



DEPARTMENT OF THE ARMY  
WALTER REED ARMY MEDICAL CENTER  
WASHINGTON, DC 20307-5001



REPLY TO  
ATTENTION OF:

MEMO TO: HEALTH PHYSICS  
MR. DAVID BURTON  
SUBJ: AUTHORIZATIONS 511 AND 615  
DATE: October 20, 1993

1) Per our conversations, we request a merger of authorizations 511 and 615. The isotopes are used in the same facility by the same individuals.

2) Please remove Dr. Frances Carr and Col Kenneth Burman as the principal users for 511 and 615 respectively effective 11/1/93. Please add Dr. Dea Nicholson as the principal user for the new 511/615 authorization.

3) The personnel listed on the 511 and 615 authorizations should be included on the new 511/615 with the following exceptions:

Dr. Sudershan Bhatia, Col Robert Smallridge, Maj Sharon Jackson, Maj Karen Mahoney Cpt Javier Torrens, Cpt Maureen Koops, Dr. Yueh-Chu Tseng.

4) We request that the following personnel be maintained or added to the 511/615 authorization: Dr. Stephen Clement, Col Allan Glass, Dr. Frances Carr, Dr. Kenneth Burman, Dr. Juliann Kiang, Dr. Lu Rui and Dr. Atwa.

We hope this re-organization will facilitate the communication process. Thank you.

Frances E. Carr, Ph.D.  
Dir., KMU Research Labs  
Dept. Clinical Invest.  
202-576-1419  
Auth. #511

10/20/93

Kenneth D. Burman, COL MC  
Chief, Div. Endocrinology/KMU  
Dept. Medicine  
202-576-1793  
Auth. #615

MEMO TO: HEALTH PHYSICS  
MR. DAVID BURTON  
SUBJ: AUTHORIZATIONS 511 AND 615  
DATE: November 1, 1993

1) I accept the responsibility as principal user for the 511/615 authorization.

*D. E. Nicholson*  
Diarmuid E. Nicholson, PhD.  
Kyle Metabolic Unit Research Laboratories  
Department of Clinical Investigation

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

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

Health Physics Officer, WRAMC

JAN 04 1994

FOR: Endo-Metabolism, ATTN: Dr. Diarmuid E. Nicholson, Auth # 511

*Arthur G. Samiljan*  
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: MAR 94

APPROVED BY

RCC

16 SEP 1992

06 JUN 1992

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

A269

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

1. APPLICATION FOR:	<input type="checkbox"/> NEW AUTHORIZATION	<input checked="" type="checkbox"/> RENEWAL OF AUTHORIZATION NUMBER 615	<input type="checkbox"/> AMENDMENT TO AUTHORIZATION NUMBER
2. APPLICANT'S NAME (Last, First, MI) (Principal User) Burman, Kenneth D.		3. APPLICANT'S MAILING ADDRESS (Include Organization) Kenneth D. Burman, COL, MC Chief, Endocrine-Metabolic Service and Kyle Metabolic Unit	
TELEPHONE NUMBER (202) 576-1793			

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

4. List all CO-WORKERS Burch, Henry B. <del>Humphrey, Michael</del> Clement, Stephen <i>Bhatia, Sudershan Dr.</i>	5. List all TRAINEES Tseng, Yueh-Chu L. Glass, Allan R. Smallridge, Robert Jackson, Sharon Francis, Thomas B. Mahoney, Karen <del>Nage, Andre</del> <del>Menigistu, Mulugetta</del>	6. List all TECHNICIANS Djuh, Yin-Ying Rhooms, Phyllis Lukes, Yvonne Anderson, Jeffrey
---	---	--

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms) Bldg 2, Rooms <sup>(on 511)</sup> 4743/4744/4747/4748; <sup>(on 511)</sup> Bldg 7, Room <sup>on 676</sup> 622
8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms) Bldg 2, Rooms <sup>(on 511)</sup> 4742/4743/4744/4747/4748 and 6Z60; Bldg 7, Room G40
9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM: NONE

## X. RADIOACTIVE MATERIAL DATA

A. RADIOSOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
3-H	Amino acids, testosterone, Vitamin D, acetyl coenzyme A, Thymidine	50mCi	Tissue metabolism studies
14-C	Amino acids, testosterone, Vitamin D, acetyl coenzyme A, diodothyronine	15mCi	Tissue metabolism studies
32-P	CATP	<sup>2mCi</sup> 20mCi	<u>In vitro</u> studies
35-S	Sulfur/PTU/CATP	<sup>2mCi</sup> 20mCi	<u>In vitro</u> studies
86-Rb	Rubidium	5mCi	<u>In vitro</u> studies
125-I	I/labelled compounds	10mCi	RIA/tracer studies/ <u>in vitro</u>
131-I	I/labelled compounds	1mCi	RIA/tracer studies/ <u>in vitro</u>
51-Cr	NaChromate	30mCi	<u>In vitro</u> studies
<del>226-Ra</del> In-111	<del>Sealed source</del>	<del>10mCi</del> 1mCi	<del>LSL source</del> <u>In vitro</u> studies

## CERTIFICATE

(This item must be completed by applicant)

DATE: 5 FEB 92Authorization Review Process  
Branch InputAuth # 6156-1793

	A	B	COMMENTS
1	<del>X</del>	<del>2PMB</del>	Signature Supervisor, Type
2	X	2PMB	
3	X	2PMB	S-35 20ml? P-32 20ml on protocol?
4	<del>X</del>	won	( <sup>4742</sup> 4743, 4748 on 511) (4744 <sup>Na</sup> re-add <del>1</del> ) add Bldg 7 22 & 640
5	NA	won	(622 on 676)
6	<del>NA</del>	<del>won</del>	
7	<del>X</del>	2PMB	early 90 Clement, Jackson, Mahoney, Rhonnes,
8	<del>X</del>	2PMB	Clement, 1/8, ( <sup>forms</sup> 1/16) ( <sup>more</sup> 5/6 forms)
9	NA	2PMB	
10	>	UCS	
11	>	UCS	
12			Delete Carr, Barnes, Lahdri
13			left message 2/14
14			
15			mahoney & Cpt Teriansky N/R

FJUN 04 1992  
*[Signature]*

## 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 resolve
- (C) - Comments



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

Inspector: C. Collins Date: 5 NOV 92 Auth# 615

1. DA form 3862 [NO] [YES]
2. Within limits [NO] [YES]
3. Inventory Control Officer: Mr. Jesse Martin/Dr. Carr  
Room: BLDG 2, WARD 47
4. WRAMC Regulation 40-10 [NO] [YES]
5. WRAMC Authorization on hand [NO] [YES]
6. General Provisions - Terms & Conditions [NO] [YES]
7. LSC - Source No. & Location: RM 6Z68 226-Ra-093
8. WRAMC form 538 - current [NO] [YES]
9. Sink log [NO] [YES] N/A
10. Signs & Labels: OK
11. Personnel [Additions] [Deletions]  
Mulugetta Mengistu, Endre Nagy, MAJ M. Humphrey
12. General Comments: \_\_\_\_\_

Principal User: Mr. J. Martin/Dr. Carr Authorized Representative: \_\_\_\_\_

Signature

Date

Jesse Martin 11/5/92

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

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

Health Physics Officer, WRAMC

13 NOV 1992

FOR: Endo-Metabolism, ATTN: COL Kenneth D. Burman, Auth # 615



ARTHUR G. SAMILJAN  
LTC, MS  
Health Physics Officer

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

**APPROVED BY**

**RCC**

17 DEC 1992

**DATE**

DATE: 5 NOV 98

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	29MB	
2	NA	29MB	
3	NA	29MB	
4	NA	nsn	
5	NA	nsn	
6	NA	29MB	
7	NA	29MB	
8	NA	29MB	
9	NA	29MB	
10	X	UCS	
11	NA	UCS	
12			
13			
14			
15			

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- (C) - Comments

HSHL-ME

27 April 1992

MEMORANDUM FOR Mr. David Burton, Health Physics Office, Forest Glen, Silver Spring, MD

SUBJECT: Research Fellowship

1. Dr. Sudershan Bhatia, from Johns Hopkins University, will be doing a two (2) year research fellowship, with the Endocrinology-Metabolic Service, from 27 April 92 through 26 April 96. He will be working on Protocol #1395 and molecular biology of T-cells.
2. Attached is a copy of his CV and a list of courses he has taken. In addition, he has completed both radiation and hazard safety classes.
3. POC for additional information is the undersigned.



KENNETH D. BURMAN, M.D.  
Colonel, Medical Corps  
Chief, Endocrine-Metabolic Service  
and Kyle Metabolic Unit  
(202) 576-1793

HSHL-HP (385-11h) 1st End

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

Health Physics Officer, WRAMC

27 JUL 1992

FOR: Endo-Metabolism, ATTN: COL. Kenneth D. Burman, Auth # 615



ARTHUR G. SAMILJAN  
LTC, MS  
Health Physics Officer

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

**APPROVED BY**  
**RCC**

16 SEP 1992

DATE

DATE: 7 MAY 92

Authorization Review Process  
Branch Input

Auth # 1015

	A	B	COMMENTS
1	X	ZMB	
2	NA	ZMB	
3	NA	ZMB	
4	NA	WMB	
5	NA	WMB	
6	NA	WMB	
7	X	ZMB	
8	X	ZMB	called 5/11, 5/27, 6/10, 7/9
9	NA	ZMB	
10	X	WMB	
11	0	WMB	
12			
13			
14			
15			hcr Bhalia v/r (Aup) JUL 22 1992

Index of Numbers and Symbols used above:

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- (B) - Initial of branch representative when complete or pending issues are resolve
- (C) - Comments

# HEALTH PHYSICS RADIOACTIVE PROTOCOL

<p>a. Principal User</p> <p>Burman, Kenneth D.</p>	<p>b. Telephone Number</p> <p>(202) 576-1793</p>	<p>c. Authorization Number</p> <p>615</p>
<p>d. Coworkers</p> <p>See 1662-R</p>	<p>e. Trainees</p> <p>See 1662-R</p>	<p>f. Technicians</p> <p>See 1662-R</p>
<p>g. Radioisotope(s)</p> <p>3-H, 14-C, 32-P, 35-S, 86-Rb, 125-I, 131-I, 51-Cr, In-111</p>	<p>h. Physical/Chemical Form</p> <p>(1) Aqueous (2) Labelled to nucleotides or chemicals</p>	<p>i. Maximum Quantity per Experiment (mCi)</p> <p>0.5 mCi</p>
<p>j. Title of Project</p> <p>Thyroid Physiology in Health and Disease</p>		
<p>k. Beginning Date</p> <p>1989</p>	<p>l. Ending Date</p> <p>1995</p>	<p>m. Repetitive Study</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>n. Life Cycle of Radioisotope Utilized for Research Procedure (Use block/flow diagram to show what, how, where, how much isotope is used from receipt to disposal; emphasize major steps (incubate over night, run gel, autoradiography, etc.), including kinds and volumes of waste generated).</p> <p>Room 4743 - Hood-Labeling (anth 511) - Screening - Disposal - <u>In Vitro</u> - Translation or Protein Analysis - Hybridization</p> <p>Room 4746 - Cold Room (511) - Precipitation of Isotope Effluent</p> <p>Room 4747 - Isotope Freezer - Central Freezer</p>		
<p>o. Labeling and Transport of Radioactive Material: All radioactive solutions tissues, animals and waste will be identified by proper labels. Transport of radioactive material between authorized work areas will be conducted in a manner that precludes the spread of contamination and inadvertent exposure of non-participating personnel.</p>		

p. Laboratory Animal Usage:

None



If yes, complete following:

Species:

Room:

Bldg:

Disposition of animals:

q. Isotope Utilization Locations:

(1)

(2)

(3)

(4)

(5)

Building

2

Room

Wd 47

Maximum Amount (mCi)

r. Maximum Amount in Possession (mCi)

Bldg

Room

Maximum Amt (mCi)

s. Isotope Storage Location(s)

2

4747

3-H 10mCi, 32-P  
20mCi, 35-S  
10mCi, 125-I  
10mCi, 14-C 15mCi

t. Waste Storage Location(s)

2

4743

3-H 10mCi, 32-P  
20mCi, 35-S  
10mCi, 125-I  
10mCi, 14-C 15mCi

u. Animal/Tissue Storage Location

—

—

—

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

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

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

Whole Body



TLD Ring



y. Are there any significant "NON-RADIATION" personnel hazards associated with this experiment; (Biological [Aids, etc.], Hazardous Chemicals [Toxic, Explosive, Corrosive etc.], Sharps, Lasers, Microwaves, electrical etc.) that may effect Health Physics personnel during routine inspections, surveys or waste handling procedures.

If yes specify:

No



Yes



Biologies Hazards - Bacterial waste/human tissue

Organic Solvents

Equipment (Microwave) - Tissue possibly contains HIV

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

Print Name and Signature  
of Principal User:

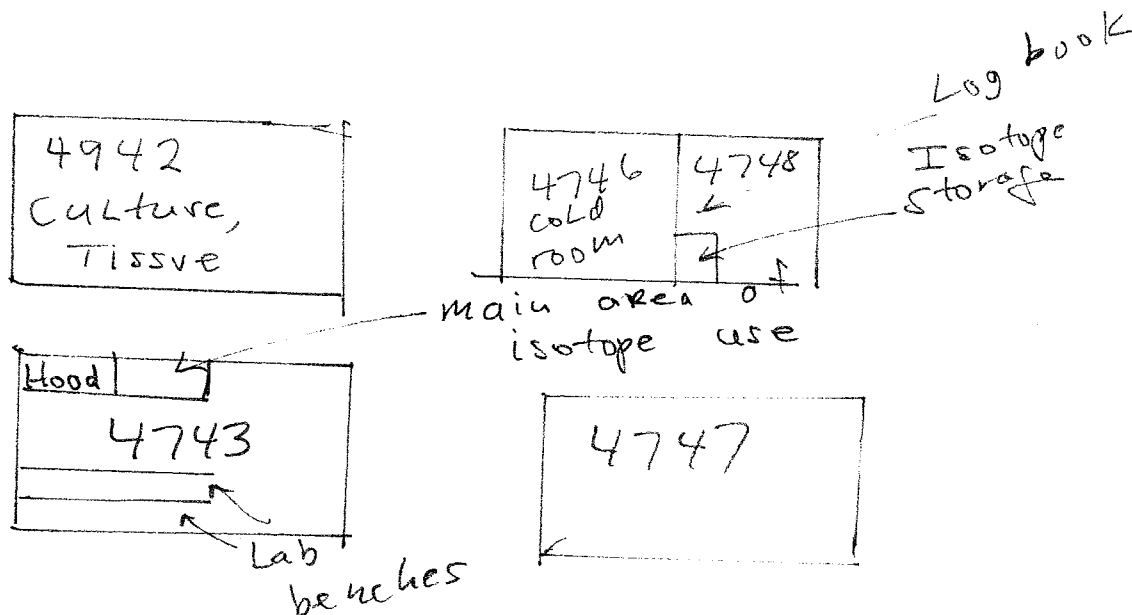
*Ken Burman*  
KENNETH D. BURMAN, MD

Date: 4 March 1992 Rank/GS grade COL

Title: Chief, Endo-Metab Svc & Endo-Metab Unit

Telephone Number (202) 576-1793

WRAMC FORM 1644-R  
4 Mar 92



Room 4747 - Isotope Freezer

4743 - Hood - Labelling - hybridization  
- sequencing  
- disposal

4746 - cold room; precipitation of isotope



# 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
		615	

2. APPLICANT'S NAME (Last, First, MI) (Principal User)	3. APPLICANT'S MAILING ADDRESS (Include Organization)
BURMAN, KENNETH D., COL, MC	Endo-Metabolic Svc WRAMC
TELEPHONE NUMBER 6-1793	

(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
<p>LATHAM, Keith R., Ph.D.</p> <p>BAKER, James R., MAJ, MC</p> <p>Carr, Frances Dr.</p> <p>Peel, Mark CPT, MC</p> <p>This Application is given interim approval until the next meeting of the RCC which is scheduled for: Aug 86</p> <p>Trainees:</p> <p>Opsahl, Mike</p> <p>Brennan, Michael</p> <p>Kushner, John</p> <p>Stanton, Frank</p> <p>Mong, Dennis</p>	<p>TSENG, Yueh-Chu, Ph.D.</p> <p>GLASS, Allen R., LTC, MC</p> <p>SMALLRIDGE, Robert, COL, MC</p> <p>Wingo, Susan</p> <p>Opsahl, Mike</p> <p>AHMANN, Andrew, CPT, MC</p> <p>NUOVO, Jennifer, CPT, MC</p> <p>KUSHNER, John, CPT, MC</p> <p>DOUGLOUS, Denny, MAJ, MC</p> <p>Humphrey, Michael, CPT</p> <p>HAISLIP, Cal, MAJ, MC</p>	<p>DJUH, Yin-Ying CIV</p> <p>KESSLER, Phyllis CIV</p> <p>LUKES, Yvonne CIV</p> <p>ANDERSON, Jeff CIV</p> <p>LATHAM, KEITH R. 2nd</p> <p>Opsahl, Mike</p> <p>Kushner, John</p> <p>Stanton, Frank</p> <p>Mong, Dennis</p> <p>Ansley, Reynolds SSG TK</p> <p>Reid, Ann H. TK</p> <p>26 Aug 86</p>

APPROVED BY  
RCC

DATE

7. LOCATIONS WHERE MATERIAL WILL BE USED: (Building and Associated Rooms)	DATE
Bldg 2 (NMTF) Rms 4743 & 4747, Bldg 7, Rm G40, 646, 4752, 4748, 4744, 221, 12	22 Aug 86
8. LOCATIONS WHERE MATERIAL WILL BE STORED: (Building and Associated Rooms)	
Bldg 2 (NMTF) Rms 4742, 4743, 4747, Bldg 7, Rm G40, 646, 4752, 4748, 4744, 221, 12	22 Aug 86
9. RADIOACTIVE WASTE DISPOSAL SINK IN ROOM:	
NONE 646 4752	

## X. RADIOACTIVE MATERIAL DATA

A. RADIOISOTOPE	B. CHEMICAL AND/OR PHYSICAL FORM (Sealed or Unsealed)	C. POSSESSION LIMIT	D. USE
3-H	Amino acids, testosterone, Vitamin D, diiodothyronine, acetyl coenzyme A, thymidine	50mCi 1mCi	Tissue metabolism studies
14-C	Amino acids, testosterone, Vitamin D, diiodothyronine, acetyl coenzyme A.	15mCi	Tissue metabolism studies
32-P	CATP	5mCi	In vitro studies
35-S	Sulfur PTU	15mCi	In vitro studies
.86-Rb	Rubidium	5mCi	In vitro studies
125-I	NaI & labelled compounds	10mCi	RIA & tracer for in vivo studies in rats
131-I	NaI (on or with) thyroid hormone	1mCi	In vitro studies or tissue metabolism studies.
Cr-51	NaChromate	30mCi	In vitro studies
In-111	NaCHROMATE	1.0mCi	In vitro studies

## CERTIFICATE

(This item must be completed by applicant)

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

Inspector: Chiquita Collins Date: 11/15/88 Auth# 615

1. DA form 3862 [NO] (YES)
2. Within limits [NO] (YES)
3. Inventory Control Officer: COL Kenneth Burman  
Room: Bldg 2 Endocrinology
4. WRAMC Regulation 40-10 [NO] (YES)
5. WRAMC Authorization on hand [NO] (YES)
6. General Provisions - Terms & Conditions [NO] (YES)
7. LSC -- Source No. & Location: N/A
8. WRAMC form 538 - current [NO] (YES)
9. Sink log [NO] (YES)
10. Signs & Labels: OK
11. Personnel [Additions] [Deletions]  
Delete: CPT Schandier, SSG Walter, Hardison, Caliboso, Mong, Kushner, Douglass, Curry
12. General Comments: ~~None~~ a NRC map RM 4752

Principal User: 615

Authorized Representative:

Ken Burman  
Signature

Date

15 NOV 88

SHL-HP  
SUBJECT: Authorization 615

TO COL Burman  
Endo-Meta

FROM Health Physics  
WRAMC

DATE NOV 17 1988 CMT 2  
Mr. Burton/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for:.....  
NOV 22 1988

*Gerald M. Connock*

GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

**APPROVED BY**  
**RCC**

NOV 22 1988

DATE

DATE: 15 NOV 88

Authorization Review Process  
Branch Input

Auth # 6/15

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

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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

Health Physics

TO

FROM

DATE

CMT 1

Health Physics  
Forest Glen

COL Burman  
Endo Clinic

11 Oct 88  
COL Burman/61793

1. Please add Dr Mike Humphrey and Dr Henry Burch on to Protocols 1385-87 and please add to my Health Physics Authorization 615. *As trainees*

2. Please add Dr Mike Humphrey to WU # 1303-88. He will be using viral probes to assess their presence in thyroid tissue. He will, in addition, be using a Retroviral GAG probe and positive (HIV) controls that he will get from Dr. Howard Gendelman, Forest Glen, Pharmacology Division.



KENNETH D. BURMAN  
Colonel, MC  
Assistant Ch, Endocrine-Metabolic

HSHL-HP


TO COL Burman  
Endo-Clinic

FROM Health Physics  
WRAMC

DATE NOV 07 1988  
Mr. Burton/pdc/75104

CMT 2

This Application is given  
interim approval until the  
next meeting of the RCC NOV 22 1988  
which is scheduled for:.....



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

## APPROVED BY

## RCC

NOV 22 1988

DATE

DATE: 24 Oct 88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	ZMB	list as trainees per conv
2	NA	ZMB	
3	NA	ZMB	
4	NA	NA	
5	NA	AA	
6	NA	Gr	
7	X	AA	
8	NA	ZMB	
9	NA	ZMB	
10	NA	Gr	
11	NA	Gr	
12			
13			
14			
15			

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- (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	SUBJECT
HSHL-ME	Additions to authorization 615

TO	FROM	DATE	CMT 1
Health Physics Mr. Burton	Asst. C, Endo-Metab Svc	23 September 1988	COL Burman/1793 CPT Schaudies/2328

1. Please transfer the following rooms, located in building 7, to authorization 615; G25H (also numbered 301) and G26A.
2. Please add the following rooms, located in building 7, to authorization 615; G34, 216, 218, 221 and 222.
3. Please add the following individuals to authorization 615; CPT Schaudies, SSG Walker, SSG Hardison, SPC Curry and SPC Caliboso.
4. These additions to authorization 615 are requested in order to maintain continuity in CPT Schaudies laboratory area. When the authorization for LTC Lippert is completed and approved, these rooms and individuals will be transferred to the new authorization.

5. Add Room G42, Bldg 7 to my authorization (615). *Mark K. Bue*  
6. Delete G46 *143/88*

*Kenneth D. Burman*  
KENNETH D. BURMAN  
COL, MC  
Asst. C, Endo-Metab Svc

CF:  
COL Wray  
LTC Lippert  
CPT Schaudies

*Added to database*

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

Additions to authorization 615

TO

FROM

DATE

CMT 1

Health Physics  
Mr. Burton

Asst. C, Endo-Metab Svc

23 September 1988

COL Burman/1793 CPT Schaudies/2328

1. Please transfer the following rooms, located in building 7, to authorization 615; G25H (also numbered G01) and G25A.

2. Please add the following rooms, located in building 7, to authorization 615; G34, 216, 218, 221 and 222.

3. Please add the following individuals to authorization 615; CPT Schaudies, SSG Walker, SSG Hardison, SPC Curry and SPC Caliboso.

4. These additions to authorization 615 are requested in order to maintain continuity in CPT Schaudies laboratory area. When the authorization for LTC Lippert is completed and approved, these rooms and individuals will be transferred to the new authorization.



