

# 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.

## FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION  
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS  
WASHINGTON, DC 20555

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
NUCLEAR MATERIAL SECTION B  
631 PARK AVENUE  
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II  
MATERIAL RADIATION PROTECTION SECTION  
101 MARIETTA STREET, SUITE 2900  
ATLANTA, GA 30323

## IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
MATERIALS LICENSING SECTION  
799 ROOSEVELT ROAD  
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
MATERIAL RADIATION PROTECTION SECTION  
611 RYAN PLAZA DRIVE, SUITE 1000  
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V  
MATERIAL RADIATION PROTECTION SECTION  
1450 MARIA LANE, SUITE 210  
WALNUT CREEK, CA 94596

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 JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE  
☒ B. AMENDMENT TO LICENSE NUMBER 19-21091-01  
☐ C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

Program Resources, Inc.  
NCI-Frederick Cancer Research Facility  
P. O. Box B  
Frederick, MD 21701

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

Fort Detrick  
Frederick, MD 21701

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

James J. Friel, Jr.

TELEPHONE NUMBER

(301) 695-1451

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.

No Change

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

No Change

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

See Attachment

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

No Change

9. FACILITIES AND EQUIPMENT.

No Change

10. RADIATION SAFETY PROGRAM

No Change

11. WASTE MANAGEMENT.

No Change

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY 3L AMOUNT ENCLOSED \$ 120.00

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, 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.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

James J. Friel, Jr.

TITLE

Radiation Safety Officer

DATE

4-11-85

## 14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

<\$250K  
\$250K—500K  
\$500K—750K  
\$750K—1M

\$1M—3.5M  
\$3.5M—7M  
\$7M—10M  
>\$10M

b. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors)

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dollar and/or staff hours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)

☐ YES

☐ NO

## FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

APPROVED BY

Amend. APA.151

3L 3E

AMOUNT RECEIVED

CHECK NUMBER

\$120

181133

"OFFICIAL RECORD COPY"

DATE

03715 5/2/85

PRIVACY ACT STATEMENT ON THE FRONT

8505290362 850510  
REG1 LIC30  
19-21091-01 PDR

ML10

APR 25 1985

## PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission  
Director, Division of Fuel Cycle and Material Safety  
Office of Nuclear Material Safety and Safeguards  
Washington, D.C. 20555

JEFFERY G. DERGE, Ph.D.

Birthdate: July 26, 1943; Pittsburgh, Pennsylvania

EDUCATION:

Ph.D., Biochemistry, Duke University, 1969

B.A., Amherst College, 1965, cum laude.

EMPLOYMENT:

1983 - Present Program Manager, Intramural Research Support Program,  
Frederick Cancer Research Facility, Support for  
Laboratory of Molecular Oncology, NCI.

1976 - 1983 Head, Support for Microbiology Section, NIH  
Intramural Research Support Program, Frederick  
Cancer Research Center

1971 - 1976 Scientist, Flow Laboratories, Inc., Rockville, MD.

1969 - 1971 Fellow of the Cystic Fibrosis Foundation in the  
laboratory of Dr. Elizabeth F. Neufeld, National  
Institutes of Health

EXPERIENCE

- Studies on herpesvirus DNAs, including EBV, HSV-1, and HSV-2.
- Purification and amplification by recombinant DNA procedures of various DNA fragments for biochemical study and transformation assays.
- Management of the support section, including budgetary responsibilities, employee evaluation, progress reports, inventory management and purchasing.

MEMBERSHIPS

Sigma Xi  
A.A.A.S.

COMMITTEES:

Coordinator NCI-FCRF AIDS Task Force, 1983.  
NCI-FCRF Institutional Review Board, 1984.  
NCI-FCRF Radiation Safety Committee, 1984.

PUBLICATIONS

See attached bibliography.

