



# 2018 Hong Kong Biotech Horizons 2018香港生物科技峰會及生物技術產業論壇 The Leading Biotech Conference in Hong Kong: Opportunities in Biotechnology

20-23 September, 2018 Hong Kong 2018年9月20日-23日 香港

# **Meeting Program**

www.hkbio.org.hk.com

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### Background

Founded by pioneering scientists with extensive life science backgrounds and multi-cultural experience in research and development, engineering and business, the vision of the Hong Kong Biotechnology Organization is to establish and facilitate a worldwide platform for the Hong Kong biotech industry, promoting awareness, encouraging and enabling international collaboration and providing informed opinion and technical advice to government bodies, healthcare institutions and the general public.

We are now holding the 2018 Hong Kong Biotech Horizons (HKBH) - Annual Global Biotech Summit (AGBS). The flagship event series is run by Hong Kong Biotechnology Organization (HKBIO) whose objective is to develop, cultivate and promote the professional and institutional disciplines of biotechnology in Hong Kong and China in order to bring benefits to the public, local and global community and raise awareness of the importance of science in Society.

The summit this year is supported by Hong Kong Commerce and Economic Development Bureau under Professional Services Advancement Support Scheme (PASS). Carrying on the past success of Hong Kong Biotech Horizons, this year we will be exploring the opportunities in Biotechnology for the Guangdong-Hong Kong-Macao Greater Bay Area and the Global Markets.

#### Simultaneous interpretation - English/Chinese is provided as for an International Summit.

We hope that you will share our enthusiasm for the Hong Kong Biotech Horizons and we look forward to your participation in this important summit of the year.

Yu, Albert Neuroscience Research Institute of Peking University Vice Director / Professor Hong Kong Biotechnology Organization Chairman Guangdong-Hong Kong-Macao Great Bay Area Biotechnology Alliance Chairman Hong Kong Council for Testing and Certification	于常海 北京大學神經科學研究所副所長/教授 香港生物科技協會 主席 粵港澳大湾区生物科技联盟 主席 香港檢測和認證局 主席
Chairman	

# **Scientific Committee**

Cheng, Christopher	鄭漢其
Managing Director	總監
Hong Kong Institute of Biotechnology	香港生物科技研究院
Hsiao, Wendy	蕭文鸞
Research Professor	教授
Macau University of Science and Technology	澳門科技大學
Jiang, Yu Yang Director Guangdong Provincial Key Laboratory of Chemical Biology	蔣宇揚 总经理 广东省化学生物学重点实验室
Lee, Tin Lap Associate Professor School of Biomedical Sciences, Faculty of Medicine The Chinese University of Hong Kong	李天立 副教授 香港中文大學醫學院生物醫學學院
Leung, Thomas Professor Department of Applied Biology & Chemical Technology, The Hong Kong Polytechnic University	梁潤松 教授 香港理工大學應用科技及化學科技學系
Li, Benjamin	李小羿
Chief Executive Officer	首席執行官
Lee's Pharmaceutical Holdings Limited	李氏大藥廠控股有限公司
Liu, Andy	劉安庭
CEO	CEO
Ilumi Health	Ilumi Health

Tian, Yao Lin	田瑶林
Chief Executive Officer	首席执行官
ShenZhen Govita Medical Laboratory	深圳健科医学检验实验室
Wang, Chun Xiang	王春香
Professor	教授
Bejiing CoWin BioTech	北京康为世纪生物科技有限公司
Wong, Bing Lou (Chair)	黃炳鏐 ( 主席 )
Chief Technology Officer	技術主管
New B Innovation Limited	新行健醫藥科技有限公司
Yang, Michael M. (Chair) Head and Yeung Kin Man Chair Professor Biomedical Sciences, City University of Hong Kong	楊夢甦(主席) 香港城市大學生物醫學系主任
Yung, Ken	翁建霖
Chairman	主席
OPER Technology Limited	薈新科技
Zhang, Jimmy	張志民
Venture Partner, LAV (Lilly Asia Ventures)	礼来亚洲基金风险合伙人
Zhou, Grace President Shenzhen International Institute for Biomedical Research (SIIBR)	周國瑛 院長 深圳羅茲曼國際轉化醫學研究院

## Treasure

Hsiao, Wendy	蕭文鸞
Research Professor	教授
Macau University of Science and Technology	澳門科技大學

# Legal Advisory

Philip KH Wong, Kennedy YH Wong & Co.

黃乾亨黃英豪律師事務所

# Organizer



# **Supporting Organizations**





LEE'S PHARM.

香港資訊科技聯會

CHKLC

KPMG

HKiNED 香港獨立非執行董事協會

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HKPC®

L'BA

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CBA

\*\*Professional Services Advancement Support Scheme ( Hong Kong Government )









### swisschamhk.org







Gerneral Information



## **Venue Information**

### L'hotel Nina et Convention Centre 如心海景酒店暨會議中心

L' hotel Nina et Convention Centre is Hong Kong's largest hotel in many respects and the landmark of Tsuen Wan. A modernist' s dream hotel in Tsuen Wan: strategically located 25 minutes each way to all of Hong Kong' s major commercial and entertainment districts, it is the flagship hotel of L' hotel Group and the most affordable luxury hotel the city has to offer.

L' hotel Nina et Convention Centre is dedicated to providing spacious, professional hospitality services and extraordinary pleasures with a wide array of amenities and facilities to ensure all guest needs are accommodated. All of the Hotel' s 1,608 well-appointed guestrooms with an average room size of 34 sq.m. (366 sq.ft.), are ideal for tourists and business travellers alike. As a business hotel, L' hotel Nina et Convention Centre offers professional catering services and a great variety of event spaces for an array of corporate, MICE and personal events created to surpass the standards of business hotels in Hong Kong. Visit L'hotel Nina et Convention Centre to enjoy affordable luxury and a haven of unparalleled comfort and service.



#### 星河丽思卡尔顿酒店

深圳福田區福華三路 116號(深圳會展中心對面)

深圳星河麗思卡爾頓酒店坐落于福田中心區核心地帶,深圳會展中心對面,可通過深圳地鉄直達香港 關□,距離深圳寶安國際機場 30 分鐘車程。282 間客房采用落地窗自然采光且均以 50 平方米起,堪稱深 圳豪華酒店中客房面積之冠。七種餐飲選擇、11 個會議室和宴會廳、配備豪華護理房和室外觀景護理房的 水療及健身中心、風景如畫的屋頂花園及室外游泳池,為獨具品味的商務及休閑旅客所尊享。

自 2009 年 3 月 15 日開業以來,酒店憑借無懈可擊的服務質量和奢華完善的酒店設施在業內榮獲 2009 年度"最佳開業酒店"、2009 年度"最佳宴請餐廳"(星麗中餐廳)、2009 年度"最佳奢華酒店" 及 2010 年度"深圳首選商務酒店"等十項殊榮。



#### **Useful Tips for Transportation in Hong Kong**

Hong Kong is a hustle and bustle city with an excellent transportation system. There are various public transports, such as: Mass Transit Railway (MTR), Bus, Mini bus, Taxi and ferry; all could be paid by cash and octopus card. Visitors

are strongly recommended to purchase an Octopus card once arrive Hong Kong. It is available for purchase in every station of the Mass Transit Railway system. The Octopus card is a smart electronic money payment system which allows payment not only for public transport (such as trains, buses, trams, ferries and minibuses), but also at parking meters, convenience stores, supermarkets, fast-food restaurants and most vending machines.



#### There are some useful Applications which could be downloaded on App stores.



#### How to Access to the Congress Venue?

Below is the options access to the Congress Venue: Hong Kong L'Hotel Nina et Convention Centre.

#### Travel to Hong Kong L'Hotel Nina et Convention Centre:

#### Option 1: By Taxi (Red Taxi) (Most Convenient Route)

\*For taxi driver: Please go to Hong Kong L'Hotel Nina et Convention Centre.

(Chinese: 如心海景酒店暨會議中心)

#### Option 2: By MTR

- \*Take Exit D in Tsuen Wan West MTR Station.
- \*Walk 5 minutes along Tai Ho Road to reach the Hotel which will be on the right

L'hotel Nina et Convention Centre Add: 8 Yeung Uk Road, Tsuen Wan, Hong Kong Phone: (852) 2280 2898

# Programme

# Programme

Day 1 Thursday, September 20, 2018			
13:00 - 14:00	Registration		
14:00 - 14:10	Soft Opening		
Discussion Forum 1			
14:30 - 15:30	Topic 1 : How to build Hong Kong and the Greater Bay Area into an Asian Biotechnology Hub		
15:30 - 16:00	Coffee Break		
Discussion Forum 2			
16:00 - 18:00	Topic 2 : How to build and evaluate your biotechnology company so it can be eventually listed in HKEx and US NASDAQ		

\* Those conferences on 21/9 will be held in Shenzhen, all the attendees will travel from L-Hotel to the Ritz Carlton Shenzhen 3/F Conference Room. A shuttle bus is arranged for transportation.

Day 2 Friday, September 21, 2018			
6:00 - 9:00	Transportation - From HK to Shenzhen		
8:50 - 9:00	<b>2018 BT Opening</b> <b>Prof. Guoying Zhou</b> CEO President of Shenzhen International Institute for Biomedical Research CEO of Immvira Co., Limited		
	Session 1 Drug Development and Future Prospect		
9:00 - 9:35	Dr. Christine Gulbranson[P25]SVP, Chief Innovation Officer for Innovation & Entrepreneurship for the University of California System Topic: An inside look into the University of California' s Drug Devel- opment and Commercialization[P25]		
9:45 - 10:20	Dr. Jing Ma[P36]President of Shanghai InnoStar Bio–Tech Co. Ltd (National Shanghai Center for New Drug Safety Evaluation and Research)Image: Center for New Drug Safety Evaluation and Research)Topic: Strategy and challenge of Non-clinical evaluation for Cell Therapy ProductsImage: Center for Cell Therapy Products		
10:30 - 11:05	Dr. Jean-Simon Diallo [P24] Assistant Professor of Biochemistry Microbiology and Immunology Department of the University of Ottawa Topic: Viral Sensitizer Technology		
11:15 - 11:50	Dr. Dongyao Ni [P38] Chief Medical Officer of Immvira Co., Limited Topic: Development of New Generation Oncolytic Virus and Future Prospect		
11:50 - 13:30	Lunch		
	Session 2 Industrialization of New Drug Development		
13:40 - 14:15	Dr. Lan Zhang [P54] Director of Department of Pharmacy at Xuanwu Hospital of Capital Medical University Deputy Director of the National Drug Clinical Trial Institute Topic: R&D of Taisi for Alzheimer's Disease-from Pre-Clinical to Clinical		

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14:25 - 15:00	Dr. Yue Han[P27]Director of Business Department in CantonBioTopic: Value Creation in Biological Product Development	
15:10 - 15:45	Dr. Xiaoping Zhao[P55]Senior Director of Pharmacokinetics and Bioanalysis at ShanghaiInnoStar Bio–Tech Co. Ltd (National Shanghai Center for New DrugSafety Evaluation and Research)Topic: Actuality, Challenges and Solution of Immunogenicity Evaluation	
16:00 - 18:00	Transportation (From Shenzhen to L - hotel in Hong Kong)	
18:00 - 19:00	Dinner	
	Discussion Forum 3	
19:00 - 20:00	Topic: China-US Trade War - How does it affect biotechnology and pharmaceutical industry locally, nationally and globally?	

