



DONALD DANFORTH
PLANT SCIENCE CENTER

August 10, 2009
Materials Licensing Branch
U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Howard F. Beittenmiller
Radiation Safety Officer
Donald Danforth Plant Science Center
975 North Warson Road
St. Louis, Missouri 63132

Re: Request to Amend License Number 24-32339-01
Docket Number 030-35805

Materials Licensing Branch

Enclosed, please find Form 313 and attached pages requesting amendment of the Materials License No. 24-32339-01 issued to the Donald Danforth Plant Science Center. The amendment request addresses the following areas:

1. Item 7: Individual(s) Responsible for Radiation Safety Program and Their Training Experience
 - a. Please see attached sheet: The Danforth Center wishes to add two (2) Principal Investigators as Authorized Users:
Dr. Yong-qiang An as Authorized User for All Materials and Uses. Dr. An's *Curriculum vitae* with relevant information is attached.
Dr. Ivan Baxter as Authorized User for All Materials and Uses. Dr. Baxter's *Curriculum vitae* with relevant information is attached.
 - b. Please see attached sheet: The Danforth Center wishes to delete three (3) Principal Investigators as Authorized Users.
Edgar Cahoon, Ph.D.
Christopher G. Taylor, Ph.D.
Liming Xiong, Ph.D.
2. Item 9: Facilities and Equipment
 - a. Please see attached sheet: Due to repeated equipment failure, the Danforth Center has decided to abandon the card access capability for the Hazardous Material Storage Building. Security will be maintained by 6-foot cyclone fence topped by 3-strand barbed wire, a proprietary/unique Best key lock (not within the site Grand Master keyway) held only by Authorized Personnel and by around-the-clock video camera surveillance.
 - b. Please see attached sheet: The Danforth Center, in order to conserve energy and control costs, will set back the air exchange rate to between 4 & 6 changes per hour in low risk laboratories during unoccupied times. For safety purposes, the ventilation will be linked to lighting circuits such that entry into the space during "unoccupied" times with lighting activation will cause the ventilation rate to automatically return to maximum ACH.

Thank you very much for your help in this matter.

Sincerely,

Howard F. Beittenmiller
Radiation Safety Officer
Donald Danforth Plant Science Center

RECEIVED AUG 17 2009

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

APPLICATION FOR MATERIALS LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER 24-32339-01
- C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Donald Danforth Plant Science Center
975 North Warson Road
St. Louis, Missouri 63132

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Donald Danforth Plant Science Center
975 North Warson Road
St. Louis, Missouri 63132

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Howard F. Beittenmiller, Radiation Safety Officer

TELEPHONE NUMBER

(314) 587-1051

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY **3M** AMOUNT ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

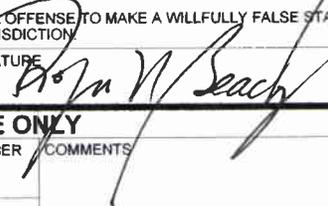
THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Roger N. Beachy, Ph.D., President

SIGNATURE



DATE

08/10/2009

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

Item 7: INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE:

Please **Add** to License:

Authorized User	Materials and Use
Yong-qiang An, Ph.D.	All
Ivan Baxter, Ph.D.	All

Please **Delete** from License:

Authorized User	Materials and Use
Edgar Cahoon Ph.D.	All
Christopher G. Taylor, Ph.D.	All
Liming Xiong, Ph.D.	All

Item 9: FACILITIES AND EQUIPMENT

- a. In the Danforth Center License Application of 2001 under *Facility Description*, page 8, paragraph 4, the Danforth Center stated with regard to the Hazardous Materials Storage Building, "Access to all restricted areas (main building and hazmat building) is controlled by electronic proximity cards, backed by a Best key system..." The access card system on the Hazardous Materials Storage Building has continuously mal-functioned and, despite numerous attempts at repair, has remained problematic. Return to full functionality would require a re-installation of hundreds of feet of underground utility conduit and wire at significant expense. The Danforth Center has decided to abandon the card access capability for the Hazardous Material Storage Building. Security will be maintained by 6-foot cyclone fence topped by 3-strand barbed wire, a proprietary/unique Best key lock (independent of the site Grand Master keyway) held only by Authorized Personnel and by around-the-clock video camera surveillance.
- b. In the Danforth Center License Application of 2001 under *Ventilation System*, page 9, the Danforth Center stated regarding laboratory/control zone ventilation: "Control Zone air is renewed at a minimum rate of 8 volumetric air changes per hour (ACH) at all times." The Danforth Center, in order to conserve energy and control costs, will set back the air exchange rate to between 4 & 6 changes per hour in low risk laboratories during unoccupied times. For safety purposes, the ventilation will be linked to lighting circuits such that entry into the space during "unoccupied" times with lighting activation will cause the ventilation rate to automatically return to maximum ACH.