## PUBLICATIONS:

- Derge, J.G. Dissertation, Duke University. Studies on the biosynthesis of chondroitin sulfate, 1969.
- Derge, J.G. and E.A. Davidson. Protein-polysaccharide biosynthesis-membrane bound saccharides. *Biochem. J.* 126:217-223, 1972.
- Neufeld, E.F., R.W. Barton, M. Cantz, J.G. Derge, C.W. Hall, H. Kresse and J.F. Scott. "Deficiency of specific proteins in the inborn errors of mucopolysaccharide metabolism", in *Sphingolipids, Sphingolipidoses, and Allied Disorders*, B.W. Volk and S.M. Aronson, eds., Plenum Publishing Corp., N.Y., N.Y., pp. 187-194, 1972.
- Hampar, B., J.G. Derge, L.M. Martos and J.L. Walker. Persistence of a repressed Epstein-Barr virus genome in Burkitt lymphoma cells made resistant to 5-Bromodeoxyuridine. *PNAS* 68:3185-3189, 1972.
- Hampar, B., J.G. Derge, L.M. Martos and J.L. Walker. Synthesis of Epstein-Barr virus following activation of the viral genome in 'virus-negative' human lymphoblastoid cells (Raji) made resistant to 5-bromodeoxyuridine. *PNAS* 69:78-82, 1972.
- Hampar, B., J.G. Derge, L.M. Martos, M.A. Tagamets and M.A. Burroughs. Sequence of spontaneous Epstein-Barr virus activation and selective DNA synthesis in activated cells in the presence of hydroxyurea. *PNAS* 69:2589-2593, 1972.
- Hampar, B., J.G. Derge and S.D. Showalter. Enhanced activation of the repressed Epstein-Barr viral genome by inhibitors of DNA synthesis. *Virology* 58:298-301, 1974.
- Hampar, B., J.G. Derge and L.M. Martos. Sequence of spontaneous Epstein-Barr virus activation in human lymphoblastoid cells in possible episomes in eukaryotes. IV Lepetit Colloquium, Cocoyoc, Mexico, 1972. L.G. Silvestri, ed., American Elsevier Publ. Co., pp. 233-242, 1973.
- Hampar, B., J.G. Derge, L.M. Martos, M.A. Tagamets, S.Y. Chang and M. Chakrabarty. Identification of a critical period during the S phase for activation of the Epstein-Barr virus by 5-iododeoxyuridine. *Nature New Biology* 244:214-217, 1973.
- Hampar, B., K.H. Rand, R.A. Lerner, B.C. Del Villano, Jr., R.M. McAllister, L.M. Martos, J.G. Derge, C.W. Long and R.V. Gilden. Formation of syncytia in human lymphoblastoid cells infected with type C viruses. *Virology* 55:453-463, 1973.
- Hampar, B., A. Tanaka, M. Nonoyama and J.G. Derge. Replication of the resident repressed Epstein-Barr virus genome during the early S phase (S-1 Period) of nonproducer Raji cells. *PNAS* 71:631-633, 1974.