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Day 3 Saturday, September 22, 2018		
Part 1		
9:00 - 9:30	Grand Open Ceremony	
	Session 3 Biotechnology Development	
9:30 - 10:30	Keynote Speaker: Prof. Lu Li [P31 Director of the Department of Educational, Scientific and Technological Affairs, Liaison Office of the Central People's Government in the HKSAR Topic: 大灣區科創中心建設機遇和挑戰	
10:30 - 10:45	Coffee Break	I
	Session 4 Immunotherapy	
11:00 - 11:25	Prof. Ken Yung [P51 Professor and Associate Head Faculty of Science, Hong Kong Baptist University Topic: Neural Stem Cell Technology as a potential treatments of Neu- rodegenerations	
11:25 - 11:50	Prof. Gong Chen[P21Professor at Department of Biology at Pennsylvania State University Lab Head of Charles H. "Skip"Smith Life Sciences Laboratory Verne M. Willaman Chair in Life Sciences Chairman of NeuExcell Therapeutics Topic: Brain repair via in Situ Astrocyte-to-Neuron Conversion	
11:50 - 12:15	Dr. Jian Ni [P39 President of R&D and CSO of Nuance Biotech Inc. Topic: CBA introduction New Immunomodulatory targets and next generation active immune checkpoint control immunotherapy	
12:15 - 12:40	Dr. Lynda Chin [P22 Founder, CEO of Apricity Health LLC Professor of Medicine, Dell Medical School UT Austin Topic: Transforming Medicine with Data, Analytics and Technologies	
12:40 - 13:40	Lunch	

Session 5 Chinese Medicine			
13:40 - 14:05	Dr. Lan Zhang [P54] Director of Department of Pharmacy at Xuanwu Hospital of Capital Medical University Deputy Director of the National Drug Clinical Trial Institute Topic: Current situation and practice of Chinese Natural Medicine and New drug development of Traditional Chinese Medicine		
14:05 - 14:30	<b>Dr. Imran Khan</b> [P29] Macao University of Science and Technology Topic: The anti-cancer nexus of Chinese medicine and gut microbiota		
	Session 6 Cancer		
14:30 - 14:55	Dr. Peter Lin [P32] Cytelligen Topic: Detection and clinical significance of Aneuploid CTCs and CECs		
14:55 - 15:20	Prof. Pui-Kwong Chan [P19] Department of pharmacology, Baylor College of Medicine, Houston Topic: Development of herbal saponin into anticancer drugs and new saponins library		
15:20 - 15:45	<b>Dr. Mao Mao</b> [P37] Chief Executive Officer of SeekIn Topic: How can cancer mortality be reduced by early detection		
15:45 - 16:05	Coffee Break	1	

Part 3			
	Session 7 Diagnostic		
	16:05 - 16:30	Key Note Speaker: Prof. Richard Barker[P18]Founding Director of New Medicine PartnersFounding Director of Centre for the Advancement of SustainableMedical Innovation (CASMI)Topic: Translational science in the era of precision medicine	
	16:30 - 16:55	<b>Dr. Zhaoyang Ye</b> [P50] Chief Scientific Officer of Hai Kang Life Corp Limited Topic: Multiplexing Molecular Diagnostics for Point-of-Care Applica- tion in Infectious Diseases	
	16:55 - 17:20	Dr. Sitong Sheng [P42] Founder of Shenzhen HYK Gene technology Topic: NGS accelerates precision medicine	
	17:20 - 17:45	<b>Dr. Nikolay Sergeev</b> [P41] Founder and CTO of AlteraBio Topic: Liquid Biopsy – Promises and Current Challenges	
	17:45 - 18:10	<b>Dr. Jason Zhu</b> [P56] CEO of InnoMedi Inc. Topic: iHeart – Long term Cardiac Patch – ECG Collection & Analysis	

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Day 4 Sunday, September 23, 2018				
Part 1				
Session 8 Pharmaceutical Development				
9:00 - 09:45	Keynote Speaker: Prof. Yu Wang[P46]Former Director General of Chinese Center for Disease Control and Prevention (China CDC)Image: Control China's New Urbanization Research Experts at Tsinghua University Topic: The prospect of bio-medicine industry in transitional ChinaImage: Control China			
9:45 - 10:30	Keynote Speaker: Dr. Shun Luo[P35]Founder and President of Jianshun Biosciences Co., Ltd. and Thousand Oaks Biopharmaceuticals Co., Ltd. Topic: The future of Biopharmaceutical Industry – The future is hereImage: Constant of the future of Biopharmaceutical Industry – The future is here			
10:30 - 10:40	Coffee Break			
Session 9 Business Opportunity in Biotechnology				
10:40 - 11:05	Mabel Chu Independent Commission Against Corruption (ICAC) Topic: Integrity-The Key to Business Success			
11:05- 11:30	Ms. Diana Viola [P43]   Chief Executive Officer of PharmaBoardroom [P43]   Topic: GBA biotech and medical technology Image: Chief Executive Officer of PharmaBoardroom			
11:30 - 11:55	Dr. Dan Zhang [P53] Executive chairman of Fountain Medical Development Ltd Topic: Product Development and IPO in the Era of ICH			

11:55 - 12:20	Mr. Eugene Yeoh [P49] Co–Head, IPO Vetting Team, Hong Kong Exchanges & Clearing Limited (HKEX) Topic: Enhancing Hong Kong's listing framework – Listing regime for Biotech Companies			
12:20 - 12:45	Dr. Jimmy Zhang [P52] Venture Partner, LAV (Lilly Asia Ventures) Topic: How to attract investments from VCs			
12:45 - 13:45	Lunch			
Part 2				
Session 10 Global Perspective on Biotechnology				
13:45 - 14:10	Dr. Alan Lu [P34] Founder, President and CEO of Sirnaomics Inc. Topic: Novel siRNA Therapeutics for Immune Oncology Application with Polypeptide Nanoparticle Delivery Technology	-		
14:10 - 14:35	Dr. Zhenhua Wu[P47]President of Sino-American Pharmaceutical ProfessionalsAssociation Greater PhiladelphiaChief Executive Officer of NeuExcell Therapeutics Inc.Topic: A transformative gene therapy for neurodegenerative diseases	9		
14:35 - 15:00	<b>Dr. Ruhong Jiang</b> [P28] Chairman CEO and President of Applied StemCells Topic: How soon can we move Gene editing therapy – Gene therapy 2.0 to the clinic			
15:00 - 15:25	Dr. Harry Liu [P33] Senior medical director in Genentech/Roche Topic: Evaluating the Benefit: Risk of Oncology molecules from a clinical perspective	S		
Session 11 Sustainable Development and Support on Biotechnology				
15:25 - 15:50	Dr. Michael Wang[P44]Chief Strategy Officer for Alliances and PartnershipsNational Foundation for Cancer Research (NFCR)Topic: Developing sustainable support for translational cancer curesresearch	Note and the second sec		

15:50 - 16:15	Mr. Liedong Xu[P48]President and Chief Executive Officer of Rundo International Pharmaceutical Research & Development Co., Ltd. Topic: The Important Role of CROs in New Drug Development			
16:15 - 16:40	Dr. Jian Han[P26]Founder, Chairman of the Board, President and ChiefScientific Officer of iCubateTopic: Why there is no KillerApp in molecular diagnostics	6		
16:40 - 17:05	Mr. Ronald Pong [P40] Smart City Consortium – IT Governance Committee Chairman Topic: Health Care IOT Security			
Part 3				
	Session 12 Knowledge Exchange Session			
17:05- 17:30	Mr. Brett Cooper [P23] General Manager, Hong Kong and Macau, Philip Morris Asia Limited Topic: Innovation in Heat-not-burn technology applying in tobacco products to reduce risk of harm			
17:30- 17:55	Mr. Jon Chang[P20]Co-founder of Asia Microbiota BankTopic: Microbiome: the Science Disrupting Drug Discovery			
17:55- 18:20	Dr. Sandy Kwok [P30] Assistant Chief Scientific Officer of Hai Kang Life Corporation Limited Topic: The Diagnostic Revolution: A total Solution via EFAD X BioRadar Technology			
18:20- 18:45	<b>Mr. Roger Wu</b> Co–founder of Ginko Dochong Assest Management Ltd, Co–founder of WS Capital Management Ltd Manager of Jiangsu Government Investment Fund			
18:45 - 19:00	Closing Ceremony			

## **Speakers**

#### Richard William Barker, MA, D.Phil, FRSM, FBPS, OBE

Founding Director, New Medicine Partners

#### Topic: Translational Science in the Era of Precision Medicine

#### Abstract

Precision medicine (PM) is emerging as a new healthcare era. It presents both challenges and opportunities to those seeking to translate bioscience breakthroughs into products and patient impact. Properly applied, PM can radically reduce the time and cost of product development and ensure that patients receive the medicines that are right for them. Drawing on his recent book 'Bioscience – lost in translation?', Prof Barker's talk will explore the 'gaps in translation' of healthcare technologies and how precision technologies can overcome them, using specific recent developments as examples. Finally, he will examine the likely future role of China in the global bioscience landscape.

#### Biography

Richard is an internationally respected leader in the field of medical innovation, with a particular focus on precision medicine. His career has spanned industry, health services and academia. He therefore understands how medical innovation originates, is developed, commercialised and adopted. His international business career includes therapeutics, diagnostics and medical informatics. His writing and speaking and work on government policy issues has given him broad influence on the healthcare world. <u>Pui–Kwong Chan, Ph.D.</u> Baylor College of Medicine, Houston, Texas.

#### Topic: Development of herbal saponin into anticancer drugs and new saponins library

#### Abstract

Saponin is ubiquitous in plant and was commonly used for health food (such as ginseng) and therapeutic purposes for generations. However, its application for anticancer treatment has not been adequately explored. One drawback of the clinical use of natural saponin is its hemolytic activity.

For the past 10 years, we researched Saponin isolated from Chinese medicine. We purified and analyzed their active components. Using cancer cell-lines from 15 different human organs, we identified the active anticancer saponin from Aesculus Hippocastanum, Xanthoceras. Base on the structure-activity-relationship (SAR) analysis, we synthetized the active compounds without the hemolytic activity. Our results demonstrated that this approach is useful to obtain many more novel active compounds for therapeutic uses.

#### Biography

Prof Chan, Department of Pharmacology, Baylor College of Medicine, Houston, Texas, got PhD from University of Toronto, Canada, Clinical Biochemistry; M. Phil. from The Chinese University of Hong Kong; B. Sc. from The Chinese University of Hong Kong.

His research expertise is the anticancer drug effect and mechanism. His works are focused on the effects of anti-cancer drugs on cancer cells, particularly on the molecular structure and functions. He also work on Chinese herbal drugs isolation and characterization. For the past 10 year, he has successfully identified and isolated an active compound from plants. Based on its SAR (Structure Activity Relationship) studies, he identified and synthesized the lead compound. This compound is ready for preclinical investigation. He invented "Anti-NPM (B23/Nucleophosmin) monoclonal antibody." and licensed to (a) Santa Cruz Bio. Inc. (b) Zymed Lab. and (c) Sigma Chemical Co.

Published 58 papers, 44 Abstract, 3 review Article, and 50 issued patents

#### Jon Chang, MBA

Co-founder, Asia Microbiota Bank (AMB).