KENNETH D. BURMAN

COL, MC

Asst. C, Endo-Metab Svc

CF:

COL Wray

LTC Lippert

CPT Schaudies



# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HS HL-ME

Cpt. Paul Schaudies

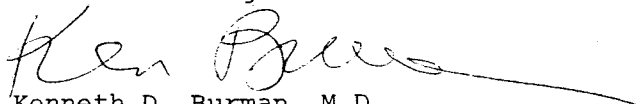
TO Maj. Connock  
Health Physics  
Forset Glen


FROM Kenneth D. Burman, M.D. DATE 23 Sept 1988  
Asst. Chief, Endocrine

CMT 1

1. Cpt. Paul Schaudies has asked to be placed on my authorization #615 for a temporary period. I have discussed this with Cpt. Schaudies and Major Connock. I agree to have Cpt. Schaudies and the people in his laboratory under my authorization under the following conditions:

- a. This temporary authorization will expire 1 Dec 1988.
- b. Health Physics will survey his laboratory weekly.
- c. Cpt. Schaudies and his people will have weekly biologic thyroid tests as performed by Health Physics.
- d. Cpt. Schaudies and his technicians agree to abide strictly by Health Physics rules and regulations.
- e. Any violation of adherence to these rules and guidelines will result in loss of authorization and, if appropriate, further administrative action.
- f. All iodinations will be brought to my attention and biologic testing and air zone testing will be performed by Health Physics on appropriate individuals.
- g. Any new personnel brought to work in the lab will be approved first in writing by Health Physics and myself.
- h. No isotope will be used or brought to unauthorized locations.

  
Kenneth D. Burman, M.D.  
COL, MC  
Asst. Chief, Endo-metab Svc

  
R. Paul Schaudies  
CPT, MS  
C, Gen Spt Lab  
Dept Clin Invest

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL	SUBJECT
HSHL-CI	Routine bioassay of laboratory personnel

TO	FROM	DATE	CMT 1
COL Burman	C, Gen Spt Lab	23 September 1988	
		CPT Schaudies/6-2328,1389	

After discussions with Mr. Burton, Health Physics WRAMC, the following policy is instituted immediately in the General Support Laboratory, Department of Clinical Investigation. All laboratory personnel assigned or attached to the General Support Laboratory will report to Health Physics on the first Tuesday of the Month for bioassay until further notice. If an individual is on leave, then they will report either prior to the leave, or immediately upon return. This is in supplementation to the required bioassay following protein iodination.



R. PAUL SCHAUDIES  
CPT, MS  
C, Gen Spt Lab  
Dept Clin Invest

CCF:  
COL Wray  
LTC Lippert  
MR. Burton, Health Physics  
Mr. Coleman  
SSG Walker  
SSG Hardison  
SPC Curry  
SPC Caliboso

HSHL-HP

SUBJECT: Authorization 615

TO COL Burman  
Endo-Metab Svc

FROM Health Physics Office  
WRAMC

DATE

OCT 07 1988

CMT 2

Mr. Burton/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for:.....NOV..... 1988

*Gerald M. Connock*

GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

**APPROVED BY**

**RCC**

NOV 22 1988

DATE

DATE: 23 Sept 88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DMB	
2	NA	DMB	
3	NA	DMB	
4	X	AA	
5	NA	AA	
6	X	Im	
7	X	AA	
8	NA	DMB	
9	NA	DMB	
10	X	Im	
11	X	Im	
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
- (C) - Comments

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSHL-ME (10-1a)

SUBJECT

Radio-isotope Room Authorization Request

THRU: Asst C, Endo-Metab Svc

FROM Maj Ahmann

DATE 19 July 1988

CMT 1

TO: Health Physics RMC Br  
Attn: Mr. Burton

AHMANN/lkw/6-1793

1. Request that Rm 22 in the G-13 area of building 7 at WRAMC be authorized for radio-isotope utilization.
2. The room in question has recently been converted to use for cell culture. It is anticipated that tritium ( $^3\text{H}$ ),  $^{125}\text{I}$ , and  $^{131}\text{I}$  will be used in this area for various assays.
3. The isotope authorization number relevant to our laboratory utilization is <sup>615</sup>519. Colonel Burman is the principal user assigned this number.
4. Your prompt attention to this matter would be greatly appreciated because the laboratory is otherwise approaching full operation but cannot be used until appropriate assays are available in the culture area.



ANDREW J. AHMANN

MAJ, MC

Staff, Endocrine-Metabolic Service

HSHL-HP

TO Endo-Metabolism  
ATTN: COL Burman  
WRAMC

FROM Health Physics  
WRAMC

DATE 22 AUG 1988

CMT 2

Ms. Collins/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for 24 AUG 1988

APPROVED BY

RCC

24 AUG 1988

DATE



GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

DATE: 8/1/88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	ZAMB	
2	NA	ZAMB	
3	NA	ZAMB	
4	<del>X</del>	<del>PR</del>	
5	NA	<del>PR</del>	
6	NA	<del>PR</del>	
7	NA	<del>PR</del>	
8	NA	ZAMB	
9	NA	ZAMB	
10	NA	GR	
11	NA	GR	
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
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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

Introductory Principles of Radiation Protection Course

TO Health Physics  
ATTN: MAJ Connock

FROM COL K. D. Burman  
Asst C, Endo-Metab Svc

DATE 26 April 1988  
COL Burman/es/1793

CMT 1

Thank you for your DF of April 12, 1988 indicating that several people should take the Introductory Principles of Radiation Protection Course. Concerning authorization 615, it is my understanding that Dr. Andrew Ahmann will take your course; Dr. Galloway will not use isotope, and should be dropped from my authorization. Dr. Douglas should also sign up for the course. Dr. Opsahl will only be with us until July 1, 1988 and then will be transferred. LT Susan Wingo is a medical student who has taken a one month elective with us and then will also be leaving. If you have any further question, please do not hesitate to call.

Delete Wingo 1 Jun 88  
" Opsahl 1 Jul 88

*Kenn Burman*  
KENNETH D. BURMAN  
COL, MC, U.S. Army  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO COL Burman  
Endo Metab

FROM Health Physics Office  
WRAMC

DATE 12 MAY 1988  
Mr. Burton/pdc/75104

CMT 2

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for:.....MAY 1988

*Gerald M. Connock*  
GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

APPROVED BY  
RCC  
07 JUN 1988

DATE

DATE: 3 MAY 88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	<del>NA</del>	29MB	
2	NA	29MB	
3	NA	29MB	
4	NA	AT	
5	NA	AT	
6	NA	9m	
7	X	AT	
8	NA	9m	
9	NA	29MB	
10	NA	9m	
11	NA	9m	
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)
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  - (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  
 (C) - Comments



# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

ASHL-ME

Authorization 615

TO

Health Physics  
Forest Glen

FROM

COL Kenneth D. Burman  
Asst C, Endo-Metab Svc

DATE

3 March 1988  
COL Burman/es/1793

CMT 1

1. Request Dr. Mike Opsahl be re-instated on my authorization 615. He plans to continue to use Chromium 51. He was erroneously deleted in our most recent DF.
2. Also, I previously sent in a DF adding 2LT Susan Wingo to my authorization 615 for P<sup>32</sup>. Please add her on other isotopes to include S<sup>35</sup>, I<sup>131</sup>, and I<sup>125</sup>, as well as Tritium.



KENNETH D. BURMAN  
COL, MC, U.S. Army  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO Endo-Meta Svc  
ATTN: COL. Burman  
WRAMC

FROM Health Physics Office  
WRAMC

DATE 30 MAR 1988  
Mr. Burton/pdc/75104

CMT 2

This Application is given  
interim approval until the  
next meeting of the RCC MAY 1988  
which is scheduled for:.....



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

APPROVED BY  
RCC

07 JUN 1988

DATE

DATE: 15 March 88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DMB	
2	NA	DMB	
3	NA	DMB	
4	NA	Im	
5	NA	Im	
6	NA	Im	
7	NA	Im	
8	NA	Im	
9	NA	DMB	
10	NA	Im	
11	NA	Im	
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)
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- (7) - Training - WRMC Form 538 (Completed by users annually)
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- (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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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

Radiation Protection Course

THRU SFC G. Sheldon  
NCOIC, DCI

FROM Dr. Kenneth D. Burman  
Asst C, Endo-Metab Svc

DATE 28 January 1988  
Dr. Burman/es/1793

CMT 1

TO MAJ G. Connock  
C, Health Physics

1. Thank you for your DF of 13 January 1988 regarding the individuals who are required to attend the "Introductory Principles of Radiation Protection Course". I have given a copy of your DF to appropriate individuals, and they will be in contact with you. Further, I would note that I am aware that Captain Mark Peele, CPT Richard Galloway, Major D. Douglass, Ms. Susan Wingo, and Major Jonathan Kushner have not, to my knowledge, taken this course as of yet. On the other hand, I am relatively certain that Ms. Djuh, Ms. Lukes, and Dr. Latham have taken this course and will be in contact with you regarding documentation.
2. To update this list, I would ask that MAJ Mike Opshal, MAJ Cal Hayslip, and MAJ Jennifer Nuovo be deleted from my authorization since they have moved to other duty stations.

*Ken Burman*

Kenneth D. Burman, M.D.  
Colonel, Medical Corps  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO Dr. Burman  
Endo- Metab

FROM Health Physics Office  
WRAMC

DATE 10 FEB 1988  
Mr. Burton/pdc/75104

CMT 2

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for 1988

*Gerald M. Connock*  
GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

**APPROVED BY**

**RCC**

7 JUN 1988

DATE

DATE: 2 Feb 88

Authorization Review Process  
Branch Input

Auth # H533 615

	A	B	COMMENTS
1	<del>X</del>	DNB	They are on 615 not H533
2	NA	DNB	drop from
3	NA	DNB	
4	NA	Jm	
5	NA	Jm	
6	NA	Jm	
7	X	Jm	Ker Buss
8	NA	Jm	2/9/88
9	NA	DNB	
10	NA	Jm	
11	NA	Jm	
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  
 (C) - Comments

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-CI

RADIOISOTOPE AUTHORIZATION # 615

TO

FROM

DATE

CMT 1

HEALTH PHYSICS OFFICE  
ATTN: MR. BURTON

ASST C, ENDO-METAB  
SVC

27 JAN 88/gms/1793  
DR. BURMAN

Request you remove the name of Dr. Michael Opsahl from my Radioisotope Authorization # 615.



KENNETH D. BURMAN  
COL, MC  
ASSISTANT CHIEF  
ENDOCRINE-MATABOLIC UNIT  
AND KYLE METABOLIC UNIT  
AUTHORIZATION # 615

HSHL-HP

TO COL Burman  
Edno Metab

FROM Health Physics Office  
WRAMC

DATE 04 FEB 1988

CMT 2

Mr. Burton/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC FEB 1988  
which is scheduled for:.....



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

APPROVED BY  
RCC

10 FEB 1988

DATE

DATE: 2 Feb 88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	NA	Im	
5	NA	Im	
6	NA	Im	
7	X	Im	
8	NA	Im	
9	NA	DNB	
10	NA	Im	
11	NA	Im	
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)
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  - (9) - Fort Detrick - Auth's 541, 618, 619, 620, 621
  - (10) - TS Branch Bioassay
  - (11) - TS Branch Personnel dosimetry
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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME (340d)

LT Susan Wingo (USUHS)

TO Health Physics

FROM Asst C, Endo-Metab

DATE 11 December 1987

CMT 1

Dr. Burman/es/1793

Please add LT Susan Wingo to my authorization 615. LT Wingo is a 4th year medical student at USUHS who will be taking a perhaps 2-3 month elective tentatively starting in February 1988 on the Endocrine Service. She will be tentatively labeling oncogenes with P-32 and be hybridizing against various tissues.

*Trainee*



KENNETH D. BURMAN

COL, MC, U.S. Army

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO Asst C, Endo-Metab  
COL Burman

FROM Health Physics Office  
WRAMC

DATE 06 JAN 1988

CMT 2

Ms. Collins/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC, FEB 1988  
which is scheduled for.....



GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

APPROVED BY  
RCC

10 FEB 1988

DATE

DATE: 1/5/88

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DWB	Approved as Trainee
2	NA	DWB	
3	NA	DWB	
4	NA	In	
5	NA	In	
6	NA	In	
7	X	In	
8	NA	In	
9	NA	DWB	
10	NA	In	
11	NA	In	
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)
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- (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
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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HL-ME (340d)

Authorizations 615, 533, and 511

TO Health Physics

FROM

Dr. F. E. Carr  
D, KMU Research Labs

DATE

5 November 1987  
Dr. Carr/es/1419

CMT 1

1. Please remove Mr. E. Dawson, Ms. K. Rice, and Ms. M. Fernandez from authorization 615, 533 and 511.

2. Please add SSG Reynolds Ansley and Ms. Ann H. Reid as technicians to authorizations 615, 533, and 511.



Frances E. Carr, Ph.D.  
Director, Kyle Metabolic Unit  
Research Laboratories  
Dept. of Clinical Investigation

HSHL-HP

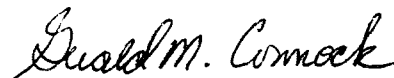
TO Dr. F.E. Carr  
D. KMU Research Labs

FROM Health Physics Office  
WRAMC

DATE **24 NOV 1987**  
Mr. Burton/pdc/75104

CMT 2

This Application is given  
interim approval until the **FEB 1988**  
next meeting of the **RCC**  
which is scheduled for:.....



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

**APPROVED BY**

**RCC**

**10 FEB 1988**

DATE

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

Authorization 615

TO Health Physics

FROM Dr. Kenneth Burman  
Asst C, Endo-Metab

DATE 27 October 1987 CMT 1  
Dr. Burman/es/1793

1. Please add the following personnel to authorization 615 as co-workers:

Mark Peele, CPT, MC

Richard Galloway, CPT, MC *trainee (T+E shows no isotope experience)*

2. These individuals will be working on protocol 1385-87 entitled "Molecular Biology of Thyroid Disease" and generally will be working with <sup>32</sup>P with regard to labeling nucleotides and hybridization studies. These individuals have been counseled with regard to proper use of isotope in this setting. They will be mainly using isotope on Ward 47, Kyle Metabolic Unit, and possibly also utilizing isotope in Building 7.

3. SSG Reynolds Ansley will be taking over SFC's Gerald Sheldon's position on the Kyle Metabolic Unit effective immediately.

*Kenn Burman*  
KENNETH D. BURMAN  
COL, MC, U.S. Army  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO Dr. Kenneth Burman  
Asst C, Endo-Metab

FROM Health Physic Office  
WRAMC

DATE 24 NOV 1987 CMT 2  
Mr. Burton/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC **FEB 1988**  
which is scheduled for:

**APPROVED BY**  
**RCC**  
**10 FEB 1988**

DATE

*Gerald M. Connock*  
GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

DATE: 29 Oct 87

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DOMB	
2	NA	DOMB	
3	NA	DOMB	
4	NA	[Signature]	
5	NA	[Signature]	
6	NA	[Signature]	
7	X	[Signature]	
8	X	[Signature]	(Called 10/20/87)
9	NA	DOMB	T+K
10	X	[Signature]	
11	X	[Signature]	
12			
13			
14			
15			

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  - (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
  - (C) - Comments

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

E -ME (340d)

Isotope Authorizations

THRU C, Endo-Metab Service

FROM

Asst C, Endo-Metab Svc

DATE

8 September 1987

CMT 1

Director, KMU Laboratories

Dr. Burman/es/6-1793

TO Mr. David Burton  
Health Physics

1. Thank you for meeting with Dr. Carr and myself on 19 August 1987, and for the constructive comments regarding our isotope usage and authorizations.

2. On authorization H533 (Dr. Wartofsky), please add room 4743 where isotope will be drawn and Ward 47 where the isotope will be administered. Room 4726 is the appropriate room for 153-Gd and I-125 sealed sources. Please remove Mr. E. Dawson from this authorization.

3. Regarding authorization 511 (Dr. Carr), please list me as a co-worker, list Dr. Jonathan Kushner as trainee, and list Dr. Yueh-Chu Tseng and Ms. Ann Reid as technicians. Please delete Maria Fernandez, Mary Kay Rice, and Ethelbert Dawson from this authorization. The rooms for this authorization should be 4743, 4742, 4746, 4754, and 4760 in Building 2. The rooms for this authorization in Building 7 are G31, G25, and G42. The materials will be utilized in these aforementioned rooms. Also, please add to this authorization P-32, which is attached to nucleotides, and add S-35 attached to proteins. Possession limit is 5 mCi for in vitro studies. The tritium can also be attached to Thymidine with a possession limit of 1 mCi for in vitro studies.

For authorization 615 (Dr. Burman), please add Dr. Carr as a co-worker and delete Mark Nunes, Kathy Weise, Anthony Zavadil, Lou Pangaro, Nancy Whorton, and Rob Sheridan from this authorization. The appropriate rooms to be utilized in Building 2 are 4747, 4752, 4748, and 4744. The rooms utilized in Building 7 are correct. Please note that the radioactive material P-32 can be added on to nucleotides, and S-35 can be attached to proteins.

5. Please note that we have discussed the fact that each technician, trainee or co-worker should keep their own log book of isotope received and disposed. In addition, a "master list" of all isotope in the Unit will be kept by the isotope freezer in room 4750.

6. Thank you for your consideration, and we hope this arrangement is satisfactory.

*Kenneth D. Burman*

KENNETH D. BURMAN

COL, MC, U.S. Army

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

APPROVED BY

RCC

10 FEB 1988

DATE

This Application is given  
interim approval until the  
next meeting of the RCC 14 NOV 1987  
which is scheduled for:.....

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

JHL-ME

Protocol 1385-87

TO Health Physics

FROM

Dr. Kenneth Burman

DATE

23 June 1987

CMT 1

Asst C, Endo-Metab Svc

Dr. Burman/es/6-1793

(Trainee)

Please add Dr. Jonathan Kushner, MAJ, on as a collaborator regarding protocol 1385-87. He will be learning molecular biology techniques and utilizing P32.

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

*Ken Burman*  
KENNETH D. BURMAN, M.D.  
Colonel, Medical Corps  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HS HL-HP

TO Dr. Burman

Asst. C, Endo-Metab

FROM

Health Physics Office

WRAMC

DATE

Mr. Burton/pdc/75104

CMT 2

*Gerald M. Connock*

GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

APPROVED BY

RCC

**20 AUG 1987**

DATE

DA FORM 2496  
AUG 80

PREVIOUS EDITIONS WILL BE USED

☆ U.S. Government Printing Office: 1983-406-0152

26 Jun 87

Auth # 615

	A	B	COMMENTS
1	X	DMB	
2	NA	DMB	
3	NA	DMB	
4	NA	DMB	
5	NA	DMB	
6	NA	DMB	
7	X	DMB	
8	X	DMB	listing As trainee
9	NA	DMB	
10	X	DMB	
11	X	DMB	
12			
13			
14			
15			

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 (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

SUBJECT

HSHL-ME

TO  
Health Physics

FROM

Dr. Kenneth Burman  
Asst C, Endo-Metab

DATE

22 December 1986

Dr. Burman/es/6-179

*Tech.*  
Please add PVT Teed to my authorizations. He is working with CPT R. Paul Schaudies.

*K. Seale*

KENNETH D. BURMAN  
COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO: Dr. Burman  
Asst C, Endo-Metab

FROM: Health Physics Office  
WRAMC

DATE:

CMT-2

Mr. Burton/pdc/75104

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

*Gerald M. Connock*  
GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

HL -ME

TO Health Physics

FROM Dr. Kenneth Burman  
Asst C, Endo-Metab

DATE 7 January 1987  
Dr. Burman/es/6-1793

CMT 1

Please add Captain Mark Peele to my authorization 511/615.

*Trainell*

*Ken Burman*

KENNETH D. BURMAN, M.D.

COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HS HL-HP (HS HL-ME/07 Jan 87)

TO Dr. Kenneth Burman  
Asst C, Endo-Metab, WRAMC

FROM Health Physics Officer  
WRAMC

DATE  
Mr. Burton/acp/75104

CMT 2

**APPROVED BY**  
**RCC**

**11 FEB 1987**

DATE

*Gerald M. Connock*

GERALD M. CONNOCK

MAJ, MS

Health Physics Officer



DATE: 9 Feb 87

Authorization Review Process  
Branch Input

Auth # 511 / 615

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

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# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

SHL-ME

PFC Laura L. Kaseem

TO Health Physics


FROM Dr. Kenneth Burman DATE 25 November 1986  
Asst C, Endo-Metab

CMT 1

Dr. Burman/es/6-1793

Please add PFC Laura L. Kaseem, SSN [REDACTED] to authorizations 511 and 615, as she will be working in our laboratory over the next 2½-3 years. She will be setting up various Elisa techniques and will gradually learn basic endocrinologic and molecular biology techniques.

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



KENNETH D. BURMAN  
COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO: C, Endo-Metab  
Dr. Burman

FROM: Health Physics Office  
WRAMC

DATE: CMT 2  
Mr. Burton/pdc/75104

APPROVED BY  
RCC

11 FEB 1987

DATE



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

DATE: 6 Jan 87

Authorization Review Process  
Branch Input

Auth # 511 + 615

	A	B	COMMENTS
1	X	JSC	
2	W/A		
3	W/A		
4	X	<i>[Signature]</i>	
5	X	<i>[Signature]</i>	
6	X	<i>[Signature]</i>	
7	X	<i>[Signature]</i>	
8	X	<i>[Signature]</i>	
9			
10	X	<i>[Signature]</i>	
11	X	<i>[Signature]</i>	X
12			
13			
14			
15			

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- (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

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SHL-ME

SUBJECT

Ms. Sabita Lahiri

TO Health Physics

FROM Dr. Kenneth Burman DATE 9 December 1986  
Asst C, Endo-Metab Dr. Burman/es/6-1793

CMT 1

Please add Ms. Sabita Lahiri, GS-11 to authorizations 511 and 615. She will be a new employee in our laboratory starting about 1 January 1987.



KENNETH D. BURMAN

COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO: C, Endo-Metab  
Dr. Burman

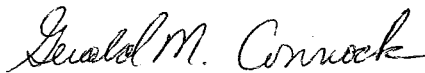
FROM: Health Physics Office  
WRAMC

DATE: CMT 2  
Mr. Burton/pdc/75104

**APPROVED BY**  
**RCC**

11 FEB 1987

DATE



GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

DATE: 6 Jan 87

Authorization Review Process  
Branch Input

Auth # 511 + 615

	A	B	COMMENTS
1	X	JRC	
2	J/A		
3	N/A		
4	X		
5	X		
6	X	Gm	
7	X	Gm	
8	X	Gm	
9			
10	X	Gm	
11	X	Gm	
12			
13			
14			
15			

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- (A) - (X) when complete, (0) when pending, and ( ) when pending completed
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- (C) - Comments

# DISPOSITION FORM

330

Use of this form, see AR 340-15; the proponent agency is TAGC

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSHL-ME

not 4/5

TO

FROM

DATE

CMT 1

Health Physyics

Asst C, Endo-Metab

2 April 1986

Dr. Burman/es/6-1793

1. Please add P32 and S35 to my authorization. We will be labeling DNA and RNA with these substances.
2. Dr. Kathy Weise will be working with us on I<sup>125</sup> labeled compounds over next year to 18 months. Please add her as a worker.
3. Doctors Dennis Mong and Michael Brennan will start their two-year Endocrinology Fellowship 1 July 1986 and should be added as workers.



KENNETH D. BURMAN  
Colonel, Medical Corps  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

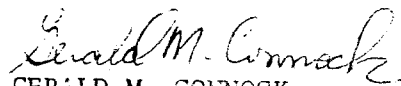
HSHL-HP

TO: Dr. Ken Burman  
C, Endo-Metab

FROM: Health Physics Office  
WRAMC

DATE: MAY 07 1986  
Mr. Stafford/pdc/751041 CMT 1

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: MAY 1986



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

APPROVED BY

RCC

28 MAY 86

DATE

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

IL-ME

Authorization 615

TO Health Physics

FROM Dr. Kenneth Burman DATE 1 October 1986  
Asst C, Endo-Metab Dr. Burman/es/6-1793

CMT 1

Please note that Kathy Rice has left her position at Walter Reed, and as approved on previous DF, Dr. Mike Opsahl and Dr. Kathy Weise are also trainees as is 1LT Mark Nunes. Each of these people have had prior approval as noted. Please also note that our S35 may be attached to amino acids and that the P32 may be attached DNA or RNA.



