



**DEKALB Genetics Corporation**  
62 Maritime Drive, Mystic, CT 06355-1958  
860/572-5200 FAX 860/572-5240

NMSBL

December 20, 2005

Licensing Assistance Section  
US Nuclear Regulatory Commission  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406-1415

03032126

RECEIVED  
DEC 23 2005

**Subject: Amendment Number 10 to License No. 06-28624-01**

Dear Sir or Madam,

Enclosed is a USNRC Form 313 and associated materials in support of a proposed amendment to the DEKALB Genetics Corporation materials license, number 06-28624-01. This amendment pertains only to changes in personnel listed on our license, as follows:

1. Dr. Michael Luethy is no longer at the Mystic site and should be removed from the list of radioisotope users in item 11.A. of the license.
2. Please add Thomas Malvar, Ph.D. to the radioisotope users listed in item 11.A. of the license. A brief C.V. of Dr. Malvar's radiation safety training and experience is enclosed for your review.
3. Please add Christopher Bonin, Ph.D. to the radioisotope users listed in item 11.A. of the license. A brief C.V. of Dr. Bonin's radiation safety training and experience is enclosed for your review.
4. Dr. Philip W. Miller, our previous site lead, has moved to a new role in Monsanto Company. As the new site lead please contact me, Dr. John P. Purcell, for routine correspondence. Dr. Kris Hardeman remains as Radiation Safety Officer.

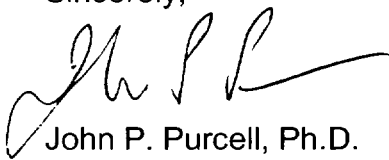
This license amendment request is signed by Ms. Nancy E. Hamilton, Secretary of DEKALB Genetics Corporation. The original document and one copy are provided for your convenience. Please contact me at (860) 572-5200 for any further information or clarification.

138200

AMENDMENT MATERIALS-001

December 20, 2005  
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Sincerely,

A handwritten signature in black ink, appearing to read 'John P. Purcell', with a long horizontal flourish extending to the right.

John P. Purcell, Ph.D.  
Mystic Site Lead  
DEKALB Genetics Corporation

Enclosures: NRC Form 313  
Thomas Malvar CV  
Christopher Bonin CV

NRC FORM 313

(4-2004)

10 CFR 30, 32, 33,  
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2005

Estimated burden per response to comply with this mandatory collection request: 7 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 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollects@nrc.gov](mailto:infocollects@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 MATERIAL 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:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
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, MISSISSIPPI, 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, 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  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-4005

03032126

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 06-28624-01☐

C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

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

DEKALB Genetics Corporation  
Mystic Research Center  
62 Maritime Drive  
Mystic, CT 06355

## 3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

DEKALB Genetics Corporation  
Mystic Research Center  
62 Maritime Drive  
Mystic, CT 06355

## 4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

John P. Purcell, Ph.D.

## TELEPHONE NUMBER

(860) 572-5200

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

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

Nancy E. Hamilton, Secretary

## SIGNATURE

Nancy E. Hamilton

## DATE

1/4/05

## FOR NRC USE ONLY

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

## RADIOACTIVITY TRAINING AND EXPERIENCE

**Name:** Thomas Malvar, Ph.D.

**Education:** B.S./B.A, 1983, Syracuse University  
 Ph.D., 1990, University of New Hampshire  
 Postdoctoral Fellow, 1991-1993, Ecogen Inc., Langhorne, PA

### **Radiation Training**

Type of Training	Where Trained	Duration of Training	On the Job or Formal Course
Radioisotopes in Biological Sciences	SUNY Health Science Center, Syracuse, NY	2 years	On the job
Safety Training on Radioisotope use	SUNY Health Science Center	2 hours	Formal Course
Safety Training on Radioisotope use	University of New Hampshire	2 hours	Formal Course
Radiation Safety Awareness	Monsanto Co	Yearly	Formal Course
Research involving Radioisotopes	SUNY Health Science Center, Syracuse, NY	2 years	On the job
	University of New Hampshire	5 years	On the job
	Ecogen Inc. Langhorne, PA	7 years	On the job

### **Experience with Radioisotopes (hands-on use)**

Isotope	Maximum Amount Used	Where Experience was Obtained	Duration of Experience	Type of Use
<sup>14</sup> C	1 mCi	SUNY Health Science Center	2 years	<i>in vitro</i> labeling; fate studies
<sup>32</sup> P	4 mCi	SUNY Health Science Center	2 years	DNA sequencing, Southern
		University of New Hampshire	5 Years	DNA sequencing, Southern and Northern blot analyses
		Ecogen Inc.	7 Years	DNA sequencing, Southern and Northern blot analyses

## RADIOACTIVITY TRAINING AND EXPERIENCE

**Name:** Christopher Bonin, Ph.D.

**Education:** B.S. 1995, University of Rhode Island  
 Ph.D. 1999, University of Connecticut  
 Postdoctoral Fellow, 1999-2002, Columbia University  
 Lab Manager and Scientist, 2002-2005, Howard Hughes Medical  
 Institute, Columbia University

### Radiation Training

Type of Training	Where Trained	Duration of Training	On the Job or Formal Course
Practical Applications in use of Radioisotopes in Biological Sciences	University of Connecticut	4 years	On the Job
	Columbia University	3 years	Both
Practical Training on Radioisotope use	Columbia University	2 hours	Formal Course
Research involving Radioisotopes	University of Connecticut	4 years	On the Job
	Columbia University	3 years	On the Job

### Experience with Radioisotopes (hands-on use)

Isotope	Maximum Amount Used	Where Experience was Obtained	Duration of Experience	Type of Use
$^{14}\text{C}$	1 mCi	University of Connecticut	4 years	<i>in vivo</i> labeling; tracer studies; enzymatic assays
$^{32}\text{P}$	5 mCi	University of Connecticut	4 years	Southern, northern DNA/RNA analysis
		Columbia University	3 years	Southern, northern DNA/RNA analysis
$^3\text{H}$	1mCi	University of Connecticut	4 years	In vivo labeling; tracer studies

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

12/20/2005, and to inform you that the initial processing which includes an administrative review has been performed.

☒ Amend. 06-22624-01  
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** 138200.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.