

# The Riyadh Global Medical Biotechnology Summit

KAIMRC successfully hosted its 12<sup>th</sup> annual global conference, dedicated this year to medical biotechnology, bioinformatics and biotherapeutics. Running from 14-16<sup>th</sup> of September, the Riyadh Global Medical Biotechnology Summit (RGMBS) 2021 brought together over fifty-five speakers from the local, regional and international biotechnology community including academic, industrial and governmental organisations to discuss developments in biotechnology in light of the COVID-19 pandemic.



**Dr. Bandar Al Knawy**  
Chief Executive Officer,  
Ministry of National  
Guard Health Affairs  
President, King Saud  
bin Abdulaziz University  
for Health Sciences and  
Summit President



**Prof. Ahmed Alaskar**  
Executive Director,  
King Abdullah  
International Medical  
Research Center and  
Summit Chairman



**Dr. Abdelali Haoudi**  
Head R&D Strategy and  
Business Development,  
Managing Director, Medical  
Biotechnology Park and  
Summit Vice Chairman

## Introduction to Riyadh Global Medical Biotechnology Summit 2021

Prof. Ahmed Alaskar, Executive Director, King Abdullah International Medical Research Center

**Developing a  
COVID-19 Vaccine  
for the World at an  
Unprecedented Pace**



**Sir Menelas N. Pangalos**  
Executive Vice  
President & President  
BioPharmaceutical R&D,  
AstraZeneca



**Mr. Walter Klemp**  
Chairman and CEO  
Moleculin, Inc.

## SESSION 1: Biotechnology for the Kingdom of Saudi Arabia: Challenges and Opportunities

Chaired by Prof. Ahmed Alaskar, Executive Director, King Abdullah International Medical Research Center

**Biotechnology in the Kingdom of Saudi Arabia: Challenges and Opportunities - Towards Better Alignment with the Saudi National Vision 2030**

Chaired by Prof. Ahmed Alaskar, Executive Director, King Abdullah International Medical Research Center



**Eng. Suliman Almazroua**  
CEO of the  
National Industrial  
Development and  
Logistics Program



**Eng. Nizar Al-Hariri**  
Chief Executive  
Officer, National  
Industrial  
Development  
Center



**Dr. Ashraf Allam**  
CEO,  
Pharmaceutical  
Investment  
Company



**Dr. Abdulrahman Alnuaim**  
Professor, physician,  
healthcare executive  
and pharmaceutical  
industry consultant  
at Ministry of  
Industry



**Dr. Pierre J. Magistretti**  
Director, KAUST  
Smart Health  
Initiative



**Dr. Elie Haddad**  
Senior Advisor  
& Project Lead,  
Riyadh Biotech  
City, Royal  
Commission for  
Riyadh City



**Dr. Malak Althagafi**  
Director of the  
General Directorate  
for the National  
RDI, King Abdulaziz  
City for Science and  
Technology

“We have learned that it is possible to streamline research that often takes 10 or 20 years into the space of a year.”

—Prof. Ahmed Alaskar  
Executive Director, King Abdullah International Medical Research Center and Summit Chairman

## SESSION 2: Biotechnology Parks/Clusters: Best Practices and Future Trends

Chaired by Dr. Abdelali Haoudi, Head R&D Strategy and Business Development, Managing Director, Medical Biotechnology Park. Co-chaired by Dr. Klaus Kleinfeld, Senior Advisor to the Ministry of Industry, KSA



**Dr. Klaus Kleinfeld**  
Senior Advisor to the Ministry of Industry, KSA



### The Munich Biotech Cluster: Turning Science into Innovation

**Dr. Horst Domdey**  
Chief Executive Officer, Biotech Cluster Development GmbH



### Medical Biotechnology as a Strategic Pillar for KSA Health and Economic Development

**Dr. Mehmood Khan**  
Chief Executive Officer, Hevolution Foundation



### Driving Biotech Success with Agile Entrepreneurs

**Dr. Richard Smith**  
Chief Operating Officer, Rockland Immunochemicals, Inc. USA



### Innovation and Intellectual Property at KAIMRC/KSAU-HS/MNG-HA

**Dr. Manal Alaamery**  
Head, Developmental Medicine, Chairman Innovation and Entrepreneurship KAIMRC, KSAU-HS, MNG-HA



### Structuring Incentives to Drive Biomedical Sector Growth

**Mr. Walter Klemp**  
Chairman and CEO, Moleculin Biotech, Inc.

## SESSION 3: Biotechnology Companies: Global Benchmarking and Partnerships

Chaired by Dr. Ronald DePinho, MD Anderson Cancer Center



### A Joint Journey into the Future: How Biotech and Academic Research Institutions Can Work Together to Foster Innovation

