

Historical Assessment  
for  
NIH Park-5 Laboratory  
12420 Parklawn Drive  
Rockville, MD

The National Institutes of Health (NIH) conducts biomedical research under a broad scope license (#19-00296-10) issued by the U.S. Nuclear Regulatory Commission (NRC). Most licensed activities take place at the main campus of NIH, 9000 Rockville Pike in Rockville, MD. However, NIH also conducts licensed activities in a number of leased facilities in Rockville, Kensington, Baltimore, and Frederick, MD.

From 1976 through 2005, NIH leased 21,061 square feet of laboratory space and non-laboratory space in a facility located at 12420 Parklawn Drive in Rockville, MD. Attachment 1 is a floor plan of the facility, which is referred to as the Park building or Danac-5.

Existing records document that radioactive materials were used in this facility from 1989 through 2004. Attachment 2 is a report from the NIH Radiation Safety Program comprehensive database which lists the nuclides and activities used for each year from 1989 through 2004.

During NIH's period of occupancy, unsealed sources of radioactive material including hydrogen-3, carbon-14, sulfur-35, phosphorus-32, calcium-45, iodine-123, and iodine-125 were used under the supervision of NIH Authorized Users in 26 lab modules. Comprehensive surveys were performed on at least a semi-annual basis in all laboratories in which radioactive materials were used or stored, as well as in corridors. These surveys involve measuring exposure levels, monitoring for contamination, and assessing compliance with over 20 programmatic requirements. Attachment 3 is the survey form on which the results of comprehensive surveys were documented. NIH no longer has comprehensive survey records from 1988 through 1996. However, survey records from 1997 through 2004 document that no contamination above 2200 dpm/100 cm<sup>2</sup> had been found. These records also document that radioactive waste from the facility was managed in accordance with NIH policy and NRC regulations.

In addition, each month in which radioactive materials were used, researchers were required to perform and document swipe surveys of their labs. No removable contamination above the 2200 dpm/100 cm<sup>2</sup> was identified on monthly surveys in this facility from 1989 through 2004. Attachment 4 is the form on which monthly surveys were documented.

When radioactive material usage ceased, a closeout survey was performed in each posted lab. Attachment 5 describes our current procedures for performing closeout surveys and demonstrating that no removable contamination above 220 dpm/100 cm<sup>2</sup> is present. The limits in Regulatory Guide 8.23 would be used for any fixed contamination. These contamination limits are orders of magnitude below the Decommissioning Contamination Guidance Limits for the long-lived radionuclides that were used in the facility, i.e., H-3 and C-14. NIH did not specifically monitor for alpha contamination because no NRC-regulated alpha emitters had been used. However, if removable alpha contamination had been present, e.g., from uranyl acetate, it would have shown up on the swipes collected during the closeout surveys.

According to NIH's sealed source records, no sealed sources that requiring leak testing were in the Park building. There were, however, some generally licensed sources. However, if they had leaked, swipes from the many surveys which were performed in the facility would have detected the contamination.

In summary, existing survey data for the Flow building demonstrate that the facility can be released for unrestricted use in accordance with NRC requirements.

# Attachment 1





## Attachment 2

TABLE 1- Radionuclides usage In Building PK

Friday June 12 2009 2:28 PM

Page 1 of 1

Year	Nuclide	Delivery Amount
1989	H 3	0.500
	P 32	0.092
	S 35	2.000
1990	C 14	1.332
	H 3	51.000
	I 125	25.200
	P 32	95.858
	S 35	43.000
1991	C 14	0.756
	CA 45	1.000
	H 3	25.500
	I 125	29.485
	P 32	132.940
	S 35	66.750
1992	C 14	2.550
	H 3	42.350
	I 123	0.100
	I 125	8.052
	P 32	130.192
	S 35	38.750
1993	C 14	2.054
	H 3	11.250
	I 125	1.771
	I 129	0.001
	P 32	48.468
	P 33	0.500
	S 35	31.500
1994	C 14	1.175
	H 3	10.050
	I 125	0.010
	P 32	48.250
	P 33	20.500
	S 35	9.750
1995	C 14	2.000
	H 3	1.376
	I 125	0.500
	P 32	86.250
	P 33	5.000
	S 35	13.000
1996	C 14	0.250
	H 3	0.500
	P 32	14.000
	P 33	1.000
	S 35	4.250
1997	H 3	2.000
	P 32	11.750
	P 33	1.795
1998	P 32	5.000
1999	P 32	1.750
2000	P 32	2.750
	P 33	3.000
2001	C 14	0.100
	H 3	2.000
	P 32	9.000
2002	C 14	0.100
	I 125	0.003
	P 32	36.750
	P 33	0.750
	S 35	0.250
2003	C 14	0.360
	H 3	1.000
	I 125	0.003
	P 32	53.500
2004	P 33	1.750
	C 14	1.000
	H 3	0.250
	P 32	56.500
	P 33	0.750

