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newsletter



BIOTRACER Project

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Members of the Scientific Committee met in Prague, Czech Republic, for the EC Review Meeting.

BIOTRACER Completes Its First EC Review!

Presentation is everything

Members of the BIOTRACER Scientific Committee met in Prague, Czech Republic, between 9—12 March 2008, for BIOTRACER's first EC Review Meeting.

The first day and a half was dedicated to improving presentation skills and doing a 'dry-run' of the presentations.

Looking in from the Outside

The presentation to the EC began officially on 11 March. Besides our Scientific Officer, Judit Krommer, from the EC, there were two outside reviewers at the meeting: Rohtraud Pichner from the Meat Science Institute in Kulmbach, Germany; and Roger Stephen from the University of Zurich, Switzerland.

Practice Made Perfect

After the presentations were finished on 12 March, the reviewers and EC Scientific

Officer gave feedback to the Scientific Committee on the written report, the presentations and the plan for the next 18 months.

Overall, the report and presentations were greeted with positive feedback and strong encouragement to continue the good work.

There were a few adjustments to the report and next 18 month plan requested by the EC. These will be completed by late spring.

The Project Office is now waiting for the written comments by the reviewers and EC.

The Project Office would like to thank all BIOTRACER participants for their cooperation and dedication to make the report and EC Review Meeting such a great success.

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Jeffrey Hoorfar (Coordinator) and Judit Krommer (EC Scientific Officer) discuss the finer points of the BIOTRACER Annual Report.

Decisions, Decisions by Gary Barker (IFR)



Interventions are usually less effective in the presence of uncertainty.

In BIOTRACER we are driven by integration – bringing together results from different corners of the project to give just one working picture of our chosen hazard domains. Why?

One reason concerns decisions – decisions that

BIOTRACER wants to support like “What should we do to intercept food chain problems” and “How should we respond to a warning sign?” These decisions involve actions, interventions and communications, which have costs and benefits. Costs and benefits are easy to weigh up when we are certain of the facts but are difficult to assess when we are uncertain. When we are confident about the source of a problem we act; when we aren’t we don’t want to do something that will incur unnecessary costs or risk making the situation worse. In BIOTRACER we are estimating probabilities for sources of potential problems - the idea of integration is to reduce uncertainties and hence strengthen the decision process.

There are at least two kinds of decision making; people usually make descriptive decisions subject to biases and heuristics that are part of their own experiences. Quantitative assessments in BIOTRACER hope to include normative decision making – a rational approach based on probabilities and expected utilities. Bayesian networks can be used to support normative decision making.

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Gary Barker is at IFR in Norwich and used to be a theoretical physicist.

Microarray Innovation Workshop: Developing New Approaches



Participants at the Microarray Innovation Workshop discussed ways in which DNA microarray techniques can be used to determine strains of *Salmonella*.



Henk Aarts (RIKILT) and Hugo Grønland (DTU) discuss protocol options.

The first of three

The three-phased Microarray Innovation Workshop is now under way. The first phase was hosted in Copenhagen, 22—23 January, and scientists and BIOTRACER participants from Denmark, Holland, Germany and France participated in the challenging process of being innovative and creative. The main objective of the workshop is to create new ideas on how to do *Salmonella* DNA microarray, to work

the most promising ideas into detailed protocols, perform experiments based on the protocols in the lab, and finally evaluate the results.

Who has ideas?

The first phase was two days of hard work. The objective here was for everybody to be positive and think out-of-the-box and to nurture and develop the new ideas that came to the participants minds. At the end of day one, the brainstorming session resulted in approximately

35 new ideas. The ideas were categorised and the principle of each idea were explained.

Next steps

On the second day, the participants selected two promising ideas and managed to work out a protocol for each idea, which is the basis for the laboratory experiments that will take place in phase two of this workshop.

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Wissenschaft, Kunst und schöne Leben – the Viennese Experience of a Young Scientist

“True relaxation, which would do me the world of good, does not exist for me.” These are the words of Gustav Klimt, a perfect motto for any of today’s youths, especially for those prone to scientific research, and, of course, for gifted artists.

Opportunity

I am a Romanian PhD student whom applied for and was granted a fellowship within the BIOTRACER Mobility Programme. Thus I spent two months in Martin Wagner’s laboratory at the University of Veterinary Medicine in Vienna. The visit was mostly practical oriented allowing me to acquire hands-on experience in real-time PCR quantification of pathogens, familiarisation with matrix lysis as a cell-based sample preparation method, and, generally, to further my knowledge in

molecular biology techniques. Overall, I credit the visit with a substantial benefit to my professional development.

