



Office of Research and Sponsored Programs

June 4, 2007

*NMSS 2*

Division of Nuclear Materials Safety  
US Nuclear Regulatory Commission  
Region I Office  
475 Allendale Road  
King of Prussia, PA 19406-1415

ATTENTION: Licensing Assistance Team

RE: Addition of Authorized User  
License No. 29-20876-01; Docket No. 030-21288

Dear Sir/Madam:

Please add Hristo B. Houbaviy, Ph.D. Assistant Professor, Department of Cell Biology, to the list of approved users (Item 11) for Items 6.A. through 6.I. As shown in the attached table, Professor Houbaviy has extensive experience in handling tracer levels of radioactive materials. He will attend the UMDNJ-SOM training sessions to refresh his formal training and to acquaint him with the institutional procedures and practices.

Please delete the names of R. Sharma, Ph.D., and T. Duda, Ph.D., from the approved user list. They left the UMDNJ-SOM.

If you need additional information please contact me at 609 919-0275 or [eac8@comcast.net](mailto:eac8@comcast.net)).

Sincerely yours,

Edward A. Christman, Ph.D., CHP  
Radiation Safety Officer

Cc: JSY

2007 JUN 11 PM 1:00  
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REGION I

*140647*

NMSS/RGN1 MATERIALS-002

## **Statement of Prior Experience with Radioactive Materials and Radiation Sources**

**Hristo B. Houbaviy, Ph. D.**

From 1990 to 1993 I was an MSc student at the Weizmann Institute of Science, Rehovot, Israel. During that period I acquired substantial experience with the handling of radioactive materials. Experiments involved the routine handling of 0.5 mCi  $^{32}\text{P}$  labeled material per week as well as smaller amounts of  $^{35}\text{S}$  labeled material. I also performed  $^{125}\text{I}$  labeling of proteins. The Weizmann Institute provided standard radiation safety training to all personnel working with radioactive materials.

From 1993 to 1999 I was a Ph. D. student at the Rockefeller University, New York, New York, USA. During this period I continued using  $^{32}\text{P}$  in my research and had to pass the radiation safety requirements of the Rockefeller University. In addition, I performed experiments at the National Synchrotron Light Source (NSLS) of the Brookhaven National Laboratory (BNL), Brookhaven, New York, USA as well as at the Cornell High Energy Synchrotron Source (CHESS), Ithaca, New York, USA. Both synchrotron facilities provided appropriate radiation safety training. At the Brookhaven National Laboratory I passed the Department of Energy General Radiation Training (GERT) certification.

From 1999 to 2005 I was a postdoctoral associate at the Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts, USA. During that period I worked mostly with  $^{32}\text{P}$ . MIT provided the appropriate radiation safety training.

From 2005 to 2007 I was a research assistant professor at Rutgers University, Piscataway, New Jersey. During this period I worked mostly with  $^{32}\text{P}$ . Rutgers University provided the appropriate radiation safety training.

## Curriculum Vitae of Hristo Botev Houbaviy, Ph. D.

**Address:** Department of Genetics  
Rutgers University  
145 Bevier Road  
Piscataway, NJ 08854-8009

Telephone: (732) 445-1027 x40033  
Facsimile: (732) 445-1147  
E-mail: houbaviy@biology.rutgers.edu

**Born:**  
**Citizenship:**  
**Immigration Status:**



### Positions:

April, 2007 - present:

Assistant Professor, Department of Cell Biology, University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine, Stratford, NJ, USA

October, 2005-April, 2007:

Research Assistant Professor, Department of Genetics, Rutgers University, Piscataway, NJ, USA

July, 1999-September, 2005:

Postdoctoral Associate (July, 2000-June 2002, Postdoctoral Fellow), Center for Cancer Research, Massachusetts Institute of Technology, Cambridge, MA, USA  
Supervisor: Professor Phillip A. Sharp.

### Education:

September, 1993-June, 1999:

**Ph. D.** (Molecular Biophysics), Laboratories of Molecular Biophysics, The Rockefeller University, New York, NY, USA. Thesis supervisor: Professor Stephen K. Burley. Thesis title: Biochemical and biophysical studies of the complex formed by YY1 and the AAV P5 promoter initiator element.

**PERSONAL INFORMATION WAS REMOVED  
BY NRC. NO COPY OF THIS INFORMATION  
WAS RETAINED BY THE NRC.**

September, 1990-August, 1993:

**M. Sc.** (Life Sciences) Department of Molecular Genetics and Virology and The Feinberg Graduate School, The Weizmann Institute of Science, Rehovot, Israel. Thesis supervisor: Professor Yosef Aloni. Thesis title: Specific interaction between the carboxy-terminal domain of RNA polymerase II and the TATA-box binding protein: an *in vitro* study.

September, 1986-August, 1990:

**B. Sc.** (Biotechnology) Faculty of Biology, The "St. Kliment Ohridski" University of Sofia, Sofia, Bulgaria. Diploma student (September, 1988-August, 1990), Institute of Molecular Biology, Bulgarian Academy of Sciences, Sofia, Bulgaria.

**Awards:**

Postdoctoral fellowship from the Jane Coffin Childs Memorial Fund for Medical Research (July, 2000 - June, 2002).

NSF travel scholarship to attend Keystone Symposium, "Emerging Mechanisms of Epigenetic Regulation", Tahoe City, CA (January 2004).

Travel scholarship to attend Keystone Symposium, "siRNAs and miRNAs", Keystone, CO (April 2004).

Stem Cell Research Grant from the New Jersey Commission on Science and Technology (January 2006 - December 2007). Project title: MicroRNAs miR-290-295 in Blastocyst-Derived Stem Cells and the Early Mouse Embryo. Total amount of funding: \$300, 000.

**Invited presentations:**

"An Embryonic Stem Cell-Specific microRNA Cluster", presentation at a plenary session of Keystone Symposium, "Emerging Mechanisms of Epigenetic Regulation", Tahoe City, CA (January 2004).

**Publications:**

1. Usheva, A., Maldonado, E., Goldring, A., Lu, H., **Houbavi, C.**, Reinberg, D. and Aloni, Y., Specific interaction between the nonphosphorylated form of RNA polymerase II and the TATA-binding protein., *Cell*, **69**: 871-881 (1992)

2. **Houbaviy, H. B.**, Usheva, A., Shenk, T. and Burley, S.K., Co-crystal structure of YY1 bound to the adeno-associated virus P5 initiator., *Proc. Natl. Acad. Sci. USA*, **93**: 13577-13582 (1996)

3. **Houbaviy, H. B.** and Burley, S. K., Thermodynamic analysis of the interaction between YY1 and the AAV P5 promoter initiator element. *Chemistry & Biology*, **8**: 179-187 (2001)
4. **Houbaviy, H. B.**, Murray, M. F. and Sharp, P. A., Embryonic stem cell-specific microRNAs, *Developmental Cell*, **5**: 351-358 (2003) (A "News and Views" report about this paper appeared in *Nature*, **424**:898 (2003))
5. **Houbaviy, H. B.**, et al., Characterization of a highly variable eutherian microRNA gene, *RNA*, **11**:1245-1257 (2005)
6. **Houbaviy, H. B.**, microRNAs in the stem cells of the blastocyst. In *MicroRNAs: from basic science to disease biology*, Appasani, K., ed. (Cambridge University Press, Cambridge, UK), in the press.

**References:**

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

6/4/2007, and to inform you that the initial processing which includes an administrative review has been performed.

AMEND. 29-20876-01  
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.

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You may call us on (610) 337-5398, or 337-5260.

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(6-98)

Sincerely,  
Licensing Assistance Team Leader