## Attachment 3

National Institutes of Health Division of Radiation Safety			<b>Radiation Safety Survey</b>			HP Area	Report No.
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Bldg	Floor	Wing	Room	AU Name (Last, First)	AU No.	Phone
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List of Radionuclides used and smear results (DPM/100cm <sup>2</sup> )			Surveyor's Name	Date	<input type="checkbox"/> Check if Radionuclides NOT used since last survey
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Locations	Radionuclides	<b>C</b> Surveyed by C = Contractor D = DRS	<input type="checkbox"/>	Survey Frequency W = Weekly M = Monthly B = Bimonthly Q = Quarterly S = Semi-annual
-----------	---------------	---	--------------------------	--

1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

All Smears < 220 DPM  YES  NO

Surveyor Meter Info.	Make/Model	S/N	Type PanGM/NaI	Cal Date	Bkg. CPM /
	Make/Model	S/N	Type	Cal Date	Bkg. CPM
	Make/Model	S/N	Type	Cal Date	Bkg. CPM

**Compliance Items (Mark YES if Compliant, NO if in Violation)**

YES	NO	1.	YES	NO	9.	YES	NO	17.
		Signs and labels: Room			Security/storage of RAM			Utilization/disposal records
		Ref / freezer / equipment			Proper protective clothing/equipment			Survey records current
		LSC vials			Routine use of shielding			Radiation levels acceptable
		Source containers			Radioactive waste management			Contamination limits met
		Waste containers			Prohibition of eating, drinking			Meters available
		AP on radionuclide use area			Adequate pers. external monitoring			Meters operational
		Adequate hood flow			Personnel trained			Calibration current
		Hood calibrated Date: _____			Daily monitoring			Other

Meter #1 Type	Serial No.	Cal. Date	Meter #2 Type	Serial No.	Cal. Date	Meter #3 Type	Serial No.	Cal. Date
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REMARKS (Refer to item No. Include violations corrected by surveyor.)

15) \_\_\_\_\_ states all staff have taken RSL class.

Radiation Safety Use Only	HP Received this form	Date follow-up completed	Person interviewed _____ HP Signature
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Follow-up remarks

## Attachment 4

### MONTHLY LABORATORY CONTAMINATION SURVEY

National Institutes of Health Radiation Safety Branch (Bldg. 21/116) RSB 496-5774 or FAX 496-3544

Send original to RSB, and retain copy in lab records for 3 years.

Building	Suffix	Floor	Wing	Room	Rooms Linked on this Survey	Survey Date (mm/dd/yy)
Authorized User: Last Name, First Name					RSB User Number	Phone Number
Surveyor: Last Name, First Name					RSB User Number	Phone Number

**Check here if radionuclides were not used this month in all modules represented on this form. [ ]**

**SURVEYOR'S SIGNATURE**

**DIAGRAM OF LABORATORY:** Sketch module(s) and number location(s) smeared. A minimum of 10 smears must be taken in each module where radionuclides are used, with at least two on the floor. Clearly indicate on multiple-module surveys if any modules had no usage in this month.

### TYPE OF COUNTER USED TO ANALYZE SMEARS:

Liquid Scintillation Counter [ ] Gamma Counter [ ]  
 LSC or Gamma Counter Property #:

Indicate radionuclides and activities used since last monthly survey:  
 Activity = Total amount used since last monthly survey.

Isotope	Activity (in mCi)	Isotope	Activity (in mCi)
H-3		P-33	
S-35		I-125	
C-14		I-131	
P-32		Cr-51	

### SMEAR RESULTS (in dpm/100cm<sup>2</sup>)

Fill in radionuclides and indicate quantitative smear results in DPM.  
**DPM = CPM / COUNTER EFFICIENCY**  
**PRINTOUT MUST BE ATTACHED!**

Location	Nuclide 1	Nuclide 2	Nuclide 3
BKG			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

**REMARKS:** Include explanation of actions taken for smears >2,200 dpm/100cm<sup>2</sup> beta-gamma or >220 dpm/100 cm<sup>2</sup> alpha.

