

# Personalized Medicine Europe: Health, Genes & Society

Tel-Aviv University, Tel-Aviv, Israel

June 19-21, 2005

Provisional Workshop Programme

Day One: Sunday, June 19, 2005

## ***Genes and Medicine: Individual and Community Health***

**09:00 Registration**

**9:30 - 10:00 Greetings and opening comments**

Dov Lichtenberg, Dean, Faculty of Medicine, Tel-Aviv University

Gregory Livshits, Tel-Aviv University

**10:00 - 11:30 Opening lectures: Health, Genes & Society**

Chair: Gregory Livshits

Leo ten Kate, VU University Medical Center, Amsterdam, The Netherlands: Is there a link between personalized medicine and community genetics?

Klaus Lindpaintner, Roche Diagnostics, Basel, Switzerland: Personalized medicine: Health, genes, and society

Carole Moquin-Patthey, European Science Foundation: ESF EMRC contribution to building a public-private platform for clinical research in Europe

**11:30 - 11:50 Coffee**

**11:50 - 12:50 Health, Genes & Society (cont.)**

Chair: David Gurwitz

Tim Spector, University College London, UK: The use of twins in genetic research: Implications for personalized medicine

Claus Moldrup, Royal Danish School of Pharmacy, Denmark: The prospects and bioethical dimensions of expanding the meaning of pharmacogenomics to encompass individualized pharmacotherapy

**12:50 - 14:00 Lunch**

### **14:00 - 16:00 Health, Genes & Society (cont.)**

Chair: Karen Avraham

Ziad Elnasser, Jordan University of Science and Technology, Irbid, Jordan: Promoting Arab and Israeli cooperation: peace building through health initiatives

Rivka Carmi, Ben-Gurion University, Israel: Cross-cultural genetic counseling

Karen Avraham, Tel-Aviv University, Israel: A Comprehensive Study on the Molecular Genetic Basis of Hereditary Hearing Loss

Moien Kanaan, Bethlehem University, Palestinian Authority: Novel Palestinian mutations in deafness-related genes

Hermona Soreq, Hebrew University, Israel: Neurogenetics of acetylcholinesterase: from stress reactions to Parkinsonism

Gideon Bach, Hadassa Medical Center, Jerusalem, Israel: Preventive programs in Israel: An ethnic based personalized medicine

### **16:00 – 16:20 Coffee**

### **16:20 – 18:00 Medical Genetics and Pharmacogenetics I**

Chair: Gian Franco De Stefano

Gideon Rechavi, Tel-Aviv University, Israel: Abundant A-to-I editing sites in the human transcriptome: relevance to disease

Hanoch Slor, Tel-Aviv University, Israel: Polymorphism in cancer patients' DNA repair capacity as a factor in determining the dosimetry of radiation and chemotherapy

Joab Chapman, Tel-Aviv University, Israel: The role of the APOE genotype in immunomodulation

Lior Sousan-Gutman, Teva, Israel: Cancer Pharmacogenomics: The field that studies the role of an individual's genetics in the response to drugs

Dan Mishmar, Gen-Gurion University, Israel: Mitochondrial Genetics, longevity, adaptation and disease

Day Two: Monday, June 20, 2005

***Genes and Health: Setting the Clinical Priorities***

**09:30 - 11:00 Towards Personalized Medicine**

Chair: Tim Spector

Andre Uitterlinden, Erasmus Medical Center, Rotterdam, The Netherlands: Analysis of Genetic Variation in Complex Endocrine Diseases

David Karasik, Harvard University, MA, USA: Gene-environment interactions on bone mass: The Framingham Study

Vangelis Manolopoulos, University of Thrace, Greece: Integration of pharmacogenetics into the therapeutic drug monitoring clinical service of large hospitals

**11:00 - 11:20 Coffee**

**11:20 - 12:50 Towards Personalized Medicine (cont.)**

Chair: Gideon Rechavi

Charles Cantor, Sequenom, USA: Automated Mass Spectrometry in Personalized Medicine

Gian Franco De Stefano, University of Rome Tor Vergata, Italy: Possible differences in the immune response to the common environmental disease factor *Onchocerca volvulus* in two ethnic communities living in the Ecuadorian rain-forest.

Uwe Fuhr, University of Cologne, Germany: Individualization of isoniazid doses based on NAT2 genotype. Design features of a randomized clinical trial

**12:50 - 14:00 Lunch**

**14:00 - 16:00 Medical Genetics and Pharmacogenetics II**

Chair: Uwe Fuhr

Avraham Weizman, Tel-Aviv University, Israel: Pharmacogenetics of citalopram in pediatric anxiety and depression

Adrian Llerena, University of Extremadura, Spain: CYP2D6 multiplication in Spanish healthy volunteers and schizophrenic patients

Julia Kirchhneier, University of Cologne, Germany: The CYP2C9 polymorphism: from enzyme kinetics towards genotype-adjusted drug therapy

Ada Rosen, Wolfson Medical Center, Israel: Genetic breast cancer – a top secret information?

