

AUTHORIZATION REVIEW PROCESS

AUTHORIZATION NO.: 572

DATE: 7/22/97

RMC BRANCH

	Initials		Comments
	Pending	Complete	
WRAMC Form 538		<i>ZPNB</i>	<i>NA</i>
WRAMC Form 1643		<i>ZPNB</i>	<i>NA</i>
Authorization or Amendments		<i>ZPNB</i>	<i>Terminate Authorization</i>
Protocol		<i>ZPNB</i>	<i>NA</i>
Isotopes	<i>ZPNB</i>	<i>ZPNB</i>	<i>final removal of sources</i>

OPERATIONS BRANCH

Pre-Room Survey		<i>ARM</i>	
Admin Hold Survey		<i>ARM</i>	
Final Survey		<i>ARM</i>	<i>Completed on 8/15/97</i>
Bioassay Program		<i>ARM</i>	
Dosimetry Program		<i>ARM</i>	
Instrumentation		<i>ARM</i>	

GENERAL COMMENTS

Principal User no longer works at WRAMC.
 Cpt Vaughan, Authorized user, will send a memo stating the transfer of the three sealed sources to Packard.
 Memo received July 24, 1997.
 8/25/97 called Cpt Vaughan and left message concerning a copy of the transfer of the three sealed sources to Packard.
 10/2/97 still need license & receipt from Perkins-Elmer

APPROVED BY

RCC

MAY 24 1990

MAR 15 1990

This Application is given
interim approval until the
next meeting of the RCC
which is scheduled for

June 90

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	NEW AUTHORIZATION	DATE	RENEWAL OF AUTHORIZATION NUMBER	AMENDMENT TO AUTHORIZATION NUMBER
			572	

2. APPLICANT'S NAME (Last, First, MI) (Principal User)

HEATH, James R.

3. APPLICANT'S MAILING ADDRESS (Include Organization)

USAIDR

TELEPHONE NUMBER

(202) 576 3092/2389

Walter Reed Army Medical Center

Washington, DC 20307-5300

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS

~~Baumgartner, John C. COL~~
~~Marden, Leslie J. Dr.~~
~~J. Anshuanti Chaudhary~~
~~Henry, Jacquelyn Dr.~~
 Barsoun, Ibrahim S.
 Kopydlowski, Karen M. 1LT

5. List all TRAINEES

Jacquelyn Henry

6. List all TECHNICIANS

~~Swayze, David R. SGT~~
~~Siboonruang, Nada~~
 Bartana, Jose A. SGT
 Gonzalez, Angel L. SGT
 North, Mark E. SPC 4

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)

Bldg. 91 Rm. 2 WRAMC (radiation work area) Bldg 40 Rm 2020.

Bldg. 40 Rm. 2031 WRAMC (sealed source in Electron Capture Detector)

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)

40 2020
Bldg. 91 Rm. 2 WRAMC

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:

40 2020
Bldg. 91 Rm. 2 WRAMC (one sink)

D. RADIOACTIVE MATERIAL DATA

A. RADIOISOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
✓ 125I	Liquid solutions in RIA kits	1mCi	Quantitative assays for various compounds in biological specimens
✓ 51Cr	Na ₂ ⁵¹ CrO ₄ in aqueous solutions	10mCi	Used in chromium release assay for cytotoxicity in vitro
✓ 226Ra 133Ba	Sealed Source	10mCi 18.8 μCi	Packard Liquid Scintillation internal standard HPO #R-53
129I	Sealed Sources (4 detectors)	120μCi	Packard Multi Prias Gamma Counter internal standards HPO #I-036
✓ 63Ni	Sealed Source	15mCi	Nickel foil source for Perkin-Elmer Electron Capture Detector on a Gas Chromatograph
✓ 3H	Tritiated glutamine and Thymidine leucine in aqueous solution	20mCi	Used as a tracer to detect in vitro synthesis of immunoglobins by human explant tissue.
35S	35S-methionine (aqueous)	20mCi	Used as a tracer to detect in vitro synthesis of proteins stimulated by bone growth factors

CERTIFICATE

(This item must be completed by applicants)

DATE: 6 MAR 90

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	ZMB	
2	X	ZMB	
3	X	ZMB	I-129 ^{OK} 1.2 μ Li?; Ra-226 ^{OK} 10 μ Li; ^{OK} drop C-14
4	X	JRC	tm 2031
5	X/A	JRC	
6	X	AB	
7	X	AB	
8	X	ZMB	
9	NA	ZMB	
10	NA	AB	
11	X	AB	
12			
13			
14			
15			

Index of Numbers and Symbols used above:

- (1) - Forms (WRAMC 1661R, 1662R, 1643) (Completed/typed)
- (2) - Protocol (Required for: 3-H, 32-P, 125-I, 131-I, and all others deemed necessary by - amounts, activity, or use. (Reference NBS Handbook #92)
- (3) - Isotopes (within limits for NRC License/personnel qualifications)
- (4) - OPS Branch room pre-survey
- (5) - OPS Branch room final survey
- (6) - TS Branch instrumentation assignment
- (7) - Training - WRAMC Form 538 (Completed by users annually)
- (8) - Training - WRAMC Form 1643 (Training and Experience Form)
- (9) - Fort Detrick - Auth#'s 541, 618, 619, 620, 621
- (10) - TS Branch Bioassay
- (11) - TS Branch Personnel dosimetry

- (A) - (X) when complete, (O) when pending, and () when pending completed
- (B) - Initial of branch representative when complete or pending issues are resolved
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SGRD-UDR-M

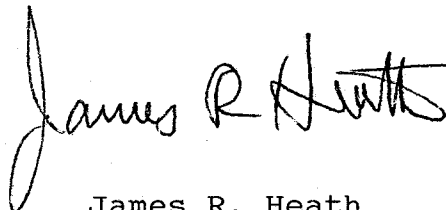
10 March 1992

MEMORANDUM

FOR: Health Physics Officer WRAMC.

SUBJECT: Removal of radiation worker from authorization 572.

Please remove CPT Leslie Marden from my authorization. She is no longer working with radioisotopes, nor does she expect to from now on.



James R. Heath
Microbiology Branch
Authorization 572

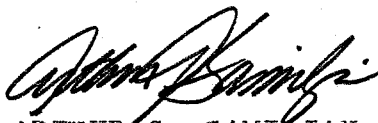
HS HL-HP (385-11h) 1st End

Mr. David W. Burton/ab/427-5107

Health Physics Officer, WRAMC

MAR 20 1992

FOR: USAIDR (Microbiology Branch), ATTN: Mr. James R. Heath
Authorization # 572



ARTHUR G. SAMILJAN
LTC, MS
Health Physics Officer

This Application is given
interim approval until the
next meeting of the RCC
which is scheduled for: JUNE 92

APPROVED BY
RCC

28 MAY 1992

DATE

DATE: 12 MAR 92

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	Row 4	18 MAR	
5	NA	DNB	
6	NA	RG	
7	NA	DNB	
8	NA	DNB	
9	NA	DNB	
10	NA	RG	
11	NA	RG	
12			
13			
14			
15			

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APPROVED BY

RCC

MAR 19 1992

DEC 30 1991
This Application is given
interim approval until the
next meeting of the RCC
which is scheduled for:...

MAR 92

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	<input checked="" type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
			572

2. APPLICANT'S NAME (Last, First, MI) (Principal User) HEATH, James R.	3. APPLICANT'S MAILING ADDRESS (Include Organization) USAIDR Walter Reed Army Medical Center Washington, DC 20307-5300
TELEPHONE NUMBER (202) 576 3092/2389	

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS Add: Kopydlowski, Karen M. 1Lt	5. List all TRAINEES	6. List all TECHNICIANS Add: North, Mark E. SPC4
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7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)
No Change

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)
No Change

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:
No Change

D. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
No change			

CERTIFICATE

(This item must be completed by applicant)

DATE: 12 DEC 91

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	NA	DNB	
5	NA	DNB	
6	NA	DNB	
7	X	DNB	538 for North, called 13 Dec
8	X	DNB	
9	NA	DNB	
10	NA	DNB	
11	NA	DNB	
12			
13			
14			
15			Kopydlowski 26 Nov 91 <u>Aug</u> 23 DEC 1991 North

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APPROVED BY

DEC 19 1991

OCT 15 1991

This Application is given interim approval until the next meeting of the RCC which is scheduled for NOV 91

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	<input checked="" type="checkbox"/> NEW AUTHORIZATION DATE	<input type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	<input checked="" type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
			572

2. APPLICANT'S NAME (Last, First, MI) (Principal User)

HEATH, James R.

TELEPHONE NUMBER

(202) 576 3092/2389

3. APPLICANT'S MAILING ADDRESS (Include Organization)

USAIDR

Walter Reed Army Medical Center
Washington, DC 20307-5300

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS

Remove:

Baumgartner, John C. COL
Chaudhari, Anshumali PhD
Jacquelyn Henry PhD

Add:

Ibrahim S. Barsoum

5. List all TRAINEES

6. List all TECHNICIANS

Remove:

Swayze, David R. SGT
Siboonruand, Nada

Add:

Jose A. Barrara SGT
Angel L. Gonzalez SGT

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)

Remove: Bldg. 91 Rm. 2 WRAMC (radiation work area)

Add: Bldg. 40 Rm. 2020 WRAMC (radiation work area)

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)

Remove: Bldg. 91 Rm. 2 WRAMC

Add: Bldg. 40 Rm. 2020 WRAMC

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:

Remove: Bldg. 91 Rm. 2 WRAMC (one sink) **Add:** Bldg. 40 Rm. 2020 (one sink)

D. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
REMOVE:			
⁵¹ Cr	Na ₂ ⁵¹ CrO ₄ in aqueous solutions	10mCi	Used in chromium release assay for cytotoxicity in vitro
²²⁶ Ra	Sealed Source	10mCi	Packard Liquid Scintillation internal standard HPO #R-53
³ H	Tritiated Thymidine (aqueous solution)	20mCi	Used as a tracer to detect in vitro synthesis of immunoglobins by explant tissue.
¹⁴ C	¹⁴ C labeled PGE ₂ (aqueous solution)	5mCi	Used as a % recovery tracer during purification of PGE ₂ from biological samples.
ADD:			
³ H	Tritiated Thymidine (aqueous solution)	20mCi	Used in a lymphocyte proliferation assay to detect delayed type hypersensitivity in vitro
¹³³ Ba	Sealed Source	18.8μCi	Packard Liquid Scintillation counter internal standard

CERTIFICATE

(This item must be completed by applicant)

I certify that this application is prepared in conformity with WRAMC Regulations and that all information contained herein is true and correct.



DEPARTMENT OF THE ARMY
UNITED STATES ARMY INSTITUTE OF DENTAL RESEARCH
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, D.C. 20307-5300

IN REPLY REFER TO:

SGRD-UDR-M

21 August 1991

MEMORANDUM

FOR: Mr. Burton, Health Physics Office, WRAMC

SUBJECT: Movement of Authorization 572 radiation work area.

In response to changing space needs and research requirements within USAIDR it has become necessary for me to move Authorization 572 radiation work area from Lab 2 in building 91 to room 2020 in building 40. To accomplish this move I need the following services from the Health Physics office:

1. Final survey and decertification of radiation work area in Lab 2 building 91 including radiation waste sink.
2. Certification and posting of appropriate warning signs in room 2020 building 40 including one radiation waste sink.

In preparation for this move I have brought my isotope inventory to zero and have turned in all radioactive waste from Lab 2 building 91.

