

PROGRAM

SUNDAY, MARCH 11, 2007

16:00 – 20:00 Registration

20:00 **Welcome Reception**

Midbar lawn

MONDAY, MARCH 12, 2007

08:30 – 09:00 – Hall A

Opening Ceremony

Chair: Benny Ron, IMBC 2007 National Organizing Committee Chair, Israel

Greeting:

Mina Teicher, Chief Scientist, Ministry of Science, Culture and Sport, Israel

Meir Itzhak Halevi, Mayor of Eilat, Israel

Jennie Hunter-Cevera

President, International Marine Biotechnology Association (IMBA), USA

Ami Ben-Amotz, Conference Director, Israel

09:00 - 10:30 PL1 – Hall A

Plenary Session 1

Chair: M.E. Spira, Israel

09:00 *Plenary lecture:*

THE GENOMICS OF RESTRICTION AND MODIFICATION

R. J. Roberts, USA

10:00 *Keynote lecture:*

FLOURISHING CORAL REEFS IN THE GULF OF AQABA: AN OUTCOME OF
UNIQUE TOPOGRAPHIC AND ATMOSPHERIC CONDITIONS

A. Genin, Israel

10:30 – 11:00 Coffee Break

MONDAY, MARCH 12, 2007 (Continued)

11:00 – 13:10 PARALLEL SESSIONS (PRL1, PRL2, PRL3)

11:00 - 13:10 PRL1 – Hall A

Marine Organismal Molecular Biology & Biotechnology

Chair: G.R. Vasta, USA

- 11:00 *Keynote lecture:*
A COMPARATIVE VIEW ON SEX DETERMINATION IN MEDAKA
M. Schartl, A. Herpin, N. Kluever, U. Hornung, Germany
- 11:30 MOLECULAR AND STRUCTURAL BASES FOR KINETIC DIFFERENCES
BETWEEN FISH AANAT PARALOGS
B. Zilberman-Peled, S. Bransburg-Zabary, Y. Gothilf, Israel
- 11:50 THE INTERFERON-REGULATED eIF2a-KINASES OF FISH
R. Jagus, B. Joshi, M. Richardson, USA
- 12:10 INHIBITION OF HEART, VASCULATURE AND BLOOD CELL DEVELOPMENT IN
ZEBRAFISH EMBRYOS BY TROUT EA4-PEPTIDE OR HUMAN EB-PEPTIDE OF
THE PRO-IGF-I
T.T. Chen, M.J. Chen, C. Zoon Chun, USA
- 12:30 KNOCK-DOWN OF GALECTIN-1-LIKE PROTEINS IN ZEBRAFISH (*DANIO RERIO*)
REVEALS A MUSCLE AND HEART DEVELOPMENTAL PHENOTYPE
G.R. Vasta, A. Hafiz, P. Strickler-Dinglasan, S.J. Du, USA

11:00 - 13:10 PRL2 - Hall B

Genomics, Proteomics & Metabolomics in Marine Biotechnology

Chair: J. Xiang, China

- 11:00 *Keynote lecture:*
CONTROLLED FORMATION OF BIOSILICATE NANOSTRUCTURES IN SPONGES
W.E.G. Muller, H.C. Schroder, Germany
- 11:30 BEYOND PREY CAPTURE – A COMPARATIVE BIOINFORMATIC APPROACH TO
CNIDARIAN ALLOMONES
D. Sher, A. Knebel, T. Bsor, N. Neshar, T. Tal, D. Morgenstern, Y. Fishman,
E. Zlotkin, Israel
- 11:50 PEPTIDE FINGERPRINT AND PHOSPHORYLATION ANALYSIS IN ALLERGENS
IN CHINESE SHRIMP, *FENNEROPENAEUS CHINENSIS* USING PROTEOMICS
METHODS
B. Wang, C. Wu, Q. Zhou, C. Yao, J. Zhang, J. Xiang, China
- 12:10 EXPLORING BIOLOGICAL ACTIVITIES OF VARIOUS MARINE MICROBIAL
ASSEMBLAGES USING COMMUNITY-BASED PROTEOMICS
F. Chen, J. Kan, T. Hanson, K. Wang, C. Cary, E.K. Wommack, R.T. Hill, USA

MONDAY, MARCH 12, 2007 (Continued)

12:30 COMPLETE GENOME SEQUENCE OF *VIBRIO SPLENDIDUS*: A PATHOGENIC BACTERIUM FOR A WIDE RANGE OF MARINE ANIMALS
F. Le Roux, J. Binesse, M. Zouine, N. Chakroun, D. Saulnier, C. Bouchier, N. Zidane, L. Ma, C. Rusniok, C. Buchrieser, D. Mazel, France

12:50 CHARACTERIZATION OF GLYCAN MOIETIES IN VITELLOGENIN OF DECAPOD CRUSTACEANS
Z. Roth, S. Parnes, S. Weil, A. Sagi, I. Khalaila, Israel

11:00 - 13:10 PRL 3 – Hall C

Sustainable Aquaculture: The Role of Biotechnology

(Sponsored by the Annual Dan Popper Symposium)

Chair: A. Tandler, Israel

11:00 *Keynote lecture:*
PRODUCTION AND VALIDATION OF BIOLOGICALLY ACTIVE RECOMBINANT TILAPIA FSH, LH AND GH
B. Levavi-Sivan, H. Kasuto, J. Aizen, Israel

11:30 UNDERSTANDING PUBERTY: APPLIED ASPECTS FOR AQUACULTURE
U. Klenke, Y. Zohar, USA

11:50 MOLECULAR CLONING AND CHARACTERIZATION OF GHRELIN GENE IN ORANGE-SPOTTED GROUPER (*EPINEPHELUS COIOIDES*)
J.K. Lu, S.T. Huang, C.H. Song, Taiwan

12:10 ONTOGENY AND MANIPULATION OF THE BRAIN GnRH-I SYSTEM: AN EMERGING NEUROENDOCRINE FISH STERILIZATION TOOL
E. Abraham, USA, O. Palevitch, Israel, S. Ijiri, Japan, Y. Gothilf, Israel, Y. Zohar, USA

12:30 PRIMARY CANDIDATE GENES FOR SEX-DETERMINATION AND SEX-SPECIFIC MORTALITY IN *OREOCHROMIS AUREUS*
A. Shirak, E. Seroussi, A. Cnaani, T.D. Kocher, G. Hulata, M. Ron, Israel

12:50 CHANGES IN THE EXPRESSION OF FUNCTIONAL GENES IN THE INTESTINE OF EUROPEAN SEA BASS (*DICENTRARCHUS LABRAX*) FOLLOWING NUTRITIONAL MANIPULATIONS.
Y. Hakim, Z. Uni, S. Harpaz, Israel

13:10 – 14:30 L u n c h

(Food Fair Restaurant – Lobby floor)

MONDAY, MARCH 12, 2007 (Continued)

14:30 – 17:00 PARALLEL SESSIONS (PRL4, PRL5, PRL6)

14:30 – 17:00 PRL 4 – Hall A

Marine Bioactive Compounds & Bioproducts

Chair: J. Baker, Australia

- 14:30 *Keynote lecture:*
CNIDARIA IN BIOTECHNOLOGY: A NATURAL DRUG DELIVERY SYSTEM
T. Lotan, A. Ayalon, M. Offir, T. Ozer, E. Shaoul, N. Sagi, Israel
- 15:00 REACTIVE OXYGEN SPECIES MEDIATE INTRA-SPECIFIC AGGRESSION IN SEA ANEMONES
E. Zlotkin, Israel
- 15:20 DIGESTIVE ENZYMES FROM MARINE CRUSTACEANS AS POTENTIAL TOOLS FOR BIOTECHNOLOGICAL APPLICATIONS
R. Saborowski, L. Redecke, C. Betzel, J.H. Hehemann, Germany
- 15:40 DEVELOPMENT OF OMEGA-3 CONCENTRATES WITH RETENTION OF STRUCTURAL INTEGRITY OF NATURAL FISH OIL
J.A. Kralovec, L.V. Watson, M.A. Potvin, C.J. Barrow, Canada
- 16:00 RED MICROALGAE AS NUTRACEUTICALS: AN INTEGRATED STUDY
I. Dvir, S. Arad, Israel
- 16:20 BIOCHEMICAL STUDIES ON TELESCOPIUM TELESCOPIUM - A MARINE MOLLUSK FROM THE COASTAL REGIONS OF WEST BENGAL
S.K. Samanta, A. Roy, A. Datta, A. Roy, K.T.M. Kumar, J.R. Vedasiromani, D. Sarkar, T. Sen, India

14:30 – 17:00 PRL5 – Hall B

Marine Nanobiotechnology and Biomaterials

Chair: W.E.G. Muller, Germany

- 14:30 *Keynote lecture:*
ECHINODERMS PROVIDE NEW CONCEPTS FOR NANOTECHNOLOGY AND DEVICE ENGINEERING
J. Aizenberg, USA
- 15:00 THE USE OF CULTURED APLYSIA NEURONS TO IMPROVE CELL ADHESION TO THE SURFACE OF ELECTRONIC DEVICE BY ENGULFMENT OF PROTRUDING MICRONAILES FABRICATED ON THE CHIP SURFACE
M.E. Spira, D. Kamber, A. Dormann, S. Yitzchaik, K. Shabthai, J. Shappir, Israel
- 15:20 GENES ASSOCIATED WITH BIOMINERALISATION PROCESSES IN THE RADULAR TEETH - OF CHITONS
A. Elizur, L. Gardner, D.J. Macey, L.R. Brooker, Australia

MONDAY, MARCH 12, 2007 (Continued)

