

ΟΝΒ από ισχαιμία-επαναιμάτωση: Παθοφυσιολογία και πειραματικά δεδομένα

Θεόδωρος Ελευθεριάδης

Καθ. Νεφρολογίας

Τμήμα Ιατρικής

Πανεπιστήμιο Θεσσαλίας

- Το συχνότερο αίτιο ONB
- Τα επιθηλιακά σωληναριακά κύτταρα τα πιο ευαίσθητα
- Κατά την ισχαιμία κυτταρικός θάνατος λόγω έλλειψης ενέργειας
- Κατά την επαναιμάτωση κυτταρικός θάνατος λόγω οξειδωτικού στρες
- Η μη αποδρομή της ONB ή η απώτερη πρόοδος σε ΧΝΝ συχνή (senescence)
- Δεν υπάρχει θεραπεία παρέμβασης στους μοριακούς μηχανισμούς

Factors that May Protect the Native Hibernator Syrian Hamster Renal Tubular Epithelial Cells from Ferroptosis Due to Warm Anoxia-Reoxygenation

Theodoros Eleftheriadis ^{*}, Georgios Pissas, Vassilios Liakopoulos [✉] and Ioannis Stefanidis

BIOMEDICAL REPORTS 13: 3, 2020

Mistimed H₂S upregulation, Nrf2 activation and antioxidant proteins levels in renal tubular epithelial cells subjected to anoxia and reoxygenation

THEODOROS ELEFThERiADiS, GEORGIOS PISSAS, EVDOKIA NIKOLAOU, GEORGIOS FILiPPiDiS, VASSiLIOS LiAKOPOULOS and IOANNiS STEFANiDiS

MOLECULAR MEDICINE REPORTS 23: 41, 2021

Reoxygenation induces reactive oxygen species production and ferroptosis in renal tubular epithelial cells by activating aryl hydrocarbon receptor

THEODOROS ELEFThERiADiS, GEORGIOS PISSAS, GEORGIOS FILiPPiDiS, VASSiLIOS LiAKOPOULOS and IOANNiS STEFANiDiS



OPEN

Cell Death Patterns Due to Warm Ischemia or Reperfusion in Renal Tubular Epithelial Cells Originating from Human, Mouse, or the Native Hibernator Hamster

Theodoros Eleftheriadis ^{*}, Georgios Pissas, Georgia Antoniad, Vassilios Liakopoulos [✉] and Ioannis Stefanidis

A Role for Human Renal Tubular Epithelial Cells in Direct Allo-Recognition by CD4+ T-cells and the Effect of Ischemia-Reperfusion

Theodoros Eleftheriadis ^{1,*,†}, Georgios Pissas ^{1,†}, Marta Crespo ², Evdokia Nikolaou ¹, Vassilios Liakopoulos ¹ and Ioannis Stefanidis ¹

The Role of Indoleamine 2,3-Dioxygenase in Renal Tubular Epithelial Cells Senescence under Anoxia or Reoxygenation

Theodoros Eleftheriadis ^{*,†}, Georgios Pissas [†], Georgios Filippidis, Vassilios Liakopoulos [✉] and Ioannis Stefanidis

CCN2 Aggravates the Immediate Oxidative Stress–DNA Damage Response following Renal Ischemia–Reperfusion Injury

Floris A. Valentijn ^{1,*}, Sebastiaan N. Knoppert ¹, Georgios Pissas ², Raúl R. Rodrigues-Diez ³, Laura Marquez-Exposito ³, Roel Broekhuizen ¹, Michal Mokry ¹, Lennart A. Kesker ¹, Lucas L. Falke ¹, Roel Goldschmeding ¹, Marta Ruiz-Ortega ³, Theodoros Eleftheriadis ² and Tri Q. Nguyen ¹ [✉]

Energy handling in renal tubular epithelial cells of the hamster, a native hibernator, under warm anoxia or reoxygenation

THEODOROS ELEFThERiADiS, GEORGIOS PISSAS, GEORGIA ANTONIADI, SPYRIDON GOLFINOPOULOS, VASSiLIOS LiAKOPOULOS and IOANNiS STEFANiDiS

Inhibition of Malate Dehydrogenase-2 Protects Renal Tubular Epithelial Cells from Anoxia-Reoxygenation-Induced Death or Senescence

Theodoros Eleftheriadis ^{*,†}, Georgios Pissas [†], Spyridon Golfinopoulos, Maria Efthymiadi, Vassilios Liakopoulos [✉] and Ioannis Stefanidis

MOLECULAR MEDICINE REPORTS 23: 472, 2021

Role of indoleamine 2,3-dioxygenase in ischemia-reperfusion injury of renal tubular epithelial cells

THEODOROS ELEFThERiADiS^{*}, GEORGIOS PISSAS^{*}, SPYRIDON GOLFINOPOULOS, VASSiLIOS LiAKOPOULOS and IOANNiS STEFANiDiS

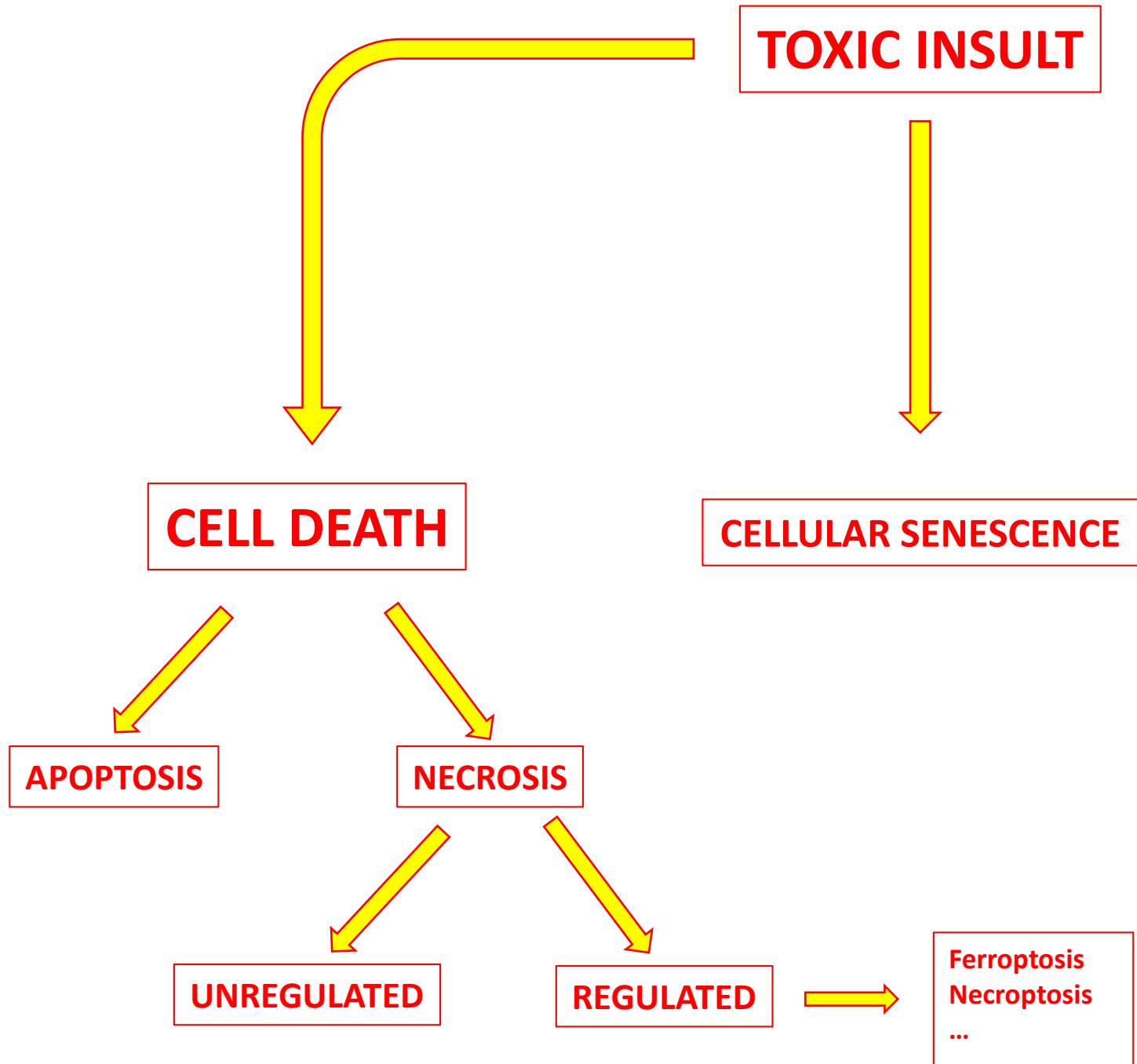
Cellular communication network 2 (connective tissue growth factor) aggravates acute DNA damage and subsequent DNA damage response-senescence-fibrosis following kidney ischemia reperfusion injury