In a related matter, I decided to upgrade my liquid scintillation counter and purchased a new Packard 2500 TR which I had delivered and setup in room 2020 in building 40. As a result I am turning in my present counter located in building 91. It is a Packard 460C and has the following options: Three channels, automatic chemiluminescence detection and subtraction, DPM option and refrigeration. This instrument is in perfect condition and has been maintained under a factory service contract since it was purchased. If you know anyone in the WRAMC community who could use this instrument it is available. In preparation for the move I have had a factory service engineer prepare it for transport by removing the internal standard, lead shielding and photomultiplier tubes.

James R. Heath
Microbiology Branch
USAIDR
Authorization 572

DATE: 22 AUG 91

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	JMB	
2	X	JMB	
3	X	JMB	C-14 previously dropped
4	X	RSB	Add 2020 with sink
5	X	RSB	delete room 2 bldg 91 and sink
6	NA	RG	
7	X	JMB	called 3 Sept, 30 Sept
8	X	JMB	
9	NA	JMB	
10	NA	RG	
11	X	RG	
12			
13			
14			
15			Barsonum N/R IPRP (sup) 03 OCT 1991

GONZALEZ 8 MAY 91
BARBERA 5 MAY 91

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APR 06 1990

MEMORANDUM THRU USAIDR, ATTN: Mr. Heath, WRAIR
FOR USAIDR, ATTN: USAIDR, ATTN: Dr. Chaudhari, Ft. Meade
SUBJECT: Authorization 572/690

Dr. Jacquelyn Henry upgraded to co-worker status based on Training and Experience form submitted 29Mar90.

Peter H. Myers
PETER H. MYERS
LTC, MS

Health Physics Officer

This Application is given
interim approval until the
next meeting of the RCC
which is scheduled for: *June 90*

APPROVED BY
RCC

MAY 24 1990

DATE

DATE: 2 APR 90

Authorization Review Process
Branch Input

Auth # 690/572

	A	B	COMMENTS
1	X	DNB	down graded to trainee on original
2	NA	DNB	application because she was on leave
3	NA	DNB & T + E	had not been completed
4	NA	OKC	
5	NA	OKC	
6	NA	AA	
7	NA	DNB	
8	X	DNB	
9	NA	DNB	
10	NA	AA	
11	X	AA	
12			
13			
14			
15			

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- (11) - TS Branch Personnel dosimetry

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IN REPLY REFER TO:
SGRD-

DEPARTMENT OF THE ARMY
UNITED STATES ARMY INSTITUTE OF DENTAL RESEARCH
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, D.C. 20307-5300

SGRD-UDR-S (340-d)

2 MAR 1990

MEMORANDUM THRU COL Jeffrey Hollinger, DC; Ph.D.
Chief, Physiology Branch, USAIDR

FOR LTC Peter H. Myers, MS, Health Physics Officer
WRAMC, Washington, D.C. 20307

SUBJECT: Authorization to Use Radioactive Materials

1. Request is made to add ^3H and ^{125}I to my authorization number 690. I plan to use a maximum of 20 mCi of tritium/year and 10 mCi of ^{125}I /year. I am submitting two 20ml limit completed Disposition Forms 2496 for the use of tritium compounds, and I will submit another one later on for the use of ^{125}I compound(s). #572
2. Request is made to authorize Ms. Nada Siboonruang, an undergraduate student, for using various radioisotopes while working as a technician on my authorization # 690. #572
3. Please contact me at 576-3462, if additional information is needed.

Anshumali Chaudhary

ANSHUMALI CHAUDHARI, PH.D.

Protocols signed by James Heath 572

Encls: 2

cc: Dr. J. Setterstrom, Deputy

—HSHL-H-HP

MAY 02 1990

MEMORANDUM FOR USAIDR, ATTN: Mr. James Heath, WRAIR

SUBJECT: Authorization 572

Peter H. Myers

PETER H. MYERS
LTC, MS

C, Health Physics Office

This Application is given
interim approval until the
next meeting of the RCC
which is scheduled for: JUNE 90

APPROVED BY
RCC

MAY 24 1990

DATE

DATE: 7 MAR 90

Authorization Review Process
Branch Input

Auth # 690/572

	A	B	COMMENTS
1	X	ZMB	Get Mr. Heath to counter sign
2	X	ZMB	
3	X	ZMB	delete I-125 per phon/conv. 8 Mar 90 ZMB
4	NA	AKC	
5	NA	AKC	
6	NA	AKC	
7	X	ZMB	Call for training cards for 690 & 572 delivered forms 3/22 called 11 Apr Chas D of 3)
8	NA	ZMB	T & E from 690
9	NA	ZMB	
10	NA	AKC	
11	NA	AKC	
12			
13			
14			
15			

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1. APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input checked="" type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER 572	<input type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
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2. APPLICANT'S NAME (Last, First, MI) (Principal User) HEATH, James R.	3. APPLICANT'S MAILING ADDRESS (Include Organization) USAIDK WRAMC Washington DC 20307-5300
TELEPHONE NUMBER (202) 576-3092/2389	This Application is given interim approval until the next meeting of the RCC which is scheduled for: MAY 1987

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS CPT John E. Van Hamont CPT Stephen A. Martin Dr. Leslie J. Marden Baumgarthner, John Col.	5. List all TRAINEES LTC Paul R. Purnett	6. List all TECHNICIANS SGT Willy C. Cornett SGT Clinton V. Shirley SGT James W. Mizgala GS-7 Ruth A. Yaskovich SGT Felix Lopez SGT David R. Swayze
--	---	---

APPROVED BY
RCC
09 JUN 1987
DATE

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms) Bldg. 91 Rm. 2, Main Section, WRAMC
8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms) Bldg. 91 Rm. 2, Main Section, WRAMC
9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM: Bldg. 91 Rm. 2, Main Section, WRAMC (one sink)

D. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
^{14}C	^{14}C labeled PGE_2 (aqueous)	5mCi	Used as a tracer (%recovery PGE_2) during purification of PGE_2 from biological samples.
^{125}I	Liquid solutions in RIA kits	1mCi	Quantative assays for various compounds in biological specimens for which the kits were designed.
^{51}Cr	$\text{Na}_2^{51}\text{CrO}_4$ in aqueous solution	10mCi	For use in Chromium release experiments to determine the cytotoxicity of various compounds <u>in vitro</u> .
^3H	Tritiated thymadine (aqueous)	20mCi	<u>In vivo</u> study to measure increased cell division around implants in rats.
^{26}Ra	Sealed source	10mCi	Packard liquid scintillation counter external standard, HPO # R-53.

CERTIFICATE

(This item must be completed by applicant)

DATE: 8 Apr 87

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	DNB	
2	X	DNB	
3	X	DNB	
4	X	HL	
5	X	HL	
6	X	DH	
7	X	DH	
8	X	DNB	
9	NA	DNB	
10	X	DH	
11	X	DH	
12			
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APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	<input checked="" type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
			572
2. APPLICANT'S NAME (Last, First, MI) (Principal User) Heath, James R. TELEPHONE NUMBER 576-3092 2389		3. APPLICANT'S MAILING ADDRESS (Include Organization) USAIDR WRAMC Washington DC 20307-5300	

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS ADD COL John C Baumgartner	5. List all TRAINEES NO CHANGES	6. List all TECHNICIANS REMOVE: SGT James W. Mizgala
---	------------------------------------	--

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)
NO CHANGE

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)
NO CHANGE

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:
NO CHANGE

D. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
NO CHANGES			

APPROVED BY
RCC
NOV 22 1988

CERTIFICATE

DATE

(This item must be completed by applicant)

DATE: 7 Oct 88

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	ZMB	
2	X	ZMB	
3	NA	ZMB	
4	NA	AS	
5	NA	AS	
6	NA	In	
7	X	AD	
8	X	ZMB	
9	NA	ZMB	
10	NA	In	
11	NA	In	
12			
13			
14			
15			

Index of Numbers and Symbols used above:

- (1) - Forms (WRANC 1661R, 1662R, 1643) (Completed/typed)
- (2) - Protocol (Required for: 3-H, 32-P, 125-I, 131-I, and all others deemed necessary by - amounts, activity, or use. (Reference NBS Handbook #92)
- (3) - Isotopes (within limits for NRC License/personnel qualifications)
- (4) - OPS Branch room pre-survey
- (5) - OPS Branch room final survey
- (6) - TS Branch instrumentation assignment
- (7) - Training - WRANC Form 538 (Completed by users annually)
- (8) - Training - WRANC Form 1643 (Training and Experience Form)
- (9) - Fort Detrick - Auth's 541, 618, 619, 620, 621
- (10) - TS Branch Bioassay
- (11) - TS Branch Personnel dosimetry

- (A) - (X) when complete, (O) when pending, and () when pending completed
- (B) - Initial of branch representative when complete or pending issues are resolved
- (C) - Comments

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	<input checked="" type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
---------------------	--	--	---

2. APPLICANT'S NAME (Last, First, MI) (Principal User)	3. APPLICANT'S MAILING ADDRESS (Include Organization)
HEATH, James R.	USAIDR WRAMC Washington DC 20307-5300
TELEPHONE NUMBER 576-3092 2389	

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS	5. List all TRAINEES	6. List all TECHNICIANS
REMOVE: CPT John E. Van Hamont ADD: Dr. Leslie J. Marden (1643 attached)	REMOVE: LTC Paul R. Burnett	REMOVE: SGT Clinton V. Shirley GS-7 Ruth A Yaskovich ADD: SGT Felix Lopez SGT David R. Swayze

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)

NO CHANGE

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)

NO CHANGE

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:

NO CHAGE

10. RADIOACTIVE MATERIAL DATA

APPROVED BY
RCC
16 NOV 1987

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE	DATE
NO CHANGES				

16 NOV 1987

This Application is given interim approval until the next meeting of the RCC which is scheduled for: 16 NOV 1987

CERTIFICATE

DATE: 10 Nov 87

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	JMB	
2	NA	JMB	
3	NA	JMB	
4	NA	Gr	
5	NA	Gr	
6	NA	Gr	
7	X	Gr	
8	X	Gr	
9	NA	JMB	
10	X	Gr	
11	X	Gr	
12			
13			
14			
15			

Index of Numbers and Symbols used above:

- (1) - Forms (WRAMC 1661R, 1662R, 1643) (Completed/typed)
- (2) - Protocol (Required for: 3-H, 32-P, 125-I, 131-I, and all others deemed necessary by - amounts, activity, or use. (Reference NBS Handbook #92)
- (3) - Isotopes (within limits for NRC License/personnel qualifications)
- (4) - OPS Branch room pre-survey
- (5) - OPS Branch room final survey
- (6) - TS Branch instrumentation assignment
- (7) - Training - WRAMC Form 538 (Completed by users annually)
- (8) - Training - WRAMC Form 1643 (Training and Experience Form)
- (9) - Fort Detrick - Auth#'s 541, 618, 619, 620, 621
- (10) - TS Branch Bioassay
- (11) - TS Branch Personnel dosimetry

- (A) - (X) when complete, (0) when pending, and () when pending completed
- (B) - Initial of branch representative when complete or pending issues are resolved
- (C) - Comments

HSHL-HP

14 APR 1989!

MEMORANDUM FOR USAIDR, ATTN: Mr. Heath, WRAIR

SUBJECT: Authorization 572

Gerald M. Connock

GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

APPROVED BY
RCC

MAY 23 1989

DATE

This Application is given
interim approval until the
next meeting of the RCC, MAY 1989!
which is scheduled for:.....