- 15:40 THE MARINE HYPERTHERMOPHILIC ARCHAEON, *METHANOCALDOCOCCLUS JANNASCHII* FORMS CHAPERONE NANOSTRUCTURES THAT ENHANCE CELLULAR SURVIVAL.
F. T. Robb, T. Whitehead, D. Clark, P. Laksanalamai, USA
- 16:00 MOLECULAR CHAPERONES FROM A COLD-ADAPTED, ANTARCTIC MARINE-SALINITY LAKE ARCHAEON, *METHANOCOCCOIDES BURTONII*
P. Laksanalamai, USA, R. Cavicchioli, Australia; K. Sowers, USA
- 16:20 SKIN PROTECTION AGAINST JELLYFISH STING
A. Lotan, M. Ramon, Israel

14:30 - 17:00 PRL6 – Hall C

Marine Bioenergy

Chair: A. Ben-Amotz, Israel

- 14:30 *Keynote lecture:*
EMISSIONS-TO-BIOFUELS TECHNOLOGY - USING ADVANCES IN MARINE BIO-ENERGY SYSTEMS TO CONVERT CO₂ IN POWER PLANT STACK GASES INTO CLEAN, RENEWABLE BIOFUELS
C. Bullock, USA
- 15:00 ENHANCING PRODUCTIVITY OF MARINE MICROALGAE FOR GREENHOUSE GAS ABATEMENT
J.E.W. Polle, M. Huesemann, J. Weissman, J.R. Benemann, USA
- 15:20 REGULATION OF BIOGENIC METHANE PRODUCTION FROM ACETATE BY MARINE *METHANOSARCINA* SPECIES
K.L. Anderson, E.E. Apolinario, S.R. MacAuley, K. Sowers, USA
- 15:40 PHOTOSYNTHETICAL BIOCONVERSION OF THE POWER STATIONS CO₂ EMISSIONS, THROUGH MARINE MICROALGAE CULTIVATION
G. Jinjikhashvily, Israel, T. Gvelessiani, Georgia; R. Meir, H. Weiss, Israel
- 16:00 LIPID PRODUCTION FROM MARINE MICROALGAE: STRAIN SELECTION, INDUCTION OF LIPID SYNTHESIS AND OUTDOOR CULTIVATION IN PILOT PHOTOBIOREACTORS
M. R. Tredici, L. Rodolfi, N. Bassi, I. Parente, G. Padovani, G. Bonini, G.C. Zittelli, N. Biondi, Italy
- 16:20 MARINE BIOMASS: A POTENTIAL FEEDSTOCK FOR BIOFUELS?
A. Meiser, J. Riese, Germany
- 16:40 BIOFUEL FROM SEAWEEEDS
M. Barbosa, R. Wijffels, W.A. Brandenburg, The Netherlands

MONDAY, MARCH 12, 2007 (Continued)

17:00 – 19:00 - Hall B & Foyer

Poster Session 1 and Refreshments

Please see poster program listed below.

19:00 – 20:00 *B r e a k*

20:00 – 21:30 – RDBI - Hall A

Round-table: Renewable Bioenergy from the Marine Environment

Moderator: J. Benemann, USA

Round-table will begin with very short comments by panel members followed by an open discussion with audience participation.

POSTER SESSION 1 - by Topic

1. SUSTAINABLE AQUACULTURE: THE ROLE OF BIOTECHNOLOGY

(Sponsored by the Annual Dan Popper Symposium)

- P-1 HYBLIVE: AN INTEGRATED REAL-TIME HYBRIDIZATION STATION THAT OPENS UP NEW FIELD APPLICATIONS FOR MARINE BIOLOGY AND AQUACULTURE
J.C. Avarre, C. Goutel, G. Escalier, F. le Boulaire, M. Henault, Y. Marcy, G. Cerovic, M. Rattier, C. Weisbuch, France
- P-2 GENETIC POPULATION DIFFERENTIATION OF GILT HEAD SEABREAM (*SPARUS AURATA*) OBSERVED IN A COMMERCIAL BROODSTOCK
C. Brown, Cyprus; B. McAndrew, UK; G. Kotoulas, A. Magoulas, Greece
- P-3 APPLICATION OF DIETARY ARACHIDONIC ACID FROM THE MICROALGA *PARIETOCHLORIS INCISA* AS AN IMMUNOSTIMULANT IN FISH
A. Dagar, Z. Cohen, I. Khozin-Goldberg, S. Boussiba, D. Zilberg, Israel
- P-4 THE IDENTIFICATION OF BIVALVE LARVAE BY FLUORESCENCE *IN-SITU* HYBRIDISATION (FISH) TECHNIQUES
S. A. Heaney, Ireland
- P-5 BACTERIAL PROFILE OF BLACK TIGER SHRIMP (*PENAEUS MONODON*) SPERMATOPHORES DURING STORAGE IN LIQUID NITROGEN
S. Nimrat, V. Vuthiphandchai, A. Keatsaksit, A.N. Bart, Thailand
- P-6 A FIRST GENETIC LINKAGE MAP FOR THE BLUE MUSSEL *MYTILUS EDULIS*
D. Lallias, UK, S. Lapègue, France; C. Hecquet, P. Boudry, France; A. Beaumont, UK
- P-7 CLONING AND EXPRESSION OF THE sGnRH IN THE BRAIN OF THE BLUE GOURAMI (*TRICHOGASTER TRICHOPTERUS*, Pallas 1970)
G. Levy, D. Goldberg, S. Jackson, G. Degani, Israel

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

- P-8 THE INHIBITORY EFFECT OF GREEN ALGA *ENTEROMORPHA CLATHRATA* ON PATHOGENIC *VIBRIO ANGUILLARUM* 65
J. Liu, K. Lu, W. Lin, China

2. MARINE MICROBIOLOGY

- P-9 DETECTION OF ALKALOIDS FROM ACTINOMYCETES ISOLATED FROM RED SEA SPONGES *TETRAPOCILLON* SP., *AMPHIMEDON* SP., AND *HYRTIOS* SP.
M. A. Anderson, USA; A. Eythorsdottir, Iceland; E.S. Eid, M.R. El-Sayed, S. Abou-El-Ela, Egypt; M. Kelly, New Zealand; M.T. Hamann, R.T. Hill, USA
- P-10 THE EFFECT OF LOW TEMPERATURE STRESS ON CONTENT OF SOLUBLE SUGAR FROM *ARTHROSPIRA (SPIRULINA)*
Q. Chen, Y. Shu-Zhen, L. Shu-Yuan, China
- P-11 *ARTHROSPIRA (SPIRULINA) PLATENSIS* TAKEN FROM ALKALINE LAKES ON THE ERDOS PLATEAU IN CHINA: THEIR MORPHOLOGY AND ULTRA-STRUCTURE AFTER SUBJECTION TO LOW TEMPERATURES
Q. Chen, T. Xiu-Ying, L. Shu-Yuan, China
- P-12 PHB-PRODUCING BACTERIA IN A POLLUTED MARINE MICROBIAL MAT
A. Lopez-Cortes, A. Lanz-Landazuri, Mexico
- P-13 THE ROLE OF INDIVIDUAL MARINE BACTERIAL PHYLOTYPES IN THE SEQUENTIAL REDUCTIVE DEHALOGENATION OF AROCLOR 1260
K. Sowers, S.K. Fagervold, H.D. May, USA
- P-14 16S RDNA DIVERSITY OF MANGROVE SOIL AND BIOACTIVE MICROBES IN TROPICAL AND SUBTROPICAL MANGROVE AREA IN CHINA
K. Hong, Q. Xie, B. Yan, H. Lin, L. Zhuang, China
- P-15 OPTIMIZATION OF FED-BATCH TYPE BIOSLURRY REACTOR FOR REMOVING PAHs CONTAMINATED ON MARINE SEDIMENTS
S.J. Kim, H.B. Jung, K.K. Kwon, H.S. Lee, South Korea
- P-16 IDENTIFICATION OF BACTERIA GROWING IN ASSOCIATION WITH BATCH CULTURES OF THE MICROALGA *CHLORELLA MINUTISSIMA*
C.S. Tsigenopoulos, F. Kokou, Greece; T. Ferreira, Portugal; P. Makridis, G. Kotoulas, A. Magoulas, P. Divanach, Greece
- P-17 A COMPARISON OF THE BACTERIAL POPULATIONS ASSOCIATED WITH HEALTHY, BLEACHED AND CAVE *OCULINA PATAGONICA*
O. Koren, E. Rosenberg, Israel

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

3. MARINE ORGANISMAL MOLECULAR BIOLOGY & BIOTECHNOLOGY

- P-18 INHIBITION OF SOLE AQUABIRNAVIRUS BY *IN VITRO* EXPRESSED SENEGALESE SOLE Mx
M.C. Alvarez, M.A. Fernández-Trujillo, M.E. Garcia-Rosado, J.J. Borrego, J. Béjar, Spain
- P-19 MOLECULAR CLONING AND EXPRESSION ANALYSIS OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) CCAAT/ENHANCER BINDING PROTEIN GENES AND THEIR RESPONSES TO INDUCTION BY GROWTH HORMONE *IN VITRO* AND *IN VIVO*
T.T. Chen, J.H. Lo, P. P. Chiou, C. M. Lin, USA
- P-20 REGULATION OF *HEYMOLYMPH ECDYSTEIDS* IN THE BLUE CRAB, *CALLINectes Sapidus*
J.S. Chung, H. Katayama, USA
- P-21 IDENTIFICATION OF GENES EXPRESSED IN RESPONSE TO BACTERIAL INFECTION OF THE COMMERCIALY-IMPORTANT SOUTH AFRICAN ABALONE *HALIOTIS MIDAE*
V. E. Coyne, D. Harding, South Africa
- P-22 LIGHT AND THE DEVELOPMENT OF A FUNCTIONAL CIRCADIAN CLOCK IN FISH
Y. Gothilf, G. Vatine, L. Ziv, L. Appelbaum, Israel
- P-23 COMPARATIVE ANALYSES OF eIF4E-FAMILY MEMBERS IN FISH
R. Jagus, B. Joshi, USA
- P-24 MOLECULAR CLONING, SEQUENCE ANALYSIS, EXPRESSION OF CHINESE STURGEON CYSTATIN IN YEAST *PICHTIA PASTORIS* AND PROTEINASE INHIBITORY ACTIVITY ANALYSIS
B. Junjie, M. Dongmei, L. Haihua, J. Qing, Y. Xing, L. Jianren, X. Xiaoyong, L. Yinghua, L. Xufang, China
- P-25 DNA-CHIP (*OLIGONUCLEOTIDE MICROARRAY*) DISTINGUISH SPECIES OF WORLD RAJIFORMES
C.G. Kim, D. Jeong, S. Kim, H.K. Yoon, J.W. Chung, S.Y. Hwang, C.N. Hwang, Y.H. Lee, South Korea
- P-26 THE ZEBRAFISH GnRH-I GENE: FUNCTIONAL ANALYSIS REVEALS A COMPLEX MECHANISM
S. Leibman-Barak, Israel; N. Zmora, Y. Zohar, USA; Y. Gothilf, Israel
- P-27 CLONING AND LOCALIZATION OF GAMMA-AMINOBUTYRIC ACID-A RECEPTOR ASSOCIATED PROTEIN IN ROTIFER *BRACHIONUS PLICATILIS*
H.S. Marcial, A. Hagiwara, K. Suga, S. Kinoshita, S. Watabe, Japan

