



University of Michigan  
**ENVIRONMENTAL  
HEALTH SCIENCE**  
Core Center

*Exploring lifestage exposures and adult disease.*



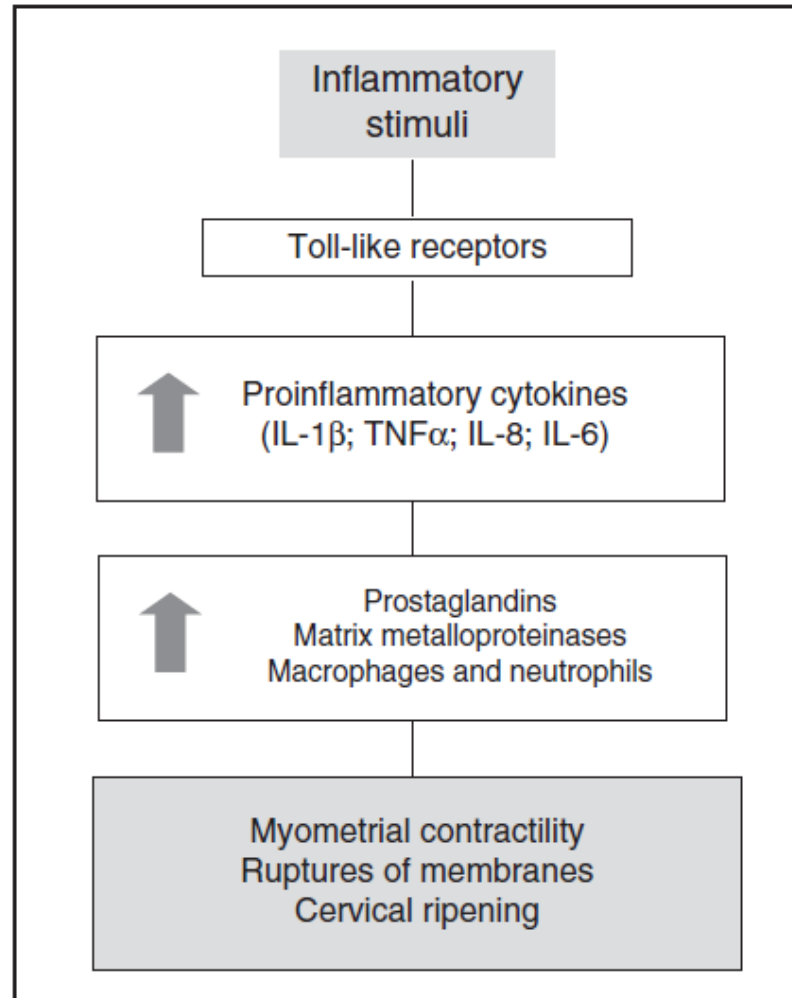
# Toxicology of Parturition

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This work supported by:

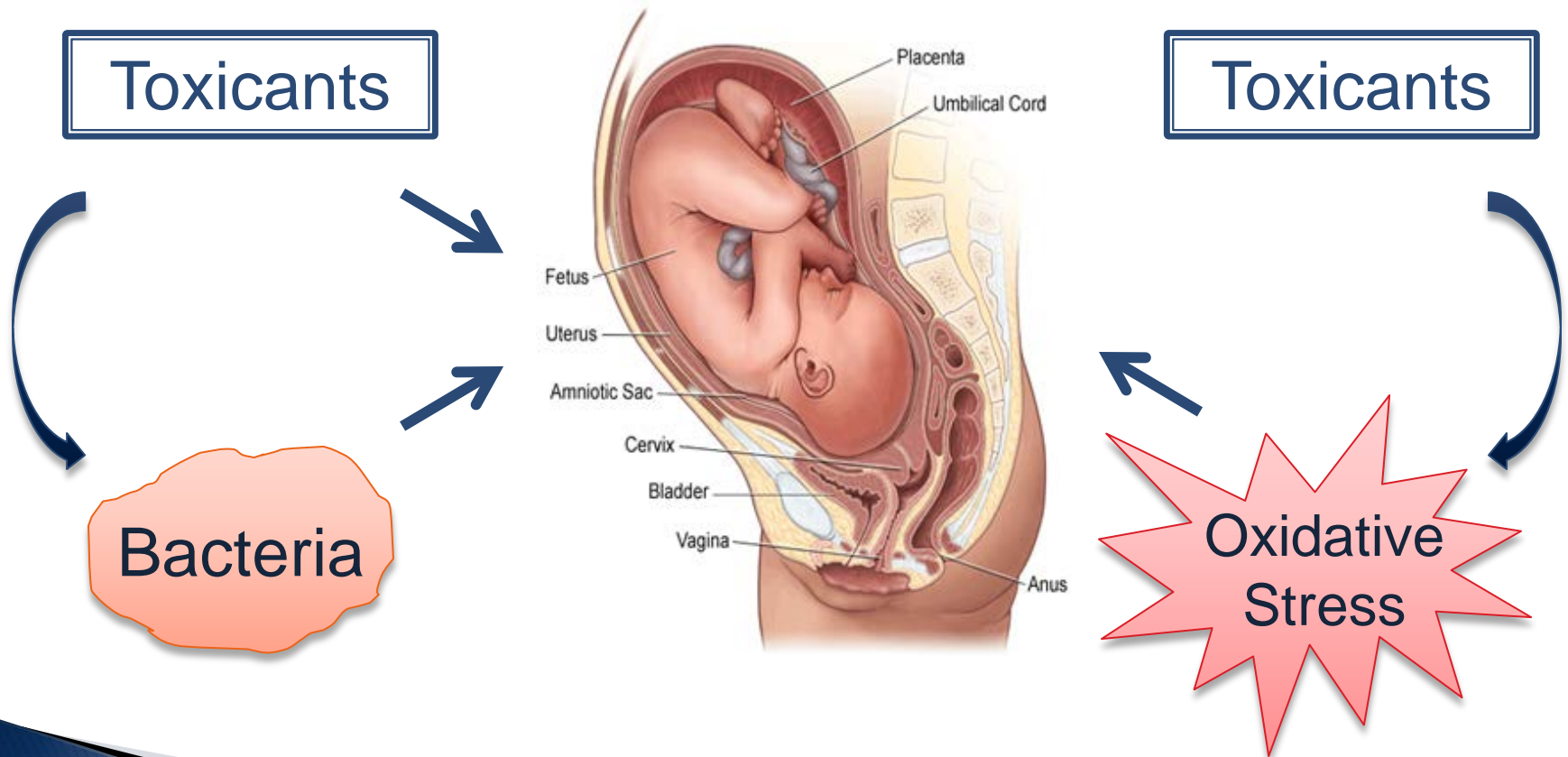
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# Model of Parturition Activation



