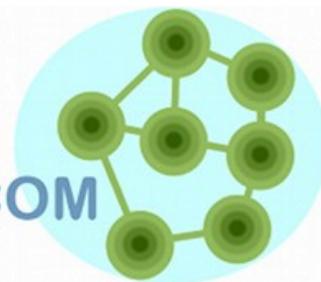


Project Newsletter

BACTOCOM



July 2010

www.bactocom.eu

Newsletter Launch

Welcome to the first edition of the BACTOCOM project newsletter.

The aim of this newsletter is to update interested parties about the research and work carried out to meet the agreed aims of the project. The newsletter will highlight work carried out on the project, information about recent events and

appointments as well as updates on external representation of the project.

The project has recently recruited an administrator, Zarka Khan, and therefore now has the capacity to provide this resource at regular intervals.

BACTOCOM is supported by a €1.95 grant from the European Commission's Seventh Framework Programme for Research and Technical Development (FP7).

The project commenced in February 2010 and is funded until January 2013.

Inside this issue:

Newsletter Launch	1
Project Overview	1
Project Kick Off	1
Project Updates	2
Upcoming Events	2
External Engagements	2

Project Overview

The aim of BACTOCOM is to build a simple computer from bacteria rather than silicon.

Part of the internal program of a bacterial cell may be reprogrammed in order to persuade it to perform human defined tasks. The project will do this by engineering artificial circuits into bacterial cells. By allowing this system to evolve over generations, natural selection is harnessed to build new, functional biological devices.

These proposed aims are inherently interdisciplinary, requiring high levels of expertise in bio technology, synthetic biology and novel computation.

The project is therefore broken up into a number of work packages which draw on the varied expertise of a team of scientists from Belgium, France, Germany, Spain and the UK.

The Project Kick Off was held at MMU in March 2010.



The project members posed outside the University's John Dalton Building.

For further information about BACTOCOM, please contact Zarka Khan in the first instance on z.khan@mmu.ac.uk or 00 44 (0) 161 247 2813



Project Update



BACTOCOM project staff recently met at the Université D'Evry-Val D'Essonne in France. The meeting was hosted by Alfonso Jaramillo, one of the project's work package leaders .

With representation from the majority of the project members, this proved an excellent opportunity to share and discuss the work that has been done to date on the various work package tasks.

Held on July 6th and 7th in sunny Evry, the group delivered presentations, participated in discussions and viewed the labs at UEVE.

The group welcomed the project's new administrator, Zarka Khan and one new PhD student from

Technische Universität München, Andrea Meyer (both pictured).

The outcome of the meeting was very positive with all work package activities on target to deliver and some worthwhile discussions to thoroughly understand the finer details of the work packages. Nominations were taken during the meeting for the creation of an External Advisory Board.

This will be an independent panel of International Scientists with considerable expertise in the Computational, Micro-biological and Micro-fluidist fields.

Their role will be to feedback on project goals, deliverables and any other project related issues.

This will prove useful in adding a further dimension of expertise and knowledge to the project and consultation in the work packages tasks.



Top row from left to right: Alfonso Rodriguez Patón (UPM), Fernando de la Cruz (UCANT), Alfonso Jaramillo (UEVE) and Javier Carrera (UEVE).

Bottom row from left to right: Andrea Meyer (TUM), Boris Kirov (UEVE), Martyn Amos (MMU), Thomas Landarin (UEVE) and Zarka Khan (MMU).

Upcoming Events & External Engagements

The next general project meeting will be held at the Universidad de Cantabria in October 2010.

Further meetings have also been provisionally scheduled for next year at the Charité-Universitätsmedizin Berlin in April and at the Universidad Politécnica de Madrid.

Representatives from UPM and MMU will be offering contributions at the [Alife XII Artificial Life Conference](#) in Odense, Denmark in August 2010.

Dr. Martyn Amos was interviewed by the [British Guardian](#) newspaper (May 17th 2010) in relation to BACTOCOM.

UEVE will be hosting the [International Conference on Synthetic Biology](#) programmed for December 15th and 16th 2010.

“What the team will be doing over the next three years is harnessing evolutionary processes to get bacteria to perform jobs to which traditional silicon-based computers are poorly suited. Environmental clean-up is just one example of how bacterial computing could help in the future.”

Extract from the linked [Guardian](#) article.

