

# IDB2018

## THE 17<sup>TH</sup> INTERNATIONAL DAYS OF BIOTECHNOLOGY

December 20<sup>th</sup> - 23<sup>rd</sup>, 2018  
Hotel Green Park Concorde \*\*\*\*\*  
SOUSSE, TUNISIA



## **SCIENTIFIC PROGRAM**

Thursday 20/12/2018			
9h00-14h30	Registration		
14h30	Opening Ceremony		
15h00	Plenary conference 1 (15h00-15h45)		
	Chairmen: Pr. Ridha Mhamdi & Pr. Samir Bejar		
	Cf1: Pr. Chedly Abdelly	National Agency for the Promotion of Scientific Research: Interfacing structure for the reinforcement of the interactions between research and the socio-economic environment	
15h45	Plenary conference 2 (15h45-16h15)		
	Chairmen: Pr. Slim Tounsi & Pr. Chedly Abdelly		
	Cf2: Pr. Souad Rouis	How can technology transfer from lab to market push companies for open innovation?	
16h15-16h35	Tea & Coffee Breaks		
Room 1: Health Biotechnology			
16h35-17h55: 5 Oral communications (HBO1-HBO5)			
Chairmen : Pr. Ahlem Amouri & Pr. Balkiss Bouhaouala-Zahar			
16h35-16h55	Tc1-HBO1	Lilia Romdhane	A population-based study of copy number variation in healthy Tunisian individuals
16h55-17h10	HBO2	Héla Gargouri	High Throughput Analysis for Processed Meat Species Authentication
17h10-17h25	HBO3	Manel Debabza	Prevalence and characterization of carbapenemase producing <i>Enterobacteriaceae</i> isolated from poultry meat
17h25-17h40	HBO4	Faten Makki Rmida	Beyond the standard, a Y-chromosome markers rearrangement increases their forensic relevance using Shannon Entropy Approach
17h40-17h55	HBO5	Fatma Abdmouleh	Synthesis, characterization and biological evaluation of new PEGylated triarylmethanes
Room 2: Industrial Biotechnology			
16h35-17h55: 5 Oral communications (IBO1-5)			
Chairmen : Pr. Karima Belguith & Dr. Aida Hmida Sayari			
16h35-16h55	Tc1-IBO1	Sami Mnif	Novel Strategy to combat <i>Macrococcus caseolyticus</i> biofilm colonization in dairy processing lines
16h55-17h10	IBO2	Yousra Ben Salah	Effect of the combination MAP fertilizer / <i>Bacillus amyloliquefaciens</i> strain C2 on the physiological state and the protection of tomato against <i>Verticillium wilt</i>
17h10-17h25	IBO3	Asma Laouar	Physicochemical and microbiological characterization of two varieties of dates "Hmira and Feggous", of the commune Abadela wilaya of Bechar and test of alcohol production
17h25-17h40	IBO4	Maryam Soudani	Abitotic factors affecting the larvicidal activity of the <i>Bacillus thuringiensis</i> InhA1 metalloprotease against the Lepidopteran pest <i>Ephesiakuhniella</i>
17h40-17h55	IBO5	Imen Zaghib	Thermal stability of natural actomyosin extracted from sardine ( <i>Sardina pilchardus</i> ) muscle affects reactivity to cross-linking by microbial and

