



University of Pittsburgh

Radiation Safety Office

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Pittsburgh, Pennsylvania 15261
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NMSB

January 31, 2006

Licensing Assistant Section
Nuclear Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

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RECEIVED
REGION I
2006 FEB -3 PM 2:09

Re: Amendment Request for License No. 37-00245-09

Dear Sir or Madam:

This correspondence is to request that Muary Rosenstein, M.D. be added as an Authorized User to our Gamma Knife License No. 37-00245-09. Enclosed is a copy of his curriculum vitae and board certification in Radiation Oncology, along with documentation of his training and experience specific to the use of the Gamma Knife. Dr. Rosenstein is currently approved as an Authorized User for 35.600 (Ir-192 high dose rate remote afterloader unit) under NRC License No. 37-14014-01. Also enclosed is a written attestation certifying that the required training and experience has been satisfactorily completed and that a level of competency to independently function as an Authorized User has been achieved.

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

Dennis Swanson
Chairman, Radiation Safety Committee

Attachments

138365

NMCS/RCN MATERIALS-002

**CURRICULUM VITAE
MAURY M. ROSENSTEIN, M.D., Ph.D.**

OFFICE ADDRESS: UPMC St. Margaret
815 Freeport Road
Pittsburgh, PA 15215

TELEPHONE: 412 784-4900

BOARD CERTIFICATION: Radiation Oncology

DATE OF BIRTH: [REDACTED]

PLACE OF BIRTH: [REDACTED]

MARITAL STATUS: [REDACTED]

CURRENT POSITION: Assistant Professor
Director, Radiation Oncology
UPMC St. Margaret

EDUCATION

1975	B.A.	Rutgers University
1979	Ph.D.	Rutgers University
1987	M.D.	Bowman Gray School of Medicine of Wake Forest University

POSTDOCTORAL TRAINING

1979 - 1981	Postdoctoral Fellow, Surgery Branch National Institutes of Health
1981 - 1982	Staff Fellow, Surgery Branch National Institutes of Health
1982 - 1983	Senior Staff Fellow, Surgery Branch National Institutes of Health
1987 - 1988	Intern in Medicine, Washington Hospital Center
1988 - 1991	Resident in Radiation Oncology, Memorial Sloan-Kettering Cancer Center

AWARDS

1976	Outstanding Teaching Award, Rutgers University, NJ
1977	Inge Gambe Scholarship Award, Rutgers University, NJ
1987	C.B. Deane Memorial Award for Clinical Oncology, Bowman Gray School of Medicine, Winston-Salem, NC
1990	American Cancer Society Clinical Oncology Fellowship

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

Maury M. Rosenstein, M.D., Ph.D.

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PROFESSIONAL SOCIETY MEMBERSHIPS

American Society for Therapeutic Radiology and Oncology
American Association of Immunologists
American Association of Cancer Research
ECOG, Melanoma Committee, Radiotherapy Chairman
NSABP, Radiation Oncology QA Committee

PUBLICATIONS

1. Rosenstein, M. and Strausser, H.R.: Differences in immune responsiveness: Comparison with sex and age. Paper in The Molecular basis of immune cell function - Proceedings of the 13th International Leukocyte Culture Conference. Ed. J.G. Kaplan (Elsevier/North Holland Biomedical Press), 1979.
2. Strausser, H.R. and Rosenstein, M.: Immunosuppression as a homeostatic mechanism in disease and aging. Paper in Macrophages and Lymphocytes, Part B. Ed. M.R. Escobar and H. Friedman. (Plenum Publishing Corp.), 1980.
3. Rosenstein, M. and Strausser, H.R.: Macrophage-induced T cell mitogen suppression with age. J. Reticuloendothelial Soc., 27:59, 1980.
4. Rosenstein, M., Eberlein, T., Kemeny, M.M., Sugarbaker, P.H., and Rosenberg, S.A.: In vitro growth of murine T cells. VI Accelerated Skin graft rejection caused by adoptively transferred cells expanded in T cell growth factor. J. Immunol. 127:566-571, 1981.
5. Eberlein, T.J., Rosenstein, M. and Rosenberg, S.A.: Successful adoptive immunotherapy of disseminated murine cancer using immunized cells expanded in T-cell growth factor. Surgical Forum, 32:452-454, 1981.
6. Eberlein, T.J., Rosenstein, M., Spiess, P., Wesley, R., and Rosenberg, S.A.: Adoptive chemoimmunotherapy of a syngeneic murine lymphoma using long term lymphoid cell lines expanded in T cell growth factor. Cancer Immunology and Immunotherapy, 13:5-13, 1982.
7. Rosenberg, S.A., Eberlein, T., Grimm, E., Mazumder, A., and Rosenstein, M.: Adoptive transfer of lymphoid cells expanded in T cell growth factor: Murine and human studies. In, Fefer, A. and Goldstein, A.L.: (ed.): Potential Role of T Cell Subpopulations in Cancer Therapy. Raven Press, New York, 1982.
8. Eberlein, T.J., Rosenstein, M., Spiess, P., and Rosenberg, S.A.: The generation of long term T-lymphoid cell lines with specific cytotoxic reactivity for a syngeneic murine lymphoma. J. Natl. Cancer Inst. 69:109-116, 1982.
9. Rosenberg, S.A., Eberlein, T., Grimm, E., Mazumder, A., and Rosenstein, M.: The development of long term cell lines and lymphoid clones reactive against murine and human tumors: A new approach to the adoptive immunotherapy of cancer. Surgery, 92:328-335, 1982.
10. Eberlein, T., Rosenstein, M., and Rosenberg, S.A.: Regression of a disseminated syngeneic solid tumor by systemic transfer of lymphoid cells expanded in Interleukin-2. J. Exp. Med., 156:385-397, 1982.