KENNETH D. BURMAN  
COL, MC  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HSHL-HP

TO Dr. Burman  
Asst C, Endo-Metab

FROM Health Physics Office  
WRAMC

DATE 14 OCT 1986 CMT 2  
SFC Conners/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC *Nov 86*  
which is scheduled for:.....



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

APPROVED BY

RCC

*18 Nov 86*

DATE

DATE: 8 Oct 86

Authorization Review Process  
Branch Input

Auth #

	A	B	COMMENTS
1	X	JSL	
2	X	JSL	
3	X	JSL	
4	X	JSL	
5	X	JSL	
6	X	JSL	
7	X	JSL	
8	X	JSL	
9	N/A		
10	X	JSL	
11	X	JSL	
12			
13			
14			
15			

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- (8) - Training - WRMC Form 1643 (Training and Experience Form)
- (9) - Forts Describers - Auth's 541, 618, 619, 620, 621
- (10) - TS Branch Bioassays
- (11) - TS Branch Personnel dosimetry

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- (C) - Comments



# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL	SUBJECT
HL-ME	DCI Protocol #1359
TO C, Health Physics, WRAMC C, Dept Clinical Investigation, Wd 63 WRAMC	FROM Asst C, KMU DATE 22 September 1986 Burman/bak/6-1743 CMT 1

During the remainder of September and for the month of October 1986, MAJ Jennifer A. Nuovo (from Madigan Army Medical Center) will be returning to WRAMC to complete her work on DCI Protocol #1359. If further information is needed please contact the undersigned.

*Ken Burman*

KENNETH D. BURMAN

COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

HS HL-HP

TO Asst C, KMU Wd 63, WRAMC ATTN: COL Burman	FROM Health Physics Office WRAMC	DATE 14 OCT 1986 SFC Connors/pdc/75104	CMT 2
--	-------------------------------------	---	-------

This Approval is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Nov 86

*Gerald M. Connock*

GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

**APPROVED BY**

**RCC**

18 Nov 86

DATE

POSTED Rec JUN 01 1986

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HL-ME

SUBJECT

LT Mark Nunes

AUTH C15

TO Health Physics

FROM Endo-Metab Svc

DATE 29 May 1986

CMT 1

Dr. Burman/es/6-1793

1. LT Mark Nunes, USAF, has just finished his second year of medical school at the Uniformed Service University of Health Sciences. He is taking a full year out from approximately 15 June 1986 to 15 June 1987 to perform research and has requested to work with us on several protocols. This is to inform you that he will be working on several protocols: 1339-82 Immunology of Thyroid Disease; 1349-84 Immunoglobulin production in Thyroid Disease; 1330-81 Utilization of Hybridoma Antibodies as a Physiologic Probe of Thyrotropin Action; and 1359-85 Newer Investigations into the Immune Mechanisms of Thyroid Disease. In addition, he will be working on the protocol that has recently been submitted entitled "Immunology and Molecular Biology of Endocrine Disease".
2. LT Nunes has received his Bachelor's Degree in [REDACTED] from the University of California at Davis and graduated Summa Cum Laude. His major was in genetics.
3. His specific project is yet to be determined, but probably he will be isolating messenger RNA from human and animal tissues and trying to isolate the messenger RNA that encodes for proteins of interest. Although the exact project has not yet been defined, he will be utilizing tritiated Thymidine, I<sup>125</sup>, S35 and Cl4 in various in vitro assays, as we are authorized to do. He will be working mainly on Ward 47, Kyle Metabolic Unit, however, will also be working in Bldg. 7 in our tissue culture facility.

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

*Kenneth D. Burman*

KENNETH D. BURMAN  
Colonel, Medical Corps  
Assistant Chief, Endocrine-Metabolic Service  
and Kyle Metabolic Unit

HSHL-HP

TO: Dr. Burman  
ASST. Chief, Endo-Metab Svc

FROM: Health Physics Office  
WRAMC

DATE: 5 JUN 1986 CMT 2  
Mr. Stafford/pdc/5104

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Aug 86

APPROVED BY  
RCC  
21 Aug 86  
DATE

*Gerald M. Connock*  
GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

23 JUL 1986 POSTED

**DISPOSITION FORM**

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

REFERENCE OR OFFICE SYMBOL	SUBJECT
-ME	Authorization Concerning S35

AUTH 615

TO	FROM	DATE	CMT 1
Health Physics	Asst C, Endo-Metab	21 July 1986	Dr. Burman/es/6-1793

Request that authorization limit for S35 be raised to 15mCi of S35. This authorization is needed because of our increased use of S35 in translation studies.



KENNETH D. BURMAN  
COL, MC  
Assist. Chief, Endo-Metab Service  
and Kyle Metabolic Unit

HSHL-HP

TO: Asst C, Endo-Metab ATTN: COL Burman	FROM: Health Physics Office WRAMC	DATE: 24 JUL 1986 Mr. Stafford/pdc/75104	CMT 2
--	--------------------------------------	---	-------

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Aug 86



GERALD M. CONNOCK  
MAJ, MS  
Health Physics Officer

**APPROVED BY**  
**RCC**

26 Aug 86

DATE

23 JUL 1986

POSTED

**DISPOSITION FORM**

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

REFERENCE OR OFFICE SYMBOL

SUBJECT

-ME

AUTH 615 AMBEMENT

TO

FROM

DATE

CMT 1

Health Physics

Asst C, Endo-Metab

21 July 1986

Dr. Burman/es/6-1793

Dr. Mike Opsahl should be added as a trainee on my authorization for isotope. He will be investigating the use of various isotopes (including Cr<sup>51</sup>, I<sup>125</sup>) and labeling different types of cells. He will be working on Ward 47, Kyle Metabolic Unit and in Building #7.



KENNETH D. BURMAN

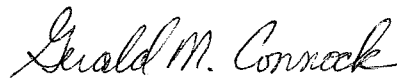
COL, MC

Asst. Chief, Endo-Metab Service  
and Kyle Metabolic Unit

HSHL-HP

TO: Asst C, Endo-Metab  
ATTN: COL BurmanFROM: Health Physics Office  
WRAMCDATE: 24 JUL 1986 CMT 2  
Mr. Stafford/pdc/75104

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Aug 86



GERALD M. CONNOCK

MAJ, MS

Health Physics Officer

**APPROVED BY**  
**RCC**

26 Aug 86

DATE

# APPLICATION FOR AUTHORIZATION TO USE RADIOACTIVE MATERIAL - HUMAN USE

1. APPLICATION FOR: (Check and/or complete as appropriate)	NEW AUTHORIZATION: <input type="checkbox"/>	RENEWAL OF AUTHORIZATION NUMBER: <input checked="" type="checkbox"/> 615	AMENDMENT TO AUTHORIZATION NUMBER: <input type="checkbox"/>
2. APPLICANT'S NAME (Principal User): BURMAN, KENNETH D., COL, MC		3. APPLICANT'S MAILING ADDRESS (Include Organization): Endo-Metab Service  Walter Reed Army Medical Center	
TELEPHONE NUMBER: 576-1793			

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

4. List all CO-WORKERS w/grade & org. Attach comp WRAMC Form 1643 if not on file with WRAMC HPO.  <del>BAKER, James R., MAJ, MC</del> <del>CARR, Frances, Ph.D.</del> <del>PEELE, Mark E., CPT</del> <del>HUMPHREY, Michael, CPT</del> <del>BURCH, Henry B., CPT Maj.</del>	5. List all TRAINEES w/grade & org. TSENG, Yueh-Chu, Ph.D. GLASS, Allen R., LTC, MC SMALLRIDGE, Robert, COL, MC <del>AIMANN, Andrew, Maj, MC</del> TERIANSKY, George, CPT, MC <del>Cai, Wen Yi Dr.</del> <del>Knight, Robert Dr. MC, MC</del> <del>Carrington, Anne</del> Francis, Thomas Dr. Nagy, Endre Dr.	6. List all TECHNICIANS who will work with RAD MAT under this Authorization. DJUH, Yin-Ying CIV <del>KESSLER, Phyllis CIV</del> LUKES, Yvonne CIV ANDERSON, Jeff CIV <del>KASEEM, Laura SP-4</del> <del>LATHAM, Kevin</del> <del>REID, Ann</del> LAHIRI, Sabita <del>HANSEN, Keith</del> BARNES, Susan CIV <del>Rhoomes, Phyllis</del>
---	---	---

7. LOCATION WHERE MATERIAL WILL BE USED:

Bldg. 2 (NMTF) Rms ~~4747~~ <sup>4747</sup> (Bldg. 7, Room G22) 4752/4744, 6Z60

8. LOCATIONS WHERE MATERIAL WILL BE STORED:

Bldg 2 (NMTF) Rms ~~4747~~ <sup>4747</sup> (Bldg. 7, Room G-22) 4752/4744, 6Z60

9. RADIOACTIVE WASTE SINK AUTHORIZED IN ROOM:

NONE 6Z60

10. Radioisotope	11. Chemical and/or Physical Form	12. Possession Limit	13. Use	14. Sealed or Unsealed Source
3-H	Amino acids, testosterone	50 mCi	Tissue metabolism studies	
	Vitamin D, diiodothyronine			
	acetyl coenzyme A, thymidine	1 mCi		
14-C	Amino acids, testosterone	15 mCi	Tissue metabolism studies	
32-P	CATP	5 mCi	In vitro studies	
35-S	Sulphur PTU	20 mCi	In vitro studies	
86-Rb	Rubidium	5 mCi	In vitro studies	
125-I	NaI & labelled compounds	10 mCi	RIA & tracer for in vivo studies	
131-I	NAI (on or with) thyroid	1 mCi	In vitro studies or tissue metabolism studies	
CR-51	NACHromate	30 mCi	In vitro studies	
In-111		1.0mCi		
<div style="font-size: 2em; font-weight: bold; margin: 10px 0;">APPROVED BY</div> <div style="font-size: 2em; font-weight: bold; margin: 10px 0;">RCC</div> <div style="margin: 10px 0;">MAY 23 1990</div> <div style="margin: 10px 0;">DATE</div>				

15. CERTIFICATE

(This item must be completed by applicant)

DATE: 15 FEB 89

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DRNB	
2	X	DRNB	Protocols for all but P-324 I-125
3	X	DRNB	
4	NA	NA	511 (4743, 4748,) 557 (4742)
5	X	NA	Am final bldg 7 Am 22
6	X	hgm	
7	X	hgm	
8	X	DRNB	Signature Burman
9	X	hgm	
10	X	hgm.	
11			
12			Room 640 picked-up by Leppert
13			Susan Barnes
14			
15			

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- (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

15 JAN 25 1991

HSHL-H-HP (385-11m)

MEMORANDUM FOR COL BURMAN

Auth 615

Suspense: 20 Feb 91

SUBJECT: Annual Principal User Briefing

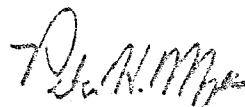
1. Title 10 CFR, Part 19, requires annual training for all radiation workers. Chapter 2.2, WRAMC Reg 40-10, requires the Principal User conduct this training.

2. A review of your authorization to use radioactive materials indicates that annual training is now required for all personnel working under Authorization 615. Suspense dates for training will be made to coincide with the review date of the Principle User's Authorization.

3. Attached are the necessary forms needed to verify this training. Please complete these forms and return them to WRAMC Health Physics Office NLT  
20 Feb 91

4. POC for this office is SSG Gaha, 427-5104/5107.

Encl



PETER H. MYERS  
LTC, MS  
Health Physics Officer

TRAINING CARDS DUE

LAST NAME =====	FIRST NAME =====	IPRP DATE =====	TC =====	DATE =====	TYPE =====	RD =====
** AUTHORIZATION: 615 COL KENNETH BURMAN						
Anderson	Jeffrey S.	8105	9001		tk	11
Barnes	Susan	7502	9001		tk	
Burch	Henry B. CPT	8811	9012		tr	11
Burman	Kenneth COL,MC	7506	PU		pu	NA
Cai	Wen-Yi	8911	9001		tr	
Carr	Frances PhD	8612	9004		co	11
Djuh	Yin-Ying	7208	9004		tk	11
Francis	Thomas	9011	9003		tr	
Glass	Allan R. COL,MC	8802	9004		tr	11
Humphrey	Micheal L. CPT	8811	8912		tr	11
Kaseem	Laura L. PFC	8612	9001		tk	11
Lahiri	Sabita	8706	9005		tk	11
Lukes	Yvonne D.	7005	9001		tk	11
Nagy	Endre	9011	9008		tk	
Rhooms	Phyllis M.	7708	9001		tk	11
Smallridge	Robert COL,MC	7703	9012		tr	11
Teriansky	George CPT	0000	9003		tr	
Tseng	Yueh-Chu PhD.	8802	9005		tr	11

*Highlighted ones due only.*

1-28-91

*Note:*

*- Cai on \$ assignment elsewhere will Ret several months part time.*

*- Kaseem - delete → Korea*

*- Rhoom - activated, in Reserves - returns?*

*155*



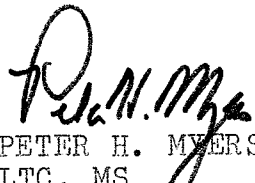
HS HL-H-HP (385-11h) 1st End

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

Health Physics Officer, WRAMC

FEB 19 1991

FOR: Endo-Metabolism, ATTN: COL Kenneth D. Burman

  
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:.....

MARCH 91

**APPROVED BY**  
**RCC**

MAR 06 1991

**DATE**

DATE: 5 FEB 91

Authorization Review Process  
Branch Input

Auth # 1015

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

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- (A) - (X) when complete, (O) when pending, and ( ) when pending completed
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- (C) - Comments

HSHL-CI (340)

18 DEC 90

MEMORANDUM FOR: HEALTH PHYSICS OFFICE, ATTN: MR. DAVE BURTON

SUBJECT: Amendment to Authorization # 615

Request Room G22, Building 7 be removed from authorization #615. There are no immediate plans to reinstitute isotope use or storage in Room G22 under my authorization.

*Kenn Burman*  
Kenneth Burman  
COL, MC

HSHL-H-HP (385-11h) 1st End

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

Health Physics Officer, WRAMC

JAN 24 1991

FOR: Endo-Metabolism, ATTN: COL Kenneth D. Burman, MC

*Peter H. Myers*

PETER H. MYERS  
LTC, MS  
Health Physics Officer

This Application is given  
interim approval until the  
next meeting of the RCC *FEB 91*  
which is scheduled for:.....

**APPROVED BY**  
**RCC**

MAR 06 1991

DATE

DATE: 10 JAN 91

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	ZMB	
2	NA	ZMB	
3	NA	ZMB	
4	NA	ME	
5	NA	ME	transferred to 616 final not nec
6	NA	JAC	
7	NA	ZMB	
8	NA	ZMB	
9	NA	ZMB	
10	NA	JAC	
11	NA	JAC	
12			
13			
14			
15			

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WRAMC  
Audit of Radioactive Material  
(In accordance with AR 48-37 & 48-61)

Inspector: C. Collins Date: 9/13/90 Auth# 615

1. DA form 3862 [NO] (YES)
2. Within limits [NO] (YES)
3. Inventory Control Officer: Jesse Martin  
Room: 2/Kyle Meta Colic
4. WRAMC Regulation 48-13 [NO] (YES)
5. WRAMC Authorization on hand [NO] (YES)
6. General Provisions - Terms & Conditions [NO] (YES)
7. LSC - Source No. & Location: N/A 7464  
152-Eu-002
8. WRAMC form 538 - current [NO] (YES)
9. Sink log [NO] (YES)
10. Signs & Labels: OK
11. Personnel [Additions] [Deletions]  
Delete: MAJ Andrew Ahmann, ~~Wen Yi Cai~~, CPT Mark Peele
12. General Comments: \_\_\_\_\_

Principal User: Mr. J. Martin Authorized Representative: \_\_\_\_\_

Jesse A Martin 9/13/90  
Signature Date  
2 persons deleted as per Dr. Berman 18 Sept  
JPM

HSHL-H-HP (385-11)

SEP 21 1990

MEMORANDUM FOR Endo-Metabolism, ATTN: Kenneth D. Burman, COL, MC

SUBJECT: Authorization 615



PETER H. MYERS  
LTC, MS  
Health Physics Office

This Application is given  
interim approval until the  
next meeting of the RCC *NOV90*  
which is scheduled for:.....

**APPROVED BY**  
**RCC**

NOV 15 1990

**DATE**

DATE: 9/13/90

Authorization Review Process  
Branch Input

Auth # 615

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

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HSHL- ME

17 Aug 1990

MEMORANDUM TO: Mr. Burton,  
Health Physics

TO: C, DCI

SUBJECT: Dr. Endre Nagy

1. Dr. Endre Nagy is a Fogarty Research Fellow from Hungary who is going to spend two years in our laboratory. Please issue him a health physics isotope badge. He will be working on several DCI protocols, to include 1395 and 1316. He will mainly be using 32-P for labelling and hybridization, and perhaps 35-S.

2. His address will be the Kyle Metabolic Unit, Ward 47; phone 576-1419/1793/1699.



Kenneth Burman, M.D.  
Assistant Chief, Endocrine Service

HSHL-H-HP (385-11h) 1st End

LTC Myers/ab/427-5104

Health Physics Officer, WRAMC

SEP 11 1990

FOR Endo-Metabolism, ATTN: Dr. Kenneth D. Burman

Dr. Endre Nagy will be added as a trainee to Authorization 615.



PETER H. MYERS  
LTC, MS  
Health Physics Officer

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

**APPROVED BY**  
**RCC**

NOV 15 1990

DATE



DATE: 23 AUG 90

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	ZMB	
2	NA	ZMB	...
3	NA	ZMB	
4	NA	AP	
5	NA	AP	
6	NA	LRC	
7	X	ZMB	
8	NA	ZMB	
9	NA	ZMB	
10	NA	LRC	
11	X	LRC	..
12			
13			
14			
15			

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04/09/90

TRAINING CARDS DUE

LAST NAME =====	FIRST NAME =====	IPRP TC DATE TYPE RD DATE =====
--------------------	---------------------	------------------------------------

\*\* AUTHORIZATION: 615 COL KENNETH BURMAN

	Ahmann	Andrew MAJ,MC	8805 8811	tr	11
Delete	X <del>Baker</del>	James R. MAJ,MC	8311 8811	co	11
	Carr	Frances PhD	8612 8903	co	11
	Djuh	Yin-Ying	7208 8812	tk	11
	Glass	Allan R. COL,MC	8802 8811	tr	11
Delete	X <del>Hansen</del>	Keith	8811 0000	tk	
Delete	X <del>Reid</del>	Ann H.	8711 8812	tk	

4/10/90

Cancel  
- Baker  
- Hansen  
- Reid

all offices  
up to date

KENNETH D. BURMAN, COL, MC  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit  
Walter Reed Army Medical Center  
Washington, D.C., 20307-5001

163

HL-H-HP

MAY 02 1990

MEMORANDUM FOR Endo-Metabolism, ATTN: COL Burman, WRAMC  
SUBJECT: Authorization 615



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: 18 APR 90

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	NA	DRC	
5	NA	DRC	
6	NA	RF	
7	NA	DNB	
8	NA	DNB	
9	NA	DNB	
10	<del>RF</del> X	RF	
11	<del>NA</del> X	RF	
12			
13			
14			
15			

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HSHL-ME

12 March 1990

MEMORANDUM TO: C, DCI

C, Health Physics

1. The purpose of this memo is to inform you that under the auspices of protocol 1316 we shall be obtaining human eye tissues from Drs. Garrity and Gorman at the Mayo Clinic in order for us to investigate if there is homology between various nucleotides in the thyroid and the eye. One main task is to determine if the TSH receptor is similar in the thyroid gland and the eye, thus leading us to conclusions about the pathophysiology of Graves' ophthalmopathy. All of the human use issues concerning obtaining this tissue will be performed by the Mayo Clinic; we are simply analyzing the tissue they send us.

2. Dr. Thomas Francis is presently a third year Internal Medicine Resident and will be working during this year, as well as during his Endocrine Fellowship, over the next three years, in investigating aspects of protocol 1316. He will mainly be using P 32 and 35 S radioisotopes. Please give him appropriate badges.

3. Thank you.



Kenneth Barman, M.D.  
Assistant Chief, Endocrine Service

HSHL-H-HP

MAY 02 1990

MEMORANDUM FOR Endo-Metabolism, ATTN: COL Burman, WRAMC

SUBJECT: Authorization 615



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: 13 MAR 90

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
-	X	DNB	
2	NA	DNB	
3	NA	DNB	
4	NA	DK	
5	NA	DK	
6	NA	RG	
7	X	DNB	delivered form 3/23, left message 11 Apr
8	NA	DNB	Trainee
9	NA	DNB	
10	NA	RG	
11	NA	RG	
12			
13			
14			
15			

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HSHL-ME

19 OCT 89

MEMORANDUM FOR: Health Physics

SUBJECT: Request Personal Dosimetry Monitor

Request personal Dosimetry Monitor for Dr. Wen Ye <sup>Yi. Cai</sup> ~~Che~~. She should be included on authorization # 615 and 511. Thank you.

A. Trawee 



Frances, E. Carr, Ph.D.  
Director, Kyle Metabolic Unit  
Research Laboratories  
Dept. of Clinical Investigation

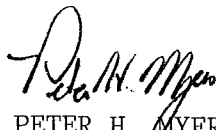
HSHL-H-HP

1 NOV 1989

MEMORANDUM FOR Dept of Clin Invest, ATTN: Dr. Carr

SUBJECT: Authorization <sup>511</sup> 615

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Nov 89



PETER H. MYERS  
LTC, MS  
Health Physics Officer

**APPROVED BY**  
**RCC**

16 NOV 1989

DATE

**WRAMC**  
**Audit of Radioactive Material**  
(In accordance with AR 48-37 & 48-61)

Inspector: D. Burton Date: 25430 Oct Auth# 615

1. DA form 3862 [NO] ☒ [YES]
2. Within limits [NO] ☒ [YES]
3. Inventory Control Officer: J. Martin  
Room: \_\_\_\_\_
4. WRAMC Regulation 48-10 [NO] ☒ [YES]
5. WRAMC Authorization on hand [NO] ☒ [YES]
6. General Provisions - Terms & Conditions [NO] ☒ [YES]
7. LSC - Source No. & Location: 6268, 4743
8. WRAMC form 538 - current [NO] ☒ [YES]
9. Sink log [NO] ☒ [YES] NA
10. Signs & Labels: OK
11. Personnel ☒ [Additions] [Deletions]  
Chen, Wen-Yi Trainee
12. General Comments: Send Blank 538's

Principal User: Dr. Burmann Authorized Representative:

Signature

Date

10-31-69



DATE: 01 Nov 84

Authorization Review Process  
Branch Input

Auth # 511 + 615

	A	B	COMMENTS
1	X	JK	
2	NA	JK	
3	NA	JK	
4	NA	OKC	
5	NA	OKC	
6	NA	AB	
7	X	AB	
8	NA	JK	
9	NA	JK	
10	X	AB	
11	X	AB	requested
12			
13			
14			
15			

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HSHL-ME

23 September 1989

MEMORANDUM TO: Health Physics

SUBJECT: Authorization 615

1. Request that Dr. Wen-Yi Cai, a Visiting Scientist in my laboratory, be added as a trainee. She has an M.D. and Ph.D. degree and has been trained in the use of isotopes in the past. She will mainly be using 32-P, 3-H, 125-I, and 35-S but may use any isotope on my authorization. She will work mainly with Yvonne Lukes in room 4747 on Ward 47 but she will also be working in room 6Z60. She may occasionally work with Dr. Tseng.
2. Please inspect room 6Z60 and please now authorize us to begin using isotopes in that room. Please discuss with Ms. Djuh for further details. use, storage, + wash sink
3. Because of the recent changes in Ward 47, please give me appropriate maps, etc. that need to be posted in various rooms on ward 47 and 6Z60.