			sardine transglutaminases
<b>Room 3: Bioactive Molecules</b>			
<b>16h35-17h55: 5 Oral communications (BMO1-BMO5)</b>			
<b>Chairmen : Pr. Adel Sayari &amp; Dr. Kaïs Jamoussi</b>			
16h35-16h55	<i>Tc1-BMO1</i>	Mourad Jridi	Investigation of the physicochemical and antioxidant properties of gelatin edible film mixed with blood orange ( <i>Citrus sinensis</i> ) peels extract
16h55-17h10	<i>BMO2</i>	Najeh Krayem	Anti-tumor effect of native and recombinant phospholipases A2 from <i>Scorpio maurus</i> venom glands
17h10-17h25	<i>BMO3</i>	Ahlem Eddehech	Expression, purification and biochemical characterization of a lipase from <i>Serratia</i> sp. W3 Tunisian cultivar
17h25-17h40	<i>BMO4</i>	Marwa Jardak	Chemical composition, antibacterial and antibiofilm activities of selected essential oils against <i>Staphylococcus epidermidis</i> biofilm
17h40-17h55	<i>BMO5</i>	Nawel Jemil	Effect of lipopeptides from <i>Bacillus methylotrophicus</i> DCS1 strain on the stability of sunflower oil in water emulsion and on the conservation of raw beef patties quality during chilled storage
17h55-18h55	<b>Poster display &amp; start of discussion (17h55-18h55)</b>		
	<b><i>HBPI-34</i></b>	<b>Health Biotechnology</b>	
	<b><i>IBPI-21</i></b>	<b>Industrial Biotechnology</b>	
20h00	<b>Dinner</b>		

Friday Morning 21/12/2018			
08h30	Plenary conference 3 (8h30-9h10)		
	Chairmen : Pr. Ezio Ricca & Pr. Balkiss Bouhaouala-Zahar		
	Cf3: Pr. Peter J. Tonellato	Precision Medicine in the Era of “Big Data” Genetics	
09h10	Plenary conference 4 (9h10-9h50)		
	Chairmen: Pr. Adel Sayari & Pr. Hafedh Belguith		
	Cf4: Pr. Massimiliano Perduca	Redefining the specificity of a human protein: the plasma retinol-binding protein case	
Room 1: Health Biotechnology 9h50-10h55: 4 Oral communications (HBO6-HBO9)			
Chairmen: Pr. Peter J. Tonellato & Pr. Pr. Massimiliano Perduca			
9h50-10h10	<i>Tc2-HBO6</i>	Amine El-Mokhtar Drici	Effect of polymorphisms in pro-inflammatory cytokine genes in carcinogenesis of gastric mucosa infected with <i>Helicobacter pylori</i>
10h10-10h25	<i>HBO7</i>	Imene Namouchi	HLA-Class II gene polymorphism in Colorectal Cancer
10h25-10h40	<i>HBO8</i>	Sinda Bedoui	Implication of interleukin-17A variants in colorectal cancer susceptibility
10h40-10h55	<i>HBO9</i>	Imen Tayachi	Application of the Immunomagnetic Separation (IMS) technique prior, the qPCR in <i>Cutaneous Leishmaniasis</i> Diagnosis
11h10-11h30	Tea & Coffee Breaks		
Room 1: Health Biotechnology 11h30-12h50: 5 Oral communications (HBO10-HBO14)			
Chairmen: Pr. Boutheina Mardassi & Pr. Amine Drici			
11h30-11h50	<i>Tc3-HBO10</i>	Kamel Charradi	Effects of subchronically dietary supplemented high dosing grape seed powder (GSP) in healthy Wistar rat brain
11h50-12h05	<i>HBO11</i>	Amira Bergal	<i>Streptococcus agalactiae</i> : antibiotic susceptibility and genotypic characterization of clinical strains isolated from Guelma, Algeria and Marseille, France
12h05-12h20	<i>HBO12</i>	Nesrine Sallem	Faecal carriage of CTX-M-producing <i>Enterobacteriaceae</i> in Tunisian communities
12h20-12h35	<i>HBO13</i>	Almahdi Chakroun	The role of Otx2 transcription factor in the control of the proliferation of cerebellum granule cell precursors and medulloblastoma
12h35-12h50	<i>HBO14</i>	Imane Bouguenoun	Study of in vitro stimulation of bronchial epithelial cells (BEAS -2B) with the major allergen (Cup s1) of <i>Cupressus sempervirens</i>
Room 2: Industrial Biotechnology 9h50-10h35: 3 Oral communications (IBO6-IBO8)			
Chairmen : Pr. Mamdouh Ben Ali & Pr. Badreddine Belhadi			
9h50-10h05	<i>IBO6</i>	Sonia Mhiri	Expression of a Thermo-stable Xylanase from the Thermophilic anaerobic bacterium <i>Caldicoprobacter algeriensis</i> sp. TH7C1 <sup>T</sup>

