



DATE: January 25, 2007

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US NRC, Region I
475 Allendale Rd.
King of Prussia, PA 19406-1415
610-337-5000

03035856

License Number: 37-30688-01

Mail Control # 139 714

RE: Radioactive Materials License Update

(S)

Dear NRC Representative:

We would like to update our current radioactive materials use license number 37-30688-01 by removing the following users from our license, as they are no longer employed by Locus:

- (1) David Casper, Ph.D., (2) Katrina Northrop, B.S. (3) Michael Saporito, Ph.D. (4) Laura Hong, Ph.D., and (5) Alex Ochman, B.S.

An updated list of our current Authorized Users, along with their respective statements of prior training(s) and experience(s) are enclosed. Those authorized users are:

- 1. Eric B. Springman, Ph.D.
- 2. Marina Bukhtiyarova, Ph.D.
- 3. Kyoung-Jin Lee, Ph.D.
- 4. German Gomez, Ph.D.
- 5. Joseph Ramcharan, Ph.D.
- 6. J. Kendall Williams, B.S.
- 7. William E. Evans, M.S.
- 8. Saro Mardirosian, M.S.

As stated in our recently sent letter (dated November 21, 2006), the following will be implemented for all new Radioactive Materials (RAM) authorized users:

- 1. Prior training and education will be documented.
- 2. Training will be administered as soon as reasonably possible for new RAM users.
- 3. Appropriate personal monitoring devices will be issued to all new RAM users as soon as reasonably possible.
- 4. New RAM users will be directly supervised by an authorized user until training can be administered, and have demonstrated appropriate skill level for procedures.

Please update our license and file accordingly.

Thank You,

Eric B. Springman, PhD, Radiation Safety Officer

Phone: 215-358-2009 FAX: 215-358-2030
Email: espringman@locuspharma.com

139714

NMOS/RGN MATERIALS-002

LOCUS Pharmaceuticals, Inc.

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: Eric B. Springman
 Highest Degree: Ph.D.

TITLE: RSO; Senior Director, Biochemistry
 Subject/Major: Molecular Biophysics

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (Include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	Jan, 2003; Nov, 2003; Nov, 2004; Nov, 2005; July, 2006; Aug, 2006. ~ Half day each.	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
Roche Pharmaceuticals, Palo Alto, CA	1998, 1999, 2000. Half day each	Radiation Safety Refresher (required). Safety issues, tracking of disposal, basic dosimetry.
Arris/Axys Pharmaceuticals, South San Francisco, CA	1995, 1997. Half day each.	Radiation Safety Refresher. (Film and lecture) safety, disposal, tracking.
Vanderbilt University, Nashville, TN	1992. Half day.	Radiation Training. Safety policy.
Florida State University, Tallahassee, FL	1988, 1990. Three days.	Radiation Safety Short Course. Basic dosimetry, isotopes, safety.

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotope(s)	Amount Handled	Type(s) of experiments or use
Roche Pharmaceuticals, Palo Alto, CA	1998-2000	C-14, H-3, S-35, P-32, P-33	Up to 5mCi each	Supervised use of these isotopes.
Arris/Axys Pharmaceuticals, South San Francisco, CA	1995-1998	C-14, ZN-65	<5mCi, <5mCi	Chemical labeling/assay; Special use assay (supervisor).
Vanderbilt University, Nashville, TN	1992-1995	C-14, H-3, S-35, P-32	Up to 5mCi each	DNA sequencing, metabolic labeling.
Florida State University, Tallahassee, FL	1987-1992	C-14, H-3	Up to 10mCi each	Protein labeling.
Florida Department of Law Enforcement, Tallahassee, FL	1990-1991	P-32	Up to 1mCi each	DNA "fingerprinting" by RFLP

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: Marina Bukhtiyarova
 Highest Degree: Ph.D.

TITLE: Group Leader, Biochemistry
 Subject/Major: Biochemistry

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (Include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	Jan, 2003; Nov, 2003; Nov, 2004; Nov, 2005; July, 2006; ~ Half day each.	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
DuPont-Merck (DuPont Pharma), Wilmington, DE	1997, 1 full day	Radiation Safety Refresher course (required). Safety issues, training, disposal, personal protection.
University of Florida, Gainesville, FL	1994, ½ day	Radiation training, safety, policy, ordering, and tracking.
Moscow State University, Moscow, Russia	1986, ~ 1 week	Radiation Course – basic description, isotopes, safety.

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
DuPont Pharmaceuticals, Wilmington, DE	1997- 2000	S-35, P-32, P-33	Less than 1mCi each	TnT, Protein Labeling
University of Florida, Gainesville, FL	1994- 1997	S-35, P-32, P-33, C-14	Less than 5mCi each	DNA sequencing, protein labeling
Institute of Biochemistry, Puschino, Russia	1988- 1993	S-35, P-32, P-33, C-14	Less than 5mCi each	DNA sequencing, Northern, Southern Blots, TnT.

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: Kyoung-Jin Lee
 Highest Degree: Ph.D.

TITLE: Senior Scientist, Preclinical Development
 Subject/Major: Pharmaceutical Science

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (Include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	Jan, 2003; Nov, 2003; Nov, 2004; July, 2006. ~ Half day each.	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
LION Bioscience (formerly Trega Bioscience), San Diego, CA	2000, 2001, 2002, ½ day	Radiation Safety Refresher (mandatory): safety issues, waste handling, cleaning procedures.
Rutgers University, Piscataway, NJ	1997, 1998, ½ day	Radiation Safety training: safety and disposal training.