  
Kenneth Burman, M.D.  
Assistant Chief, Endocrine Service  
576-1793

HSH1-H-HP

11 OCT 1989

MEMORANDUM FOR Endocrine Svc, ATTN: Dr. Burman

SUBJECT: Authorization 615

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Nov 89



PETER H. MYERS  
LTC, MS  
Health Physics Officer

**APPROVED BY**  
**RCC**

16 NOV 1989

DATE

DATE: 02 Oct 89

Authorization Review Process  
Branch Input

Auth # 615

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

Index of Numbers and Symbols used above:

- (1) - Forms (WRAMC 1661R, 1662R, 1643) (Completed/taped)
  - (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  
 (C) - Comments

HSHL-ME (10-1a)

24 July 1989

MEMORANDUM FOR: Chief, Health Physics, Attn: Mr. Burton, Forest Glen Annex,  
Silver Spring, Maryland 99703-5001

SUBJECT: Room Changes For Authorizations

1. The Endocrine Service has new rooms for the following personnel to be performing radio-isotope procedures. Please annotate the following to allow the authorizations to cover rooms 6Z60, 4747, and 4743.

a) Ms Yin-Ying Djuh is moving from 4747 to 6Z60.

b) Ms Yvonne Lukes is moving from <sup>Delete</sup> 4752 to 4747. 615

c) Dr. Carr is moving from <sup>Delete</sup> 4754 to 4743. 511

d) Ms. Phyllis Kesler is moving from 4743 to 6Z60.

e) A laboratory will be set up on Ward 7464 and the personnel to move there will be determined at a later date.

2. Any questions may be referred to this office at 576-1793.

*Ken Burman*  
KENNETH D. BURMAN, M.D.  
COL, MC  
Asst. Chief, Endocrine-Metabolic  
Service and the Kyle Metabolic Unit

*Place, PhD Auth #511*

31 OCT 1989

HSHL-H-HP

MEMORANDUM FOR Endo- Metabolism, ATTN: Dr. Carr, Dr. Burman, WRAMC

SUBJECT: Authorization 511 & 615

This Application is given  
interim approval until the  
next meeting of the RCC  
which is scheduled for: Nov 89

**APPROVED BY**  
**RCC**

16 NOV 1989

DATE

*Peter H. Myers*  
PETER H. MYERS  
LTC, MS  
Health Physics Officer

LTR M. 11 Aug 89

→ Mr. Burton

HSHL-ME (10-1a)

24 July 1989

MEMORANDUM FOR: Chief, Health Physics, Attn: Mr. Burton, Forest Glen Annex,  
Silver Spring, Maryland 99703-5001

SUBJECT: Room Changes For Authorizations

1. The Endocrine Service has new rooms for the following personnel to be performing radio-isotope procedures. Please annotate the following to allow the authorizations to cover rooms 6Z60, 4747, and 4743.

a) Ms Yin-Ying Djuh is moving from 4747 to 6Z60.

b) Ms Yvonne Lukes is moving from 4752 to 4747.

c) Dr. Carr is moving from 4754 to 4743.

d) Ms. Phyllis Kesler is moving from 4743 to 6Z60.

e) A laboratory will be set up on Ward 7464 and the personnel to move there will be determined at a later date.

2. Any questions may be referred to this office at 576-1793.



KENNETH D. BURMAN, M.D.

COL, MC

Asst. Chief, Endocrine-Metabolic  
Service and the Kyle Metabolic Unit

DATE: 24 July 89

Authorization Review Process  
Branch Input

Auth # 511 & 615

	A	B	COMMENTS
1	<del>X</del>	DNB	which Auth for rooms. Move complete,
2	NA	DNB	final assignment to auth 511 & 615
3	<del>NA</del>	DRC	
4	<del>X</del>	DRC	
5	<del>X</del>	DRC	
6	X	AA	
7	NA	AA	
8	NA	DNB	
9	NA	DNB	
10	NA	AA	
11	NA	AA	
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  
 (C) - Comments

HSHL-ME

12 October 1989

MEMORANDUM FOR: Health Physics

SUBJECT: Fume Hood

Request hood in room 4744 be closed for isotope use. This fume hood has been previously used for idinations; authorizations 511, 615.

Request clearance of scintillation counter; authorization 511 in room 4743. This equipment is to be turned in.



Frances E. Carr, Ph.D.  
Director, Kyle Metabolic Unit  
Research Laboratories  
Dept. of Clinical Investigation

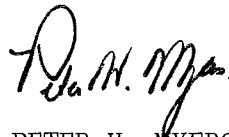
cc Dr. Burman  
Dr. Wartofsky

HSHL-H-HP

8 NOV 1989

MEMORANDUM FOR Dept of Clin Invest, ATTN: Dr. Carr Berman

SUBJECT: Authorization 511 615 This Application is given interim approval until the next meeting of the RCC which is scheduled for: Nov 89



PETER H. MYERS  
LTC, MS  
Health Physics Officer

**APPROVED BY**  
**RCC**

16 NOV 1989

DATE

DATE: 19 Oct 89

Authorization Review Process  
Branch Input

Auth # 511

	A	B	COMMENTS
1	X	DRB	
2	NA	DRB	Delete NaI from Protocol
3	NA	DRB	
4	NA	DRB	
5	X	DRB	equip. final & room 4744
6	X	AA	will pick up C-28
7	NA	AA	
8	NA	DRB	
9	NA	DRB	
10	X	AA	
11	NA	AA	
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)
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- (5) - OPS Branch room final survey
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- (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




HSHL-ME

4 August 1989

MEMORANDUM TO: Health Physics

SUBJECT: Modifications of authorization 615

1. Please increase my allowable authorization of 35-S to 20 millicuries. We are going to attempt to use this agent for our nucleotide sequencing reactions as it seems to give more distinct results.
2. Ms. Lukes and Dr. Carr have completed their recent relocations and are ready to start using isotopes again. ~~Also, Ms. Djuh and Ms. Kesler have almost completed their move to 6Z60.~~ Please survey these rooms to certify we can use isotopes as we have discussed. Also, please send me several sets of Health Physics regulations and maps that need to be posted in each of these new rooms. Thank you.
3. Ms. Kesler recently got married and will change her name to Phyllis Rhooms.

  
Kenneth Burman, M.D.  
Assistant C, Endocrine Svc  
576-1793

HSHL-H-HP

MEMORANDUM FOR Assist Chief, Endocrine Svc, ATTN: Dr. Burman

SUBJECT: Authorization 615

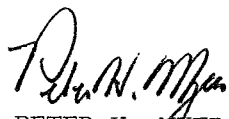
6Z60 will be posted by the Health Physics Office when stored material is removed and lab is set-up.

**APPROVED BY**

**RCC**

**6 SEP 1989**

**DATE**

  
PETER H. MYERS  
LTC, MS  
Health Physics Officer

DATE: 09 Aug 89

Authorization Review Process  
Branch Input

Auth # 615

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

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- (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

HSHL-H-HP

29 AUG 1989

MEMORANDUM FOR Assistant Chief, Endocrine-Metabolic, ATTN: COL Burman, WRAMC

SUBJECT: Authorization 615

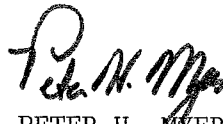
APPROVED BY

This Application is given  
interim approval until the  
next meeting of the RCC SEP 1989  
which is scheduled for.....

RCC

6 SEP 1989

DATE



PETER H. MYERS  
LTC, MS  
Health Physics Officer

Page No. 12  
07/17/89

TRAINING CARDS DUE

LAST NAME =====	FIRST NAME =====	IPRP TC DATE TYPE RD DATE =====
--------------------	---------------------	------------------------------------

\*\* AUTHORIZATION: 615 COL KENNETH BURMAN  
Latham Keith R. 0000 0000 tk

*De Caba*

*Please note any deletions or additions on this form & sign*

*Thank you*

*SSG Caba*

*HPO.*

*KIS*

KENNETH D. BURMAN, COL, MC  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit  
Walter Reed Army Medical Center  
Washington, D.C., 20307-5001

DATE: 14 Aug 89

Authorization Review Process  
Branch Input

Auth # 615

	A	B	COMMENTS
1	X	JMB	
2	NA	JMB	
3	NA	JMB	
4	NA	JMB	
5	NA	JMB	
6	NA	A	
7	X	A	
8	NA	JMB	
9	NA	JMB	
10	X	A	
11	X	A	
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)
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  - (7) - Training - WRAMC Form 538 (Completed by users annually)
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  - (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

REFERENCE OR OFFICE SYMBOL

HSHL-HP

SUBJECT

Research Protocol for Isotope Named in the  
Application for Use of Radioactive Material  
Authorization # \_\_\_\_\_TO Health Physics Officer  
WRAMC

FROM

DATE

CMT 1

a. Principal User

Brewer

Telephone Number

576 1793

Authorization Number

615

b. Investigator & Auth#  
(If different than (a.))c. Trainee & Auth#d. Technician & Auth#Lubas  
Dyck  
Kesslere. Radioisotope

C-14

Physical/Chemical form

Vitamin

Maximum Quantity to be used  
per Experiment in millicuries  
(mCi)

1 mCi

f. Title of Project:

Oncogenes / mutations

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

1 mCi

g. Beginning Date:

1 Jan 89

h. Ending Date:

1 Jan 92

i. Repetitive Study

Yes 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.)

Received 474 - stored 4744 -&gt; used 4743 -&gt; Mo

- Liquid waste disposal of 4743

- Used in cell / tissue studies

(not using at present)

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	Bldg#	Room#

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 #	NMTF			
Room #	2			
Max. Amt. (mCi)	100 1 mCi			

o. Isotope Storage Location

Building # 2 Room # 4743 Max. Amt. (mCi) 1-5 uCi

p. Isotope Waste Storage Locations

(1) Biological: Bldg# 2 Room# 4743

(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 1130 to 1230.

☐

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.

*Burman*

Signature

3/15/89

Date

*Isotope not used*

*rec'd*

COL Kenneth D. Burman, M.D.  
489-46-3548  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit



# DISPOSITION FORM

For use of this form, see AP 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 # _____	
TO Health Physics Officer WRAMC		FROM	DATE
		CMT 1	
a. <u>Principal User</u> S <sup>35</sup> / <i>Burum</i>	Telephone Number 57671793		Authorization Number 615
b. <u>Investigator &amp; Auth#</u> (If different than (a.))	c. <u>Trainee &amp; Auth#</u>		d. <u>Technician &amp; Auth#</u> <i>Lube</i> <i>Cash</i> <i>Bzuh</i>
e. <u>Radioisotope</u> S <sup>35</sup>	Physical/Chemical form <i>attached to</i> <i>howards</i>		Maximum Quantity to be used per Experiment in millicuries (mCi) 1 mCi
f. <u>Title of Project:</u> <i>Oncofores / Nutrition</i>			Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi) 5 mCi
g. <u>Beginning Date:</u> 1 / Jan 84	h. <u>Ending Date:</u> 1 Jan 92		i. <u>Repetitive Study</u> Yes <input type="checkbox"/> No <input type="checkbox"/>
j. <u>Life Cycle of Radioisotope Utilized for Research Procedure:</u> (Use block/flow diagram to show (where, how much, whose, etc..) isotope travel from receipt to disposal.) <ul style="list-style-type: none"> <li>- Received Wd 47</li> <li>- Stored 47 43</li> <li>- Used in 47 43</li> <li>- Liquid waste / cell culture / molypic 8044</li> <li>- Disposal of 47 43</li> </ul>			

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	Bldg#	Room#

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 #	2			
Room #	4743			
Max. Amt. (mCi)	5			

o. Isotope Storage Location

Building # 2 Room # 4743 Max. Amt. (mCi) 5

p. Isotope Waste Storage Locations

(1) Biological: Bldg# \_\_\_\_\_ Room# \_\_\_\_\_

(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 1130 to 1230.

☐

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.

Brewer 3/15/89  
Signature Date

COL Kenneth C. [unclear]  
489-46-3548  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL <b>HSHL-HP</b>		SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # <u>615</u>	
TO Health Physics Officer WRAMC		FROM Kenneth D. Burman, COL, MC Assistant Chief, Endocrine-Metabolic Service and Kyle Metabolic Walter Reed Army Medical Center Washington, DC 20307-5000	DATE CMT 1
a. <u>Principal User</u> <i>Burman</i>	Telephone Number <i>61793</i>	Authorization Number <i>615</i>	
b. <u>Investigator &amp; Auth#</u> (If different than (a.))	c. <u>Trainee &amp; Auth#</u>	d. <u>Technician &amp; Auth#</u> <i>Hubb</i> <i>Dyck</i> <i>Kerle</i>	
e. <u>Radioisotope</u> <i>125 I</i>	<u>Physical/Chemical form</u> <i>Labelled to barium n free</i>	<u>Maximum Quantity to be used per Experiment in millicuries (mCi)</u> <i>500 uCi</i>	
f. <u>Title of Project:</u> <i>Oncogenes</i>		<u>Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)</u> <i>~?</i>	
g. <u>Beginning Date:</u> <i>1 Jan 89</i>	h. <u>Ending Date:</u> <i>1 Jan 92</i>	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.)

- Received *Wd 47* → *Stored* *4752* → *used* → *disposed*  
*4758*  
*4764*  
- *Rarely utilized - Room 4744*  
- *Used @ usually ~ 500 uCi*  
*attached to ligand - not free -*  
*used in RIA / liquid waste collected in 4743 + then disposed*

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.

Burman 8 Feb 89  
Signature Date

Kenneth D. Burman, COL, MC  
Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic  
Walter Reed Army Medical Center  
Washington, DC 20307-5001

# POSITION 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 # 615

TO Health Physics Officer  
WRAMC

FROM

Burman

DATE

8 Feb 89

CMT 1

a. Principal User

Burman

Telephone Number

61793

Authorization Number

615

b. Investigator & Auth#  
(If different than (a.))

c. Trainee & Auth#

d. Technician & Auth#

Dubles  
Dyck  
Kerla

e. Radioisotope

p32

Physical/Chemical form

nucleotide  
label or free

Maximum Quantity to be used  
per Experiment in millicuries  
(mCi)

1 mCi

f. Title of Project:

Oncogenes

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

Unknown

g. Beginning Date:

1 JAN 89

h. Ending Date:

1 JAN 92

i. Repetitive Study

Yes

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.)

Received → Stored → Used → disposal  
Wd 47      4752 4748 4744 (same rooms)  
~ 1 mCi  
- Used in room 4743 mostly for hybridization on blots. Liquid waste stored in 4743 then disposed of

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) - *Use of various possible carcinogens such*

---

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.

*- molecules only as required*

*Ken Burman 8 Feb 89*  
\_\_\_\_\_  
Signature Date

Kenneth D. Burman, PhD, MC  
Assistant Chief, Exposure-Metabolic  
Service and Kyle Metabolic  
Walter Reed Army Medical Center  
Washington, DC 20307-5001

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL  MSHL-HP	SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization # _____
---	---

TO Health Physics Officer WRAMC	FROM	DATE	CMT 1
------------------------------------	------	------	-------

a. <u>Principal User</u>  Burrman	Telephone Number  6-1793	Authorization Number  615
b. <u>Investigator &amp; Auth#</u> (If different than (a.))	c. <u>Trainee &amp; Auth#</u>	d. <u>Technician &amp; Auth#</u>  Lube Psych Keele
e. <u>Radioisotope</u>  3H	Physical/Chemical form  thymidine label	Maximum Quantity to be used per Experiment in millicuries (mCi)  50 mci
f. <u>Title of Project:</u>  Immunity of fasting		Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi)  ~15 mci
g. <u>Beginning Date:</u>  1 Jan 89	h. <u>Ending Date:</u>  1 Jan 92	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.)

Isotope stored in 4743 - used  
to ~~label~~ cell harvest - 4743  
liquid waste stored 4743 then  
expelled



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

*mouse*

Bldg#

Room#

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

Building #

Room #

Max. Amt (mCi)

Location 1

*1*  
*4743*

*5 mCi*

Location 2

Location 3

Location 4

o. Isotope Storage Location

Building #

*1*

Room #

*4743*

Max. Amt. (mCi)

*50 mCi*

p. Isotope Waste Storage Locations

(1) Biological: Bldg#

*1*

Room#

*4743*

(2) All other: Bldg#

Room#

☒

All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTE) - 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 1130 to 1230.

☐

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.

Ken Bm 3/14/83  
Signature Date

REFERENCE OR OFFICE SYMBOL

HSHL-HP

SUBJECT

Research Protocol for Isotope Named in the  
Application for Use of Radioactive Material  
Authorization # \_\_\_\_\_TO Health Physics Officer  
WRAMC

FROM

DATE

CMT 1

a. Principal User

Bumgar

Telephone Number

61793

Authorization Number

615

b. Investigator & Auth#  
(If different than (a.))c. Trainee & Auth#d. Technician & Auth#Heber  
Dyck  
Kesslere. Radioisotope

131 I

Physical/Chemical form

Attached to  
KorwanesMaximum Quantity to be used  
per Experiment in millicuries  
(mCi)

1000 Ci

f. Title of Project:

Oncogenes

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

2 mCi

g. Beginning Date:

1/Jan 88

h. Ending Date:

1 Jan 92

i. Repetitive Study☒ Yes☐ Noj. 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.)Received 47 → stored → used → disposal  
4744 4743 4747- RIA/beels - liquid waste  
disposed of in 4743

- beels mls fluid

(not using at present)

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

Bldg#

Room#

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 #

Room #

Max. Amt. (mCi)

NMTP

4743

~~100m~~

5mCi

o. Isotope Storage Location

Building # NMTP Room # 4743

Max. Amt. (mCi) 5mCi

p. Isotope Waste Storage Locations

(1) Biological: Bldg# \_\_\_\_\_ Room# \_\_\_\_\_

(2) All other: Bldg# \_\_\_\_\_ Room# \_\_\_\_\_

☒

All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTP) - 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 1130 to 1230.

☐

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.

PERSONAL INFORMATION  
WAS REMOVED BY NRC.  
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Burman 15 March 89  
Signature Date  
COL Kenneth D. Burman, M.D.  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit

FOR USE OF THE FBI, AND ALL OTHERS, THE PROCEEDINGS ARE TO BE

REFERENCE OR OFFICE SYMBOL HSHL-HP		SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization #	
TO Health Physics Officer WRAMC		FROM	DATE
a. Principal User Buevan		Telephone Number 526 1793	Authorization Number 605
b. Investigator & Auth# (If different than (a.))	c. Trainee & Auth#		d. Technician & Auth# Lube - Kesler - Ojish
e. Radioisotope Rb 86	Physical/Chemical form Rb 86 free		Maximum Quantity to be used per Experiment in millicuries (mCi) 1 mCi
f. Title of Project: Red cell update			Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi) ?
g. Beginning Date: 1 Jan 84	h. Ending Date: 1 Jan 92		i. Repetitive Study <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.) not being used at present - Received 4/7/84 - 8me 4/7/84 - used 4/7/84 - Liquid waste / red cells - Disposed of 4/7/84			

FORM 2496  
AUG 80

PREVIOUS EDITIONS WILL BE USED

U.S. GOVERNMENT PRINTING OFFICE: 1980-117

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

Bldg#

Room#

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

Building #

Room #

Max. Amt. (mCi)

Location 1

Location 2

Location 3

Location 4

2  
4783  
5

o. Isotope Storage Location

Building #

Room #

Max. Amt. (mCi)

2 4783

p. Isotope Waste Storage Locations

(1) Biological: Bldg#

Room#

(2) All other: Bldg#

Room#

4783

☒ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NMTF) - loading dock) (1530 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 1130 to 1230.

☐ 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.

Burman  
Signature

3/15/87  
Date

PERSONAL INFORMATION  
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COL Kenneth D. Burman, M.D.  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit



REFERENCE OR OFFICE SYMBOL HSHL-HP		SUBJECT Research Protocol for Isotope Named in the Application for Use of Radioactive Material Authorization #	
TO Health Physics Officer WRAMC		FROM	DATE
a. Principal User Bullock		Telephone Number 576 1793	Note: Please make sure Hansen added to Authorization Number 665
b. Investigator & Auth# (If different than (a.))	c. Trainee & Auth#	d. Technician & Auth# Byrd / Kesler Lubbes / Hansen	
e. Radioisotope Cs 137	Physical/Chemical form free	Maximum Quantity to be used per Experiment in millicuries (mCi) 1 mCi	
f. Title of Project: Killer cells		Maximum Quantity to be used for Entire Project (if known) in millicuries (mCi) ?	
g. Beginning Date: 1 Jan 88	h. Ending Date: 1 Jan 92	i. Repetitive Study <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.)			

- Receive waste 47
- Transported & sent in Buggy 7
- Report of Bldg 7
- Cell labels - liquid waste
- Dispose waste

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. Laboratory Animal Usage

Species

Bldg#

Room#

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

Building #

Room #

Max. Amt. (mCi)

Location 1

7

Location 2

2

4743

4741

Location 3

Location 4

o. Isotope Storage Location

Building # 7

Room #

Max. Amt. (mCi)

p. Isotope Waste Storage Locations

(1) Biological: Bldg#

Room#

(2) All other: Bldg#

Room#

☒ All radioactive waste will be transferred to the Health Physics collection point, WRAIC (Bldg 2 (NMTF) - loading dock) (1530 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 1130 to 1230.

☐ 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.

Burman 3/15/89  
Signature Date

PERSONAL INFORMATION  
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COL Kenneth D. Burman, M.D.  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit

REFERENCE OR OFFICE SYMBOL

MSHL-HP

SUBJECT

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

TO Health Physics Officer  
WRAMC

FROM

DATE

CMT 1

a. Principal User

*Buller*

Telephone Number

*576 1793*

Authorization Number

*615*

b. Investigator & Auth#  
(If different than (a.))

c. Trainee & Auth#

d. Technician & Auth#

*Dyck/Kesler  
Lubs*

e. Radioisotope

*In <sup>111</sup>*

Physical/Chemical form

*free*

Maximum Quantity to be used  
per Experiment in millicuries  
(mCi)

*1*

f. Title of Project:

*Keller cells*

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

*?*

g. Beginning Date:

*1/1/84*

h. Ending Date:

*2-9-82*

i. Repetitive Study

☒ Yes ☐ 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.)

*Received w/ 47 (some 4743)*

*- used 4743*

*- Liquid waste*

*- Bldg 2 (4743)*

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. Laboratory Animal Usage

Species

Bldg#

Room#

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

Building #

Room #

Max. Amt. (mCi)

Location 1

Location 2

Location 3

Location 4

✓

4743

1

o. Isotope Storage Location

Building #

Room #

Max. Amt. (mCi)

✓

4743

1

p. Isotope Waste Storage Locations

(1) Biological: Bldg#

Room#

(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 1130 to 1230.

☐

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.

Burman  
Signature

3/15/89  
Date

PERSONAL INFORMATION  
WAS REMOVED BY NRC.  
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INFORMATION WAS  
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COL Kenneth D. Burman, M.D.  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

Research Protocol for Isotope named in the  
Application for Use of Radioactive Material  
Authorization # 615

TO

Health Physics Officer  
WRAMC

FROM

Kenneth D. Burman, MD  
Asst.C, KMU

DATE

11-5-83

CMT 1

a. Principal User:

BURMAN, Kenneth D., LTC, MC

Telephone Number

576-1743

Authorization No.