**Dr. Paul Rothman**  
Chief Executive Officer, Johns Hopkins University, USA



### Sporos Bioventures: A New Model for Biotech Creation and Development

**Dr. Ronald DePinho**  
Professor and Past President MD Anderson Cancer Center, USA



### How Bioentrepreneurship Works

**Mr. Brady Huggett**  
Business Editor, *Nature Biotechnology*



### The Gene Editing Institute at ChristianaCare: An Innovation Accelerator in a Regional Healthcare System

**Dr. Eric Kmiec**  
Founder and Director, The Gene Editing Institute, Helen F. Graham Cancer Center & Research Institute, Christiana Care Health System



### Open Innovation and Entrepreneurship

**Dr. Hitesh Sanganeer**  
Executive Director & Head of Emerging Innovations, AstraZeneca



### Biotechnology Development: Clinical Trials and Manufacturing

**Mr. Markus Peterseim**  
Managing Director, Alvarez & Marsal, Frankfurt, Germany



### Biotechnological Advances in Cardiovascular Disease Management: From a One to a Billion

**Dr. Philip Larsen**  
Senior Vice President & Head Global R&D, BAYER AG

## SESSION 4: Medical Biotechnology, Digital Medicine and Clinical Trials

Chaired by Dr. Ali Alessandro Ayach, Alvarez & Marsal



### Biotechnology and Clinical Trials; Adding More Complexity or Facilitating?

**Dr. Majed Al Jeraysi**  
Chairman, Research Office, Director, Clinical Trial Services, KAIMRC



### Real World Evidence in the Era of Digital Health: Opportunities and Challenges

**Dr. Ali Al Qarni**  
Head, KAIMRC- Eastern Region, Deputy Executive Regional Director-Medical Services, MNGHA



### Creating an Ecosystem to Harness Digital and Biotech Innovations for Precision Health

**Dr. Rifat Atun**  
Professor Global Health Systems, Director of Global Health Systems Cluster Harvard University, USA



### Re-imagine Patient Access to Expert Cancer Care in the Era of Digital Medicine

**Dr. Lynda Chin**  
President and Chief Executive Officer, Apricity Health LLC, USA



### Acceleration Clinical Trials in the Digital Era and Commercialization of Outputs

**Dr. Ali Alessandro Ayach**  
Senior Director, Strategy and Performance Improvement Alvarez & Marsal Dubai, UAE

## SESSION 5: Biosimilars and Biotherapeutics Development and Manufacturing

Chaired by Dr. Joshua LaBaer, The Biodesign Institute



### Natural Camelid Single Domain Antibodies as Potential Alternatives to Monoclonal Antibodies in the Next Generation Immunotherapy

**Dr. Hiep Tran**  
President and Chief Scientific Officer, Abzyme Therapeutics LLC



### New Methods for Cell-Free Presentation of Proteins for Functional Analysis

**Dr. Joshua LaBaer**  
Executive Director, The Biodesign Institute



### Developing Cell and Gene Therapies: Challenges and Opportunities

**Dr. Fouad Atouf**  
Vice President, Global Biologics, US Pharmacoepa, USA



### Creating a Biosimilars and Biotherapeutics CDMO Hub

**Mr. Markus Peterseim**  
Managing Director, Alvarez & Marsal, Frankfurt, Germany



**Dr. Waldemar Radziszewski**  
Executive Medical Director, Global Clinical Development, AMGEN

## SESSION 6: Vaccine Development and Manufacturing

Chaired by Dr. Jamila Louahed, GSK



### Biotechnology in Vaccine Development

**Dr. Hani Al Hashmi**  
Senior Medical Affairs Director, Pfizer, KSA



### Innovation in Vaccines

**Dr. Jamila Louahed**  
Vice President and Head, Global R&D, GSK



### Vaccine R&D in KSA: Experience and Challenges

**Dr. Naif Al Harbi**  
Director, Vaccine Development Unit, Director, Research Quality Management Research Scientist, Infectious Diseases Research Department, KAIMRC