WRAMC
Audit of Radioactive Material
(In accordance with AR 40-37 & 40-61)

Inspector: Chiquita Collins Date: 7 APR 89 Auth# 572

1. DA form 3862 [NO] (YES)
2. Within limits [NO] (YES)
3. Inventory Control Officer: Mr. James Heath
Room: Bldg 91
4. WRAMC Regulation 40-19 [NO] (YES)
5. WRAMC Authorization on hand [NO] (YES)
6. General Provisions - Terms & Conditions [NO] (YES)
7. LSC - Source No. & Location: 226 Ra-053 Packard
8. WRAMC form 538 - current [NO] (YES)
9. Sink log [NO] (YES)
10. Signs & Labels: OK
11. Personnel [Additions] [Deletions]
Delete: SGT W. Cornett, CPT Stephen Martin
12. General Comments: _____

Principal User: James P. Heath Authorized Representative: _____

Signature

Date

DATE: 7 APR 89

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	NA	AA	
5	NA	AA	
6	NA	Rm	
7	X	Rm	
8	NA	DNB	
9	NA	DNB	
10	NA	Rm	
11	X	Rm	
12			
13			
14			
15			

Index of Numbers and Symbols used above:

- (1) - Forms (WRAMC 1661R, 1662R, 1643) (Completed/typed)
- (2) - Protocol (Required for: 3-H, 32-P, 125-I, 131-I, and all others deemed necessary by - amounts, activity, or use. (Reference NBS Handbook #92)
- (3) - Isotopes (within limits for NRC License/personnel qualifications)
- (4) - OPS Branch room pre-survey
- (5) - OPS Branch room final survey
- (6) - TS Branch instrumentation assignment
- (7) - Training - WRAMC Form 538 (Completed by users annually)
- (8) - Training - WRAMC Form 1643 (Training and Experience Form)
- (9) - Fort Detrick - Auth#'s 541, 518, 519, 520, 521
- (10) - TS Branch Bioassay
- (11) - TS Branch Personnel dosimetry

- (A) - (X) when complete, (O) when pending, and () when pending completed
- (B) - Initial of branch representative when complete or pending issues are resolved
- (C) - Comments

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL HSHL-HP	SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # _____
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TO Health Physics Officer WRAMC	FROM DR. ANSHUMALI CHAUDHARI	DATE 01 MAR 90	CMT 1
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a. <u>Principal User</u> ANSHUMALI CHAUDHARI	Telephone Number 576-3462	Authorization Number 690 572
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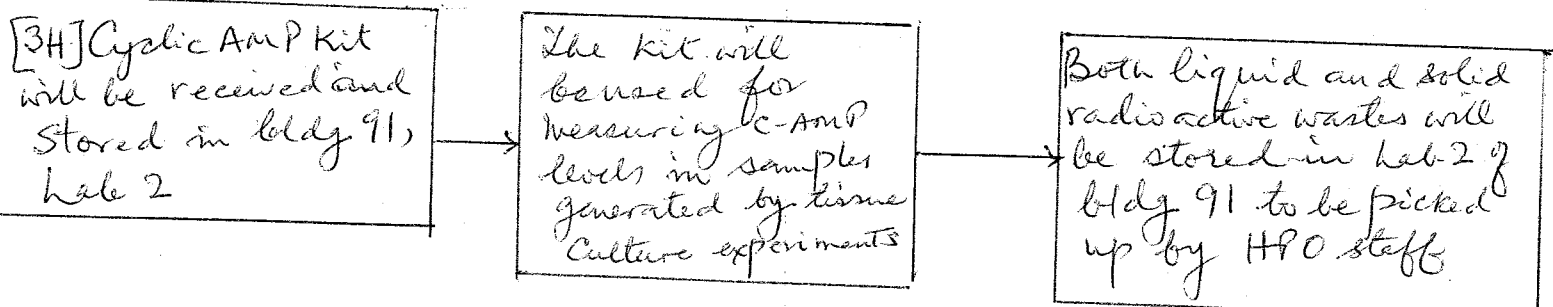
b. <u>Investigator & Auth#</u> (If different than (a.))	c. <u>Trainee & Auth#</u> 690 Dr. Jacquelyn Henry	d. <u>Technician & Auth#</u> Ms. Nada Liboonruang
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e. <u>Radioisotope</u> 3H	Physical/Chemical form [3H] Cyclic AMP	Maximum Quantity to be used per Experiment in millicuries (mCi) 0.05 mCi
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f. <u>Title of Project:</u> In Vitro Evaluation of Osteogenic and Growth factors on Bone cell Growth	Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi) 5 mCi
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g. <u>Beginning Date:</u> MARCH 1990	h. <u>Ending Date:</u> SEPTEMBER 1991	i. <u>Repetitive Study</u> <input checked="" type="radio"/> Yes <input type="radio"/> No
---	--	---

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

-
- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical)
that would effect Health Physics personnel during there routine inspections of these areas.

☒ No

☐ Yes(Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James R. Heath 8 March 90
Ashtumeli Chaudhary 2 MAR 1990
Signature Date

DISPOSITION FORM

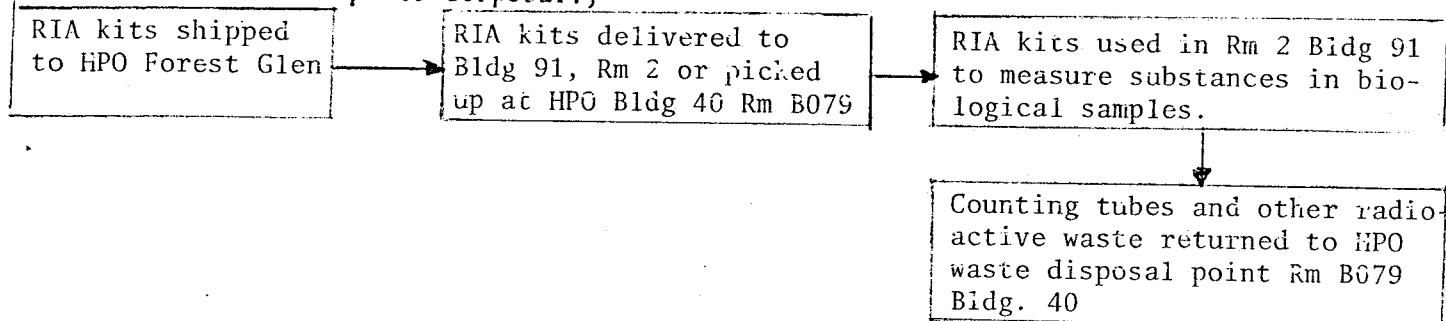
For use of this form, see AR 340-15 the proponent agency is 1A(1)

REFERENCE OR OFFICE SYMBOL HSIL-HP	SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # 572	
TO Health Physics Officer WRAMC	FROM James R. Heath USAIDR	DATE 27 March 1987 CMT 1

a. <u>Principal User</u> James R. Heath	<u>Telephone Number</u> 576-3092/2389	<u>Authorization Number</u> 572
b. <u>Investigator & Auth#</u> (If different than (a.)) Coworker: CPT John E. Van Hamont Auth. 572	c. <u>Trainee & Auth#</u>	d. <u>Technician & Auth#</u> CPT Stephen A. Martin 572 SGT Willy C. Cornett 572 SGT Clinton V. Shirley 572 SGT James W. Mizgala 572
e. <u>Radioisotope</u> ^{125}I	<u>Physical/Chemical form</u> ^{125}I labelled antibodies in Radioimmunoassay Kits.	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> Less than 0.04 mCi/kit
f. <u>Title of Project:</u> This isotope is used on several projects including Measurement of Hepatitis-B antigen and Antibody, Measurement of c-AMP and c-GMP in Saliva, Measurement of PGE_2 in Biological samples!		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> Less than 1 mCi on hand at any time.
g. <u>Beginning Date:</u> 1890	h. <u>Ending Date:</u> ongoing project	i. <u>Repetitive Study</u> <input checked="" type="radio"/> Yes <input type="radio"/> No

j. Life Cycle of Radioisotope Utilized for Research Procedure:

(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

1. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
NO ANIMALS USED		

m. Disposition of Animals

- ☒ Not Applicable
- ☐ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other (Specify)

n. Isotope Utilization Locations

	Location 1	Location 2	Location 3	Location 4
Building #	91			
Room #	Lab 2			
Max. Amt (mCi)	1mCi			

o. Isotope Storage Location

Building # 91 Room # Lab 2 Max. Amt. (mCi) 1mCi

p. Isotope Waste Storage Locations

- (1) Biological: Bldg# 91 Room# Lab 2
- (2) All other: Bldg# Room#

- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.
- ☒ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical) that would effect Health Physics personnel during there routine inspections of these areas.

☒

No

☐

Yes (Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James B. Neath
Signature

24 March 87
Date

DISPOSITION FORM

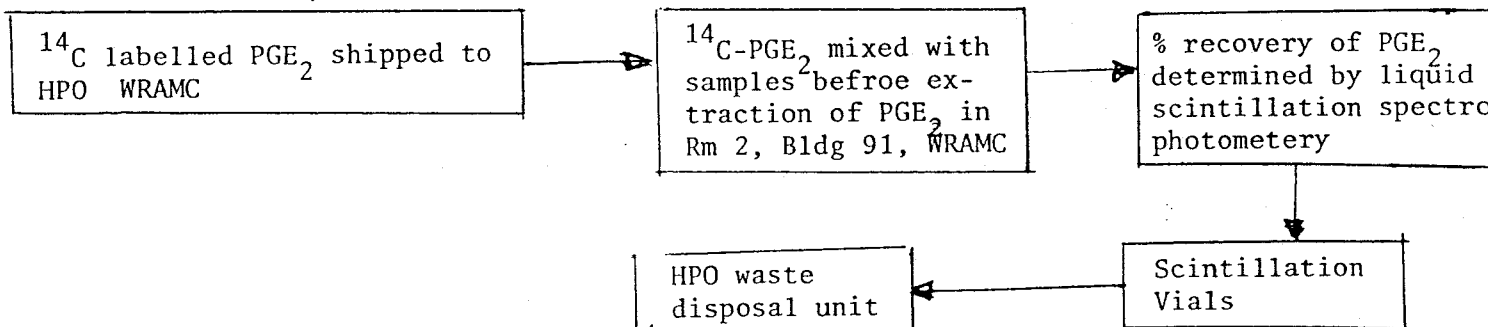
For use of this form, see AR 340-18 (the procuring agency is TAGC)

REFERENCE OR OFFICE SYMBOL HSHL-HP	SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # 572
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TO Health Physics Officer WRAMC	FROM J. R. Heath III	DATE 26 March 84	CMT 1
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a. <u>Principal User</u> HEATH, James R., III	b. <u>Telephone Number</u> 576-3092	c. <u>Authorization Number</u> 572
b. <u>Investigator & Auth#</u> (if different than (a.))	c. <u>Trainee & Auth#</u> NONE	d. <u>Technician & Auth#</u> SP/5-STERLING, A Laverne <i>AMB</i> 572
e. <u>Radioisotope</u> ^{14}C	f. <u>Physical/Chemical form</u> ^{14}C labeled PGE_2	g. <u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> Aprox 0.001 mCi
h. <u>Title of Project:</u> Identification of Leukocyte Populations Responsible for Production of OAF & Their role in Bone Resorption. (PGE_2 levels are also measured in several other projects dealing with bone physiology)		i. <u>Maximum Quantity to be used for Entire Project (if known) in millicuries</u> Aprox 5 mCi
j. <u>Beginning Date:</u> 1980	k. <u>Ending Date:</u> Ongoing project	l. <u>Repetitive Study</u> Yes <input checked="" type="checkbox"/> No

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

l. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
NO ANIMALS USED		

m. Disposition of Animals

- ☒ Not Applicable
- ☐ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other(Specify)

n. <u>Isotope Utilization Locations</u>				
	Location 1	Location 2	Location 3	Location 4
Building #	91			
Room #	Lab 2			
Max. Amt (mCi)	5mCi			

o. Isotope Storage Location

Building # 91 Room # Lab 2 Max. Amt.(mCi) 5mCi

p. Isotope Waste Storage Locations

(1) Biological: Bldg# 91 Room# Lab 2

(2) All other: Bldg# _____ Room# _____

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMFF) - loading dock)(1330 to 1430) Wednesday of each week.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

X All radioactive waste will be picked up from Building 91 by Health Physics. Arrangements for pick up to be made in advance with Health Physics waste disposal personnel.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazard associated with experiments; (Biological, Explosive, Toxic Substances, High Intensity Optical sources, Microwaves, or Electrical) that would effect Health Physics personnel during there routine inspections of these areas.