615

b. Investigator & Auth #

BURMAN, Kenneth D., LTC, MC

c. Trainee & Auth #

d. Technician & Auth #

DJUH, Yin-Ying  
FAMA, Don  
KESLER, Phyllis  
LUKES, Yvonne

e. Radioisotope

32-P

35-S

86-Rb

Physical/Chemical form

cATP

PTU

Rubidium

Maximum  
Quantity per Experi-  
ment (mCi)

1mCi each

f. Title of Project:

In Vitro studies

Maximum Quantity  
for Entire Project  
(mCi)

5mCi each

g. Beginning Date:

On-going

h. Ending Date:

i. Repetitive Study

☒ Yes

☐ No

j. Life cycle of Radioisotope utilized for Research Procedure:

Isotopes delivered by Health Physics - stored in refrigerator room 4742 -  
aliquoted into samples in laboratories (rooms 4743 and 4747) - counted  
and discarded as radioactive waste - Delivered to loading dock NMTF every  
wednesday to Health Physics in the appropriately marked containers.

153

4.13.87



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 Memo #3, #5, & #8. 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 NONE

Bldg #

Room #

m. Disposition of Animals

☒ Not Applicable

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

☐ Other (Specify)

n. Isotope Utilization Location

Bldg

Loc. #1

Loc. #2

Loc. #3

Loc. #4

Loc. #5

Room

2 (NMTF)

2 (NMTF)

4743

4747

Maximum Amt  
(mCi)

1mCi

1mCi

o. Isotope Storage Location

Bldg 2 (NMTF)

Room 4742

Maximum Amt (mCi) 5mCi each



p. Isotope Waste Storage Location

(1) Biological: Bldg # NA Room #

(2) All other: Bldg # 2(NMTF) Room # 4743 and 4747

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

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR(Forest Glen Section) on Thursday (1330 to 1430) every other week.

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

s. Personnel Dosimetry

Whole Body ☒

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. 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, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

The research protocol enumerated above 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 procedures.

Ken Burman  
Signature

# DISPOSITION FORM

For use of this form, see AR 340-15; the disposing Agency is TAGC

REFERENCE OR OFFICE SYMBOL

MSHL-HP

SUBJECT

Research Protocol for Isotope Named in the Application for use of Radioactive Material Authorization # 615

Health Physics Officer  
WRAMC

a. Principal User

Burman

Telephone Number

1743

Authorization Number

615

b. Investigator & Auth#  
(If different than (a.))

c. Trainee & Auth#

Dr. Sack  
J. Dziah  
P. Kestler

d. Technician & Auth#

M. Rosow  
Y. Kestler  
J. Kestler

e. Radioisotope

Cr<sup>51</sup>

Physical/Chemical form

Cr<sup>51</sup>

Maximum Quantity to be used  
per Experiment in millicuries  
(mCi)

(mCi)

f. Title of Project:

Immunoglobulin  
production

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

g. Beginning Date:

1 Dec 84

h. Ending Date:

1 Dec 87

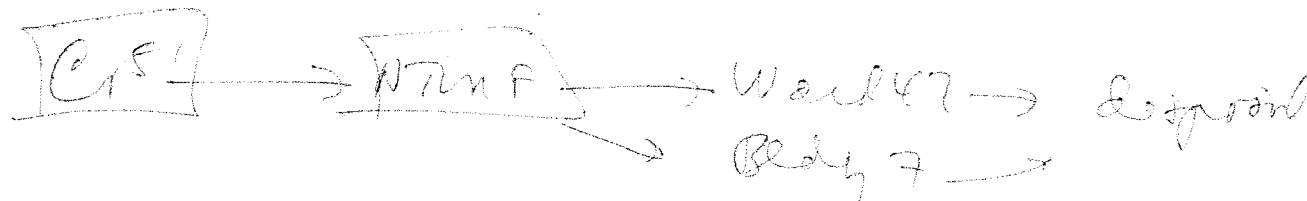
i. Repetitive Study

Yes

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.)



KB 4.13.87



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	Bldg#	Room#
<i>None</i>		

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 #	<i>NTMF</i>	<i>Bldg 7</i>		
Room #	<i>W0447</i>			
Max. Amt (mCi)	<i>1 mCi</i>	<i>1 mCi</i>		

o. Isotope Storage Location

Building # *7 or NTMF* Room # *W0447* Max. Amt. (mCi) *1.0 mCi*

p. Isotope Waste Storage Locations

(1) Biological: Bldg# *None* Room#

(2) All other: Bldg# *NTMF* Room# *Bldg 7*

- ☒ All radioactive waste will be transferred to the Health Physics collection point, WRAMC (Bldg 2 (NTMF) - 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 in 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

10/1/88  
Asst. Dir. of Health Physics  
Battelle Pacific Northwest Laboratory  
Richland, WA 99352

# 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 # 615

TO Health Physics Officer  
WRAMC

FROM

DATE

CMT 1

a. Principal User

BURMAN

Telephone Number

1743

Authorization Number

615

b. Investigator & Auth#  
(If different than (a.))

c. Trainee & Auth#

Dr. SACK  
Y. Djah  
P. Kerlor

d. Technician & Auth#

Maria Rosario  
Y. Luker  
J. Baker

e. Radioisotope

H-3

Physical/Chemical form

Thymidine

Maximum Quantity to be used  
per Experiment in millicuries  
(mCi)

0.1 mCi

f. Title of Project:

Immune globulin  
Production

Maximum Quantity to be used  
for Entire Project (if known)  
in millicuries (mCi)

g. Beginning Date:

1 Dec 84

h. Ending Date:

1 Dec 87

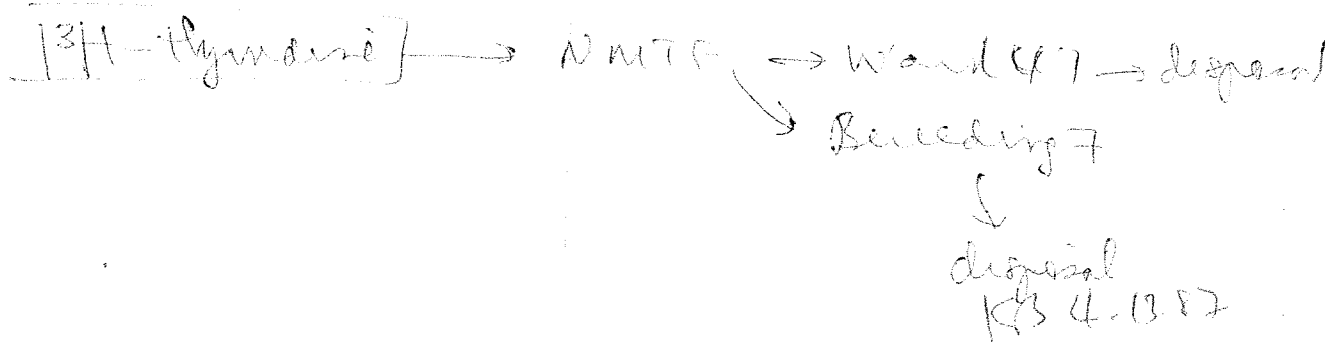
i. Repetitive Study

Yes

☒ 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. Laboratory Animal Usage

Species

Bldg#

Room#

*none*

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

Building #

Room #

Max. Amt (mCi)

Location 1

*NTRF  
Ward 47*

*1 uCi*

Location 2

*Bldg 7*

*1 uCi*

Location 3

Location 4

o. Isotope Storage Location

Building #

*7*

Room #

*or 4247*

Max. Amt. (mCi)

*6.0*

*uCi*

p. Isotope Waste Storage Locations

(1) Biological: Bldg#

*none*

Room#

(2) All other:

Bldg#

*NTRF*

Room#

*Bldg 7*



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 8079) 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 ☐

Waist Badge ☐

TLD Ring ☐ (by CrSI)

*(Are these needed for  $^3H$ )*  
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.

*12/12/87*  
*Ken Brown*

Signature

Date

RECEIVED  
100. 113  
12/12/87  
12/12/87



# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

Research Protocol for Isotope named in the Application for Use of Radioactive Material Authorization # 615

TO Health Physics Officer  
WRAMC

FROM Kenneth D. Burman, MD  
Asst.C, KMU

DATE May 11, 83 CMT 1

a. Principal User:

BURMAN, Kenneth D., LTC, MC

Telephone Number

576-1743

Authorization No.

615

b. Investigator & Auth #

BURMAN, Kenneth D., LTC, MC

c. Trainee & Auth #

d. Technician & Auth #

DJUH, Yin-Ying  
FAMA, Don  
KESLER, Phyllis  
LUKES, Yvonne

e. Radioisotope

125-I

Physical/Chemical form

NaI and organic compounds

Maximum  
Quantity per Experiment (mCi)  
.05mCi

f. Title of Project:

Radioimmunoassay

Maximum Quantity  
for Entire Project  
(mCi)  
10mCi

g. Beginning Date:

On-going

h. Ending Date:

i. Repetitive Study

☒ Yes

☐ No

j. Life cycle of Radioisotope utilized for Research Procedure:

125-I arrives (delivered by WRAMC Health Physics) - placed in refrigerator room 4742. Aliquoted in labs (rooms 4743 and 4747).  
Iodinations done under Dr Brutons' authorization #511 in room 4742.  
Waste delivered every wednesday to loading dock of NMTF (Health Physics) in appropriately labelled containers.

K-3

4.13.87

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 Memo #3, #5, & #8. 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 NONE

Bldg #

Room #

m. Disposition of Animals

☒ Not Applicable

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

☐ Other (Specify)

n. Isotope Utilization Location

	Loc. #1	Loc. #2	Loc. #3	Loc. #4	Loc. #5
Bldg	2(NMTF)	2(NMTF)	2(NMTF)		
Room	4743	4747	4742		
Maximum Amt (mCi)	.5mCi	.5mCi	Auth# 511 .5mCi		

o. Isotope Storage Location

Bldg 2(NMTF)

Room 4742

Maximum Amt (mCi) 10mCi

p. Isotope Waste Storage Location

- (1) Biological: Bldg # NA Room #  
(2) All other: Bldg # 2(NMTF) Room # 4743 & 4747

- ☒ All radioactive waste will be transferred to the Health Physics collection point, WRAMC(Bldg 2 NMTF-Loading Dock)(1330 to 1430) of each week.
- ☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.
- ☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR(Forest Glen Section) on Thursday (1330 to 1430) every other week.

---

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

---

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

---

s. Personnel Dosimetry

Whole Body ☒

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. Assigned dosimetry monitors will be worn by all participating personnel.

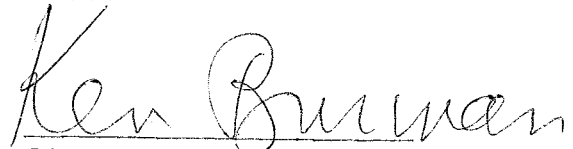
- 
- t. Are there any significant non-radiation personnel hazards associated with experiments (Biological, Explosive, Toxic substances, High Intensity Optical sources, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

---

The research protocol enumerated above 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 procedures.

  
Signature

# DISPOSITION FORM

For use of this form, see AR 340-13, the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

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

TO

Health Physics Officer  
WRAMC

FROM

DATE 7-Jul-81

CMT 1

a. Principal User:

Burman, Kenneth

Telephone Number

6-3853

Authorization No.

615

b. Investigator & Auth #

Latham, Keith

c. Trainee & Auth #

d. Technician & Auth #

DJ4H, Vin

e. Radioisotope

P<sup>32</sup>

Physical/Chemical form

A.T.P.

Maximum Quantity per Experiment (mCi)

0.1 mCi

f. Title of Project:

Regulation of TV Conversion

Maximum Quantity for Entire Project (mCi)

5 mCi

g. Beginning Date:

7 July 81

h. Ending Date:

7 July 84

i. Repetitive Study

☐ Yes

☐ No

j. Life cycle of Radioisotope utilized for Research Procedure:

Kept in Plexiglas then lead  
Shield - Room 4742 Used in 4747  
or 4743. Disposed of on  
Wed afternoons.

KB 4-8-87

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 Memo #3, #5, & #8. 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

Bldg #

Room #

m. Disposition of Animals

☒ Not Applicable

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

☐ Other (Specify)

n. Isotope Utilization Location

	Loc. #1	Loc. #2	Loc. #3	Loc. #4	Loc. #5
Bldg 2					
Room	4747	4743			
Maximum Amt (mCi)	1mCi	1mCi			

o. Isotope Storage Location

Bldg 2                      Room 4742                      Maximum Amt (mCi) 5mCi

p. Isotope Waste Storage Location

(1) Biological: Bldg #                      Room #

(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) of each week.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR (Forest Glen Section) on Thursday (1330 to 1430) every other week.

---

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

---

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

---

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. 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, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

---

The research protocol enumerated above 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 procedures.

*Ken Bruneau*

Signature

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

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

TO

Health Physics Officer  
WRAMC

FROM

DATE 7-Jul-81

CMT 1

a. Principal User:

Burman, Kenneth

Telephone Number

Authorization No.

615

b. Investigator & Auth #

Latham, Keith

c. Trainee & Auth #

d. Technician & Auth #

DJUH, Yin

e. Radioisotope

Rb<sup>86</sup>

Physical/Chemical form

Rb<sup>86</sup>

Maximum Quantity per Experiment (mCi)

0.1 mCi

f. Title of Project:

Regulation of T<sub>4</sub> conversion

Maximum Quantity for Entire Project (mCi)

5 mCi

g. Beginning Date:

7 July 81

h. Ending Date:

7 July 84

i. Repetitive Study

☐ Yes

☐ No

j. Life cycle of Radioisotope utilized for Research Procedure:

Kept in Plexiglas then lead  
shield - Room 4742. Used in 4747  
or 4743. Advised of on Wed.  
afternoons.

51 4-13-87

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 Memo #3, #5, & #8. 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

Bldg #

Room #

m. Disposition of Animals



Not Applicable



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



Other (Specify)

n. Isotope Utilization Location

Bldg

Loc. #1

Loc. #2

Loc. #3

Loc. #4

Loc. #5

Room

Maximum Amt  
(mCi)

1  
4747

1  
4743

1  
4754

100 mCi

1 mCi

1 mCi

o. Isotope Storage Location

Bldg

Room

Maximum Amt (mCi)

1

4742

5 mCi



p. Isotope Waste Storage Location

(1) Biological: Bldg # \_\_\_\_\_ Room # \_\_\_\_\_

(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) of each week.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR (Forest Glen Section) on Thursday (1330 to 1430) every other week.

---

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

---

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

---

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. 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, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

---

The research protocol enumerated above 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 procedures.

*Ken Brunner*

Signature

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

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

TO

Health Physics Officer  
WRAMC

FROM

DATE 7-Jan-81

CMT 1

a. Principal User:

Burnan, Kenneth

Telephone Number

6-3853

Authorization No.

615

b. Investigator & Auth #

Latham, Keith

c. Trainee & Auth #

d. Technician & Auth #

DJUH, VIN

e. Radioisotope

131 I

Physical/Chemical form

alone or attached to thyronine .100 mCi

Maximum Quantity per Experiment (mCi)

f. Title of Project:

Regulation of T4 to T3 conversion

Maximum Quantity for Entire Project (mCi)

5 mCi

g. Beginning Date:

7 July 81

h. Ending Date:

7 July 84

i. Repetitive Study



Yes



No

j. Life cycle of Radioisotope utilized for Research Procedure:

All isotope kept in lead  
refuge (4742) then used either  
in 4747 or 4743; ~~dump~~ beyond  
of loading each used.

Maximum time kept in 4747  
for original isotope is 4-6  
weeks.

Retire

Ken. Burn

4-13-87

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 Memo #3, #5, & #8. 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

Bldg #

Room #

m. Disposition of Animals



Not Applicable



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



Other (Specify)

n. Isotope Utilization Location

Bldg

2

Loc. #1

Loc. #2

Loc. #3

Loc. #4

Loc. #5

Room

4747

4743

Maximum Amt  
(mCi)

o. Isotope Storage Location

Bldg

2

Room

4742

Maximum Amt (mCi) 1mCi

p. Isotope Waste Storage Location

(1) Biological: Bldg #                      Room #

(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) of each week.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR (Forest Glen Section) on Thursday (1330 to 1430) every other week.

---

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

---

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

---

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☐

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. 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, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

---

The research protocol enumerated above 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 procedures.

*Ken Burman*  
Signature

# DISPOSITION FORM

For use of this form, see AR 340-13, the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

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

TO

Health Physics Officer  
WRAMC

FROM

DATE 7-JUN-81 CMT 1

a. Principal User:

Burman, Kenneth

Telephone Number

6-3853

Authorization No.

615

b. Investigator & Auth #

Latham, Keith

c. Trainee & Auth #

d. Technician & Auth #

DTUH, Yin

e. Radioisotope

$^{125}\text{I}$

Physical/Chemical form

alone n  
thyroxine attached

Maximum Quantity per Experiment (mCi)

1.8 mCi

f. Title of Project:

Regulation of T4 to T3 conversion

Maximum Quantity for Entire Project (mCi)

5 mCi

g. Beginning Date:

7 July 81

h. Ending Date:

7 July 84

i. Repetitive Study

☐ Yes

☐ No

j. Life cycle of Radioisotope utilized for Research Procedure:

All isotope kept in lead  
refry (4742) then used either  
in 4747 n 4743; kept out of  
on loading each each used.  
[When codivale case 50 mCi]

Revised  
4-13-87  
145

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 Memo #3, #5, & #8. 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

Bldg #

Room #

m. Disposition of Animals

☒ Not Applicable

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

☐ Other (Specify)

n. Isotope Utilization Location

	Loc. #1	Loc. #2	Loc. #3	Loc. #4	Loc. #5
Bldg 2					
Room	4747	4743			
Maximum Amt (mCi)					

o. Isotope Storage Location

Bldg 2 Room 4742 Maximum Amt (mCi) 10mCi

p. Isotope Waste Storage Location

(1) Biological: Bldg # \_\_\_\_\_ Room # \_\_\_\_\_

(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) of each week.

☐ All radioactive waste will be transferred to the Health Physics collection point, WRAIR (Room B079) Open everyday 1030 to 1130.

☐ All radioactive waste will be transferred to the Health Physics collection vehicle, WRAIR (Forest Glen Section) on Thursday (1330 to 1430) every other week.

---

q. Radioactive Waste Disposal

All radioactive waste will be transferred to Health Physics Office in accordance with Health Physics Memo # 3, Memo # 8, and SOP # 1-11.

---

r. Room Survey

All room surveys will be conducted in accordance with Health Physics Memo #12.

---

s. Personnel Dosimetry

Whole Body ☐

Wrist Badge ☒

TLD Ring ☐

will be requested in accordance with Health Physics SOP #1-5. 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, Microwave, or Electrical)?

☒ No

☐ Yes (Specify)

---

The research protocol enumerated above 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 procedures.

*Ker Brunner*

Signature

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

.SWP-QHP

SUBJECT

Research Protocol for Isotope Named in the Application  
for Amendments to Radioactive Material Authorization  
#615 Dated 26 June, 1980

TO  
Health Physics Officer  
WRAMC

FROM  
Dept. of Endo-Metabolism  
WRAMC

DATE  
19 Aug., 1980

CMT 1

1. The research protocol enumerated below is provided in order to supplement the information submitted with the application for amendment of Radioactive Material Authorization No. 615, dated 26 June, 1980.

2. RESEARCH PROTOCOL:

- a. Principal User: Kenneth D. Burman, LTC, MC  
Telephone No.: 576-1417  
Radioactive Material Authorization No.: 615
- b. Title of Project: Use of 131-I as a marker.
- c. Beginning Date: 19 Aug. 1980    Ending Date: 19 Aug. 1982
- d. Life Cycle of Radioisotope Utilized for Research Procedure:
  - (1) The 131-I is used purely as an "in vitro" marker for a column of gel filtration. It is supplied from Nuclear Medicine, Authorization #H274E, then brought to Ward 47 and stored in room 4742. It is transferred in a covered lead container. It is placed on the column in the cold room and then counted in room 4747 or 4743. No animals are injected. It will be disposed of in a magenta bag and delivered to the loading dock on Wednesday, at the appropriate time, by qualified personnel.
- e. Investigators: Kenneth D. Burman, LTC, MC    (Auth # 615)
- f. Technician: F. D. Wright    (Auth # 615)  
Y. G. Lukes    (Auth # 615)
- g. Isotope: 131-I  
Quantity: About 100,000 CPM/column (about 0.1uCi)  
Preparation: By vendor
- h. Isotope Utilization Location: Room 4742, 4747, and 4743 of the NMTF, WRAMC
- i. Isotope Storage Location: Room 4742 of Ward 47, NMTF, WRAMC
- j. Survey meter/methods: Request that Health Physics Office WRAMC provide proper survey instrument or alternate procedure for monitoring of all work areas and equipment.
- k. Personnel Dosimetry: Whole body badges will be worn by all participating personnel.

The research protocol enumerated above is designed to ensure that occupational



# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-ME

SUBJECT

Research Protocol for Isotope Use

TO

Health Physics Officer  
WRAMC

FROM

Department of Endocrinology  
WRAMC

DATE

21 Apr 80  
Burman/lmm/6-1417

CMT 1

1. The research protocol enumerated below is provided in order to supplement the information submitted with the application for amendment of Radioactive Material Authorization Number 615, dated 26 October 1979.

## 2. RESEARCH PROTOCOL:

a. Principal User: Burman, Kenneth D., M.D., LTC  
Telephone Number: 576-1417  
Radioactive Material Authorization Number: 615

b. Title of Project: Studies on extrathyroidal conversion T4 to T3

c. Beginning Date: 22 April 1980      Ending Date: June 1981

d. Life Cycle of Radioisotope Utilized for Research Procedure:

(1) Approximately 3 baboons will be injected with 5 microcuries of I-125 each getting one bolus injection with blood drawn for 6 hours thereafter. The radioisotope will be stored and injected solution prepared on Ward 47 of Building 2. Injection solution will be transported to NAMRII in a lead pig by Health Physics containing absorbent material and sealed in a magenta colored plastic bag. All radioisotope injections will be performed at NAMRII. The blood will be transported back to WRAMC, Ward 47 for processing.

(2) All radioactive solutions, baboon organs, and waste will be identified by the proper label. Transport of radioactive material between authorized work areas will be conducted in a manner that precludes the spread of contaminated and inadvertant exposure to non-participating personnel.

e. Investigator(s): Kenneth D. Burman, M.D., LTC (Auth #615)

f. Technician(s): Bart Chernow, M.D., Lt Cdr, Fellow, Endocrinology, NNMC

g. Isotope: I-125 (Abbott Laboratories, 15.0 uCi/kit/month)  
Physical/chemical form: Iodide attached to T3, T4 or rT3 molecule  
Quantity: 5 microcuries/injection (maximum)



KENNETH D. BURMAN, M.D.  
LTC, MC  
Endocrine-Metabolic Service  
and Kyle Metabolic Unit

HSWP-QHP

30 Oct 79

SUBJECT: Research Protocol for Isotope Named in the Application  
for Amendments to Radioactive Material Authorization #615,  
26 October 1979

Preparation: By vendor

- h. Laboratory Animal Used: Rats only
  - i. Isotope Utilization Location: Room G075 and Room 4747, Bldg 2
  - j. Isotope Storage Location: Ward 47, Bldg 2
  - k. Isotope Waste Storage Location:
    - (1) Biological: WRAIR and Room 4747, Bldg 2
    - (2) All Other: Ward 47, Bldg 2
    - (3) All radioactive waste transferred to Health Physics Office, WRAMC on Wednesday of each week
  - l. Survey meter/methods: Request that Health Physics Office WRAMC provide proper survey instrument or alternate procedure for monitoring of all work areas and equipment.
  - m. Personnel Dosimetry: Whole body and wrist badges will be worn by all participating personnel.
3. The research protocol enumerated above is designed to ensure that occupational radiation exposures and releases of radioactive effluents to the environment will be "as low as reasonably achievable" (ALARA) during all phases of the research procedures.



KENNETH BURMAN

LTC, MC

Department of Endocrine-Metabolism  
WRAMC

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HSWP-QHP

SUBJECT

Research Protocol for Isotope Named in the Application  
for Amendments to Radioactive Material Authorization #615,  
26 October 1979

TO Health Physics Officer  
WRAMC

FROM Department of Endo-Metab  
WRAMC

DATE 30 Oct 79

CMT 1

1. The research protocol enumerated below is provided in order to supplement the information submitted with the application for amendment of Radioactive Material Authorization Number 615, dated 26 October 1979.

