



WELCOME to the P4FIFTY Newsletter

P4FIFTY is funded by the People Programme (Marie Curie Actions) of the European Union's 7th Framework Programme (FP7/2007-2013). P4FIFTY started on 1 January 2012 and is a four year project.

(more information is available on the P4FIFTY website at: <http://www.p4fifty.eu/>)

P4FIFTY Group

Prof Neil Bruce/Dr Gideon Grogan, University of York, UK; Prof Nick Turner/Dr Sabine Flitsch, University of Manchester, UK; Prof Bernhard Hauer/Prof Jürgen Pleiss, University of Stuttgart, Germany; Prof Dick Janssen/Prof Andy-Mark Thunnissen, University of Groningen, Netherlands; Dr Danièle Werck/Dr Nicolas Navrot, Centre National de la Recherche Scientifique, Strasbourg, France; Prof Birger Lindberg Møller/Prof Søren Bak, University of Copenhagen, Denmark; Prof John Woodley, Technical University of Denmark; Prof Rita Bernhardt, University of Saarland, Germany; Dr Jürgen Riegler, Lonza AG; Dr Martin Hayes, AstraZeneca AB.

Experienced and Early Stage Researchers

Maria Magdalena Razalan, York; Claudia Spandolf, York; Slavomíra Husárová, ER, Manchester; Anja Eichler, Manchester; Sandra Notonier, Stuttgart; Lukasz Gricman, Stuttgart; Nina Beyer, Groningen; Ilona Józwiak, Groningen; Tina Ilc, CNRS; Martina Picmanova, Copenhagen; Krutika Barvishi, Copenhagen; Marie Andersson, DTU; Flóra M Kiss, Saarland; Justyna Kulig, ER, AstraZeneca; Michael Ringle, ER, Lonza.

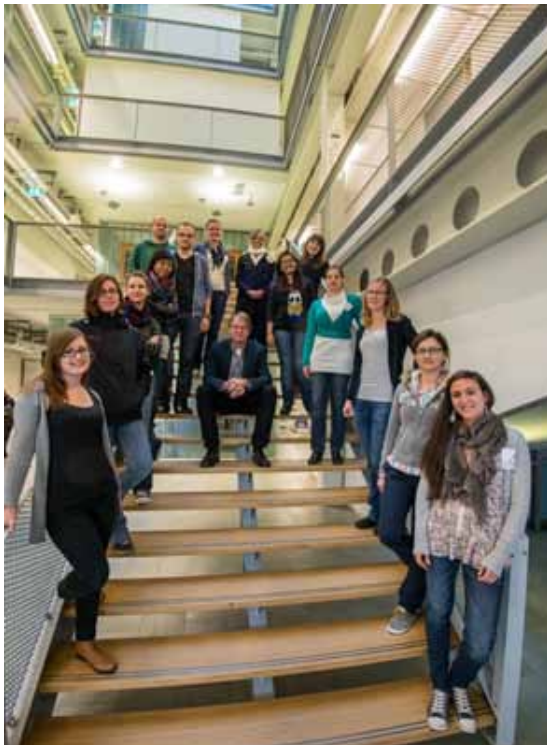


P4FIFTY Meetings

Students and supervisors attending a Workshop on bioprocess engineering for P450s – “Training in Engineering Techniques” in Lyngby, Denmark, on 12-15 May 2013, organised by Professor John Woodley, Technical University of Denmark and all enjoyed an industrial visit to Novozymes, Kalundborg.

Professors Dick Janssen, University of Groningen and Jürgen Pleiss, University of Stuttgart, organised a P450 Enzyme Engineering Masterclass at the University of Groningen, The Netherlands, on 30 September – 4 October 2013. The course aimed to make students familiar with the use of computational

and bioinformatics tools for engineering the biocatalytic performance of cytochrome P450 enzymes and provided both a sound theoretical background on the biochemistry of P450s and hands-on experience with computational methods.



Mid-term Review Meeting

The Fellows and Partners met with the EU Project Officer, Nadia Bergamino, at the Manchester Institute of Biotechnology, Manchester, on 8-9 October 2013, when progress of the project was reviewed to date.

