



Office of the Vice Provost for Research  
4400 University Drive, MS 3A2, Fairfax, Virginia 22030  
Phone: 703-993-2270; Fax: 703-993-8871

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REGION 1

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November 12, 2004

U.S. Nuclear Regulatory Commission, Region II  
Sam Nunn Atlantic Federal Center  
61 Forsyth Street S.W., Suite 23T85  
Atlanta, Georgia 30303-8931

03001128

Re: License No. 45-13147-01

Gentlemen:

George Mason University (GMU) wishes to request an amendment to NRC license # 45-13147-01 to reflect a change in Executive Management. Mr. David Wynn, the current Radiation Safety Officer (RSO) for GMU, has decided to take another position within the University and will no longer be able to function as the RSO. Ms. Diann Stedman has been hired to become the new RSO and will assume her duties as such once her appointment is approved by the Nuclear Regulatory Commission (NRC). Ms. Stedman will operate as part of the Office of Laboratory Safety under the direction of Ms. Julie Zobel, Director of Laboratory Safety, who reports to Dr. Christopher T. Hill, Vice Provost for Research. The Vice Provost for Research is the certifying officer for the radiation protection program at GMU.

Ms. Stedman, who possesses a Masters of Science degree in Microbiology and Immunology, has significant experience which qualifies her to be the Radiation Safety Officer. She has attended radiation safety training programs at both Virginia Commonwealth University and Yale University and has ten years of experience using radioactive materials for molecular biology research. For the past seven years, Ms. Stedman has managed the radiation safety program for a laboratory at Yale University, overseeing procurement, storage, utilization, and disposal of radioactive materials, training of personnel in the safe use of radioactive materials, and ensuring compliance with government regulations and university policy concerning the use of radioactive materials in the laboratory. Since beginning her employment at GMU in August of this year, Ms. Stedman has worked closely with Mr. Wynn to learn specific information about the operation of the radiation safety program at GMU. Upon review of her performance thus far, the GMU Radiation Safety Review Board Chair is confident in her abilities to function as the RSO.

Ms. Stedman recently received Radiation Safety Officer Certification from the Radiation Safety Academy in Gaithersburg, MD and Department of Transportation Training certifying her to ship radioactive materials. Copies of her certifications, an outline of her radiation experience, and her resume accompany this letter. Also enclosed is a *Radiation Safety Officer Delegation of Authority* Memorandum designating Diann Stedman as the GMU RSO. This memorandum will be distributed once Ms. Stedman's appointment is confirmed by the NRC.

136117

NM36/RGNI MATERIALS-002

In addition to amending the license, GMU would also like to request that contact information for our license be changed. Diann Stedman will be the new contact person. Ms. Stedman can be reached at (703) 993-4820, or at [dstedman@gmu.edu](mailto:dstedman@gmu.edu)

If there are any questions concerning this license amendment, please feel free to contact me at (703) 993-2270.

Sincerely,



Christopher T. Hill, Ph.D., P.E.  
Vice Provost for Research

Cc: Vikas Chandhoke, Chairperson, Radiation Safety Review Board  
Julie Zobel, Director of Laboratory Safety  
Diann Stedman, Radiation Safety Officer  
Keith Bushey, Assistant Vice President, Chief Safety Officer  
David Wynn, Compliance Officer

Enc.



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**MEMORANDUM**

To: Approved Users of Radioactive Materials and Devices That Produce Ionizing Radiation  
From: Christopher T. Hill, Vice Provost for Research   
Subject: Delegation of Authority for Radiation Safety Officer  
Date: November 12, 2004  
RE: Radiation Safety Officer Delegation of Authority

Under my authority as the Certifying Officer of the radiation protection program at George Mason University, I have appointed Diann Stedman as the Radiation Safety Officer (RSO) responsible for ensuring the safe use of byproduct material as outlined in the Nuclear Regulatory Commission (NRC) license #45-13147-01. As RSO, Ms. Stedman is responsible for managing the radiation safety program; identifying radiation safety problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; and ensuring compliance with regulations for the use of byproduct material as outlined in the license. The RSO is hereby delegated the authority necessary to meet these responsibilities.

Ms. Stedman will also have similar authority and responsibilities for devices that produce ionizing radiation.

The RSO has the authority to immediately stop any operations involving the use of byproduct material or devices that produce ionizing radiation through which, in her judgment, health and safety may be compromised and/or non-compliance with NRC, Commonwealth of Virginia, or George Mason requirements may result.