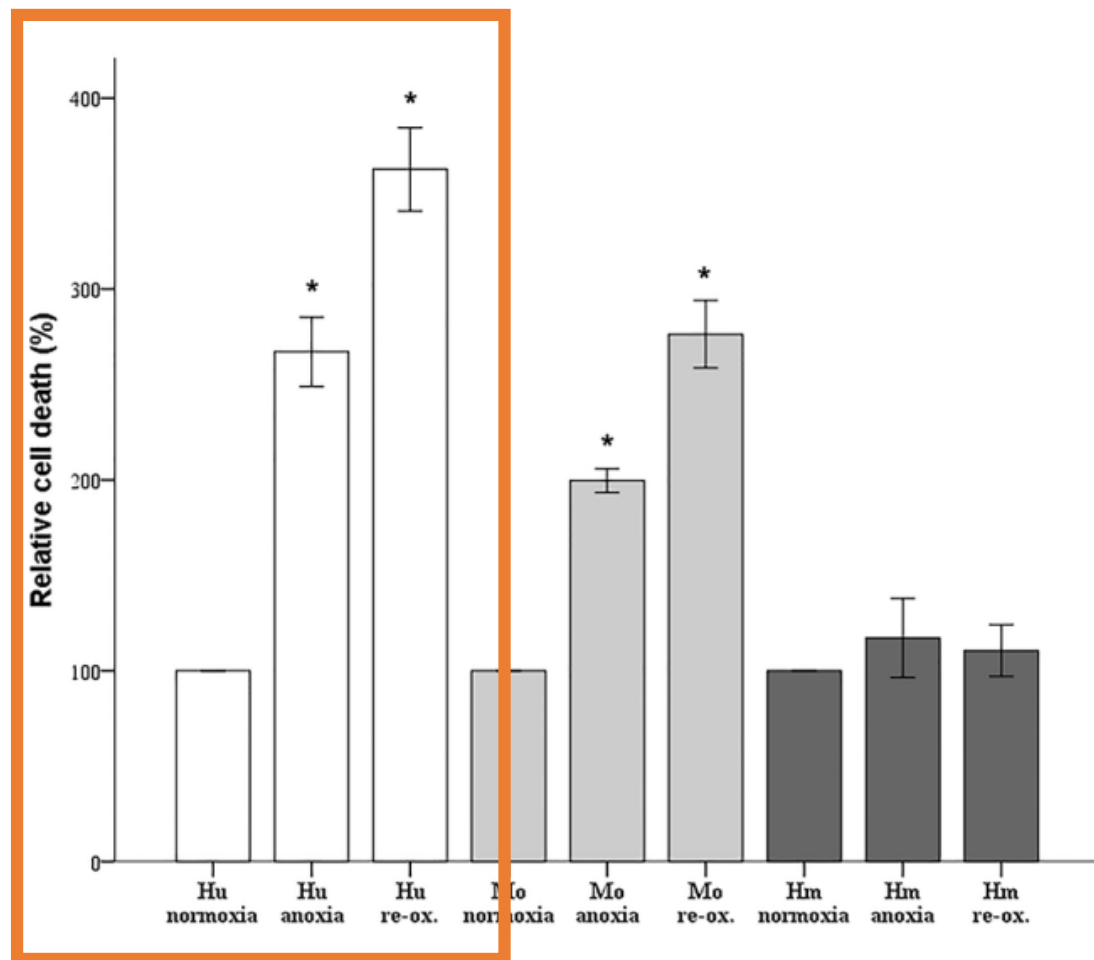
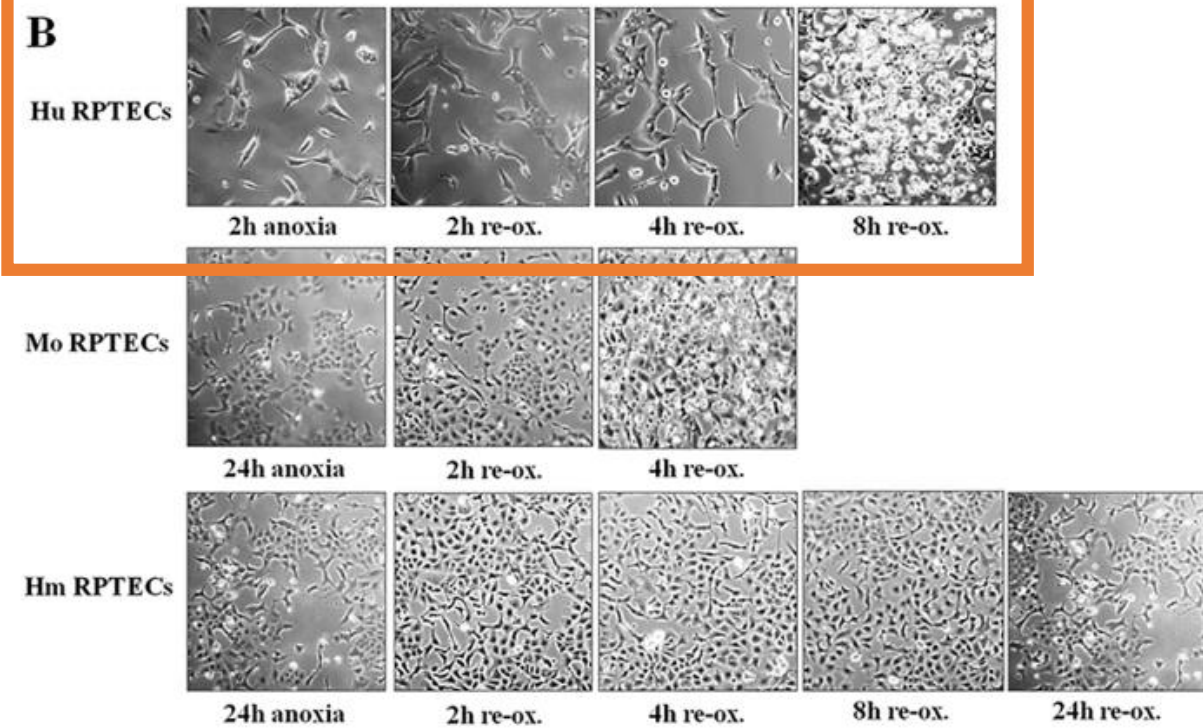
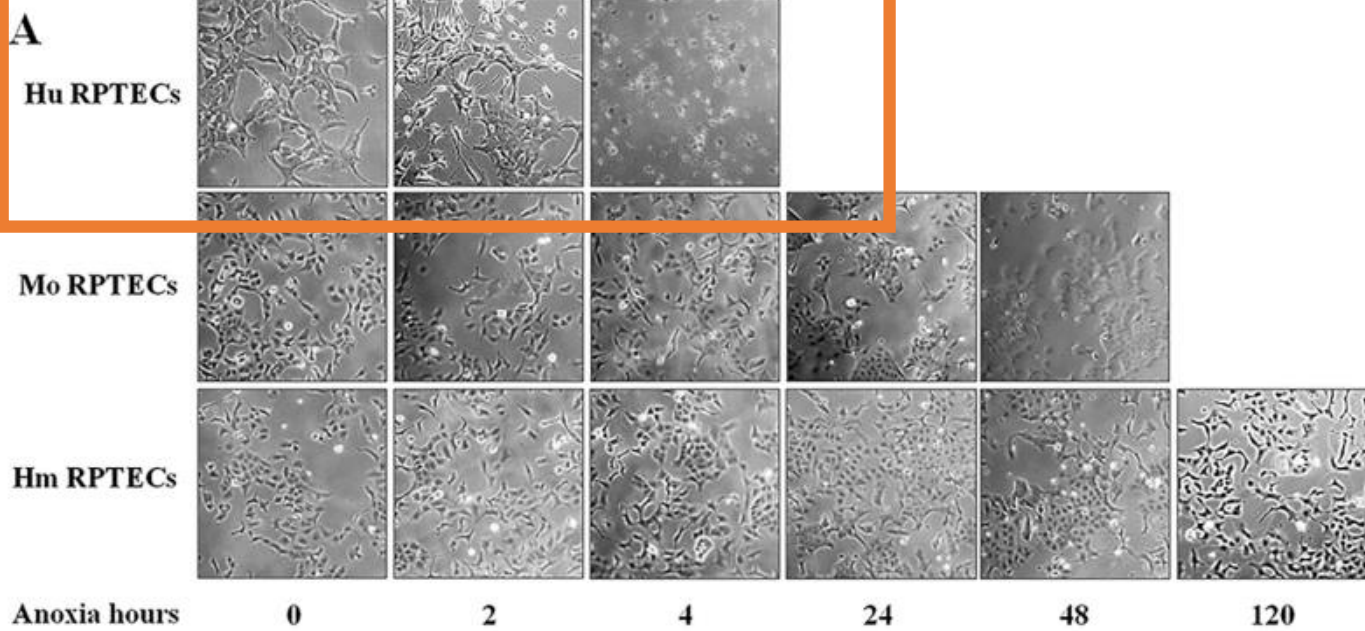
Floris A. Valentijn ¹, Sebastiaan N. Knoppert ¹, Laura Marquez-Exposito ², Raúl R. Rodrigues-Diez ², Georgios Pissas ³, Jiaqi Tang ⁴, Lucia Tejedor-Santamaria ², Roel Broekhuizen ¹, Rohan Samarakoon ⁴, Theodoros Eleftheriadis ³, Roel Goldschmeding ¹, Tri Q. Nguyen ¹, Marta Ruiz-Ortega ² and Lucas L. Falke ¹