No



Yes (Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James R. Neath
Signature

27 March 87
Date

APPLICATION FORM

For use of this form, see AR 340-15 the proponent agency is (AIC)

REFERENCE OR OFFICE SYMBOL

HSIL-HP

SUBJECT

Research Protocol for Isotope Named in the
Application for Use of Radioactive Material
Authorization # 572

TO Health Physics Officer
WRAMC

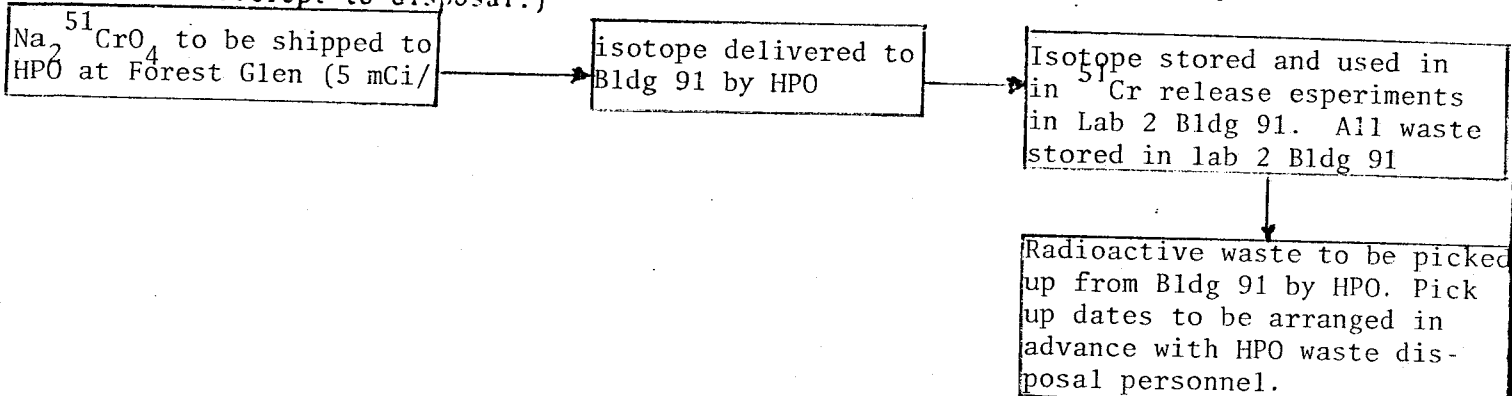
FROM James R. Heath
USAIDR

DATE 27 March 1987

CMT 1

<p>a. <u>Principal User</u></p> <p>James R. Heath</p>	<p><u>Telephone Number</u></p> <p>576-3092/2389</p>	<p><u>Authorization Number</u></p> <p>572</p>
<p>b. <u>Investigator & Auth#</u> (If different than (a.))</p> <p>Coworker CPT John E van Hamont</p>	<p>c. <u>Trainee & Auth#</u></p>	<p>d. <u>Technician & Auth#</u></p> <p>CPT Stephen A Martin 572 SGT Willy C. Cornett 572 SGT James W. Mizgala 572 SGT Clinton V. Shirley 572</p>
<p>e. <u>Radioisotope</u></p> <p>^{51}Cr</p>	<p><u>Physical/Chemical form</u></p> <p>$\text{Na}_2^{51}\text{CrO}_4$ aqueous solution</p>	<p><u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u></p> <p>1 mCi</p>
<p>f. <u>Title of Project:</u></p> <p>Chromium 51 release assay for the measurement of cytotoxicity.</p>		<p><u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u></p> <p>Unknown</p>
<p>g. <u>Beginning Date:</u></p> <p>June 85</p>	<p>h. <u>Ending Date:</u></p> <p>Unknown</p>	<p>i. <u>Repetitive Study</u></p> <p style="text-align: center;">Yes No</p>

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc..) isotope travel
from receipt to disposal.)



REFERENCE OR OFFICE SYMBOL

HSIL-HP

SUBJECT

Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # 572

TO Health Physics Officer
WRANC

FROM James R. Heath

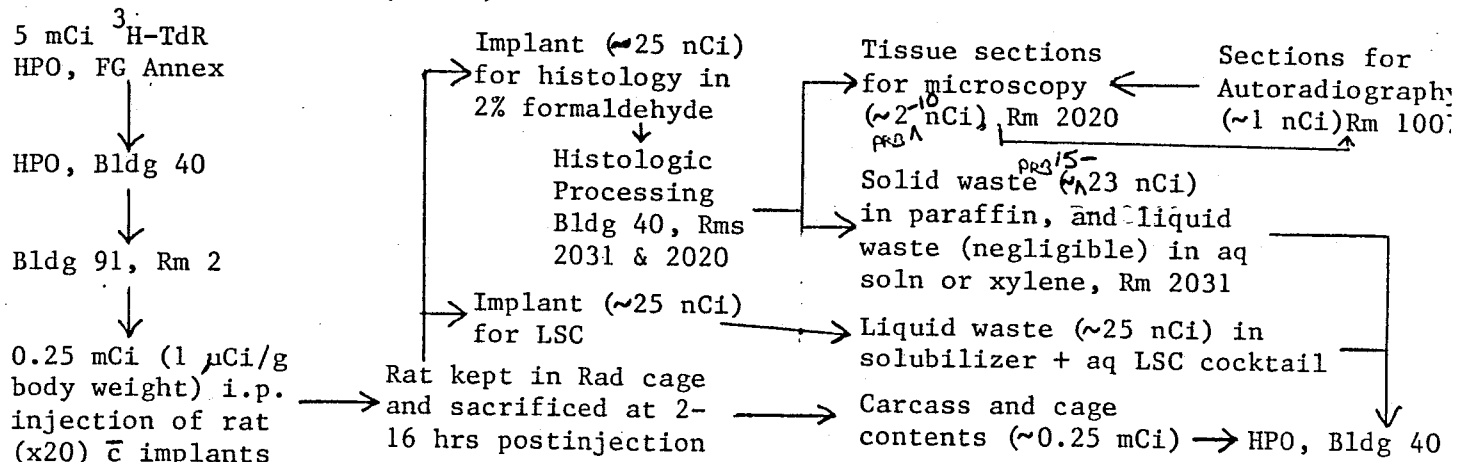
DATE 19 NOV 86

CMT 1

a. <u>Principal User</u> James R. Heath	<u>Telephone Number</u> 576-3092/2389	<u>Authorization Number</u> 572
b. <u>Investigator & Auth#</u> (If different than (a.))	c. <u>Trainee & Auth#</u> LTC Paul R. Burnett	d. <u>Technician & Auth#</u> SGT James W. Mizgala Ruth A. Yaskovich
e. <u>Radioisotope</u> ^3H	<u>Physical/Chemical form</u> methyl- ^3H -Thymidine 20 Ci/mmol	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> 5 mCi
f. <u>Title of Project:</u> Histochemical Analysis of Osteoinduction by Bone Matrix Derivatives, Autoradiography addendum		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> unknown
g. <u>Beginning Date:</u> 8 DEC 86	h. <u>Ending Date:</u> Unknown	i. <u>Repetitive Study</u> <input checked="" type="radio"/> Yes <input type="radio"/> No

j. Life Cycle of Radioisotope Utilized for Research Procedure:

(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

1. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
Rat	91	2

m. Disposition of Animals

- ☐ Not Applicable
- ☒ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other (Specify)

n. <u>Isotope Utilization Locations</u>				
	Location 1	Location 2	Location 3	Location 4
Building #	91	40	40	40
Room #	2	2031	2020	1007
Max. Amt (mCi)	20 mCi	0.5 μ Ci	0.2 μ Ci	15 nCi

o. Isotope Storage Location

Building # 91 Room # 2 Max. Amt. (mCi) 20

p. Isotope Waste Storage Locations

- (1) Biological: Bldg# 91 Room# 2
- (2) All other: Bldg# 40 Room# 2031

- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.
- ☒ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazard associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical)
that would effect Health Physics personnel during there routine inspections of these areas.

☒ No

☐ Yes (Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James R. Keith 27 March 87
Signature Date

DISPOSITION FORM

For use of this form, see AR 340 15, the proponent agency is 1A(1)

REFERENCE OR OFFICE SYMBOL

HSHL-HP

SUBJECT

Research Protocol for Isotope Named in the
Application for Use of Radioactive Material
Authorization # 572

TO Health Physics Officer
WRANC

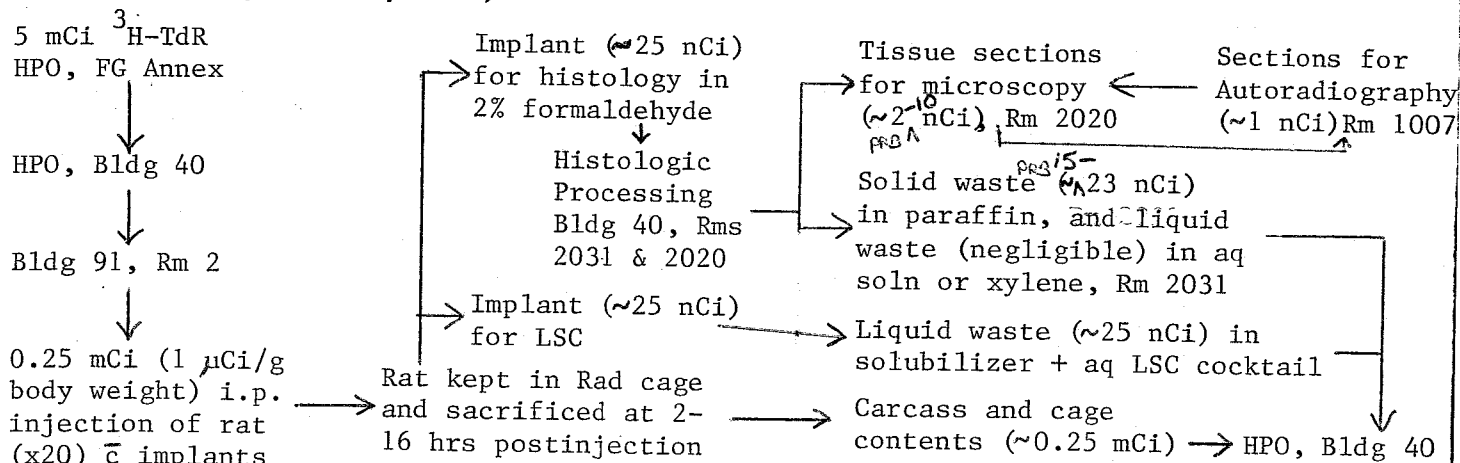
FROM James R. Heath

DATE 19 NOV 86

CMT 1

a. <u>Principal User</u> James R. Heath	<u>Telephone Number</u> 576-3092/2389	<u>Authorization Number</u> 572
b. <u>Investigator & Auth#</u> (If different than (a.))	c. <u>Trainee & Auth#</u> LTC Paul R. Burnett	d. <u>Technician & Auth#</u> SGT James W. Mizgala Ruth A. Yaskovich
e. <u>Radioisotope</u> ^3H	<u>Physical/Chemical form</u> methyl- ^3H -Thymidine 20 Ci/mmol	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> 5 mCi
f. <u>Title of Project:</u> Histochemical Analysis of Osteoinduction by Bone Matrix Derivatives, Autoradiography addendum		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> unknown
g. <u>Beginning Date:</u> 8 DEC 86	h. <u>Ending Date:</u> Unknown	i. <u>Repetitive Study</u> <div style="text-align: center;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </div>

