

# TRANSAUTOPHAGY

European Network for Multidisciplinary Research on Autophagy

Quarterly Newsletter - Spring 2019 -

<http://cost-transautophagy.eu/>



## Words from the Management Committee

- **COST TRANSAUTOPHAGY: Annual Meeting**, 23-25<sup>th</sup> April 2019, Sofia (BG). [Read more](#)



### Special Issues:

- "Autophagy in neurodegenerative diseases" in Cells: Call for papers (End May 2019). [Read more](#)
- "Chaperone-mediated autophagy" in Cells: Call for papers (End August 2019). [Read more](#)
- "Autophagy in cancer" in Biology: Call for papers (End August 2019). [Read more](#)
- "Inflammation, oxidative stress and protein aggregation" in Cells: Call for papers (End August 2019). [Read more](#)
- "Plant autophagy" in Plants: Call for papers (End December 2019). [Read more](#)
- Follow us on [Twitter](#) and [LinkedIn](#)



## Upcoming Autophagy Meetings/Workshops

### COST TRANSAUTOPHAGY members as guest speakers or organizers:

- *Ubiquitin & Friends Symposium*. May 20-21, 2019. Vienna, AT
- *Autophagy UK Network Meeting*. May 21-22, 2019. Glasgow, UK
- *Nordic Autophagy Society Conference*. May 22-24, 2019. Utrecht, NL
- *EMBO Workshop: Autophagy from molecular principles to human diseases*. August 26-30, 2019. Crieff, UK
- *Life Sciences Switzerland: Autophagy Workshop*. September 13, 2019. Fribourg, CH
- *Age-related human diseases. Special focus: Autophagy*. Sept 25-27, 2019. Tübingen, DE
- *French Autophagy Network (CFATG) Scientific Days*. Nov 20-22, 2019. Obernai, FR



## Publications/Videos

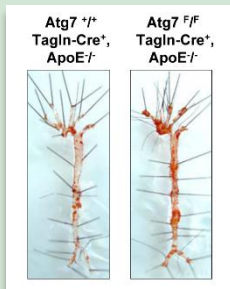
### Reviews from COST TRANSAUTOPHAGY members:

- *Role of autophagy during the replication and pathogenesis of common mosquito-borne flavi- and alphaviruses*. Open Biol
- *The Role of ATG16 in Autophagy and The Ubiquitin Proteasome System*. Cells
- *Autophagy in liver diseases: Time for translation?* J Hepatol
- *Therapeutic Modulation of Autophagy in Leukaemia and Lymphoma*. Cells

- *Methods to Detect Loss of Lysosomal Membrane Integrity*. Methods Mol Biol
- *Possible Mechanisms by which Stefin B could Regulate Proteostasis and Oxidative Stress*. Cells
- *Mitochondrial quality control as a key determinant of cell survival*. Biochim Biophys Acta
- *Identification and Validation of Novel Autophagy Regulators Using an Endogenous Readout siGENOME Screen*. Methods Mol Biol

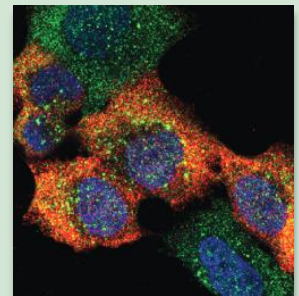
### Collaborative Research Articles from COST TRANSAUTOPHAGY members:

- *Targeting autophagy by small molecule inhibitors of vacuolar protein sorting 34 (Vps34) improves the sensitivity of breast cancer cells to Sunitinib*. Cancer Lett
- *Gigaxonin E3 ligase governs ATG16L1 turnover to control autophagosome production*. Nat Commun



- *Altered mitochondrial quality control in Atg7-deficient VSMCs promotes enhanced apoptosis and is linked to unstable atherosclerotic plaque phenotype*. Cell Death Dis