## Attachment 5

National Institutes of Health  
Bethesda, Maryland 20892

www.nih.gov

**Memorandum**

**Date:** October 21, 2004  
**To:** All DRS Area Health Physicists  
**Subject:** Checklist for Radiological Clearances of Laboratories and Equipment  
**From:** Chief, Radiation Safety Operations Branch

This memo is being circulated as the Radiation Safety Operations Branch checklist to standardize applicable procedures and practices when clearing laboratories and equipment.

**DRS Contact Phone Numbers:**

Radioactive material moving and storage service: 301-496-3277  
Radioactive waste disposal service: 301-496-4451

**I. Pre-Inspection (only for moves/renovations):**

**NOTE:** For lab inactivations, see section II.

- Inspect** lab with lab personnel and **instruct** lab staff on appropriate clearance/moving procedures (*refer to AU clearance memorandum*).
- Verify** that all radioactive material (RAM), radioactive waste (RW), and potentially contaminated and labeled items have been removed from the lab area to be inactivated. **Resolve** any discrepancies or issues involving these items *prior* to removal.
- Identify** items or equipment with inaccessible contaminated areas (e.g. HPLC's, harvesters, etc) that should not be packed by movers (see section III). Be aware of the mover's contract.
- Review** lab closeout contamination survey of the area and note RAM used and usage areas (if possible).
- Ensure** that adequate arrangements (i.e. RAM moving and storage service) are made to safely move RAM and sealed sources (e.g. to DRS storage or new lab).
- Spot-check** for any other radiation safety related problems or radiological hazards.
- Inspect** lab by performing a portable meter survey (pancake G-M, NaI, and ZnS as appropriate) of all RAM accessible work areas, RAM and RW storage sites, floors, sinks, and equipment in which RAM may have been used to ensure the absence of contamination.
- Notify** lab staff of any issues and discuss appropriate solutions. Additionally, **document** conclusions and solutions from the discussion on the survey sheet. AHP is responsible for ensuring that all identified problems are corrected prior to the inactivation, renovation, or move.
- Schedule** a tentative date and time (at most two business days after the renovation or move) to perform the final lab clearance. Recommend reminding lab staff of their responsibility to notify the AHP of any changes to the scheduled time and reschedule the clearance in a timely manner.
- For partial renovations, simply **post** a DRS clearance sticker on the lab door or near the area in question. Note that the lab will have performed a swipe survey regardless of radionuclides used.

## II. Final Clearance:

**NOTE:** For moves/complete renovations, the lab should be vacant! Final clearance *is not required* for partial renovations.

- Ensure** that all RAM, RW, and empty waste containers have been removed from the lab, all radiation warning signs/labels/tape have been removed or obliterated, and the lab is vacant (from a radiation safety perspective). Address any issues with the former staff.
- Monitor** the entire lab including inside *potentially* contaminated drawers, cabinets, refrigerators, freezers, incubators, RAM and RW storage areas, floors, and work benches using both pancake G-M and NaI probes (and ZnS if alpha emitting radionuclides have been used), regardless of isotope use, to confirm the absence of residual contamination (removable or fixed) and radiological hazards.
- Perform a **swipe** survey (10 swipes minimum) of RAM and RW areas, sinks, benches, and floors to ensure that removable contamination levels are below the appropriate release limits for unrestricted areas.
- Document** the survey using the lab's closeout survey, including monitored and swiped areas, results, and provide a brief summary of the clearance. If the lab is not moving (i.e. no future RAM use), include comprehensive documentation of all prior isotope usage in the lab area within the past three years (longer if possible).
- Remove** the lab door postings after the survey results confirm the absence of contamination and post a DRS clearance sticker.
- Attach** a copy of the closeout survey to the lab change form and submit the originals for data entry.
- If the lab has moved, **notify** RSA of new meter locations and **contact** appropriate DRS staff member to update lab personnel information in the database.
- For renovations/moves, **remind** lab staff of their responsibility to contact the AHP for reactivation, before RAM can be used or stored in the lab.

## III. Equipment Clearances:

**NOTE:** Official DRS clearance is *typically* not required for lab equipment, except for liquid scintillation counters, gamma counters, and chemical fume hoods using volatile materials!