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
LION Bioscience (formerly Trega Bioscience), San Diego, CA	Nov, 1999 – Oct, 2002	H-3, C-14	≤ 2mCi each	ADME Assays: Protein Binding, Permeation, Blood- Plasma Partition study.

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: German Gomez
Highest Degree: Ph.D.TITLE: Post Doctoral Researcher
Subject/Major: Chemistry**Formal Courses on Radiation Safety and Radioisotope Technology:**

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	August, 2006. ~ Half day	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
Brookhaven National Labs	2000-2007	G.E.R.T and Safety training before every first visit and then every two years in accordance to lab requirements. Currently active assignment in good standing.
University of Pennsylvania	2000-2006	Yearly radiation training and safety seminar
Cornell Synchrotron Lawrence Berkeley National Labs Argonne National Labs	2000-2006	G.E.R.T and Safety training before every first visit and then every two years in accordance to lab requirements.

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
Locus Pharmaceuticals	2007	---	---	X-ray diffraction X-ray crystallography
Locus Pharmaceuticals	2007	Tritium	10 mCi	Peptide Acetylation and Spa assay development
University of Pennsylvania	2000-2006	---	---	X-ray diffraction X-ray crystallography
University of Pennsylvania	2005-2006	Tritium	10 μ Ci	Enzyme Activity Assay

NRC License Number: 37-30688-01
AUTHORIZED USER: Joseph Ramcharan
Highest Degree: Ph.D.

DATE: Thursday, January 25, 2007
TITLE: Scientist
Subject/Major: Chemistry

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	July, 2006. ~ Half day	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
Fox Chase Cancer Center	2002-2005 ~ Half day	Various Radiation Safety Lectures
Fox Chase Cancer Center	2002 ~ Half day	Radiation Safety Exams

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
Locus Pharmaceuticals, Blue Bell, PA	2006-2007	P33	Up to 10mCi	Enzyme assay
Fox Chase Cancer Center, Philadelphia	2005-2006	P32	Up to 1mCi	Enzyme assay
Fox Chase Cancer Center, Philadelphia	2002-2005	Cesium	Up to 1mCi	Cell irradiation
Penn State University, State College	1998	P32	Up to 1mCi	Enzyme assay

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: J. Kendall Williams
 Highest Degree: BS Chemistry

TITLE: Sr. Research Associate
 Subject/Major: Chemistry

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	Nov, 2005; July, 2006; ~ Half day each.	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
GSK	1993	Radiation Safety Officer Training
Cytogen	1987	Radiation User Training

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
Cytogen	1987-1989	In111, P32, S35	1-10 mCi	Ab labeling and DNA sequencing
GSK	1989-1999	S35, I125	< 2 mCi	DNA sequencing, Protein labeling

NRC License Number: 37-30688-01

DATE: Thursday, January 25, 2007

AUTHORIZED USER: William E. Evans
Highest Degree: M.S.

TITLE: Research Associate
Subject/Major: Biology

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	July, 2006. ~ Half day	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
Merck, West Point, PA	06/2000, ~ 4-8hrs.	Radiation Safety Training
M.I.T., Cambridge, MA	06/2001, ~ 4-8hrs.	Radiation Safety Training

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
Locus Pharmaceuticals, Blue Bell, PA	07/2006-present	33P	<10mCi	Kinase pharmacology
M.I.T, Cambridge, MA	06/2001-06/2002	125I, 3H	<100mCi	Radioligand binding assays, kinetic assays
Merck, West Point, PA	06/2000-08/2000	32P, 33P	<100mCi	Polymerase assays

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AUTHORIZED USER: Saro I. Mardirosian
 Highest Degree: M.S.

TITLE: Research Associate, Preclinical Development
 Subject/Major: Pharmaceutical Science

Formal Courses on Radiation Safety and Radioisotope Technology:

Please list all educational and training courses which included principles and practices of radiation protection, radioactivity measurements, radiation monitoring techniques, and/or biological effects of radiation. (Include college courses, radiation safety training lectures, and short courses.)

Institution, city	Date and duration	Name & description of course
Locus Pharmaceuticals, Inc. Blue Bell, PA	Nov, 2004; Nov, 2005; July, 2006; Aug, 2006. ~ Half day each.	Radiation Safety Training (in accordance to NRC 10 CFR requirements, Locus Policy, and Locus Materials License).
Georgetown University, Dept. Molecular Biology, Washington, DC	August, 2003, ½ day	Basic Radiation Safety (<i>mandatory</i>) Course: safety issues, waste handling, & cleaning procedures.
University of Iowa, Iowa City, IA	June 2002, ½ day	Radiation Safety training tutorial (<i>required</i>).

Experience with radiation:

Please list all the different types of work you have done with radioisotopes or radiation.

Institution, city	Date and duration	Radioisotopes	Amount Handled	Type(s) of experiments or use
Locus Pharmaceuticals, Inc. Blue Bell, PA	Nov, 2004 – Dec, 2005	H-3; C-14	less than 100µCi each	ADME Assays: CACO-2 Permeation validation studies.
University of Iowa, Iowa City, IA	June – August 2002	Fe-55	≤ 5mCi	Radioisotope Hemin and Hemoglobin transport experiments in bacteria.