NEW BIOTECHNOLOGIES FOR PRECISION MEDICINE & PRECISION AGRICULTURE

Outline Program

Saturday, 3rd of November 2018 (CRASC Oran)		
09.00-09.30	**Reception and Registration**	
09.30-10.00	**Welcome session and introduction to the workshop**	• **Prof. SEDDIKI M'hamed Mohamed Salah Eddine,** The General Secretary of the Ministry of Higher Education and Scientific Research. • **Prof. AOURAG Hafid,** General Director of the General Directorate for Scientific Research and Technological Development.
10.00-10.30	**Coffee Break**	
10.30-12.30	**Ignite Stage Session:** Overview on Algerian and German Research activities	• **Dr. Christian GARBE,** CEO, FIZ. Germany • **Prof. Messaoud ZITOUNI,** Responsible of the Algerian cancer plan • **Prof. Peter MOMBAERTS,** Director of Max Plank Research Unit for Neurogenetics. • **Dr. Ammar AZIOUNE,** Director of CRBt. Algeria
12.00-13.45	**Lunch**	
13.45-16.30	**Algerian strategy development for using new Biotechnologies in precision medicine and precision agriculture.** *Discussion and exchange introduction to workshop topics*	• **Prof. Nabil AOUFFEN** General Director of ATRSS • **Prof. Lynda. BENHADJA,- BOUTEKRABT** General Director of ATRBSA • **Dr. Ammar AZIOUNE,** Director of CRBt.
Sunday, 4th of November 2018 (Eden Hotel, Ayoun Turk, Oran)		
09.00-10.30	**FIZ CONFERENCES** (Conference Room: all participants)	
	Coffee Break	
Workshop Sessions (by topics)		
10.45-12.45	• **Precision Medicine (NGS, bioinformatics)** ✿ Establishment of a precision medicine workflow for the identification of actionable mutations in tissues biopsies from cancer patients including pathological examination, DNA and RNA extraction, NGS library preparation, sequencing and data analyses pipelines ✿ Setup of databases of cancer, rare diseases and collecting molecular and other information of the patients ✿ Genetic screening of patients with rare diseases	Conference room Moderator: **Prof. Nabil AOUFFEN**
	• **Liquid biopsies** ✿ Wet lab workflows to generate NGS libraries from circulating DNA and small RNA to identify biomarkers based on mutations, epimutations or small RNA signatures in blood or urine ✿ Virus detection by nucleic acid amplification technology (NAT)	Room 1 Moderator: **Dr. Ammar AZIOUNE**
	• **Smart Breeding / Precision Agriculture** ✿ Use of NGS methods and bioinformatics for fast and cost efficient genes analyses for traits of interest ✿ Development of molecular markers in the DNA for smart breeding approaches ✿ Setup of screening facilities for high-throughput screening of plants for these markers (using PCR, mass spectrometry …)	Room 2 Moderator: **Prof. Lynda BENHADJA-BOUTEKRABT**
13.00-14.30	**Lunch**	
14.30-16.00	**Workshop Sessions (2)**	
16.00-17.00	**Wrap-up and next steps**	