Valuable Experience

Nonetheless, such a visit should not be solely about the raw professional skills gained, particularly when you are at the start of what you wish to be a prominent career in research. Of course, expertise is of paramount importance, but the social skills should not be neglected. Nowadays, high scientific research is unconceivable without networking. Hence, mobility of scientists is critical to building up collaborations. Aside from actually connecting people, it shapes up the capacity to relate to peers with different cultural or even scientific backgrounds. I had the opportunity to work in an international group comprised of young

researchers from various European countries (e.g. Austria, Germany, Italy, Poland), to share a multicultural experience, and to create the premises for future projects such as, why not, BIOTRACER.

Social Value

Vienna is a cosmopolitan and historically and culturally rich European capital city, and by living there for two months I was able to get a glimpse of its beauties and wonders. I had the chance of watching live and up-close the works of the *Secession* masters and of other great artists displayed in the City’s numerous and impressive art museums. I enjoyed tasting some of the famously delicious cakes in the elegant yet cosy cafés all around. I had two full, memorable and professionally and personally rewarding months... Thank you, BIOTRACER!

Genotyping Workshop held in Bern, Switzerland

On 4–5 February 2008, in Bern, Switzerland, 13 participants gathered to learn about genotyping at the Institute of Veterinary Bacteriology, University of Bern.

Genotyping of pathogenic bacteria is an important tool for tracing bacteria in

food. It is used for investigating and detecting transmission routes, cross-infections, and reservoirs of pathogenic bacteria. The choice of genotyping method should depend on the purpose and the organism studied. Seven presenters from

Statens Serum Institute (DK), University of Bern (CH), Nestec (CH), and SmartGene (CH) guided the participants through genotyping methods and demonstrations. Presentations from the workshop can be found on the e-management tool.



Florin Soptica, of the Univeristy Dunarea de Jos Galati in Romania, used the BIOTRACER Mobility Programme to gain experience in the use of real-time PCR quantification at the University of Veterinary Medicine in Vienna.

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Participants at the Genotyping workshop in Bern learned about methods and had a demonstration and training session on data analysis using the SmartGene MLST *Campylobacter* Module.



A CHANCE TO KISS THE BLARNEY STONE

2nd BIOTRACER General Meeting Dublin, Ireland 2—4 July 2008

BIOTRACER will hold its second General Meeting in Dublin, Ireland, 2—4 July 2008. The event will take place at the Crowne Plaza Dublin Airport, Santry, Dublin, Ireland (www.crowneplazadublin.ie).

The meeting is planned as a full, three-day event, so return travel should be scheduled for later on

Friday evening, or on Saturday.

Each partner is expected to send at least one participant to the meeting.

A meeting flyer with all of the information on how to register and book a hotel, as well as a detailed schedule, will be sent to BIOTRACER participants

in the coming weeks.

In addition to the Research Area and Work Package meetings, there will be a Scientific Committee meeting, a poster session, and Continuing Education Seminars.

So start planning now for your 'chance to kiss the Blarney Stone'.

**BIOTRACER
Project**

Mark Your Calendars!

- 'Predictive modelling methodologies and guidelines to data generators' workshop, 1 July 2008, Dublin, Ireland
- General Meeting, 2—4 July 2008, Dublin, Ireland
- BIOTRACER Ph.D. course, **POSTPONED until 2009**, Copenhagen, Denmark

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Modelling and Data Generation Workshop to be Held in Dublin

The 'Predictive modelling methodologies and guidelines to data generators' workshop is being offered in conjunction with the second BIOTRACER General Meeting.

The workshop will be on 1 July 2008 (from early afternoon until early evening, approximately 4 hours) at the Crown Plaza Hotel, Dublin, Ireland. Panos Skandamis from the Agricultural University of Athens is the host of this workshop.

The goal of the workshop is to increase the level of understanding of predictive modelling.

Background

Demonstration with methodology of development and validation of predictive models will be performed, including experimental design for collection of data for modelling microbial inactivation, probability of growth/no growth interface, classification of models (primary, secondary, tertiary), fitting primary and secondary models with linear and nonlinear regression, and validation of models by using performance statistics and visible comparisons of predicted values with observed values. The

participants will receive training on the definition of dependent and independent variables as well as on the necessary data transformation in order to be further used for predictive modelling. Demonstrations will take place on recording kinetic or binary probability of growth data. There will also be a special session to demonstrate Monte Carlo simulation and how it may be implemented in exposure assessment.

If you would like to register for this workshop, please send an email to 'skib'.

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Panos Skandamis of the Agricultural University of Athens is the host for the workshop.

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