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

- P-28 MOLECULAR REGULATION OF GONADOTROPIN RELEASING HORMONE (GNRH) NEURAL MIGRATION IN ZEBRAFISH (*DANIO RERIO*)
O. Palevitch, Israel; E. Abraham, Y. Zohar, USA; Y. Gothilf, Israel
- P-29 DEVELOPING A SUSTAINABLE SUPPLY OF 1-3 ALKYLPIYRIDINIUM SALTS FOR USE AS NOVEL DRUG DELIVERY AGENTS FROM THE MEDITERRANEAN SPONGE *RENEIRA SARAI*
R. Trepos, P.F. Long, M. Smith, R. Scott, M. Jaspars, UK

4. GENOMICS, PROTEOMICS & METABOLOMICS IN MARINE BIOTECHNOLOGY

- P-30 IDENTIFICATION OF GENES IMPLICATED IN VIRULENCE OR RESISTANCE
J. Binesse, F. Le Roux, D. Saulnier, D. Mazel, France
- P-31 GENOMIC DNA ISOLATION FROM THE TISSUES OF FROZEN CHITONS
D. Chen, Z. Cai, D. Wang, China
- P-32 CLONING AND CHARACTERIZATION OF ACTIN GENES FROM COBIA (*RACHYCENTRON CANADUM*)
T.C. Cheng, S.Y. Lu, K.J. Lin, S.L. Chang, T.I. Chen, M.S. Su, Taiwan
- P-33 EXPRESSION OF A SULFOTRANSFERASE FROM THE RED MICROALGA *PORPHYRIDIUM SP.* IN *ESCHERICHIA COLI*
L. Davidi, L. Plesser, S. Arad, Israel
- P-34 N-GLYCOSYLATION PATHWAY OF THE UNICELLULAR RED ALGA *PORPHYRIDIUM SP.*
M. Fisher, S. Arad, Y. Tekoah, Israel
- P-35 A HIGHLY SENSITIVE AND SPECIFIC SYSTEM FOR LARGE-SCALE GENE EXPRESSION PROFILING
G. Hu, Q. Yang, H. Li, USA
- P-36 SALT-INDUCED CHANGES IN THE PLASMA MEMBRANE PROTEOME OF THE HALOTOLERANT ALGA *DUNALIELLA SALINA*
A. Katz, Israel; P. Waridel, A. Shevchenko, Germany; U. Pick, Israel

5. MARINE BIOACTIVE COMPOUNDS & BIOPRODUCTS

- P-37 NOVAXENICINS A-D AND XENIOLIDES I-K, SEVEN NEW DITERPENES FROM THE SOFT CORAL *XENIA NOVAEBRITANNIAE*
A. Bishara, A. Rudi, Y. Benayahu, I. Goldberg, Y. Kashman, Israel
- P-38 *IN-VIVO* AND *IN-VITRO* ESTIMATION OF IMMUNOMODULATORY ACTIVITY OF THREE MARINE ORGANISMS
P. Ponkshe, A. Akerkar, M. Indap, India
- P-39 MARINE BIOTOXIN PRODUCTION FROM DINOFLAGELLATE CULTURES
H.N. Chou, J.S. Wu, J.M. Jerng, Taiwan

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

- P-40 PHYCOBILIPROTEINS FROM FILAMENTOUS CULTURES OF RED ALGAE
H.N. Chou, J.M. Jerng, C.B. Yang, Taiwan
- P-41 OMRIOLIDE A AND B: TWO NEW REARRANGED SPONGIAN DITERPENES FROM THE MARINE SPONGE *DICTYODENDRILLA AFF. RETIARA*
Y. Erez, A. Rudi, Y. Benayahu, Y. Kashman, Israel
- P-42 HOT SPOT FOR ANTIMICROBIAL ACTIVITY
A. Eythorsdottir, H. Einarsson, Iceland
- P-43 ANTIBACTERIAL PROPERTIES OF STRESSED SCLERACTINIAN CORALS
Y. Geffen, E.Z. Ron, E. Rosenberg, Israel
- P-44 SIX NOVEL METABOLITES FROM A WATER BLOOM OF THE CYANOBACTERIUM *MICROCYSTIS* SP
S. Gesner Apter, S. Carmeli, Israel
- P-45 BIOACTIVE POTENTIAL OF OLEIC ACID FROM MARINE SPONGE *TETHYA LYNCURIUM* (LINN.)
M. Indap, R. Pandit, A. Anil, S. Parab, A. Lali, India
- P-46 SULPHUR ASSIMILATION INTO THE CELL-WALL POLYSACCHARIDE OF RED MICROALGA *PORPHYRIDIUM* SP. (RODOPHYTA)
M. Keidan, D. van Moppes, S. Arad, H. Broshy, Israel
- P-47 STRUCTURES AND BIOLOGICAL ACTIVITIES OF BROMOPHENOLS AND THEIR DERIVATIVES FROM *ODONTHALIA CORYMBIFERA*
H.S. Lee, H. J. Shin, Y. Seo, South Korea
- P-48 THREE NOVEL MICROPEPTINS FROM A WATER BLOOM OF THE CYANOBACTERIUM *MICROCYSTIS* SP.
E. Zafirir, S. Carmeli, Israel

6. ALGAL BIOTECHNOLOGY

- P-49 OPTIMIZATION OF CO₂ SUPPLY FOR ASTAXANTHIN ACCUMULATION IN CULTURES OF *HAEMATOCOCCUS PLUVIALIS*
O. Agranat, A. Zarka, S. Boussiba, Israel
- P-50 IDENTIFICATION OF DIFFERENTIALLY EXPRESSED GENES IN THE COMMERCIALY IMPORTANT AGAROPHYTE, *GRACILARIA GRACILIS*, FOLLOWING EXPOSURE TO DISEASE RESPONSE ELICITORS
C. S. Ealand, V.E. Coyne, South Africa
- P-51 SPECIFICITY OF PATHOGENIC CHYTRID TOWARDS CAROTENOID PRODUCING ALGAE
J. Gutman, A. Zarka, S. Boussiba, Israel

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

- P-52 ISOLATION AND CHARACTERIZATION OF NITRATE REDUCTASE-DEFICIENT MUTANTS OF *DUNALIELLA SALINA*
Y. Jia, S. Li, L. Xue, China
- P-53 PHOTOBIOREACTOR DESIGN - ENHANCING PRODUCTIVITY OF *DUNALIELLA SALINA* CULTURES
A.M.J Kliphuis, M.G. Janssen, R.H. Wijffels, The Netherlands
- P-54 EFFECTS OF STRESSES ON THE TRANSCRIPTION OF PHOTOSYSTEM II GENES *psbA* AND *psbD* DERIVED FROM *DUNALIELLA SALINA*
H. Liu, Z. Lu, L. Xue, China

7. BIOMINERALIZATION, BIOMATERIALS & NANOBIO TECHNOLOGY

- P-55 ASSEMBLY OF A FET-ENZYME BIOELECTRONIC HYBRID SYSTEM FOR THE DETECTION OF ACETYLCHOLINE ESTERASE ACTIVITY
A. Hai, J. Shappir, I. Goykhman, N. Korbakov, S. Yitzchaiek, M.E. Spira, Israel
- P-56 2D-DIGE ANALYSIS OF PROTEINS ASSOCIATED WITH COCCOLITH FORMATION IN COCCOLITHOPHORID ALGA *PLEUROCHRYSIS CARTERAE*
H. Inoue, T. Ohira, H. Nagasawa, Japan
- P-57 FERROMAGNETIC MINERALS IN THE RED SEA SPONGE *NIPHATES ROWI*
B. Mayzel, E. Meroz-Fine, S. Marco, M. Ilan, Israel

8. BIOFOULING

- P-58 STUDIES ON MARINE BIOFOULING AT WEST COAST OF INDIA COAST, INDIA
G. D. Khedkar, A. K. Khan, N.T. Ansari, India

10. OCEANS AND HUMAN HEALTH

- P-59 SHRIMP (*PENAEUS MONODON*) ANTI-LIPOPLYSACCHARIDE FACTOR REDUCES LETHALITY OF *PSEUDOMONAS AERUGINOSA* SEPSIS IN MICE
J.Y. Chen, C.Y. Pan, T.T. Chao, W.C. Liu, C.H. Lin, C.M. Kuo, Taiwan
- P-60 9-CIS BETA-CAROTENE-RICH POWDER OF THE ALGA *DUNALIELLA BARDAWIL* INHIBITS ATHEROGENESIS AND AUGMENTS THE ANTI-DIABETIC EFFECTS OF ROSIGLITAZONE IN MOUSE MODELS
A. Harari, A. Shaish, D. Marko, H. Cohen, A. Ben-Amotz, D. Harats, Israel
- P-61 COLD PASTEURIZATION OF OYSTER USING SUPERCRITICAL CARBON DIOXIDE
D.A. Meujo, L. Jiangping, M.T. Hamann, USA