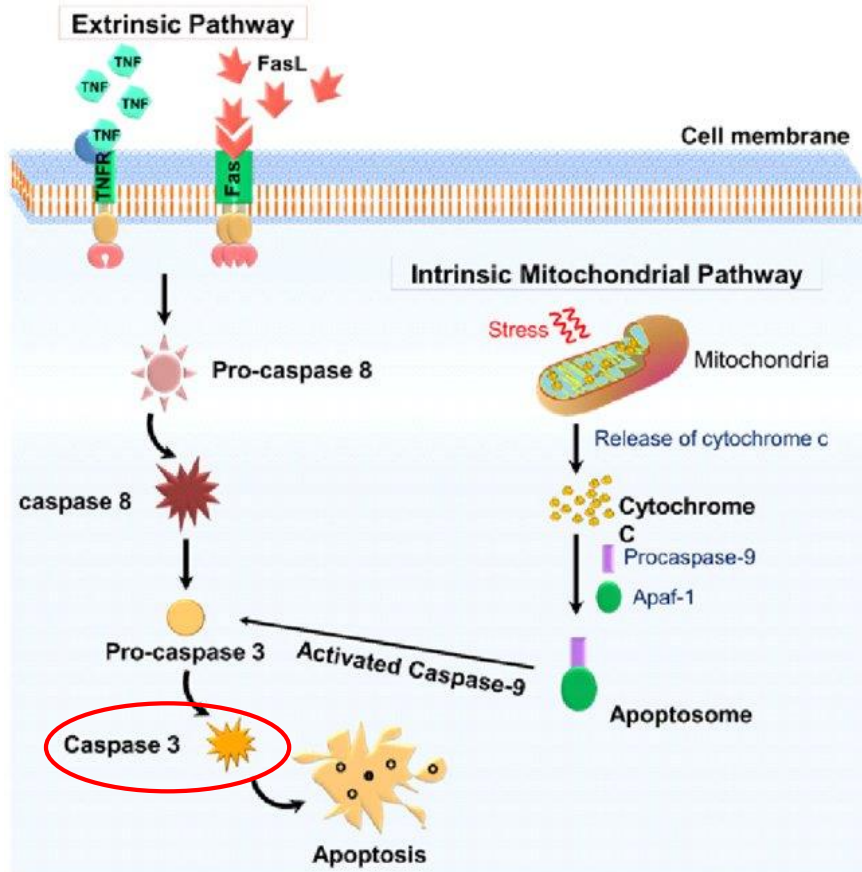
THE DAY AFTER

A FILM BY NICHOLAS MEYER



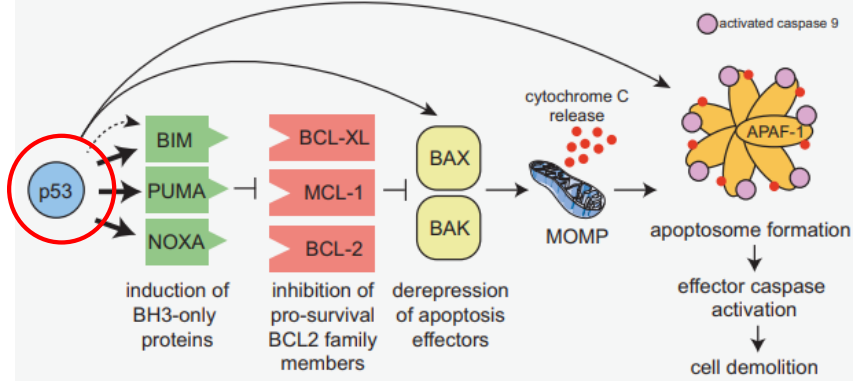




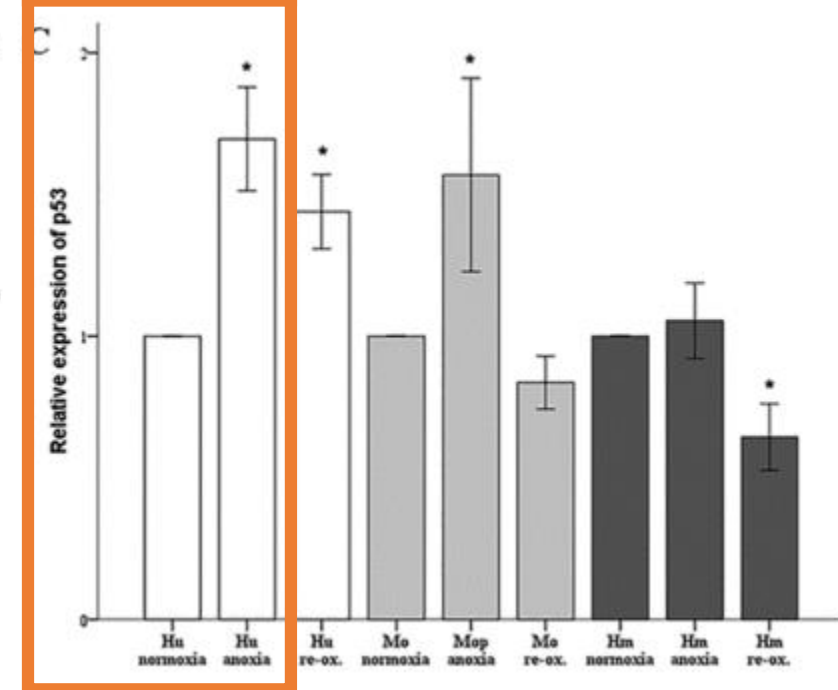
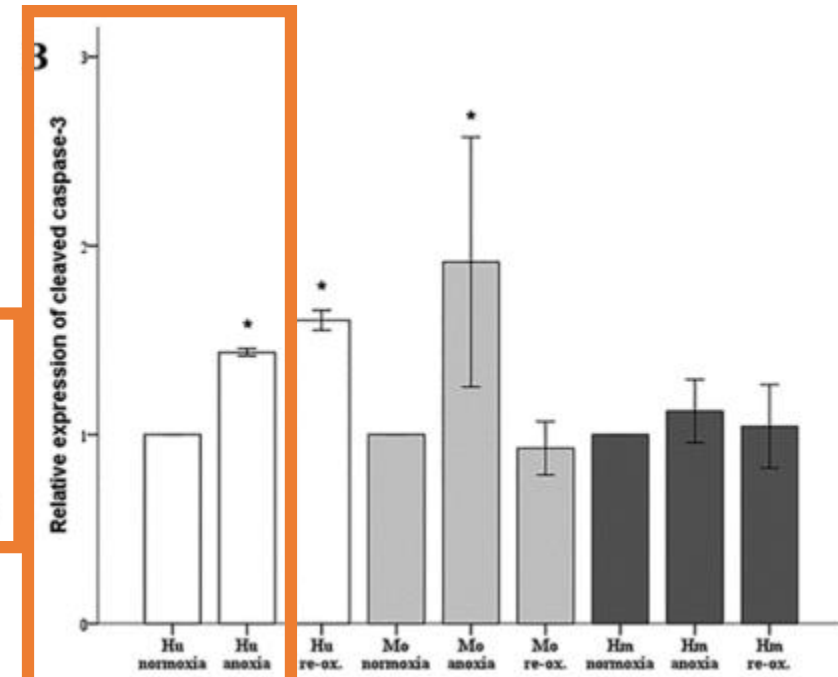
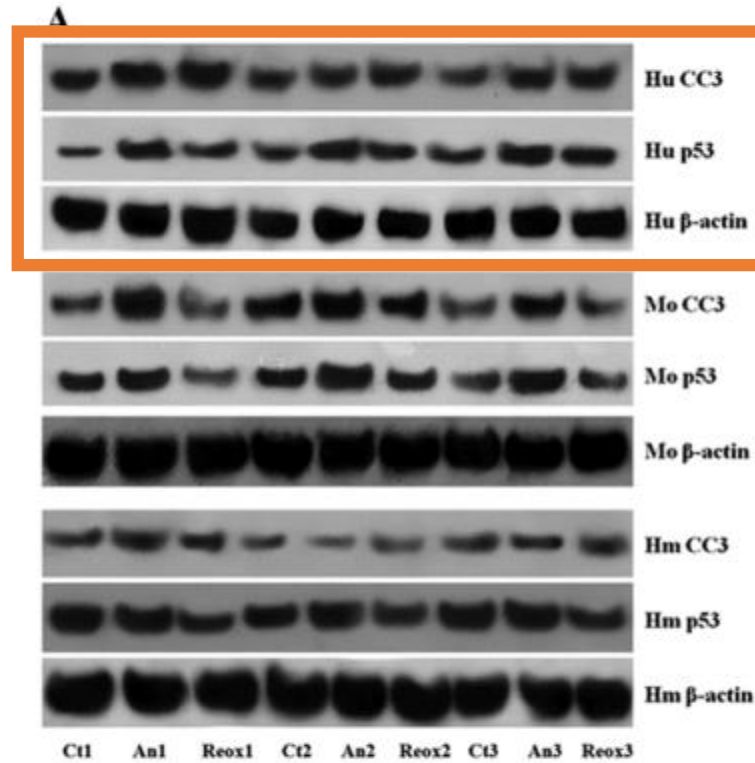


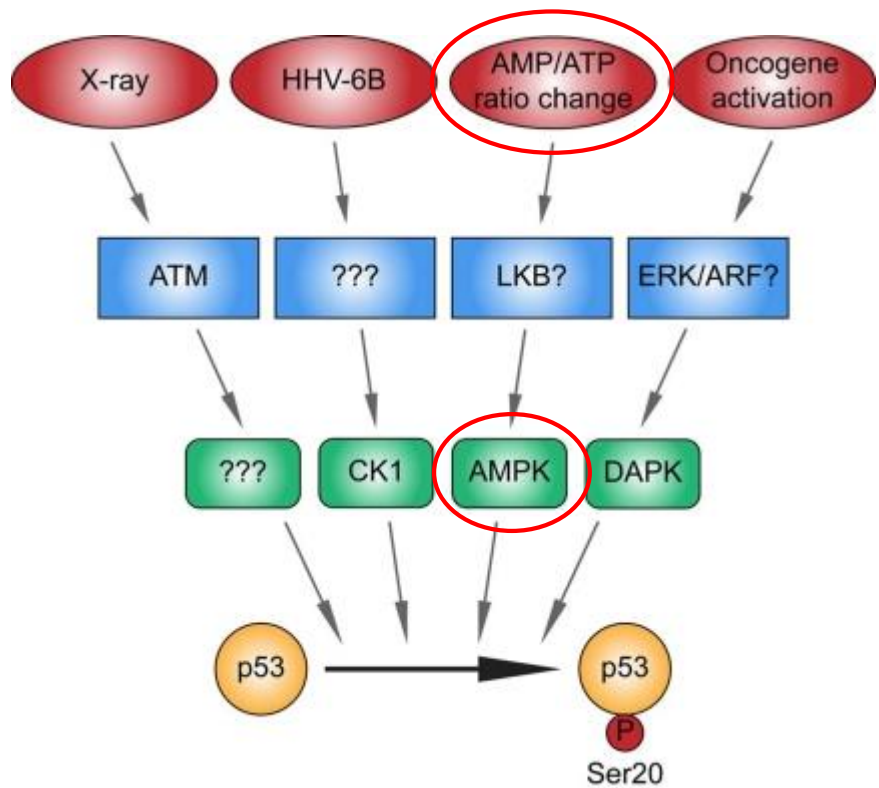
Journal of Biomedical Translational Research 2020; doi: 10.12729/jbtr.2020.21.2.050

1) induction of the intrinsic apoptotic pathway

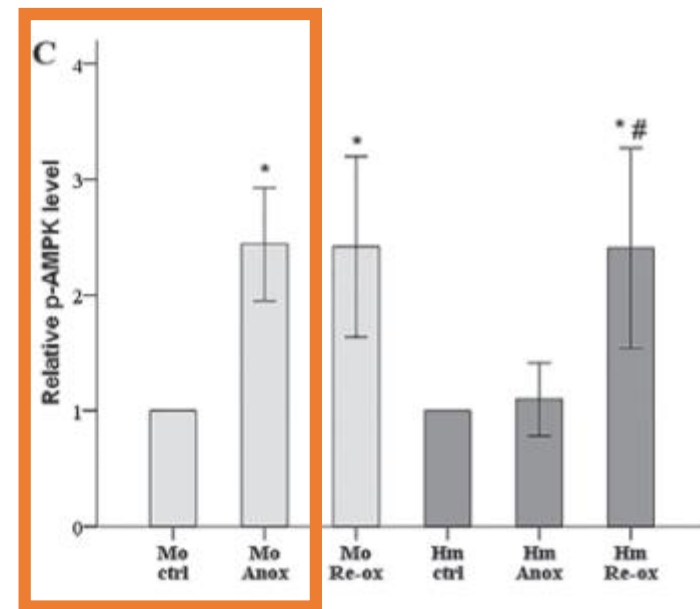
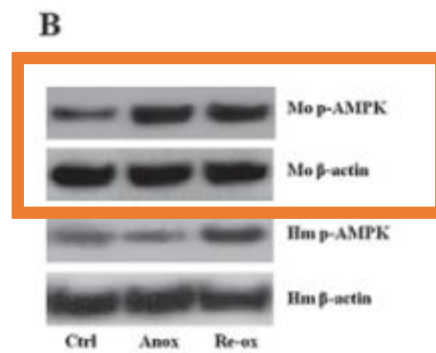
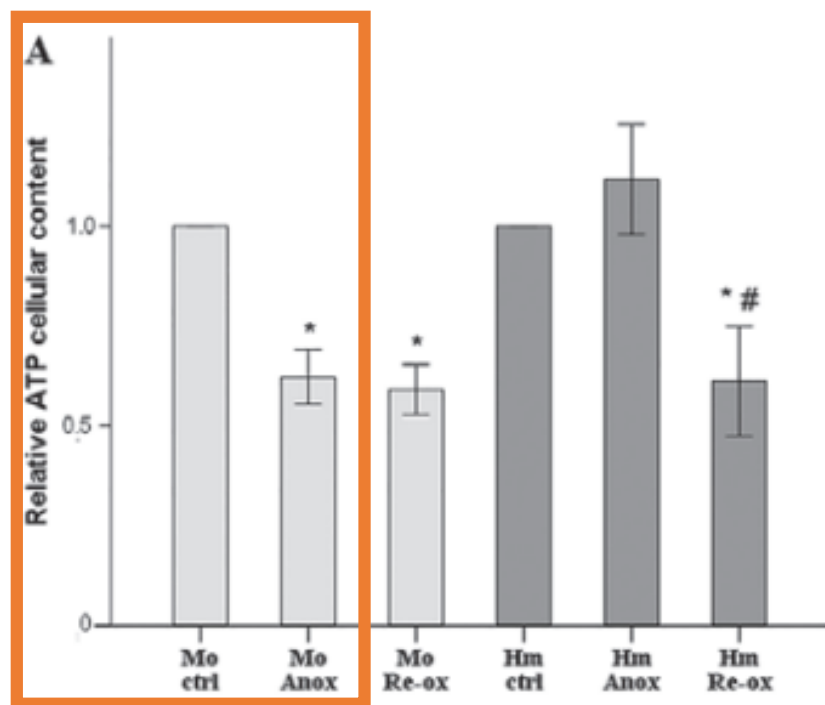