10h05-10h20	<i>IBO7</i>	Sahar Trabelsi	Purification, Characterization and Application in the Bread Making Industry of Acid-stable Alpha Amylases from a New Isolated <i>Bacillus subtilis</i> US586 Strain
10h20-10h35	<i>IBO8</i>	Sondes Mechri	A novel serine alkaline protease from <i>Anoxybacillus kamchatkensis</i> M1V and its application as detergent additive
11h10-11h30	<b>Tea &amp; Coffee Breaks</b>		
<b>Room 2: Environmental Biotechnology 11h30-12h50: 5 Oral communications (EBO1-EBO5)</b>			
<b>Chairmen : Dr. Omar Cheknane &amp; Dr. Bassem Jaouadi</b>			
11h30-11h50	<i>Tc1-EBO1</i>	Sonia Khoufi	Biogas potential from organic fraction of municipal solid waste: hybrid solid co-digestion batch process
11h50-12h05	<i>EBO2</i>	Rafika Saidi	Biohydrogen production from onion wastes by the extreme thermophile <i>Thermotoga maritima</i> in a simplified culture medium
12h05-12h20	<i>EBO3</i>	Amel Farhat	Fermentative hydrogen and methane co-production from anaerobic co-digestion of organic wastes at high loading rate coupling continuously and sequencing batch digesters
12h20-12h35	<i>EBO4</i>	Abdelwahab Rai	<i>Pseudomonas protegens</i> with high antifungal activity protects apple fruits against <i>Botrytis cinerea</i> -gray mold
12h35-12h50	<i>EBO5</i>	Lazhar Mhadhbi	Protective effect of <i>Zizyphus lotus</i> jujube fruits against cypermethrin-induced oxidative stress and neurotoxicity in freshwater mussel <i>Unio pictorum</i>
<b>Room 3: Bioactive Molecules and Applications 9h50-11h10: 5 Oral communications (BMO6-BMO10)</b>			
<b>Chairmen: Dr. Mohamed Najib Saidi &amp; Pr. Amel Hadj-Ziane-Zafour</b>			
9h50-10h05	<i>Tc2-BMO8</i>	Rafik Balti	Concentration and purification of <i>Porphyridium cruentum</i> exopolysaccharides by membrane filtration at various cross-flow velocities
10h05-10h20	<i>BMO6</i>	Hacene Elhameur	Antioxidative, antimicrobial and healing activity of a prodigiosin of <i>Serratia marcescens</i> microbiota of a traditional Algerian fermented food
10h20-10h40	<i>BMO7</i>	Riadh Ben Salah	Novel strategies for functional beef sausages productions
10h40-10h55	<i>BMO9</i>	Leila Soua	Water-soluble polysaccharides and hemicelluloses from <i>Ephedra alata</i> : angiotensin-I-converting enzyme inhibitory and biological activities
10h55-11h10	<i>BMO10</i>	Faiez Hentati	Structural characterization, rheological investigations and antioxidant activity of water-soluble polysaccharides from the Tunisian brown seaweed <i>Cystoseira compressa</i>
11h10-11h30	<b>Tea &amp; Coffee Breaks</b>		
<b>Room 3: Bioactive Molecules and Applications 11h30-12h50: 5 Oral communications (BMO11-BMO15)</b>			
<b>Chairmen: Pr. Djamel Djenane &amp; Dr. Riadh Ben Salah</b>			
11h30-11h45	<i>Tc3-BMO14</i>	Mohamed Ben Mansour	Characterization and anticoagulant activity of a novel fucosylated chondroitin sulfate