## 2. RESEARCH PROTOCOL:

- a. Principal User: Burman, Kenneth LTC, MC  
Telephone Number: 576-3858  
Radioactive Material Authorization Number: 615
- b. Title of Project: T-3 and T-4 Recovery in Liver, Brain and Kidney Nuclei of the rat
- c. Beginning Date: 30 Oct 1979      Ending Date: 30 Feb 1980
- d. Life Cycle of Radioisotope Utilized for Research Procedure:
  - (1) Approximately 30 rats will be injected with 0.005 microcuries of I-125 each over a period of 4 months. The radioisotope will be stored and injection solution prepared on Ward 47 of Building 2. Injection solution will be transported to Room G075 in a lead pig containing absorbent material and sealed in a magenta colored plastic bag. All radioisotope injections will be performed in Room G075. Experimental rats will be sacrificed 30 minutes after injection. The liver, brain and kidney will be removed from each rat, placed on ice and transported to Ward 47, Room 4747 in a sealed magenta plastic bag. The remainder of the rat carcass will be transported to WRAIR for disposal as radioactive biological waste by Mr. Lynch or Mr. Nelson.
  - (2) All radioactive solutions, rat organs, and waste will be identified by the proper label. Transport of radioactive material between authorized work areas will be conducted in a manner that precludes the spread of contamination and inadvertent exposure to non-participating personnel.
- e. Investigators: Kenneth Burman, LTC, MC (Auth # 615)
- f. Technician: Ms. Frances Wright (Auth # 615)  
Mr. Fred Coleman (Auth # 443)
- g. Isotope: I-125 (Abbott Laboratories, 0.25 uCi/kit/month)  
Physical/chemical form: Iodide attached to T-3 and T-4 molecule  
Quantity: 0.005 microcuries/injection (maximum)

615

# DISPOSITION FORM

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

REFERENCE OR OFFICE SYMBOL

HS HL-ME

SUBJECT

Isotopes

TO

Health Physics  
MAJ Counock

FROM

Asst C, Endo-Metab  
Dr. K. D. Burman

DATE

8 July 1986

CMT 1

Dr. Burman/es/6-1793

1. Over the next, approximately one, year we will have various samples of isotopes, usually S35, that are at the NIH in Building 10 and need to be transported to our laboratory. We ask your help and advice in getting this mission accomplished.



KENNETH D. BURMAN  
COL, MC

Asst. Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

## ADDENDA

TO Health Physics

FROM Asst C, Endo-Metab  
Dr. Ken Burman

DATE 9 July 1986

Dr. Burman

SGT Brantly has notified us that we are authorized to pick up the isotope (less than 5 mCi) from the NIH and return it to WRAMC with our private vehicle. We will inform Health Physics when this is done for inventory purposes.



KENNETH D. BURMAN  
COL, MC

Assistant Chief, Endocrine-Metabolic  
Service and Kyle Metabolic Unit

16 July 86

Coordination completed

J.E.S.

# CONTROLLED SUBSTANCES STOCK RECORD

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

DESCRIPTION

125-I  
Endo-Metabolism  
08-01738-02/615

CONVERSION FACTOR

ACCOUNTABLE UNIT

STOCK NUMBER

UNIT AS RECEIVED

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
10 Nov '81	1 mCi	DADA 1582 F2198	24861		6 JAN 82	1 mCi	DADA 1582 F2198	25092	
17 Nov '81	1 mCi	DADA 1582 M3121	24884		19 JAN 82	4 mCi	DADA 1581 F9225	25141	
17 Nov '81	2 mCi	DADA 1581 F5564	24885		19 JAN 82	2 mCi	DADA 1581 F5564	25143	
17 Nov '81	4 mCi	DADA 1581 F9225	24886		19 JAN 82	1 mCi	DADA 1582 M3121	25144	
19 Nov '81	0.01 mCi	DADA 1581 F6874	24899		31 JAN 82	0.001 mCi	DADA 1581 F6874	25153	
24 Nov '81	25 mCi	DADA 1581 F4603	24920		25 JAN 82	0.002 mCi	DADA 1581 F5605	25164	
30 Nov '81	0.001 mCi	DADA 1581 F5605	24933		25 JAN 82	0.04 mCi	DADA 1582 M4643	25170	
3 Dec '81	0.04 mCi	DADA 1581 F3077	24954		1 Feb 82	5 mCi	DADA 1581 F8448	25194	
8 Dec '81	1 mCi	DADA 1582 F2198	24978		2 Feb 82	1 mCi	DADA 1582 F2198	25201	
16 Dec '81	5 mCi	DADA 1581 F8448	25019		17 Feb 82	4 mCi	DADA 1581 F9225	25274	
21 Dec '81	5 mCi	Memo	25037		17 Feb 82	2 mCi	DADA 1581 F5564	25276	
23 Dec '81	2 mCi	DADA 1581 F5564	25043		18 Feb 82	0.01 mCi	DADA 1581 F6874	25280	
23 Dec '81	1 mCi	DADA 1582 M3121	25044		24 Feb 82	1 mCi	DADA 1582 M3121	25300	
23 Dec '81	4 mCi	DADA 1581 F9225	25045		24 Feb 82	0.001 mCi	DADA 1581 F5605	25301	
24 Dec '81	0.001 mCi	DADA 1581 F5605	25052		2 MAR 82	1 mCi	DADA 1582 F2198	25320	
24 Dec '81	0.01 mCi	DADA 1581 F6874	25053		08 MAR '82	0.025 mCi	DADA 1582 M2951	25349	
29 Dec '81	0.056 mCi	DADA 1582 M0354	25063		08 MAR '82	0.045 mCi	DADA 1582 M4643	25351	

DA FORM 1 JUNE 72 3862

REPLACES DA FORM 8-235, 1 AUG 61, WHICH IS OBSOLETE

5

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER		DESCRIPTION I-125 Endo-Metab, NMTF 08-01738-02/615							
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
15 MAR '82	5mCi	DADA1581 F8448	25380		26 May 82	.002mCi	DADA1581 F5605	25727	
16 Mar '82	.2mCi	DADA1581 F9225	25395		28 May 82	.25mCi	DADA1582 M6472	25739	
18 Mar '82	.01mCi	DADA1581 F6874	25410		9 Jun 82	.025mCi	DADA1582 M7389	25783	
19 Mar '82	1.5mCi	DADA1581 M8550	25421		16 Jun 82	5mCi	DADA1581 F8448	25814	
22 MAR '82	101mCi	DADA1581 F5605	25432		23 Jun 82	.2mCi	DADA1581 F9225	25843	
24 MAR '82	.25mCi	DADA1582 M6472	25448		23 Jun 82	1.0mCi	DADA1582 F2198	25848	
30 MAR '82	1mCi	DADA1582 F2198	25470		30 Jun 82	.001mCi	DADA1582 M5097	25884	
20 APR '82	.2mCi	DADA1581 F9225	25563		7 Jul 82	.025mCi	DADA1582 M9851	25916	
22 APR '82	101mCi	DADA1581 F6874	25574		13 Jul 82	.032mCi	DADA1582 M4643	25943	
23 APR '82	.002mCi	DADA1581 F5605	25580		14 Jul 82	.04mCi	DADA1582 M4643	25948	
26 APR '82	.06mCi	DADA1582 M4643	25591		31 Jul 82	.2mCi	DADA1581 F9225	25965	
27 Apr '82	1mCi	DADA1582 F2198	25592		31 Jul 82	.1mCi	DADA1582 F2198	25966	
4 MAY '82	5mCi	DADA1581 F8448	25624		28 Jul '82	.05mCi	DADA1582 M6472	25994	
4 MAY '82	.025mCi	DADA1582 M9851	25629		2 Aug '82	5mCi	DADA1581 F8448	26017	
18 May '82	.4mCi	DADA1581 F9225	25693		4 Aug 82	.25mCi	DADA1582 M7389	26025	
25 May '82	1mCi	DADA1582 F2198	25721		18 Aug 82	.4mCi	DADA1581 F9225	26086	
26 May '82	.043mCi	DADA1582 M4643	25726		18 Aug 82	.001mCi	DADA1582 F2198	26087	

# 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						
			I-125 Endo-Metab/NMTF 08-01738-02/615						
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
3 Sept 82	.072mCi	DADA 1582 M5097	26171		8 Dec 82	.275mCi	DADA 1582 MP 210	26556	
8 Sept 82	.025mCi	DADA 1582 M9851	26194		8 Dec 82	1mCi	DADA 1582 MP 145	26559	
10 Sept 82	.0025mCi	DADA 1582 MP 112	26200		8 Dec 82	.22mCi	DADA 1580 A0010 7024	26561	
15 Sept 82	.001mCi	DADA 1582 F2198	26220		16 Dec 82	.023mCi	DADA 1582 M4643	26562	
22 Sept 82	.4mCi	DADA 1581 F9225	26248		17 Dec 82	5mCi	DADA 1583 F3404	26598	
1 Oct 82	.250mCi	DADA 1582 M6472	26279		20 Dec 82	.03mCi	DADA 1582 126212	26604	
1 Oct 82	.035mCi	DADA 1582 M4683	26280		22 Dec 82	.6mCi	DADA 1582 MP 269	26612	
6 Oct 82	.025mCi	DADA 1582 M7389	26306		29 Dec 82	.03mCi	126212	26621	
6 Oct 82	.075mCi	DADA 1582 MP 210	26307		5 Jan 83	.275mCi	DADA 1582 MP 210	26640	
20 Oct 82	.6mCi	DADA 1582 MP 269	26359		5 Jan 83	1mCi	DADA 1582 MP 145	26642	
29 Oct 82	.25mCi	DADA 1582 M6472	26395		19 Jan 83	.6mCi	DADA 1582 MP 269	26706	
1 Nov 82	.046mCi	DADA 1582 M4643	26409		31 Jan 83	5mCi	DADA 1583 F3404	26742	
1 Nov 82	.5mCi	DADA 1581 M8550	26410		2 Feb 83	1mCi	DADA 1582 MP 145	26748	
1 Nov 82	.025mCi	DADA 1582 M9851	26421		14 Feb 83	.275mCi	DADA 1582 MP 210	26779	
1 Nov 82	.275mCi	DADA 1582 MP 210	26422		18 Feb 83	.053mCi	DADA 1583 M6285	26800	
10 Nov 82	1mCi	DADA 1582 MP 145	26443		22 Feb 83	.9mCi	DADA 1582 MP 269	26810	
17 Nov 82	.6mCi	DADA 1582 MP 269	26472		2 Mar 83	1mCi	DADA 1582 MP 145	26857	

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER			DESCRIPTION						
			I-125 Endo-Metab, NMTF 08-01738-02/615						
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
9 March '83	.275 mCi	DADA1582 MP210	26881		18 May '83	.6 mCi	DADA1582 MP269	27176	
11 March '83	5 mCi	DADA1583 F3404	26902		25 May '83	1 mCi	DADA1582 MP145	27195	
16 March '83	.01 mCi	DADA1583 M6755	26913		8 Jun '83	.03 mCi	DADA1583 M7657	27240	
18 March '83	.01 mCi	DADA1583 M6755	26921		8 Jun '83	.275 mCi	DADA1582 MP210	27242	
23 March '83	.9 mCi	DADA1582 MP269	26939		8 Jun '83	1 mCi	DADA1583 M2596	27246	
30 March '83	1 mCi	DADA1582 MP145	26970		15 Jun '83	5 mCi	DADA1583 F3404	27281	
30 March '83	.05 mCi	DADA1583 M6285	26971		22 Jun '83	1 mCi	DADA1582 MP145	27310	
6 APR '83	.275 mCi	DADA1582 MP210	26999		8 Jul '83	.03 mCi	DADA1583 M7657	27357	
13 APR '83	.015 mCi	DADA1583 M7657	27031		20 Jul '83	1 mCi	DADA1582 MP145	27399	
15 APR '83	.031 mCi	DADA1583 M6285	27035		29 Jul '83	5 mCi	DADA1583 F3404	27441	
20 APR '83	.6 mCi	DADA1582 MP269	27061		1 Aug '83	.01 mCi	DADA1583 M7657	27449	
20 APR '83	.01 mCi	DADA1583 M6755	27062		10 Aug '83	.003 mCi	DADA1583 ME819	27488	
27 APR '83	1 mCi	DADA1582 MP145	27096		17 Aug '83	.3 mCi	DADA1582 MP269	27505	
4 May '83	.3 mCi	DADA1582 MP269	27126		17 Aug '83	1 mCi	DADA1582 MP145	27506	
4 May '83	.25 mCi	DADA1582 MP210	27127		17 Aug '83	.01 mCi	DADA1583 M6755	27510	
4 May '83	5 mCi	DADA1583 F3404	27128		6 Sept '83	.015 mCi	DADA1583 M7657	27577	
13 May '83	.07 mCi	DADA1583 M6285	27156		6 Sept '83	.3 mCi	DADA1583 MP210	27598	



# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER			DESCRIPTION						
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
9 Sept '83	5 mCi	DADA1583 F3404	27593		14 Dec 83	1.0 mCi	DADA1584 M4469	27942	
14 Sept '83	1 mCi	DADA1582 MP145	27607		16 Dec 83	0.02 mCi	DADA1584 M9348	27956	
7 Oct '83	.003 mCi	DADA1583 ME819	27689		20 Dec 83	0.3 mCi	DADA1584 M4297	27963	
9 Oct '83	.03 mCi	DADA1583 M7657	27690		23 Dec 83	0.01 mCi	DADA1583 M6755	27985	
19 Oct '83	.01 mCi	DADA1583 M6755	27732		23 Dec 83	0.01 mCi	DADA1584 M4159	27986	
28 Oct '83	.01 mCi	DADA1584 M4159	27750		4 Jan 84	0.15 mCi	DADA1584 M4298	28001	
2 Nov '83	.3 mCi	DADA1584 M4297	27769		4 Jan 84	1.0 mCi	DADA1584 M4469	28015	
7 Nov '83	.15 mCi	DADA1584 M4298	27796		11 Jan 84	0.1 mCi	DADA1584 M4500	28042	
9 Nov '83	1 mCi	DADA1583 M0596	27803		17 Jan 84	0.3 mCi	DADA1584 M4297	28064	
14 Nov '83	1 mCi	DADA1584 M4469	27823		30 Jan 84	0.15 mCi	DADA1584 M4298	28117	
16 Nov '83	.1 mCi	DADA1584 M4500	27830		1 Feb 84	1.0 mCi	DADA1584 M4469	28125	
23 Nov '83	.01 mCi	DADA1583 M6755	27860		7 Feb 84	0.01 mCi	DADA1584 M4500	28147	
23 Nov '83	.3 mCi	DADA1584 M4297	27862		10 Feb 84	5.0 mCi	DADA1584 M4469	28176	
5 Dec 83	0.15 mCi	DADA1584 M4298	27898		14 Feb 84	0.006 mCi	DADA1584 M5414	28190	
6 Dec 83	1.0 mCi	DADA1583 M7596	27906		15 Feb 84	0.01 mCi	DADA1584 M4159	28193	
9 Dec 83	0.024 mCi	DADA1583 M6285	27922		22 Feb 84	0.3 mCi	DADA1584 M4297	28233	
14 Dec 83	0.1 mCi	DADA1584 M4500	27938		22 Feb 84	0.01 mCi	DADA1584 M5351	28234	

(10)

# 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 I-185 Endo-Metab 08-01738-02/615							
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
24 Feb 84	5.0 mCi	DADA1584 M4452	28245		21 May 84	0.15 mCi	DADA1584 M4298	28607	
27 Feb 84	0.15 mCi	DADA1584 M4298	28253		23 May 84	1.0 mCi	DADA1584 M4469	28617	
28 Feb 84	1.0 mCi	DADA1584 M4469	28264		23 May 84	0.01 mCi	DADA1584 M5351	28619	
7 Mar 84	0.1 mCi	DADA1584 M4500	28290		23 May 84	300.0 mCi	DADA1584 M447	28621	
14 Mar 84	0.018 mCi	DADA1584 M4922	28327		30 May 84	0.1 mCi	DADA1584 M4500	28644	
23 Mar 84	0.3 mCi	DADA1584 M4297	28344		6 Jun 84	0.01 mCi	DADA1584 M4159	28683	
23 Mar 84	0.01 mCi	DADA1584 M5351	28346		18 Jun 84	0.15 mCi	DADA1584 M4298	28734	
23 Mar 84	5.0 mCi	DADA1584 M4452	28347		20 Jun 84	1.0 mCi	DADA1584 M4469	28741	
26 Mar 84	0.15 mCi	DADA1584 M4298	28365		20 Jun 84	5.0 mCi	DADA1584 M4452	28746	
28 Mar 84	1.0 mCi	DADA1584 M4469	28381		20 Jun 84	0.3 mCi	DADA1584 M4297	28747	
4 Apr 84	0.1 mCi	DADA1584 M4500	28406		20 Jun 84	0.01	DADA1584 M5351	28748	
18 Apr 84	0.3 mCi	DADA1584 M4297	28472		26 Jun 84	0.1 mCi	DADA1584 M4500	28777	
18 Apr 84	0.01 mCi	DADA1584 M5351	28473		6 Jul 84	0.005 mCi	DADA1584 M7482	28824	
23 Apr 84	0.15 mCi	DADA1584 M4298	28493		6 Jul 84	0.025 mCi	DADA1584 M6654	28828	
24 Apr 84	1.0 mCi	DADA1584 M4469	28502		5 July 84	0.06 mCi	DADA1584 M5900	28820	
2 May 84	0.1 mCi	DADA1584 M4500	28533		5 July 84	0.055 mCi	DADA1584 M5900	28821	
7 May 84	5.0 mCi	DADA1584 M4454	28559		16 Jul 84	0.15 mCi	DADA1584 M4298	28870	

DA FORM 1 JUNE 72 3862

REPLACES DA FORM 8-235, 1 AUG 51, WHICH WILL BE USED.

# 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				
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
10 Sept '81	.25 mli	DADA 1581 F 6707	24608		23 Nov '83	.05 mli	DADA 1583 MH 648	27861	
2 Feb 82	.25 mli	DADA 1582 M 4645	25203		28 Nov '83	1 mli	DADA 1593 MK 043	27873	
2 MAR '82	.25 mli	DADA 1582 M 4645	25325		20 Dec 83	0.5 mli	DADA 1583 MH 648	27968	
6 APR '82	.25 mli	DADA 1582 M 4645	25501		28 Dec 83	1.0 mli	DADA 1583 MK 043	27972	
4 MAY '82	.25 mli	DADA 1582 M 4645	25633		25 Jan 84	0.5 mli	DADA 1583 MH 648	28098	
7 Jun 82	.25 mli	DADA 1582 M 4645	25789		25 Jan 84	1.0 mli	DADA 1583 MK 043	28090	
16 Feb '83	.25 mli	DADA 1583 M 5794	26793		22 Feb 84	0.5 mli	DADA 1583 MH 648	28230	
16 Mar '83	.25 mli	DADA 1583 M 5794	26914		22 Feb 84	1.0 mli	DADA 1583 MK 043	28238	
13 APR '83	.25 mli	DADA 1583 M 5794	27024		19 Mar 84	1.0 mli	DADA 1583 MK 043	28333	
11 May '83	.25 mli	DADA 1583 M 5794	27152		23 Mar 84	0.5 mli	DADA 1583 MH 648	28353	
8 Jun 83	.25 mli	DADA 1583 M 5794	27241		16 Apr 84	1.0 mli	DADA 1583 MK 043	28464	
27 Jul '83	.25 mli	DADA 1583 MG 667	27424		24 Apr 84	0.5 mli	DADA 1583 MH 648	28501	
14 Sept '83	.25 mli	DADA 1583 M 5794	27608		14 May 84	1.0 mli	DADA 1583 MK 043	28584	
21 Sept '83	.5 mli	DADA 1583 MH 648	27631		23 May 84	0.5 mli	DADA 1583 MH 648	28618	
28 Sept '83	.25 mli	DADA 1583 M 5794	27656		11 June 84	1.0 mli	DADA 1583 MK 043	28701	
19 Oct '83	.5 mli	DADA 1583 MH 648	27721		20 Jun 84	0.5 mli	DADA 1583 MH 648	28739	
31 Oct 83	1 mli	DADA 1583 MK 043	27761		9 Jul 84	1.0 mli	DADA 1583 MK 043	28831	

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER					DESCRIPTION				
					D-32 Endo-morph 08-01778-02/615				
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
24 Jul 84	0.5 mCi	DADA 1583 M H 68	28907		10 Feb 87	1.0 mCi	DADA 1587 M 2880	33102	
6 Aug 84	1.00	DADA 1583 M H 68	28967		12 Feb 87	0.414 mCi	DADA 1587 M 2617	33113	
5 Sept 84	1.0 mCi	DADA 1584 M <del>2880</del> K043	29095		18 Feb 87	0.04 mCi	11	33145	
4 Sept 85	.005 mCi	DADA 1585MA 267	30732	280116	26 Feb 87	1.0 mCi	DADA 1587 M 2661	33175	
28 Feb 86	0.5 mCi	DADA 1585 A0185	31428	34411	27 Feb 87	0.02	DADA 1587 M 4427	33185	
14 Jul 86	0.25 mCi	TRANSPORTED TO DR. BURMAN FROM NIH	32136	-	3 Mar 87	1.0 mCi	DADA 1587 M 2880	33200	
5 Aug 86	0.01	MDA 90586 M 3591	32242		23 Mar 87	0.5 mCi	DADA 1587 M 4765	33317	
6 Aug 86	0.004	DADA 1586 M A 595	32262		30 Mar 87	1.0 mCi	DADA 1587 M 2661	33351	
22 Aug 86	0.010	DADA 1586 M A 595	32330		06 Apr 87	1.0 mCi	DADA 1587 M 2880	33390	
11 Sep 86	0.526 mCi	DADA 1586 M A 595	32429	5386	16 Apr 87	0.244 mCi	DADA 1587 A 0027	33458	
20 Nov 86	0.5 mCi	DADA 1587 M 0930	32751		20 Apr 87	1.0 mCi	DADA 1587 M 4765	33478	
4 Dec 86	0.34318	DADA 1587 M 0930	32805		22 Apr 87	0.785 mCi	DADA 1587 A 0027	33491	
10 Dec 86	0.223	DADA 1587 M 1455	32850		27 Apr 87	1.0 mCi	DADA 1587 M 2661	33512	
9 Jan 87	0.6	DADA 1587 M 2617	32959		1 May 87	1.971	DADA 1587 A 0027	33536	
21 Jan 87	0.6	11	33023		5 May 87	1.0 mCi	DADA 1587 M 2880	33559	
28 Jan 87	1.0	DADA 1587 M 2661	33037		8 May 87	0.25 mCi	DADA 1587 A 0199	33580	
4 Feb 87	0.72 mCi	DADA 1587 M 2617	33082		14 May 87	0.668	DADA 1587 A 027	33614	44 m4

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

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

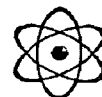
DA FORM 1 JUNE 72 3862

REPLACES DA FORM 8-235, 1 AUG 51, WHICH WILL BE USED.