#### Topic: Microbiome: the Science Disrupting Drug Discovery

#### Abstract

Taking the biotech space by storm, how microbiome is disrupting traditional drug development and changing the way we treat intestinal diseases. Asia Microbiota Bank (AMB) shares incredible outcomes of their early patients who received bacteria repopulation procedures in Hong Kong. AMB presents select case studies on the clinical outcomes from patients with irritable bowel syndrome, intestinal bowel disease, chronic diarrhea, gut dysbiosis, ulcerative colitis and more. Learn the benefits and challenges of running a biotech startup in Hong Kong and how to navigate this unique market/city.

#### Biography

Mr. Chang is the interim executive director of the Asia Microbiota Bank, a microbiome company headquartered in Hong Kong. Previously, Mr. Chang was a corporate development director for a US technology company where he was responsible for regional strategy and mergers and acquisitions. He was also a senior investment manager for a Chinese healthcare conglomerate, focusing on hospital and pharmaceutical investment projects. He lead numerous hospital system related investment and JV negotiations as well as pharmaceutical licensing deals. Mr. Chang is originally from California, and has spent close to a decade in Beijing and Hong Kong. He is fluent in Mandarin and English. He holds an MBA from Tsinghua–MIT business program.

Speakei

Gong Chen, Ph.D.

Willaman Chair Professor, The Pennsylvania State University. Reconstruct Destructed Brain Circuits Through In Vivo Astrocyte-to-Neuron Conversion Chairman of NeuExcell Therapeutics

#### Topic: Brain repair via un Situ Astrocyte-to-Neuron Conversion

#### Abstract

There is a huge unmet medical need to treat severe neurological disorders such as stroke, Alzheimer's disease, Parkinson' s disease, spinal cord injury, ALS. Neuronal loss is the common cause of these functional deficits in the brain and spinal cord. Unfortunately, human brains have largely lost the neuroregeneration capability in the adult stage, yet so far there is no effective technology to regenerate >20% of lost neurons in order to rebuild the damaged neural circuits. We have recently developed an innovative in vivo cell conversion technology to directly convert reactive glial cells into functional neurons inside the mouse brain through expressing a single neural transcription factor NeuroD1 (Guo et al., Cell Stem Cell, BEST of 2014 article). In an ischemic stroke model, we demonstrate that NeuroD1-mediated in vivo astrocyte-toneuron conversion can regenerate ~40% of lost neurons plus protect ~40% of injured neurons, leading to the reconstruction of a damaged motor cortex with layered structures. The NeuroD1-converted neurons are fully functional, showing repetitive action potentials and robust synaptic activities, and sending out long-range axonal projections to global brain regions. Interestingly, after high efficiency astrocyte-to-neuron conversion (90% conversion rate), the remaining astrocytes can regenerate themselves in parallel with the regeneration of new neurons, accompanied by a significant reduction of microglia and neuroinflammation. Most importantly, our NeuroD1-mediated in vivo astrocyte-to-neuron conversion technology can successfully rescue both motor and cognitive functional deficits caused by ischemic injury. We are currently completing a series of preclinical studies in mice, rats, and monkeys in order to translate our highly efficient in vivo astrocyte-toneuron conversion technology into successful clinical therapies.

#### Biography

Dr. Gong Chen graduated in 1987 from Fudan University in Shanghai and obtained his PhD degree with Prof. T.P. Feng in Shanghai Institute of Physiology, Chinese Academy of Sciences. Dr. Chen did postdoctoral work at Yale University (Anthony van den Pol) and Stanford University (Richard Tsien), before landed a tenure-track faculty position at Pennsylvania State University. He is now a distinguished Chair Professor at Penn State (Verne M. Willaman Chair in Life Sciences) and Professor of Guangdong-Hong Kong-Macao Institute of Regeneration in Central Nervous System. Dr. Chen's work focuses on brain repair after injury and neurodegenerative disorders. Dr. Chen pioneered an innovative in vivo reprogramming technology, converting reactive glial cells directly into functional neurons inside adult mouse cortex. This seminal work was published in Cell Stem Cell (Guo et al., 2014) and selected as one of the BEST of 2014 articles, because of its revolutionary approach in brain repair without external cell transplantation. Recently, Dr. Chen and colleagues further developed a chemical reprogramming technology, using a cocktail of small molecules to convert human glial cells into functional neurons (Zhang et al., Cell Stem Cell, 2015), paving the way for a potential drug therapy for neural regeneration in the future. Dr. Chen published many research articles in world leading journals including Cell Stem Cell, Nature Communications, PNAS, Journal of Neuroscience, Nature, Cell, and received the Zenith Fellows Award by Alzheimer's Association. Dr. Chen organized and Chaired the first symposium in history on in vivo reprogramming at the 2014 annual meeting of Society for Neuroscience in Washington DC, with more than 800 attendees. This symposium is a milestone marking a new field of in vivo reprogramming in regenerative medicine.

#### Lynda Chin Ph.D. Founder, CEO of Apricity Health LLC Professor of Medicine, Dell Medical School UT Austin

#### Topic: Transforming Medicine with Data, Analytics and Technologies

#### Abstract

Artificial intelligence (AI) can be a powerful tool to augment capabilities of human experts, accelerate discovery and improve care. However, many challenges unique to developing AI applications for medicine must be addressed, such as trust and transparency of AI, secure and compliant sharing and use of health data, as well as public-private partnerships to facilitate academic-industry collaborations. Dr. Chin will share her experience working with MD Anderson oncology experts and IBM Watson team to explore how AI can be responsibly developed to democratize clinical knowledge for evidence-based care, as well as her collaboration with local community and major industry leaders (e.g. AT&T, PwC, Walmart) to create a digitally connected ecosystem for purposeful sharing of real-world health data to improve care in an underserved community. In addition, Dr. Chin will describe her current effort to bring data and analytics together to develop next-generation contextualized care pathway for management of treatment related adverse events in cancer patients receiving immunotherapy.

#### Biography

An elected member of the U.S. National Academy of Medicine, the Association of American Physicians, and the American Society for Clinical Investigation, Dr. Chin is a world renowned cancer genomic scientist who had authored or co-authored over 200 peer-reviewed publications and presented in over 300 national and international conferences including Tedmed. At Dana-Farber Cancer Institute where she was a professor at Harvard Medical School and a senior associate member at the Broad Institute of MIT and Harvard, Dr. Chin conducted research spanning mouse models of human cancers, cancer genomics, functional genomics and personalized medicine. Outside of her laboratory, Dr. Chin held multiple leadership positions in The Cancer Genome Atlas (TCGA) project in the U.S., including serving on the executive subcommittee and leading the development of Firehose pipeline as co-PI at the Broad Institute. Internationally, Dr. Chin has been active in the International Cancer Genome Consortium since its inception, currently sitting on the ICGC-ARGO Steering Committee and chairing its Phenomics Working Group. In 2011, Dr. Chin created the first Department of Genomic Medicine at MD Anderson Cancer Center with a mission to accelerate the translation of scientific advances and democratize the best care to patients outside of academic centers with technologies, data and AI analytics. In 2015, foreseeing the need for a new model to harness the potential of real-world health and health-related data, Dr. Chin launched the Institute for Health Transformation as the Chief Innovation Officer for University of Texas System. She designed and developed REDI (Realworld Education, early Detection and Intervention), an infrastructure platform for a connected health data and care delivery ecosystem. Collaborating with public and private entities across industries, engaging local stakeholders in communities from federally qualified health center to churches, Dr. Chin established such an ecosystem in one of the poorest communities of South Texas to demonstrate feasibility of purposeful data sharing across public and private entities and benefits of technology-enabled chronic care for a vulnerable population.

#### Brett Cooper

#### General Manager, Hong Kong and Macau, Philip Morris Asia Limited Topic: Innovation in Heat-not-burn technology applying in tobacco products to reduce risk of harm

#### Abstract

The Heat-not-burn technology application on tobacco products was selected as one of the 'Ten Disruptive Innovations' in November 2017. The technology allows heating the tobacco without burning it, which delivers to users the satisfaction of tobacco but without the smoke, the ash and the strong smell. In absence of the combustion process, the harmful and potentially harmful substances are significantly reduced in the aerosol compared to cigarette smoke, therefore potentially reducing the health risk to users and the people and environment around them. By innovating a product which has been scientifically proven to be a better alternative than cigarette at the same time acceptable to adult smokers, the conversion rate presented is extremely promising.

This year, we have brought this innovative technology into Hong Kong by setting up a new Electronics Hub (E-Hub) as part of our R&D to further progress our innovation and technology in the area of reduced risk platforms. We now have 75+ people hired in the E-Hub including local talents from both science and engineering fields.

#### Biography

Brett is the head of the Kong Kong and Macau markets and responsible for the overall managment of PMI's marketing and sals functions as well as the day-to-day operations of the Hong Kong and Macau. Brett spent 19 years with PMI across a spectrum of functions. He started his career in Sales in his home country in Australia and was transferred to PMI's Operation Centre in Switzerland where he managed regulatory affairs for the European Union. Brett was serving as Commerial Approach Director for Philip Morris Fortune Tobacco Corp, Inc, leading the marketing and sales departments.

#### Jean-Simon Diallo, Ph.D.

Scientist of Cancer Therapeutics, Ottawa Hospital Research Institute Assistant Professor of Biochemistry Microbiology and Immunology Department of the University of Ottawa Member of Faculty in Graduate Studies and Research

#### **Topic: Viral Sensitizer Technology**

#### Biography

Diallo 博士 2000 年以優异成績畢業于加拿大渥太華大學生物信息學專業,獲得生物化學學士學位,隨后在加拿大麥吉爾大學繼續攻讀生物化學碩士學位,研究方向為珠蛋白基因的表現遺傳調控。2003 年,他于加拿大蒙特利爾大學攻讀 分子生物學博士學位,研究前列腺癌的預后標志物/模型,以及天然植物化學物質在前列腺癌治療中的應用。目前作為 加拿大渥太華醫院研究所的一名科學家,Diallo 博士及其團隊與跨學科的合作者形成了科研網絡,使用藥物化學、質譜 和高通量分子生物學方法來研究"病毒敏化劑"藥物的工作原理。同時,Diallo 博士也在不斷擴大病毒敏化劑藥物的應 用範圍,除溶瘤病毒療法外,這些藥物在病毒/疫苗生產和基因治療應用方面均顯示出巨大的前景。 Christine Gulbranson, Ph.D.

SVP, Chief Innovation Officer for Innovation & Entrepreneurship for the University of California System

#### Topic: An inside look into the University of California's Drug Development and Commercialization

#### **Biography**

Gulbranson 博士是加州大學系統創新與創業事業高級副總裁和首席創新官。加州大學董事會將她譽為"2016 年首位加 州大學系統的創新大師, 曾經的工程師變身為現在的風險投資高管和企業家, 是加州大學完美的傳播者。"

Gulbranson 博士曾擔任戰略咨詢公司 CHRISTA-LIS,LLC 的首席執行官長達十多年,并組建了國家實體行業協會 Advanced Energy Economy(AEE).

作為 Kauffman 基金會的高級研究員,她主導了智囊團的淸潔技術項目,幷支持該技術的商業創新發展。她也是風險投 資公司 GCP 的合伙人,投資了 IT、軟件和材料方面的很多種子公司和初創公司。

<u>Jian Han, Ph.D.</u> Founder, iCubate

#### Topic: Why there is no KillerApp in molecular diagnostics

#### Abstract

iCubate is a molecular diagnostic company located in Huntsville, Alabama. It was established in 2009, the founder, Dr. Jian Han is a serial entrepreneur (Genaco and Diatherix been acquired, iCubate and iRepertoire are current). Even though we have developed a sophisticated instrument system, multiplex PCR (mPCR) is our core technology. mPCR provides molecular differential diagnosis and actionable answers, because multiple gene targets are studied from one sample, in one reaction. mPCR is the enabling technology for precision medicine, because diseases share symptoms and only a timely differential diagnostic will lead to personalized treatment. The highly automated sample to answer capability of the iCubate system democratized molecular differential diagnostics, made it available anywhere, performed by anyone. The system and assay already won US FDA approval and CE mark. Chinese public and private biotech companies (such as Wondfo and 3DMed) already licensed the technology for infectious disease and drug resistance gene rapid detection and cancer NGS library prep fields. The platform technology was developed to be an open platform, called iCubate 2.0, allowing developers large or small to develop Apps and commercialize their own assays. iCubate is seeking developers, marketing partners, and other strategic alliance.

