ESTHER Database Newsletter - Number 4 - May 2015

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MESSAGE FROM THE ESTHER Database Published occasionally by the ESTHER Team

Since Newsletter Number 3 of January 2015, it happened the following:

## **ANNOUNCEMENT**

Dr. Palmer Taylor announced that the BP Doctor Memorial Travel Award Fund created and supported by scientific colleagues and family friends of "Doc" could fund five young investigators at \$1,000 each, which would cover their registration funds, housing and perhaps a bit of travel for the 12<sup>th</sup> Cholinesterase Meeting to be held in Elche, Spain, on Sept 27 – Oct 2, 2015. The stipulations are that the investigators are young, i.e., student, postdoc, beginning faculty without funds. There must also be a reasonable geographic distribution of the awardees with attention accorded to those applicants without access to funding. Awardees will be selected on the basis of their abstract and track record. They will receive the award (check and plaque) at the meeting, and be asked to give a short scientific presentation. More information can be found at <a href="http://tox.umh.es/12thche/index.html">http://tox.umh.es/12thche/index.html</a>.

## **STRUCTURES**

During the latest 4 months (January - May 2015), 40 new crystal structures of 20 alpha/beta hydrolase proteins from 16 subfamilies where released by the RCSB PDB; for 13 of these proteins they were the first structures to be solved. Among those are 4 newly characterized human proteins:

- human-NOTUM, which deacetylates Wnt proteins to suppress signaling activity

Kakugawa 2015 Nature 519:187

- human-DPP10

Bezerra 2015 Sci.Rep 5:8769

-two structures of members of the PC-sterol\_acyltransferase sub family, human-LCAT and human-PLA2G15 Glukhova 2015 Nat.Commun 6:6250

Presently a structure is known for 35 of the 120 human alpha/beta hydrolases identified.

See the table of the families:

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

## **MUTATIONS**

A mutation (<u>p.Phe362Tyr</u>, torpedo\_number: <u>331</u>) found in one of the two copies of ace1 (<u>lepsm-ACHE1A</u>) in Salmon Lice (*Lepeophtheirus salmonis*) playing a role in resistance against the organophosphate azamethiphos is described by <u>Kaur et al.</u>

Novel mutations on the ace-1 gene of the malaria vector *Anopheles albimanus* are published by <u>Liebman et al.</u>

## **MEETINGS**

The page on past and scheduled meetings related to the cholinesterases and other cholinergic topics has been updated (<a href="http://bioweb.ensam.inra.fr/ESTHER/meeting.pl">http://bioweb.ensam.inra.fr/ESTHER/meeting.pl</a>); 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 scheduled for October 2nd-6th, 2016, in Marseille France. Please have a look at the preliminary web site at <a href="http://iscm.sciencesconf.org/">http://iscm.sciencesconf.org/</a> and send a note to <a href="mailto:iscm@afmb.univ-mrs.fr">iscm@afmb.univ-mrs.fr</a> to express your anticipated interest for this event.

On behalf of the ESTHER Team Arnaud