



Br. 2

13 August 2009

Regional Administrator  
U.S. Nuclear Regulatory Commission Region I  
Commercial and R&D Branch  
Division of Nuclear Materials Safety  
475 Allendale Road  
King of Prussia, PA 19406-1415

RECEIVED  
REGION I  
2009 AUG 17 PM 12:24

03034289

**SUBJECT: NRC RAM License Amendment, License # 47-25375-01MD**

Dear Sir:

PharmaLogic WV is requesting an amendment to the Nuclear Regulatory Commission RAM License # 47-25375-01MD to add **Garth Kistner, PharmD.** as an authorized user.

This individual is a licensed pharmacist who has successfully completed the 200 hours of required didactic coursework through the Purdue University Nuclear Pharmacy Certificate Program and completed the supervised practical experience in PharmaLogic nuclear pharmacies. I have attached supporting documentation.

Thank you for your consideration of this amendment request. If there are any questions, please contact me at the telephone numbers listed below.

Sincerely,

Timothy Summers, RPh  
Facility Manager

**PharmaLogic WV**  
5842B Davis Creek Road ♦ Barboursville ♦ West Virginia 25504  
304-955-6801 ♦ 304-736-3296 FAX

144069  
NRCSS/RGNI MATER. ALS-002

**APPLICATION FOR RADIOACTIVE MATERIAL LICENSEE**

**TRAINING AND EXPERIENCE FOR AUTHORIZED USER**

<b>NAME</b>
Garth Kristner

CERTIFICATION		
<b>Program:</b> Purdue University	<b>Category:</b> Nuclear Pharmacy	<b>Month &amp; Year Certified:</b> August 2009

TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES		
		TYPE AND LENGTH OF TRAINING
FIELD OF TRAINING	LOCATION & DATES OF TRAINING	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
Radiation Physics & Instrumentation	PharmaLogic WV May-August 2009	65
Radiation Protection	PharmaLogic WV May-August 2009	125
Mathematics pertaining to the use and measurement of radioactivity	PharmaLogic WV May-August 2009; PharmaLogic Ltd June 2009	170
Radiation Biology	PharmaLogic WV May-August 2009	40
Radiopharmaceutical Chemistry	PharmaLogic WV May-August 2009; PharmaLogic Ltd; June 2009	195

EXPERIENCE WITH RADIATION (Actual use of radioisotopes or Equivalent Experience)				
Isotope	mCi used at one time	Location	Clock hours	Use
Co-57	3 mCi	PharmaLogic WV, Bridgeport, WV;	500 hrs	Nuclear Pharmacy Practice, dose preparation, dispensing, drug compounding, equipment quality control tests, radiation safety tasks
Ba-133	1 mCi			
Cs-137	0.4 mCi			
Ga-67	20 mCi	PharmaLogic WV, Barboursville, WV;		
Mo-99	1900 mCi			
Tc-99m	1500 mCi			
Tl-201	240 mCi	PharmaLogic Ltd, Williston, VT		
I-131	10 mCi			
Xe-133	100 mCi			
In-111	2 mCi			

August 10, 2009

Garth Kistner  
PharmaLogic WV  
109 Platinum Drive, Suite A  
Bridgeport, WV 26330

Dear Garth,

We are pleased to provide the enclosed certificate to recognize formally your completion of the Purdue University Nuclear Pharmacy Certificate Program. You have successfully completed all requirements of both the distance and on-campus components of the program as set forth by the Nuclear Regulatory Commission and Purdue University. We enjoyed the brief opportunity to share our knowledge from the world of academia. We wish you the very best for a gratifying and successful professional career.

As you continue on in your career, please do not hesitate to let us know if we can be of any assistance to you – we consider you part of the “Purdue family” and we look forward to hearing from you in the future!