### *Liquid scintillation counters (LSCs), gamma counters:*

- Ensure** radioactive source (and lead shielding if applicable) is removed.
- Examine** AU swipe survey to confirm absence of contamination.
- Monitor** (portable meter survey using pan-GM, NaI, and ZnS as appropriate) accessible portions of machine to confirm absence of removable/fixed contamination.
- Instruct** lab staff to affix a completed NIH Form 2683 (Certification that Equipment is Free from Hazards) to the unit.
- Attach** clearance sticker to machine to certify that it is free of radiological hazards. If contaminated, work with the lab staff to decontaminate.
- Complete** DRS clearance record for counters and submit to appropriate contact.

***Radiation producing machines (i.e. cabinet x-ray, fluoroscopy, radiography, microCT, CT, electron microscope, bone densitometers, and x-ray diffraction units):***

***Note:*** *Special clearance is not required, however DRS must be notified when units are procured, moved, or surplused!*

- Document** DRS number (yellow tag), location, custodian, machine type, serial number, model number, and NIH number, if applicable, from unit and submit documentation to Project Officer and RSA for database update.
- If machine is only to be transferred, document custodian and new location to update the database and resurvey the unit. **Submit** documentation to Project Officer and RSA for database update.
- Remind** lab staff to affix a completed NIH Form 2683 (Certification that Equipment is Free from Hazards) to the unit, even though a DRS clearance is not required.
- For moves between campus buildings:
  - Secure** source and lead shielding.
  - Evaluate** lab survey.
  - Attach** clearance sticker (stating source secured for on campus move). It is not necessary to complete a DRS clearance record in this case.

***Devices containing radioactive sources:***

***Note:*** *These units are typically on the DRS sealed source list and cannot be surplused. Irradiators are handled differently and on a case-by-case basis!*

- Internal counter sources must be **removed** and **disposed** by the manufacturer. Otherwise, **contact** RMCB for removal and disposal of all other sources (e.g. mass spectrometers, gas chromatographs, ion mobility spectrometers, H-3 exit signs, etc).
- For gas chromatographs and mass spectrometers:
  - Survey** the machine for contamination.
  - Surplus** or return the source-free unit to the manufacturer.
  - Notify** the sealed source custodian.

***Chemical fume hoods using volatile radioactive material (i.e. I-125 and I-131 iodinations, H-3, and Cysteine and Methionine S-35):***

- Review** lab clearance survey (swipe results) of chemical fume hood prior to repair (clearing hood). This should consist of 10 swipes taken from accessible areas of the fume hood.
- Spot check** chemical fume hood. If applicable, perform additional swipe surveys of hood area. If hood is to be disassembled, verify it is free from radiological hazards by monitoring (pan-GM and NaI) and swiping the hood duct.
- Attach** DRS clearance sticker to chemical fume hood.
- Instruct** lab staff to affix a completed NIH Form 2683 (Certification that Equipment is Free from Hazards) to the fume hood.

***Centrifuges:***

- Ensure** that the exterior is free from contamination. Contaminated rotors can be locked inside the centrifuge. However, contamination *must not* be removable during packing and transit!

Recent Leases  
Park-5 Building  
&  
Flow Building

U. S. GOVERNMENT  
LEASE FOR REAL PROPERTY

DATE OF LEASE: AUG 3 1995

LEASE #GS-11B-51075

THIS LEASE, made and entered into this date between JBG/Twinbrook Metro Limited Partnership,  
By: JBG Real Estate Associates, Inc., General Partner

whose address is:

c/o The JBG Companies, Inc.  
1250 Connecticut Avenue, Suite 500  
Washington, DC 20036

and whose interest in the property hereinafter described is that of OWNER, hereinafter  
called the LESSOR, and the UNITED STATES OF AMERICA, hereinafter called the Government.

\* \* \* \* \*

WITNESSETH: The parties hereto for the considerations hereinafter mentioned, covenant and  
agree as follows:

\* \* \* \* \*

1. The Lessor hereby leases to the Government the following described premises:

A TOTAL OF 21,061 NET USABLE SQUARE FEET (NUSF) OF LABORATORY AND RELATED SPACE BEING  
THE ENTIRE FOURTH FLOOR IN THE BUILDING KNOWN AS THE PARK BUILDING, 12420 PARKLAWN  
DRIVE, ROCKVILLE, MARYLAND.

to be used for SUCH PURPOSES AS DETERMINED BY THE GOVERNMENT.