Yong-qiang Charles An, Ph. D.
Research Molecular Biologist
USDA-ARS-MWA-Plant Genetics Research Unit
Donald Danforth Plant Science Center
St. Louis, Missouri

Employment and Record of Radioisotope Use

- 2008–present Research Molecular Biologist, USDA-ARS-MWA
Plant Genetics Research Unit,
Donald Danforth Plant Center, St. Louis, MO
- Training:
Institutional Radiation Safety Training Courses
- Supervision:
Responsible for a technician
- 2007-2008 Visiting Scientist, Dept. of Biology, Washington University, St. Louis, MO
- No isotope used.
- 2003-2008 Research Molecular Biologist, USDA-ARS-MWA
Cereal Crop Research Unit, Madison, WI
- Isotope Use:
³²P: DNA labeling
- Training:
Institutional Radiation Safety Training Courses
- Supervision:
Responsible for technicians, post-doctoral fellows and student workers
- 2000-2003 Group Leader/Research Scientist
Epicyte Pharmaceutical Inc. San Diego, CA.
- Isotopes Used:
³²P: DNA labeling
- Training:
Institutional Radiation Safety Training
- Supervision:
Responsible for research associates and interns

Yong-qiang Charles An, Ph. D.
Research Molecular Biologist
USDA-ARS-MWA-Plant Genetics Research Unit
Donald Danforth Plant Science Center
St. Louis, Missouri

- 1998-2000** **Group Leader/Co-Founding Scientist**
Paradigm Genetics, Inc. RTP, NC
- Isotopes Used:**
³²P: DNA labeling
- Training:**
Institutional Radiation Safety Training
- Supervision:**
Responsible for research associates.
- 1997-1998** **Postdoctoral Associate**
Novartis Agricultural Biotechnology and Genomics Center, RTP, NC
- Isotopes Used:**
³²P: DNA labeling
- Training:**
Institutional Radiation Safety Training
- 1989-1997** **Graduate Research Assistant and Postdoctoral Fellow**
Dept. of Genetics, University of Georgia, Athens, GA
- Isotopes Used:**
³²P: DNA labeling
³⁵S: DNA labeling
- Training:**
Institutional Radiation Safety Training

Ivan Baxter, Ph. D.
Assistant Member
Donald Danforth Plant Science Center
St. Louis, Missouri

Employment and Record of Radioisotope Use

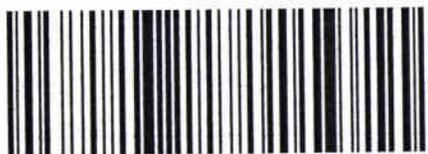
June 2009 – Present	Assistant Member Donald Danforth Plant Science Center St. Louis, Missouri Isotope Use: None to Date Training: Institutional Radiation Safety Training Course Supervision: Will be responsible for technical personnel, students, post-doctoral fellows
2004-2009	Post-doctoral Fellow Bindley Bioscience Center Purdue University West Lafayette, Indiana Isotope Use: None
1998-2004	Graduate Student Molecular Biology Department The Scripps Research Institute La Jolla, California Isotope Use: ³² P: RNA labeling Training: Institutional Radiation Safety Training Course Supervision: None
1996-1997	Graduate Student Chemistry Department The Massachusetts Institute of Technology Cambridge, Massachusetts Isotope Use: ³² P: RNA labeling Training: Institutional Radiation Safety Training Course Supervision: None

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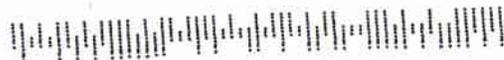
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Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

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