

- ❖ **Why are certain cancer sites not associated with radiation dose? – e.g., prostate cancer, rectal cancer**
- ❖ **What biological mechanisms are implicated in radiation-related cardiovascular disease in humans at low-moderate doses?**
  - **What biomarkers or measurements could be used to assess those mechanisms?**
  - **Roles of radiation to organs/tissues other than the heart – arteries, kidneys, pituitary, etc.?**

# Unanswered Questions about Radiation and Cataract

- ❖ **Need more/better data on cataract risk after protracted exposures – risk magnitude, dose threshold, etc.**
- ❖ **Most radiation “cataract” data are based on screening studies, in which the preponderance of opacities detected are small, minor opacities.**
  - **We need more data on radiation and clinically-significant, vision-impairing cataracts**
  - **We need information on what fraction of small opacities progress to clinically-significant cataracts**
- ❖ **Are *ATM* or other genes in that pathway predictive of radiation-cataract risk in humans as they are in an animal model?**