Sincerely,



Kara Duncan Weatherman, PharmD, BCNP, FAPhA  
Assistant Professor of Nuclear Pharmacy  
Division of Nuclear Pharmacy



# **NUCLEAR PHARMACY CERTIFICATE PROGRAM**

## *Synopsis of Clock Hours of Training*

*Garth Kistner  
Certificate Program #67  
Campus session: May, 2009*

**School of Pharmacy and Pharmaceutical Sciences**

**Department of Industrial and Physical Pharmacy**

**Division of Nuclear Pharmacy**

**Purdue University**

**West Lafayette, Indiana 47907**

Copyright, (2007) by Purdue Research Foundation, West Lafayette, Indiana 47907. All Rights Reserved. Unless permission is granted, this material shall not be copied, reproduced or coded for reproduction by any electrical, mechanical or chemical processes, or combinations thereof, now known or later developed.

# Nuclear Pharmacy Certificate Program Outline:

## **Contents:**

1. Program Concept
2. Synopsis of Clock Hours of Training
3. DVD and Workbook (Self-Study Portion) Clock Hours
4. Campus Portion Laboratory and Lecture Clock Hours
5. Instructional Staff

## **Abbreviations Used:**

RPI:	Radiation Physics / Instrumentation
RP:	Radiation Physics
MA:	Math
RB:	Radiation Biology
RC:	Radiochemistry

## **Nuclear Pharmacy Certificate Program Concept**

The School of Pharmacy and Pharmacal Sciences at Purdue University offers a Certificate Program in Nuclear Pharmacy. The goal of the certificate program is to provide fundamental information to post-graduate pharmacists that will serve as a foundation for attaining competency as practitioners in nuclear pharmacy. The program follows the guidelines for nuclear pharmacy training prepared by nuclear pharmacists in the American Pharmaceutical Association, Section on Nuclear Pharmacy Practice.

This student completed the videotaped distance learning portion of the certificate program. This training module utilizes self-study concepts, including lectures on videotape and correlated reading assignments. The nuclear pharmacy manager, or other qualified nuclear pharmacist at the practice site, serves as the clinical instructor and mentor for the pharmacist in training. This portion is self-paced by the trainee with regular examinations returned to Purdue to assist in monitoring the learning process.

Form Updated 08/07

TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES\*

Trainee: GARTH KISTNER

Date issued: August 10, 2009

Location of Training	Date(s) of Attendance	Nuclear Pharmacy Certificate Program	Total Clock Hours of Course	Breakdown of Course Content in Clock Hours				
				Radiation Physics & Instrumentation	Radiation Protection	Math Pertaining to Radio-activity	Radiation Biology	Radio-pharmaceutical Chemistry
Purdue University	June 2009 - August 2009	DVD-Workbook	150	51	33	13	21	32
	May 2009	On-Site	65	34	13	10	0	8
Total Hours Received			<b>215</b>					
Hourly breakdown by topic				<b>85</b>	<b>46</b>	<b>23</b>	<b>21</b>	<b>40</b>

\* This form is representative of that which is used to apply for an NRC license amendment for an authorized user.

Director of Nuclear Pharmacy Training Programs:



Kara Duncan Weatherman, PharmD, BCNP, FAPhA  
 Assistant Professor of Nuclear Pharmacy  
 Purdue University  
 Division of Nuclear Pharmacy