Cc: Alan Merten, President  
Maurice Scherrens, Senior Vice President  
Peter Stearns, Provost  
Lawrence Czarda, Vice President, Prince William Campus  
Stanley Taylor, Vice President, Arlington Campus  
Vikas Chandhoke, Chairperson, Radiation Safety Review Board  
All Members of the Radiation Safety Review Board  
Julie Zobel, Director of Laboratory Safety  
Diann Stedman, Radiation Safety Officer  
Keith Bushey, Assistant Vice President, Chief Safety Officer  
David Wynn, Compliance Officer

## **Diann R. Stedman, M.S.**

### ***Personal Information***

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*Mailing Address:* George Mason University  
Office of Laboratory Safety  
4400 University Drive, MS5G8  
Fairfax, VA 22030

*Phone:* (703) 993-4820

*Fax:* (703) 993-8389

*Email:* [dstedman@gmu.edu](mailto:dstedman@gmu.edu)

### ***Objective***

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A leadership position at a university where my scientific expertise, interpersonal skills, and attention to detail are needed to implement and maintain safety and regulatory guidelines at research facilities.

### ***Summary***

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- Experienced laboratory manager with 7 years experience overseeing Radiation, Chemical, and Biological Program for a large molecular research laboratory
- Versatile biologist and teacher with 10 years experience in scientific research and 4 years experience as adjunct faculty at a community college
- Highly skilled in molecular, cellular, and microbiology techniques and in maintenance and operation of a research laboratory
- Experience in laboratory procedures involving radioactivity, biological agents, and small animals
- Experience maintaining laboratory records for radioisotope, biological, and chemical use and disposal
- Excellent communicator with exceptional teaching, mentoring, and problem-solving abilities
- Well-organized individual with great attention to detail. Energetic and committed to safety in the work place

### ***Professional Skills and Achievements***

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- Scientific techniques: All standard methodologies in molecular and cellular biology including genomic and plasmid DNA isolation, Southern blot hybridization, PCR amplification, creation of plasmid vectors, protein purification from bacteria and tissues, protein gel electrophoresis and western immunoblot analysis, animal dissection, mammalian cell culture, bright field and fluorescence microscopy, and behavioral testing.
- Experience in procurement, maintenance, and usage of laboratory equipment including centrifuges, incubators, pH meters, spectrophotometers, and microscopes
- Experience writing progress reports and peer-reviewed articles
- Computer Software: Microsoft word, Excel, Powerpoint, Adobe Photoshop and Illustrator

### ***Degrees and Certification***

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Radiation Safety Officer Certification, Radiation Safety Academy, Gaithersburg, MD, Oct. 2004.

DOT Certification, Radiation Safety Academy, Gaithersburg, MD, Oct. 2004.

Master of Science in Microbiology and Immunology, Virginia Commonwealth University, Richmond, VA, 1997.

Bachelor of Science in Biology, University of Pittsburgh, Johnstown, PA, 1993; Minor: Chemistry.

### ***Professional Experience***

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#### **Research Assistant II, Yale University School of Medicine, Department of Psychiatry, New Haven, CT 1997-July 2004.**

Coordinate meetings with students, laboratory staff, and primary investigators. Supervise and train students and laboratory staff in techniques and protocols. Work closely with University Health and Safety officers to ensure compliance with University and Government regulations. Coordinate timely ordering of supplies, reagents, and equipment for all laboratory personnel. Oversee maintenance and repair of laboratory equipment. Conduct scientific research independently and in cooperation with postdoctoral fellows and graduate students.

#### **Adjunct Faculty, Science and Math Department, Gateway Community College, New Haven, CT, 2001-2004.**

Instruct students in 4 credit courses in Fundamental Biology, Anatomy and Physiology I and Anatomy and Physiology II. Prepare and supervise laboratory exercises that coincide with and support lecture material. Mentor and advise students in academic matters.

#### **Graduate Research Assistant, Department of Microbiology and Immunology, Virginia Commonwealth University, Richmond, VA, 1993-1997.**

Conducted independent research to develop a regulatable *in vitro* expression system in *Trypanosoma cruzi*. Taught the laboratory portion of the Microbiology and Immunology course for professional dental students. Taught the laboratory portion of a summer molecular biology program for high school students.