Cell Death and Differentiation 2018; doi:10.1038/cdd.2017.169





Ageing 2009; doi:10.18632/aging.100047



ISCHEMIA



↑AMP



p-AMPK



p-p53

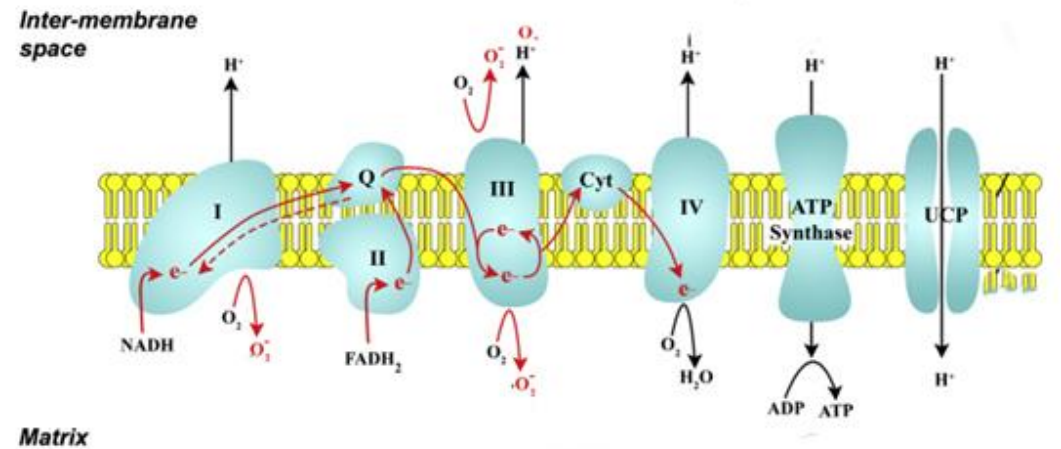
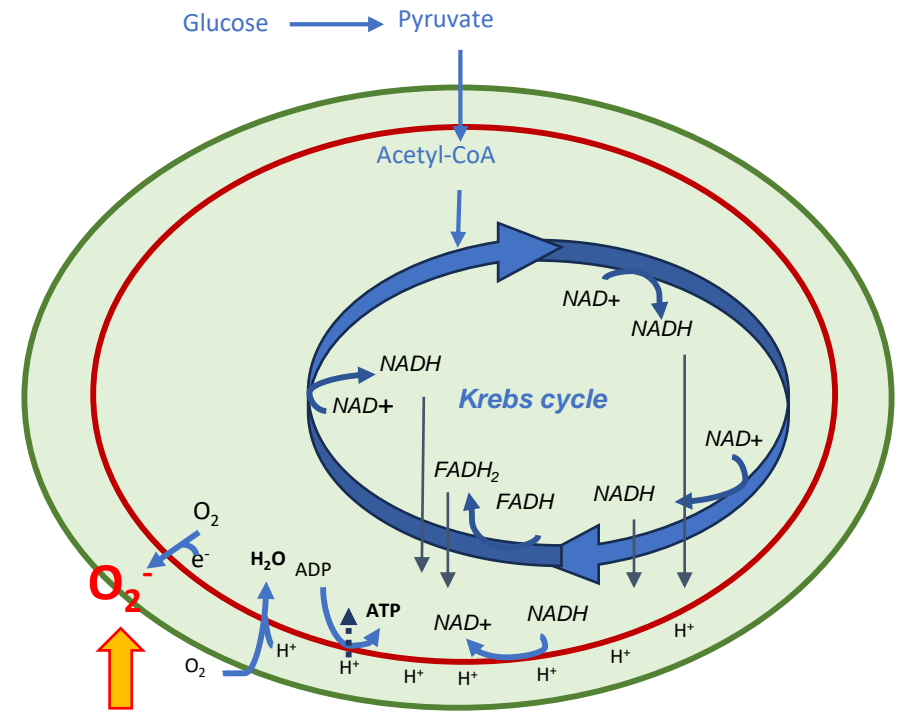
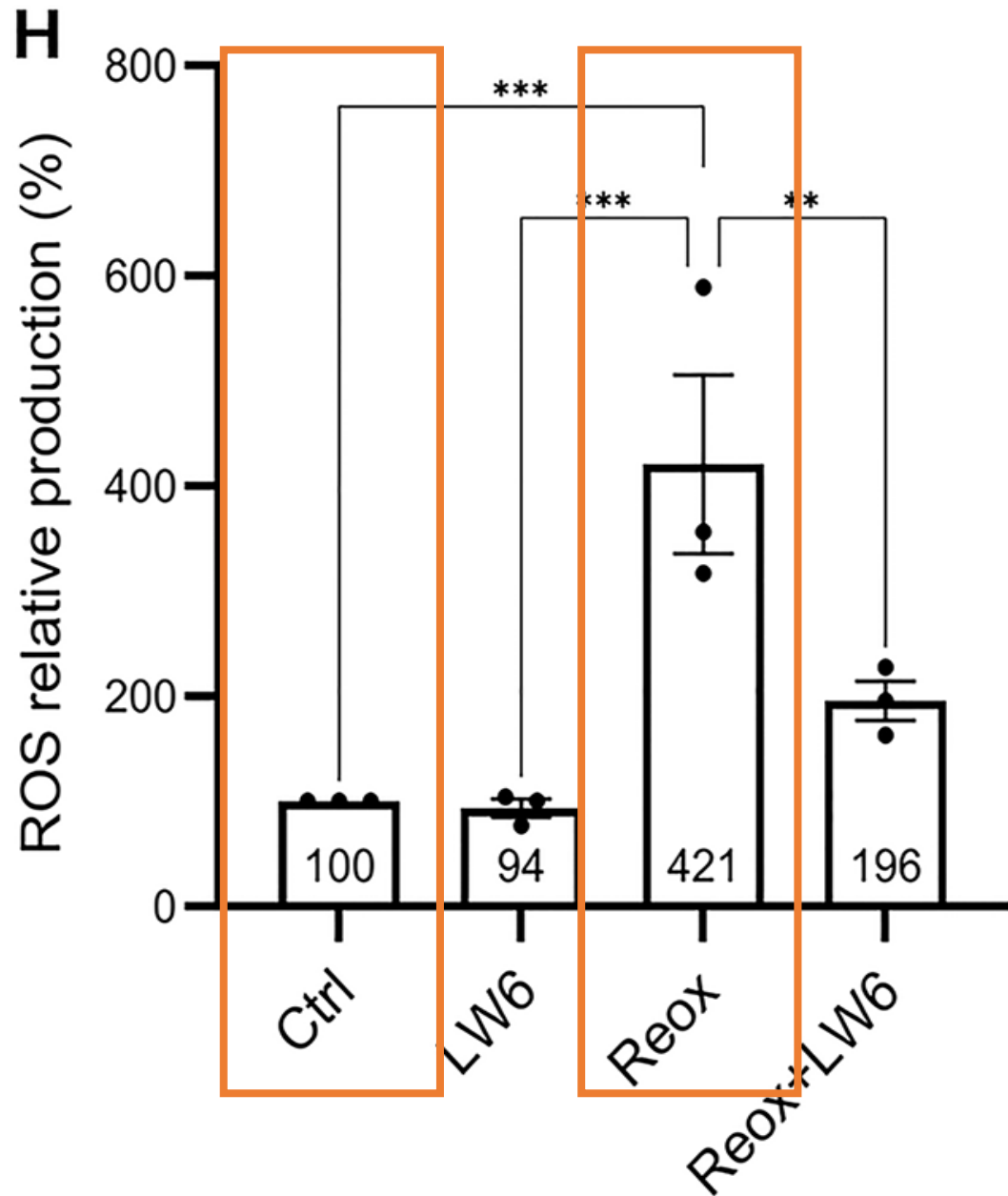