#### Biography

韓健博士是分子診斷領域的著名專家,系列創業者,研發了三多重 PCR 技術,具有十多個國際專利,成立了四個分子 診斷公司。他在蘇州醫學院獲得醫學學士,美國阿拉巴馬大學伯明翰分校獲得醫學遺傳學博士,現任哈森阿爾法生物技 術研究院的研究員。韓博士還是科學網,新浪網的著名博主,寫有上千篇博文,實時分享生物技術領域創新創業的體驗。

#### Yue Han Ph.D. Director of Business Department in CantonBio

#### Topic: Value Creation in Biological Product Development

#### Biography

韓玥博士本科畢業于中國科學技術大學生命科學專業,從事蛇毒金屬蛋白酶的表達,純化與特征鑒定的研究。博士畢 業于美國 Oklahoma State University 生物化學與分子生物學,博士期間從事帕金森病相關蛋白 Leucine Rich Repeat Kinase 2 和疫苗病毒蛋白 A6 的表達,純化,特征鑒定,結晶和結構分析,工作發表在 Science Signaling, PNAS, Acta 等期刊。回國后在上海藥明康德新藥開發有限公司生物部擔任高級研究員,進行了 4 個項目(包括激酶類,反轉錄酶, 二氫葉酸還原酶等)的基于蛋白質晶體結構的藥物開發研究,帶領實驗室進行 5S star 整改幷兩次獲得公司認證,進行 Lean Sigma 學習幷取得黃帶資格。韓玥博士在漢騰生物任商務部總監,負責公司的商務拓展工作,項目管理工作及融 資工作。

#### Ruhong Jiang, Ph.D.

Cofounder, Chairman, CEO and President of Applied StemCell, Inc. Silicon Valley, California

#### Topic: How Soon Can We Move Gene Editing Therapy – Gene Therapy 2.0 to The Clinic?

#### Abstract

The year 2018 has marked a substantial push by the FDA and NIH to streamline the development of gene and cell therapies after the breakthough 2017 with three gene therapeutic products appoved by the FDA. Drs. Collins and Gottlieb stated recently on the August 2108 issue of New England Journal of Medicine that "it seems reasonable to envision a day when gene therapy will be a mainstay of treatment for many diseases," highlights the exciting time that gene and cell therapies are in. This is compounded by \$7.9 billion of investment in the space in first half 2018, up 79% year-over-year. The author will share some lessons learned from the development of gene and cell therapies.

#### Biography

Ruhong Jiang, Ph.D., is cofounder and CEO of Applied StemCell, Inc. - A global leading company in stem cell and precise genome editing. He has held a variety of technical and managerial roles with increasing responsibilities in several biotechnology/biopharmaceutical companies. Before starting Applied StemCell, Ruhong was general manager of MicuRx(Shanghai)Pharmaceutical, Inc. a California - based biopharmaceutical company where he set up its entire China operation. From 2005 - 2007, Dr. Jiang was head of the Pharmacogenetics Program at Stanford Research Institute International (SRI) where he managed multiple pharmacogenetic and molecular genetics projects with multi - millions of annual budgets. Prior to relocating to California, Dr. Jiang was pharmacogenomics consultant at Boehringer Ingelheim Pharmaceuticals and served as senior scientist, then director of project management at Genaissance Pharmaceuticals from 2000 - 2004 where he played an important role in biomarker discovery, pharmacogenetics and clinical bioinformatics, diagnostic product development, alliance management and business development. Dr. Jiang graduated from Fudan University with a B.S. degree in biology and received M.S. degree in reproductive biology from China Agricultural University and a Ph.D. degree in Genetics from Oklahoma State University in 1997. From there Ruhong went to Baylor College of Medicine where he furthered his education as a postdoctoral fellow in Dr. Douglas Burrin's lab. Dr. Jiang has authored and coauthored more than 40 publications in the fields of human genetics, pharmacogenetics and disease animal models. Ruhong has a deep interest in the science, ethics and societal issues of personalized medicine, regenerative medicine and global health. His demonstrated leadership has led to an established track record of success; especially in the areas of biomarker - based molecular assays or diagnosis, CRO service, and drug research and development.

Speakei

Imran Khan, Ph.D. Macau University of Science and Technology.

#### Topic: The anti-cancer nexus of Chinese medicine and gut microbiota

#### Abstract

Colorectal cancer (CRC) is the third leading cause of cancer-related deaths and more than one million new cases are globally reported each year - which is demanding new anti-CRC therapeutic strategies. Recently, gut microbiota (GM) role in cancer development and prevention has been spotlighted that is improving our mechanistic understanding of microbial implications in cancer, particularly colorectal cancer. Studies have shown that manipulation of GM composition through the treatment of prebiotics could be a novel preventive measure against CRC development.

Previously, we reported prebiotic properties of Gynostemma pentaphyllum saponin (GpS) that modulated GM composition and polyp burden in an ApcMin/+mouse model. Whereas, in this study for the first-time, we are reporting improved efficacy and underlined mechanism of GpS in the presence of polysaccharides extracted from Ganoderma lucidum (GLP), a Chinese medicinal mushroom known for immunomodulatory properties. After treating with GLP and GpS (GLP+GpS), polyp burden greatly stifled in the ApcMin/+ mice. GLP+GpS protected intestinal barrier by improving mucus layer, repleted epithelium with goblet and Paneth cells, and shifted mucosal macrophages from M1 to M2 phenotype. In addition to restored level of E-cadherin and N-cadherin, we observed upregulated expression of the anti-inflammatory cytokines (IL-4, IL-10, and IL-12) in the treated mice. The level of kinases (ERK and AKT),  $\beta$  -catenin, and STAT3 was found suppressed after GLP+GpS treatments. Besides, the gut of the GLP+GpS treated mice was profoundly enriched with short chain fatty acids (SCFAs) producing bacteria whereas depleted with the pathobionts (especially sulfate-reducing bacteria). The abundance of SCFAs producers was associated with the high occurrence of SCFAs in the mice sera. Concurrently, GLP+GpS profoundly promoted expressions of the G-protein couple receptors (GPCRs) and histone deacetylase (HDAC). Moreover, raised levels of the GPR119 and PYY were found in the GLP+GpS treated mice. We conclude that GLP+GpS associated decrease in polyp burden could be initiated by SCFAs interaction with GPCRs that downstream suppressed the expression of the HDAC and upregulated the expression of the PPAR  $\gamma$ .

#### Biography

Imran Khan is currently working as a postdoctoral fellow for the last two years at Macau university of science and technology. He earned his PhD certificate from King Abdulaziz university, Saudi Arabia. In his PhD thesis, for the first time, he evaluated gut microbiota of Saudi women using next generation sequencing technology. Also, through MALDI-TOF MS and VITECK MS technologies, he compiled gut microbiota resistome in Saudi Arabian population. During his PhD work, he traced compositional and resistome changes in gut microbiota along the trimesters in pregnant Saudi women.

After completing his PhD, he joined Prof. Wendy's lab, as a gut microbiota specialist, at state key laboratory of quality research in Chinese medicine. His current research focus is, but not limited, to understand microbial implications in the development and prevention of colorectal cancer and food allergy. He has found medicinal herbs and mushrooms as a rich source of nutraceuticals that have shown the potentials to prebiotically reshape gut microbiota composition. He believes that gastrointestinal tract is a core-center of the human body where most of the health issues could be manipulated by remodeling gut microbial composition.

Sandy KWOK, Ph.D.

Assistant Chief Scientific Officer of Hai Kang Life Corporation Limited

#### Topic: The Diagnostic Revolution: A total Solution via EFAD X BioRadar Technology

#### Biography

Dr. Sandy Kwok is a chemical engineer and graduated from the University of Cambridge, UK with Master's and PhD degrees in chemical engineering and biotechnology. She is the assistant Chief Scientific Officer at Hai Kang Life, and is responsible for chip production, process equipment design and product development.

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#### Lu Li, Professor

Director of the Department of Educational, Scientific and Technological Affairs, Liaison Office of the Central People's Government in the HKSAR

#### Topic: 大灣區科創中心建設機遇和挑戰

#### Biography

李魯,上海醫科大學公共衛生學院社會醫學與衛生事業管理專業畢業,敎授,博士生導師。歷任浙江醫科大學醫學系輔 導員、黨委宣傳部干事,浙江醫科大學團委副書記、團委書記、校長辦公室副主任,浙江醫科大學公共衛生學院黨總支 書記、副院長,浙江醫科大學黨委副書記;浙江大學湖濱校區工作領導小組組長、浙江大學醫學院黨委書記、常務副院 長;浙江師範大學黨委書記;2008年5月,任中共浙江省委敎育工委副書記、浙江省敎育廳副廳長(正廳長級)。現 任中央人民政府駐港聯絡辦公室敎育科技部部長。

#### Peter Lin, Ph.D. President, Cytelligen USA/Cytointelligen China

#### Topic: Detection and Clinical Significance of Aneuploid CTCs and CECs

#### Abstract

Conventional circulating tumor cell (CTC) detection technologies are restricted to large tumor cells (. white blood cells (WBCs)), or those unique carcinoma cells with double positive expression of surface epithelial cell adhesion molecule (EpCAM) for isolation, and intracellular structural protein cytokeratins (CKs) for identification. With respect to detecting the full spectrum of highly heterogeneous circulating rare cells (CRCs), including CTCs and circulating endothelial cells (CECs), it is imperative to develop a strategy systematically coordinating all tri-elements of nucleic acids, biomarker proteins, and cellular morphology, to effectively enrich and comprehensively identify CRCs. Accordingly, a novel strategy integrating subtraction enrichment and immunostaining-fluorescence in situ hybridization (SE-iFISH), independent of cell size variation and free of hypotonic damage as well as anti-EpCAM perturbing, has been demonstrated to enable in situ phenotyping multi-protein expression, karyotyping chromosome aneuploidy, and detecting cytogenetic rearrangements of the ALK gene in non-hematologic CRCs. Symbolic non-synonymous single nucleotide variants (SNVs) of both the TP53 gene (P33R) in each single aneuploid CTCs, and the cyclin-dependent kinase inhibitor 2A (CDKN2A) tumor suppressor gene in each examined aneuploid CECs, were identified for the first time across patients with diverse carcinomas. Comprehensive co-detecting observable aneuploid CTCs and CECs by SE-iFISH, along with applicable genomic and/or proteomic single cell molecular profiling, are anticipated to facilitate elucidating how those disparate categories of aneuploid CTCs and CECs cross-talk and functionally interplay with tumor angiogenesis, therapeutic drug resistance, tumor progression, and cancer metastasis.

