Important Moments in the History of Nuclear Medicine

1896 – Henri Becquerel discovered mysterious “rays” from uranium.

1897 – Marie Curie named the mysterious rays “radioactivity.”

1913 – The first study on the intravenous injection of radium for therapy of various diseases was published.

1924 – Georg de Hevesy et al performed the first radiotracer studies in animals.

1936 – The first clinical therapeutic application of an artificial radionuclide, phosphorus-32, is used to treat leukemia.

1939 – Carbon-14, a radioactive tracer widely used in medical and drug research, is discovered.

1951 – The U.S. Food and Drug Administration (FDA) approved sodium iodide 1-131 for use with thyroid patients. It was the first FDA-approved radiopharmaceutical.

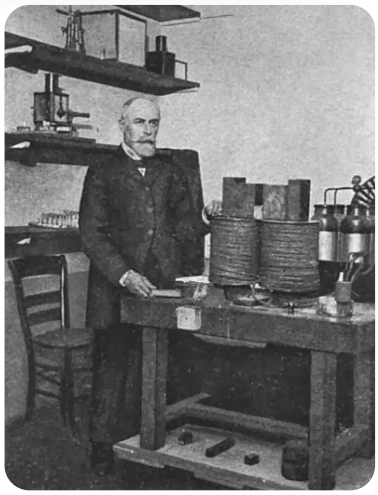
1962 – David Kuhl introduced emission reconstruction tomography. This method later became known as SPECT and PET. It was extended in radiology to transmission X-ray scanning, known as CT.

1971 – The American Medical Association officially recognized nuclear medicine as a medical specialty.

2000 – Time Magazine recognizes Siemens Biograph as the invention of the year.

2004 – The Society of Nuclear Medicine celebrates its 50th anniversary.

2008 – The first hybrid PET/MRI system for humans, created by Siemens, was installed.



Henri Becquerel in his lab.
(Credit: http://scihi.org/henri-becquerel-and-radioactivity/)

About Nuclear Medicine Exams

Nuclear medicine imaging uses small amounts of radioactive materials called radiotracers that are typically injected into the bloodstream, inhaled or swallowed. The radiotracer travels through the area being examined and gives off energy in the form of gamma rays which are detected by a special camera and a computer to create images of the inside of a patient’s body.

Nuclear medicine plays an essential role in many medical specialties, including cardiology, oncology and neurology, and allows physicians to cost-effectively obtain medical information that would otherwise be unavailable or would require more invasive procedures, such as surgery or biopsy.

Fast Facts:

20 million nuclear medicine procedures are performed in the United States each year.

There are approximately 20,000 nuclear medicine technologists in the US, with jobs expected to grow 10% by 2026.

Nuclear medicine exams can help to identify disease in its earliest stages and show whether a patient is responding to treatment.

Sources:
The Society of Nuclear Medicine and Molecular Imaging
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