07/28/93

## 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 615

HPO TAG NO	CHEMICAL FORM	ORIGINAL DATE RECEIVED	ACTIVITY IN MILLICURIES			VENDOR	PURCHASE ORDER NUMBER	CALL NO	REMARKS
			ORIGINAL	ENTER CURRENT	LAST UPDATED				
=====									
Total millicuries P-32									
15988	dATP	02/08/93	0.2500	<u>0</u>	0.0000	NEN DUPONT	DADA1593A001	2CI02	
16031	ATP,GAMMA	02/19/93	5.0000	<u>0</u>	0.0000	NEN DUPONT	DADA1593P208		
16110	dATP	03/12/93	0.2500	<u>0</u>	0.0000	NEN DUPONT	DADA1593P548		
16140	ATP,GAMMA	03/19/93	5.0000	<u>0</u>	0.0000	NEN DUPONT	DADA1593P208		
16222	dATP	04/09/93	0.2500	<u>0</u>	0.0000	NEN DUPONT	DADA1593P548		
16299	ATP,GAMMA	04/23/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P208		
16350	dATP	05/07/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P548		
16428	ATP,GAMMA	05/21/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P208		
16487	dATP	06/04/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P548		
16547	ATP,GAMMA	06/18/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P208		
16638	dATP	07/09/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P548		
16705	ATP,GAMMA	07/23/93	5.0000	<u>0.5</u>	5.0000	NEN DUPONT	DADA1593P208		
16706	dATP	07/23/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P548		
Total Activity			31.7500	<u>0.5</u>	Isotope Possesion Limit		20.0000		

Signature

*[Handwritten Signature]*  
for K. B. Newman MD

Date 8/10/93

AUTHORIZATION ISOTOPE INVENTORY

04/30/93

( 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 615

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

44057	GLUCOSAMINE HCL	01/23/92	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1590A0014		
45507	THYMIDINE	10/13/92	1.0000	<u>0</u>	1.0000	AMERSHAM	DADA1592P1479		
Total activity			1.2500	<u>0</u>	Isotope possession limit		51.0000		

Total millicuries P-32

45448	UTP	10/05/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
45637	UTP	11/09/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
45791	dATP	12/14/92	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1593A0014	12C10	
45823	dCTP	12/21/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1593P2875		
45914	dATP	01/15/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593A0014	1C101	
45915	ATP, GAMMA	01/15/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593A0014	1C102	
45935	ATP, GAMMA	01/22/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P2086		
45988	dATP	02/08/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593A0014	2C102	
46031	ATP, GAMMA	02/19/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P2086		
46110	dATP	03/12/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P5483		
46140	ATP, GAMMA	03/19/93	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1593P2086		
46222	dATP	04/09/93	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1593P5483		
46299	ATP, GAMMA	04/23/93	5.0000	<u>5.0</u>	5.0000	NEN DUPONT	DADA1593P2086		
Total activity			29.5000	<u>5.0</u>	Isotope possession limit		20.0000		

Signature

*Jose Martin*

Date

5/3/93

# AUTHORIZATION ISOTOPE INVENTORY

10/29/92

( 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 615

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

4057	GLUCOSAMINE HCL	01/23/92	0.2500	<u>0.250</u>	0.2500	NEN DUPONT	DADA1590A0014		
4833	THYMIDINE	06/15/92	1.0000	<u>0</u>	1.0000	AMERSHAM	DADA1592P1479		
5199	THYMIDINE	08/18/92	1.0000	<u>0</u>	1.0000	AMERSHAM	DADA1592P1479		
5507	THYMIDINE	10/13/92	1.0000	<u>0</u>	1.0000	AMERSHAM	DADA1592P1479		
Total activity			3.2500	<u>1.25</u>	Isotope possession limit		51.0000		

Total millicuries P-32

4430	UTP	04/03/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
4629	UTP	05/08/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
4788	UTP	06/05/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
4953	UTP	07/10/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
5147	UTP	08/07/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
5329	UTP	09/09/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584 REPL		
5448	UTP	10/05/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
Total activity			7.0000	<u>1.0</u>	Isotope possession limit		5.0000		

Total millicuries S-35

43847	METHIONINE	12/10/91	5.0000	<u>0</u>	0.2500	AMERSHAM	DADA1592P1121		
44055	SULFURIC ACID	01/23/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590A0014		
44149	METHIONINE	02/10/92	5.0000	<u>0</u>	0.2500	AMERSHAM	DADA1592P1121		
44278	METHIONINE	03/09/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
44459	METHIONINE	04/06/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
44806	METHIONINE	06/08/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
44967	METHIONINE	07/13/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
Total activity			31.0000	<u>0</u>	Isotope possession limit		20.0000		

Signature

*[Handwritten Signature]*

Date

11/5/92



**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. )

HPD 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
<i>Audit</i>	<i>5/6/92</i>								
** Authorization Number: 615									
* Total Millicuries H-3									
44057	GLUCOSAMINE HCL	01/23/92	0.2500	<u>0.25</u>	1.0000	NEN DUPONT	DADA1590A0014		
44155	THYMIDINE	02/10/92	1.0000	<u>7.00</u>	0.0000	AMERSHAM	DADA1592P1479		
44151	THYMIDINE	04/14/92	1.0000	<u>7.00</u>	1.0000	AMERSHAM	DADA1592P1479		
* Subsubtotal *			2.2500		2.0000				
* Total Millicuries I-125									
44487	TRAB 30T	04/08/92	0.0100	<u>0</u>	0.0100	KRONUS	DADA1592P7286		
* Subsubtotal *			0.0100		0.0100				
* Total Millicuries P-32									
43323	UTP	12/06/91	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
43962	UTP	01/03/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
44056	Na DIHYDROGEN	01/23/92	1.0000	<u>0</u>	0.0000	NEN DUPONT	DADA1590A0014		
44135	UTP	02/07/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
44272	UTP	03/06/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1592P1584		
44430	UTP	04/03/92	1.0000	<u>1.0</u>	1.0000	NEN DUPONT	DADA1592P1584		
* Subsubtotal *			6.0000		5.0000				
* Total Millicuries S-35									
43847	METHIONINE	12/10/91	5.0000	<u>0</u>	0.2500	AMERSHAM	DADA1592P1121		
44055	SULFURIC ACID	01/23/92	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590A0014		
44149	METHIONINE	02/10/92	5.0000	<u>0</u>	0.2500	AMERSHAM	DADA1592P1121		
44278	METHIONINE	03/09/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
44459	METHIONINE	04/06/92	5.0000	<u>0</u>	5.0000	AMERSHAM	DADA1592P1121		
* Subsubtotal *			21.0000		11.5000				
** Subtotal **			29.2600		18.5100				
*** Total ***			29.2600		18.5100				

*Jesse L Martin*  
*5/6/92*

02/03/92

## 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. )

HPD TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES	LAST UPDATED ACTIVITY IN MILLICURIES	VENDOR	PURCHASE ORDER NUMBER	CAL NO
** Authorization Number: 615								
* Total Millicuries H-3								
43543	THYMIDINE	11/01/91	1.0000	0	1.0000	AMERSHAM	DADA1590A0041	10C
43335	THYMIDINE	12/09/91	1.0000	0	1.0000	AMERSHAM	DADA1592P1479	
44057	GLUCOSAMINE HCL	01/23/92	0.2500	1.0	0.2500	NEN DUPONT	DADA1590A0014	
* Subsubtotal *			2.2500	0	2.2500			
* Total Millicuries P-32								
43528	UTP	10/30/91	1.0000	0	1.0000	NEN DUPONT	DADA1590A0014	10C
43767	dATP	11/25/91	0.5000	0	0.5000	NEN DUPONT	DADA1590M9653	
43823	UTP	12/06/91	1.0000	1.0	1.0000	NEN DUPONT	DADA1592P1584	
43907	dATP	12/20/91	0.5000	0	0.5000	NEN DUPONT	DADA1590M9653	
43962	UTP	01/03/92	1.0000	1.0	1.0000	NEN DUPONT	DADA1592P1584	
44056	Na DIHYDROGEN	01/23/92	1.0000	0	1.0000	NEN DUPONT	DADA1590A0014	
* Subsubtotal *			5.0000	1.0	5.0000			
* Total Millicuries S-35								
43847	METHIONINE	12/10/91	5.0000	5.0	5.0000	AMERSHAM	DADA1592P1121	
44055	SULFURIC ACID	01/23/92	1.0000	1.0	1.0000	NEN DUPONT	DADA1590A0014	
* Subsubtotal *			6.0000	1.5	6.0000			
** Subtotal **			13.2500	1.5	13.2500			
*** Total ***			13.2500	2.0	13.2500			

Ken Bruns  
2/25/92

**AUTHORIZATION ISOTOPE INVENTORY**  
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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
<u>Adit</u>	<u>11/5/91</u>								

\*\* Authorization Number: 615

\* Total Millicuries H-3

42143	THYMIDINE	02/26/91	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1590A0014	2C100
42232	THYMIDINE	03/11/91	1.0000		1.0000	NEN DUPONT	DADA1591P1050	
42572	DIHYDROXYVIT 2	05/03/91	0.0100		0.0100	NEN DUPONT	DADA1590M9644	
42591	THYMIDINE	05/07/91	1.0000		1.0000	NEN DUPONT	DADA1591P1050	
42842	HYDROVIT D3	06/14/91	0.0050		0.0050	NEN DUPONT	DADA1590M7768	
42888	DIHYDROVIT X 2	06/21/91	0.0100		0.0100	NEN DUPONT	DADA1590M9644	
42990	THYMIDINE	07/09/91	1.0000		1.0000	NEN DUPONT	DADA1591P1050	
43232	DIHYDROXYVIT X 2	08/16/91	0.0100	<u>↓</u>	0.0100	NEN DUPONT	DADA1590M9644	
* Subsubtotal *			8.0350		8.0350			

\* Total Millicuries P-32

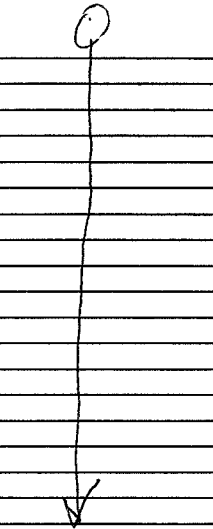
42042	dATP	02/08/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590MA127	
42130	dATP	02/22/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42131	CTP	02/22/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42165	dCTP	03/01/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42166	dATP	03/01/91	0.5000		0.5000	NEN DUPONT	DADA1590M9653	
42221	dATP	03/08/91	1.0000		1.0000	NEN DUPONT	DADA1590MA127	
42222	CTP	03/08/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42257	dCTP	03/15/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42258	dATP	03/15/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42298	CTP	03/22/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42291	dCTP	03/22/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42292	dATP	03/22/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42337	dATP	03/29/91	0.5000		0.5000	NEN DUPONT	DADA1590M9653	
42394	dATP	04/05/91	1.0000		1.0000	NEN DUPONT	DADA1590MA127	
42395	CTP	04/05/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42446	dCTP	04/12/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42447	dATP	04/12/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42485	CTP	04/19/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42486	dCTP	04/19/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42487	dATP	04/19/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42517	dATP	04/26/91	0.5000		0.5000	NEN DUPONT	DADA1590M9653	
42575	dATP	05/03/91	1.0000		1.0000	NEN DUPONT	DADA1590MA127	
42576	CTP	05/03/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	
42619	dATP	05/10/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42620	dCTP	05/10/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647	
42622	dATP	05/10/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419	
42648	dATP	05/17/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390	
42649	dCTP	05/17/91	1.0000	<u>↓</u>	1.0000	NEN DUPONT	DADA1590M9647	
42650	CTP	05/17/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018	

*Jesse L. Martin*  
11/5/91

AUTHORIZATION ISOTOPE INVENTORY  
( The Principle User's signature on the bottom of this form  
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has been performed. )

HPD 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
42586	dATP	05/24/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
42731	dATP	05/31/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
42798	dATP	06/07/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590MA127		
42799	CTP	06/07/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
42848	dCTP	06/14/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
42841	dATP	06/14/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
42877	CTP	06/21/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
42878	dCTP	06/21/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
42879	dATP	06/21/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
42933	dATP	06/28/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
42986	CTP	07/08/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43012	dCTP	07/12/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43013	dATP	07/12/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590MA127		
43014	dATP	07/12/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43045	CTP	07/19/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43046	dCTP	07/19/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43048	dATP	07/19/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43090	dATP	07/26/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
43025	CTP	08/02/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43026	dATP	08/02/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590MA127		
43084	dCTP	08/09/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43085	dATP	08/09/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43029	dCTP	08/16/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43030	CTP	08/16/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43031	dATP	08/16/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43066	dATP	08/23/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
43094	dATP	08/30/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
43038	CTP	09/06/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43039	dATP	09/06/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590MA127		
43074	dATP	09/13/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43075	dCTP	09/13/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43009	CTP	09/20/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9018		
43010	dCTP	09/20/91	1.0000	<u>1</u>	1.0000	NEN DUPONT	DADA1590M9647		
43011	dATP	09/20/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590MA390		
43059	dATP	09/27/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
43009	dATP	10/25/91	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1590M9653		
43028	UTP	10/30/91	1.0000	<u>1.0</u>	1.0000	NEN DUPONT	DADA1590A0014	10C10	
* Subsubtotal *			52.2500		52.2500				
* Total Millicuries S-35									
41394	METHIONINE	01/11/91	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1590M9020		
42099	DIDEOXY ATP	02/15/91	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1590M9419		
42223	METHIONINE	03/08/91	5.0000	<u>5</u>	5.0000	NEN DUPONT	DADA1590M9020		

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. )

HFO 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
42259✓	dATP	03/15/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
42260✓	dideoxy ATP	03/15/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
42448✓	ddATP	04/12/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
42449✓	dATP	04/12/91	0.2500		0.2500	NEN DUPONT	DADA1590M9649		
42463✓	METHIONINE X 2	04/15/91	10.0000		10.0000	NEN DUPONT	DADA1590A0014	4CI04	
42515✓	RETICULOCYTE	05/10/91	5.0000		5.0000	NEN DUPONT	DADA1590M9020		
42523✓	dATP	05/10/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
42343✓	dATP	06/14/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
42345✓	dideoxyATP	06/14/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
43011✓	dATP	07/12/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
43017✓	dATP	07/12/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
43031✓	RETICULOCYTE	07/16/91	5.0000		5.0000	NEN DUPONT	DADA1590M9020		LYSATE
43186✓	ddATP	08/09/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
43187✓	dATP	08/09/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
43376✓	METHIONINE	09/13/91	5.0000		5.0000	NEN DUPONT	DADA1590M9020		
43377✓	ddATP	09/13/91	0.2500		0.2500	NEN DUPONT	DADA1590M9419		
43378✓	dATP	09/13/91	0.2500		0.2500	NEN DUPONT	DADA1590M9649		
43544✓	dATP	10/11/91	0.2500		0.2500	NEN DUPONT	DADA1590M9646		
43546✓	METHIONINE	10/11/91	5.0000		5.0000	NEN DUPONT	DADA1590M9020		
* Subsubtotal *			43.7500		43.7500				
** Subtotal **			104.0350		104.0350				
*** Total ***			104.0350		104.0350				

AUTHORIZATION ISOTOPE INVENTORY

HPD 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 5 MAR 91*

\*\* Authorization Number: 615

\* Total Millicuries H-3

39004	DIHYDRO VIT D-3	10/23/89	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1589MB405		
39413	HYDROXYVITAMIN	12/15/89	0.0050	<i>0</i>	0.0050	NEN DUPONT	DADA1590M0667		
40182	DIHYDROXY D3 X2	04/02/90	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1589MB405		
40338	HDRXYVITAMIN D3	04/20/90	0.0050	<i>0</i>	0.0050	NEN DUPONT	DADA1590M0667		
40342	DIHDRXYVITMN D3	04/20/90	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1589MB405		
41124	HYDROXYVIT D3	08/24/90	0.0050	<i>0</i>	0.0050	NEN DUPONT	DADA1590M0667		
41128	DIHYDROXYVIT X2	08/24/90	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1589MB405		
41522	VIT D3 X 2	11/13/90	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1590M9644		
41590	THYMIDINE	12/03/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1591P1050		
41768	HYDROXYVIT D3	12/14/90	0.0050	<i>0</i>	0.0050	NEN DUPONT	DADA1590M7768		
41817	DIHYDROVIT X 2	12/27/90	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1590M9644		
41871	THYMIDINE	01/07/91	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1591P1050		
42096	THYMIDINE	02/15/91	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1591P1050		
42129	DIHYDROXYVIT D3	02/22/91	0.0100	<i>0</i>	0.0100	NEN DUPONT	DADA1590M9644		
42143	THYMIDINE	02/26/91	5.0000	<i>5.0</i>	5.0000	NEN DUPONT	DADA1590A0014	2C100	
* Subsubtotal *			8.0900		8.0900				

\* Total Millicuries I-125

41527	HUMAN TSH	10/30/90	0.1000	<i>0</i>	0.1000	HAZLETON LABS	DADA1589A0068	10C10	
41827	TRAb KIT	12/31/90	0.0100	<i>0</i>	0.0100	KRONUS	DADA1591P1823		
* Subsubtotal *			0.1100		0.1100				

\* Total Millicuries P-32

40991	CYTIDINE	08/03/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1589MB217		
41043	dATP	08/10/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0696		
41044	dCTP	08/10/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0385		
41046	dATP	08/10/90	0.5000	<i>0</i>	0.0000	NEN DUPONT	DADA1589MB403		
41047	CTP	08/10/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0270		
41126	dCTP	08/24/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0385		
41127	ATP	08/24/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0707		
41130	dATP	08/24/90	0.5000	<i>0</i>	0.0000	NEN DUPONT	DADA1589MB403		
41230	dCTP	09/07/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1590M0385		
41235	CTP	09/10/90	1.0000	<i>0</i>	0.0000	NEN DUPONT	DADA1589MB217		
41270	CTTP	09/14/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M0270		
41271	dATP	09/14/90	0.5000	<i>0</i>	0.5000	NEN DUPONT	DADA1589MB403		
41272	dATP	09/14/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M0696		
41323	dCTP	09/21/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M0385		
41324	ATP	09/21/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M0707		
41348	dATP	09/28/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M0696		
41349	dATP	09/28/90	0.5000	<i>0</i>	0.5000	NEN DUPONT	DADA1589MB403		
41415	dATP	10/05/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590MA127		
41416	CTP	10/05/90	1.0000	<i>0</i>	1.0000	NEN DUPONT	DADA1590M9018		

*Dec 35-91*

AUTHORIZATION ISOTOPE INVENTORY

HUT 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
41456	dATP	10/12/90	0.5000	0	0.5000	NEN DUPONT	DADA1590MA390		
41488	CTP	10/19/90	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41489	dATP	10/19/90	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41553	dATP	11/02/90	1.0000		1.0000	NEN DUPONT	DAMD1590MA127		
41554	CTP	11/02/90	1.0000		1.0000	NEN DUPONT	DAMD1590M9018		
41513	dATP	11/09/90	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41538	dATP	11/16/90	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41539	dCTP	11/16/90	0.2500		0.2500	NEN DUPONT	DADA1590M9647		
41559	CTP	11/20/90	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41588	dATP	11/30/90	0.5000		0.5000	NEN DUPONT	DADA1590M9653		
41733	dATP	12/07/90	1.0000		1.0000	NEN DUPONT	DADA1590MA127		
41734	CTP	12/07/90	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41769	dCTP	12/14/90	1.0000		1.0000	NEN DUPONT	DADA1590M9647		
41771	dATP	12/14/90	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41805	CTP	12/21/90	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41806	dATP	12/21/90	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41807	dCTP	12/21/90	1.0000		1.0000	NEN DUPONT	DADA1590M9647		
41851	CTP	01/04/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41352	dATP	01/04/91	1.0000		1.0000	NEN DUPONT	DADA1590MA127		
41392	dATP	01/11/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41393	dCTP	01/11/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647		
41927	CTP	01/18/91	1.0000		1.0000	NEN DUPONT	DADA1590M9018		
41928	dCTP, ALPHA	01/18/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647		
41929	dATP	01/18/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
41959	dATP	01/25/91	0.5000		0.5000	NEN DUPONT	DADA1590M9653		
41993	dATP	02/01/91	0.5000		0.5000	NEN DUPONT	DADA1590M9653		
42047	dATP	02/08/91	1.0000	1.0	1.0000	NEN DUPONT	DADA1590MA127		
42048	CTP	02/08/91	1.0000	0	1.0000	NEN DUPONT	DADA1590M9018		
42097	dCTP	02/15/91	1.0000		1.0000	NEN DUPONT	DADA1590M9647		
42098	dATP	02/15/91	0.5000		0.5000	NEN DUPONT	DADA1590MA390		
42130	dATP	02/22/91	0.5000	0.5	0.5000	NEN DUPONT	DADA1590MA390		
42131	CTP	02/22/91	1.0000	1.0	1.0000	NEN DUPONT	DADA1590M9018		

\* Subsubtotal \*

41.7500

32.7500

\* Total Millicuries S-35

41032	DIDEOXY ATP	08/08/90	0.2500	0	0.0000	NEN DUPONT	DADA1589MB160		
41033	dATP	08/08/90	0.2500	0	0.0000	NEN DUPONT	DADA1589MB490		
41185	dATP	09/05/90	0.2500	0	0.2500	NEN DUPONT	DADA1589MB490		
41191	DIDEOXY ATP	09/05/90	0.2500	0	0.2500	NEN DUPONT	DADA1589MB160		
41258	RETICULOCYTE	09/12/90	5.0000	0	5.0000	NEN DUPONT	DADA1590M2667		
41411	METHIONINE	10/04/90	5.0000	0	5.0000	NEN DUPONT	DADA1590M2667		
41455	DIDEOXY ATP	10/12/90	0.2500	0	0.2500	NEN DUPONT	DADA1590M9419		
41610	METHIONINE	11/09/90	5.0000	0	5.0000	NEN DUPONT	DADA1590M9020		
41611	METHIONINE	11/09/90	5.0000	0	5.0000	NEN DUPONT	DADA1590M2667		
41612	DIDEOXY ATP	11/09/90	0.2500	0	0.2500	NEN DUPONT	DADA1590M9419		
41614	dATP	11/09/90	0.2500	0	0.2500	NEN DUPONT	DADA1590M9646		

Spec 35-91

AUTHORIZATION ISOTOPE INVENTORY

HPD 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
4170	dATP	12/14/90	0.2500	0	0.2500	NEN DUPONT	DADA1590M9646		
4172	dideoxy ATP	12/14/90	0.2500	0	0.2500	NEN DUPONT	DADA1590M9419		
4198	METHIONINE	12/20/90	5.0000	0	5.0000	NEN DUPONT	DADA1590A0014	12C10 CALL #	
								12C1002	
41394	METHIONINE	01/11/91	5.0000	5.0	5.0000	NEN DUPONT	DADA1590M9020		
41398	DIDEOXY ATP	01/14/91	0.2500	0	0.2500	NEN DUPONT	DADA1590M9419		
41399	dATP	01/14/91	0.2500	0	0.2500	NEN DUPONT	DADA1590M9646		
42049	dATP	02/08/91	0.2500	0	0.2500	NEN DUPONT	DADA1590M9646		
42099	DIDEOXY ATP	02/15/91	0.2500	0.25	0.2500	NEN DUPONT	DADA1590M9419		
* Subsubtotal *			33.2500		32.7500				
** Subtotal **			83.2000		73.7000				
*** Total ***			83.2000		73.7000				

42165 dCTP 3/1/91 1.0 1.0  
42166 dATP 3/1/91 0.5 0.5

REC-35-91



AUTHORIZATION ISOTOPE INVENTORY

NFO TAG	CHEMICAL	DATE	ORIGINAL	NEW	LAST UPDATED	VENDOR	PURCHASE	CALL	REMA
NUMBER	FORM	RECEIVED	ACTIVITY	ACTIVITY	ACTIVITY		ORDER	NO	
			IN MILLICURIES	IN MILLICURIES	IN MILLICURIES		NUMBER		
Audit	9/13/90								

\*\* Authorization Number: 615

\* Total Millicuries H-3  
3004 DIHYDRO VIT D-3 10/23/89 0.0100 0.01 0.0100 NEN DUPONT DADA1589MB405  
\* Subsubtotal \*  
0.0100 0.0100

\* Total Millicuries S-35  
30130 dATP A-S 11/09/89 0.2500 0 0.2500 NEN DUPONT DADA1589MB160  
\* Subsubtotal \*  
0.2500 0.2500

\* Total Millicuries H-3  
30171 ESTRADIOL 11/16/89 0.2500 0 0.2500 NEN DUPONT DADA1590M0706  
\* Subsubtotal \*  
0.2500 0.2500