\* \* \* \* \*

2. TO HAVE AND TO HOLD the said premises with their appurtenances for the TEN YEAR FIRM  
term beginning on AUGUST 1, 1995 through JULY 31, 2005, subject to termination and renewal  
rights as may be hereinafter set forth.

\* \* \* \* \*

3. The Government shall pay the Lessor annual rent of ~~\$224,559.72~~ \$316,125.61 at the rate of ~~\$24,546.64~~ \$26,343.80  
per MONTH in arrears. Rent for a lesser period shall be prorated. Rent checks shall be made  
payable to: JBG/TWINBROOK METRO LIMITED PARTNERSHIP.

\* \* \* \* \*

~~4. The Government may terminate this lease at any time by giving at least 180 days notice  
in writing to the Lessor and no rental shall accrue after the effective date of termination.  
Said notice shall be computed commencing with the day after the date of mailing.~~

\* \* \* \* \*

~~5. This lease may be renewed at the option of the Government, for the following terms and  
at the following rentals: THE GOVERNMENT SHALL HAVE THE RIGHT TO XXXX CONSECUTIVE RENEWAL  
OPTIONS AT A RENTAL RATE OF \$XXXXX PER ANNUM PAYABLE AT THE RATE OF \$XXXX PER MONTH IN  
ARREARS. SUCH RATE SHALL BE IN ADDITION TO ALL ACCRUED OPERATING COST ESCALATIONS. Such  
options shall become effective provided notice be given in writing to the Lessor at least  
365 days before the end of the original lease term and at the start of the first renewal  
option, respectively; all other terms and conditions of this lease shall remain the same  
during any renewal term. Said notice shall be computed commencing with the day after the  
date of mailing.~~

LESSOR J GOV'T ja  
12D89

EXCEPTION TO SF2 APPROVED GSA/IRMS

AUG 3 1995

6. The Lessor shall furnish to the Government as part of the rental consideration, the following:

ALL SERVICES, REPAIRS, MAINTENANCE, IMPROVEMENTS, ALTERATIONS AND UTILITIES (WITH THE EXCEPTION OF ELECTRICITY, GAS, WATER AND SEWER WHICH WILL BE SEPARATELY METERED AND PAID DIRECTLY BY THE GOVERNMENT) AS DEFINED BY THIS LEASE. NO AFTER HOURS FEES WILL BE CHARGED. DAYTIME CLEANING AS DEFINED IN THE LEASE.

THE ANNUAL RENT IS SUBJECT TO OPERATING COST ESCALATIONS PER PARAGRAPH 3.5 OF SFO 94-012. THE BASE COST FOR SERVICES PER GSA FORM 1217 SHALL BE \$60,900.

THE ANNUAL RENTAL STATED IN PARAGRAPH 3 OF THIS STANDARD FORM 2 INCLUDES 33 ON-SITE PARKING SPACES.

THE CONFIGURATION AND CONDITION OF THE SPACE IS ACCEPTABLE TO THE GOVERNMENT IN THEIR "AS-IS" CONDITION WITH THE EXCEPTION THAT LESSOR WILL PROVIDE A BASE BUILDING CORE & SHELL, AND COMMON AREAS THAT COMPLY WITH THE PERFORMANCE STANDARDS AND SPECIFICATIONS OF THIS LEASE. CONSTRUCTION MATERIALS SPECIFIED BY HEREIN AND NOT USED BY THE GOVERNMENT SHALL NOT BE TAKEN AS CREDITS AGAINST ANY RENT AS OUTLINED IN SFO PARAGRAPH 3.1 "UNIT COSTS FOR ADJUSTMENTS".

ALL COSTS INCURRED FOR THE PERFORMANCE OF THE TENANT IMPROVEMENTS OUTLINED IN ATTACHMENT #2 HEREOF SHALL BE PAID BY THE GOVERNMENT, INCLUDING RELATED DESIGN, CONSTRUCTION AND ASSOCIATED COSTS REQUIRED TO DELIVER THE SPECIFIED IMPROVEMENTS.