#### Biography

Following graduation from Peking University School of Medicine, and Chinese Academy of Medical Science/ Peking Union Medical College (MD), Dr. Peter Lin pursued his graduate study at UNM School of Medicine (PhD, Immunology) in USA, and postdoc training (Tumor Cell Biology) in the lab of Drs. Marilyn Farquhar (President of American Society for Cell Biology) and George Palade (Nobel Laurite) at University of California San Diego (UCSD) School of Medicine. From 2005, Dr. Lin has led a team persistently working on technology innovation and clinical studies of circulating rare cells (CRCs), including CTCs and CECs. The invented novel cutting-edge technology of the integrated subtraction enrichment and immunostaining-FISH (SE-iFISH), has demonstrated its unique advantage of efficient isolation, in situ phenotypic and karyotypic comprehensive characterization as well as classification of various CRCs. NGS of single cell analyses demonstrated that CTCs and CECs possessed distinct symbolic non-synonymous single nucleotide variation (SNV) in their specific tumor suppressor genes of TP53 and CDLN2A. Disparate CTC subtypes seemed correlating with diverse clinical significance in terms of therapeutic drug resistance, tumor metastasis and recurrence, respectively.

#### Topic: Evaluating the Benefit: Risk of Oncology molecules from a clinical perspective

#### Abstract

It is important to evaluate the benefit-risk (B-R) profile when regulatory authorities consider the approvability, or companies make investment decision of a drug (molecule). For oncology molecules, the benefit analysis is typically based on the overall survival (OS) where available. When OS is not available, progression-free survival (PFS) or overall response rate (ORR) are used as surrogate endpoints to estimate benefit. In the recent competitive environment, companies often pursue accelerate approvals based on PSF or ORR to reach the market fast. Risks of the molecule also need to be characterized based on data from pre-clinical studies to Phase I, II, and III clinical studies. It is important to characterize the identified and potential risks of the molecule early, and develop risk mitigation plans. In the competitive environment, the B-R profile is often is the differentiating factor to win market shares.

#### Biography

Haiying (Harry) Liu has 15 years of experience in the biopharma industry in safety risk management and clinical development. He is currently a senior medical director in Genentech/Roche. During his time in Genentech, his work led to the worldwide approval of an oncology molecule (initial BLA), as well as several supplemental worldwide approvals (sBLAs). He previously took on various roles in drug development Amgen and Johnson and Johnson. He also conducted clinical research in University of California at San Francisco (UCSF). He holds a Medical Degree (MD) from Jilin University, Master of Public Health (MPH) from University of California at Berkeley, and a Master of Business Administration (MBA) from UCLA Anderson.

<u>Alan Lu, Ph.D.and MBA</u> Executive Vice President Sirnaomics, Inc MD. USA

#### Topic: Novel siRNA Therapeutics for Immune Oncology Application with Polypeptide Nanoparticle Delivery Technology

#### Abstract

Using a proprietary and optimized polypeptide nanoparticle-based delivery technology, we have developed the novel anticancer therapeutics with siRNAs targeting both TGF  $\beta$  1 and Cox-2 simultaneously (STP705), resulting apoptosis of fibroblasts for initial clinical indication of skin hypertrophic scar (in clinical Phase II study in US) and later for liver fibrosis treatment (Orphan drug designation by US FDA). Further advancement of neovasculature and tumor targeting delivery allow us to develop siRNA and miRNA therapeutics for treatments of liver cancer (Cholangiocarcinoma, CCA, Orphan drug designation by US FDA), Coloractal Carcinoma, and Non-melanoma Skin Cancers. Recent immune oncology study with dual targeting PD-L1/PD-1 and TGF  $\beta$  1 resulted in very promising clinical outcome nspired us for an attempt using STP705 in combination with immune checkpoint inhibitory mAb therapy for treatment of liver cancers. We have received IND approvals for our novel siRNA therapeutic product candidates, by both US FDA and China CFDA, for clinical Phase I and Phase II studies. I will discuss the unique advantage of our Polypeptide Nanoparticle (PNP) technology platform for safe and efficient siRNA delivery, and our strategy for advancing multiple clinical studies in both China and USA in near future.

#### Biography

Dr. Alan Y. Lu is currently the Executive Vice President for Sirnaomics, Inc, USA and CSO at Suzhou Sirnaomics Biopharmaceutical Co. Ltd. China. Sirnaomics has established proprietary platforms to deliver siRNA in vivo for the siRNA therapeutics development. With the support of the platforms the company has advanced its STP705 into clinical Phase IIa study in the US and Phase I in China for the treatment of Hypertrophic Scar (HTS) and gained orphan drug designation (ODD) from US FDA for the treatment of Primary Sclerosing Cholangitis (PSC) and Cholangiocarcinoma (CCA). The company also developed a rich therapeutic product line, including the products for inhibiting influenza viral infection, for inhibiting Human Papilloma Viral infection, for the treatment of several cancers covering breast, lung, brain blastoma, colon in different developmental stages. Dr. Lu graduated from University of Science and Technology of China (BS), University of Illinois (PhD) and Johns Hopkins University Carey Business School (MBA), and has been working with targeted medicine R & D for more than 20 years.

Speakei

#### Topic: The Future of Biopharmaceutical Industry – The Future is Here

#### Abstract

Thousand Oaks Biopharmaceuticals group ("TOBIO") vision is for global affordability and accessibility of quality biologics. TOBIO will do this through dedicated contract research, development and manufacture of biologics (CDMO), cell culture media manufacturing, and bioreactor equipment development. We will share the changes in biopharmaceutical landscape and the impact to China and the rest of the world. We will share why we must accelerate the development of biopharmaceuticals, reduce the current duplication of construction and waste of resources with improved efficiency.

Today, given the strong government and investment commitment, China's biopharmaceutical landscape is evolving in the same way as how the semi-conductor fabrication and electronic manufacturing industry evolved during the late 90s. Foxconn, for example, has become the notable leader that provides diversified contract manufacturing solutions to global electronic companies. The bioproduction chain is likely to progress upward and evolve into highly specialized and systematic biomanufacturing which is creating new opportunities for companies to compete on a global stage. China will usher in the golden age of biomedicine. This new biomanufacturing landscape will bring affordable, accessible, quality biologics to patients worldwide so that everyone can realize their fullest potential. The future is Here.

#### Biography

Dr. Shun Luo is Founder and President of Jianshun Biosciences Co., Ltd. and Thousand Oaks Biopharmaceuticals Co., Ltd. Dr. Luo has more than 25 years of experience in biopharmaceutical and biotechnology industries. He started his industry career as Principal Investigator at Ares Serono Group. Later Dr. Luo worked for Beckman Coulter, JRH/SAFC Bio, Genentech, and Amgen with increasing responsibilities of scientific staff and executive management team. His career spans from discovery research, to technology and product development, to late stage process development, and to commercial operations. Dr. Luo founded GeneXP Biosciences in Boston with VC funding.

Dr. Luo got his Ph.D. in Microbiology and Immunology from Virginia Tech. He was trained as a postdoc at the Department of Biological Chemistry and Molecular Pharmacology, Dana-Farber Cancer Institute, Harvard Medical School.

In 2010, Dr. Luo was awarded Science and Technology Innovation award at Amgen (for his work on Mab productivity of 11g/L at 2000 L scale). He also led a team at Jianshun Biosciences achieved an ATF-based perfusion process at 1.5 g/L/day productivity recently.

Dr. Luo is an inventor of more than 10 U.S. patents, including Gene for Fc y RIII Polymorphic Isoforms (4 US Patents issued, 7 Patents pending). Dr. Luo published more than 20 papers in peer reviewed journals and publications. He is often invited speakers at national and international professional venues.

#### Jing Ma, Ph.D.

President of Shanghai InnoStar Bio–Tech Co. Ltd (National Shanghai Center for New Drug Safety Evalu– ation and Research)

#### Topic: Strategy and challenge of Non-clinical evaluation for Cell Therapy Products

#### Biography

現任上海益諾思生物技術股份有限公司董事長,國家上海新藥安全評價研究中心研究員。兼任 CFDA 新藥審評專家及 資深 GLP 檢查專家,仿制藥質量和療效一致性評價專家委員會委員,環境保護部化學物質環境管理評審專家委員會評 審專家,擔任中國藥理學會藥物毒理專業委員會主任,中國藥學會藥物安全評價專業委員會副主任,中國毒理學會第六 屆理事會常務理事兼副秘書長,中國毒理學會藥物毒理與安全性評價專業委員會委員,上海市藥理學會第六屆理事會副 理事長,上海藥理學會毒理毒理專業委員會主任等職務。30 多年來一直從事藥理、毒理學研究,先后主持承擔國家"863"、 "十一五""十二五"重大新藥創制重大專項、國際自然科學基金等 2 多項課題,發表論文 100 余篇。 <u>Mao Mao, Ph.D.</u> CEO, SeekIn

#### Topic: How can cancer mortality be reduced by early detection?

#### Abstract

Despite the significant increase of our knowledge about carcinogenesis and recent successful development of innovative cancer drugs, including targeted therapies and immunotherapies, cancer mortality has only slightly decreased in the past decades. Cancer early detection is probably the most cost-effective means to reduce cancer mortality as prognosis is much better when cancer is detected and treated at the early stage. Recently companies like Grail and academic labs have demonstrated that blood-based mutation detection approaches may be effective to identify asymptomatic cancer patients from general population. In this talk, I will provide an overview of current cancer early detection methods, and present a few technological advances including integrative approaches using multi-omics data that may hold promise for developing more effective and accurate cancer early screening tests. Regulatory and economical challenges will be addressed as well.

#### Biography

Dr. Mao Mao is CEO of SeekIn, a start-up focusing on cancer early detection. He was CSO of BGI Genomics Inc, responsible for R&D pipeline and oncology business. He is also Adjunct Professor of several universities in Asia. He was Senior Vice President of Translational Bioscience and Diagnostics at WuXi AppTec. He was President of Asian Cancer Research Group (ACRG), an independent not-for-profit organization jointly established by Eli Lilly, Merck and Pfizer. He led biomarker and molecular diagnostics efforts at Oncology Research Unit in Pfizer, and also worked with the academic and industry partners to generate large scale cancer genomics data. He was Director of Molecular Profiling & Pharmacogenomics at Merck Research Laboratories. He worked on biomarker discovery and coordinating extensive collaborations with academic institutions and industry partners to promote personalized cancer therapy in Asia Pacific region. During his early years with Rosetta/Merck, he made significant contributions to the Ink Jet DNA microarray technology development and subsequent applications. He was one of the inventors of the breast cancer prognosis test (MammaPrint) for the 70 genes identified from the study with his colleagues at Rosetta and the Netherlands Cancer Institute, which became the world's first In Vitro Diagnostic Multivariate Index Assay (IVDMIA) to acquire market clearance from the US FDA in 2007. As one of the founding members of the National Human Genome Center in Shanghai, he established the first high-throughput DNA sequencing facility and pioneered genome research in China. He published 90+ articles in the peer-reviewed journals including Nature, Cell, Nature Genetics, Nature Biotechnology and PNAS, and chapters of two books. He is a strong advocate of genomics and health data sharing.