### RSV Prevention for All Infants and Children

**Dr. Jon Heinrichs**  
Associate Vice President and Franchise Head, Sanofi Pasteur



### Cytiva and Vaccine Bioprocessing

**Mr. Sven Frie**  
General Manager, Commercial Enterprise Solutions, Cytiva



### Biotechnology Development: Diagnostics and Therapeutics

**Dr. Manal Alaamery**  
Head, Developmental Medicine, Chairman Innovation and Entrepreneurship KAIMRC, KSAU-HS, MNG-HA



### Messenger RNA: A Flexible Platform for Different Therapeutic Areas

**Dr. Paolo Martini**  
Senior Vice President, Moderna

## SESSION 7: MedTech/Medical Devices and Diagnostics

Chaired by Mrs. Bouchra Bensaoud, Danaher. Co-Chaired by Mr. Raymond Berglund, Alvarez & Marsal



**Mrs. Bouchra Bensaoud, Danaher**

**Molecular Diagnostics' Role in the Fight Against COVID and Beyond**



**Oncology Care Pathway: Devices and Tracers**

**Mr. Perry Frederick**  
Senior Director, Strategic Research, Europe, Middle East, and Africa  
GE Healthcare



**MNGHA's Response to Support Ventilator Manufacturing Initiatives by Local SMEs**

**Dr. Ahmed AlZahrani**  
Director of Healthcare Technology Development, Information Technology Department, MNGHA



**Data and the Future of Healthcare in the COVID-19 Era**

**Mr. Elie Chaillot**  
Vice-President and Chief Executive Officer, GE Healthcare, EMEA



**What to Consider in Localization for Manufacturing Medtech/Med Devices**

**Mr. Raymond Berglund**  
Managing Director & Head, Healthcare and Life Science, Alvarez & Marsal



**Mr. Iain Sharp-Paul**  
Vice President EMEA Marketing, Cepheid



**Mr. Sherif Harydi**  
General Manager, Middle East, Cepheid

## SESSION 8: Stem Cell Biotechnology and Cellular and Gene Therapy

Chaired by Dr. Miriam Fuchs, Novartis



**Chimeric Antigen Receptor T Cells: Lessons from B Cell Malignancies**

**Dr. Badr Al Ahmari**  
Director, Hematology Fellowship Program, Consultant, Adult Stem Cell Transplant and Cellular Therapy Department of Oncology, KAMC, MNGHA – Riyadh



**Genetically Enhanced T Cells: Designing, Engineering, and Building Cancer Immunotherapies**

**Dr. Joseph Fraietta**  
Director of the Solid Tumor Immunotherapy Laboratory University of Pennsylvania (Philadelphia, PA)



**Saudi Bank of Induced Pluripotent Stem Cells**

**Dr. Khaled Al Sayegh**  
Associate Director, Biomedical Research  
KAIMRC



**Development of the Bacteria Viruses, Bacteriophage, into a Delivery Technology for Therapeutic Genes and DNA Vaccines Against Cancer and Other Human Diseases**

**Dr. Amin Hajitou**  
Professor and Chair, Targeted Therapeutics, Imperial College London, UK



**The Tisagenlecleucel (CAR-T) Experience**

**Dr. Miriam Fuchs**  
Global Therapeutic Area Lead, Cell and Gene Therapies, Oncology, Regulatory Affairs, Novartis

## SESSION 9: Genomics, Genetics, Gene Editing and Bioinformatics

Chaired by Dr. Paolo Martini, Moderna. Co-Chaired by Prof. Majid Alfadhel, King Abdullah International Medical Research Center



**Genetic and Rare Disease Program (GARD): An Opportunity for Orphan Diseases Biotechnology**

**Prof. Majid Alfadhel**  
Deputy Executive Director, KAIMRC, Chairman, Genetics and Precision Medicine Department, King Abdulaziz Medical City



**mRNA Therapy for Propionic Acidemia: From Bench to Bedside**

**Dr. Paolo Martini**  
Senior Vice President, Moderna



**Magnetically Guided Rosette Nanotubes-siRNA Delivery for Cancer Gene Silencing**

**Dr. Hicham Fenniri**  
Professor, Departments of Chemical Engineering, Bioengineering, Chemistry & Chemical Biology, Northeastern University, USA & Chief Scientific Officer, MAScIR Foundation, Morocco



**Beyond Exome: Whole Genome Sequencing for Rare Disease Diagnostics**

**Dr. Madhuri Hegde**  
Vice President and Chief Scientific Officer, PerkinElmer, Inc.



**Empowering Infectious Disease Surveillance Using Whole-genome Sequencing**

**Prof. Majed Al Ghoribi**  
Chairman, Infectious Diseases Research Department, Associate Research Scientist, King Abdullah International Medical Research Center