

# Newsletter

[www.perene-project.eu](http://www.perene-project.eu)

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## Final meeting of the PeReNE project

The final meeting of PERENE project was held in Le Havre January 15<sup>th</sup> and 16<sup>th</sup>, 2015. On this occasion, the French and British researchers from the different teams of PERENE network have presented their work on peptide research through oral or posters presentations. Three plenary lectures were also given by Pr **Heinrich DIRCKSEN** (Stockholm University, Stockholm, Suède) « *Bioactive peptide in arthropods* », Dr **Nathalie THIRIET** (INSERM U1084, Poitiers) « *Protective and proliferative functions of NPY within the brain* » and Dr **Angelita REBOLLO** (UPMC, Paris) « *Enhanced serum proteolysis resistance of cell-penetrating peptides* ». Prizes were awarded at the end of the presentations. A prize for the best oral communication was given to **Pierre-Michaël COLY** for his presentation entitled « *GPCR-Induced chemotactic migration requires mitigation of autophagy: involvement in glial cell invasion* ». Another award for best oral communication was won by **Carla DELEPE, Elke HAENSELE, Nawel MELE, Marija MILJAK** and **Jana SOPKOVA-DE OLIVEIRA SANTOS** for their presentation entitled « *Cyclic peptide hormones: conformation, dynamics and pharmacophores of urotensin and vasopressin* ». The award for best poster was won by **Seyma BAHDUDI** for her presentation entitled « *The neuropeptide PACAP and the gliopeptide ODN prevent 6-hydroxydopamine-induced apoptosis of cerebellar granule neurons* ».

This meeting was also the opportunity to organize the last Steering Committee of the PeReNE project.



## 12<sup>th</sup> International Symposium on VIP, PACAP and related peptides

The 12<sup>th</sup> International Symposium on VIP, PACAP and related peptides will be organized by Pr **Nese TUNCEL** and her colleagues in Cappadocia (Turkey) from September 21<sup>th</sup> to 26<sup>th</sup>, 2015. Registration to the meeting and abstract submissions are now available. A preferential rate is offered to those who register before April 1<sup>st</sup>. For more information, connect to: [www.vip-pacap2015.com](http://www.vip-pacap2015.com)



## REGPEP2016

REGPEP2016 will be a joint meeting under the auspices of the *International Regulatory Peptide Society*, the *Summer Neuropeptide Conferences* and the *European Neuropeptide Club*. This International Meeting will take place in Rouen (Normandy, France) from July 12<sup>th</sup> to 14<sup>th</sup>, 2016. The scientific program will include 6 Plenary Lecture, 2 Poster sessions and at least 12 Symposia organized in parallel sessions. The meeting will be focused on peptides which regulate cell, tissue or organ functions in physiological or pathological conditions. The sessions will address both basic and clinical research. A call for Symposia will be launched in April 2015 and proposals should be returned by June 15<sup>th</sup>. For more information, contact **David VAUDRY** ([david.vaudry@univ-rouen.fr](mailto:david.vaudry@univ-rouen.fr)).





## 19<sup>th</sup> GFPP meeting

Registration for the next GFPP meeting that will take place from May 17<sup>th</sup> to 22<sup>nd</sup> in Port-Bail (France) are still possible at the following address : [www.gfpp.fr](http://www.gfpp.fr).