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel
from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

1. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
Rat	91	2

m. Disposition of Animals

- ☐ Not Applicable
- ☒ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other (Specify)

n. Isotope Utilization Locations

	Location 1	Location 2	Location 3	Location 4
Building #	91	40	40	40
Room #	2	2031	2020	1007
Max. Amt (mCi)	20 mCi	0.5 μ Ci	0.2 μ Ci	15 nCi

o. Isotope Storage Location

Building # 91 Room # 2 Max. Amt. (mCi) 20

p. Isotope Waste Storage Locations

- (1) Biological: Bldg# 91 Room# 2
- (2) All others: Bldg# 40 Room# 2031

- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRANC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.
- ☒ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry NA

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical) that would effect Health Physics personnel during there routine inspections of these areas.

☒ No

☐ Yes (Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James P. Smith
Signature

19 Nov. 1986
Date

DISPOSITION FORM

For use of this form, see AR 340-15, the component agency's TAG(1)

REFERENCE OR OFFICE SYMBOL

HSHL-HP

SUBJECT

Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # 572

TO Health Physics Officer
WRANIC

FROM James R. Heath
USAIDR

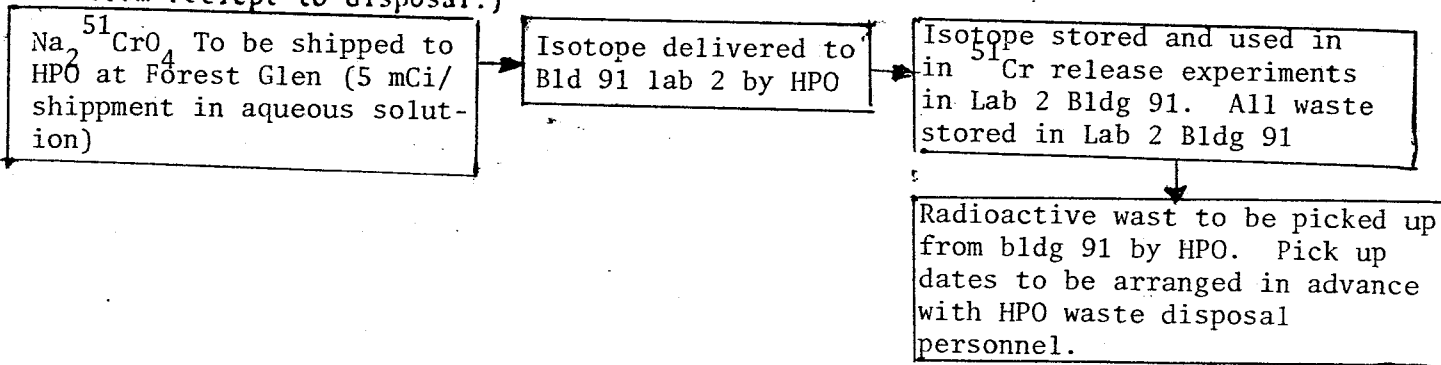
DATE 7 May 85

CMT 1

a. <u>Principal User</u> James R. Heath	<u>Telephone Number</u> 576 3092	<u>Authorization Number</u> 572
b. <u>Investigator & Auth#</u> (If different than (a.)) Coworkers: COL Jack W. Vincent CPT John E. van Hamont	c. <u>Trainee & Auth#</u>	d. <u>Technician & Auth#</u> SP/5 Willy C. Cornett SP/4 Clinton V. Shirley
e. <u>Radioisotope</u> ^{51}Cr	<u>Physical/Chemical form</u> $\text{Na}_2^{51}\text{CrO}_4$ in aqueous Solution	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> 1 mCi
f. <u>Title of Project:</u> DNA Probe for the Leukotoxin Produced by <u>Actinobacillus actinomycetemcomitans</u> Strain Y-4		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> Unknown
g. <u>Beginning Date:</u> June 85	h. <u>Ending Date:</u> June 87	i. <u>Repetitive Study</u> Yes <input checked="" type="checkbox"/> No

j. Life Cycle of Radioisotope Utilized for Research Procedure:

(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

1. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
- NO ANIMALS USED		

m. Disposition of Animals

- ☒ Not Applicable
- ☐ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other (Specify)

n. <u>Isotope Utilization Locations</u>	Location 1	Location 2	Location 3	Location 4
Building #	91			
Room #	Lab 2			
Max. Amt (mCi)	10 mCi			

o. Isotope Storage Location

Building # 91 Room # Lab 2 Max. Amt. (mCi) 10 mCi

p. Isotope Waste Storage Locations

- (1) Biological: Bldg# 91 Room# Lab 2
- (2) All other: Bldg# 91 Room# Lab 2

- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.
- ☒ All radioactive waste will be picked up from Building 91 by Health Physics. Arrangements for pick up to be made in advance with Health Physics waste disposal personnel

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

-
- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical) that would effect Health Physics personnel during there routine inspections of these areas.




No



Yes(Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

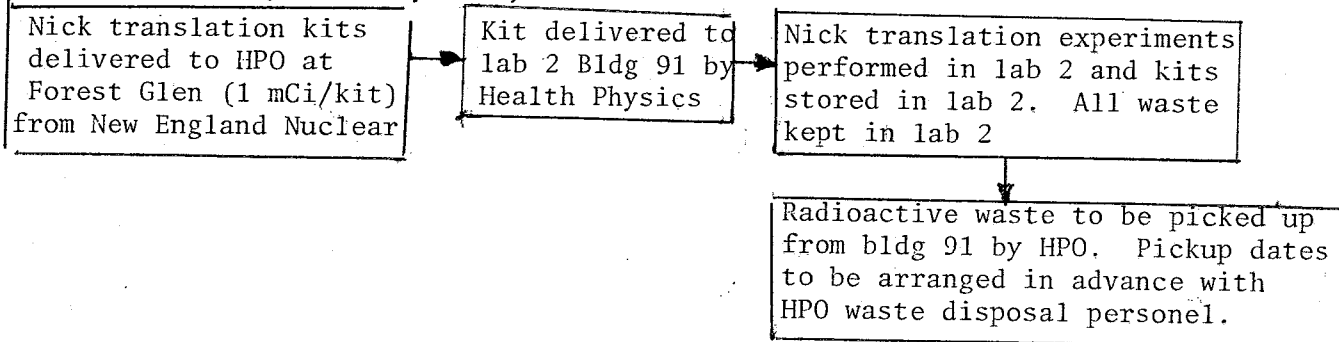

Signature _____ Date _____

DISPOSITION FORM

For use of this form, see AR 340 15, the proponent agency is TAG(1)

REFERENCE OR OFFICE SYMBOL HSHL-HP		SUBJECT Research Protocol for isotope Named in the Application for Use of Radioactive Material Authorization # 572	
TO Health Physics Officer WRAMC		FROM James R. Heath USAIDR	DATE 7 May 85 CMT 1
a. <u>Principal User</u> James R. Heath	<u>Telephone Number</u> 576 3092	<u>Authorization Number</u> 572	
b. <u>Investigator & Auth#</u> (If different than (a.)) Coworkers: COL Jack W Vincent CPT John E van Hamont	c. <u>Trainee & Auth#</u>	d. <u>Technician & Auth#</u> SP/5 Willy C. Cornett SP/4 Clinton V. Shirley	
e. <u>Radioisotope</u> 32P	<u>Physical/Chemical form</u> 32P labeled DNA nucleotides	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> 1 mCi	
f. <u>Title of Project:</u> DNA Probe for the Leukotoxin Produced by <u>Actinobacillus Actinomycetemcomitans</u> Strain Y-4		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> Unknown	
g. <u>Beginning Date:</u> June 85	h. <u>Ending Date:</u> June 87	i. <u>Repetitive Study</u> Yes <input checked="" type="checkbox"/>	

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

l. <u>Laboratory Animal Usage</u>		
Species	Bldg#	Room#
NO ANIMALS REQUIRED		

m. Disposition of Animals

- ☒ Not Applicable
- ☐ Animals will be sacrificed and carcasses will be disposed of as radioactive waste.
- ☐ Other (Specify)

n. <u>Isotope Utilization Locations</u>				
	Location 1	Location 2	Location 3	Location 4
Building # 91	B1	NA	NA	NA
Room #	Lab 2			
Max. Amt (mCi)	5 mCi			

o. Isotope Storage Location

Building # 91 Room # Lab 2 Max. Amt. (mCi) 5 mCi

p. Isotope Waste Storage Locations

- (1) Biological: Bldg# 91 Room# Lab 2
- (2) All other: Bldg# 91 Room# Lab 2

- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

- ☒ All radioactive waste will be picked up from Building 91 by Health Physics. Arrangements for pickup to be made in advance with Health Physics waste disposal personnel.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical) that would effect Health Physics personnel during there routine inspections of these areas.