THE GOVERNMENT WILL BE GIVEN UP TO \$100 PER SQUARE FOOT FOR TENANT IMPROVEMENTS. ANY TENANT IMPROVEMENT ALLOWANCE USED BY THE GOVERNMENT WILL BE AMORTIZED OVER THE FIRM TERM OF THE LEASE AGREEMENT AT A RATE OF 11.0% PER ANNUM. THIS ALLOWANCE IS ONLY APPLICABLE WITHIN THE FIRST YEAR OF THE FIRM LEASE TERM. ANY REMAINING PORTION OF THE ALLOWANCE WHICH REMAINS UN-USED AFTER THE FIRST YEAR OF THE LEASE TERM SHALL BE FORFEITED BY THE GOVERNMENT.

LESSOR SHALL MAINTAIN THE BASE BUILDING AND APPURTENANT AREAS IN A MANNER WHICH FULLY COMPLIES WITH THE TERMS OF THIS LEASE. THE GOVERNMENT SHALL BE RESPONSIBLE FOR THE CONDITION, MAINTENANCE, AND REPAIR OF ALL LABORATORY AND TENANT IMPROVEMENTS, FIXTURES, AND/OR PERSONAL PROPERTY INSTALLED WITHIN THE PREMISES. ANY CONTRACT REQUESTED BY THE GOVERNMENT FOR THE MAINTENANCE OF EQUIPMENT WILL BE DONE AS A SEPARATE CONTRACT.

THE GOVERNMENT'S PERCENTAGE OF OCCUPANCY FOR REAL ESTATE TAX ASSESSMENT PURPOSES SHALL BE 25.15%.

7. The following are attached and made a part hereof: STATE ATTACHMENTS TO LEASE HERE

1. SOLICITATION FOR OFFERS #95-044, 34 PAGES
2. ATTACHMENT #1, SPECIFICATIONS, UNIT COSTS, UNIT PRICES, 12 PAGES
3. ATTACHMENT #2, LEASE SPACE PROGRAM OF REQUIREMENTS
4. ATTACHMENT #3, FIRESAFETY INSPECTION & FIRE PROTECTION CERTIFICATION (5 PAGES)
5. RIDER #1, DESIGN AND CONSTRUCTION, 5 PAGES
6. RIDER #2, SPECIFIC BASE BUILDING AND LEASE ISSUES, 1 PAGE
7. GSA FORM 1217, LESSOR'S COST STATEMENT, 1 PAGE
8. GSA FORM 3517, GENERAL CLAUSES, 23 PAGES
9. GSA FORM 3518, REPRESENTATIONS AND CERTIFICATIONS, 6 PAGES
10. CERTIFICATE OF PROCUREMENT INTEGRITY, 1 PAGE
11. GSA Form 3516, Solicitation Provisions, 5 Pages

8. The following changes were made in this lease prior to its execution:

PARAGRAPH #4 OF THIS STANDARD FORM 2 HAS BEEN DELETED IN IT'S ENTIRETY.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

LESSOR, JBG/TWINBROOK METRO LIMITED PARTNERSHIP; by JBG REAL ESTATE ASSOCIATES INC.,

BY [Signature] BY [Signature] GENERAL PARTNER

IN PRESENCE [Signature] ADDRESS 1250 Connecticut Avenue NW  
OF [Signature] Washington, DC 20036

UNITED STATES OF AMERICA

BY [Signature] CONTRACTING OFFICER, GSA, NCR, OPR, RED  
MS. PATRICIA C. CONNORS

U.S. GOVERNMENT  
LEASE FOR REAL PROPERTY

Date of Lease: 1/31/2006

Lease No. LRP-0405129

This Lease, made and entered into this date by and between JBG/JER Twinbrook Metro L.L.C., whose address is 4445 Willard Avenue, Suite 400, Chevy Chase, Maryland 20815 and whose interest in the property hereinafter described in that of Owner, hereinafter called the "Lessor", and the National Institutes of Health, As Agent for the UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSED: The parties hereto for the considerations hereinafter mentioned, covenant and agree as follows:

1. Rentable Square Feet. The Lessor leases to the Government the following described premises:

A total of 26,700 BOMA Rentable Square Feet (BRSF) of lab, office and related space consisting of 26,700 BRSF on the first floor and only floor in the building known as 12501 Washington Avenue, Rockville, Maryland 20852 (hereinafter the "premises").

There is 26,700 BOMA rentable square feet (BRSF) of lab, office and related space available for lease in the building. The Government will occupy 100% of the building for purposes of pro-ration of the annual real estate tax adjustment based upon the SF-1217.

