

Comparative gene expression profiling indicated that genes in the *phnAB* operon, including *pqsA–E*, were controlled by the *mvfR* and subsequent genetic inactivation established catalytic roles for proteins in the HHQ pathway, in which 4-hydroxy-2-heptylquinoline (HHQ) produced as a major congener is the direct precursor of PQS.

Finally, the authors demonstrated that in the bacterial community PQS production also relies on the HHQ available in the extracellular milieu. As another N-oxide

HHQ derivative has the major antimicrobial activity of all HAQs, whereas PQS does not, they probably reflect two different messages conveyed among the cells.

This work identifies and characterizes a second signaling molecule and its link to the primary QS system of *P. aeruginosa* that commonly causes nosocomial chronic infections of immunocompromized patients. Particularly, HHQ and PQS were found to be significant in the lungs of cystic fibrosis

patients. The HHQ biosynthetic pathway and its regulation should represent an array of potential drug targets for treating this disease.

- 8 Déziel, E. *et al.* (2004) Analysis of *Pseudomonas aeruginosa* 4-hydroxy-2-alkylquinolines (HAQs) reveals a role for 4-hydroxy-2-heptylquinoline in cell-to-cell communication. *Proc. Natl. Acad. Sci. U. S. A.* 101, 1339–1344

Shawn Chen
schen@isisph.com

Business

Collaborations

BioXell and ProSkelia collaborate in osteoporosis

BioXell SpA (<http://www.bioxell.com>) and ProSkelia SAS (<http://www.proskelia.com>) have announced an R&D collaboration for drug candidates based on vitamin D3 analogues for the treatment of osteoporosis and secondary hyperparathyroidism (HPT).

BioXell's broad vitamin D3 platform has enabled them to discover several novel compounds, some of which fall outside the company's key focus areas of urology and inflammatory diseases. ProSkelia have concentrated its research efforts on the development of novel treatments for osteoporosis and other bone diseases.

Roland Baron, Founder and CSO of ProSkelia, said: 'The compounds involved in this collaboration are core to our business and will augment our existing pipeline of products aimed at this therapeutic field.' Founder and CEO of BioXell, Francesco Sinigaglia, commented: 'The coupling of BioXell's expertise in vitamin D3 with ProSkelia's discovery and

development capabilities... is a powerful combination designed to result in the expedited discovery of patentable clinical drug candidates.'

Archemix and JnJ: GPCR targets and aptamers

Archemix (<http://www.archemix.com>) have announced a target validation collaboration with Johnson & Johnson Pharmaceutical R&D (<http://www.jnj.com>), which will focus on validating G protein-coupled receptor (GPCR) targets.

Errol De Souza, President and CEO of Archemix, said: 'Archemix is enthusiastic about the opportunities for using aptamers for target validation. ... Archemix will be able to leverage the aptamer technology generated in these collaborations for use within its aptamer therapeutic programs.'

Archemix is a biopharmaceutical company focused on discovering and developing aptamers as a new class of directed therapies for a wide range of disease areas.

Chemogenomics collaboration: Iconix and Abbott

Iconix Pharmaceuticals (<http://www.iconixpharm.com>) have entered a research collaboration with Abbott Laboratories (<http://www.abott.com>) to apply Iconix's chemogenomics technology in Abbott's drug discovery and development efforts.

Iconix's DrugMatrix® system – the world's largest source of information on the genomic effects of drug and chemical treatments – and library of Drug Signatures™ will be used, as well as technology to identify biomarkers for the clinical development and commercialization of Abbott's therapeutic products.

James B. Summer, divisional VP, Advanced Technology, Drug Discovery at Abbott, said: 'Iconix's technology will enhance our understanding of potential drug candidates and can be applied throughout Abbott's R&D process.' Jim Neal, CEO of Iconix, commented: 'We are confident that in the near future chemogenomics will become a key tool in drug discovery and development and an integral part of regulatory submissions.'

Business was written by Joanne Clough

People

Appointments

Affibody appoints new Chief Scientific Officer

Affibody (<http://www.affibody.com>), a Swedish company focused on the areas of

bioseparation, proteomics and bioinformatics, has announced the appointment of Lars Abrahmsén as CSO, replacing one of the company's founders, Stefan Ståhl, who has returned to his academic professorship. Ståhl will remain as a scientific advisor to the company.

Abrahmsén joins Affibody from Biovitrum, where he was senior project team leader.

Torben Jørgensen, CEO of Affibody, said: 'Having Lars Abrahmsén in our management team... is highly beneficial for us. This recruitment supports our progression of development of protein therapeutics using Affibody molecules.'

Abrahmsén, who is recognized for his work on protein pharmaceuticals, said: 'Affibody's technologies hold very