Diagnostic Imaging
A Historical Perspective

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Ionizing Radiation Historical Overview

- **Wilhelm Conrad Röentgen**
  - 1845 – 1923
  - November 8, 1895 – discovery of the x-ray
    - Discovered effect of passing this ray through materials
    - First radiograph of his wife’s hand
  - 1901 – Nobel Prize Physics

- **Antoine Henri Becquerel**
  - 1852-1908
  - Radioactive nature of Uranium
  - 1903 – Nobel Prize Physics
Ionizing Radiation Historical Overview

- **Marie and Pierre Curie**
  - 1867-1934, 1859 – 1906
  - Marie coined term “radioactivity”
  - Discovery of Polonium and Radium
  - 1903 - 1910 – Nobel Prize Physics - Chemistry
  - Died July 4, 1934 – Aplastic Anemia

- **William D. Coolidge**
  - Patent holder for the original x-ray tube 1913

- **Robert S. Ledley**
  - Patent holder for original CT scanner 1975
US Historical Overview

- George D. Ludwig
  - Late 1940’s research for the Navy
  - Classified work using US to evaluate tissues
  - Report June 1949 first published work on US applications

- Douglass Howry, Joseph Holmes
  - Pioneering work in B-Mode ultrasound

- Joseph Holmes, William Wright and Ralph Meyerdirk
  - First articulated arm scanner 1963

- James Griffith, Walter Henry NIH
  - Mechanical oscillating real-time apparatus 1973

- Martin H. Wilcox
  - Linear array real time scanner 1973
NM Historical Overview

- Benedict Cassen, Lawrence Curtis, Clifton Reed
  - Automated scintillation detector 1951
- Hal Anger
  - Scintillation Camera 1958
- Picker Corporation
  - 3 inch rectilinear scanner 1959
- John Kuranz – Nuclear Chicago
  - First commercial Anger (Gamma Camera)
MRI Historical Overview

- Felix Bloch, Edward Purcell
  - NMR Spectroscopy
- Paul Laterbur, Peter Mansfield
  - 2003 Nobel Prize Physiology / Medicine
- Raymond Damadian
  - First patent in field of MRI 1970
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