No



Yes (Please specify)

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James R. Hatt III 7 May 85
Signature Date

DISPOSITION FORM

For use of this form, see AR 340-15, the procuring agency's (TAG's)

REFERENCE OR OFFICE SYMBOL HSHL-HP	SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # 572
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TO Health Physics Officer WRAMC	FROM James R. Heath III	DATE 15 March 84	CMT 1
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a. Principal User HEATH, James R. , III	Telephone Number 576 3092	Authorization Number 572
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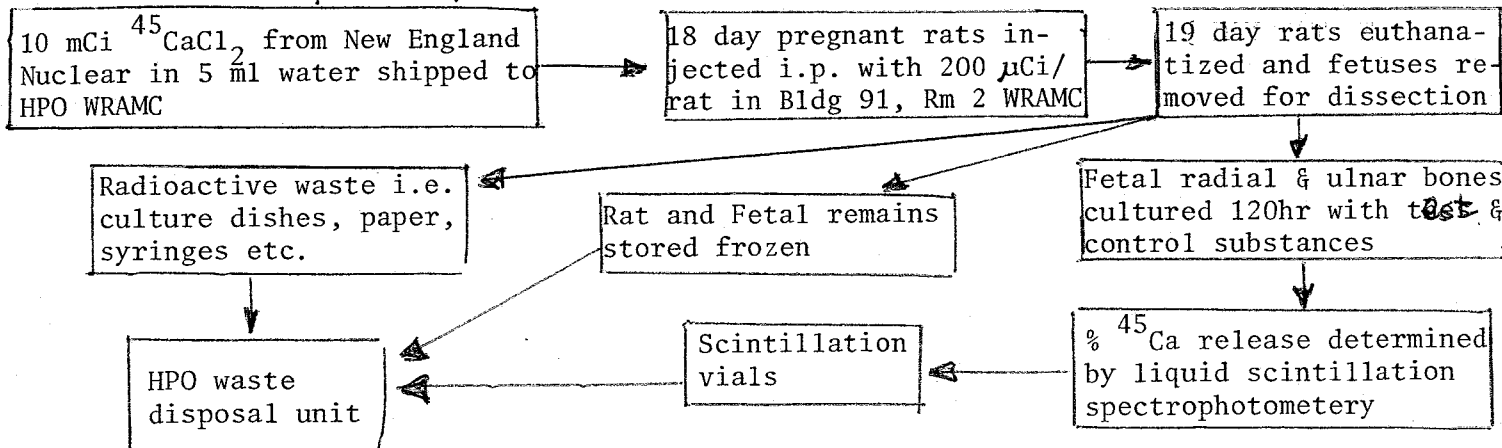
b. Investigator & Auth# (if different than (a.)) NONE	c. Trainee & Auth# NONE	d. Technician & Auth# STERLING, A Laverne SP 5 Auth 572
---	----------------------------	---

e. Radioisotope ^{45}Ca	Physical/Chemical form $^{45}\text{CaCl}_2$ in aqueous solution	Maximum Quantity to be used per Experiment in millicuries (mCi) 0.6 mCi
-------------------------------------	--	--

f. Title of Project: Identification of Leukocyte Populations Responsible for Production of OAF & Their Role in Bone Resorption (Bone Resorption Bioassay)	Maximum Quantity to be used for Entire Project (if known) in millicuries Aprox 30 mCi/year
--	---

g. Beginning Date: Ongoing study (statred in 1974 or 1975)	h. Ending Date: Ongoing research	i. Repetitive Study Yes <input checked="" type="checkbox"/>
--	-------------------------------------	--

j. Life Cycle of Radioisotope Utilized for Research Procedure:
(Use block/flow diagram to show (where, how much, whose, etc.,) isotope travel
from receipt to disposal.)



k. Labelling and Transport of Radioactive Material

All radioactive solutions, tissues, animals and waste will be identified by proper label, in accordance with Health Physics Condition No. 4. Transport of radioactive material between authorized work areas and waste disposal sites will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.

l. Laboratory Animal Usage

Species Rat

Bldg# 91

Room# Lab 2

m. Disposition of Animals

☐

Not Applicable

☒

Animals will be sacrificed and carcasses will be disposed of as radioactive waste.

☐

Other (Specify)

n. Isotope Utilization Locations

	Location 1	Location 2	Location 3	Location 4
Building #	<u>91</u>			
Room #	<u>Lab 2</u>			
Max. Amt (mCi)	<u>15 mCi</u>			

o. Isotope Storage Location

Building # 91

Room # Lab 2

Max. Amt. (mCi) 15 mCi

p. Isotope Waste Storage Locations

(1) Biological: Bldg# 91 Room# Lab 2

(2) All other: Bldg# _____ Room# _____

☐

All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1330 to 1430) Wednesday of each week.

☐

All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Bldg 40 - Room B079) Open Monday, Wednesday, & Friday 1030 to 1130.

☐

All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Forest Glen Section) every Wednesday afternoon.

☒

Picked by Health Physics at Bld 91

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Condition No. 4.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Condition No. 2.

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics Condition No. 1.
Assigned dosimetry monitors will be worn by all participating personnel.

- t. Are there any significant non-radiation personnel hazards associated with experiments; (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwaves, or Electrical)
that would effect Health Physics personnel during there routine inspections of these areas.

☒ No

☒ ~~Yes (Please Specify)~~

The Research Protocol enumerated above and on the previous pages is designed to ensure that occupational radiation exposures and release of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedure.

James R. Heath III 12 May 84
Signature Date

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	NEW AUTHORIZATION	<input checked="" type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	AMENDMENT TO AUTHORIZATION NUMBER
		572	

2. APPLICANT'S NAME (Last, First, MI) (Principal User)	3. APPLICANT'S MAILING ADDRESS (Include Organization)
HEATH, James R. III	Division of Research Sciences
TELEPHONE NUMBER	USAIDR
576-3092/2389	Bldg. 40, WRAMC

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS	5. List all TRAINEES	6. List all TECHNICIANS
NONE	NONE	SP5
<div style="text-align: center;"> <p>APPROVED BY</p> <p>RCC</p> <p>9 MAY 1984</p> <p>DATE</p> </div>	Barnett, Paul R. LTC	STERLING, Laverne A. (name change, formerly Bunch, Laverne A.)
		Mizgala, James W. SGT
		Yaskovich, Ruth A.
		Martin, Steven A. CPT

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)

Bldg 91, Rm. 2, Main Section, WRAMC

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)

Bldg 91, Rm 2, Main Section, WRAMC

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:

one Rm 2 Bldg 91, Main Section, WRAMC

10. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
^3H	Tritium labelled lipo polly-saccharide (liquid)	20mCi	<u>In vivo</u> in rats
^{14}C	Tritiated Thymidine	5mCi	In Vitro culture studies
	Liquid ^{14}C labelled PGE ₂		Used as a tracer (% recovery PGE ₂) during purification of PGE ₂ from bone samples
^{45}Ca	Calcium chloride in aqueous solution.	15mCi	<u>In vivo</u> animal and <u>in vitro</u> culture studies to measure Ca^{++} release and uptake from bones.
^{125}I	RIA kits (cAMP and cGMP)	1mCi	Quantative assays for cAMP and cGMP in animal Salaiva samples.
^{226}Ra	Sealed Source	10uCi	Packard liquid scintillation counter, HPO # R-53
	SEE AUG 85 ADDITIONS		

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:

☐ NEW AUTHORIZATION

☐ RENEWAL OF AUTHORIZATION NUMBER

☒ AMENDMENT TO AUTHORIZATION NUMBER

572

2. APPLICANT'S NAME (Last, First, MI) (Principal User)
HEATH, JAMES R.

TELEPHONE NUMBER
576-3092/2389

3. APPLICANT'S MAILING ADDRESS (Include Organization)

Microbiology Branch

USAIDR

WRAMC, Washington, D.C. 20307-5300

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS

NO CHANGE

5. List all TRAINEES

DELETE:

COL Jack W. Vincent

ADD:

LTC Paul R. Burnett

6. List all TECHNICIANS

ADD:

SGT James W. Mizgala

Ruth A. Yaskovich

CPT Steven A. Martin

APPROVED BY
RCC
11 FEB 1987

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)

NO CHANGE

8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)

NO CHANGE

9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:

NO CHANGE

10. RADIOACTIVE MATERIAL DATA

A. RADIOISOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
DELETE: ^3H	Tritium labelled lipo-polysaccharide (liquid)	20 mCi	In Vitro culture studies
ADD: ^3H	Tritiated thymidine (liquid)	20 mCi	In Vivo study to measure increased cell division around bone implants in rats

CERTIFICATE

(This item must be completed by applicant)

DATE: 28 Nov 86

Authorization Review Process
Branch Input

Auth # 572

	A	B	COMMENTS
1	X	SB	
2	X	SB	
3	X	SB	
4	NA	NA	
5	NA	NA	
6	X	In	
7	X	In	
8	X	In	
9			
10	X	In	
11	X	In	
12			
13			
14			
15			

Index of Numbers and Symbols used above:

- (1) - Forms (WRMC 1661R, 1662R, 1643) (Completed/typed)
- (2) - Protocol (Required for: 3-H, 32-P, 125-I, 131-I, and all others deemed necessary by - amounts, activity, or use. (Reference NBS Handbook #92)
- (3) - Isotopes (within limits for NRC License/personnel qualifications)
- (4) - OPS Branch room pre-survey
- (5) - OPS Branch room final survey
- (6) - TS Branch instrumentation assignment
- (7) - Training - WRMC Form 538 (Completed by users annually)
- (8) - Training - WRMC Form 1643 (Training and Experience Form)
- (9) - Fort Detrick - Auth's 541, 618, 619, 620, 621
- (10) - TS Branch Bioassay
- (11) - TS Branch Personnel dosimetry

- (A) - (X) when complete, (O) when pending, and () when pending completed
- (B) - Initial of branch representative when complete or pending issues are resolved
- (C) - Comments

APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL -- NON-HUMAN USE

1. APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER	<input checked="" type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
			572

2. APPLICANT'S NAME (Last, First, MI) (Principal User) HEATH, James R.	3. APPLICANT'S MAILING ADDRESS (Include Organization) U. S. Army Institute of Dental Research Walter Reed Army Medical Center Washington, D.C. 20307-5300
TELEPHONE NUMBER 202-576 3092 Or 2589	

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

4. List all CO-WORKERS ADD: COL Jack W. Vincent CPT John E. van Hamont	5. List all TRAINEES ADD: COL JACK W. VINCENT - PERFORM 13 MAY 85 <div style="border: 1px solid black; padding: 5px; transform: rotate(-5deg); margin-top: 10px;"> This Application is given interim approval until the next meeting of the RCC which is scheduled for: <u>Aug 85</u> </div>	6. List all TECHNICIANS DELETE: SP/5 STERLING, Laverne ADD: SP/5 Willy C. Cornett and SP/4 Clinton V. Shirley
--	--	---

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms) NO CHANGE
8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms) NO CHANGE
9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM: NO CHANGE

D. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
ADD: ^{32}P	^{32}P labeled DNA nucleotides	5 mCi	To be used in nick translation for a DNA probe protocol
^{51}Cr	$\text{Na}_2^{51}\text{CrO}_4$ in aqueous solution	10mCi	For use in Chromium release experiments to determine cell viability.

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

572

REFERENCE OR OFFICE SYMBOL

SUBJECT

HL-HP

Assistant Principal User

USAIDR

FROM

DATE

MAR 25 1985

CMT 1

ATTN: Mr. Heath

Health Physics Officer

WRAIR

WRAMC

SP6 Lewis/esm/75104

1. Recent incidents have shown the administrative requirement for designation of an Assistant Principal User for each authorization to use radioactive material.
2. The individual designated as Assistant Principal User will function as Principal User during absence of Principal User.
3. Request name of the individual designated as Assistant Principal User be returned to the Health Physics Officer NLT APR 8 1985
4. POC for this action is Mr. Stafford, 427-5104.



WILLIAM E. WOODWARD
LTC, MSC
Health Physics Officer

HSHL-HP

SUBJECT: Assistant Principal User

TO Health Physics Office

FROM

DATE

CMT 2

WRAMC


SP6 Lewis/esm/75104

ATTN: C, RMC Br.

1. The following named individual has been designated as the Assistant Principal User for authorization CAPT John Von Hamond.

2. Prior to my departure from this post I will submit a written request for cancellation of my authorization or submit an amendment designating a new Principal User and Assistant.

572



SOURCE VIAL RECORD

DATE: Jan. 10, 1997

As stated in the errata sheet dated 8 October 96, an amendment to the General Provisions - Radioactive Waste, Condition No. 9. - DISPOSAL OF STOCK SOURCE VIALS, each user must abide to the following when turning in vials:

d. When source vials are turned in to Health Physics, please provide the source HPO identification number (Yellow Tag Number).

e. If there are multiple vials listed under the same identification number, list the vials still in your possession.

f. The inventory log will be adjusted to show the change in the authorization inventory. Health Physics personnel will sign the inventory log if provided at the time of turn-in. In addition, Health Physics personnel will provide a signed receipt for possession of the source vial(s).

