

Physics Division Colloquium

11 December 2020

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***Low Energy Radionuclide Production for Medical Applications***

Mn-51 and Mn-52g show promise for a variety of medical applications. The Cyclotron Research Group at the University of Wisconsin has investigated their production via charged particle bombardments and their radiochemical isolation from cyclotron target materials. We have also explored their application in preclinical settings to various models of human diseases such as cancer and diabetes. I will describe the production methods we have developed, including measurements made to correct the accepted half-life of Mn-51 by more than  $5\sigma$ . I will also briefly treat our attempts to use Mn-52g as a radiotracer label for antibody imaging and Mn-51 as a monitor of pancreatic beta cell viability.

To meet with the speaker (remotely), please contact the host [Dave Rotsch](#).