Dan Bercowitz, MIGAL, Israel: Pharmacogenetics of Fluvastatin in Familial Hypercholesterolemic Patients

Edna Ben-Asher, The Weizmann Institute of Science, Israel: Sequenom MassArray technology and its uses in Israel

**16:00 – 16:20 Coffee**

**16:20 – 18:00 Oral Posters Session**

Six of the posters listed below, displayed during Monday, would be selected for oral presentations (15 min each):

Amiel A Dror, Ronna Hertzano, Mireille Montcouquiol *et al*, Tel-Aviv University, Israel: The LIM domain transcription factor LHX3 is a putative target of POU4F3 in the inner ear

M Fellous, Hopital Cochin, France: Genetics analysis of human infertility

Iris Grossman, Nili Avidan, Clara Singer *et al*, Technion and Carmel Medical Center, Israel: Pharmacogenetics of glatiramer acetate therapy for multiple sclerosis reveals drug-response markers

Ronna Hertzano, Mireille Montcouquiol, Sharon Rashi-Elkeles *et al*, Tel-Aviv University, Israel: Understanding the pathogenesis of human hereditary deafness by expression profiling of inner ears from mutant mice

EY Levanon, E Eisenberg, Y Kinar *et al*, Tel-Aviv University, Israel: Identification of A-to-I RNA-editing sites in the human transcriptome

S Lieberman, A Frumkin, M Sagi, Hadassah University Hospital, Israel: Evaluating attitudes towards genetic screening programs among orthodox Jewish students

Idan Menashe, Yoav Gilad, Orna Man *et al*, The Weizmann Institute, Israel: Sniffing SNPs – the genetic basis of human olfactory variability

LI Minaicheva, OA Makeeva, VA Stepanov *et al*, Russian Academy of Medical Science, Tomsk, Russian Federation: Genetic testing for common diseases in clinical practice

APA Rani, A Aysha Mahmoodha, Lady Doak College, Madurai, Tamil Nadu, India: *In silico* structural analysis of cytochrome P450-dependent monooxygenase

Gilad Silberberg, Ruth Navon, Tel-Aviv University, Israel: *ErbB4* shows a highly significant association with schizophrenia in Ashkenazi Jews

Manuela Vecsler, Ronen Loebstein, Shlomo Almog *et al*, Sheba Medical Center, Israel: Individual sensitivity to warfarin could be predicted from genetic profiles of the components and effectors of vitamin K-dependent gamma-carboxylation system

Shachar Zuckerman, Ephrat Levy-Lahad, Amnon Lahad, Michal Sagi, Shaare Zedek Medical Center, Israel: Genetic screening for Gaucher disease in Israel: genetic screening program for a low penetrant, treatable disease

Day Three: Tuesday, June 21, 2005

***Genes and Society***

**09:30 - 11:00 Personalized Medicine: ELSI perspectives**

Chair: Leo ten Kate

Felix Frueh, FDA, USA: Personalized Medicine: Ethical and social consequences

Michel Revel, The Weizmann Institute, Israel: Bioethical limits of prenatal genetic testing

Jeantine Lunshof, VU Medical Center, Amsterdam, The Netherlands: Personalized medicine: new perspectives, new dilemmas?

**11:00 – 11:20 Coffee**

**11:20 – 12:50 Personalized Medicine: ELSI perspectives (cont.)**

Chair: Jeantine Lunshof

Norbert Paul, Johannes Gutenberg-University Medical School, Germany: Public Health Genetics in Germany: Pandora's Perils or Panacea's Promise?

Andre Metspalu, University of Tartu, Estonia: Biobanking and personalized medicine

Julie Friedman, Bristol Myers Squibb, NJ, USA: Pharmacogenomic Research in Drug Development - The Ethical Concern, Bridging The Gap Between Public Perceptions and Industries Realities

**12:50 – 14:00 Lunch**

**14:00 - 16:00 Pharmacogenetics and public policy**

Chair: Norbert Paul

Vaidutis Kucinkas, Vilnius University, Lithuania: The meaning of free and informed consent in biomedical research personalizing medicine

Michael Weingarten, Tel-Aviv University, Israel: The ethics of clinical prediction

Barbara Prainsack, Vienna University, Austria: Personalized Medicine in Times of "Global Genes": Making sense of a "hype"

Inga Peter, Tufts University, MA, USA: Personalized medicine United States: pros, cons, but no way back

Carmel Shalev, Tel-Aviv University, Israel: A Human Rights Perspective on Personalized Medicine and Justice

**16:00 – 16:20 Coffee**

**16:20 - 18:20 Concluding Session and Round Table Discussion:  
Health, Genes & Society: Where do we go from here?**

Moderators: Gregory Livshits, David Gurwitz

David Goldstein, Duke University, NC, USA: Prospects for pharmacogenetics: lessons from anti-epileptic drugs

Round Table Discussion Panelists: David Goldstein, Leo ten Kate, Norbert Paul, Michel Revel