◀ Images of en-face staining of the whole aorta from *Atg7<sup>+/+</sup> Tagln-Cre<sup>+</sup>, ApoE<sup>-/-</sup>* and *Atg7<sup>F/F</sup> Tagln-Cre<sup>+</sup>, ApoE<sup>-/-</sup>* mice after 18 weeks of high fat diet. Atherosclerotic lesions (red oil staining) were significantly increased in *Atg7<sup>F/F</sup> Tagln-Cre<sup>+</sup>, ApoE<sup>-/-</sup>* mice compared to control mice implicating that impaired autophagy worsens the disease phenotype. This work is the result of a fruitful collaboration between the **Vindis** group at the Institute of Metabolic and Cardiovascular Diseases in Toulouse and the **Martinet** group at the University of Antwerp.

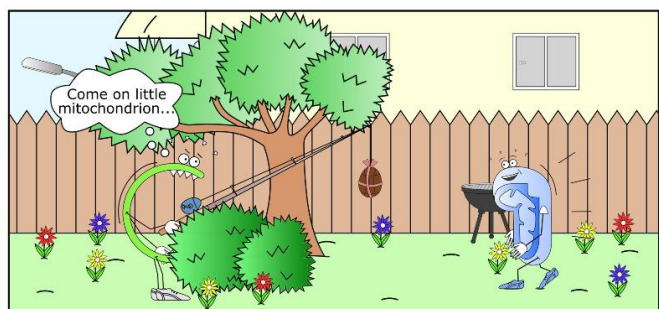
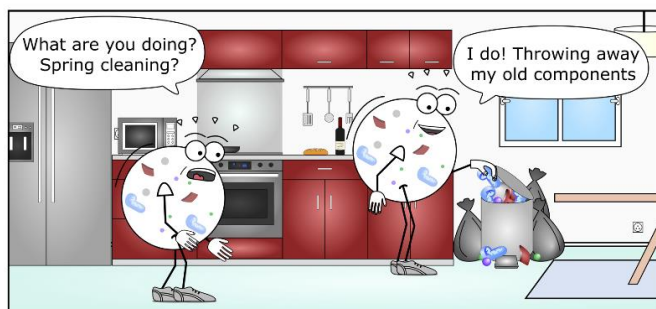


- *MDH1 and MPP7 regulate autophagy in pancreatic ductal adenocarcinoma*. Cancer Res  
The human pancreatic ductal adenocarcinoma cell line PK-1 stably expressing HA-tagged MPP7 (red) was treated with BafilomycinA1 for 2h and labelled with an antibody to LC3b. Cells overexpressing HA-MPP7 had increased numbers of LC3b puncta implicating MPP7 in the control of basal autophagy. MPP7 was identified in a high-throughput siGenome wide-screen in collaboration between the **Tooze** group at the Francis Crick Institute and the **Ryan** group at the Beatson Institute.
- *Members of the autophagy class III phosphatidylinositol 3-kinase complex I interact with GABARAP and GABARAPL1 via LIR motifs*. Autophagy



### PhD/Postdoc/Job opportunities

- National Cardiovascular Research Center, P. Muñoz-Cánoves Laboratory, Madrid, ES  
Postdoc: *Stem cell aging*. Contacts: alvaro.cuesta@cnic.es and marina.raya@upf.edu
- Uppsala Biocenter, SLU, P. Bozhkov Laboratory, Uppsala, SE  
Postdoc: *Metacaspases in model green algae: mechanisms and functions*. Contact: Peter.Bozhkov@slu.se
- Institute of Life Sciences, H. Batoko Laboratory, Louvain, BE  
Postdoc: *Biochemistry and plant molecular biology*. Contact: henri.batoko@uclouvain.be
- Lund University, S. Aits Laboratory, Lund, SE  
Postdoc & Student: *Cell death and lysosomes*. Contact: sonja.aits@med.lu.se



Comic courtesy of Pierre Vigié, PhD (IBGC, Bordeaux, FR)

To be continued