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11. Eberlein, T., Rosenstein, M., and Rosenberg, S.A.: Successful systemic adoptive immunotherapy of a disseminated solid syngeneic murine tumor with long-term cultured T-cells. 9th International Transplantation Congress, Brighton, England. Transp.Proc. 15:396-398, 1983.
12. Rosenstein, M., Eberlein, T., Schwarz, S., and Rosenberg, S.A.: Simplified techniques for the isolation of alloreactive cell lines and clones with specific cytotoxic or proliferative activity. J. Immunol. Meth. 61:183-193, 1983.
13. Grimm, E.A., Gorelik, E., Rosenstein, M.M., and Rosenberg, S.A.: The lymphokine-activated killer cell phenomenon: In vitro and in vivo studies. In Cohen, S. and Oppenheim, J. (eds): The Proceedings of the Third International Lymphokine Congress. New York, Academic Press, pp. 739-748, 1983.
14. Mazumder, A., Rosenstein, M., and Rosenberg, S.A.: Lysis of fresh NK-resistant tumor cells by lectin activated syngeneic and allogeneic murine splenocytes. Cancer Res. 43:5729-5734, 1983.
15. Weiland, D.J., Kim, B., Rosenstein, M., and Rosenberg, S.A.: Adoptive transfer of T-lymphocyte clones can mediate skin graft rejection. Surg. Forum. 34:410-412, 1983.
16. Kim, B., Rosenstein, M., and Rosenberg, S.A.: Clonal analysis of the lymphoid cells mediating skin allograft rejection; cloned Ly 1+2- proliferative, noncytotoxic long term cell lines mediate graft rejection in vivo. Transplantation. 36:525-532, 1983.
17. Eberlein, T.J., Rosenstein, M., and Rosenberg, S.A.: Successful systemic adoptive immunotherapy of a disseminated solid syngeneic murine tumor with long-term cultured T cells. Transp. Proc. 15:396-398, 1983.
18. Rosenstein, M., Eberlein, T.J., and Rosenberg, S.A.: Adoptive immunotherapy of established syngeneic solid tumors: Role of T lymphoid subpopulations. J. Immunol. 132:2117-2122, 1984.
19. Rosenstein, M., Yron, I., Kaufman, Y., and Rosenberg, S.A.: Lymphokine activated killer cells: Lysis of fresh syngeneic NK-resistant murine tumor cells by lymphocytes cultured in Interleukin-2. Cancer Res. 44:1946-1953, 1984.
20. Rosenberg, S.A., Rosenstein, M., Grimm, E., Lotze, M., and Mazumder, A.: The use of lymphoid cells expanded in IL-2 for the adoptive immunotherapy of murine and human tumors. In Thymic Hormone and Lymphokines. Plenum Publishing Corp., New York, N.Y., pp. 191-207, 1984.
21. Donohue, J.H., Lotze, M.t., Robb, R.J., Rosenstein, M., Braziel, R.M., Jaffe, E.S., and Rosenberg, S.A.: In vivo administration of purified Jurkat-derived Interleukin-2 in mice. Cancer Res. 44:1380-1386, 1984.
22. Donohue, J.H., Rosenstein, M., Chang, A.E., Lotze, M.T., Robb, R.J., and Rosenberg, S.A.: The systemic administration of purified Interleukin -2 enhances the ability of sensitized murine lymphocyte lines to cure a disseminated syngeneic lymphoma. J. Immunol. 132:2123-2128, 1984.
23. Mule, J., Rosenstein, M., Shu, S., and Rosenberg, S.A.: Eradication of a disseminated syngeneic mouse lymphoma by systemic adoptive transfer of immune lymphocytes and its dependence upon a host component(s). Cancer Res. 45:526-531, 1985.
24. Reichert, C.M., Rosenstein, M., Von Glatz, J., Hsu, S.M. and Rosenberg, S.A.: Curative intravenous adoptive immunotherapy of Meth A murine sarcoma: A histological and immunohistochemical assessment. Laboratory Invest. 52:304-313, 1985.

