Proceedings of

24th Biotechnology Congress: Research & Innovations

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Annual Congress on

CRISPR Cas9 Technology and Genetic Engineering

October 24-25, 2018 | Billerica, USA
Day 1 October 24, 2018
Conference Hall: Manning

08:30-08:45 Registrations
08:45-09:00 Opening Ceremony

Keynote Forum

09:00-09:30 Title: Recombinant proteins: From bench to clinics
Fuad Fares, University of Haifa, Israel

09:30-10:00 Title: Investigating the nexus between DNA repair pathways and genomic instability in cancer
Sonali Bhattacharjee, Cold Spring Harbor Laboratory, USA

10:00-10:30 Title: Dairy effluent conversion into biofertilizer using tailor made microbial consortium
Shaon Ray Chaudhuri, Tripura University, India

Group Photo

Panel Discussion

Networking & Refreshment Break 10:30-10:50

Sessions: Applied Biotechnology | Pharmaceutical Biotechnology | Biomedical Engineering | Nano Biotechnology | Medical Biotechnology | Business Development

Session Chair: Fuad Fares, University of Haifa, Israel
Session Chair: Sonali Bhattacharjee, Cold Spring Harbor Laboratory, USA

10:50-11:10 Title: Novel cytotoxicity and broad-spectrum genotoxicity platforms
Bevin Engelward, Massachusetts Institute of Technology, USA

11:10-11:30 Title: Ligninolytic enzymes and their possible role in future sustainable waste management of non-recyclable paper
Gabriela Kalcikova, University of Ljubljana, Slovenia

11:30-11:50 Title: Enabling a new era of stem cell medicine: A first technology for determining the dose of therapeutic tissue stem cells
James L Sherley, Asymmetrex LLC, USA

11:50-12:10 Title: RegenerAge System: Therapeutic effects of combinatorial biologics (mRNA and allogenic MSCs) with a spinal cord stimulation system on a patient with spinal cord section
Joel I Osorio, RegenerAge International, USA

12:10-12:30 Title: Towards a better understanding of the biochemical response to stressors such as disease or toxins IROA® measurement system and workflow
Felice A de Jong, IROA Technologies LLC, USA

Panel Discussion

Lunch Break 12:30-13:30

13:30-13:50 Title: Natural polymers of bacterial origin and their medical applications
Ipsita Roy, University of Westminster, UK

13:50-14:10 Title: A Novel enzyme extracted from aloe vera plant used in hide unhaairng leather process
Durairaj Jothi, Bagavathi Bio Tech Chemical Company, India

14:10-14:20 Title: Effect of glycosylation and physico-chemical properties on biological activity of anti-HER2 molecule
Sourav Majumdar, Serum Institute of India Pvt Ltd, India

14:20-14:40 Title: Enhanced bioH2 and poly-hydroxyalkanoates production by a co-culture of Syntrophomonas wolfei and a photoheterotrophic mixed consortium using a dark-fermentation effluent as substrate
Z Vanegas-Zuñiga, Instituto Politécnico Nacional, México

Panel Discussion
14:40-15:00  Title: Detection of adulteration/substitution in herbal market samples  
Priya A, University of Delhi, India

15:00-15:20  Title: Biodegradation of woods used for roof construction as one of the causes of roof failure in Nigeria: An Overview  
Kalada Itelima, Kalite Associate Jos, Nigeria

Panel Discussion 15:20-15:40
Networking & Refreshment Break 15:40-16:00

Day 2  October 25, 2018
Conference Hall: Manning

Keynote Forum

09:00-09:30  Title: DNA break repair and modification guided by transcript RNA  
Francesca Storici, Georgia Institute of Technology, Atlanta, USA

09:30-10:00  Title: ASPRE Model for prediction and prevention of preeclampsia and molecular approach for a personalized diagnosis with an attempt for prevention in an in-vitro model with CRISPR/Cas9  
Hamutal Meiri, TeleMarpeh Tel Aviv, Israel

Sessions: Animal Biotechnology | Agricultural Biotechnology | CRISPR-Cas9 | Genetic Engineering | Environmental Biotechnology
Session Chair: Storici Francesca, Georgia Institute of Technology, USA
Session Chair: Hamutal Merie, TeleMarpeh Tel Aviv, Israel

10:00-10:30  Title: Genome editing in wheat, polyploid and complex genome  
Hikmet Budak, Montana State University, USA

Panel Discussion
Networking & Refreshment Break 10:30-10:50

10:50-11:10  Title: Analytical next-generation sequencing approaches for CRISPR-Cas9-mediated cell engineering  
Haythem Latif, GENEWIZ, USA

11:10-11:30  Title: CRISPRseek and GUIDEseq for design of target-specific guide RNAs in CRISPR-Cas9 genome-editing systems  
Lihua Julie Zhu, University of Massachusetts Medical School, USA

11:30-11:50  Title: RegenerAge System Therapeutic effects of combinatorial biologics (mRNA and allogenic MSCs) with a spinal cord stimulation system on a patient with spinal cord section  
Joel I Osorio, RegenerAge, USA

Poster Presentations 11:50-12:50
Poster Judge: Hamutal Merie, TeleMarpeh Tel Aviv, Israel

P 01  Title: Measuring and monitoring structural variation associated with gene editing using directional genomic hybridization (dGH) and automated image processing  
David Sebesta, KromaTid, USA

P 02  Title: Generation of transgenic chimeric ducks using blastoderm cell transfer CRISPR/Cas9-mediated gene insertion into the duck genome  
Maria Dororsenko, National University of Life and Environmental Sciences of Ukraine, Ukraine

P 03  Title: Zebrafish as genetic model for investigating the role of BCL6A & its regulation via STAT5  
Farooq Almohaisen, Deakin University, Australia

P 04  Title: Genome editing in microalga Chlamydomonas reinhardtii via CRISPR/Cas9  
Irina Sizova, Humboldt University of Berlin, Germany
| Title: Strategies for controlling off-target effects and biological variations in CRISPR/Cas9 genome editing experiments |
| Michelle Kimberland, GlaxoSmithKline, USA |

| Title: Growth and yield of *Pisum sativum* L (pea) in response to bio-fertilizer produced from *Rhizobium* species isolated from soya bean root nodules |
| Janet U Itelima, University of Jos, Nigeria |

| Panel Discussion |
| Lunch Break 12:50-13:50 |

| 13:50-14:10 |
| Title: Implications of cGMP for CRISPR-Cas9 cellular therapy |
| Kimberley Buytaert-Hoefen, Parexel International, USA |

| 14:10-14:30 |
| Title: Generation of genetically modified ducks by CRISPR/Cas9-mediated gene insertion into the duck genome |
| Svitlana Kostenko, National University of Life and Environmental Science of Ukraine, Ukraine |

| 14:30-14:50 |
| Title: Efficient animal model generation using zinc-finger nucleases and CRISPR/Cas systems |
| Guojun Zhao, Horizon Discovery, USA |

| Panel Discussions |
| Networking 14:50-15:50 |

| Networking & Refreshment Break 15:50-16:15 |

| Thanks Giving & Closing Ceremony |