MONDAY, MARCH 12, 2007 (Continued)

POSTER SESSION 1 – by topic (Continued)

ADDITIONAL POSTERS

P-62 POLYUNSATURATED FATTY ACIDS (PUFA) FROM CORAL ASSOCIATED
(topic 2) PROTISTS

A. Kushmaro, D. Rasoulouniriana, E. Ben-Dov, N. Siboni, M. Harel, Z. Wiesman, Israel

P-63 *ROSENBERGIA FUNGICOLA* G.N.SP.N.: A NEW GENUS OF
(topic 2) THRAUSTOCHYTRIIDAE ISOLATED FROM THE HERMATYPIC CORAL *FUNGIA*
GRANULOSA

A. Kushmaro, M. Harel, E. Ben-Dov, E. Kramarsky-Winter, Y. Loya, Z. Barak, Israel

TUESDAY, MARCH 13, 2007

08:30 - 10:10 PL2 – Hall A

Plenary Session 2

Chair: J. van der Meer, Canada

08:30 *Plenary lecture:*

21st CENTURY FRONTIERS IN MARINE ECOLOGY & BIOTECHNOLOGY

E.J. Mathur, USA

09:30 *Keynote lecture:*

UNDERSTANDING THE BIOSYNTHETIC CAPABILITY OF MARINE
CYANOBACTERIA: ENZYMATIC ANALYSES OF THE CURACIN A PATHWAY

D. H. Sherman, L. Gu, K.E. Anderson, USA

10:00 INTELLECTUAL PROPERTY AND THE SCIENTIST: SINK OR SWIM

D. Graeser, Israel

10:10 – 10:30 *Coffee Break*

10:30 – 12:40 PARALLEL SESSIONS (PRL7, PRL8, PRL9)

10:30 - 12:40 PRL7 – Hall A

Sustainable Aquaculture (Aquapharming): The Role of Biotechnology *(Sponsored by the Annual Dan Popper Symposium)*

Chair: M. Ilan, Israel

10:30 *Keynote lecture:*

GROWTH AND DEVELOPMENT OF SPONGES- LEARNING FROM NATURE

R.H. Wijffels, M. Koopmans, S. de Caralt, The Netherlands

11:00 IMPORTANCE OF FLOW FOR CULTURE OF MARINE SPONGES

D. Mendola, The Netherlands, S. de Caralt, M.J. Uriz, Spain; J.L. van Leeuwen,
J. vanden Boogaart, R.H. Wijffels, The Netherlands

11:20 MICROBIAL COMMUNITIES OF THREE RED SEA SPONGES IN AN OPEN
WATER AQUACULTURE SYSTEM

M. A. Anderson, USA, M. Ilan, M. Shpigel, Israel; R.T. Hill, USA

11:40 THE IMPORTANCE OF MICROBIAL SYMBIONTS OF MARINE INVERTEBRATES
FOR DRUG DISCOVERY

R.T. Hill, J.J. Enticknap, O. Peraud, M. A. Anderson, N. Kasanah, V. Rao,
M.T. Hamann, USA

12:00 *EX SITU* MAINTENANCE OF SPONGES FAR FROM THE SEA

F. Brümmer, A. Klöppel, I. Heim, M. Pfannkuchen, C. Wolf, I. Koch, Germany

TUESDAY, MARCH 13, 2007 (Continued)

10:30 - 12:40 PRL8 – Hall B

Sustainable Aquaculture: The Role of Biotechnology

(Sponsored by the Annual Dan Popper Symposium)

Chair: **B. Cavari, Israel**

- 10:30 *Keynote lecture:*
APPLICATION OF TRANSGENIC TECHNOLOGY TO DEVELOP STRAINS OF FINFISH RESISTANT TO INFECTION BY MICROBIAL PATHOGENS
T.T. Chen, P. Chiou, C.M. Lin, USA, J.A. Leong, Hawaii; M.J. Chen, USA
- 11:00 PERFORMANCE OF CULTIVATED NORTHWEST ATLANTIC COD (*GADUS MORHUA*) FAMILIES: INITIATION OF A SELECTIVE BREEDING PROGRAM IN EASTERN CANADA
E. A. Trippel, A.F. Garber, S.R. E. Neil, S.P. Walker, F. Powell, Canada; G. Nardi, USA; V. Puvanendran, L.P. Lush, D. Boyce, K. Gamperl, A. Robinson, J.E. Symonds, Canada
- 11:20 MOLECULAR CLONING AND EXPRESSION OF PENAEID SHRIMP FARNESOIC ACID O-METHYL TRANSFERASE (FAMeT) GENES IN *E. COLI* SYSTEM
J.K. Lu, Y.Y. Lee, Z.T. Chen, Taiwan
- 11:40 A FIRST GENETIC LINKAGE MAP OF THE EUROPEAN FLAT OYSTER *OSTREA EDULIS*
D. Lallias, UK, S. Lapègue, France, C. Haley, UK; S. Heurtebise, P. Boudry, France; A. Beaumont, UK
- 12:00 STATUS AND MICROBIOTIC ENVIRONMENT OF CORALS IN CLOSE VICINITY TO FIN FISH CAGE MARICULTURE
W. Reichardt, Philippines
- 12:20 CONSTRUCTED WETLANDS WITH *SALICORNIA* AS AN ENVIRONMENTALLY FRIENDLY BIOFILTER AND A VALUABLE BY-PRODUCT
M. Shpigel, M. Sagi, Israel

10:30 - 12:40 PRL9 – Hall C

Marine Organismal Molecular Biology & Biotechnology

Chair: **G. Kotoulas, Greece**

- 10:30 *Keynote lecture:*
THE ANDROGENIC GLAND AND MONOSEX CULTURE OF CRUSTACEANS - A BIOTECHNOLOGICAL PERSPECTIVE
A. Sagi, E.D. Aflalo, Israel
- 11:00 IDENTIFICATION AND CHARACTERIZATION OF AN INSULIN-LIKE GENE EXPRESSED EXCLUSIVELY IN THE ANDROGENIC GLAND OF THE MALE CRAYFISH
R. Manor, S. Weil, S. Oren, L. Glazer, E.D. Aflalo, T. Ventura, V. Chalifa-Caspi, M. Lapidot, A. Sagi, Israel

TUESDAY, MARCH 13, 2007 (Continued)

- 11:20 UNDERSTANDING THE PHYSIOLOGICAL FUNCTIONS OF CRUSTACEAN HYPERGLYCEMIC HORMONES OF THE BLUE CRAB, *CALLINECTES SAPIDUS*: LOCALIZATION, RELEASE AND EXPRESSION PATTERNS
J.S. Chung, H. Katayama, USA
- 11:40 MULTIGENIC TRANSCRIPTIONAL PROFILE OF ECDYSONE-RESPONSIVE GENES DURING CRAYFISH MOLT CYCLE
A. Shechter, Y. Yudkovski, S. Weil, V. Chalifa-Caspi, R.P. Ramachandra, M. Tom, A. Sagi, Israel
- 12:00 BIOLOGICAL PROPERTIES OF THE SHRIMP OVARIAN PERITROPHIN FROM *FENNEROPENAEUS MERGUIENSIS* (Fm-SOP) EXPRESSED IN BACULOVIRUS-INFECTED INSECT CELLS AND *ESCHERICHIA COLI* CELLS
J.C. Avarre, France, W. Loongyai, W. Chotigeat, Thailand; M. Cerutti, France; E. Lubzens, Israel
- 12:20 HORMONAL FUNCTIONS OF CHH-B IN THE LOBSTER *HOMARUS AMERICANUS*
H. Laufer, N. Demir, J. Bagshaw, USA

12:40 – 14:00 *L u n c h* (Food Fair Restaurant – Lobby floor)

14:00 – 16:10 **PARALLEL SESSIONS (PRL10, PRL11, PRL12)**

14:00 - 16:10 **PRL10 - Hall A**

Marine Microbiology

Chair: S.J. Kim, South Korea

- 14:00 *Keynote lecture:*
UNCULTIVATED MICROORGANISMS AND OPPORTUNITY FOR DRUG DISCOVERY
S. Epstein, USA
- 14:30 SIGNALING BETWEEN MARINE ROSEOBACTERS AND DINOFLAGELLATES
R. Belas, USA
- 14:50 SEASONAL SUCCESSIONS AND GENETIC DIVERSITIES OF ESTUARINE *SYNECHOCOCCUS* AND THEIR CO-OCCURRING PHAGES: A FOUR-YEAR SURVEY IN THE CHESAPEAKE BAY
K. Wang, F. Chen, USA
- 15:10 CULTURED BACTERIAL ISOLATES FROM *XESTOSPONGIA* SPP. SPONGES
N. F. Montalvo, R.T. Hill, USA
- 15:30 THE ROLE OF SPONGE-ASSOCIATED BACTERIA IN NITROGEN FIXATION
N. M. Mohamed, R.T. Hill, Y. Tal, A.S. Colman, USA
- 15:50 CORAL MUCUS AS A NOVEL SOURCE OF ACTINOBACTERIA FOR BIOTECHNOLOGICAL PURPOSES
Y. Lampert, D. Kelman, Y. Nitzan, Z. Dubinsky, Israel; R.T. Hill, USA

TUESDAY, MARCH 13, 2007 (Continued)

