

TRAINING RECEIVED IN BASIC RADIOSOTOPE HANDLING TECHNIQUES

Name: Andrew Hughes

Location of Training	Date(s) of Accordance	Course Title	Total Clock Hours of	BREAKDOWN OF COURSE CONTENT IN CLOCK HOURS*				
				Radiation Physics & Instrumentation	Radiation Protection	Math Pertaining to Radioactivity	Radiation Biology	Radiopharmaceutical Chemistry
Knoxville, TN	Oct-07	RAM Intro	8	2	2	2	2	32
Knoxville, TN	Oct-07	Ops I - Rad	40	8	16	8	8	
Knoxville, TN	Oct-07	Ops II - Rad	40	4			4	
Knoxville, TN	Oct-07	Intro	40	16	16	8		
Knoxville, TN	Oct-07	Cyclotron	80	80				24
Knoxville, TN	Oct-07	Advanced Cyclotron	24					
Knoxville, TN	Oct-07	Chemistry Modules						
Woburn, MA	Oct-08	Annual Refresher	1		1			
Woburn, MA	Oct-09	Annual Refresher	1		1			
Woburn, MA	Oct-10	Annual Refresher	1		1			
Woburn, MA	Oct-11	Annual Refresher	1		1			
Woburn, MA	Oct-12	Annual Refresher	1		1			
Woburn, MA	Oct-13	Annual Refresher	1		1			
*Note: Show a breakdown of hours by institution, dates, and subjects. List each hour only once (i.e., under the most applicable subject category)			238	110	40	18	14	56
TOTAL HOURS								

RADIOISOTOPE HANDLING EXPERIENCE

Name: Andrew Hughes

Date: 18-Feb-2020

Document the actual use/handling of radioactive material under the supervision of an Authorized Nuclear Pharmacist.

ISOTOPE	MAXIMUM ACTIVITY HANDLED	USE See key below: 1,2,3,4,5,6,7	EXPERIENCE Actual clock hours (Include date range of experience)	WHERE EXPERIENCE GAINED
F-18	20,000 mCi	1,2,3,4,5,6	10/2007-06/2019 17,280 hours	PETNET Solutions Woburn, MA
Cs-137	1 uCi	2	10/2007-06/2019 17,280 hours	PETNET Solutions Woburn, MA
Co-57	1 uCi	2	10/2007-06/2019 17,280 hours	PETNET Solutions Woburn, MA
In-111	80 mCi	1,2,5,6	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN
Ac-225	5 mCi	1,2,5,6	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN
Eu-152	1 uCi	2	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN
Na-22	1 uCi	2	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN
H-3	1 uCi	2	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN
C-14	1 uCi	2	07/2019-Present 1000 hours	Cardinal Health Indianapolis, IN

Key for "Use": the number, or numbers, entered under "Use" should correspond to the handling experience for each isotope.

- Ordering, shipping, receiving radioactive materials and performing related radiation surveys
- Calibrating, using and performing checks for proper operation of dose calibrators, scintillation detectors, survey meters, and, if appropriate, instruments used to measure alpha- or beta-emitting radionuclides
- Calculating, assaying and safely preparing dosages for patients or human research subjects
- Using appropriate internal controls to avoid mistakes in the labeling and/or administration of by product material
- Using procedures to prevent or minimize contamination and using proper decontamination procedures
- Learning emergency procedures to handle and contain spilled materials safely, including related decontamination procedures, surveys, and wipe tests
- Eluting Tc-99m from generator systems, assaying the eluate for Tc-99m and for Mo-99 contaminations, and processing the eluate with reagent kits to prepare Tc-99m labeled radioactive drugs.

From: [Sullivan, Glenn](#)
To: [Parker, Bryan](#)
Subject: [External_Sender] training for Andrew Hughes
Date: Tuesday, June 09, 2020 1:33:11 PM
Attachments: [image002.png](#)
[Didactic and Radioisotope Andrew Hughes.pdf](#)

Here is the training for Andrew Hughes. You can disregard our request for Mr. Glenn as he has left the company.

g

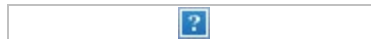


Glenn P. Sullivan, Ph.D.

*Director Health Physics /Corporate
Radiation Safety Officer*

Nuclear & Precision Health Solutions

5100 Rings Road
Dublin, OH 43017
614/757-9586 tel



Restorative, Learner, Achiever, Individualization, Harmony

ISFJ (The Defender).

This message is for the designated recipient only and may contain privileged, proprietary or otherwise private information. If you have received it in error, please notify the sender immediately and delete the original. Any other use of the email by you is prohibited.

Dansk - Deutsch - Espanol - Francais - Italiano - Japanese - Nederlands - Norsk - Portuguese - Chinese

Svenska: <http://www.cardinalhealth.com/en/support/terms-and-conditions-english.html>