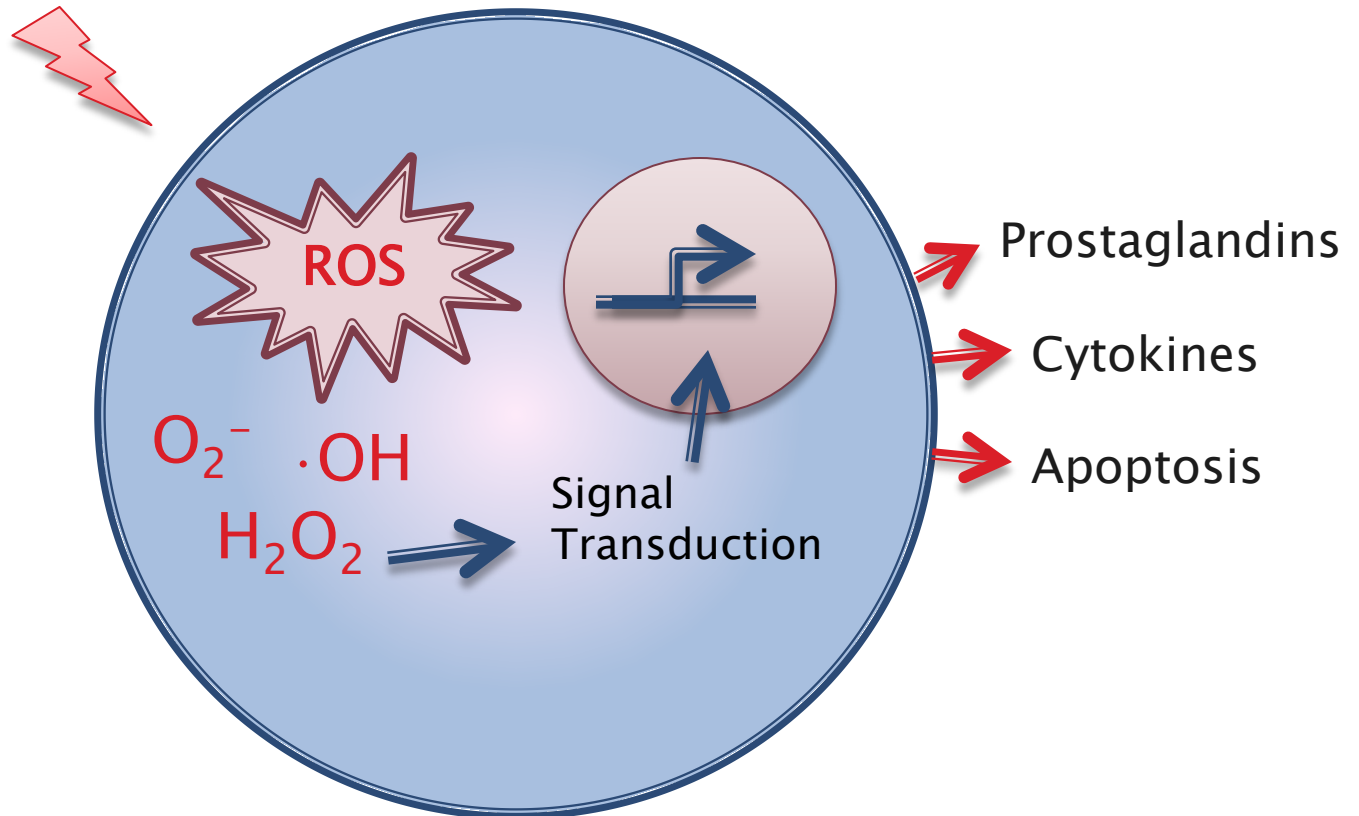
Challis, JR et al., Reprod Sci 16, 206–215, 2009

# Toxicant Activation of Parturition

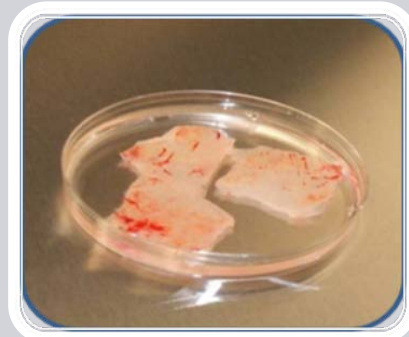
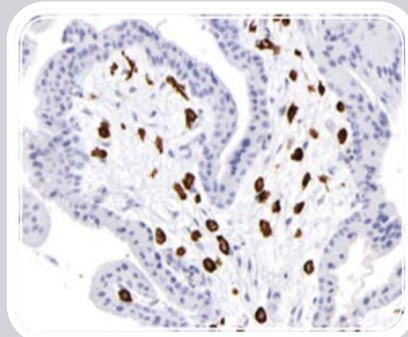
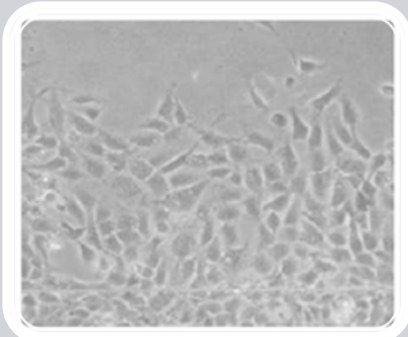


# Hypothesis

*tert*-Butylhydroperoxide (TBHP)  
Mono-2-ethylhexyl phthalate (MEHP)  
*S*-(1,2)-Dichlorovinyl-L-cysteine (DCVC)  
Bromodiphenyl ether 47 (BDE-47)  
Tetrabromobisphenol A (TBBPA)



# In Vitro Models



HTR-8/Svneo  
cells

Primary  
placental  
macrophages

Gestational  
membrane  
tissue  
explants

Gestational  
membranes  
mounted on  
Transwell  
inserts