11h45-12h00	<i>BMO11</i>	Amir Bouallegue	Exopolysaccharides from a new isolated bacteria: Purification Structural Analysis and Antioxidant activities
12h00-12h15	<i>BMO12</i>	Amel Hadj-Ziane Zafour	Biocidal effect of <i>Melia azedarach</i> seed oil encapsulated in B-cyclodextrin on devastating insect species and environmental protection
12h15-12h35	<i>BMO13</i>	Ola Abdelhedi	Physicochemical, structural and sensory properties of smooth hound autolysates-sugar conjugates formed using Maillard reaction
12h35-12h50	<i>BMO15</i>	Hamida Saïda Cherif	Study of the effect of leaves's aqueous and methanolic extracts of <i>Olea europaea</i> var <i>sylvestris</i> on germs responsible for urinary tract infections
13h00	<b>Lunch</b>		
<b>Friday afternoon 21/12/2018</b>			
14h30-15h30	<b>Poster discussion (continuation &amp; end) - (14h30-15h30)</b>		
	<i>HBPI-34</i>	<b>Health Biotechnology</b>	
	<i>IBPI-21</i>	<b>Industrial Biotechnology</b>	
15h30	<b>Plenary conference 5 (15h30-16h10)</b>		
	<b>Chairmen : Pr. Samir Bejar &amp; Pr. Ridha Mhamdi</b>		
	Cf5: Pr. Ezio Ricca	Bacterial Spore Formers: Biology and Biotechnology	
16h10	<b>Plenary conference 6 (16h10-16h50)</b>		
	<b>Chairmen : Pr. Radhia Gargouri &amp; Pr. Haythem Mhadhbi</b>		
	Cf6: Pr. Renaud Brouquisse	Nitric oxide (NO) regulates symbiotic nitrogen fixation in legumes	
16h50-17h10	<b>Tea &amp; Coffee Breaks</b>		
<b>Room 1: Plant Biotechnology</b>			
<b>17h10-18h45: 6 Oral communications (PBO1-PBO6)</b>			
<b>Chairmen : Pr. Renaud Brouquisse &amp; Dr. Moncef Mrabet</b>			
17h10-17h30	<i>Tc1-PBO1</i>	Cherki Ghoulam	How do the most prevailing abiotic stresses affect legume-rhizobia symbiosis and its contribution to agrosystem sustainability?
17h30-17h45	<i>PBO2</i>	Rim. Tinhinen Maougal	PGPR effect of microbial phytases isolated from the bean rhizosphere
17h45-18h00	<i>PBO3</i>	Bacem Mnasri	Nodulation and mycorrhization of red pea ( <i>Lathyrus cicera</i> ) in Tunisia
18h00-18h15	<i>PBO4</i>	Nadia Kallala	Biodiversity within <i>Medicago truncatula</i> genotypes toward response to iron deficiency: Investigation of main tolerance mechanisms and effect of efficient <i>Sinorhizobium</i> strains' inoculation
18h15-18h30	<i>PBO5</i>	Houda Ben Slama	Biological control of phytopathogenic <i>Fusarium</i> spp. fungi by <i>Bacillus halotolerans</i> bacteria
18h30-18h45	<i>PBO6</i>	Najla Dhen	Effectiveness of biotized substrate based on date-palm wastes peat and native arbuscular mycorrhizal fungi on lettuce transplants performance
<b>Room 2: Environmental Biotechnology</b>			