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25. Matis, L.A., Shu, S., Groves, E., Zinn, S., Chou, T., Kruisbeek, M., Rosenstein, M., and Rosenberg, S.A.: Adoptive immunotherapy of a syngeneic murine leukemia with a tumor-specific cytotoxic T-cell clone and recombinant human Interleukin-2 correlation with clonal IL-2 receptor expression. J. Immunol. 136:3496-3501, 1986.
26. Lafreniere, R., Rosenstein, M., and Rosenberg, S.A.: The immunotherapeutic significance of expanded lymphokine activated killer cells against experimental murine metastases: An *in vivo* analysis. J. Immunol. Meth.
27. Rosenstein, M., Ettinghausen, S.F., and Rosenberg, S.A.: Extravasation of intravascular fluid mediated by the systemic administration of recombinant Interleukin-2. J. Immunol. 137:1735-1742, 1986.
28. Lafreniere, R., Rosenstein, M. and Rosenberg, S.A.: *In vitro* expansion of lymphokine activated killer cells leads to increased numbers of cells which can modulate the reduction of murine hepatic and pulmonary metastases when adoptively transferred with recombinant Interleukin-2. Surg. Forum. 37:394-396, 1987.
29. Armstrong, J., Rosenstein, M., Kris, M., Shank, B., Scher, H., Fass, D., Harrison, L., Leibel, S., and Fuks, Z.: Twice daily irradiation for limited small cell lung cancer.: Total dose of radiation and the use of concomitant chemotherapy may be important determinants of outcome. Int. J. Rad. Onc. Biol. Phys. 21:1269-1274, 1991.
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33. Rosenstein, M., Wallner, K., Scher, H., and Sternberg, C.N. Treatment of brain metastases from bladder cancer. J. Urology. 149(3): 480-483, 1993.
34. Prezioso, J.A., Shields, D., Wang, N., and Rosenstein, M.: Role of gamma-glutamyltranspeptidase mediated glutathione transport in the radioresponse of B16 melanoma variants. Int. J. Rad. Onc. Biol. Phys. 30:373-381, 1994.
35. Pippin, B.A., Rosenstein, M., Jacob, W.F., Chiang, Y., and Lotze, M.T. Local IL-4 delivery enhances immune reaction to murine tumor: Gene therapy in combination with IL-2. Cancer Gene Therapy. 1: 1-7, 1994.
36. Leder, G.H., Oppenheim, M., Rosenstein, M., Shah, N. Hoffman,, R., Simmons, R., and Lotze, M.T.: The IL-2 induced Nitric Oxide production but not IL-2 induced capillary leak syndrome is decreased by Aminoguanidine. In Proceedings of the Third International Meeting on the Biology of Nitric Oxide.
37. Rosenstein, M., Epperly, M., Hughey, R.P. Prezioso, J., and Greenberger, J.S.: Overexpression of a gamma-glutamyltranspeptidase transgene does not alter the gamma irradiation sensitivity of