Dongyao Ni, Ph.D. Chief Medical Officer of Immvira Co., Limited

#### Topic: Development of New Generation Oncolytic Virus and Future Prospect

#### Biography

上海第二醫科大學臨床醫學系(現上海交通大學醫學院)畢業后從事外科專業六年。2000年赴美,先后在普林斯頓大學和芝加哥大學從事免疫學的科研和管理工作。期間在 JEM 和 PNAS 參與發表了數篇文獻,同時也參與了包括 Gilead 公司在美國進行的數個臨床研究。

2015年回國參與了深圳市亦諾微醫藥科技有限公司的創建,主要是負責公司疱疹溶瘤病毒的臨床前和臨床研發。2015年作為團隊領頭人獲得深圳市孔雀團隊的資助,并獲得深圳市海外高層次B類人才的稱號。目前是深圳羅茲曼轉化醫學研究院的副院長,深圳市亦諾微醫藥科技有限公司的醫藥總監兼首席醫學官。

#### Topic: New Immunomodulatory Targets and Next Generation Active Immune Checkpoint Control Immunotherapy

#### Abstract

Despite the success of immunomodulatory antibodies in immuno-oncology, challenges remain in expanding the target space, developing next-generation immune checkpoint inhibitors and active immune checkpoint control immunotherapy with improved efficacy and safety, and addressing innate and acquired resistance to immunotherapy. This presentation focuses the leading immunomodulatory pathways as well as therapeutic targets we have identified in B7 superfamily members: B7-H1(PD-L1), B7-H2(ICOSL), B7-H3 and B7-H4, TNF ligands and receptor superfamily : Blys (THANK ), DR3(TNFR25), DR4, DR5, DR6, GITR (AITR, TNFR18), GITRL, TR2, LIGHT, TR6, TL1A, RANK, TNFRSF19, RELT, TR1(DcR3), DcR1and DcR2, Siglecs family: Siglec 5, 7, 8, 9, 10, 11, and Galectin family: Galectin 9, 10, 11, 12.

This talk will also discuss the next generation active immune checkpoint control immunotherapy based on a Specific Total Immune Remodeler Platform which have demonstrated the ability to activate and use the full potential of the patient's own immune system to eradicate cancer and is able to induce the killing of tumor target expressing cells by simultaneously activating all possible immunological pathways (humoral and cellular), thus, succeed in controlling all the relevant immune checkpoints that prevent the immune system from attacking and defeating cancer. Whereas current passive checkpoint specific immunotherapy lacks tumor cell specificity with the risk of massive autoimmune reactions, this new active therapy is totally tumor target specific.

#### Biography

President of R & D and CSO, Nuance Biotech Inc., Vice President, Biotechnique Association of Jiangsu; Chairman, Committee of Interferon and Other Cytokines, Executive Director, Chinese Society of Microbiology; Chairman, Committee of Medicine and Pharmceuticals, Co-Chairman, Committee of Key Laboratory of Antibody Technique, Ministry of Health; Vice President, Shanghai Society of Biotechnology. Received many honors and awards, such as The National Science Fund for Distinguished Young Scholars, Award for national outstanding returned scholars, Second Prize of National Science and Technology Progress Award, Outstanding Achievement Award for Chinese Biopharmaceutical Association, USA, Privileged expert of China Department of State, Shanghai excellent returned scholars, Scientific foresight advisor for Shanghai government, Award for JiangSu Leading Talent, Award for Innovative R&D Team Leadership of Guangdong Province. He is currently a Visiting Professor of Shanghai Jiao Tong University, Second Military Medical University and Nanjing Medical University.

Dr. Jian Ni obtained his M.D. from Second Military Medical University and Ph.D. from University of Cambridge. Dr. Ni was a Post-doctoral Fellow at the National Cancer Institute and University of California, Irvine. He is an American Society of Clinical pathologists board certified Specialist in Immunology. Dr. Ni was a Senior Scientist of Human Genome Sciences, Inc., and has many years of experience in biomedical research, immunology, oncology and protein chemistry, and industrial experience in functional genomics, therapeutic protein and antibodies discovery and development. He has published more than 117 scientific articles in top scientific journals (IF >600), Inventor of 251 issued US patents, 2 FDA approved antibody drugs and 8 antibody drugs in clinical trials were based on these inventions. First identified or published or patented several B7 superfamily members, such as B7–H1(PD–L1), B7–H2(ICOSL), B7–H3 and B7–H4, TNF ligands and receptor superfamily members, such as Blys (THANK ), DR3(TNFR25), DR4, DR5, DR6, GITR(AITR, TNFR18), GITRL, TR2, LIGHT, TR6, TL1A, RANK, TNFRSF19, RELT TR1 (DcR3), DcR1and DcR2, Siglecs family: Siglec 5, 7, 8, 9, 10, 11, and Galectin family: Galectin 9, 10, 11, 12. 4–1BB and MyD88 are used in CAR–T. A few apoptosis related genes discovered by Dr. Ni and his collaborators were reviewed by Science Journal as top ten breakthroughs of the year 1996.

#### Ronald Pong Smart City Consortium – IT Governance Committee Chairman

#### Topic: Health Care IOT Security

#### Abstract

Samrt City, Smart Criminal. What IOT is? and How we use it in Health Care environment? What is happening around us? May I ask you some questions? Do you know easy to learn hacking IOT device? May I ask you more questions? There is a reason why Health Care IOT device easy to be attacked. Testing and Evaluation, Identity and Traceability, Monitoring and Investigation. Do you know we have a existing security mechanism can help to solve those problem?

#### Biography

龐博文擁有二十二年信息安全行業經驗, 曾擔任各類信息安全相關職稱, 包括信息安全咨詢顧問, 計算機取證及調查人 員及計算機犯罪專家證人, 企業信息系統管治及監控專家, 內審風險監控管理專家, 大學計算機信息安全講師, 信息安 全專家, 古典密碼學家等職位。龐博文曾服務機構包括四大審計師行之安永會計師事務所及安達信會計師事務所, 香港 特區政府質量保證據, 香港大學專業進修學院等機構。精通各類信息安全技術相關之專業知識及各國(企業管治, 計算 機罪行) 法例法規及發證搜集流程, 模擬攻擊測試準則及其相關之審計及報告技術等。

龐博文現職 Nexusguard Consulting 首席執行官, Nexusguard 集團于 2015 年 9 月至今持續獲選為世界網絡安公司 500 強第 24 位。在 2013 年 8 月 1 日于中華人民共和國國家知識產權局,美國專利局及歐洲專利局成功申請"帶互動 顯示屏的耳機"(穿戴式計算機)專利。

在過去十年龐博文亦作烏講師任教于香港品質保證局,香港大學專業進修學院和香港金融管理學院,中國國家行政學院。

<u>Nikolay Sergeev, Ph.D.</u> Founder and CTO, AlteraBio

#### Topic: Liquid biopsy: promises and current challenges

#### Abstract

Liquid biopsy is a non-invasive alternative to surgical biopsies with a great promise in cancer diagnostics, therapy selection and monitoring. Different liquid biopsy tests target different biomarkers, such as cfDNA (ctDNA), RNA (mRNA, miRNA, IncRNA), proteins, exosomes and circulating tumor cells (CTCs) in various bodily fluids including blood, urine and saliva. A variety of well-developed molecular methods such as: NGS, qPCR, ddPCR, Sanger sequencing, microarrays, bead arrays and others can be used to interrogate various biomarkers with high sensitivity and specificity. Recently, in 2016, the FDA approved the first liquid biopsy test for detecting EGFR alterations to aid physicians in identifying patients who may benefit from a targeted therapy. This new test enables access to precision medicine for patients, which are too ill or are otherwise unable to provide a tumor specimen for genetic testing, and thus benefit from a better available treatment.

#### Biography

Dr. Sergeev is an experienced R&D leader with > 15 years of experience in the research and development of molecular assays for genetic analysis. Prior to AlteraBio, Dr.Sergeev has held key R&D positions at Diacarta, Theranos, Natera, Guardant Health and Applied Biosystems. Dr. Sergeev is a strong technical leader with a track record of successful launches of qPCR assays and NGS LDTs such as Guardant360. The portfolio of launched products includes validated assays and workflows for regulated markets such as Food Safety analysis, Animal Health, Pharma analytics and IVD.

Dr. Sergeev has published over 10 peer reviewed papers and book chapters, and he is a co-inventor of several patents at Applied Biosystems and Natera.

Dr. Sergeev received his M.S. in Biotechnology from Moscow Academy of Fine Chemical technology and his PhD in Bioorganic Chemistry from Russian Academy of Sciences.

Sitong Sheng, Ph.D.

Founder, Considerin Group, HYK Gene Technology Co. Ltd

#### Topic: NGC accelerates precision medicine

#### Abstract

Precision medicine describes the ability to tailor therapies to a patient' s individual needs by examining their particular physiology, genome and environment. As a new medical model, precision medicine is a combination of modern science, technology and traditional medical methods. Relying on the development of high throughput sequencing technology and various genomics technologies, individualized treatment will lead to lower costs, fewer side effects, and better outcomes, therefore, it has inevitably become the trend of future medicine. In recent years, with the continuous development of high-throughput sequencing technology has showed significant promise and has been playing an important role in various clinical; applications. China is a country providing unique opportunities for research, including a varied geography and a large population presenting with many different diseases, both common and rare. Furthermore, the government is clearly a strong proponent of precision medicine, supporting it financially through numerous initiatives and also through policy changes at a national level. There is no doubt that, as a fundamental part of the precision medicine, high-throughput sequencing will soon be a routine clinical procedure of precision medicine and will play its greatest role in helping public health.

#### Biography

盛司潼,康昕瑞集團總裁兼首席科學家,幷創辦了深圳華因康基因科技有限公司、深圳市華因康高通量生物技術研究院 及全國各地多家分支機構。14歲就讀于淸華大學應用物理系,在美國弗吉尼亞大學醫學院攻讀碩士和博士,隨后受邀 在美國約翰霍普金斯大學醫學院做博士后研究。首批國家"千人計劃"專家、國家特聘專家、國家標準咨詢委委員、全 國生化檢測標準化技術委員會(TC387)組長、中國靑年科技工作者協會理事、中國中醫藥信息研究會中醫藥基因分會 會長、中國基因測序技術與產業聯盟產業委員會主任、廣東省創新創業團隊帶頭人、"廣東靑年五四獎章集體"帶頭人、 深圳市國家級技術領軍人物、"深圳市靑年科技人才協會"常務副會長、深圳市海外高層次人才(孔雀計劃)A類人才、 深圳大學特聘教授。

長期從事國際基因測序前沿技術研究,實踐國產基因測序設備"從0到1",幷將基因科技成功應用于醫療健康領域。 擁有400多項發明專利,承擔多個國家"863"計劃項目,牽頭起草了基因測序領域第一個國家標準,幷在多個國際級 刊物上發表學術論文。 Diana Viola Chief Executive Officer, PharmaBoardroom

#### Topic: GBA biotech and medical technology

#### Abstract

On the ground in the Greater Bay Area: the aspirations and realities of healthcare and life sciences in the Greater Bay Area. With her decades' experience covering leading healthcare markets globally across Switzerland, France, Singapore, Japan, Canada, Brazil, Mexico, and so on, and interviewing industry CEOs from the global top 50 and beyond, Diana will share her insights on the global perception of the 'Greater Bay Area' concept, break down its value proposition for the global healthcare and life sciences industry, the operational challenges that still exist, as well as discuss how executives on the ground can leverage the opportunities within the Greater Bay Area to take their business international.

#### Biography

Diana Viola is CEO and cofounder of PharmaBoardroom.com, a global platform for high-level dialogue between government authorities and regulators, C-level industry executives, financial investors and other key stakeholders, as well as Healthcare and Life Sciences Review, comprehensive digital reports covering various healthcare markets and industry thematics. In total, both platforms reach over 53,000 global industry stakeholders across the entire value chain from R&D, manufacturing, and marketing and sales, to supply chain distribution, logistics and other services. Over the past 15 years, Diana has been committed to driving global engagement on relevant industry topics, trends and debates, sharing best practices across international markets, and advocating for collaboration and innovation within the healthcare and life sciences industry.