### ***Publications***

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- **Stedman, D.**; Uboya, N.; Stedman, T.; Nairn, A.; Picciotto, M. (2004) Cytoplasmic localization of Calcium/calmodulin-dependent protein kinase I depends on a nuclear export signal located within its regulatory domain. *FEBS Letters* May 21;566(103):275-80.
- Zachariou, V.; Brunzell, D.; Hawes, J.; **Stedman, D.**; Bartfai, T.; Steiner, R.; Wynick, D.; Langel, U.; Picciotto, M. (2003) The neuropeptide galanin modulates behavioral and neurochemical signs of opiate withdrawal. *Proc. Natl. Acad. Sci. USA*, Jul 22; 100(15):9028-33.
- Wen, L.; Xu, P.; Benegal, G.; Carvaho, M.; **Butler, D.**; Buck, G. (2001) *Trypanosoma cruzi*: Exogenously Regulated Gene Expression. *J. Parasitol.* Apr; 97 (4):196-204.
- Stedman, T.; **Butler, D.**; Buck, G. (1998). The HSP70 Gene Family in *Pneumocystis carinii*: Molecular and Phylogenetic Characterization of Cytoplasmic Members. *J. Microbiol.* 46(6):589-599.

## **Radiation Training and Experience**

**Diann Stedman, M.S.**

Office of Laboratory Safety  
4400 University Drive, MS5G8  
Fairfax, VA 22030  
703-993-4820  
[dstedman@gmu.edu](mailto:dstedman@gmu.edu)

### ***Certification***

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#### **Radiation Safety Officer Certification**

Radiation Safety Academy, Gaithersburg, MD, *Oct., 2004.*

#### **DOT Training Certification**

Radiation Safety Academy, Gaithersburg, MD, *Oct., 2004.*

### ***Training***

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#### **Radiation Safety Training, Radiation Safety Academy, Gaithersburg, MD, 2004.**

- 37 training hours: Radiation Fundamentals, Health Risks, Regulations, Licensing, Enforcement, Dosimetry, Radiation Instruments, Interpreting Radiation Data, Quality Assurance, DOT Shipping and Receiving of Radioactive Materials, Radiation Safety Program Management, Record Keeping, Preparing for Inspections, and Emergency Response.
- 8 training hours: X-ray Safety, Mathematics, and Training for the Radiation Safety Trainer.
- 4 training hours: Fundamentals of Liquid Scintillation Counting for Analysis of Surface Swipes, Biomedical, Environmental, Waste and other types of samples.

#### **On-the-Job Experience, George Mason University, Fairfax, VA, August 2004-present.**

- Guidance from Current RSO in specific aspects of George Mason University Radiation Safety Program:
  - Monitoring and surveying areas in which radioactive material is used (use of survey meters, performing wipe tests, and use of scintillation counters)
  - Ordering, receipt, survey, and delivery of radioactive material to approved users
  - Personnel monitoring (collection and distribution of dosimeter and ring badges, monitoring personnel exposure records)
  - Waste disposal (collection of waste from users, centralized storage of waste, disposal of waste and maintenance of waste records)
  - Decontamination procedures for spills and other forms of contamination
  - Inspecting laboratories, performing physical inventories, updating inventory records, and performing wipe tests in preparation of audits reported semi-annually to the Radiation Safety Review Board
  - Maintaining required records
  - Process for reviewing and approving projects
  - Process for training new users of radioactive materials.

- Completion of GMU Radiation Safety Online Training Courses
  - Radiation Safety Training
  - X-ray Safety Training

**Radiation Safety Orientation, Yale University, New Haven, CT, 1998.**

- 3 hour training course in the fundamentals of radiation safety; procurement, storage, usage, and disposal of radioactive material; security; maintenance of records; monitoring devices; personal and laboratory surveys; dosimetry; monitoring
- Annual refresher training offered by a Yale Radiation Safety Specialist tailored to the specific radiation hazards of the laboratory (1998-2004)
- Hands On training as necessary to learn experimental procedures involving radioactive materials.

**Radiation Safety Training, Virginia Commonwealth University, Richmond, VA, 1994.**

- 2 hour training course covering federal, state, and local regulations; radioisotope orders; handling techniques; waste disposal; security; types of radioactive hazards; dosimetry; laboratory surveys; decontamination procedures; and the basis for the ALARA philosophy.
- Hands On training as necessary to learn experimental procedures involving radioactive materials.