14:00 - 16:10 PRL11 – Hall B

Marine Bioactive Compounds & Bioproducts

Chair: S. Carmeli, Israel

- 14:00 *Keynote lecture:*
HETEROCYCLIC COMPOUNDS FROM MARINE INVERTEBRATES; STRUCTURE AND SYNTHESIS
Y. Kashman, A. Rudi, D. Pappo, Israel
- 14:30 PHYTOENE AND PHYTOFLUENE, TWO COLORLESS BIOACTIVE MOLECULES, ARE THE MOST IMPORTANT CAROTENOIDS FOR THE SKIN
E. P. Soudant, L. von Oppen-Bezalel, I. Perry, Israel
- 14:50 THE BLOOM-FORMING MARINE CYANOBACTERIUM *TRICHODESMIUM* AS A NOVEL SOURCE FOR POTENT ANTIOXIDANTS
D. Kelman, I. Berman-Frank, Israel
- 15:10 INVESTIGATION OF A MICROBIAL SOURCE AND SYNTHETIC MODIFICATIONS OF THE POTENT MARINE ALKALOID AAPTAMINE
J.J. Bowling, M.A. Anderson, R.F. Shinazi, F.A. Valeriote, D.E. Graves, K.J. Sufka, R.T. Hill, M.T. Hamann, USA
- 15:30 ENZYMES FROM MARINE MICROORGANISMS FOR APPLICATIONS IN WHITE BIOTECHNOLOGY
K. Muffler, A. R. Kuetchou, K.H. van Pee, R. Ulber, Germany
- 15:50 ANTIBACTERIAL COMPOUNDS FROM THE MARINE DIATOM, *PHAEODACTYLUM TRICORNUTUM*
V.J. Smith, A.P. Desbois, UK

14:00 - 16:10 PRL12 – Hall C

Sustainable Aquaculture: The Role of Biotechnology

(Sponsored by the Annual Dan Popper Symposium)

Chair: H. Gordin, Israel

- 14:00 *Keynote lecture:*
THE ROLE OF BIOTECHNOLOGY IN SUSTAINABLE AQUACULTURE
Y. Zohar, USA, T. Svaasand, Norway
- 14:30 A NOVEL APPROACH FOR THE PRODUCTION OF SEABREAM (*SPARUS AURATA*) IN A FULLY CLOSED, ENVIRONMENTALLY SUSTAINABLE, MARINE RECIRCULATING SYSTEM
Y. Tal, H.J. Schreier, Y. Zohar, USA
- 14:50 THE LOW-HEAD MEGA-FLOW AIR DRIVEN RECIRCULATING SYSTEM - FROM RESEARCH TO A COMMERCIAL PILOT
N. Mozes, Y. Alfiya, I. Haddas, Israel

TUESDAY, MARCH 13, 2007 (Continued)

15:10 STUDY ON THE GROWTH AND DEVELOPMENT OF LABORATORY REARED RED KING CRAB (*PARALITHODES CAMTCHATICUS*) IN A RECYCLING WATER SYSTEM

N. Kovatcheva, Russia

15:30 LAND-BASED MARICULTURE WASTEWATER TREATMENT - KEEPING THE RED SEA CLEAN

M. Al-Zibdah, Jordan; N. Mozes, O. Lahav, Israel; M. Badran, Jordan; I. Seginer, Israel

16:10 – 18:00 - Hall B & Foyer

Poster Session 2 and Refreshments

Please see list of posters on the following pages.

18:00 – 19:30 – PARALLEL ROUND-TABLES (RDB2, RDB3)

18:00 - 19:30 RDB2 - Round-table – Hall A

Extremophiles: Making the Leap from Exciting Research to Commercial Success

Moderators: **F. Robb**, USA and **E. Mathur**, USA

Round-table will begin with very short comments by panel members followed by an open discussion with audience participation.

18:00 - 19:30 RDB3 - Round-table – Hall B

Moving Natural Products from the Sea to Drugs on Pharmacy Shelves. The Supply Problem and Other Issues

Moderators: **R. T. Hill**, USA and **D. Mendola**, The Netherlands

Round-table will begin with very short comments by panel members followed by an open discussion with audience participation.

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 - by topic

1. SUSTAINABLE AQUACULTURE: THE ROLE OF BIOTECHNOLOGY

(Sponsored by the Annual Dan Popper Symposium)

- P-1 PROBIOTIC BACTERIA *EXIGUOBACTERIUM MEXICANUM* AND *MICROBACTERIUM* SP. IN THE GUT LUMEN OF *ARTEMIA FRANCISCANA* LARVAE UNDER MONOXENIC AND DIXENIC CONDITIONS
A. Lopez-Cortés, C. Orozco-Medina, A.M. Maeda-Martinez, Mexico
- P-2 USE OF ANTIBIOTIC IN SHRIMP FARMING AND ITS IMPLICATIONS ON ENVIRONMENTAL IMPACTS AND HUMAN HEALTH IN INDIA
G. D. Khedkar, A. C. Reddy, India
- P-3 THE EFFECT OF INHIBITION OF MYOSTATIN ON SKELETAL MUSCLE OF TRANSGENIC RAINBOW TROUT *ONCORHYNCHUS MYKISS*
M. Phelps, E. Mobley, M. Concepcion, T. Bradley, USA
- P-4 THE INFLUENCE OF THE PINEAL ORGAN AND MELATONIN ON THE REPRODUCTIVE SYSTEM AND OF LIGHT INTENSITY AND WAVELENGTH ON MELATONIN IN THE GILTHEAD SEA BREAM (*SPARUS AURATA*)
B. Ron, A. Naor, Israel
- P-5 ENVIRONMENTAL EFFECTS OF ON SEX DIFFERENTIATION IN EUROPEAN SEA BASS (*DICENTRARCHUS LABRAX*)
B. Ron, Israel
- P-6 APPLICATION OF QUANTITATIVE PCR TO MONITOR DYNAMICS OF THE CRAB PARASITE, *HEMATODINIUM* SP., IN EXPERIMENTAL AND FIELD STUDIES OF THE BLUE CRAB, *CALLINECTES SAPIDUS*
E. J. Schott, G.A. Messick, K. Jennings, S. Murphy, L. Nagle, J.S. Pitula, R. Jagus, A. R. Place, USA
- P-7 DIETARY ROSEMARY (*ROSMARINUS OFFICINALIS*), AS A NATURAL THERAPEUTANT IN FISH: EFFECT ON IMMUNE FUNCTION IN TILAPIA (*OREOCHROMIS* SP.)
D. Zilberg, A. Tal, T. Sinai, A. Dagar, S. Abutbul, Israel

2. MARINE MICROBIOLOGY

- P-8 A PILOT STUDY ON KINETICS OF LACTATE DEHYDROGENASE (LDH) FROM ARTHROSPITA (*SPIRULINA*)
Q. Chen, M. Yong-Qiang, L. Shu-Yuan, China
- P-9 NITROGEN FIXATION IN THE EASTERN MEDITERRANEAN SEA
D. Man-Aharonovich, T. Yogev, E. Bar Zeev, O. Beja, I. Berman-Frank, Israel
- P-10 MONITORING MICROBIAL AND CHMICAL DIVERSITY IN THE MARINE SPONGE *IRCINIA STROBILINA* ON TRANSFER INTO AQUACULTURE
N. M. Mohamed, V. Rao, M.T. Hamann, R.T. Hill, USA

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 – by topic (Continued)

- P-11 DIVERSITY OF MAGNETOTACTIC BACTERIA IN A COASTAL SEAWATER POND
H. Pan, T. Xiao, S. Xing, S. Zhao, T. Song, China; K. Zhang, L.F. Wu, France
- P-12 TOXICITY AND METABOLISM OF P-CHLOROPHENOL IN THE MARINE MICROALGA *TETRASELMIS MARINA*
D. Petroutsos, Greece; J. Wang, USA; P. Katapodis, D. Kekos, Greece; M. Sommerfeld, Q. Hu, USA
- P-13 COMPARISON STUDY OF AGGREGATE-LIKE MICROORGANISMS ON CORALS FROM EILAT AND HERON ISLAND, GBR
N. Siboni, A. Kushmaro, A. Sivan, Y. Loya, E. Kramarsky-Winter, Israel
- P-14 PATTERNS OF MICROBIAL DIVERSITY IN CONTRASTED ECOSYSTEMS AS A TOOL FOR FOCUSING ON FUNCTIONAL CANDIDATES OF INTEREST
K. Skaraki, E. Sarropoulou, S. Reizopoulou, M. Roussomoustakaki, A. Pantazidou, A. Nikolaidou, G. Kotoulas, C. Arvanitidis, Greece
- P-15 CHARACTERIZATION AND APPLICATION OF REPEATED INTERGENIC SEQUENCES IN TWO CHROMOSOMES OF *VIBRIONACEAE* SPECIES
Y.G. Zo, USA

3. MARINE ORGANISMAL MOLECULAR BIOLOGY & BIOTECHNOLOGY

- P-16 GENETIC STRUCTURE OF FOUR ESATERN ASIAN GIANT SCALLOP (*MIZUHOPECTEN YESSOENSIS*) POPULATIONS BY MICROSATELLITE MARKERS
H.S. An, Y.G. Lee, J.Y. Park, J.H. Jeong, South Korea
- P-17 cDNA CLONING AND LIGHT-REGULATED EXPRESSION OF SMALL SUBUNIT OF RIBULOSE-1, 5-BISPHOSPHATE CARBOXYLASE/OXYGENASE FROM GREEN ALGA: *DUNALIELLA SALINA*
Y. Chai, L. Xue, China
- P-18 A UNIQUE IRON BINDING AND INTERNALIZATION MECHANISM IN *DUNALIELLA SALINA*
U. Pick, Y. Paz, M. Weiss, Israel
- P-19 HYDRALYSINS – NEW MODEL BETA PORE FORMING TOXINS FROM CNIDARIA
D. Sher, Y. Fishman, M. Zhang, M. Lebendiker, E. Zlotkin, Israel; J. M. Mancheño, Spain
- P-20 TYPE II ANTIFREEZE PROTEIN FROM THE ANTARCTIC COD, *NOTOTHENIA CORIICEPS*
J.M. Song, S.E. Bae, H.S. Son, C.G. Kim, Y.H. Lee, South Korea
- P-21 THE EFFECTS OF TEMPERATURE AND SCHEDULED FEEDING ON THE ZEBRAFISH (*DANIO RERIO*) CIRCADIAN CLOCK
A. Tovin, N. Kronfeld-Schor, Y. Gothilf, Israel

