GENERAL INFORMATION

The first workshop on New Trends in Nucleic Acid Based Biosensors, organised by the University of Florence, will be held in Sesto Fiorentino, Florence (Italy), from 26th to 28th October 2003.

Since the objective of the workshop is to bring together experts from RNA, DNA and biosensing research areas for optimising the DNA or RNA biosensor tool, we will be very glad to welcome experts and also people who are interested in these themes.

The European Science Foundation (ESF) has funded the workshop within the programme “Functional Genomics” (Programme Area: DNA arrays and chips).

SCIENTIFIC COMMITTEE
Prof. Marco Mascini (University of Florence, Italy)
Prof. Ulf Landegren (University of Uppsala, Sweden)
Dr. Ettore Luzi (University of Florence, Italy)
Dr. Maria Minunni (University of Florence, Italy)

LOCAL ORGANISING COMMITTEE
Dr. Ettore Luzi
Dr. Maria Minunni
Prof. Giovanna Marrazza
Dr. Sara Tombelli
Dr. Serena Laschi

WORKSHOP SECRETARIAT
Dr. Maria Minunni – minunni@unifi.it
Dr. Sara Tombelli – sara.tombelli@unifi.it

IMPORTANT DEADLINES
July 31, 2003 Registration and Submission of abstracts
August 31, 2003 Information to authors about acceptance of abstracts

EXHIBITION

An exhibition of instrumentation, books and journals is planned. Exhibition spaces are limited and we advise that companies wishing to book space contact the organisers quickly to avoid disappointment.

ACCOMMODATION SERVICE (optional)

Participants: 500 ?

The accommodation service includes:
-3 nights (25-28 October) in very good and comfortable Hotels (4 stars) near the Workshop location
-Transports from the Hotel to the workshop location
-Welcome Party on the 25th of October
-Workshop Banquet on the 27th of October

Participants can look for other accommodation through the local tourist information centre (www.firenzeturismo.it).

REGISTRATION AND FINAL PROGRAMME

The final programme, including the contributions of all participants will be distributed in September 2003. For more information and registration please visit: http://www.polosci.unifi.it (news).

We recommend a rapid registration because a maximum of 60 participants is accepted and priority will be given to European applicants.

PRESENTATIONS

Plenary lectures: 45 min
Oral presentations: 20 min
Poster presentations: Maximum poster dimensions will be 90 cm wide x 120 cm deep.

Computers with digital projectors will be provided for oral presentations.
biosensors with emphasis on new trends in nucleic acid research such as developments of aptamers and aptazymes as affinity ligands and potential coupling to transduction technologies. The main objectives of this workshop are:

- To bring together experts from biosensing and nucleic acid research areas for optimising the DNA or RNA biosensor tool
- Progress in understanding immobilisation of ssDNA and RNA to allow the design of analytical sensing surfaces that can be used for very rapid and quantitative determination of nucleic acid hybridisation
- Recent developments on SELEX technology for the rapid production of aptamers with improved affinity and stability
- Optimisation of analytical biosensors for studying RNA-protein interactions

The workshop will be divided in 3 sessions:

**Session 1:**
State of art and future trends in DNA/RNA sensing
a) Evolution of nucleic acid sensors
b) Analytical and diagnostic advantages

**Session 2:**
In vitro selection of Aptamers as new affinity ligands
a) SELEX
b) In vitro selection of modified ligands
c) New strategies in immobilisation of nucleic acids

**Session 3:**
RNA based biosensors: aptasensors and aptazymes
a) Selection of novel allosteric catalytic RNA
b) RNA arrays
c) Affinity biosensors

**INVITED SPEAKERS**

- Prof. F.F. Bier (Fraunhofer Institute for Biomedical Engineering (IBMT), Department of Molecular Bioanalytical Chemistry & Bioelectronics, Bergholz-Rehbrucke, Germany)
- Prof. K.K. Breaker (Department of Molecular, Cellular and Developmental Biology, Yale University, New Haven, USA (to be confirmed))
- Dr. A. Cooper (Department of Chemistry, University of Cambridge, Cambridge, UK)
- Prof. F. Eckstein (Max Planck Institute for Experimental Medicine, Göttingen, Germany)
- Prof. V.A. Erdmann (Free University of Berlin, Institute for Chemistry/Biochemistry, Berlin, Germany)
- Prof. M. Famulok (Kekulé Institute of Organic Chemistry and Biochemistry, Bonn, Germany)
- Prof. L. Gold (Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, USA). (to be confirmed)
- Prof. G.G. Guibault (Chemistry Department, University College of Cork, Cork, Ireland)
- Dr. J. Hamm (Università degli Studi di Torino, Dipartimento di Genetica, Biologia e Biochimica, Sezione di Biologia, Centro Ricerca Medicina Sperimentale, Torino, Italy)
- Dr. F. Hook (Department of Applied Physics, Chalmers University of Technology & Goteborg University, Goteborg, Sweden)
- Prof. A. Jaschke (University of Heidelberg, IPMB, Department of Chemistry, Heidelberg, Germany)
- Prof. J. Labuda (Department of Analytical Chemistry, Faculty of Chemical Technology, Slovak University of Technology, Bratislava, Slovak Republic)
- Dr. D. Libri (Centre de Genetique Moleculaire, CNRS, Gif-sur-Yvette, France)
- Prof. M. Ozsoz (Department of Analytical Chemistry, Faculty of Pharmacy, Ege University, Izmir, Turkey)
- Prof. E. Palecek (Institute of Biophysics, Academy of Sciences of Czech Republic, Brno, Czech Republic)
- Dr. B. Personn (Biacore AB, Uppsala, Sweden)
- Prof. F.W. Scheller (University of Potsdam, Department of Analytical Biochemistry, Institute of Biochemistry and Biology, Golm, Germany)
- Prof. J.J. Toulme (INSERM U 386, Bordeaux, France)
- Prof. I. Willner (Department of Organic Chemistry, Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel)