



# ECVP/ESVP Summer School in Veterinary Pathology



## Marie Curie Training Courses

Summer School 2006 – Toxicological Pathology 86-623

### Slide 3. H-1 (86-623) Mouse

#### Description (10)

*Describe coagulative necrosis (3), centrilobular (2)*

*Hemorrhage rimming areas of necrosis (2)*

*Hepatocytes at periphery of necrosis undergoing vacuolar change (2)*

*Prominent Ito cells (1)*

#### Morphologic Diagnosis(es) (5)

*Severe acute central lobular necrosis (coagulative) with hemorrhage*

#### Give possible mechanism(s) with examples (3)

*Bioactivation by cytochrome P450 enzymes - acetaminophen (CYP1IIE1), bromobenzene, carbon tetrachloride, cocklebur*

*Hypoxia/ischemia – gossypol (?)*

*Bile acid carrier mediated uptake – microcystin LR*

#### Discuss repair mechanism(s) (2)

*Hepatocyte proliferation, impaired by probable endothelial cell damage (hemorrhage) which disrupted normal architecture. Fibrosis likely as part of repair mechanism.*

**Additional information:** *Balb C mouse given acetaminophen (paracetamol) 24 hr previously. Note also get necrosis of olfactory and transitional nasal epithelium and Clara cells. From Jeffery and Haschek, 1988, Toxicol Appl Pharmacol 93: 452-461*