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- the1B3-1 normal bronchoepithelial or A549 human lung carcinoma cell line. Rad. Onc. Invest. 3:9-16, 1995.
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39. Deutsch, M. and Rosenstein, M.: Ductal carcinoma In Situ (DCIS) of the male breast treated with lumpectomy and breast irradiation. Clinical Oncology. 10:204-205, 1998.
40. Deutsch, M. and Rosenstein, M.: Angiosarcoma of the breast mimicking radiation dermatitis arising after lumpectomy and breast irradiation, A case report. J. Clin. Am. Oncol. 21: 608-609, 1998.
41. Deutsch, M. and Rosenstein, M., and Figura, J.: Meningioma following radiotherapy for Hodgkin's Disease. Am. J. Clin. Oncol. 22:361-363, 1999.
42. Deutsch, M., Rosenstein, M., and Ramanathan, R.: Pancreatic cancer in a young adult following treatment of Hodgkin's disease. Clinical Oncology. 11:280-282, 1999.
43. Posner, M.C., Gooding, W.E., Landreneu, R.J., Rosenstein, M., Clarke, M.R., Peterson, M.S., and Lembersky, B.C.: Preoperative chemoradiotherapy and carcinoma of the esophagus and gastroesophageal junction. Cancer J. Sci. Am. 4:237-246, 1999.
44. Deutsch M, Ellerbroek N, Rosenstein M. Radiotherapy for symptomatic metastases to the mandible in adults. Accepted by American Journal of Clinical Oncology.

The American Board of Radiology

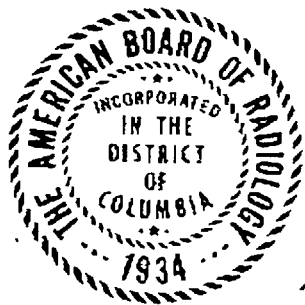
*Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association,
the American Society for Therapeutic Radiology and Oncology, the Association of
University Radiologists, and American Association of Physicists in Medicine*
Hereby certifies that

Maury Michael Rosenstein, Ph.D., M.D.

*Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of
The American Board of Radiology*

*On this seventh day of June, 1995
Thereby demonstrating to the satisfaction of the Board
that he is qualified to practice the specialty of*

Radiation Oncology



Douglas Maynard MD
President

William Jewelle MD
Secretary-Treasurer

M. Paul Capp. M.D.
Executive Director



University of Pittsburgh

Center for Image-Guided Neurosurgery

This is to Certify That

Maury Rosenstein, M.D.



Attended

Principles and Practice of Gamma Knife® Radiosurgery

from January 9-13, 2006

A handwritten signature in black ink, likely belonging to L. Dade Lunsford, M.D., FACS.

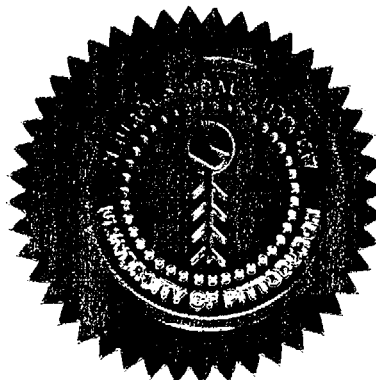
L. Dade Lunsford, M.D., FACS

A handwritten signature in black ink, likely belonging to Douglas Kondziolka M.D., M.Sc., FRCS(C).

Douglas Kondziolka M.D., M.Sc., FRCS(C)

A handwritten signature in black ink, likely belonging to Ann H. Maitz, M.Sc.

Ann H. Maitz, M.Sc.



A handwritten signature in black ink, likely belonging to John C. Flickinger, M.D.

John C. Flickinger, M.D.



UPMC Cancer Center

at UPMC Presbyterian

Department of
Radiation Oncology

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Referral Service
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January 17, 2006

**Radiation Safety Committee
University of Pittsburgh**

RE: Maury Rosenstein, M.D., Ph.D.

Dear Radiation Safety Committee Members:

This letter is in support of Dr. Rosenstein's application to become approved as an Authorized User for 10 CFR 35.600 (Gamma stereotactic radiosurgery units) under the University of Pittsburgh's NRC radioactive materials license No. 37-00245-09.

I attest that Dr. Rosenstein has satisfactorily completed the training and experience requirements outlined in 10CFR 35.690(b)(1) and (b)(2), has training from the types of devices for which authorization is sought as required by 10 CFR 35.690(c), and has achieved a level of competency sufficient to function independently as an Authorized User for gamma stereotactic radiosurgery units.

I am approved as an Authorized User for 10 CFR 35.600 (Gamma stereotactic radiosurgery units) under the University of Pittsburgh's NRC license No. 37-00245-09.

Sincerely,

John C. Flickinger, MD



UPMC Cancer Centers works in tandem with the University of Pittsburgh Cancer Institute, the region's only National Cancer Institute-designated Comprehensive Cancer Center.

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

1/31/2006, and to inform you that the initial processing which includes an administrative review has been performed.

☒ AMEND. 37-00245-09
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

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** 138365.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.