
MESSAGE FROM THE ESTHER Database
Published occasionally by the ESTHER Team

Since our Newsletter Number 4 of May 2015, it happened the following:

NEW TOOLS

We are pleased to announce that

- since July the ESTHER database is cross-referenced in UniProt under the "Protein family/group databases" header.
- since August the HMM profiles (profile hidden Markov models) are built with the latest version of HMMER (v3.1b2)

STRUCTURES

In August, the number of tridimensional structures in ESTHER reached a milestone of 1500 entries!

During the latest 4 months (May - August 2015), 96 new crystal structures of 15 alpha/beta hydrolase proteins from 13 subfamilies were released by the RCSB PDB; for 7 of these proteins they were the first structures to be solved. Crystal Structure of phospholipase A1 from hornet (*Vespa basalis*) venom ([4QNN](#)) is the first structure of the phospholipase subfamily ([Chou et al.](#)).

The publication of a crystal structure of the N-Formylmaleamic acid deformylase Nfo(S94A) from *Pseudomonas putida* S16 ([4LOC](#)) by [Wu et al.](#) prompted us to create a new family ([NFM-deformylase](#))

See the table of the families:

<http://bioweb.ensam.inra.fr/ESTHER/general?what=overallTable>

MUTATIONS

[Dell-Kuster et al.](#) identified three novel butyrylcholinesterase variants as risk factors for a prolonged neuromuscular block following succinylcholine administration: ([p.Ile5Thr](#); [p.Val178Ile](#); and [p.Try231Ser](#).)

MEETINGS

The page on past and forthcoming meetings related to the cholinesterases and other cholinergic topics has been updated (<http://bioweb.ensam.inra.fr/ESTHER/meeting.pl>); since some information is still missing (e.g., program, participants), please contact us if you can provide details!

The 12ChE-6PON meeting is approaching! Visit the website for the final program about the 12th Meeting on Cholinesterases (27 Sept - 2 Oct) together with the Sixth International Conference on Paraoxonases, Alicante, Spain. ([12th ChE](#))

The XVth International Symposium on Cholinergic Mechanisms (XVth ISCM) **is now scheduled for September 25-29th, 2016 (note the new final date)**, in Marseille France. Please have a look at the preliminary web site at <http://iscm.sciencesconf.org/> and send a note to iscm@afmb.univ-mrs.fr to express your anticipated interest for this event.

A molecular perspective on the cholinergic synapse: A symposium in honor of Israel Silman's 80th birthday will take place at The David Lopatie Conference Centre Weizmann Institute of Science, December 9-11 2015 ([Poster](#))

MISCELLANEOUS

Convergent evolution of the KAI2d genes of Orobanchaceae parasitic plants toward similar strigolactone recognition site of D14 is described by [Conn et al.](#). Parasitic seeds germinate after sensing plant hormones, strigolactones, exuded from host roots. D14 and KAI2d genes belong to the [RsbQ-like](#) family.

On behalf of the ESTHER Team
Arnaud