Invited speakers will be:

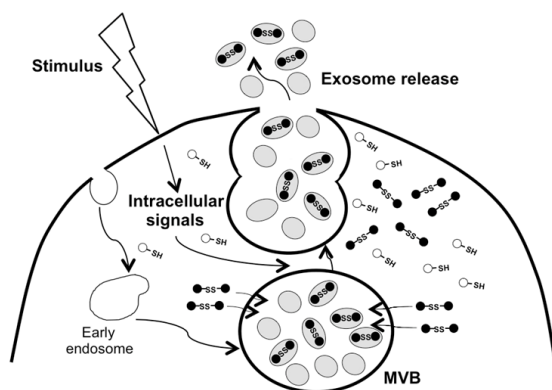
- Pr Alain Prochiantz, Collège de France, Paris: *Signalisation par transduction protéique*
- Dr Raphaël Haumont, Centre Français d'Innovation Culinaire Orsay : *Innovations en cuisine moléculaire*
- Dr Olivier Berateau, INRA Jouy-en-Josas: *Radical SAM enzymes: Novel catalysts for peptide modification and engineering*
- Pr Robin Fåhræus, UIH, Université Paris VII : *Alternative mRNA translation events for antigenic peptides and for full length proteins*
- Dr Sophie Faure, ICCF de Clermont-Ferrand: *Peptoides : peptidomimétiques à architecture modulable*
- Dr Sébastien Granier, IGF, Montpellier: *Structural studies of opioid receptor activation*
- Pr Christian Hackenberger, University of Berlin : *Chemoselective reactions for the synthesis of functional proteins*
- Pr Philippe Jubault, INSA de Rouen: *Synthesis of highly functionalized fluorocyclopropanes. Applications to the synthesis of constrained amino-acids analogs*
- Dr Patrick Legembre, IRSET, Rennes: *Non-apoptotic role of CD95 in lupus and its disruption using a small peptide*
- Dr Claire Loison, ILM, Université Lyon 1: *Modeling of Antimicrobial Lipopeptides in interaction with lipidic membranes*
- Pr Annemieke Madder, University of Gent: *Modified peptides for non-covalent and covalent recognition of biological targets*
- Dr Tamas Martinek, University of Szeged: *Protein mimicry with peptidic foldamers, structure and function*
- Pr Anthony Romieu, Université de Dijon: *Nouveaux outils chimiques pour la marquage fluorescent et la bioconjugaison – Applications aux agents d'imagerie moléculaires*
- Pr Norbert Sewald, University of Bielefeld: *Cytotoxic peptide-drug conjugates based on cryptophycins*

For more information, please contact Dr Jérôme LEPRINCE ([jerome.leprince@univ-rouen.fr](mailto:jerome.leprince@univ-rouen.fr)).

## Peptides, proteins and proteomics

Lisa MULLEN and Pietro GHEZZI at the University of Sussex have published a follow up paper to a previous collaborative publication with the Proteomics group in Rouen. In this study they show a novel mechanism of protein secretion, which does not occur through the classical Golgi pathways but requires oxidation of protein cysteines instead. This paper, published in *Molecular Medicine*, refers to PeReNE is published as Open Access and is available here: [http://molmed.org/content/pdfstore/15\\_033\\_Mullen.pdf](http://molmed.org/content/pdfstore/15_033_Mullen.pdf).

Below is a representation of the mechanism identified in this study.



**Schematic model of redox regulated release of Prdx 1 and 2.** Oxidised Prdx 1 and 2 are targeted to exosomes for release following exposure of the cells to inflammatory agents or oxidants.

Pietro GHEZZI will be presenting these results and the overall output from PeReNE at a meeting of a small group of the top EU scientists working in the field of oxidative stress in Frankfurt on 12 March.

**Peptide, proteins and genomics.** The group at Sussex has also completed two large gene expression profile experiment using DNA microarrays to study the changes in gene expression in cells either undergoing oxidative stress or exposed to cytokines. These experiment will on one hand be important in the training of the two PhD student working on this project (**Georgina GYETVAI** and **Marina DIOTALLEVI**, the latter is a French PhD student working at Sussex) who are acquiring the skills for analysing and visualising big data using sophisticated bioinformatics tools. On the other hand these experiments provide an important set of “big data” available to all scientists in the PeReNE group and outside it. These datasets will be made available on the website of PeReNE before the end of March. The two PhD student presented some of their results in posters at the British Society of Immunology in Brighton in December 2015.