Chief Strategy Officer for Alliances and Partnerships National Foundation for Cancer Research (NFCR)

#### Topic: Developing Sustainable Support for Translational Cancer Research

#### Abstract

The National Foundation for Cancer Research (NFCR) was founded in 1973 by Nobel Laureate Dr. Albert Szent–Gyorgyi and retired lawyer–entrepreneur Franklin Salisbury, Sr. to provide seed funding and sustainable support for "high–risk/high–reward" cancer research. NFCR research funding promotes and facilitates world–wide collaboration among scientists to accelerate the translation of discoveries from laboratory bench to patient bedside.

However, the translational research takes time and needs sufficient funding to advance. The standard time for new cancer treatments to get approved by FDA is between 7 –15 years from conception to the market. Early in this long journey, there is a period of time known as the "Valley of Death" – where many potentially groundbreaking ideas are abandoned due to lack of sustainable funding. Many of the promising drug candidates have never had a chance to advance into the clinical phases. Patients are in urgent need of new treatments, but the scientists who are supposed to do research on the new therapeutics are forced to spend their precious time to look for funding everywhere with very low rate of success. This situation has to change.

To address these challenges, NFCR has initiated an oncology translational research program AIM HI, which provides enhanced and sustainable funding support for early stage projects to bridge the gap between the research and early stage clinical development of novel cancer therapeutics and diagnostics. AIM HI funding would provide the critically needed support to scientist- and physician-entrepreneurs to push the projects quickly moving out of the Valley of Death and advancing into the clinical stage, where larger funding will be attracted to enable them reaching the development finish line. Projects that achieve commercial success will have returns to NFCR for re-investing to AIM HI and accelerating the pace of future project funding.

NFCR is looking for partnerships of all kinds in Hong Kong. Anyone motivated to be part of this impactmaking initiative is welcome to join the force with us. Together we will be able to do a better and greater job in supporting innovative, patient-benefiting cancer research to save lives in the world.

#### Biography

Dr. Michael Wang is responsible for developing corporate strategies and forming critical alliances, partnerships and collaborations with organizations and corporations in both academic and industrial communities to fulfill NFCR's mission of "Research for a Cure".

Prior to the current position, Dr. Wang has served as the Chief Science Officer for many years, where he initiated multiple new research projects and international collaborations, coordinated grant reviewing activities with the Scientific Advisory Board and managed all aspects of NFCR's research programs operated at 9 discovery centers and 30 plus laboratories in the US, UK, Germany and P.R. China.

Currently, Dr. Wang is focusing on the newly created AIM HI program, which uses a new self-sustainable funding model adopted by non-profit organizations to fund promising early stage oncology projects initiated by startups and help them quickly moving out of the "Valley of Death" to reach the clinical application phase. Through proactive partnerships with universities, government and private investors, pharma and

biotech companies and the top players of all areas gathered within NFCR's global network, Dr. Wang has been working with NFCR leadership team to continue optimizing the process of AIM HI program and funded several projects by leveraging the combinational power of traditional research funding and the "ever green" recoverable grants.

Dr. Wang also serves as a member of Scientific Advisor Board for the Hong Kong based Asian Fund for Cancer Research (AFCR). He is actively involved in identifying, promoting and supporting the opportunities of research collaboration between scientists in Asia, US and Europe to maximize the value of global resources in advancing cancer research.

#### Yu Wang, M.D., Ph.D.

Advisory Committee member of China's New Urbanization Research Experts, Tsinghua University 清華大學中國新型城鎮化研究院健康城市研究中心 (中國疾病預防控制中心原主任)

Topic: 經濟轉型期中國的生物醫藥產業前景

#### Abstract

隨着中國內地經濟社會快速發展,人們生活水平提高,社會民生領域需求和供給能力都上升到一個高水平。基于經濟短 缺條件建立的醫療衛生產品和全民保障服務,無論品種數量或質量都已經不能滿足公眾多樣化需求。以疫苗為典型代表 的醫藥品種,面臨着使用的風險效益和支付渠道等的更新換代、個體化應用的市場拉動力。轉型的中國給新一輪醫藥產 品研發和市場帶來了巨大空間。

#### Biography

王宇,研究員、博士生導師,原中國疾病預防控制中心主任。兼任中華預防醫學會副會長,中華醫學會常務理事和醫學 病毒學分會主任委員,國務院應急專家組成員。在國際上,擔任國家公共衛生機構國際聯盟執委,世界衛生組織《國際 衛生條例》和流感大流行評估委員會成員。現任淸華大學中國新型城鎭化研究院專家顧問委員會委員。

# Programme

President of Sino–American Pharmaceutical Professionals Association Greater Philadelphia Chief Executive Officer of NeuExcell Therapeutics Inc.

#### Topic: A transformative gene therapy for neurodegenerative diseases

#### Abstract

Neurological diseases such as brain injuries and neurodegenerative diseases are becoming the world's newest epidemics. Currently, there are no effective treatments that can reverse or halt the progression of neurodegenerative diseases such as ALS and Alzheimer's disease. Likewise, current treatments for brain injury such as stroke have short treatment window and limited efficacy.

In neurodegenerative or acutely injured brain, neural cells die while glial cells, a group of supporting cells surrounding neurons such as astrocytes, are activated and proliferate. NeuExcell's proprietary and patented in vivo cell conversion technology regenerates neurons from glial cells in diseased central nervous system. NeuExcell is developing two platform technologies, gene therapy and small molecule therapy, to treat a variety of neurological disorders including stroke, Alzheimer's disease, ALS, spinal cord injury, Parkinson's disease, and Huntington's disease. Using AAV-based gene therapy technology, reactive glial cells inside the injured brains can be efficiently (~90% efficiency) converted into functional neurons and restore lost brain functions. We have further developed small molecule-based therapy that effectively converts human glial cells (67%) into functional neurons with a small molecule cocktail (patent issued in 2017). We have obtained solid preclinical proof-of-concept validation in mouse and monkey models of ischemic stroke. NXL-AAV001, a AAV-based gene therapy not only converts astrocytes into new neurons, but also protects existing neurons from inflammation-mediated secondary injury. Newly generated neurons are functional and able to incorporate into existing neuronal network. NXL-AAV001 reverses behavioral deficits induced by ischemic stroke. Phase I/II clinical trial to test the safety, tolerability, behavior and imaging biomarker improvement of NXL-AAV001 gene therapy is planned to take place in 18 months.

#### Biography

Dr. Zhenhua Wu is a senior discovery and development leader with more than 20 years' experience and a deep understanding of the R&D value chain. He is currently the CEO of NeuExcell Therapeutics. Previously he was the Vice President, Head of Preclinical Development of United Neuroscience, overseeing strategy and execution of preclinical research and development. Prior to UNS, he was Director of Neuroscience Therapeutic Area at GlaxoSmithKline, where he served as a global project lead focusing on therapies for neurodegenerative and neuroinflammatory diseases. He was responsible for directing virtual drug discovery pipeline through partnering with external groups, such as biotech, academic groups and CROs, toward to proof-of- concept studies. Dr. Wu had worked in various functional areas in Merck & Co. for ten years where he led various neuroscience projects and delivered several preclinical candidates and served as a global externalization lead. Zhenhua received his Ph.D. degree in neuroscience from University of Rochester and M.S. degree in cell biology from Shanghai Institute of Cell Biology, Chinese Academy of Sciences. He has published extensively in the field of neuroscience including publications in prestigious journals such as Nature, Nature Medicine, Neuron and Stroke. He is also a recipient of Hugh Davson Distinguished Award in Neurovascular Biology. Zhenhua serves as the President (2017–2018) of Sino-American Pharmaceutical Professional Association - Great Philadelphia (SAPA-GP).

#### Liedong Xu, MBA

President and Chief Executive Officer of Rundo International Pharmaceutical Research & Development Co., Ltd.

#### Topic: The Important Role of CROs in New Drug Development

#### Abstract

With the recent surge in new drug development and the ever increasing complexity of clinical trials, the success of clinical trials depends on how to best utilize funding, resources, and time. CRO industry plays an important role in helping China biotech companies to overcome shortage of resources, complexity in trial management, and on time delivery of projects.

隨着中國新藥研發的高速增長和臨床試驗難度的增加,臨床試驗的成功更加依賴于如何有效地利用資金、資源和時間。 CRO 行業可以在幫助新藥研發公司克服人力資源短缺、項目管理復雜、時間交付緊迫方面,提供重要的支持。

#### Biography

Mr. Liedong Xu has more than 27 years of experience in the pharmaceutical and CRO industry. In US and China, he has worked in progressive roles in MSD, Allergan, Abbott, Santen, Merck Serono, Quintiles, WuXiPRA, Covance, and Rundo. He is a member of Clinical Data Management of China Group (CDMC), and a member of China Steering Committee of Society for Clinical Data Management. He received his MSE in Computer Science from University of Pennsylvania, USA and his MBA from University of Maryland, USA.

徐列東先生在中美醫藥及 CRO 行業工作 27 余年,包括默沙東、艾而建、雅培、参天、默克雪蘭諾、昆泰、康德保瑞、 科文斯、和潤東等公司。他是中國臨床數據管理學組成員,國際臨床數據管理學會中國指導委員會成員。他在美國賓夕 法尼亞大學獲得 MSE 學位,在美國馬里蘭大學獲得 MBA 學位。

#### Topic: Enhancing Hong Kong's Listing Framework

#### Abstract

In this presentation I will talk about the listing regime for biotech companies. Eugene joined the Exchange in 2013 and is Co-Head of the IPO Vetting team within the Listing Department of Hong Kong Exchanges & Clearing Limited (HKEX). He manages a team of 70 staff and oversees the applications process for new equity listings including transactions by listed companies deemed to be new listings, issuance of guidance, formulation of IPO policies and vetting prospectuses.

Prior to this he was a seasoned banker with more than 15 years in the finance and banking industry where he had roles in equities research, sales and proprietary trading. In 2010–2013, he was a Director and head of the highly rated small cap research team at Deutsche Bank. Prior to that he was part of Saba Principal Strategies, a proprietary trading unit of Deutsche Bank. He has a bachelor's degree from the University of Melbourne.

#### Biography

Eugene joined the Exchange in 2013 and is Co-Head of the IPO Vetting team within the Listing Department of Hong Kong Exchanges & Clearing Limited (HKEX). He manages a team of 70 staff and oversees the applications process for new equity listings including transactions by listed companies deemed to be new listings, issuance of guidance, formulation of IPO policies and vetting prospectuses.

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#### Zhaoyang Ye, Ph.D. CSO, Hai Kang life Corporation Limited

#### Topic: Multiplexing Molecular Diagnostics for Point-of-Care Application in Infectious Disease

#### Abstract

Infectious diseases remain a serious threat to the world today, as they are responsible for approximately 25% of all deaths worldwide. The World Health Organization (WHO) estimates an economic loss due to pandemics of over US\$ 60 billion per year. The number and frequency of pandemic outbreaks around the world are rising and more and more new and dangerous infectious diseases are emerging. To counter infectious disease, diagnosis is critical to surveillance and treatment. Current diagnostics has limited capability leading to slow, incorrect and/or expensive diagnosis and sub-optimal treatment. Thus, fast and effective diagnostic tools are urgently needed. On top of this, infectious disease in nature often can be associated with multiple pathogenic species. A multiplexing molecular diagnostics that can simultaneously detect dozens to hundreds of genetic targets has great advantages to achieve fast and effective diagnosis, especially in Point-Of-Care (POC) testing.