***Work Experience***

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**Research Assistant and Lab Manager, Yale University, New Haven, CT, 1997-July 2004.**

- 7 Years Experience Managing the Radiation Program for large molecular laboratory authorized to use  $^{32}\text{P}$ ,  $^{33}\text{P}$ ,  $^{125}\text{I}$ ,  $^{131}\text{I}$ ,  $^{35}\text{S}$ ,  $^{14}\text{C}$ , and  $^3\text{H}$ .
  - Oversaw procurement, surveying, and record maintenance for radioisotope orders
  - Trained personnel in radiation safety and radiation hazards relevant to the laboratory
  - Trained and supervised personnel in specific techniques using radioisotopes
  - Performed laboratory surveys (wipe tests) and inspections to ensure compliance with Government and University Regulations
  - Ensured security of the radioisotope inventory and radiation waste
  - Maintained radiation safety equipment (shielding, fume hood, survey meters, and radiation work area)
  - Ensured proper decontamination of equipment as necessary
  - Oversaw disposal of radioactive waste
  - Maintained required records
  - Worked closely with the Yale Radiation Safety Section to ensure the laboratory conformed to the ALARA standard.
- 7 Years experience performing experiments using radioactive isotopes:
  - $^{32}\text{P}$ : (Southern Hybridization Analyses, Northern Hybridization Analyses, Colony Hybridization Analyses, Immuno-precipitation Experiments, and Enzymatic Assays involving Kinases). Approximately 50  $\mu\text{Ci}$  per experiment, 5 to 10 experiments per year.

- <sup>35</sup>S: (*In Situ* Hybridization Analyses) Approximately 50  $\mu$ Ci per experiment, 2 experiments per year.
- <sup>125</sup>I: (Binding Studies) Approximately 5  $\mu$ Ci per experiment, 1 experiment.

**Graduate Research Assistant, Virginia Commonwealth University, Richmond, VA, 1993-1997.**

- 4 years experience performing experiments using radioisotopes
  - <sup>32</sup>P: (Southern Hybridization Analysis, Northern Hybridization Analysis, Colony Hybridization, Gel Shift Assays, and enzymatic activity assays) Approximately 100  $\mu$ Ci per experiment, 15 experiments per year.

# Certificate of Training

This Certifies That

***Diann Stedman***

has been trained, tested and successfully completed the specialized instruction in

## **DOT & NRC Requirements for Shipping and Receiving Radioactive Materials**

**October 28, 2004**

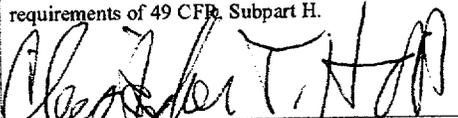
Presented By: **Sean M. Austin, Instructor**  
***Radiation Safety Academy***

481 North Frederick Avenue, Suite 302, Gaithersburg, Maryland 20877  
www.RadiationSafetyAcademy.com -- 301-990-6006

Presented For: **George Mason University**

Presented At: **Gaithersburg, MD**

This certifies that the employee named on this certificate has been trained and tested in accordance with the training requirements of 49 CFR, Subpart H.



Employer's Signature

This certificate is valid for 24 months for ICAO/IATA and for three years for U.S. Department of Transportation and U.S. Nuclear Regulatory Commission or Agreement State Agencies.



Sean Austin, CHP  
Senior Health Physicist

# Certificate of Training

Awarded To

*Diann Stedman*

Recognizing completion of 5 days of specialized instruction in

## **Radiation Safety Officer with LSC Option**

**October 29, 2004**

Presented By

*Radiation Safety Academy*

481 North Frederick Avenue, Suite 302  
Gaithersburg, Maryland 20877

ABIH has awarded this course 4.5 CM Points, CM Approval #04-185  
AAHP has awarded this course 32 Continuing Education Credits, 2003-00-018

*Ray Johnson*

Raymond Johnson, CHP, PE, RSO  
Training Director



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

11/12/2004 <sup>RECEIVED</sup> (12/13/2004) and to inform you that the initial processing which includes an administrative review has been performed.

AMEND. 45-13147-01 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

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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** 136117.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

BETWEEN: : (FOR LFMS USE)  
 : INFORMATION FROM LTS  
 : -----  
 :  
 License Fee Management Branch, ARM : Program Code: 01110  
 and : Status Code: 0  
 Regional Licensing Sections : Fee Category: EX 3M  
 : Exp. Date: 20060131  
 : Fee Comments: 170.11(A)(4)  
 : Decom Fin Assur Req'd: N  
 : ::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: GEORGE MASON UNIVERSITY  
 Received Date: 20041213  
 Docket No: 3001128  
 Control No.: 136117  
 License No.: 45-13147-01  
 Action Type: Amendment

2. FEE ATTACHED

Amount:             
 Check No.:           

3. COMMENTS

Signed Ms. A. Parkin  
 Date 12/13/04

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_\_\_/)

1. Fee Category and Amount: \_\_\_\_\_

2. Correct Fee Paid. Application may be processed for:

Amendment \_\_\_\_\_  
 Renewal \_\_\_\_\_  
 License \_\_\_\_\_

3. OTHER \_\_\_\_\_

Signed \_\_\_\_\_  
 Date \_\_\_\_\_