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 – by topic (Continued)

- P-22 CROSS-SPECIES AMPLIFICATION OF EXPRESSED SEQUENCE TAG -BASED MICROSATELLITES (EST-SSRs) FROM GILT HEAD SEA BREAM (*SPARUS AURATA*) TO OTHER TELEOSTS
C. S. Tsigenopoulos, V. Pakaki, P. Kasapidis, J. A. Lagnel, G. Kotoulas, A. Magoulas, Greece
- P-23 A SINGLE WHEY ACIDIC PROTEIN DOMAIN (SWD)-CONTAINING PEPTIDE FROM FLESHY PRAWN *FENNEROPENAEUS CHINENSIS*
J.X. Wang, Y.P. Jia, Y.D. Sun, X.F. Zhao, China
- P-24 MOLECULAR CLONING OF *PENAEUS MONODON* LYSOZYME AND LYTIC ACTIVITY OF THE RECOMBINANT PROTEIN
Y. Xing, G. Feng-Ying, Z. Qing-Mei, B. Junjie, China
- P-25 MOLECULAR CHARACTERISTICS AND EXPRESSION OF SEVERAL TYPES OF CHITINOLYTIC ENZYMES FROM CHINESE SHRIMP *FENNEROPENAEUS CHINENSIS*
J. Zhang, F. Li, J. Xiang, China
- P-26 AN ESRB MUTANT OF FISH PATHOGENIC *EDWARDSIELLA TARDA* IS ATTENUATED AND EFFECTIVE AS A LIVE VACCINE AGAINST THE HAEMORRHAGIC SEPTICEMIA IN TURBOT *SCOPHTHAMUS MAXIMUS* (L.)
M. Zhaolan, X. Peng, M. Yunxiang, Z. Zhifeng, L. Jie, China
- P-27 VITELLOGENESIS AND ITS REGULATION BY SINUS GLAND NEUROPEPTIDES IN THE BLUE-CRAB, *CALLINECTES SAPIDUS*
N. Zmora, J. S. Chung, USA
- P-28 CYP4C15 IS PROBABLY NOT INVOLVED IN ECDYSTEROIDOGENESIS IN THE Y-ORGAN OF THE BLUE CRAB, *CALLINECTES SAPIDUS*
N. Zmora, J.M. Trant, J. S. Chung, USA

4. GENOMICS, PROTEOMICS & METABOLOMICS IN MARINE BIOTECHNOLOGY

- P-29 SCREENING LIPOLYTIC ENZYMES FROM VARIOUS MARINE ENVIRONMENTS BY METAGENOMIC APPROACH
J.H. Lee, J.J. Ho, J.K. Lim, J.T. Kim, H.S. Lee, S. G. Kang, S.J. Kim, South Korea
- P-30 CHARACTERIZATION OF GLYCAN MOIETIES IN GLYCOPROTEINS OF THE RED UNICELLULAR ALGAE *PORPHYRIDIUM* SP
O. Ontman, S. Arad, Y. Tekoah, Israel
- P-31 SULFOTRANSFERASE OF RED MICROALGAE: A MOLECULAR AND BIOCHEMICAL STUDY
L. Plessner, M. Lapidot, Y. Weinstein, S. Arad, Israel
- P-32 HPLC-MS-BASED METABOLOMIC STUDY OF THE EFFECT OF ACUTE HANDLING STRESS IN JUVENILE ATLANTIC SALMON (*SALMO SALAR*)
E.C. Soo, E. Huenupi, L.O.B. Alfonso, J.P.M. Hui, Canada

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 – by topic (Continued)

- P-33 PROTEOMICS ANALYSIS OF TRIPLOID CHINESE SHRIMP, *FENNEROPENAEUS CHINENSIS*
B. Wang, C. Wu, J. Xiang, Q. Zhou, C. Yao, F. Li, Z. J. Zhang, China
- P-34 SEQUENCE ANALYSIS OF *ARTHROSPIRA MAXIMA* BASED ON FOSMID IBRARY
M. Yunxiang, L. Na, M. Zhaolan, L. Wei, China

5. MARINE BIOACTIVE COMPOUNDS & BIOPRODUCTS

- P-35 APOPTOSIS INDUCTION OF MARINE ALGAE EXTRACTS VIA p53 IN MELANOMA CELLS
M.M. Kim, N. Rajapakse, E. Mendis, S.K. Kim, South Korea
- P-36 ANTI-INFLAMMATORY EFFECTS OF MARINE ALGAE EXTRACTS IN RAW 264.7 CELLS
S.K. Kim, N. Rajapakse, E. Mendis, M.M. Kim, South Korea
- P-37 INHIBITION OF FREE RADICAL-MEDIATED OXIDATION OF CELLULAR BIOMOLECULES BY CARBOXYLATED CHITOLIGOSACCHARIDES
S.K. Kim, N. Rajapakse, E. Mendis, M.M. Kim, South Korea
- P-38 ANTIDEPRESSANT LEADS FROM SEVERAL GENERA OF MARINE SPONGES
A. J. Kochanowska, R. Matsumoto, M.T. Hamann, USA
- P-39 SEASONAL VARIATION IN THE GROWTH RATES AND CARRAGEENAN PROPERTIES OF THE CULTIVATED *KAPPAPHYCUS ALVAREZII* AND *EUCHEUMA DENTICULATUM* IN ZANZIBAR, TANZANIA
F. E. Msuya, M.S. Kyewalyanga, Tanzania; G. Bleicher Lhonneur, A. Leflamand, J. Mazoyer, A.T. Critchley, France
- P-40 ANALYZING THE MICROBIAL CONTENT OF A LATRUNCULIN PRODUCING RED-SEA SPONGE
L. Novak, M. Ilan, Israel
- P-41 INTERACTION OF CHOLESTEROL ISOLATED FROM *LOLIGO DUVAUCELI D'ORBIGNY* WITH TUBULIN
R. Pandit, A. Anil, A. Lali, M. Indap, India
- P-42 NEW ISONITRILE-CONTAINING INDOLE ALKALOIDS FROM A SOIL SAMPLE OF THE CYANOBACTERIUM *FISCHERELLA* SP
A. Raveh, S. Carmeli, Israel
- P-43 A PORE-FORMING TOXIN IS INVOLVED IN PREY DIGESTION BY HYDRA
D. J. Sher, Y. Fishman, M. Zhang, E. Zlotkin, Israel
- P-44 EFFECTS OF THE PROTEIN FRACTION FROM *PORPHYRA YEZOENSIS* ON ACETAMINOPHEN-INDUCED LIVER INJURY IN RATS
T.J. Nam, H.J. Hwang, M.J. Kwon, South Korea

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 – by topic (Continued)

- P-45 PROTECTIVE EFFECTS OF POLYSACCHARIDES FROM THE MARINE ALGA *CAPSOSIPHON FULVESCENS* ON ETHANOL-INDUCED GASTRIC DAMAGE IN VIVO AND IN VITRO
T.J. Nam, M.J. Kwon, South Korea
- P-46 NETAMINES A-G: SEVEN NEW TRICYCLIC GUANIDINE ALKALOIDS FROM THE MARINE SPONGE *BIEMNA LABOUTEI*
H. Sorek, A. Rudi, S. Gueta, Y. Kashman, Israel; F. Reyes, M.J. Martin, Spain; M. Akinin, E. Gaydou, J. Vacelet, France
- P-47 RED MICROALGAL PIGMENTS FOR COSMETICS AND FOOD APPLICATIONS
A. Yaron, S. Arad, Israel

6. ALGAL BIOTECHNOLOGY

- P-48 CONTINUOUS DISC-STACK CENTRIFUGES (SEPARATORS) FOR MICROALGAL HARVESTING PROCESS
A. Piek, B. Schiemann, W. Witt, Germany
- P-49 THE STUDY OF ALGAL PHOTOSYNTHESIS AND ITS QUANTUM YIELD BY PHOTOACOUSTICS
Y. Pinchasov, Z. Dubinsky, Israel
- P-50 DEVELOPMENT OF MOLECULAR AND GENETIC TOOLS FOR THE UNICELLULAR ALGA *DUNALIELLA SALINA* (CHLOROPHYTA)
J. E. W. Polle, USA
- P-51 CHARACTERIZATION OF THE NITRATE REDUCTASE GENE DERIVED FROM *DUNALIELLA SALINA*
L. Xue, H. Xie, China
- P-52 INCREASED EXPRESSION OF TRANSGENE IN STABLY TRANSFORMED CELLS OF *DUNALIELLA SALINA* BY MATRIX ATTACHMENT REGIONS
L. Xue, T. Wang, China

7. BIOMINERALIZATION, BIOMATERIALS & NANOBIO TECHNOLOGY

- P-53 ISOLATION OF CRYSTAL GROWTH REGULATING PROTEINS FROM BACTERIAL MAGNETITE SURFACE OF *DESULFOVIBRIO MAGNETICUS* STRAIN RS-1
M. Nemoto, A. Arakaki, M. Tanaka, H. Nakazawa, K. Jin-no, I. Yashiro, T. Tanaka, H. Takeyama, T. Matsunaga, Japan
- P-54 PREPARATION OF A TRANSGENIC COCCOLITHOPHORID ALGA *PLEUROCHRYDIS CARTERAE* BY *AGROBACTERIUM TUMEFACIENS*
T. Ohira, T. Sakurai, H. Nagasawa, Japan

TUESDAY, MARCH 13, 2007 (Continued)