A measurement of the space in the premises will be made, in accordance with the BOMA method of measurement, no later than fifteen (15) business days prior to the lease start date to determine the actual rentable square feet. If required, adjustment to the annual rent will be made by Supplemental Lease Agreement.

Loading Dock. The Government will have the use of a minimum of two (2) truck bays for deliveries/pick-up per Section 1.10 of this SFO.

2. TO HAVE AND TO HOLD the said premises with their appurtenances for a five (5) year term commencing on the Government acceptance of substantial completion of the space per Section 3.19(F) of the SFO.
3. Renewal Periods. The Government may elect to renew the term of the lease for two (2) one (1) year options by giving the Lesssor 180 days advance written notice prior to the Lease expiration.

LRP-0405129 LESSOR  GOVERNMENT 

4. CANCELLATION. The Government may cancel the lease 180 days after each anniversary date. If the Government elects to cancel the lease the Government must provide a cancellation notice to the Lessor 30 days advance written notice prior to the anniversary date. If the Government terminates the lease prior to the completion of the fifth year, the unamortized portion of the tenant improvement allowance will be paid to the Lessor as a lump sum with approved invoice payable in arrears. No additional cost to the Government shall accrue after the period of cancellation.
5. Appraisal. The Lessor will provide to the Government a fair market appraisal within 30 days after award. If the fair market appraisal is not received within 30 days after award, or if the Government determines that the lease scores as a CAPITAL LEASE, as defined by the Government, the Government has the right to rescind the award without any cost to the Government.
6. Shell Rate. For the premises under this Lease, the Government shall pay to the Lessor annual rent of \$668,568.00 (i.e. \$25.04 RSF) at the rate of \$55,714.00 per month in arrears, on the first day of each month, for 26,700 BOMA Rentable Square Feet of space. The rents shall remain fixed for the full term including renewal options of this lease.

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Rent checks shall be made payable to:

JBG/JER Twinbrook Metro, L.L.C.

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All payments to Lessor will be sent to the following address:

C/o The JBG Companies  
4445 Willard Avenue  
Suite 400  
Chevy Chase, Maryland 20815

Taxpayer Identification Number (TIN): 52-1722390  
Duns Number: To be provided

7. Real Estate Adjustment. The Real Estate Tax Base of \$41,154.00 per the SF-1217 shall be subject to adjustments established under Section 3.5 of this SFO.
8. Parking Rate. The Lessor shall provide 75 outside parking spaces on the building lot for a consideration of \$80.00 per space per month for an annual rate of \$72,000.00 or \$6,000.00 per month payable in arrears. The Lessor is responsible for keeping the parking space free of snow, ice and debris, 24 hours per day 7 days a week and as per Section 7.5 of the SFO. The Lessor is responsible for keeping the parking lot maintained throughout the life of this lease. The parking rate will be adjusted at each anniversary date based upon market conditions however the rate will not increase or decrease more than 3% each year. The

LRP-0405129 LESSOR  GOVERNMENT 

Contracting Officer will have the final determination on the market rate conditions.

9. **OPERATING COSTS.** The Government will pay the Lessor operating costs subject to Section 3.7 of the SFO and in accordance with GSA SF-1217 in the amount of \$51,955.00 per annum or \$4,329.58 per month payable in arrears (i.e. \$1.95 per BRSF).
10. **Tenant Improvement Allowance.** The Lessor shall furnish to the Government Tenant Improvement Allowance in the amount of \$20.00 per BRSF (\$534,000.00 based upon 26,700 BRSF) for NIH tenant design services and base building specific requirements as directed by the Contracting Officer as stated in this SFO. The Tenant Improvement Allowance shall include all Lessor fees to include but not limited to interest of 10% amortized over 5 years. If the Government terminates the lease within 5 years, the unamortized portion of the Tenant Improvement Allowance will be paid at the Lessor as a lump sum payment with approved invoice. Base building shell requirements that are not approved by the Contracting Officer will be to the expense of the Lessor per Section 1.10 of the SFO.
11. **Security Screening Area.** The Lessor and Government agree through a future Supplemental Lease Agreement to identify space for a Government Security Screening Area. The Lessor will provide to the Government additional space which is attached and adjacent to the premises. The additional space is currently being used as a common area corridor and security screening between the premises and an adjacent building. The additional space will increase the total BRSF of this lease. The shell rate, operating expense and tax adjustment will be increase to reflect the increased of BRSF.
12. **Utilities.** The Government shall be responsible for all utilities for the full term of this lease. The space shall be separately sub-metered and all utility bills will be forwarded from the utility provider to the Government.
13. **Acceptance of Space.** The Rent will start when the Government accepts substantial completion of the space.
14. **Maintenance Agreement.** It is the intention of the Government to contract through the Lessor for maintenance and repairs through a separate Supplemental Lease Agreement after award. The Lessor is responsible for Base Building systems to be in good working order with a minimum of five (5) years life cycle.
15. **Warm Lit Shell.** The Lessor shall provide and be responsible for all base building "warm lit shell items" and design services as stated in Section 1.10 of this SFO.