**Nuclear Pharmacy Certificate Program  
DVD and Workbook (Self-Study Portion) Clock Hours**

DVD	Instructor	Hours
Physics and Overview Disc 1-4	Dr. Stanley M. Shaw	RP/I: 11 RP: 4 MA: 1
Radiation Protection Disc 1-2	Dr. Paul Ziemer	RP: 8
Instrumentation Disc 1	Dr. Kara Weatherman	RP/I: 4
Radiopharmaceuticals Disc 1-3	Dr. Kara Weatherman	RP: 3 RB: 3 RC: 6
Math Review Disc 1	Dr. Kara Weatherman	MA: 4
Radionuclide Generators Disc 1	Ms. C. Anne Smith	RP/I: 2 MA: 2
Kit Preparation Disc 1	Dr. Kara Weatherman	MA: 4
Quality Control Disc 1	Ms. C. Anne Smith	RP/I: 2 MA: 1 RC: 1
Radiopharmaceutical Formulations (Disc 1)	Mr. James Ponto	RP/I: 1 MA: 1 RC: 2
Health Physics and Recordkeeping (Disc 1)	Dr. Brigette McGhee	RP/I: 2 RP: 2
Radiation Biology Disc 1-3	Dr. Stanley M. Shaw	RP/I: 3 RB: 9
Late Effects of Ionizing Radiation (Disc 1)	Dr. William R. Widmer	RP/I: 1 RB: 3
Radiation Safety in Pregnant and Breastfeeding Patients (Disc 1)	Mr. James Ponto	RP/I: 1 RP: 3
Adverse Drug Reactions (Disc 1)	Mr. James Ponto	RP/I: 1 RP: 2 RB: 1
Radiopharmaceutical Updates (Disc 1-3)	Dr. Richard Kowalsky	RP/I: 9 RB: 3
Blood Pool Imaging (Disc 1)	Dr. Ronald Calahan	RP/I: 1 MA: 1 RC: 2
Clinical PET	Dr. Laura Boles Ponto	RP/I: 1 RP: 1 RC: 2
Nuclear Pharmacy Regulations (Disc 1-2)	Dr. Stanley M. Shaw	RP: 8
Radiopharmaceutical Chemistry (Disc 1-4)	Dr. Mark A. Green	RC: 16

**Nuclear Pharmacy Certificate Program  
On-Campus Portion Clock Hours**

Session	Instructor	
On-Campus portion:	Dr. Kara Weatherman	RP/I: 34 RP: 13 MA: 10 RB: 0 RC: 8

**Nuclear Pharmacy Certificate Program  
Instructional Staff**

Dr. Stanley M. Shaw, Ph.D.  
Professor of Nuclear Pharmacy  
Purdue University  
West Lafayette, Indiana 47097

Dr. Paul Ziemer, Ph.D.  
Professor Emeritus of Health Physics  
Purdue University  
West Lafayette, Indiana 47097

Dr. Kara Weatherman, PharmD, BCNP, FAPhA  
Assistant Professor of Nuclear Pharmacy  
Purdue University  
West Lafayette, Indiana 47907

Ms. C. Anne Smith, M.S., B.C.N.P.  
Nuclear Pharmacy Program Director  
Purdue University  
West Lafayette, IN 47907

Mr. James A. Ponto, M.S., B.C.N.P.  
Division of Nuclear Medicine  
University of Iowa Hospitals and Clinics  
Iowa City, Iowa 52242

Brigette McGhee  
Staff Pharmacist  
Central Pharmacy Services, Inc  
Jacksonville, FL

Dr. William R. Widmer, D.V.M.  
Associate Professor of Diagnostic Imaging  
Department of Veterinary Clinical Sciences  
School of Veterinary Medicine  
Purdue University  
West Lafayette, Indiana 47907

Dr. Richard J. Kowalsky, PharmD, BCNP, FAPhA  
Associate Professor Pharmacy and Radiology  
University of North Carolina  
Chapel Hill, North Carolina 27599

Dr. Ronald Callahan, PhD  
Harvard Medical School  
- Associate Professor of Radiology  
Massachusetts General Hospital  
- Director of Nuclear Pharmacy  
Boston, Massachusetts 02114

Dr. Laura Boles Ponto, PhD  
Division of Nuclear Medicine  
University of Iowa Hospitals and Clinics  
Iowa City, Iowa 52242

Dr. Mark A Green, PhD  
Professor of Industrial and Physical Pharmacy  
Division of Nuclear Pharmacy  
Purdue University  
West Lafayette, Indiana 47907

# PURDUE UNIVERSITY

WEST LAFAYETTE, INDIANA

SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES

DEPARTMENT OF INDUSTRIAL AND PHYSICAL PHARMACY

DIVISION OF NUCLEAR PHARMACY

This certificate is awarded to

*Garth Kistner*

as evidence of completion of the

NUCLEAR PHARMACY CERTIFICATE PROGRAM

*August 10, 2009*

*Kara D. Weatherman*  
Director of Nuclear Pharmacy Training Programs

This is to acknowledge the receipt of your letter/application dated

8/13/09, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (47-25375-01MID)  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 144069.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)  
(6-96)

Sincerely,  
Licensing Assistance Team Leader