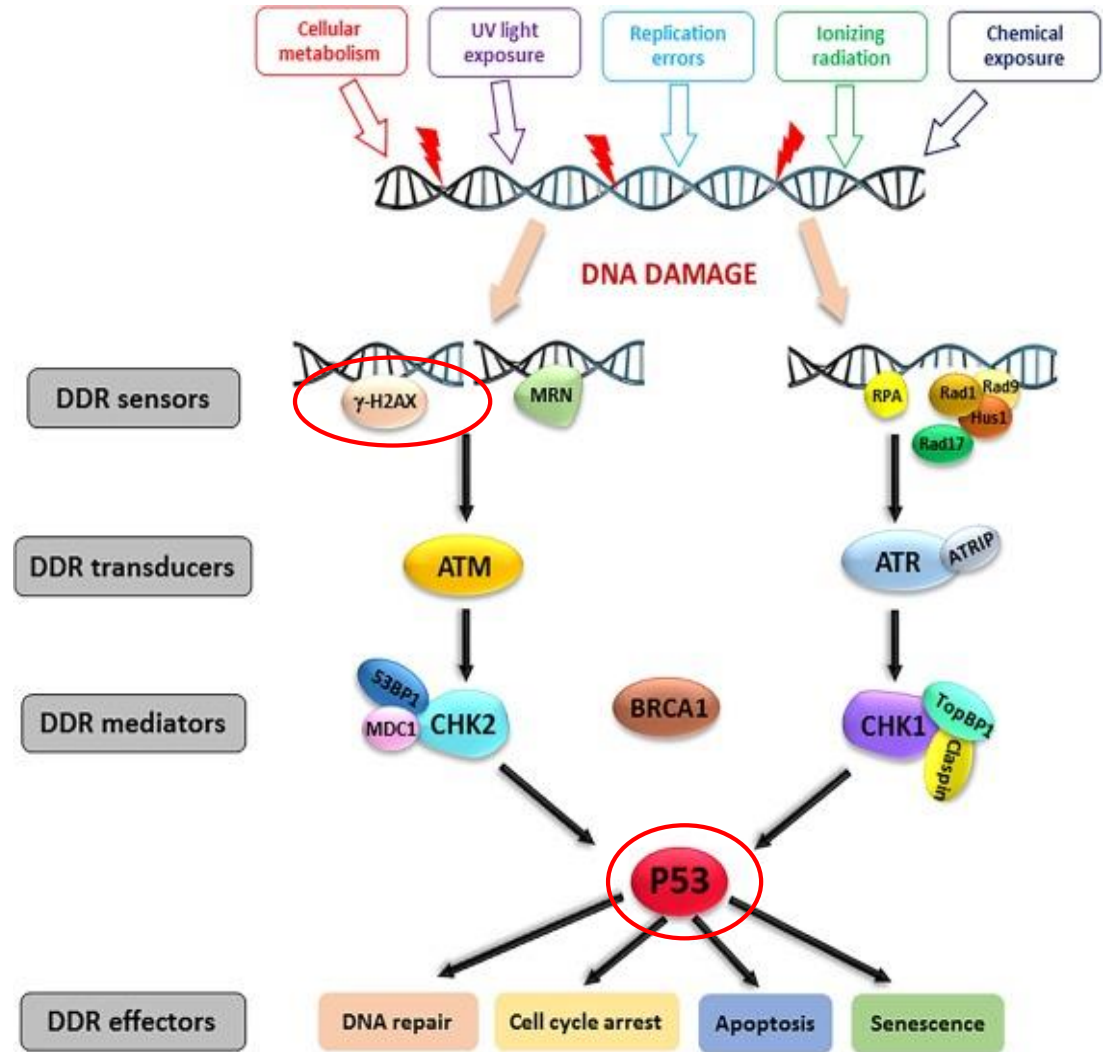
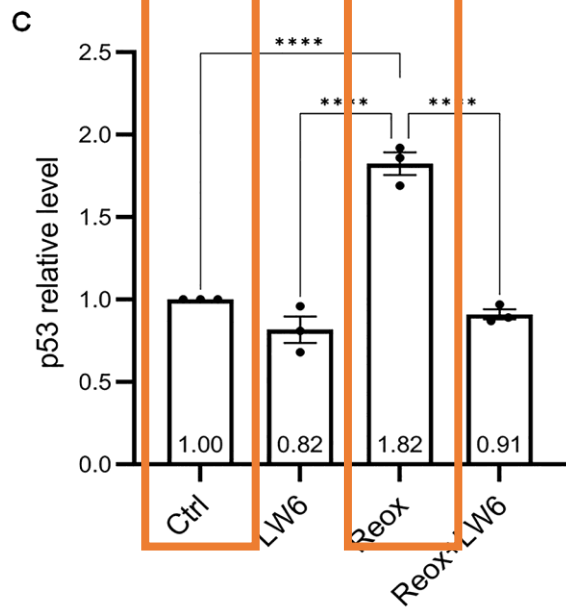
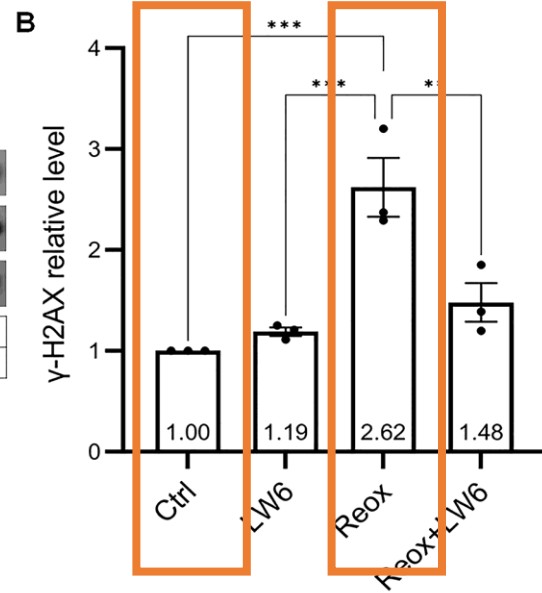
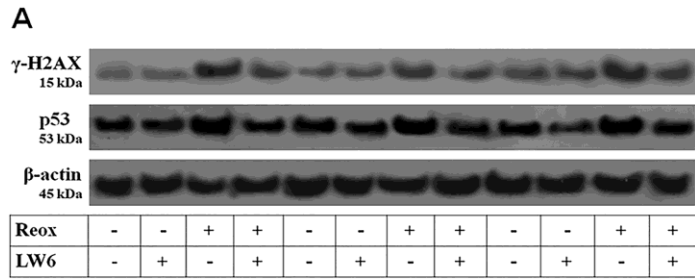
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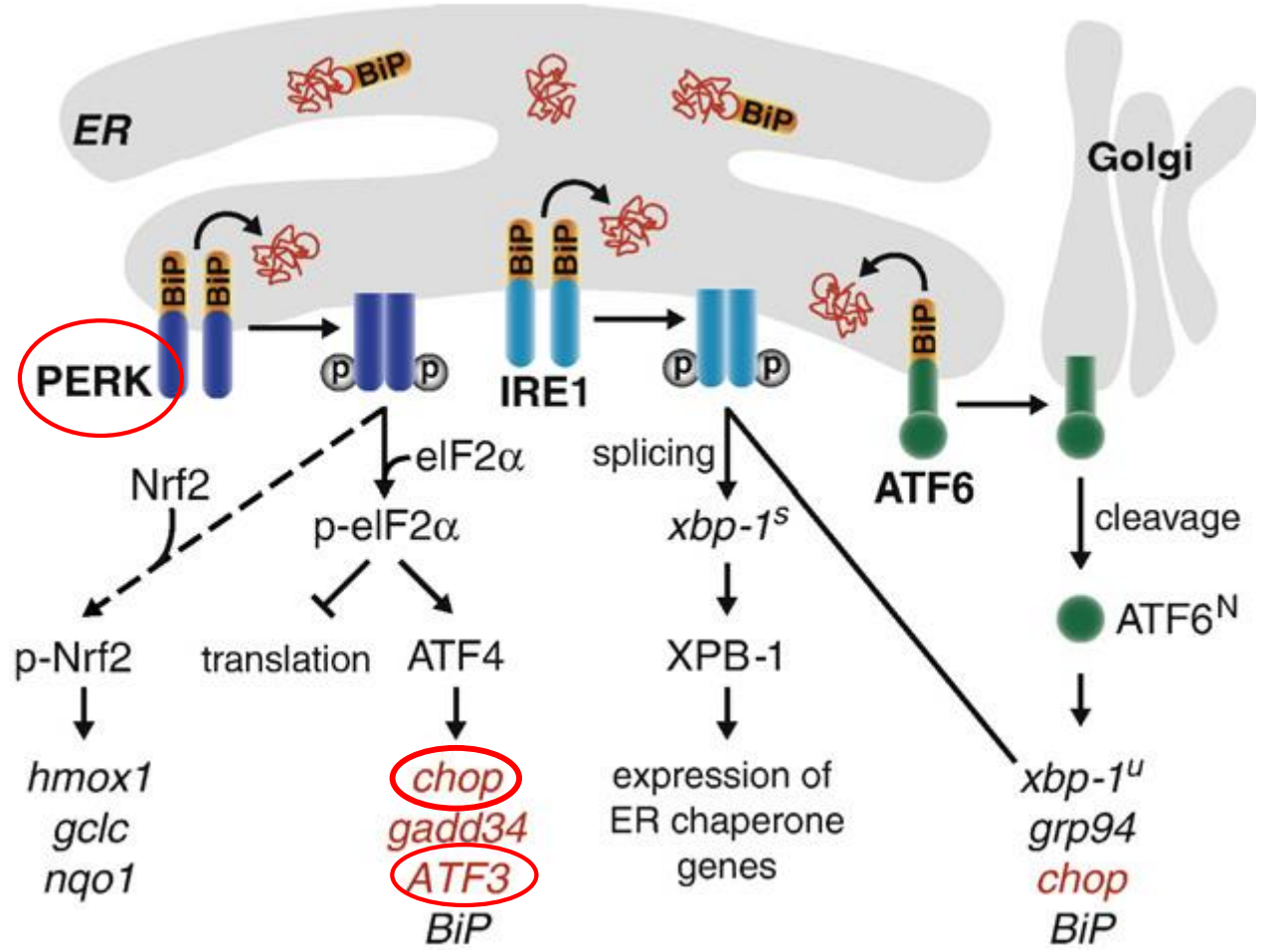
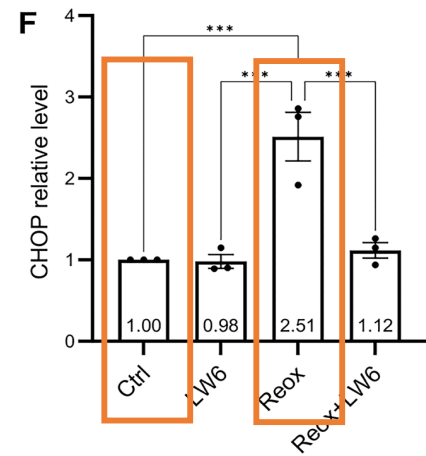
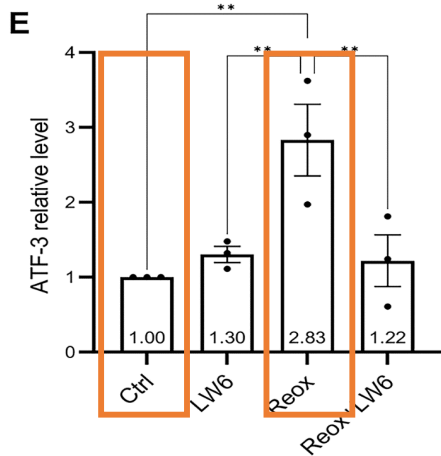
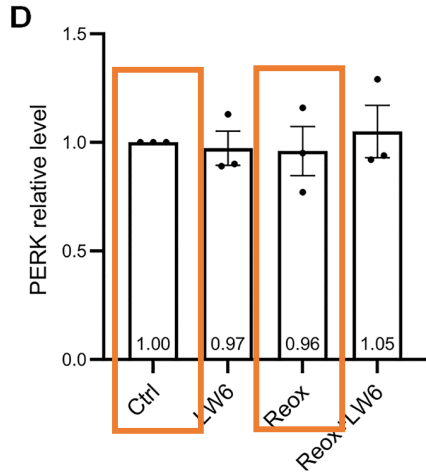
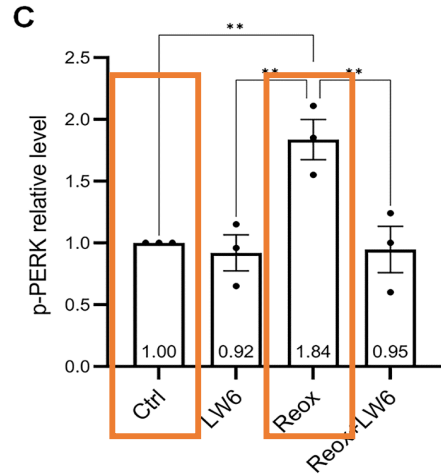
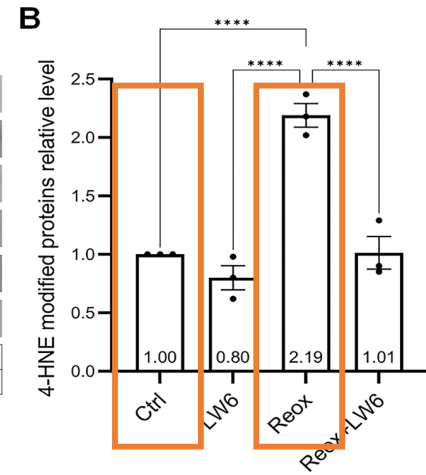
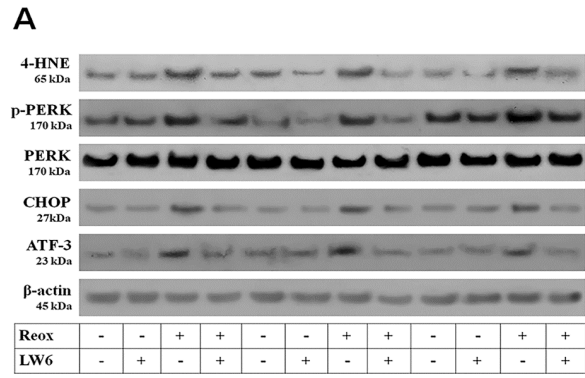