## PUBLICATIONS: (continued)

- Lông, C., J.G. Derge and B. Hampar. Procedure for activating Epstein-Barr virus early antigen in nonproducer cells by 5-iododeoxyuridine. *J. Nat. Cancer Inst.* 52:1355-1357, 1974.
- Nonoyama, M., A. Tanaka, B. Hampar and J.G. Derge. Latent genomes of Epstein-Barr virus. In *Mechanisms of Virus Disease on Molecular and Cellular Biology*. ICN-UCLA Symp., 1974. (Eds. W. S. Robinson and C. F. Fox), W. A. Benjamin, Inc., Menlo Park, California, pp. 505-514: Vol. 1.
- Hampar, B., J.G. Derge, M. Nonoyama, S.Y. Chang, M. Tagamets and S.D. Showalter. Programming of events in Epstein-Barr virus activated cells induced by 5-iododeoxyuridine. *Virology* 62:71-89, 1974.
- Hampar, B., J.G. Derge and M. Nonoyama. Sequence of Epstein-Barr virus productive cycle in human lymphoblastoid cells. In *Cold Spring Harbor Symposium on Tumor Viruses*, May 30 - June 6, Vol. 39:811-815, 1974.
- Derge, J.G., B. Hampar, S. Birkhead and T. Hemmaplardh. DNA synthesis in cells activated for the Epstein-Barr virus, in *Proceedings of the Second International Symposium on Oncogenesis and Herpesviruses*, October 14-16, 1974, Nuremberg, Germany, G. de-The, M.A. Epstein, H. zur Hausen, eds., IARC, Lyon, France, pp. 467-473, 1975.
- Hampar, B., G. Lenoir, M. Nonoyama, J.G. Derge and S.Y. Chang. Cell cycle dependence for activation of Epstein-Barr virus by inhibitors of protein synthesis or medium deficient in arginine. *Virology* 69:660-668, 1976.
- Hampar, B., S.A. Aaronson, J.G. Derge, M. Chakrabarty, S.D. Showalter and C.Y. Dunn. Activation of an endogenous mouse type C virus by ultra-violet irradiated herpes simplex virus types 1 and 2. *PNAS* 73:646-650, 1976.
- Hampar, B. and J.G. Derge. Epstein-Barr Virus: A natural latent human herpesvirus, in *Tumor Virus Infections and Immunity*, R.L. Crowell, H. Friedman and J.E. Prier, eds., University Park Press, Baltimore, Md., pp. 133-146, 1975.
- Hampar, B., M. Hatanaka, G. Aulakh, J.G. Derge, L. Lee and S. Showalter. Type C virus activation in "nontransfomed" mouse cells by UV-irradiated herpes simplex virus. *Virology* 76:876-881, 1977.
- Hampar, B., J.R. Stephenson, A. Boyd, J.G. Derge, A. Brown and S. Oroszlan. Expression of type C virus p30 in mouse cells infected with herpes simplex virus. *Virology* 83:438-443, 1977.
- Boyd, A.L., J.G. Derge and B. Hampar. Activation of endogenous type C virus in BALB/c mouse cells by herpesvirus DNA. *PNAS* 75:4558-4562, 1978.

## PUBLICATIONS (continued)

Hampar, B., A.L. Boyd, J.G. Derge, M. Zweig, L. Eader, and S.D. Showalter. Comparison of properties of mouse cells transformed spontaneously by ultraviolet light-irradiated herpes simplex virus or by simian virus 40. Cancer Res. 40:2213-2222, 1980.

Hampar, B., J.G. Derge, A.L. Boyd, M.A. Tainsky, and S.D. Showalter. Herpes simplex virus (type 1) thymidine kinase gene does not transform cells morphologically. Proc. Natl. Acad. Sci. USA 78:2616-2619, 1981.

BETWEEN: William O. Miller, Chief  
License Fee Management Branch  
Office of Administration

John E. Glenn, Chief  
Nuclear Materials Section B  
Division of Engineering and  
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: Program Resources, Inc

Application Dated: 4/11/85

Control No.: 03715

License No.: 19-21091-01

2. FEE ATTACHED

Amount: \$120.00

Check No.: 181133

3. COMMENTS

Signed Brenda Platchek

Date 4/26/85

03610

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 3L 3E \$120

2. Correct Fee Paid. Application may be processed for:

Amendment ✓

Renewal \_\_\_\_\_

License \_\_\_\_\_

Signed Frances Brown

Date 5/2/85

5/3/85

"SECTION COPY"

NATIONAL  
CANCER  
INSTITUTE



Frederick Cancer  
Research Facility



PROGRAM  
RESOURCES,  
INC.

PAY

PROGRAM  
RESOURCES, INC. 120dols00cts

65-302  
550

CHECK NO. 181133

DATE 04/18/85

\$120.00

DOLLARS

TO THE ORDER OF

U. S. NUCLEAR REGULATORY COMMISSION

PROGRAM RESOURCES, INC.

*[Signature]*  
SIGNATURE

MARYLAND NATIONAL BANK  
FREDERICK, MARYLAND 21701

⑈181133⑈ ⑆055003023⑆ 010⑈84⑆5⑈

REMITTANCE STATEMENT

PRI P.O. NO.	INVOICE NO.	DATE	INVOICE AMOUNT	DEDUCTIONS	BALANCE
133737	APPLICATION FEE -- LICENSE NO. 19-21091-01		120 00		120 00
REMITTANCE SUMMARY			120 00		120 00

PROGRAM RESOURCES, INC. NCI-FREDERICK CANCER RESEARCH FACILITY P.O. BOX B, FREDERICK, MARYLAND 21701

CHECK AMOUNT