<b>17h40-18h40: 6 Oral communications (EBO6-EBO11)</b>			
<b>Chairmen : Dr. Sonia Khoufi &amp; Dr. Ferid Abidi</b>			
17h10-17h25	<i>Tc2-EBO8</i>	Bassem Jaouadi	Microbial peroxidases as promising tool for lignin and humic acid biodegradation, and other environmental applications
17h25-17h40	<i>EBO6</i>	Mohamed Hamidi	Developing of a biocide to fight against <i>Thaumetopoea pityocampa</i> phytophage of Aleppo pine forests
17h40-18h00	<i>EBO7</i>	Imène Manai	Improved real textile wastewater decolourization by fungal bioaugmentation technology: Application process at SITEX pilot-scale plant
18h00-18h15	<i>EBO9</i>	Faiza Zermane	Elaboration of porous bead based on iron pillared clay and their application in the elimination of a mixture of dyes
18h15-18h30	<i>EBO10</i>	Khelifa Bouacem	Studies on the biodiversity of thermophilic bacteria isolated from hammam Righa hot spring (Algeria) under aerobic conditions
18h30-18h45	<i>EBO11</i>	Neila Miled	Eco-friendly degreasing processes of sheep skins and hides: Potential application of a yeast lipase in leather industry
<b>Room 3: Bioactive Molecules and Applications</b>			
<b>17h10-18h40: 6 Oral communications (BMO16-BMO21)</b>			
<b>Chairmen : Pr. Chaouki Selles &amp; Pr. Abdelfettah El Feki</b>			
17h10-17h25	<i>BMO16</i>	Karim Kadri	Effect of pollen source and pollination time on yield and fruit characteristics of “Deglet Nour” date palm ( <i>Phoenix dactylifera</i> L.) in the Oasis of Djerid (Tunisia)
17h25-17h40	<i>BMO17</i>	Jouda Mediouni-Ben Jemâa	Insecticidal toxicity of <i>Laurus nobilis</i> essential oil on <i>Tribolium castaneum</i> adults and impact on semolina characteristics
17h40-17h55	<i>BMO18</i>	Amina Chniguir	<i>Syzygium aromaticum</i> aqueous extract inhibits human neutrophils myeloperoxidase and protects mice from LPS-induced lung inflammation
17h55-18h10	<i>BMO19</i>	Amel Hamdi	Evaluation of antioxidant and biological activities of bioactive compounds from the rhizomes of wild <i>Asparagus albus</i> L.
18h10-18h25	<i>BMO20</i>	Youssra Doria Lahneche	New Schiff bases derived from Benzimidazole and their Zn(II) complexes: synthesis, characterization and biological evaluation
18h25-18h40	<i>BMO21</i>	Fatma Allouche	Synthesis and Biological Activities of 1,2,4-Triazol-3-yl-Thiazolidin-4-Ones
19h30	<b>Poster display &amp; Start Posters</b>		
	<i>BMP1-48</i>	<b>Bioactive Molecules and Applications</b>	
	<i>EBP1-41</i>	<b>Environmental Biotechnology</b>	
	<i>PBP1-48</i>	<b>Plant Biotechnology</b>	
20h00	<b>Dinner</b>		

