Colloquium

Challenges in radiopharmaceutical synthesis and purification

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Wednesday

September 3

4 P.M.

Rm 118 NSH

The field of nuclear medicine was one of the peaceful uses of the atom that came from the Manhattan project and subsequent research in nuclear science. As the technology became more sophisticated, the challenges in using nuclear decay for both diagnosis and therapy also progressed. One of the challenges in choice of imaging or therapy agent is to match the physical half life of the radionuclide to the biological lifetime of the targeting. In the case of breathing studies, an isotope with a half life of seconds would be ideal. At the other end of the timescale, monoclonal antibodies often take up to a day to localize in the target. In order to minimize the extraneous dose to the patient, we strive to identify radionuclides with the right characteristics for the intended purpose. I will discuss the process used and give some examples of recent developments in both diagnostic and therapeutic applications.

Refreshments @ 3:30 in 202 NSH

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