Posters Session 2 – by topic (Continued)

- P-55 NANOINDENTATION AND NANOWEAR STUDIES OF PASSIVE FILMS ON STAINLESS STEEL
Y. Yuan, China; S. S. Qiang, Hong Kong; Q. Lijie, C. Wuyang, China
- P-56 CLONING, EXPRESSION AND CHARACTERIZATION OF ENANTIOSELECTIVE EPOXIDE HYDROLASES FROM MARINE MICROORGANISMS
S.J. Kim, J.H. Kang, S.G. Kang, Y.O. Hwang, J.H. Woo, South Korea

9. MARINE BIO-ENERGY

- P-57 THE DIGESTION OF BRACKISH WATER AQUACULTURE SLUDGE IN AN UP-FLOW ANAEROBIC SLUDGE BLANKET REACTOR
A. Gross, N. Mirzoyan, Israel

10. OCEANS AND HUMAN HEALTH

- P-58 STUDIES ON PHARMACOLOGICAL EFFECTS OF HIPPOCAMPUS ON BENIGN PROSTATIC HYPERPLASIA
D. Xu, X. Mei, L. Wang, S. Xu, China

ADDITIONAL POSTERS

- P-59 CHARACTERIZATION OF BLACK BAND DISEASE IN RED SEA STONY CORALS (topic 2) **A. Kushmaro**, O. Barneah, E. Ben-Dov, Israel; E. Kramarsky-Winter, Israel, USA; Y. Loya, Israel
- P-60 ISOLATION AND IDENTIFICATION OF BACTERIA WITH ANTIMICROBIAL (topic 2) ACTIVITY FROM CORAL MUCUS LAYER
A. Kushmaro, M. Shnit-Orland, Israel
- P-61 SECONDARY METABOLITE PRODUCTION IN LABORATORY CULTURE: (topic 5) A CASE STUDY ON *APLYSINA AEROPHOBA*
A. Klöppel, M. Pfannkuchen, A. Putz, P. Proksch, F. Brümmer, Germany
- P-62 EXPOSURE TO EXOGENOUS THYROID HORMONE AFFECTS METAMORPHIC (topic 1) DEVELOPMENT IN WHITE GROUPER (*Epinephelus aeneus*) LARVAE
I. Geva, B. Ron, S. Lutzky, O. Nixon, S. Golan-Fisher, A. Tandler, W. Koven, Israel

WEDNESDAY, MARCH 14, 2007

08:30 - 10:00 *PL3 – Hall A*

Plenary Session 3

Chair: **R. Belas**, USA

08:30 *Plenary lecture:*
THE ROLE OF BACTERIA IN CORAL HEALTH, DISEASE AND EVOLUTION
E. Rosenberg, O. Koren, L. Reshef, I. Zilber-Rosenberg, Israel

09:30 *Keynote lecture:*
MARINE BIOTECHNOLOGY AND THE ENVIRONMENT: RESEARCH,
APPLICATIONS, MITIGATIONS AND CONFRONTATIONS
R. H. Richmond, USA

10:00 *Coffee break*

10:30 – 12:40 *PARALLEL SESSIONS (PRL13, PRL14, PRL15)*

10:30 - 12:40 *PRL13 – Hall A*

Sustainable Aquaculture: The Role of Biotechnology

(Sponsored by the Annual Dan Popper Symposium)

Chair: **M. Shpigel**, Israel

10:30 *Keynote lecture:*
ADVANCES IN MOLECULAR IMMUNOLOGICAL RESEARCH OF CHINESE
SHRIMP *FENNEROPENAEUS CHINENSIS*
J. Xiang, F. Li, B. Wang, B. Dong, Y. Liu, J. Zhang, X. Zhang, China

11:00 GENOMIC APPROACH TO THE STUDY OF CRUSTACEAN CUTICULAR
COMPONENTS ACROSS THE MOULT CYCLE
A. V. Kuballa, A. Elizur, Australia

11:20 TRACKING HATCHERY BLUE CRABS (*CALLINECTES SAPIDUS*) USING
MOLECULAR GENETIC MARKERS
X. Feng, J. Hill, A. R. Place, USA

11:40 CRUSTACEAN IMMUNE STIMULATION: SNAKE OIL OR SOLUTION?
A MOLECULAR STUDY
V.J. Smith, C. Hauton, UK

12:00 CRYOPRESERVATION OF BLACK TIGER SHRIMP (*PENAEUS MONODON*)
SPERMATOPHORES
V. Vuthiphandchai, S. Nimrat, S. Kotchalat, A.N. Bart, Thailand

12:20 SEARCHING FOR GENETIC MARKERS OF VIRULENCE IN *VIBRIO*
NIGRIPULCHRITUDO, A *LITOPENAEUS STYLIROSTRIS* SHRIMP PATHOGEN
Y. Reynaud, F. Le Roux, C. Goarant, D. Saulnier, France

WEDNESDAY, MARCH 14, 2007 (Continued)

10:30 - 12:40 PRL14 – Hall B

Algal Biotechnology

Chair: S. Arad Israel

- 10:30 *Keynote lecture:*
MARINE MICROBIAL BIOTECHNOLOGY: REALIZING THE OPPORTUNITY
J. Flatt, K. Apt, B. Barclay, J. Metz, C. Weaver, C. Lippmeier, USA
- 11:00 IDENTIFICATION OF DIFFERENTIALLY EXPRESSED GENES IN THE
COMMERCIALY IMPORTANT AGAROPHYTE, *GRACILARIA GRACILIS*,
FOLLOWING NITROGEN DEPRIVATION
V. E. Coyne, T. Lebi, South Africa
- 11:20 ALGAL CULTURE, FROM LABORATORY TO COMMERCIAL SCALE
PRODUCTION
J.U. Grobbelaar, South Africa
- 11:40 A NOVEL APPROACH TO SUPPLY OXYGEN FOR IMPLANTED CELLS
Y. Evron, S. Maimon, I. Mashenko, A. Rotem, Israel
- 12:00 PRODUCTION LOSSES CAUSED BY HIGH OXYGEN CONCENTRATIONS IN
HAEMATOCOCCUS PLUVIALIS CULTURES GROWN IN ENCLOSED
PHOTOBIOREACTORS
G. Banet, Y. Hofman, Israel
- 12:20 EFFECTS OF WINTER TEMPERATURE ON MICROALGAL PRODUCTIVITY AT
GREENFUEL'S BIODIESEL FACILITY IN THE ARIZONA DESERT
M. Olaizola, USA

10:30 - 12:40 PRL15 – Hall C

Marine Organismal Molecular Biology & Biotechnology

Chair: S. Du, USA

- 10:30 *Keynote lecture:*
LECTINS IN INNATE IMMUNITY OF SHELLFISH AND FINFISH: STRUCTURAL,
FUNCTIONAL AND EVOLUTIONARY ASPECTS
G.R. Vasta, H. Ahmed, S. Tasumi, E. W. Odom, K. Saito, USA
- 11:00 EXPRESSED SEQUENCE TAGS FROM ALLOGENEIC REJECTING COLONIES OF
THE TUNICATE *BOTRYLLUS SCHLOSSERI*
M. Oren, J. Douek, Z. Fishelson, B. Rinkevich, Israel
- 11:20 COMPARISON OF GENE EXPRESSION PROFILES OF SHRIMP CHALLENGED
WITH WSSV AND VIBRIO
B. Wang, F. Li, J. Xiang, China
- 11:40 GENETIC MODIFICATION OF THE PROTOZOAN PARASITE
PERKINSUS MARINUS
J.A.F. Robledo, L. Zhuoer, G.R. Vasta, USA

WEDNESDAY, MARCH 14, 2007 (Continued)

12:00 IDENTIFICATION OF DIFFERENTIALLY EXPRESSED IMMUNE RESPONSE GENES IN THE SOUTH AFRICAN ABALONE, *HALIOTIS MIDAE*, FOLLOWING THE ADMINISTRATION OF A PROBITOIC SUPPLEMENTED ARTIFICIAL DIET
B. L. Arendze-Bailey, V. E. Coyne, South Africa

12:20 DEVELOPMENT OF RECOMBINANT AND DNA VACCINE TO CONTROL *VIBRIO ANGUILLARUM* IN SEA BASS, *LATES CALCARIFER*
A. S. Ninawe, India

12:40 – 14:00 L u n c h (Food Fair Restaurant – Lobby floor)

14:00 VISIT TO THE UNDERWATER OBSERVATORY MARINE PARK EILAT
(for participants and accompanying persons).
Departure: 14:00 from the Dan hotel lobby. *Return:* 16:00

15:30 FIELD TRIP TO MARINE BIOTECHNOLOGY VENTURES IN EILAT
Pre-registration for the above visits is required by Monday, March 12.
See details on page 11.
Departure: 15:30 from the Underwater Observatory Marine Park Eilat

20:30 FAREWELL BEDOUIN FEAST AT THE CAMEL RANCH
Departure: 20:00 from the Dan Eilat, Dan Panorama and Nova hotels.