RADIOACTIVE WASTE TURN-IN

AUTHORIZATION NUMBER 570

HPO RECEIPT NO.	ISOTOPES	ACTIVITY (mCi)	VOLUME (If known)
47361	C-14	0.225	N/A
46707	H-3	2.865	N/A

Person Turning In the Vial: IBRAHIM S. BARSOUM Ibrahim S. Barso
 PRINT NAME SIGNATURE

Person Receiving In the Vial: Vanessa Cox Vanessa Cox
 PRINT NAME SIGNATURE

CHAMMP Report
Sealed Sources for Internal License 572(Barsoum, Ibrahim) (A205)

JUL 21 1997 11:21:33

Sealed Source Key	Manufacturer	Model Number	Serial Number	Initial Cal Date	Radio- nuclide	Initial Activity	Current Act (mCi)	Current Act (MegaBq)	Custodian
SS133-BA-8	Packard	TRI-CARB 2	UNKNOWN	10/01/1991	Ba-133	1.880E-02 mCi	1.291E-02	4.776E-01	Barsoum, Ibrahim
SS129-I-36	Packard	MULTI-PRIA	B1145	10/01/1987	I-129	1.200E+00 uCi	1.200E-03	4.440E-02	Barsoum, Ibrahim
SS63-NI-52	Perkin-Elmer	6100133	0297	10/30/1990	Ni-63	1.500E+01 mCi	1.432E+01	5.298E+02	Barsoum, Ibrahim

3 Records Processed

Audit 10/8/96

CHAMMP Report

Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim) (A208)

OCT 07 1996 07:59:20

Receipt Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01 mCi	<u>2.25x10⁻¹ mCi</u>	2.250E-01	8.324E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00 mCi	<u>2.865 mCi</u>	2.756E+00	1.020E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim I. BarsoumDate: 10, 8, 96

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

JUN 25 1996 12:24:15

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01 mCi	<u>2.25 x 10⁻¹ mCi</u>	2.250E-01	8.324E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00 mCi	<u>2.865 mCi</u>	2.817E+00	1.042E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim S. Barsoum Date: 6, 27, 96

CHAMMP Report

Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

APR 15 1996 11:49:48

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01	mCi <u>Same</u>	2.250E-01	8.325E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00	mCi <u>Same</u>	2.825E+00	1.045E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim I. Barsoum Date: 4/16/96

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

DEC 29 1995 08:11:37

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01 mCi	<u>2.25 x 10⁻¹ mCi</u>	2.250E-01	8.325E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00 mCi	<u>2.865 mCi</u>	2.865E+00	1.060E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim S. Barsoum Date: 1/11/96

Acct 10/10/95

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

OCT 02 1995 10:37:57

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01 mCi	<i>0.225 mCi</i>	8.999E-02	3.330E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00 mCi	<i>2.9 mCi</i>	3.155E+00	1.167E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: *Ibrahim S. Barsoum* Date: *10/10/95*

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

JUN 07 1995 13:41:26

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL(L)	01/06/94	2.500E-01 mCi	<u>0.09 mCi</u>	8.999E-02	3.330E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE(L)	07/23/93	5.000E+00 mCi	<u>3.30 mCi</u>	3.213E+00	1.189E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim Barsoum Date: 13 July 95

CHAMMP Report

Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

MAR 23 1995 07:42:09

Audit 4/3/95

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL	01/06/94	2.500E-01 mCi	<u>same</u>	9.000E-02	3.330E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00 mCi	<u>↓</u>	3.265E+00	1.208E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim S. Barsoum Date: 4, 3, 95

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

MAY 25 1994 09:56:19

Key	Radio- Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL	01/06/94	2.500E-01 mCi	<u>2.500E-01 mCi</u>	2.500E-01	9.250E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00 mCi	<u>3.800E+00</u>	3.800E+00	1.406E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

Signature: Ibrahim S. BarsoumDate: 5 July 94

Audit 4/5/94

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

MAR 28 1994 13:54:12

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL	01/06/94	2.500E-01 mCi	<u>2.50</u>	2.500E-01	9.250E+00	Dupont NEN Research Products	DAMD1791A1171
RMR45249	H-3	THYMIDINE	08/26/92	5.000E+00 mCi	<u>0</u>	2.500E+00	9.250E+01	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00 mCi	<u>3.8</u>	4.500E+00	1.665E+02	Dupont NEN Research Products	DAMD1791A1171

3 Records Processed

Signature: Ibrahim I. Barsoum Date: 4.5.94

CHAMMP Report
Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

NOV 30 1994 10:14:29

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL	01/06/94	2.500E-01 mCi	<u>0.09 mCi</u>	2.500E-01	9.250E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00 mCi	<u>3.30 mCi</u>	3.600E+00	1.332E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ibrahim S. Barsoum Date: 2, Dec, 94

Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

Audit
10/3/94

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR47361	C-14	URACIL	01/06/94	2.500E-01	mCi <u>0.25</u>	2.500E-01	9.250E+00	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00	mCi <u>3.60</u>	3.779E+00	1.398E+02	Dupont NEN Research Products	DAMD1791A1171

2 Records Processed

The principal users signature on the bottom of this form indicates that a physical inventory of the radionuclides listed has been performed.

Signature: Ihab I Barsoum Date: 3, 10, 94

Receipts in Inventory by Activity for Internal License 572(Barsoum, Ibrahim)

Key	Radio-Nuclide	Chemical/Physical Form	Receipt Date	Receipt Activity	Current Activity	Inventory Activity(mCi)	Inventory Activity(MBq)	Supplier	P.O. Number
RMR45249	H-3	THYMIDINE	08/26/92	5.000E+00 mCi	<u>2.500 mli</u>	5.000E+00	1.850E+02	Dupont NEN Research Products	DAMD1791A1171
RMR46707	H-3	THYMIDINE	07/23/93	5.000E+00 mCi	<u>4.500 mli</u>	5.000E+00	1.850E+02	Dupont NEN Research Products	DAMD1791A1171
RMR43831	H-3	THYMIDINE	12/06/91	5.000E+00 mCi	<u>0</u>	5.000E+00	1.850E+02	Dupont NEN Research Products	DAMD1792M0943

3 Records Processed

Total

7.000 mli

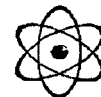
5 Jan 94

Ibrahim S. Barsoum

Signature: Ibrahim S. Barsoum Date: 5, JAN 94

AUTHORIZATION ISOTOPE INVENTORY

(The Principle User's signature on the bottom of this form indicates that a physical inventory of the isotopes listed has been performed.)



Authorization Number 572

HPO TAG NO	CHEMICAL FORM	ORIGINAL DATE RECEIVED	ACTIVITY IN MILLICURIES			VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMARKS
			ORIGINAL	ENTER CURRENT	LAST UPDATED				
	<i>Audit 10/4/93</i>								
Total millicuries H-3									
43831	THYMIDINE	12/06/91	5.0000	<i>Same</i>	5.0000	NEN DUPONT	DAMD1792M094		
45249	THYMIDINE	08/26/92	5.0000	<i>J</i>	5.0000	NEN DUPONT	DAMD1791A117	W109	
46707	THYMIDINE	07/23/93	5.0000	<i>↓</i>	5.0000	NEN DUPONT	DAMD1791A117	W137	
Total Activity			15.0000	<i>15.0</i>		Isotope Possesion Limit		20.0000	

Signature *Ybrah L. Benson* Date *10-9-93*

06/24/93

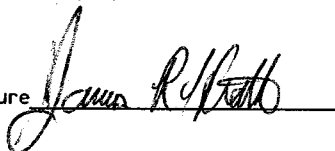
AUTHORIZATION ISOTOPE INVENTORY

(The Principle User's signature on the bottom of this form indicates that
a physical inventory of the isotopes listed has been performed.)

Authorization Number 572

HPO TAG NO	CHEMICAL FORM	ORIGINAL DATE RECEIVED	ORIGINAL ACTIVITY IN MILLCURIES	ENTER CURRENT ACTIVITY IN MILLCURIES	LAST UPDATED ACTIVITY IN MILLCURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMARKS
=====									
Total millicuries H-3									
43831	THYMIDINE	12/06/91	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1792M0943		
45249	THYMIDINE	08/26/92	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1791A1171	W109	
Total activity			10.0000	<u>10.0</u>	Isotope possession limit		20.0000		

Signature



Date



AUTHORIZATION ISOTOPE INVENTORY

03/26/93

(The Principle User's signature on the bottom of this form indicates that
a physical inventory of the isotopes listed has been performed.)

Authorization Number 572

HPO TAG NO	CHEMICAL FORM	ORIGINAL DATE RECEIVED	ORIGINAL ACTIVITY IN MILLCURIES	ENTER CURRENT ACTIVITY IN MILLCURIES	LAST UPDATED ACTIVITY IN MILLCURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMARKS
=====									
Total millicuries H-3									
43831	THYMIDINE	12/06/91	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1792M0943		
45249	THYMIDINE	08/26/92	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1791A1171	W109	
Total activity			10.0000	<u>10.0</u>	Isotope possession limit		20.0000		

Signature James R Webb Date 4/5/93

02/04/93

AUTHORIZATION ISOTOPE INVENTORY

(The Principle User's signature on the bottom of this form indicates that
a physical inventory of the isotopes listed has been performed.)

Authorization Number 572

HPO TAG NO	CHEMICAL FORM	ORIGINAL DATE RECEIVED	ORIGINAL ACTIVITY IN MILLCURIES	ENTER CURRENT ACTIVITY IN MILLCURIES	LAST UPDATED ACTIVITY IN MILLCURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMARKS
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=====

Total millicuries H-3

43831	THYMIDINE	12/06/91	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1792M0943		
45249	THYMIDINE	08/26/92	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DAMD1791A1171	W109	

Total activity	10.0000	<u>10.0</u>	Isotope possession limit	20.0000
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Signature

James R. Hest

Date

2/5/93

Please excuse the lateness. Because of
asbestos abatement in Bldg 91 the
building is closed and I have had
to move my office to Bldg 40. Please
address any future correspondence to
USADR Bldg. 40

AUTHORIZATION ISOTOPE INVENTORY
(The Principle User's signature on the bottom of this form
indicates that a physical inventory of the isotopes listed
has been performed.)

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMAR
10/6/92									

** Authorization Number: 572

* Total Millicuries H-3

43831	THYMIDINE	12/06/91	5.0000	5.0	5.0000	NEN DUPONT	DAMD1792M0943
45249	THYMIDINE	08/26/92	5.0000	5.0	5.0000	NEN DUPONT	DAMD1791A1171 W109

* Subsubtotal *

10.0000	10.0000
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** Subtotal **

10.0000	10.0000
---------	---------

*** Total ***

10.0000	10.0000
---------	---------

James R. Heath
6 Oct 92

AUTHORIZATION ISOTOPE INVENTORY
(The Principle User's signature on the bottom of this form
indicates that a physical inventory of the isotopes listed
has been performed.)

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
4/8/92 Audit									

** Authorization Number: 572

* Total Millicuries H-3

43831 THYMIDINE 12/06/91 5.0000 5.0000 NEN DUPONT DAMD1792M0943

* Subsubtotal *

5.0000 5.0000

** Subtotal **

5.0000 5.0000

*** Total ***

5.0000 5.0000

Mark E. York 8 April 92

AUTHORIZATION ISOTOPE INVENTORY
(The Principle User's signature on the bottom of this form
indicates that a physical inventory of the isotopes listed
has been performed.)

