D. Kiet

Time: 03:40 – 04:00 pm

Encountering with Vietnam Biomedical Sciences

Leigh Jones

*Agency for Science, Technology and Research, Institute of Molecular and Cell Biology, A*STAR*

Not available at time of print

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 2:00 – 02:20 pm

Identifying new targets for adrenocortical carcinoma therapy innovation

Liem M. Phan*, Enrique Fuentes-Mattei*, Weixin Wu, Guermarie Velazquez-Torres, Kanishka Sircar, Christopher G. Wood, Tao Hai, Camilo Jimenez, Gilbert J. Cote, Levent Ozsari, Marie-Claude Hofmann, Siyuan Zheng, Roeland Verhaak, Lance Pagliaro, Maria Angelica Cortez, Mong-Hong Lee, Sai-Ching J. Yeung, Mouhammed Amir Habra

The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA

*: equal contribution to this study.

Abstract

Adrenocortical carcinoma is a rare malignancy with poor prognosis and limited response to chemotherapy. Hepatocyte growth factor (HGF) and its receptor cMET augment cancer growth and resistance to chemotherapy, but their role in adrenocortical carcinoma has not been examined. In this study, we investigated the association between HGF/cMET expression and cancer hallmarks of adrenocortical carcinoma. Transcriptomic and immunohistochemical analyses indicated that increased HGF/cMET expression in human adrenocortical carcinoma samples was positively associated with cancer-related biologic processes, including proliferation and angiogenesis, and negatively correlated with apoptosis. Accordingly, treatment of adrenocortical carcinoma cells with exogenous HGF resulted in increased cell proliferation *in vitro* and *in vivo* while short hairpin RNA–mediated knockdown or pharmacologic inhibition of cMET suppressed cell proliferation and tumor growth. Moreover, exposure of cells to mitotane, cisplatin, or radiation rapidly induced pro-cMET expression and was associated with an enrichment of genes (e.g., CYP450 family) related to therapy resistance, further implicating cMET in the anticancer drug response. Together, these data suggest an important role for HGF/cMET signaling in adrenocortical carcinoma growth and resistance to commonly used treatments. Targeting cMET, alone or in combination with other drugs, could provide a breakthrough in the management of this aggressive cancer.

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 2:20 – 03:00 pm

Mesenchymal Stem Cell: A Potential Therapy For Liver Cirrhosis Treatment

Nhung Hai Truong[1,2], Nam Hai Nguyen[1], Trinh Van Le[1], Huy Minh Le[3], Nghia Huynh[3], Dat Quoc Ngo[3], Thanh Van Nguyen[4], Ngoc Kim Phan[1,2], Phuc Van Pham[1,2]*

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[3] *University of Medicine and Pharmacy at HCM city, Vietnam*
[4] *Nguyen Tat Thanh University, Ho Chi Minh city, Vietnam*

Abstract

Liver cirrhosis is defined as the replacement of healthy liver tissues by fibrosis and regenerative nodule formation. Cirrhosis ranks 14th in the world and 4th in Central Europe as cause of death. Orthotopic liver transplantation (OLT) is the priority treatment for decompensated liver cirrhosis. Nonetheless, patients face many obstacles, such as the high costs, high risk from invasive surgery, limitation of donor tissue, and lifelong immunosuppressive treatment. In recent years, stem cell therapy has become a promising therapy for treatment. Some *in vitro* studies and *in vivo* preclinical trials have demonstrated that mesenchymal stem cells (MSCs) may improve liver cirrhosis. However, application of MSCs in liver cirrhosis treatment is still controversial issues including MSC sources, routes of transplantation, "homing" into liver and hepatic differentitation *in vivo*. To clarify any ambiguity some issues, we test the hypothesis that autologous and allogenic mesenchymal stem cells ameliorate liver cirrhosis in mice. The results showed that MSC transplantation improved AST/ALT/bilirubin/albumin index after 7 days of injection ($p<0.05$); significantly down-regulate gene expression of TGF-beta, procollagen and nt5e ($p<0.05$). Both MSCs autologus and allogenic transplantation accelerated liver regeneration capacity in mice after 21 days of transplantation. Considering safety, MSC transfusion via a peripheral vein is a potential method for liver fibrosis treatment.