Future Meetings

The next meeting is planned to be held in Copenhagen during week commencing 28 April 2014 and to include a workshop on the assembly of nano discs containing P450s and their partnering reductases.

The meeting timed for October 2014 is to be held in Manchester to include commercial and IP training.

Conferences attended

Most of the researchers have attended International Conferences:

Nina Beyer, Copenhagen presented a poster at the NWO CW study group meeting “Molecules: Synthesis and Properties” in Lunteren, 4-5 November 2013.

Kruitika Bavishi, Copenhagen, has recently returned from a workshop on Amphipols in Paris, 21 to 24 October. Amphipols are extensively used in the field of membrane proteins and the course was conducted by Jean-Luc Popot pioneer of Amphipol Technology <http://www.ibpc.fr/amphipol2013/index.html>



of omega-hydroxylated fatty acids. Maria Magdalena Razalan is also in Denmark at the University of Copenhagen, visiting the lab of Professor Birger Møller to gain expertise on P450 expression systems. Michael Ringle of Lonza, made a short exchange visit to Saarland University in April for P450 screening.

Martina Picmanova will visit Sabine Flitsch's lab at the University of Manchester during November/December. The objective is to use IM-MS to elucidate structures of the cyanogenic glucoside.

Outreach activities by P4FIFTY researchers include participation in the Big Bang Fair in March 2013 in London by Maria Magdalena Razalan, York and lectures to school children (12-14 years) by Slavomíra Husárová at a Summer School of Chemistry organised by the Institute of Chemistry, Slovak Academy of Sciences, 5-8 August 2013.

Marie Andersson, DTU, attended "Industrial biotechnology – meeting the challenges" in Lund, Sweden, 12-13 September 2013.

Slavomíra Husárová, Manchester, attended the 17th Euroanalysis 2013 - the European Conference on Analytical Chemistry, Warsaw, Poland, 25-29 August 2013.

Claudia Spandolf, York; Sandra Notonier, Stuttgart; Marie Andersson, DTU; presented posters at the BIOTRANS2013 International Conference, Manchester, 21-25 July 2013.

And most of the Fellows attended the 18th International Conference on Cytochrome P450, Seattle, Washington, 18-22 June 2013, where Maria Magdalena Razalan, York; Slavomíra Husárová, Manchester; Anja Eichler, Manchester; Sandra Notonier, Stuttgart; Lukasz Gricman, Stuttgart, Ilona Jóźwik /Nina Beyer, Groningen, presented posters. Researchers shown left enjoying a break.

Tina Ilc, CNRS, attended the TERPNET conference in Kolymvari, Greece, 1-5 June 2013.

Slavomíra Husárová presented a poster: Husárová S., Flitsch S.L., Turner N.J.: "High-throughput screening method for P450 activity assay", The First North-West Bio-Pharma Postdoctoral Symposium, 8th March 2013, Alderley Edge, United Kingdom.

Collaborations/Exchanges

Sandra Notonier is currently (01 11 13 - 21 12 13) in Denmark, at DTU for 7 weeks of exchange, working with Marie Andersson and Professor John Woodley, working on improving knowledge and skills in bioprocessing and up-scaling for the production

Publications

- Gricman L, Vogel C, Pleiss J, 2013. Conservation analysis of class-specific positions in cytochrome P450 monooxygenases: functional and structural relevance. Proteins in press

Forthcoming Conferences/Events

- Biocatalysis, Delft, April 2014.
- 19th International Conference on Cytochrome P450, Olympics Memorial Youth Center, Shibuya-ku, Tokyo 151-0052 from 12-15 June 2015 (19th ICCP450 Tokyo).
- Gordon Research Conference, Biocatalysis - Changing Paradigms in Catalysis, Bryant University, Smithfield, RI, USA, July 6-11, 2014, (<http://www.grc.org>).
- 12th International Symposium on Cytochrome P450 Biodiversity and Biotechnology, Kyoto, Japan, 24-28 September 2014 (<http://p450kyoto2014.com/>).

Contact

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