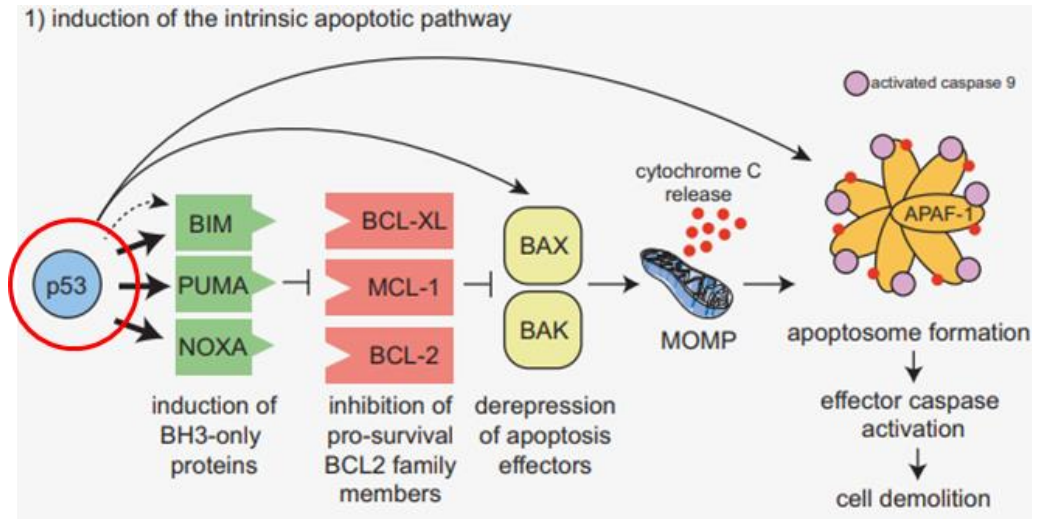
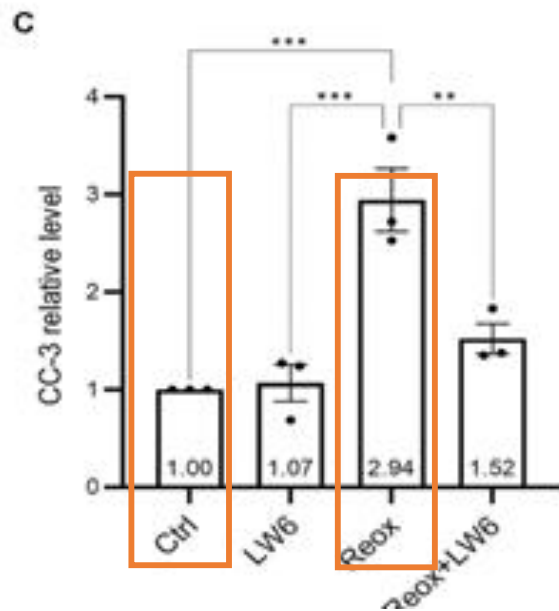
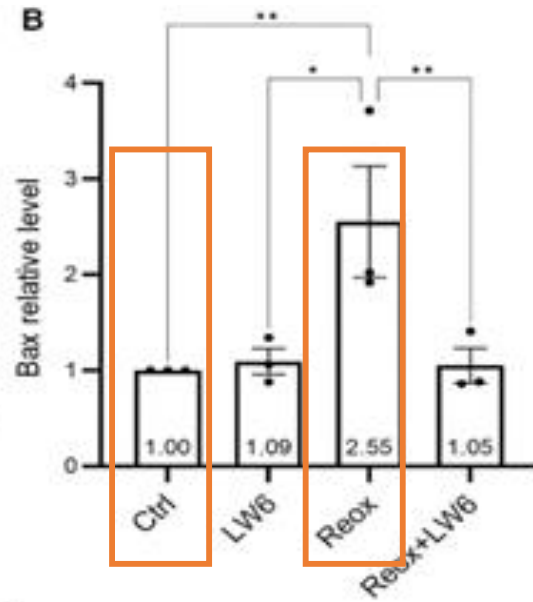
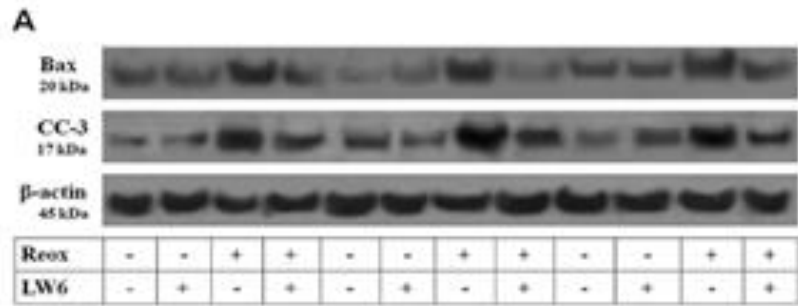
Apoptosis