**Saturday Morning 22/12/2018**

<b>Plenary conference 7 (8h30-9h10)</b>			
08h30	<b>Chairmen: Pr. Chedly Abdely &amp; Pr. Hassib Bouallagui</b>		
	Cf7: Pr. Ahmed Debez	Proteomics as promising tool to progress in the elucidation of salt tolerance mechanisms in a model of Extremophile plants: <i>Cakile maritima</i>	
<b>Plenary conference 8 (9h10-9h50)</b>			
09h10	<b>Chairmen: Pr. Amel Bouanane-Darenfed &amp; Dr. Bassem Jaouadi</b>		
	Cf8: Pr. Djamel Djenane	Carbon monoxide and the Food Packaging in the 21st Century: the Paradox	
<b>Room 1: Plant Biotechnology</b>			
<b>9h50-11h10: 5 Oral communications (PBO7-PBO11)</b>			
<b>Chairmen: Dr. Rym Tinhinen Maoual &amp; Dr. Ahmad Debez</b>			
9h50-10h05	<i>Tc2-PBO9</i>	Rahma Jardak	Root proteome response of Tunisian barley landraces to salinity stress at the seedling stage
10h05-10h20	<i>PBO7</i>	Zayneb Kthiri	Induction of tomato plant defense against <i>Fusarium</i> wilt disease using <i>Trichoderma harzianum</i> and <i>Meyerozyma guilliermondii</i>
10h20-10h40	<i>PBO8</i>	Badiaa Essghaier	Halophilic bacteria able to promote plant growth
10h40-10h55	<i>PBO10</i>	Jawaher Riahi	Grain proteome analysis of the Tunisian barley landraces with contrasting salinity tolerance
10h55-11h10	<i>PBO11</i>	Faiza Boussora	Effect of Salt on spike development and final yield in Tunisian Barley
11h10-11h30	<b>Coffee Break</b>		
<b>Room 1: Plant Biotechnology (PBO12-15)</b>			
<b>11h30-12h30: 4 Oral communications</b>			
<b>Chairmen: Pr. Cherki Ghoulam &amp; Dr. Bacem Mnasri</b>			
11h30-11h45	<i>PBO12</i>	Warda Saoudi	Genetic variation of ionic accumulation in roots and leaves levels under salinity stress in the Tunisian populations of <i>Hordeum marinum</i> ssp. <i>marinum</i>
11h45-12h00	<i>PBO13</i>	Myriam Lamine	Identification of the NaCl-responsive metabolites in <i>Citrus roots</i> : A lipidomic and volatometric signature
12h00-12h15	<i>PBO14</i>	Malika Drira	Delta-7-stigmastenol: quantification and isomeric formation during chemical refining of olive pomace oil and optimization of the neutralization step
12h15-12h30	<i>PBO15</i>	Salama Aissam	The resistance of the olive tree varieties to the leaf-spot disease: The study of the phenolic metabolism
<b>Room 2: Environmental Biotechnology</b>			
<b>9h50-10h50: 4 Oral communications (EBO12-EBO15)</b>			
<b>Chairmen: Pr. Abdelmalek Badis &amp; Pr. Slim Tounsi</b>			
9h50-10h05	<i>EBO12</i>	Mouna Ben Elhouli	Development of an environmentally friendly approach of feather degradation using a new keratinase from Actinomycetes
10h05-10h20	<i>EBO13</i>	Douja Sellami	Feasibility and Performance Study of the Ground-source Heat Pump System For Heating Greenhouse
10h20-10h35	<i>EBO14</i>	Hajer Ennouri	Effect of Solid State fermentation by <i>Chaetomium globosum</i> on the anaerobic co-digestion performances of municipal solid waste with the



			urban and industrial sludge
10h35-10h50	<i>EBO15</i>	Smain Megateli	Potential of Duckweed ( <i>Lemna gibba</i> ) for removal of Nitrogen and Phosphorus and mater organic from dairy wastewater
11h10-11h30	<b>Tea &amp; Coffee Breaks</b>		
13h00	<b>Lunch</b>		
<b>Saturday afternoon 22/12/2016</b>			
14h30-16h	<b>Poster discussion (continuation &amp; end)</b>		
	<i>BMP1-48</i>	<b>Bioactive Molecules and Applications</b>	
	<i>EBP1-41</i>	<b>Environmental Biotechnology</b>	
	<i>PBP1-48</i>	<b>Plant Biotechnology</b>	
	<b>Plenary conference 9 (16h00-16h40)</b>		
	<b>Chairmen: Pr. Radhia Gargouri &amp; Pr. Issam Smaali</b>		
	Cf9: Pr. Hassib Bouallagui	Complementary solutions for dry waste (biomass) and waste water treatment and renewable energy recovery	
16h40-17h00	<b>Tea &amp; Coffee Breaks</b>		
20h00	<b>Dinner</b>		
21h00	<b>Musical animation &amp; Poster awards</b>		

<b>Sunday Morning 23/12/2018</b>	
9h00	<b>Closing Ceremony</b>
11h00	<b>Departure</b>