Keywords: Mesenchymal stem cell, liver cirrhosis/fibrosis treatment, stem cell therapy, liver disease, stem cell transplantation.

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 2:20 – 03:00 pm

Novel Scaffolder: Acellular Adipose Matrix (AAM) from human Adipose tissues

Nguyen Thi Ngoc My[1], Tran Le Bao Ha[1], Nguyen Duc Thai, Michele Zocchi

[1]*Department of Physiology, Animal Biotechnology Laboratory of Tissue Engineering & Biomedical Materials, University of Science, VNU – HCMC*

Abstract

Autologous fat grafting is considered as a routinely plastic surgery including breast augmentation. Adipose tissues are used in fat grafting which is a process of taking small amounts of fat from one part of the body and re-implanting it elsewhere, where it is needed. It also can be implanted to the lips, hollowness at lower eyelids, the nasolabial folds. However, unpredictable resorption rates was found around from 25% to 80%, there is a search for promising alternative approaches. Recently, acellular adipose matrix (AAM) has been examined as biomaterial in soft tissue reconstruction. AAM are fabricated from human adipose tissue which are undergone a process to eliminate completely cellular components and achieve the acellular matrix. AAM has been found to have good biocompatibility and several advantages for including the ability to induce adipogenesis, angiogenesis in vivo, and promote vasculogenesis. Our research aims to establish a protocol to prepare AAM in order to use as an off-the-shelf potential graft material for clinical applications.

Keywords: acellular, adipose matrix, adipogenesis, fat grafting

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 3:00 – 03:20 pm

Immunotherapy of Hepatocellular Carcinoma Using T cells Redirected Against Hepatitis B Virus

Saren Koh

Scientific Director of Lion TCR Pte. Ltd., Singapore

Abstract

Adoptive T cell therapy of lymphocytes expressing engineered T cell receptors (TCR) has shown great success in the treatment of cancers. This approach could be used in hepatocellular carcinoma (HCC), where at the moment therapeutic options are limited. In Asia, where the incidence of hepatitis B virus (HBV) infection is high, HBV accounts for at least 80% of HCC. A high frequency of HBV DNA integrations has been observed in HBV-related HCC tumors, and HBV antigens can be expressed in HCC tumor cells and potentially be targeted by immune therapeutic strategies. Results obtained *in vitro* and in animal model showing that HBV antigens can act as a HCC-specific antigen and the ability of T cells genetically modified to express HBV-specific TCR to recognize and lyse such tumor cells will be discussed. In addition, these HBV-specific TCR-redirected T cells have been used in adoptive T cell therapy in liver transplanted patients with chemo-resistant HCC metastases. The initial immunological and clinical results obtained in our first case study will be reported.

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 3:20 – 03:40 pm

Phase II study of Autologous Adipose Derived Mesenchymal Stem Cells from Transplantation for Acute Spinal Cord Injury completely

Nguyen Dinh Hoa

Spinal department in Institute of Othopeadic & Trauma Surgery, Viet Duc Hospital, Hanoi,VN

Abstract

Spinal cord injury (SCI) is a severe neurological disease. An effective strategy for the treatment of SCI is urgently required. Stem cell transplantation has emerged as a viable therapeutic option with great potential for restoring neurological function lost following SCI. From 2012 to 2014, a total of 48 SCI patients were enrolled in a clinical trial by Vietnamese-German Hospital and Tri Phuoc Biotechnology JSC. All patients completed and signed informed consent prior to autologous adipose-derived mesenchymal stem cell transplantation and were divided equally in treatment group and control group. Analysis of subsequent treatment results indicated significant improvements in sensory, motor and autonomic nerve function as assessed by the AIS, somatosensory evoked potential, enhanced MRI, Barthel activities of daily index… In treatment group, 6 months after transplantation, eight patients 51.61% improved from AIS A to AIS B, 6.45% improved from AIS A to AIS C, 12 months after transplantation, and two patients (10%) improved from AIS C to AIS D. While only one patient (6.25%) improved from AIS A to AIS B in control group. The most common adverse event, 6.25% reported back pain, 3.2% recorded headache and disappeared within 24–48 h without treatment, 6.5% reported fever (not recorded meningitis) and 3.2% reported uneasiness.