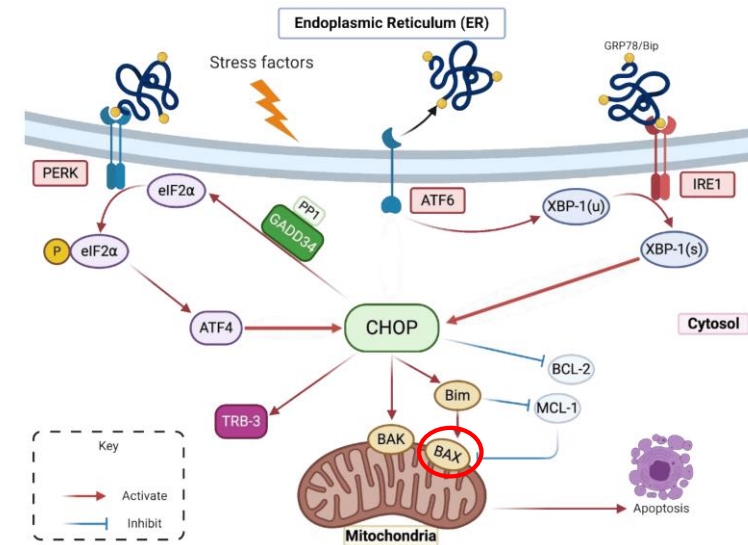




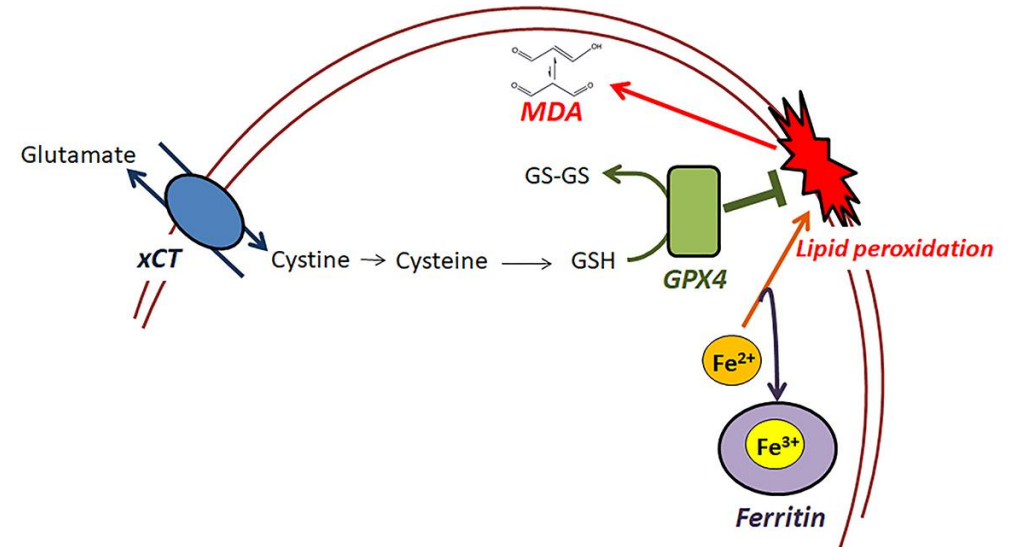
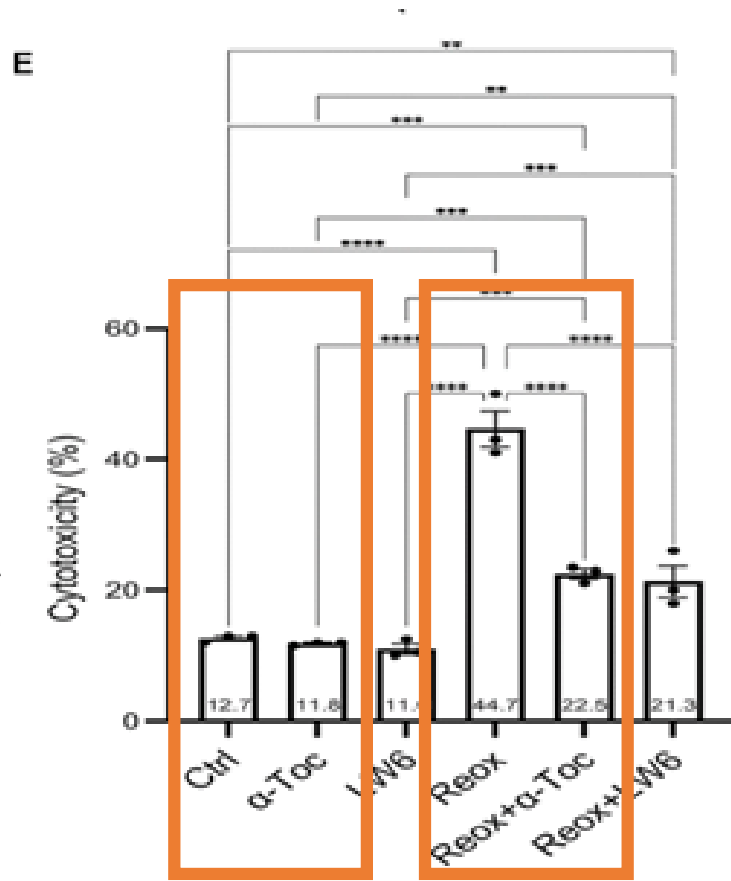
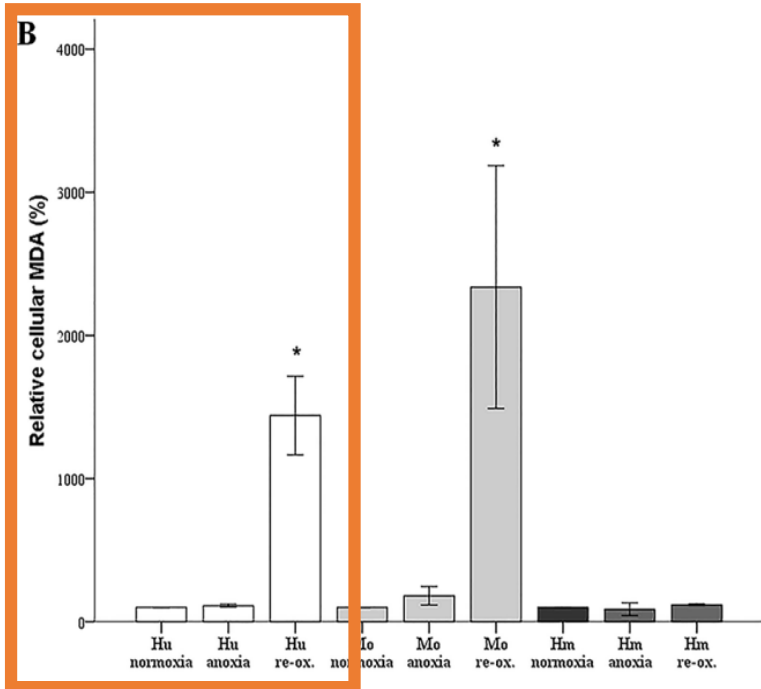
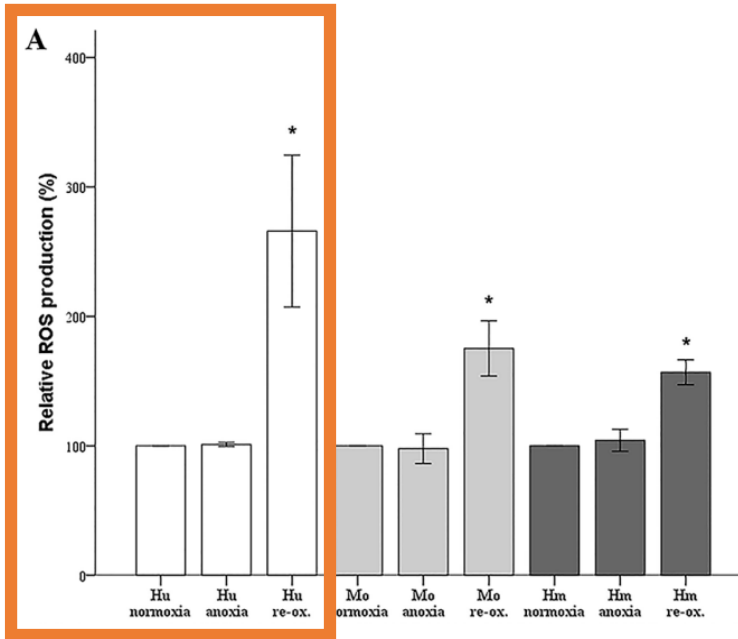




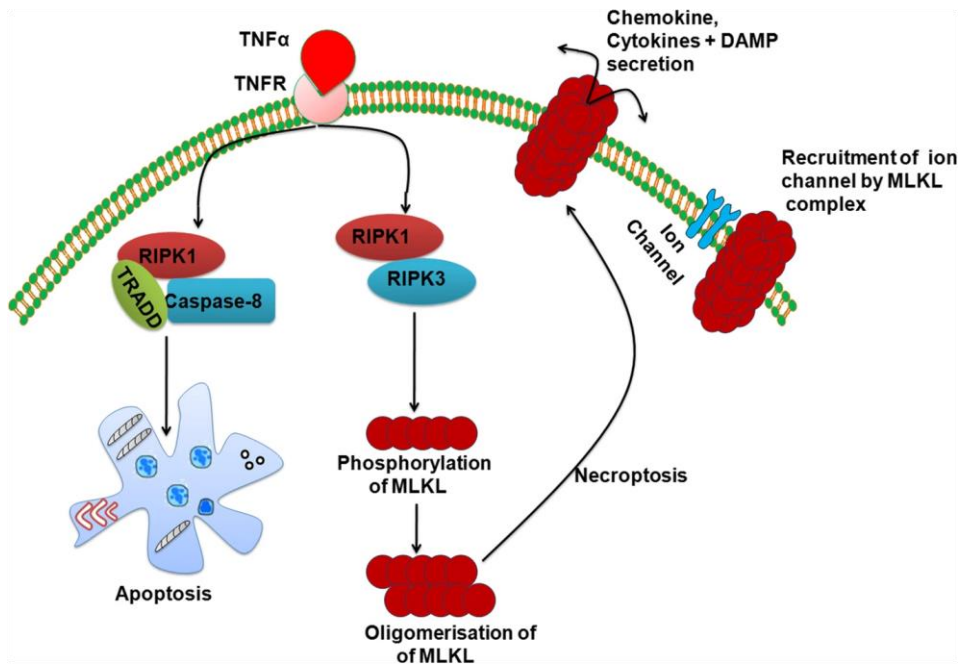
Cell Death and Differentiation 2018; doi:10.1038/cdd.2017.169



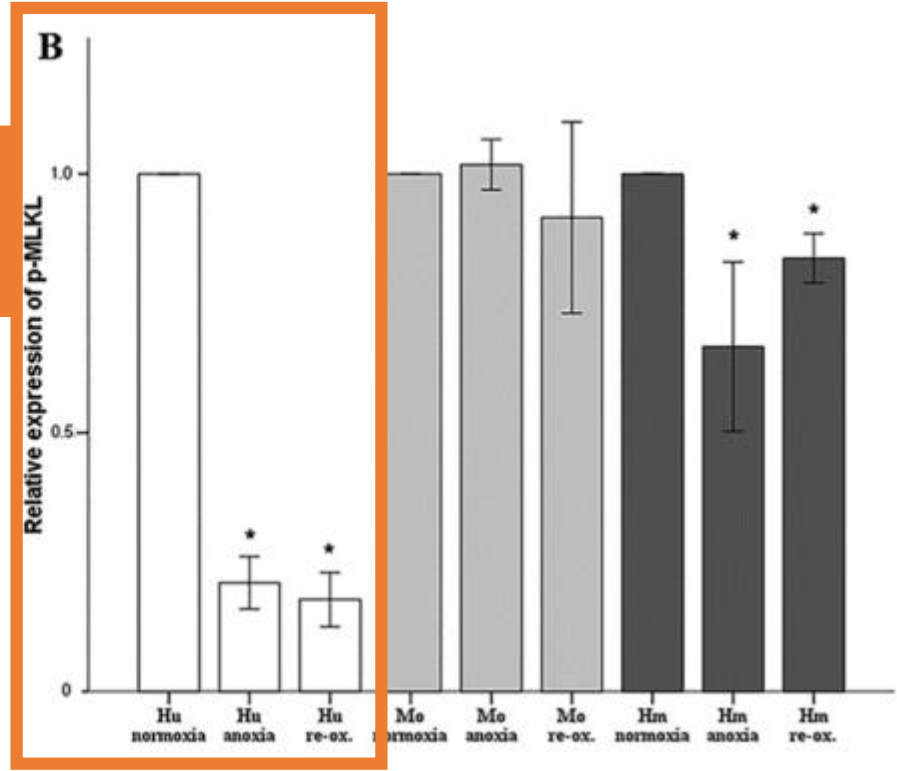
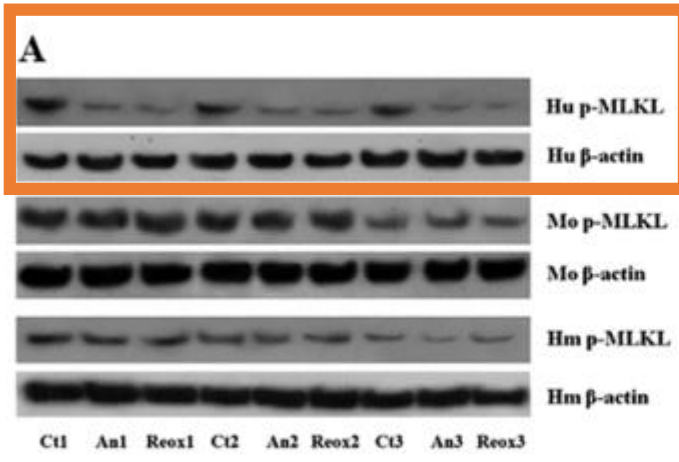
Int. J. Mol. Sci. 2021; doi:10.3390/ijms22073750

