



The College of New Jersey

NMS02

December 14, 2006

Department of Administrative  
and Environmental Services

PO Box 7718  
Ewing, NJ 08628-0718

Licensing Assistance Team  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission, Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

P) 609.771.2881  
F) 609.883.6695  
W) www.tcnj.edu

03019957

Subject: Amendment to License Number 29-15765-02, The College of New Jersey

Dear Licensing Assistance Team:

An amendment to the subject license is submitted for your approval. The nature of the changes, additions and deletions are described below and reference the applicable items listed in NUREG-1556, Vol. 7. All other items remain the same.

Item 1: Request that item 9 on the license be amended to authorize restart of research and development as defined in 10CFR30.4, animal studies. The College is currently licensed for possession and storage only, as of the license renewal in August 2005. Prior to the renewal, The College was licensed for research and development.

Item 4: Remove William S. Klug as the designated management representative. Add Brian Webb as the designated management representative. His telephone number is 609-771-2881 and his e-mail address is [bwebb@tcnj.edu](mailto:bwebb@tcnj.edu). Correspondence should be mailed to his attention to the address detailed on this letter heading.

Item 5: As The College does not intend to use or store all of the materials on the license, remove the following materials (6.F. through 6.N. on the license):

- Calcium 45
- Chromium 51
- Nickel 63
- Zinc 65
- Selenium 75
- Rubidium 86
- Cadmium 109
- Tin 113
- Mercury 203

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NUCLEAR MATERIALS-002

Item 7: Remove Janice Bossart from the license as an Authorized User.

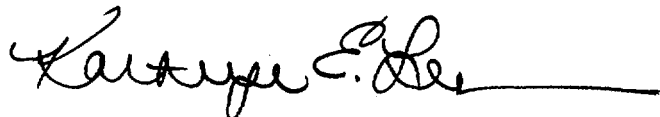
Remove Laretta Bushar from the license as an Authorized User.

Propose Miriam Segura-Totten be added as an Authorized User for items 6.C. and 6.E. on the license. For review and approval, please see the attached information that demonstrates that the proposed Authorized User is qualified by training and experience with the types and quantities of licensed material proposed to be used (Phosphorus 32: 2 mCi/year, 250  $\mu$ Ci on hand at a time and Sulfur 35: 2 mCi/year, 250  $\mu$ Ci/on hand at a time).

Propose Sudhir Nayak be added as an Authorized User for items 6.C. and 6.E. on the license. For review and approval, please see the attached information that demonstrates that the proposed Authorized User is qualified by training and experience with the types and quantities of licensed material proposed to be used (Phosphorus 32: 2 mCi/year, 1 mCi on hand at any given time and Sulfur 35: 2 mCi/year, 1 mCi on hand at any given time).

Your consideration of this amendment is greatly appreciated. Please contact Brian Webb at (609)771-2881 for any additional information you may need to authorize this amendment. Thank you.

Sincerely,



Kathryn E. Leverton  
Associate Vice President for  
Administrative and Environmental Services,  
Radiation Safety Officer

attachments

cc: Brian Webb

**Requested Authorized User: Miriam Segura-Totten**

**Education**

*B.A. in Biology, 1998*

Princeton University

*Ph.D. in Biochemistry, Cell and Molecular Biology, 2003*

Johns Hopkins University School of Medicine

**Training on radioactive materials handling**

*Princeton University, Princeton, NJ – Fall 1997-Spring 1998*

**Isotopes used:**

- 35S

**Training:**

- Radioactive Materials Safety class: radiation protection principles, characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, biological hazards of exposure to radiation
- Further training on topics mentioned above and supervision by graduate students and post-doctoral fellows in the lab where I handled radioactive materials.

*Johns Hopkins School of Medicine, Baltimore, MD – Fall 1998-Summer 2003*

**Isotopes used:**

- 35S
- 32P

**Training:**

- Radioactive material training: radiation protection principles, characteristics of ionizing radiation, units of radiation dose and quantities, biological hazards of exposure to radiation

**Rooms where isotopes will be used:** Biology Building, Rooms 221, 251, and 211

**Amounts to be used:**

- 32P: No more than 1 mCi on hand at a time and no more than 2mCi/year
- 35S: No more than 1 mCi on hand at a time and no more than 2mCi/year.

**Intended use:**

- 35S will be used for the *in vitro* production of radioactively labeled proteins. The interactions of these proteins will then be studied using biochemical

assays *in vitro*.  $^{32}\text{P}$  will be used for protein phosphorylation assays, both *in vitro* and in tissue culture cells.

**Requested Authorized User: Sudhir Nayak:**

**Education**

*B.A. in Biology, 1992*  
University of Delaware

*Ph.D. in Biology, 1999*  
University of Pennsylvania

**Training on radioactive materials handling:**

*The Wistar Institute*

**Isotopes used:**

- 35S-Methionine: Labeling proteins and sequencing, 250uCi yearly
- alpha-33P: Sequencing, 1mCi yearly
- alpha-32P: Northern and Southern blotting probes, 1mCi yearly
- gamma-32P: Phospho-amino acid analysis and Kinase assays
- ortho-32P: Phospho-amino acid analysis, 250mCi yearly
- 125I : Radiolabeling antibodies, trained but never performed
- 35S and 32P: Labeling protein and sequencing, 250uCi yearly

**Training:**

- Radiation Safety course: Radiation Protection Principles, Characteristics of Ionizing Radiation, Units of Radiation Dose and Quantities, Radiation Detection Instrumentation, Biological Hazards of Exposure to Radiation
- Hands-on training in the laboratory

*The University of Pennsylvania*

**Isotopes used:**

- 35S-Methionine: Labeling protein, 250uCi yearly
- alpha-32P: Northern and Southern blotting probes, 1mCi yearly
- gamma-32P: Phospho-amino acid analysis and Kinase assays, 500uCi yearly

**Training:**

- Radiation Safety Course: Radiation Protection Principles, Characteristics of Ionizing Radiation, Units of Radiation Dose and Quantities, Radiation Detection Instrumentation, Biological Hazards of Exposure to Radiation

*Washington University*

**Isotopes used:**

- 35S-Methionine: Labeling proteins, 250uCi total
- alpha-32P: Northern and Southern blotting probes, 250uCi total

- gamma-32P: Phospho-amino acid analysis and Kinase assays, 250uCi total

**Training:**

- Radiation Protection Principles, Characteristics of Ionizing Radiation, Units of Radiation Dose and Quantities, Radiation Detection Instrumentation, Biological Hazards of Exposure to Radiation
- Passed the comprehensive radiation safety exam

**Rooms where isotopes will be used:** Biology Building, Rooms 236, 251, and 211

**Amounts to be used:**

- 32P: No more than 250uCi on hand at a time and no more than 2mCi/year
- 35S: No more than 250uCi on hand at a time and no more than 2mCi/year.

**Intended use:**

- The 32P will be used for generating high sensitivity probes for Northern blots, cross-species Southern blots, and generating riboprobes in RNA binding assays. The 32P will be used for kinase assays and to identify residues that are phosphorylated on a protein of interest. The 35S-methionine will be used for *in vitro* protein-protein interaction validation of yeast-two-hybrid positives

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

12/14/2006, and to inform you that the initial processing which includes an administrative review has been performed.

29-15765-02 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** 139879.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.