#### Biography

Zhaoyang Ye, Ph.D., has around 20 years' experience in both academia and industry in bioengineering. He received Ph.D. from University of Tennessee in pharmaceutical science and conducted his postdoctoral training at Johns Hopkins University, He is currently the Chief Scientific officer of Hai Kang Life Corporation Limited. Hai Kang Life is a pioneering molecular diagnostics(MDx) company dedicated to revolutionizing clinical diagnostics and provides platforms for point of care(POC) applications focused on personalized medicine and surveillance of emerging pathogens and diseases.

Ken Kin-Lam Yung, Ph.D.

Executive Associate Dean of Graduation School, Hong Kong Baptist University

#### Topic: Neural Stem Cell Technology as a potential treatments of Neurodegenerations

#### Abstract

Cell replacement therapy is now considered as a potential direction in development of novel treatments for degenerative diseases. Previously, we have achieved a novel cell harvesting technology in order to harvesting neural stem cells from a live brain (Lui et al., Angew. Chem. Int. Ed., 52, 12298 –12302, 2013). We have successfully performed in live subjects for the neural stem cells harvest by applying specific designed magnetic iron oxide nanoparticles. We then subsequently created a growth factor-free cell-processing inorganic anomatrix for cell differentiation and maturation of the neural stem cells into functional neurons. We showed that the differentiated neurons are fully functional and they are capable to survive and repair of the damaged brains. These all together indicate that the autologous neural stem cells can be processed into cell replacement treatments of neurodegenerative diseases including Alzheimer' s disease. This autologous approach leads us to develop a new tailor-made personalized autologous cell replacement therapy for patients with neurodegeneration in the future. Advancements of neural stem cell technology is therefore having great potential in clinical applications.

#### Biography

Professor Ken K.L. YUNG received his DPhil from the University of Oxford, UK in Neuroscience. He then joined the Hong Kong Baptist University and started his lab. His current research mainly focus on the causes and treatments of neurodegenerative diseases. Recently, his lab has developed a US patented nanomaterial-based technology for harvesting autologous neural stem cells from the brain of living subjects. This unique technology forms an important basis for personalized neural stem cell replacement therapy for patients with neurodegenerative diseases. In addition, his research team has also pioneered in nanomaterial-based cell differentiation device that can minimize the risk of tumorigenesis for stem cell therapy. These technologies have won international innovation awards including a Gold Metal and a Gold Medal with Congratulations of Jury at the 44th and 46th International Exhibition of Inventions of Geneva respectively. Professor Yung has published so far over 120 SCI journal papers and has 3800 citations with H-index of 34. Professor Yung serves as the Executive Associate Dean of Graduation School and he was the Associate Head of Department of Biology and sat on the Advisory Board of School of Chinese Medicine in Hong Kong Baptist University. Professor Yung is also the current President of The Hong Kong Movement Disorder Society, Vice Chairman of Hong Kong Biotechnology Organization, Vice President of the Hong Kong Society of Neurosciences and Council member of the Hong Kong Brain Foundation.

Venture Partner, Lilly Asian Ventures (LAV)

#### Topic: How to attract investments from Venture Capitals

In this presentation, I will talk about what venture capitals look for when investing in a biotech start-up company.

#### Biography

Dr. Jimmy Zhang is a Venture Partner at LAV (Lilly Asian Ventures). He was former Vice President (global level), Transactions, Johnson & Johnson Innovation. He led the transactional and partnership management activities and strategy in Asia Pacific region in pharmaceuticals, medical devices & diagnostics and consumer products, as well as fund relationship and partnership in the region. Before joining J&J, Jimmy was the Managing Director, MSD Early Investments – Greater China at Merck & Co., and a member of Merck Research Lab (China) Senior Leadership Team. He was in charge of Merck's venture capital investments, licensing, acquisitions, external research collaboration, and alliance/partnership management in Greater China. He was also a Board Director of BeiGene (Beijing) Co, Ltd. (NASDAQ: BGNE) and an Advisor Board member of Cenova Ventures.

Jimmy was a Senior Vice President at Synergenics, LLC, a professional service and venture firm founded and led by Dr. Bill Rutter, one of the founding fathers and pioneers of the biotech industry. Synergenics invests and manages early-stage companies in drug discovery in small and large molecules, vaccine, gene therapy, diagnostics, and healthcare IT. Jimmy was responsible for the investment, business development and operations of Synergenics and some of its portfolio companies, and their businesses in China. Jimmy was previously a consultant at McKinsey & Company, a registered patent agent in the Palo Alto office of Morrison & Foerster, managing director of cross-border investment at CL Investment Group and President and CEO of CL Life Sciences (Shenzhen) Ltd., and a project manager at Chiron Corporation (now part of Novartis). Dan Zhang, M.D., MA, MPH,

Executive Chairman, Fountain Medical Development Ltd.,

#### Topic: Product Development and IPO in the Era of ICH

#### Abstract

This presentation will highlight the impact of ICH to the product development scheme in Greater China area, and its implied risk/reward for the new drug portfolio and its implication to the IPO in Hong Kong in US.

Since CFDA became a member of ICH, a series of ICH compatible policies and guidelines have been issued by CFDA. These changes have made China an integral art of the global pharmaceutical & biotech market. Because of this dramatic change, the valuation of biotech/pharmacetical R&D portfolio should be in-line with US & EU market, and the drug regulatory and development planning would have to take a global view, meaning a unified global drug regulatory and development planning has to deal with simultaneous NDAs in US, EU, Japan and China by taking full advantage of ICH guidelines. This is also the best way to deal with the negative impact from CFDA's decision of recognizing foreign clinical and CMC data.

#### Biography

方恩醫藥發展公司是一個能夠全方位提供臨床新藥開發服務的外包服務組織(CRO)。現有員工 1700 人,分布在中國, 美國,日本,英國,印度,南韓等 11 個國家和地區。

之前張丹在意大利 Sigma-Tau 公司全面負責其北美市場的臨床開發及藥物安全性評價。在此之前,張丹為美國昆泰集團公司(Quintiles Transnational Corp.)開創了大中國區市場,任其第一任大中國區董事長。

張丹于 1981-1984 年在北京大學生物系醫預科就讀,并在 1984-1989 年在北京協和醫科大學學習臨床醫學幷獲醫學博 士學位,然后先后在哈佛大學公共衛生學院,賓州大學沃頓商學院等院校進修醫院管理,經濟學及金融學等,獲公衛碩士、 醫院管理碩士及在讀金融學博士。

張丹是中組部"千人計劃"生物醫藥國家特聘專家,幷任"千人計劃"專家聯誼會秘書長(第一,二屆)。中國醫藥創 新促進會藥物研發專業委員會主任委員(第一屆)及新藥服務專業委員會副主任委員(第一屆)。曾任美中生物醫藥科 技協會(CBA)會長,美中藥物專業協會(SAPA)執行董事,百華協會(Bayhelix)董事。現任任國家"十三五"重 大新藥創制計劃責任專家,幷參與國家食品藥品監督管理總局藥審中心的技術指南制訂,新藥臨床評審及藥審人員培訓 工作。目前擔任國際 ICH E19 IFPMA專家委員會組長, CFDA ICH 工作組專家。 Lan Zhang Ph.D.

Director of Drug Research at Xuanwu Hospital of Capital Medical University

#### Topic: Current situation and practice of Chinese Natural Medicine and New drug development of Traditional Chinese Medicine

#### Biography

藥理學博士,醫院藥事管理碩士,美國哈佛醫學院藥物政策研究博士后。首都醫科大學宣武醫院藥學部主任,國家藥物 臨床試驗機構副主任。教授、博士生導師。新世紀百千萬人才工程北京市級人選,北京市衛生系統"215"高層次衛生 技術人才 --- 學科帶頭人 (藥學)。兼任中國藥理學會常務理事、北京藥理學會副理事長、中國老年保健醫學研究會合 理用藥分會副主任委員,中國藥學會老年藥學專業委員會常務委員等職。擔任國家科技部重大專項、國家自然基金委、 國家藥品審評中心專家。

長期從事臨床藥學、臨床藥理及神經藥理研究,作為課題負責人承擔縱向課題 21 頃,其中 5 頃國家級課題,6 頃省部 級課題。作為 PI,承擔藥物 I 期臨床試驗 20 余頃。獲北京市科學技術一等獎 1 頃,國家科學技術進步二等獎 1 頃。獲 授權新藥國際發明專利 3 頃、中國發明專利 13 頃。已在國內外期刊發表論著近 200 篇,第一作者及通訊作者論文 60 余篇。

# roaramme

Senior Director of Pharmacokinetics and Bioanalysis at Shanghai InnoStar Bio–Tech Co. Ltd (National Shanghai Center for New Drug Safety Evaluation and Research)

#### Topic: Actuality, Challenges and Solution of Immunogenicity Evaluation

#### Biography

博士,現任上海益諾思生物技術股份有限公司(國家上海新藥安全評價研究中心)藥代及生物分析高級總監。博士畢 業于軍事醫學科學藥理學專業藥理學與分子生物學方向,碩士畢業于中國藥科大學藥理學專業藥物代謝動力學方向。 2006年至今,先后就職于上海恆瑞醫藥有限公司和保諾科技(北京)有限公司從事藥物代謝動力學研究工作,2014年 加入上海益諾思生物技術股份有限公司(國家上海新藥安全評價研究中心),負責生物技術藥物的藥代/毒代研究、生 物分析及冤疫原性分析等。在抗體藥物的生物分析、藥代/毒代研究和冤疫原性研究積累了豐富經驗。負責過約3000 個化合物的早期藥代動力學體外及體內藥動學篩選工作。 Jason Zhu, Ph.D. CEO of InnoMedi Inc.

#### Topic: iHeart - Long term Cardiac Patch - ECG Collection & Analysis

InnoMedi/深圳樂心平江科技有限公司是誕生于一家在硅谷的初創公司,公司的成員均曾在美國頂級的 IT 公司有多年 的工作經驗。公司正在開發一款醫療級別的可穿戴產品。核心技術是應用最先進的醫療級芯片,傳感器,以及自主設計 的軟硬件架構,研發用于測試心電的創口貼式長效(10-14天)可穿戴產品。公司目前已經申請了一系列的中國專利, 并于 2016 年 12 月與北京 301 醫院心電科合作對現有的原型系統進行了測試,其結果顯示 InnoMedi 的產品的信號采 集靈敏度要高于目前醫院使用的 Holter (GE)。公司的未來發展是着力于與醫療系統合作(醫院,體檢中心,健康中心, 社區醫院等等),建立完整的數據中心系統,在精準數據收集的基礎上,做大數據的挖掘開發和 AI 系統的研制。公司 已經于 2017 年 2 月拿了深圳松禾資本歷偉的種子輪風投,目前正在做第二輪融資。2018 年 5/20 開始與 301 醫院合作 開始對產品的臨床測試幷取得了完滿成功。同時將與中國人民解放軍總醫院簽署長期科研和商業合作協議。同時將在杭 州師範學院附屬醫院腦神經科主任盧曉東主任奉頭下,聯合浙江省內的著名三甲醫院,對心源性腦卒中的篩查做臨床研 究和試驗。目前產品已經進入到最后的產品化階段,同時也將開始 CFDA 的認證流程。公司的顧問組包括國務院參事 石定寰老師和中國醫藥設備工程協會副會長兼秘書長顧維軍老師。 NOTE



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