Keywords: acute spinal cord injury, Autologous Adipose Tissue derived Mesenchymal Stem Cells, thoracic and lumbar spinal cord injury, transplantation

Session II: Chairmen: Prof. Nguyen Hoang Bac And Prof. Lee Man Ryul

Time: 3:40 – 04:00 pm

Derivation of Endothelial Colony Forming Cells (ECFC) from Induced Pluripotent Cells to Engineer Human Blood Vessels

Lee Man Ryul

Soon Chun Hyang Institute of Medi-bio Science (SIMS), Soon Chun Hyang University, Republic of Korea

Abstract

Human induced pluripotent stem (hiPS) cells and human embryonic stem (hES) cells differentiate into cells of the endothelial lineage, but derivation of cells with human umbilical cord blood endothelial colony forming cell (ECFC)-like properties has not been reported. Here we describe a novel serum and stromal cell-free ECFC differentiation protocol for the derivation of clinically relevant numbers of ECFCs from hiPS and hES cells. We identified NRP1/CD31 double positive selected cells that displayed stable endothelial vessels that inosculated with host vasculature upon transplantation, but lacking in teratoma formation in vivo. We also identified NRP1-VEGF mediated activation of KDR as a critical mechanism for the emergence and derivation of ECFCs from hiPS and hES cells. This protocol advances the field by generating highly replicative but stable endothelial cells for use as a potential cell therapy for human clinical disorders.

PRESENTATION OF THE COMPANIES

Imaging Tools in Translational Research – Phenotyping Tissue Microenvironments

Chris Johnson

Advanced microscopic and macroscopic imaging techniques are revealing many layers of additional data and analysis for translational research. This presentation will focus on a newly developed range of histological based protocols and novel imaging techniques that are bringing a new importance to tissue imaging as a quantitative tool in understanding relationships in tissue microenvironments, particularly in the relation to tumorgenesis, inflammation and immunity

This new development combines: single section multi-marker fluorescent labeling of up to 8 antigens using antibodies all of the same species ; automated multispectral imaging (MSI) to remove the typically problematic FFPE tissue auto-fluorescence and correct cross-talk between fluorescent channels; and an automated analysis that can quantitate the per-cell marker expression, determine the cellular phenotype, and elevates the power of fluorescence imaging from a cell based to tissue based analysis and bioinformatics

This combined staining and detection strategy is ideal solution for delivering quantitative per-cell marker expression and phenotyping in cells and tissue, analogous to that obtained from flow cytometry, but from within the intact tissue microenvironment, imaged in situ from standard FFPE tissue blocks.

3D Biology

Jimmy Toh

NanoString is excited to offer the power of 3D Biology™ technology in a series of focused PanCancer Profiles that enable our customers to measure gene and protein expression simultaneously. We believe the power of 3D Biology technology will drive a new frontier of immuno-oncology biomarker discovery and utilization, enabling our customers to become leaders in developing a deeper understanding of the underlying biology and its relevance to cancer immunology.

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Professor & President
UMP

John Edward Connolly, PhD

Professor
IMCB, A*STAR

Nguyen Duc Thai, PhD

Advisor, Translational Program
UMP

On behalf of the organizers, we would like to convey to you cordial invitation to participate in The First TRANSMED-VN CONFERENCE, which will be on 19th August 2016 in Ho Chi Minh City, Vietnam.

ACKNOLEDGEMENTS AND SPONSORS

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Chia sẻ cảm nghĩ

ĐH Y Dược, Tp HCM 13 tháng 08, 2016

Kính gửi quí Thầy Cô và Thân Hữu,

HỘI THẢO "THE 1ST TRANSMED-VN 2016" ĐHYD Tp HCM đang vào những ngày cuối, BTC xin trân trọng gửi lời cám ơn sự hỗ trợ quí giá của quí Thầy cô và Thân hữu đã dành cho trong việc tổ chức. Những hỗ trợ này đã giúp cho BTC những hoàn chỉnh cần thiết cho hội nghi. Xin chia sẻ các tin và tiến triển dưới đây:

- Mục tiêu của TransMed-VN là đáp ứng nhu cầu mang các nghiên cứu tân sinh học đi vào ứng dụng phục vụ y tế Việt Nam. Về thực tế, đây là chiến lược thật cần thiết để chúng ta có thể dùng rất nhiều tiến bộ hiện nay gồm bộ gen người (human genome) cho chuẩn đoán chính xác và tiên liệu, về tê bào gốc (TBG) cho các trị liệu đang rộng mở, nhưng cần độ an toàn và tiêu chuẩn khoa học cao. Hiện có nhiều kết quả, tiềm năng khoa học trên thế giới và cả trong nước, đang còn bỏ ngỏ hay dùng thiếu tiêu chuẩn dẫn đến sai lệch. Đây chính là vai trò của các ĐH Y Khoa trong nước để chuyển tải công nghệ sinh học cho lâm sàng, qua việc định hướng nghiên cứu, kết hợp có hệ thống và hài hoà các nhà khoa học và bác sĩ bệnh viện.

- Trong mục đích này, hội thảo TransMed-VN hân hoan có sự tham dự của GS John Connolly, A* Star Singapore chủ trì cho chủ đề Miễn dịch trị liệu, có tiềm năng rất cao cho trị liệu ung thư; TS Ogen Gurel, cố vấn Samsung sẽ thuyết trình về mang thành tựu khoa học cho ứng dụng và sản xuất; TS Phan Toàn Thắng sẻ chia sẻ kinh nghiệm chuyển niềm đam mê nghiện cứu, và kết quả TBG từ Việt Nam, thành sản phẩm trị giá 700 triệu USD ở Singapore!. Hội nghị có gần 20 diễn giả, mỗi diễn giả là một tấm gương khoa học, với các nghiên cứu mới nhất, tiềm năng và những kế hoạch hợp tác để đạt các mục tiêu, kỳ vọng mang ứng dụng cho Việt Nam và các nước trong vùng.

- Và thật là may mắn khi TransMed-VN được dưa trên uy tín vững vàng của ĐH Y Dược Tp HCM và BV ĐHYD, ngoài ra được sự lưu tâm chu đáo của các nhà tài trợ (Cty Liên Hoa, ITS, TBR) dù là hội thảo lần đầu tiên. Điều này cho thấy có sự quan tâm đặc biệt cho nhu cầu phát triển TransMed và chúng ta sẽ cần nhiều nỗ lực và kế hoạch phát triển cho tương lai.

- Tổ chức hội thảo khoa học ở Việt Nam không thiếu những khó khăn, nhưng cũng nhiều niềm vui. Một trong những niềm vui đó là có sự đồng hành của những bạn trẻ và thân hữu của IBSGacademic.com và BioMedia Nam Việt. Cám ơn Tuệ An và các bạn hưởng ứng. Các bạn đang giúp cho TransMed rât nhiều từ thiện chí và năng lực đáng ngưỡng mộ.

- Bước đi này chỉ là nhỏ bé và kinh nghiện thực tế là chúng ta phải chấp nhận những thiếu sót, lỗi lầm từ chúng ta hay hoàn cảnh. Nhưng chính những sót lầm này mang đến cho

TransMed-VN những người bạn đồng hành, thiện chí và cảm thông để cùng nhau đi nhanh và đi xa hơn.

- Cám ơn và chúc mừng Trung tâm Y Sinh học Phân tử ĐHYD, nhóm tiên phong và đứng mũi chịu sào xây dựng TransMed những ngày qua. Chúng ta sẽ không đơn lẻ lâu nữa vì đã có gần 200 ghi danh (ngoài Tp HCM, sẽ có Hà Nôi, Vinh, Huế, Đà Nẵng, Cần Thơ...) đến với TransMed để tiến lên ngày 19/08 này.

Cuối tin, xin được chia sẻ motto này với quí bạn cho mục tiêu chúng ta làm khoa học vì một xã hội công bằng: "Các tiến bộ vĩ đại nhất của nhân loại không phải là những khám phá, mà là những khám phá có thể giúp kết nối con người và san bằng các bất công của xã hội" Bill Gates (Lễ tốt nghiệp ĐH Stanford, 2007).

Xin cám ơn - Chào thân ái - Hẹn gặp.

Nguyễn Đ. Thái

https://transmedvn2016.wordpress.com/programs/