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

** Authorization Number: 572

* Total Millicuries H-3									
43831	THYMIDINE	12/06/91	5.0000	<u>5.0</u>					
* Subsubtotal *					5.0000	NEN DUPONT	DAMD1792M0943		
** Subtotal **			5.0000		5.0000				
*** Total ***			5.0000		5.0000				
			5.0000		5.0000				

Correct

James R. Smith
Smith 572
16 Dec 91

AUTHORIZATION ISOTOPE INVENTORY
(The Principle User's signature on the bottom of this form
indicates that a physical inventory of the isotopes listed
has been performed.)

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLCURIES	NEW ACTIVITY IN MILLCURIES	LAST UPDATED ACTIVITY IN MILLCURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
** Authorization Number: 572									
* Total Millicuries H-3									
40222	PROLINE	04/04/90	1.0000	_____	1.0000	AMERSHAM	DAMD1785A5004		
41161	cAMP	08/31/90	0.0050	_____	0.0050	AMERSHAM	DAMD1790M8615		
41339	RIA X 3	09/25/90	0.0150	_____	0.0150	AMERSHAM			
41809	cAMP X 2	12/21/90	0.0100	_____	0.0100	AMERSHAM	DAMD1791A1183	D834	
42036	cAMP X 2	02/07/91	0.0100	_____	0.0100	AMERSHAM	DAMD1791A1183		
42391	cAMP X 2	04/04/91	0.0100	_____	0.0100	AMERSHAM	DAMD1791A1183		
* Subsubtotal *			1.0500		1.0500				
** Subtotal **			1.0500		1.0500				
*** Total ***			1.0500		1.0500				

RECD AT
40

All of the above isotopes have been
transferred to authorization 690
at Ft Meade. This is Dr Chaudhari's
authorization. My current inventory
is 0 mCi

James R Shatt
Auth 572

Mr Burdian:

I am in the process of closing out my radioactive
work area in Bldg 91 and opening one in RM 2020 in
Bldg 40. Dr Chaudhari (auth 690) has finally moved out to Ft Meade
along with his isotopes and technicians and I have turned in
all my radio isotopes and will order new ones for Bldg 40. I
plan, therefore, to submit a major ~~revision~~ ^{amendment} to my authorization
to accomplish all of these changes. ~~no more changes~~

Jim Shatt

AUTHORIZATION ISOTOPE INVENTORY
(The Principle User's signature on the bottom of this form
indicates that a physical inventory of the isotopes listed
has been performed.)

572

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
Audit	10/2/91								

* Subsubtotal *

0.0000 0.0000

** Subtotal **

0.0000 0.0000

*** Total ***

0.0000 0.0000

James R. Heath 2 Oct 91

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
40222	PROLINE	04/04/90	1.0000	<u>1.0</u>	1.0000	AMERSHAM	DAMD1785A5004		
41161	CAMP	08/31/90	0.0050	<u>0.005</u>	0.0050	AMERSHAM	DAMD1790M8615		
41339	RIA X 3	09/25/90	0.0150	<u>0.015</u>	0.0150	AMERSHAM			RECD AT 40
41809	CAMP X 2	12/21/90	0.0100	<u>0.01</u>	0.0100	AMERSHAM	DAMD1791A1183	D834	
42036	CAMP X 2	02/07/91	0.0100	<u>0.01</u>	0.0100	AMERSHAM	DAMD1791A1183		
* Subsubtotal *			0.01	<u>0.01</u>					
47391	CAMP X 2		1.0400		1.0400				
* Total Millicuries I-125				<u>0</u>					
39318	PHABAS IGE	12/04/89	0.0102		0.0102	PHARMACIA	W745QZ9300-13 00-		REC'D @ 40
* Subsubtotal *					0.0102				
** Subtotal **					0.0102				
*** Total ***					1.0502				
					1.0502				

Janus R Heath
7 April 91

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMA
Audit 10 OCT 90									

** Authorization Number: 572

* Total Millicuries C-14					
PGE-2	06/21/82	0.0025	0	0.0025	
* Subsubtotal *		0.0025		0.0025	

* Total Millicuries H-3					
ENDOTOXIN	05/13/87	5.0000	0	5.0000	
36536 THYMIDINE	10/18/88	2.0000	0	2.0000	UNIV OF MARYLAN
40080 CYCLIC AMP X 1	03/16/90	0.0050	0	0.0050	AMERSHAM DAMD1785A5004 WP05
40222 PROLINE	04/04/90	1.0000	0	1.0000	AMERSHAM DAMD1785A5004
40682 CYCLIC AMP	06/13/90	0.0050	0.005 0	0.0050	AMERSHAM DAMD1790M8615
40984 cAMP	08/02/90	0.0050	0.005 0	0.0050	AMERSHAM DAMD1790M8615
41161 cAMP	08/31/90	0.0050	0.005	0.0050	AMERSHAM DAMD1790M8615
41339 RIA X 3	09/25/90	0.0150	0.015	0.0150	AMERSHAM
* Subsubtotal *		8.0350		8.0350	

* Total Millicuries I-125					
39318 PHABAS IGE	12/04/89	0.0102	0.0102	0.0102	PHARMACIA W745Q29300-13 00- REC'D @ 40
* Subsubtotal *		0.0102		0.0102	
** Subtotal **		8.0477		8.0477	
*** Total ***		8.0477		8.0477	

James R. Heath
10 Oct 90

03/29/90

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
<u>Audit 4/3/90</u>				
** Authorization Number: 572				
* Total Millicuries C-14				
	PGE-2	06/21/82	0.0025	<u>0.0025</u>
* Subsubtotal *			0.0025	
* Total Millicuries H-3				
	ENDOTOXIN	05/13/87	5.0000	<u>5</u>
36536	THYMIDINE	10/18/88	2.0000	<u>2</u>
40080	CYCLIC AMP X 1	03/16/90	0.0050	<u>0.0050</u>
* Subsubtotal *			7.0050	
* Total Millicuries I-125				
39318	PHABAS IGE	12/04/89	0.0102	<u>0.0102</u>
* Subsubtotal *			0.0102	
** Subtotal **			7.0177	
*** Total ***			7.0177	

James R Heath
3 April 90

10/03/89

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====

** Authorization Number: 572

* Total Millicuries H-3				
36536	Thymidine	10/18/88	2.0000	<u>2.0</u>
* Subsubtotal *				

** Subtotal **			2.0000	
----------------	--	--	--------	--

*** Total ***			2.0000	
	endo toxin	05/13/87	5.0	5.0
			2.0000	

C-14	PGE-2	6/21/82	0.0025	.0025
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James R. Smith
26 Oct 89

04/03/89

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
<u>Audit 7 APR 88</u>		<u> </u>	<u> </u>	<u> </u>

** Authorization Number: 572

* Total Millicuries H-3

36536

10/18/88

2.0000

2.0

* Subsubtotal *

2.0000

** Subtotal **

2.0000

*** Total ***

2.0000

H³ old rad material 5mCi

C¹⁴ 2.5uCi

James R Heath
17 April 89

AUTHORIZATION ISOTOPE INVENTORY

HPD TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
Audit 10/20/88				

** Authorization Number: 572

* Total Millicuries Cr-51

34880 DAMD1787M3528

01/11/88

5.0000

0- 4-5-88

* Subsubtotal *

5.0000

** Subtotal **

5.0000

*** Total ***

5.0000

old rad material

H³ 7.0 mCi

I¹²⁵ 0.003 mCi

C¹⁴ 0.003 mCi

James R/Heath
20 Oct 88

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER =====	PURCHASE ORDER & CALL NUMBER =====	DATE RECEIVED =====	ORIGINAL ACTIVITY =====	NEW ACTIVITY =====
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** Authorization Number: 572

* Total Millicuries Cr-51

34880 DAMD1787M3528

01/11/88

5.0000

0

* Subsubtotal *

5.0000

** Subtotal **

5.0000

*** Total ***

5.0000

C¹⁴ 0.0025mCi 4/5/88

I¹²⁵ 0.0

H³ 5.0mCi 4/5/88

(AR 40-2)

[illegible]

CONTROLLED SUBSTANCES STOCK RECORD

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

STOCK NUMBER		DESCRIPTION CA-45 USACOR 08-01738-02/572							
UNIT AS RECEIVED		CONVERSION FACTOR			ACCOUNTABLE UNIT				
DATE	DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO.	CREDIT (Expenditures)	BALANCE ON HAND	DATE	DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO.	CREDIT (Expenditures)	BALANCE ON HAND
16-Jul-79	10mCi	A1074 7C7	20903		11 July 84	10.0mCi	DAMD1781 A0112W390	28848	
26-Jul-79	10mCi	A1074 7C9	20952		7 Nov 84	10.0mCi	DAMD1781 A5005W013	29377	
18-Sept-79	10mCi	A1074 9C8	21209						
28-Nov-79	10mCi	A1074 11C12	21521						
28 Jan 80	10mCi	A1074C 1C7	21796						
26 Mar 80	10mCi	A1074 3C14	22099						
16 May 80	10mCi	A1074 5C12	22336						
19 Sep 80	10mCi	A1074 9C5	22965						
6 APR 81	10mCi	DAMD 1781 A0112	23836						
14-Jul-81	10mCi	DAMD 1781 A0112	24316						
21 Dec-81	10mCi	DAMD 1781 A0112 12C10	25035						
4 MAY 82	.01mCi	DAMD 1781 A0112 W041	25631						
3 Sept 82	.01mCi	DAMD 1781 A0112 W098	26160						
17 Dec 82	10mCi	DAMD 1781 A0112 W144	26589						
4 May 83	10mCi	DAMD 1781 A0112 W214	27129						
17 Aug 83	10mCi	DAMD 1781 A0112 W265	27511						
26 Mar 84	10.0mCi	DAMD 1781 A0112 W347	28368						

4

STOCK NUMBER

UNIT AS RECEIVED

ACCOUNTABLE UNIT	
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[illegible]

(AR 40-2)

STOCK NUMBER

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ON CR-51
USAID R
08-01738-02/572
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UNIT AS RECEIVED

CONVERSION FACTOR

[illegible]

☆U.S. Government Printing Office: 1981-341-646/8316

6

STOCK NUMBER

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UNIT AS RECEIVED

CONVERSION FACTOR

ACCOUNTABLE UNIT	
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[illegible]

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

DA FORM 3862
1 JUNE 72

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DESCRIPTION
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USAIDR - FG

08 - 01738 - 02/572

CONVERSION FACTOR

ACCOUNTABLE UNIT	
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DATE _____

DEBIT
(Receipts)

DEBIT (VO.)
OR
CREDIT (RX)
NO.

H.P.#
CREDIT
(Expenditures)

**BALANCE
ON HAND**

DATE _____

DEBIT
(Receipts)

DEBIT (VO.)
OR
CREDIT (RX)
NO.

CREDIT
(Expenditures)

BALANCE
ON HAND

7 Aug 81

.0084C

DADA 1581
FG

24449

**BALANCE
ON HAND**

20 APR 82

0.02 mL

DATA 1781
A01124128

25562

1 Sept 82

1.02 ml.

0417101781
A0112W085

26155

27 Sept 82

Monte

ADAM 7781
ADAM 7785

26264

23 Feb 83

Handwritten signature: *Handwritten signature*

DAMD 1781
201121168

26878

13 AUG 85

0.296 li

DAMD1785
MC196

30639

852-05
75-5

