

## MESSAGE FROM THE ESTHER Database

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Since the latest Newsletter,

New families of alpha/beta hydrolases have been built

Duf\_2235 includes type VI lipase effectors Tle1-Tle4 secreted by the bacterial type VI secretion system (T6SS) which have recently been identified as antibacterial proteins that hydrolyze membrane phospholipids.

Hydrolase-1\_PEP and Hydrolase-2\_PEP Hydrolase, ortholog 1 and 2, exosortase system type 1 and 2 associated

HOD-cofactorfree-dioxygenase 1h-3-hydroxy-4-oxoquinaldine 2,4-dioxygenase (HOD) Oxygenases without requirement for cofactors or metal ions, catalyzing N-heterocyclic-ring cleavage and formation of carbon monoxide.

- See the table of the families:

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

## MUTATIONS

A novel "Silent" allele: point mutation (p.Val204Asp) in human butyrylcholinesterase is described by Delacour et al.

An esterase involved in malathion resistance in the head louse *Pediculus humanus capitis* is described by Kwon et al.

Mutations in acetylcholinesterase 1 associated with mevinphos resistance in diamondback moth, *Plutella xylostella* are described by Yeh et al.

Point mutations associated with organophosphate and carbamate resistance in chinese strains of *Culex pipiens* are published by Zhao et al.

## STRUCTURES

During the latest 3 months, 53 new crystal structures of 23 alpha/beta hydrolase proteins were released by the RCSB PDB; for 14 of these proteins there were the first structures to be solved.

## MEETINGS

The proceedings of the XIVth ISCM are published in *Journal of Molecular Neuroscience* Jul;53(3) <http://link.springer.com/journal/12031/53/3/page/1>

The page on past and scheduled 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., programme, participants), please contact us if you can provide details.

The 15th International Symposium on Cholinergic Mechanisms (XVth ISCM) is tentatively scheduled for October 2nd-6th, 2016, 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](mailto:iscm@afmb.univ-mrs.fr) to express your anticipated interest for this event.

On behalf of the ESTHER Team