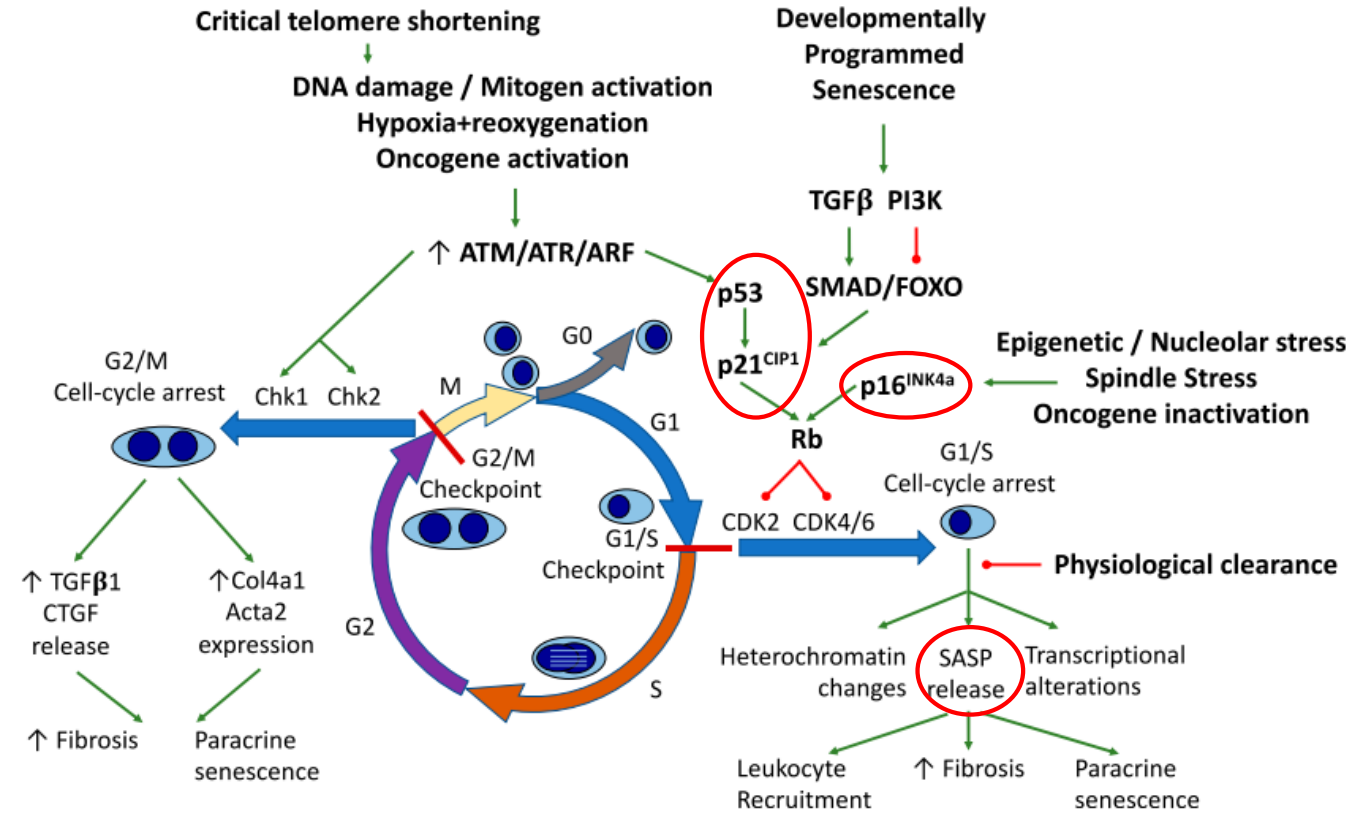
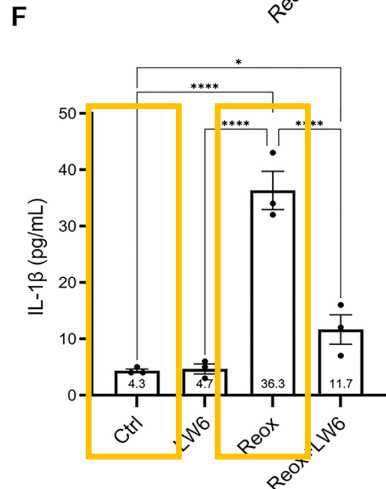
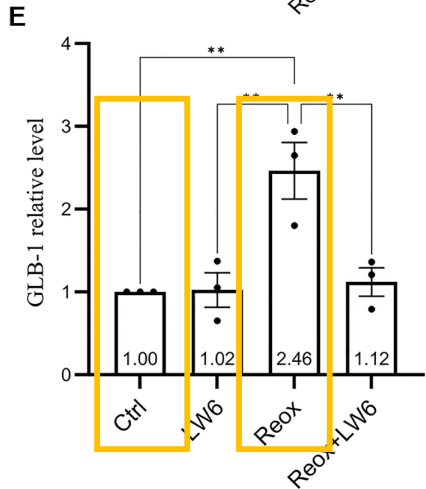
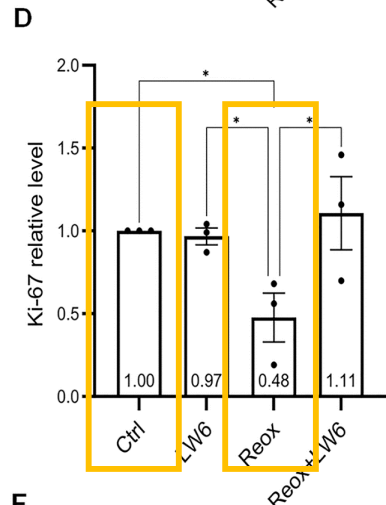
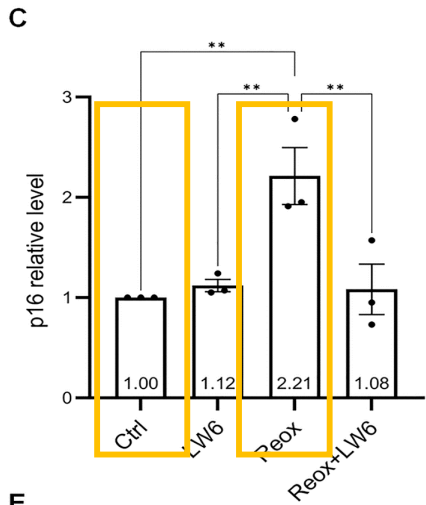
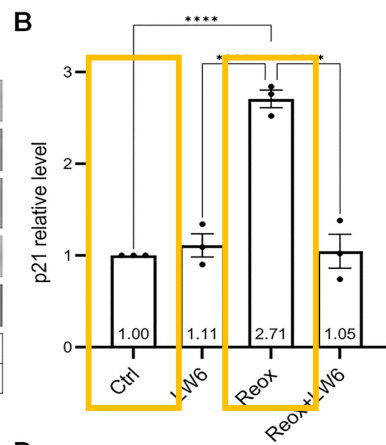
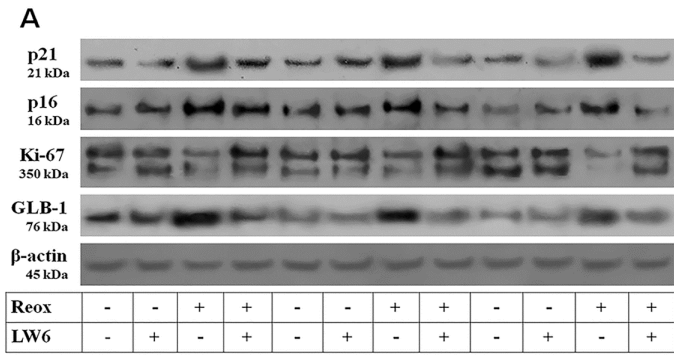


Biology 2019; doi10.3390/biology8020022



J Neuroinflammation 2018; doi: 10.1186/s12974-018-1235-0



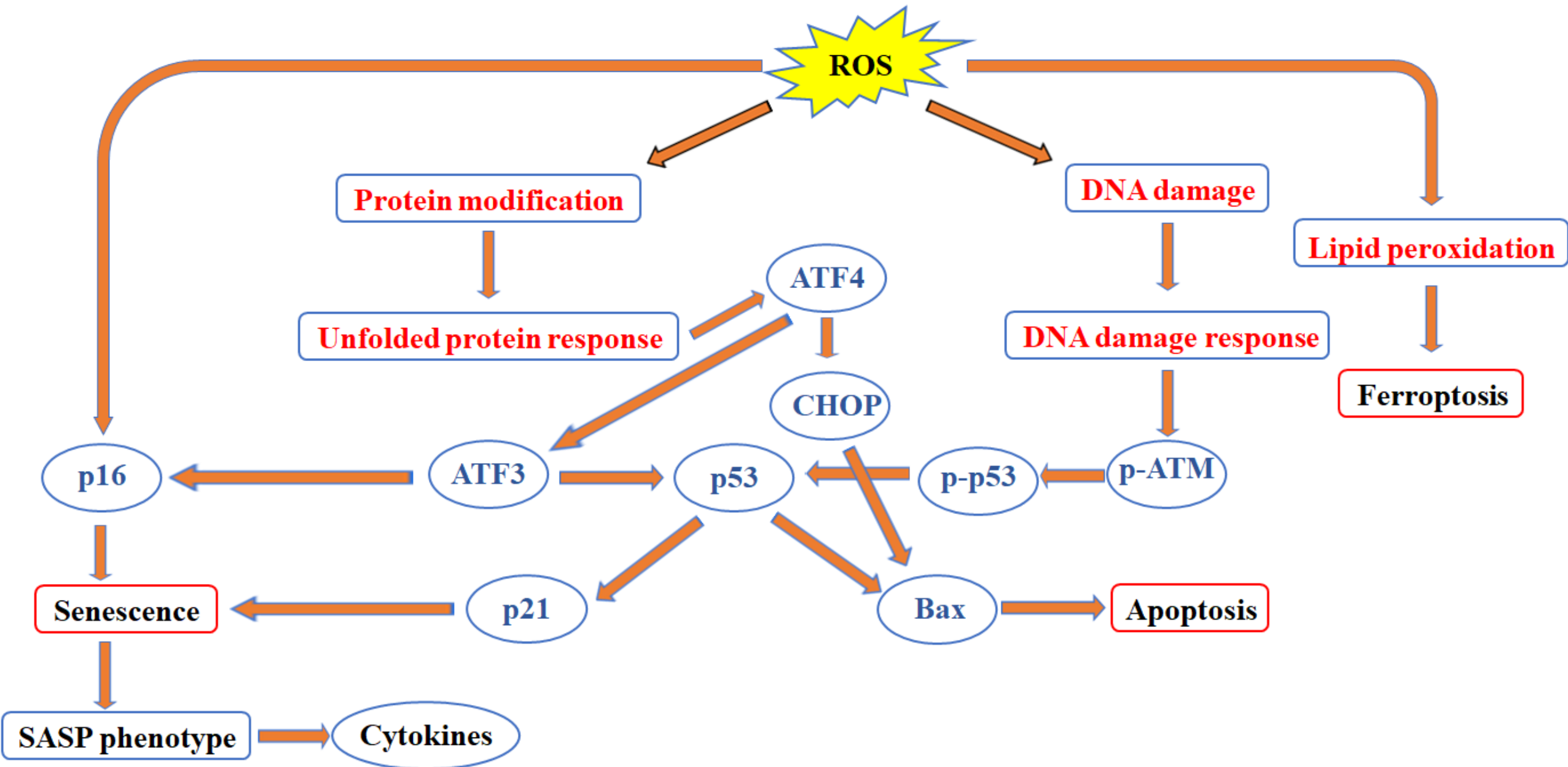


J Am Soc Nephrol 2019; doi: 10.1681/ASN.2018121251



The Walking Dead

REPERFUSION





The Matrix Resurrections Review