THURSDAY, MARCH 15, 2007

08:30 - 10:00 *PL4 – Hall A*

Plenary Session 4

Chair: T.T. Chen, USA

08:30 *Plenary lecture:*
GERM CELL TRANSPLANTATION IN FISH: APPLICATION TO AQUACULTURE
G. Yoshizaki, Japan

09:30 *Keynote lecture:*
ALGAL BIOTECHNOLOGY: FROM GENOMICS TO PRODUCT ENGINEERING
S. Qin, J. Peng, C. Huaxin, China

10:00 *Coffee break*

10:30 – 12:40 *PARALLEL SESSIONS (PRL16, PRL17)*

10:30 - 12:40 *PRL16 – Hall A*

Environmental Issues, Education & Policy

Chair: Hussam Masalha, Israel

10:30 *Keynote lecture:*
BIOFUELS FROM MARINE MICROALGAE
J.R. Benemann, USA

11:00 MARINE BIOTECHNOLOGY CONTENT IN COASTAL ZONE MANAGEMENT
EDUCATION
F. Quezada, H. H. Halvorson, R. Delaney, , USA

11:20 CULTURING CORALS FOR PUBLIC DISPLAYS: EFFECTS OF ABIOTIC FACTORS
ON GROWTH OF STONY CORALS
R. Osinga, M. Schutter, J. Crocker, B. van Velthoven, M. Janse, J. Verreth,
The Netherlands

11:40 MARICULTURE AS A NEW CHALLENGING RESOURCE
J.O.B. Carioca, A.C. Fortes-Xavier, M.R.L.V. Leal, Brazil

12:00 FATTENING BLUE FIN TUNA IN THE MEDITERRANEAN SEA – PROBLEMS
AND POSSIBLE SOLUTIONS
H. Gordin, Israel

12:20 ECOLOGICALLY FRIENDLY AQUACULTURE: NOT A DREAM BUT A REALITY
A. Neori, Israel

10:30 - 12:40 *PRL17 - Hall C*

Marine Microbiology

Chair: J. Hunter-Cevera, USA

10:30 *Keynote lecture:*
ENVIRONMENTAL GENOMICS AND VIRAL 'PHOTOSYNTHESIS'
O. Beja, Israel

THURSDAY, MARCH 15, 2007 (Continued)

11:00 METAGENOME ANALYSIS OF MARINE BACTERIA ASSOCIATED WITH INVERTEBRATES WITH EXPLORATION FOR USEFUL GENES/PRODUCTS
H. Takeyama, H. Yokouchi, T. Matsunaga, Japan

11:20 PHYLOGENETIC ANALYSIS OF POLYKETIDE SYNTHASE TYPE I FROM SPONGE AND CORAL METAGENOMES
M. Meneses, H. Yokouchi, H. Takeyama, T. Matsunaga, Japan

11:40 DEVELOPMENTS IN THE ANAEROBIC IN SITU MONITORING AND TREATMENT OF POLYCHLORINATED BIPHENYLS (PCBS) IN MARINE SEDIMENTS
K. R. Sowers, B. Kjellerup, S.K. Fagervold, H.D. May, USA

12:00 RE-EVALUATING LYSOGENIC POTENTIAL OF MARINE HETEROTROPHIC BACTERIA
F. Chen, K. Wang, Y. Zhao, K. Williams, N. Jiao, USA

12:20 UNCULTURED CORAL BACTERIA: POTENTIAL SOURCE FOR BIOACTIVE COMPOUNDS
D. Zeevi BenYosef, A. Kushmaro, Israel

12:40 – 14:00 *Lunch*

(Food Fair Restaurant – Lobby floor)

14:00 – 16:10 **PARALLEL SESSIONS (PRL18, PRL19, PRL20)**

14:00 - 16:10 **PRL18 – Hall A**

Genomics, Proteomics & Metabolomics in Marine Biotechnology

Chair: A. Elizur, Australia

14:00 *Keynote lecture:*

HARMFUL ALGAE GENOMICS; NEW INSIGHTS INTO TOXICITY AND BIOTECHNOLOGY APPLICATIONS
A. Place, USA

14:30 COMPUTATIONAL AND EXPERIMENTAL APPROACHES FOR ESTIMATING EFFICIENCY OF CROSS-SPECIES cDNA MICROARRAY HYBRIDIZATIONS - FISH MODEL
M. Tom, R. Cohen, V. Chalifa-Caspi, Israel; T.D. Williams, S.G. George, J.K. Chipman, UK; M. Auslander, Israel;

14:50 EXPRESSION OF RIBOSOMAL PROTEIN GENES DURING EMBRYONAL DEVELOPMENT OF ZEBRAFISH: COMPARISON OF MICROARRAY AND NORTHERN BLOT ANALYSES
B. Cavari, Israel; S. Mathavan, W.Y. Lian, Z. Gong, Singapore

15:10 CHARACTERIZATION OF SIMPLE SEQUENCE REPEATS DERIVED FROM EXPRESSED SEQUENCE TAGS (EST-SSRs) OF GILTHEAD SEA BREAM AND EUROPEAN SEA BASS; PCR ASSAYS AND POLYMORPHISM EVALUATION
C.S. Tsigenopoulos, J. Lagnel, V. Pakaki, G. Kotoulas, Greece; A. Canario, Portugal; A. Magoulas, Greece

THURSDAY, MARCH 15, 2007 (Continued)

15:30 ZEBRAFISH AS A MODEL FOR UNCOVERING GENE FUNCTIONS INVOLVED IN MUSCLE AND BONE DEVELOPMENT
S.-J. Du, USA

15:50 IDENTIFICATION OF DEVELOPMENTAL AND OSMOREGULATORY GENES USING HIGHLY REPRESENTATIVE CDNA MICROARRAYS FOR THE EUROPEAN EEL, *ANGUILLA ANGUILLA*
I. S. McWilliam, S. Kalujnaia, UK; J. Nicholson, N. Hazon, R. Balment, G. Cramb, UK; C.P. Cutler, USA

14:00 - 16:10 PRL19 – Hall B

Sustainable Aquaculture: The Role of Biotechnology

(Sponsored by the Annual Dan Popper Symposium)

Chair: H. Laufer, USA

- 14:00 *Keynote lecture:*
A MULTIDISCIPLINARY APPROACH FOR INVESTIGATING THE PROSPECTS FOR CRYOPRESERVATION OF FISH OOCYTES
E. Lubzens, H. Rosenfeld, I. Meiri, Israel; P.-E. Olsson, Sweden; J. Cerda, Spain; J.P.J. Babin, France; A. Admon, Israel; O. Carnevali, Italy; D. Rawson, T. Zhang, UK
- 14:30 SPAWNING ACTIVITY OF BLUEFIN TUNA IN THE MEDITERRANEAN SEA: WILD VS. CAPTIVE BROODSTOCKS
H. Rosenfeld, G. Heinisch, I. Meiri, D. Gliksman, Israel; A. Corriero, Italy; A. Medina, F.J. Abascal, J.M. de la Serna, Spain; R.V. Aguis, Malta; A. Belmonte, A. Garcia, F. de la Gandara, Spain; C. Fauvel, France; C. Mylonas, Greece; I. Oray, Turkey; G. De Metrio, Italy; C.R. Bridges, Germany; Y. Zohar, USA; H. Gordin, Israel
- 14:50 VARIATION IN SPAWNING SUCCESS AND GENETIC CONTRIBUTION OF COMMERCIAL GILTHEAD SEABREAM BROODSTOCK TO MASS SPAWNING EVENTS
C. Brown, Cyprus; B. McAndrew, UK; G. Kotoulas, A. Magoulas, Greece
- 15:10 REDUCING THE DEPENDENCY OF FISH MEAL AND FISH OIL IN FEEDS FOR HYBRID STRIPED BASS AND THEIR EFFECT ON PRODUCT QUALITY, CONSUMER HEALTH AND ACCEPTANCE
H. Nonogaki, USA; G.W. Kissil, I. Lupatsch, Israel; A.R. Place, USA
- 15:30 HOMOZYGOUS DIPLOID GYNOGENESIS INDUCTION OF THE OLIVE FLOUNDER *PARALICHTHYS OLIVACEUS*
P. Zhang, F. You, J. Xu, Y. Xu, China
- 15:50 ENVIRONMENTAL EFFECTS, GH, SEX HORMONES AND GROWTH RATES, IN MALE AND FEMALE EELS (*ANGUILLA ANGUILLA*): BASIC AND APPLIED ASPECTS
G. Degani, Israel

THURSDAY, MARCH 15, 2007 (Continued)

14:00 - 16:10 PRL20 – Hall C

Algal Biotechnology

Chair: R.H. Wijffels, The Netherlands

- 14:00 *Keynote lecture:*
PHOTOSYNTHESIS IN MARINE *SYNECHOCOCCUS* AND ELECTRON FLOW TO OXYGEN
A. R. Grossman, S. Bailey, K. Mackey, M. Berg, K. Arrigo, J. Shrager, USA
- 14:30 FUNCTIONAL AND MOLECULAR STRATEGIES BEHIND THE ASTOUNDING STRESS TOLERANCE OF THE ALGA *DUNALIELLA*
A. Zamir, P. Lakshmanane, I. Gokhman, J. Sussman, Israel
- 14:50 CLONING AND CHARACTERIZATION OF 5' AND 3' FLANKING REGIONS OF THE NITRATE REDUCTASE GENE DERIVED FROM *DUNALIELLA SALINA*
J. Li, L. Xue, China
- 15:10 METABOLOMICS OF CAROTENOGENESIS IN *DUNALIELLA SALINA*
P.P. Lamers, M.G. Janssen, C.H. R. de Vos, R.J. Bino, R.H. Wijffels, The Netherlands
- 15:30 CAROTENOID MILKING OF *DUNALIELLA SALINA*
D. M. M. Kleinegris, M.G. J. Janssen, R.H. Wijffels, W.A. Brandenburg, The Netherlands
- 15:50 PHOTOACCLIMATION MECHANISMS IN PHYTOPLANKTON AND THEIR IMPLICATIONS IN ALGAL MASS CULTURE
Z. Dubinsky, Israel

16:40 – 18:10 PL5 – Hall A

Plenary Session 5

Chair: S. Arad, Israel

- 16:40 *Plenary lecture:*
MERGING GENOMICS INTO ALGAL BIOTECHNOLOGY
B. Kloareg, France
- 17:40 COSMETICS FROM THE SEA: THE USE OF MARINE PREPARATIONS IN MODERN SKIN CARE
K. Marenus, USA

18:10 – 19:00 – Hall A

Closing Session

Chair: A. Ben-Amotz, Israel

CONCLUDING REMARKS:
Y. Zohar and R.T. Hill, USA

FRIDAY, MARCH 16, 2007

Optional tours