

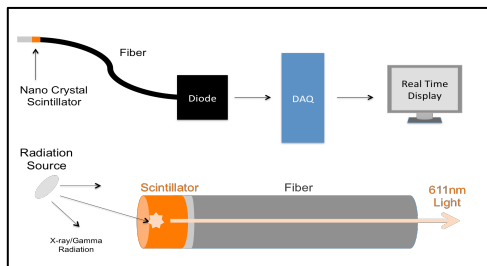
# It's About (Real) Time to Verify HDR Treatments: Duke Solution Using Nano-Fiber Optic Detector

Presenter: Michelle Rokni

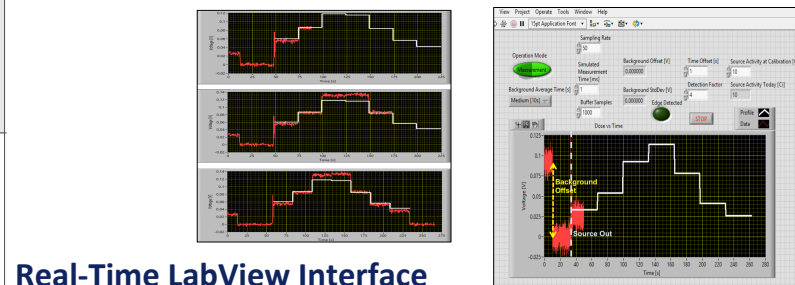
**Session: Brachytherapy and Radionuclide Therapy**  
 Room: Davidson Ballroom A  
**Wednesday August 1, 2018, 8:30 am**

To create a method of verifying HDR Brachytherapy treatment deliveries in real-time to allow users to intervene during treatment if an error occurs, improving patient outcomes

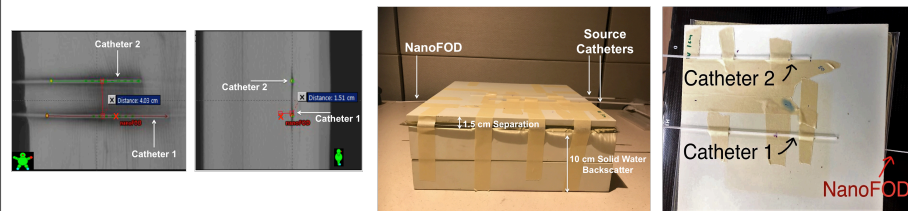
## Purpose



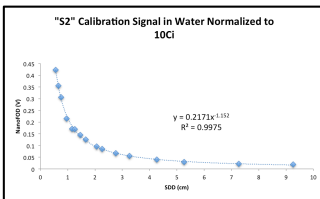
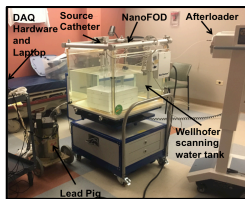
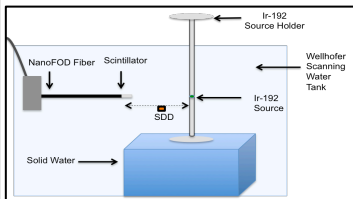
## The Duke NanoFOD System



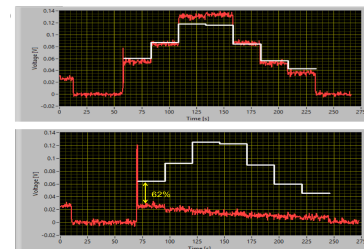
## Real-Time LabView Interface



## Solid Water Phantom Test



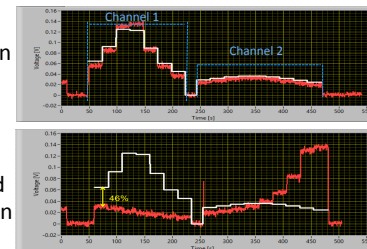
## NanoFOD Calibration



## Results Single Channel Test

Correct Plan Delivery

Introduced Error to Plan



## Two Channel Test