

STOWERS INSTITUTE®
FOR MEDICAL RESEARCH

7 November 2012

Materials Licensing Section
U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Subject: **LICENSE AMENDMENT APPLICATION – PLEASE EXPEDITE**
License No: 24-32242-01

The Stowers Institute for Medical Research (Stowers Institute) requests an amendment to the U.S. Nuclear Regulatory Commission (NRC) Radioactive Materials License, as detailed below. The item numbers correspond to those on the NRC Form 313, Application for Material License. Only those items pertinent to this amendment are listed.

Item 1. This application is for amendment of license no. 24-32242-01

Item 2. The name and mailing address of the applicant:

Stowers Institute for Medical Research
1000 E. 50th Street
Kansas City, MO 64110

Item 3. Same address as above.

Item 4. The person to be contacted about this application is Ms. Tonyea R. Inglis, Radiation Safety Officer, phone (816) 926-4434, fax (816) 926-2076; e-mail tri@stowers.org.

Item 7. The following person is already an authorized user on this license for Phosphorus-32, Phosphorus-33, and Sulfur-35. The Stowers Institute requests the **addition** of the following person to the license as an authorized user for the **additional** corresponding material listed:

Alejandro Sanchez Alvarado, Ph.D.
Investigator

Phosphorus-32 (already listed)
Phosphorus-33 (already listed)
Sulfur-35 (already listed)
Hydrogen-3 (wish to add at this time)

Alejandro Sanchez Alvarado previous radiation safety training:

Training courses were general in nature, covering the principals of radiation protection, radioactivity measurements, biological effects of radiation exposure, characteristics of ionizing radiation, units of radiation dose and quantities, and radiation detection instrumentation.

Course Title	Institution	Duration of Training
Radiation Safety, 1985	Washington University, St. Louis	~ 4 hours
Radiation Safety, 1988	University of Cincinnati School of Medicine	~ 6 hours
Basic Radiation Sciences, 1994	Carnegie Institute of Washington	~ 8 hours
Radiation Safety, 2002	University of Utah	~ 8 hours
Radiation Safety Training, 2011	Stowers Institute for Medical Research	~ 3 hours

Alejandro Sanchez Alvarado previous experience with radioisotopes:

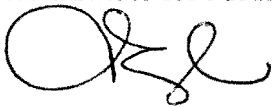
Dr. Sanchez has been listed as an Authorized User on our license since 2011 and has been supervising work with radioisotopes since that time period. He is currently an Authorized User of P32, P33 and S35.

Dr. Sanchez has previous experience handling H3. He was an authorized user of tritium at the University of Cincinnati School of Medicine from 1988-1992, using this radioisotope for labeling synthetic RNA to be used in in situ hybridizations of muscle sections on film emulsion-covered microscopy slides. Amounts used were less than 1 mCi.

Experimental plans for the use of H3 include: Pulse-chase experiments with tritium thymidine labels incorporated and maintained in proliferating cells. Tritium thymidine will then be detected by high resolution autoradiography combined with electron microscopy to identify and characterize structural morphology and cell lineage. Amounts used for these experiments will be less than or equal to 1 mCi.

If you have any questions or require additional information, please contact me at the number(s) listed in Item 4. Thank you in advance for your prompt action on our behalf.

Stowers Institute for Medical Research



Tonyea R. Inglis
Radiation Safety Officer



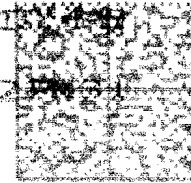
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