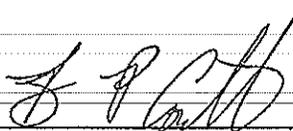
16. NIH Design Policy Guidelines. The Lessor is fully responsible for meeting the design and construction requirements as outline in the SFO including any attachments.
17. Program of Requirements. The Program of Requirements (POR) is made part of this lease as Exhibit "B". The Government reserves the right to make changes to the POR within 30 days from award. The Government does not waive any rights under the SFO regarding reviews and comments of Design Intent Drawings and working/construction drawings.
18. Certification of Base Building Systems. The Lessor must provide the Government within 30 days of award satisfactory certification by a licensed professional that the Base Building Systems (i.e. mechanical, electrical, plumbing and roof) are in good working order with a minimum of five (5) years life cycle per Section 1.10 (Building Shell Requirements) per this SFO. The Government reserves the right to rescind the award if the Government is not satisfied with the certification of the Base Building Systems or the life cycle is less than five (5) years. The Government must respond or comment to the Lessor within ten (10) working days after receipt of the certification of Base Building System report. The Lessor then has five (5) working days to respond to the Government.
19. Floor Moisture Test. The Lessor must provide the Government within 30 days after award satisfactory floor moisture test that meet manufacture tolerances for Vinyl Composite Tile (VCT). The test report will identify the location of the test per the existing space layout.
20. Lessor Fee. Construction Management, including management of tenant design and construction services for the Government tenant improvements shall be provided by JBG/JER Twinbrook Metro L.L.C. All general contractors and sub-contractors selected to work in this facility shall possess adequate experience and credentials for work in laboratory/animal facilities. The cost for Lessor management and coordination shall not exceed 10% of the design and construction cost. Lessor will receive a fee of 4 ½% of the total cost for any change orders above the initial contract price. No funds for tenant design or construction will be expended without the written approval of the NIH Contracting Officer.
21. NMR Equipment. The Lessor agrees to keep in place the Government NMR equipment located in room 39 in the premises at no cost to the Government during the design and construction phase. The NMR will be powered down during the design and construction phase.
22. The following exhibits are attached and made apart of this lease:
- a. Solicitations of Offers No. LRP-0405129, 50 pages
  - b. Program of Requirements dated April 29, 2005, 203 pages
  - c. Annual Cost Statement (GSA SF-1217), 1 page

- d. General Clauses (GSA Form 3517B), 28 pages
- e. Proposal to Lease Space (GSA Form 1364A), 2 pages
- f. Representations and Certifications (GSA Form 3518), 4 pages
- g. Solicitation Provisions (GSA Form 3516A), 5 pages
- h. Floor Plans of Offered Space, 1 page
- i. Unit cost sheet, 1 page
- j. SFO Rate Structure, 1 page
- k. Fire Protection & Life Safety Evaluation, 7 pages
- l. ACH Vendor/Miscellaneous Payment Enrollment Form, 2 pages
- m. W-9, 4 pages
- n. Security Standards For Leased Space, 17 pages

IN WITNESS WHEREOF, the parties hereto have subscribed their names as of this date first above written.

**LESSOR: JBG/JER TWINBROOK METRO, L.L.C., a Maryland Limited Liability Company**

**BY: JBG/BANNOCKBURNPARTNERS IV, L.L.C. its Operating Member**



*Managing Member*

Signature above and print name below  
BRIAN P. COULTER

Title

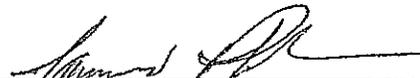
IN PRESENCE OF



Signature above and print name below  
ROD LAWRENCE

Title

UNITED STATES OF AMERICA

BY:   
James Phelan

Contracting Officer