\* Total Millicuries S-35  
30336 dATP AS 12/06/89 0.2500 0 0.2500 NEN DUPONT DADA1589MB160  
\* Subsubtotal \*  
0.2500 0.2500

\* Total Millicuries H-3  
30413 HYDROXYVITAMIN 12/15/89 0.0050 0.005 0.0050 NEN DUPONT DADA1590M0667  
30414 DI HYDROXYVITAM 12/15/89 0.0100 0 0.0050 NEN DUPONT DADA1589MB405  
\* Subsubtotal \*  
0.0150 0.0100

\* Total Millicuries S-35  
39525 dATP 01/04/90 0.2500 0 0.2500 NEN DUPONT DADA1589MB160  
39802 dATP 02/07/90 0.2500 0 0.2500 NEN DUPONT DADA1589MB160  
39803 dATP 02/07/90 0.2500 0 0.2500 NEN DUPONT DADA1589MB490  
39841 METHIONINE 02/14/90 5.0000 0 5.0000 NEN DUPONT DADA1590M2667  
39988 dATP 03/07/90 0.2500 0 0.2500 NEN DUPONT DADA1589MB490  
40002 dATP 03/07/90 0.2500 0 0.2500 NEN DUPONT DADA1589MB160  
\* Subsubtotal \*  
6.2500 6.2500

\* Total Millicuries P-32  
40023 dATP 03/09/90 0.5000 0 0.5000 NEN DUPONT DADA1589MB403  
40076 dCTP 03/16/90 1.0000 0 1.0000 NEN DUPONT DADA1590M0385  
40125 dATP 03/23/90 0.5000 0 0.5000 NEN DUPONT DADA1589MB403  
40175 dATP 03/30/90 0.5000 0 0.5000 NEN DUPONT DADA1589MB403  
\* Subsubtotal \*  
2.5000 2.5000

Yasser A. Martin  
9/13/90

05/10/90

## AUTHORIZATION ISOTOPE INVENTORY

WFO 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
=====									
* Total Millicuries H-3									
40182	DIHYDROXY D3 X2	04/02/90	0.0100	<u>0.0100</u>	0.0100	NEN DUPONT	DADA1589MB405		
* Subsubtotal *			0.0100		0.0100				
* Total Millicuries P-32									
40226	dATP	04/04/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB490		
40250	CTP	04/06/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1589MB217		
* Subsubtotal *			1.2500		1.2500				
* Total Millicuries S-35									
40279	dATP	04/11/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB160		
* Subsubtotal *			0.2500		0.2500				
* Total Millicuries P-32									
40305	dCTP	04/13/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1589MB060		
40306	dATP	04/13/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40307	dATP	04/13/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0696		
40308	CTP	04/13/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0270		
* Subsubtotal *			3.5000		3.5000				
* Total Millicuries S-35									
40328	METHIONINE	04/18/90	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1590M2667		
* Subsubtotal *			5.0000		5.0000				
* Total Millicuries H-3									
40338	HDRXYVITAMIN D3	04/20/90	0.0050	<u>0.005</u>	0.0050	NEN DUPONT	DADA1590M0667		
* Subsubtotal *			0.0050		0.0050				
* Total Millicuries P-32									
40339	ADENOSINE	04/20/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0707		
* Subsubtotal *			1.0000		1.0000				
* Total Millicuries H-3									
40342	DIHDXVITAMN D3	04/20/90	0.0100	<u>0.01</u>	0.0100	NEN DUPONT	DADA1589MB405		
* Subsubtotal *			0.0100		0.0100				
* Total Millicuries P-32									
40376	dATP	04/27/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40453	CYTIDINE	05/04/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1589MB217		

AUTHORIZATION ISOTOPE INVENTORY

HFO 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
40470	DEOXYCTDNE X 2	05/08/90	2.0000	<u>0</u>	2.0000	NEN DUPONT	DADA1590M0385		
* Subsubtotal *			3.5000		3.5000				
* Total Millicuries S-35									
40484	dATP	05/09/90	0.2500	<u>0.25 0</u>	0.2500	NEN DUPONT	DADA1589MB490		
40485	dATP	05/09/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB160		
* Subsubtotal *			0.5000		0.5000				
* Total Millicuries P-32									
40492	dATP	05/11/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40493	CTP	05/11/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0270		
40495	dATP	05/11/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0696		
40517	dATP	05/15/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0696		
40539	ADENOSINE	05/18/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0707		
40574	dATP	05/25/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40595	dATP	06/01/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40596	dCTP	06/01/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0385		
* Subsubtotal *			6.5000		6.5000				
* Total Millicuries S-35									
40649	dATP	06/06/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB490		
40653	dATP	06/06/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB160		
* Subsubtotal *			0.5000		0.5000				
* Total Millicuries P-32									
40662	dCTP	06/08/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0385		
40664	CTP	06/08/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1589MB217		
40689	CTP	06/15/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0270		
40691	dCTP	06/15/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0385		
40692	dATP	06/15/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
* Subsubtotal *			4.5000		4.5000				
* Total Millicuries S-35									
40715	METHIONINE	06/20/90	5.0000	<u>0</u>	5.0000	NEN DUPONT	DADA1590M2667		
* Subsubtotal *			5.0000		5.0000				
* Total Millicuries P-32									
40730	dCTP	06/25/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0385		
* Subsubtotal *			1.0000		1.0000				

AUTHORIZATION ISOTOPE INVENTORY

HPD 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
* Total Millicuries H-3									
40738	DIHYDROXY X 2	06/25/90	0.0100	<u>0</u>	0.0100	NEN DUPONT	DADA1589MB405		
* Subsubtotal *			0.0100		0.0100				
* Total Millicuries P-32									
40771	dATP	06/29/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
* Subsubtotal *			0.5000		0.5000				
* Total Millicuries S-35									
40820	dATP	07/06/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DADA1589MB490		
* Subsubtotal *			0.2500		0.2500				
* Total Millicuries P-32									
40821	CYTIDINE	07/06/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1589MB217		
* Subsubtotal *			1.0000		1.0000				
* Total Millicuries S-35									
40854	dATP	07/11/90	0.2500	<u>0</u>	0.2500	NEN DUPONT	DAMD1589MB160		
* Subsubtotal *			0.2500		0.2500				
* Total Millicuries P-32									
40863	dATP	07/13/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1590M0696		
40866	dATP	07/13/90	0.5000	<u>0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40867	dCTP	07/13/90	1.0000	<u>0</u>	1.0000	NEN DUPONT	DADA1590M0385		
40868	CTP	07/13/90	1.0000	<u>trans 645 7/18/90 0</u>	1.0000	NEN DUPONT	DADA1590M0270		
40907	dCTP	07/20/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1590M0385		
40944	dATP	07/27/90	0.5000	<u><del>0.50</del> 0</u>	0.5000	NEN DUPONT	DADA1589MB403		
40945	ATP	07/27/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1589M0707		
40991	CYTIDINE	08/03/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1589MB217		
* Subsubtotal *									
41127			<u><del>1.00</del> 0</u>	7.0000	7.0000				
41235			<u><del>1.00</del> 0</u>						
* Total Millicuries S-35									
41032	DIDEOXY ATP	08/08/90	0.2500	<u><del>0.25</del> 0</u>	0.2500	NEN DUPONT	DADA1589MB160		
41033	dATP	08/08/90	0.2500	<u><del>0.25</del> 0</u>	0.2500	NEN DUPONT	DADA1589MB490		
* Subsubtotal *									
41185	ddATP	0.25	0.5000		0.5000				
41191	ddATP	0.25							
* Total Millicuries P-32									
41043	dATP	08/10/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1590M0696		
41044	dCTP	08/10/90	1.0000	<u><del>1.00</del> 0</u>	1.0000	NEN DUPONT	DADA1590M0385		
41046	dATP	08/10/90	0.5000	<u><del>0.50</del> 0</u>	0.5000	NEN DUPONT	DADA1589MB403		
411130	dATP		<u><del>0.50</del> 0</u>						
41230	dCTP		<u><del>1.00</del> 0</u>						

AUTHORIZATION ISOTOPE INVENTORY

HPD 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
41047	CTP	08/10/90	1.0000	<u>1.0000</u>	1.0000	NEN DUPONT	DADA1590M0270		
* Subsubtotal *			3.5000		3.5000				
* Total Millicuries H-3									
41124	HYDROXYVIT D3	08/24/90	0.0050	<u>0.0050</u>	0.0050	NEN DUPONT	DADA1590M0667		
* Subsubtotal *			0.0050		0.0050				
* Total Millicuries P-32									
41126	dCTP	08/24/90	1.0000	<u>1.0000</u>	1.0000	NEN DUPONT	DADA1590M0385		
41127	ATP	08/24/90	1.0000	<u>1.0000</u>	1.0000	NEN DUPONT	DADA1590M0707		
* Subsubtotal *			2.0000		2.0000				
* Total Millicuries H-3									
41128	DIHYDROXYVIT X2	08/24/90	0.0100	<u>0.0100</u>	0.0100	NEN DUPONT	DADA1589MB405		
* Subsubtotal *			0.0100		0.0100				
* Total Millicuries P-32									
41130	dATP	08/24/90	0.5000	<u>1.0000</u>	0.5000	NEN DUPONT	DADA1589MB403		
* Subsubtotal *			0.5000		0.5000				
** Subtotal **			57.5750		57.5700				
*** Total ***			57.5750		57.5700				

01/03/90

## AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
<u>Audit 4/10/90</u>				

\*\* Authorization Number: 615

* Total Millicuries C-14			0.0100	0
CO ENZYME A	/ /		0.5000	0
ORNITHINE X 2	09/18/86			
* Subsubtotal *			0.5100	

* Total Millicuries Cr-51			5.0000	0
33970	10/16/89			
* Subsubtotal *			5.0000	

* Total Millicuries H-3			0.0250	0
VIT D3	/ /		0.0700	0
DI HYDROXVIT D3	/ /		0.0050	0
33023	06/07/89		0.0200	0
33810	09/22/89		0.0100	0.01
39004	10/23/89		0.2500	0.25
39171	11/16/89		0.0050	0.005
39413	12/15/89		0.0100	0.005
39414	12/15/89		0.0100	0.005
* Subsubtotal *			0.01	0.01
0182 VIT D3	4/2/90		0.3950	

* Total Millicuries P-32			1.0000	0
38947	10/11/89		2.0000	0
38953	10/12/89		0.5000	0
38962	10/13/89		1.0000	0
38992	10/20/89		1.0000	0
38997	10/20/89		1.0000	0
39009	10/23/89		1.0000	0
39033	10/26/89		1.0000	0
39036	10/27/89		0.5000	0
39040	10/27/89		0.5000	0
39077	11/03/89		1.0000	0
39082	11/03/89		1.0000	0
39146	11/13/89		1.0000	0
39150	11/13/89		0.5000	0
39187	11/17/89		1.0000	0
39188	11/17/89		1.0000	0
39190	11/17/89		1.0000	0
39208	11/20/89		1.0000	0
39247	11/27/89		2.0000	0
39281	12/01/89		1.0000	0
39359	12/08/89		1.0000	0
39362	12/08/89		0.5000	0

Jeane muth  
4/10/90

04/03/90

## AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
<u>=====</u>				
<i>Audit 4/10/90</i>				
39364	dATP	12/08/89	1.0000	0
39410	dCTP	12/15/89	1.0000	0
39411	CTP	12/15/89	1.0000	0
39412	ADENOSINE	12/15/89	1.0000	0
39545	CYTIDINE	01/05/90	1.0000	0
39546	dCTP	01/05/90	1.0000	0
39606	dATP	01/12/90	0.5000	0
39612	dATP	01/12/90	1.0000	0
39645	CYTIDINE	01/19/90	1.0000	0
39646	dCTP	01/19/90	1.0000	0
39649	ATP	01/19/90	1.0000	0
39708	dATP	01/26/90	0.5000	0
39749		02/02/90	1.0000	0
39750		02/02/90	1.0000	0
39816	dATP	02/09/90	0.5000	0
39818	dATP	02/09/90	1.0000	0
39862	ATP	02/16/90	1.0000	0
39863	dCTP	02/16/90	1.0000	0. Transferred AUTH 645 0.8mc
39914	dATP	02/23/90	0.5000	0
39947	DEOXYCYTIDINE	03/02/90	1.0000	0
39949	CYTIDINE	03/02/90	1.0000	0
40019	DEOXYADENOSINE	03/09/90	1.0000	0
40020	CYTIDINE	03/09/90	1.0000	0
40023	dATP	03/09/90	0.5000	0.5
40076	DEOXYCYTIDINE	03/16/90	1.0000	0.5
40125	dATP	03/23/90	0.5000	0.5
40175	dATP	03/30/90	0.5000	0.5
* Subsubtotal *			1.0	1.0
40250	CTP	4/6/90	44.0000	

## \* Total Millicuries S-35

38598		08/29/89	5.0000	0
38783	METHIONINE	09/19/89	5.0000	0
38911	dATP	10/06/89	0.2500	0
38932	RETICULOCYTE	10/10/89	5.0000	0
39130	dATP A-S	11/09/89	0.2500	0.25
39131	dATP	11/09/89	0.2500	0
39335	dATP	12/06/89	0.2500	0
39336	dATP AS	12/06/89	0.2500	0.25
39519	dATP	01/03/90	0.2500	0
39525	dATP	01/04/90	0.2500	0.25
39802	dideoxyATP	02/07/90	0.2500	0.25
39803	dATP	02/07/90	0.2500	0.25
39819	METHIONINE	02/09/90	5.0000	0
39841	METHIONINE	02/14/90	5.0000	5.0
39988	dATP	03/07/90	0.2500	0.25
40002	dATP	03/07/90	0.2500	0.25
40226	dATP	4/8/90	0.25	0.25

*James Martin*  
4/10/90

# AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====
** Authorization Number: 615				
* Total Millicuries C-14				
36931		12/22/88	0.0500	<u>0</u>
37401		03/08/89	0.0500	<u>0</u>
* Subsubtotal *			0.1000	
* Total Millicuries Cr-51				
37408		03/09/89	5.0000	<u>0</u>
37665		04/13/89	5.0000	<u>0</u>
37875		05/16/89	5.0000	<u>0</u>
38105		06/19/89	5.0000	<u>0</u>
38318		07/18/89	5.0000	<u>0</u>
38504		08/14/89	5.0000	<u>0</u>
38770		09/18/89	5.0000	<u>0.0</u>
* Subsubtotal *			35.0000	
* Total Millicuries H-3				
36642		11/04/88	0.0050	<u>0</u>
36643		11/04/88	0.0200	<u>0</u>
36854		12/09/88	0.0200	<u>0</u>
37054		01/13/89	0.0200	<u>0</u>
37057		01/17/89	5.0000	<u>0.0</u>
37272		02/17/89	0.0200	<u>0</u>
37448		03/14/89	5.0000	<u>0</u>
37480		03/17/89	0.0200	<u>0</u>
37669		04/14/89	0.0200	<u>0</u>
37868		05/15/89	5.0000	<u>0</u>
38023	HYDROX VIT D3 349	06/07/89	0.0050	<u>0.005 0.005</u>
38030		06/07/89	0.0200	<u>0</u>
38344		07/21/89	0.0050	<u>0</u>
38347		07/21/89	0.0200	<u>0</u>
38803	HYDROX VITAMIN	09/22/89	0.0050	<u>0</u>
38810	HYDROXVITAMINE 626	09/22/89	0.0200	<u>0.02</u>
* Subsubtotal *			15.2000	
* Total Millicuries I-125				
37952		05/26/89	0.0020	<u>0</u>
37996		06/02/89	0.0100	<u>0</u>
38256		07/10/89	0.0020	<u>0</u>
38535		08/18/89	0.0160	<u>0.0160</u>
38553		08/22/89	0.0090	<u>0.0090</u>
* Subsubtotal *			0.0390	



10/04/89

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====
* Total Millicuries P-32				
37566		03/31/89	0.5000	0
37673		04/14/89	1.0000	0
37721		04/21/89	0.5000	0
37722		04/21/89	1.0000	0
37723		04/21/89	1.0000	0
37762		04/28/89	0.2500	0
37767		04/28/89	0.5000	0
37768		04/28/89	0.5000	0
37832		05/05/89	1.0000	0
37905		05/19/89	1.0000	0
37908		05/19/89	1.0000	0
37909		05/19/89	0.5000	0
37939		05/24/89	1.0000	0
37947		05/26/89	0.5000	0
37948		05/26/89	0.5000	0
37949		05/26/89	0.2500	0
37997		06/02/89	1.0000	0
38037		06/08/89	2.0000	0
38090		06/16/89	1.0000	0
38091		06/16/89	1.0000	0
38156		06/23/89	0.5000	0
38157		06/23/89	1.0000	0
38158		06/23/89	0.5000	0
38159		06/23/89	0.2500	0
38196		06/30/89	0.5000	0
38199		06/30/89	0.5000	0
38244		07/07/89	1.0000	0
38288		07/14/89	1.0000	0
38348		07/21/89	1.0000	0
38349		07/21/89	0.5000	0
38350		07/21/89	0.5000	0
38351		07/21/89	1.0000	0
38385		07/27/89	1.0000	0
38389		07/28/89	0.5000	0
38397		07/28/89	0.2500	0
38398		07/28/89	0.5000	0
38443		08/04/89	1.0000	0
38507		08/14/89	2.0000	0
38531		08/18/89	1.0000	0
38532		08/18/89	1.0000	0
38574		08/25/89	2.0000	0
38579		08/25/89	0.5000	0
38580		08/25/89	0.5000	0
38588		08/28/89	0.2500	0
38642	dATP	09/01/89	0.5000	0
38643	ADENOSINE, GAMMA	09/01/89	0.5000	0
38695	dCTP	09/08/89	1.0000	0

10/04/89

## AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	CHEMICAL FORM	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
38755	dATP	09/15/89	2.0000	0
38806		09/22/89	1.0000	0
38808	ATP	09/22/89	0.5000	0
38809	dCTP	09/22/89	1.0000	0
38811	dATP	09/22/89	0.5000	0
38830	dCTP	09/27/89	0.2500	0
38844	dATP	09/28/89	2.0000	0
38847	ATP	09/29/89	0.5000	0
38848	dATP	09/29/89	0.5000	0
* Subsubtotal *			1.0	1.0
8992			1.0	1.0
7747			2.0	2.0
8952				
* Total Millicuries S-35				
37600		04/05/89	5.0000	0
37748		04/26/89	5.0000	0
37886		05/16/89	5.0000	0
38176		06/27/89	5.0000	0
38328		07/18/89	5.0000	0
38476		08/09/89	0.2500	0
38598		08/29/89	5.0000	5.0
38783	METHIONINE	09/19/89	5.0000	5.0
* Subsubtotal *				5.0
			31.2500	
** Subtotal **			126.5890	
*** Total ***			126.5890	

Ken Burman  
10-30-89

PERSONAL INFORMATION  
WAS REMOVED BY NRC.  
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RETAINED BY THE NRC

COL Kenneth D. Burman, M.D.  
Asst Chief, Endocrine Metabolic Service  
and Kyle Metabolic Unit

NET 180 vit D3 0.025 mCi 2260 077

~~24,25 Dihydroxy vit D3~~  
Ribosomal markers 0.01 mCi

add  
A X NET 349 25 vit D3 20 NOV 87 0.02 2293-185  
1 X NET 349 4 NOV 87 0.01 2293-228  
NET 349 25 vit D3 0.005 mCi 2293-228  
NET 349 11/15/86 0.02  
NET 626 { 1,25 D3 0.005 mCi 0.01 2536-028  
626 4/11 0.005

~~NET 0277 Thymidine (1/18/89) 5 mCi 2561-097~~

~~NET 156 Uridine 0.25 mCi 2161-150~~

7/1 X NET 349 7 June 89 .005

Test.

14 X NET 349 (.005)

04/03/89

## AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
*** Authorization Number: 615				
* Total Millicuries C-14				
36931 -	DADA1589M0353	12/22/88	0.0500	0.05
* Subsubtotal *				
7401			0.0500	
* Total Millicuries Cr-51				
36399 -	DADA1588MA631	09/21/88	5.0000	0
36724 -	DADA1589M0898	11/17/88	5.0000	0
36889 -	DADA1589M0898	12/15/88	5.0000	0
37045 -	DADA1589M0898	01/12/89	5.0000	0
37235 -	DADA1589M0898	02/10/89	5.0000	0
37408 -	DADA1589M0898	03/09/89	5.0000	5.0
* Subsubtotal *			5.0	5.0
		04/14/89	30.0000	
* Total Millicuries H-3				
35583	DADA1588M0737	05/03/88	0.0050	
36642 -	DADA1589M0367	11/04/88	0.0050	0.005
36643 -	DADA1589M0367	11/04/88	0.0200	0.02
36808 *	DADA1589M0861	12/02/88	0.2500	Auth 642
36854 *	DADA1589M0367	12/09/88	0.0200	0.02
37054 -	DADA1589M0367	01/13/89	0.0200	0.02
37057 -	DADA1589M2062	01/17/89	5.0000	5.0
37272 -	DADA1589M0367	02/17/89	0.0200	0.02
37448 -	DADA1589M2062	03/14/89	5.0000	5.0
37480 *	DADA1589M0367	03/17/89	0.0200	0.02
* Subsubtotal *			0.02	0.02
37669		4/14/89	10.3600	
* Total Millicuries I-125				
37000 -	DADA1589M2074	01/05/88	0.0100	0.0
* Subsubtotal *				
			0.0100	
* Total Millicuries P-32				
36480	DADA1588M8361	10/05/88	0.0520	0
36514	DADA1588M8361	10/12/88	0.0240	0
36522 -	DADA1588M4862	10/14/88	0.5000	0
36586 -	DADA1588M4862	10/28/88	0.5000	0
36590 -	DADA1589M0337	10/28/88	0.2500	0
36732 -	8121841400200	11/18/88	1.0000	0
36780 -	DADA1589M0337	11/29/88	0.2500	0
36839	8121841400200	12/07/88	0.7500	0
36900 -	DADA1589M0604	12/16/88	2.0000	0
36901 -	DADA1589M0571	12/16/88	1.0000	0
36934 -	DADA1589M0353	12/22/88	0.5000	0

04/03/89

AUTHORIZATION ISOTOPE INVENTORY

HPO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====
36963 -	DADA1589M0560	12/30/88	0.5000	0
36964 -	DADA1589M0353	12/30/88	0.5000	0
36965 -	DADA1589M0337	12/30/88	0.2500	0
37009 -	DADA1589M0604	01/06/88	1.0000	0
37098 -	DADA1589M0604	01/23/89	1.0000	0
37101 -	DADA1589M0571	01/23/89	0.5000	0
37103 -	DADA1589M0353	01/23/89	0.5000	0
37135 -	DADA1589M0337	01/27/89	0.2500	0
37136 -	DADA1589M0560	01/27/89	0.5000	0
37137 -	DADA1589M0353 337	01/27/89	0.25 0.5000	0
37186 -	DADA1589M0604	02/03/89	1.0000	0
37273 -	DADA1589M0571	02/17/89	1.0000	0
37274 -	DADA1589M0604	02/17/89	1.0000	0
37275 -	DADA1589M0353	02/17/89	0.5000	0
37312 -	DADA1589M0560	02/24/89	0.5000	0
37313 -	DADA1589M0353	02/24/89	0.5000	0
37314 -	DADA1589M0337	02/24/89	0.2500	0
37373 -	DADA1589M0604	03/03/89	1.0000	0
37476 -	DADA1589M0571	03/17/89	1.0000	0
37478 -	DADA1589M0604	03/17/89	2.0000	0
37516 -	DADA1589M0353	03/24/89	0.5000	0
37518 -	DADA1589M0560	03/24/89	0.5000	0
37519 -	DADA1589M0337	03/24/89	0.2500	0
37564 -	DADA1589M0560	03/31/89	0.5000	0
37566 -	DADA1589M0353	03/31/89	0.5000	0.5
* Subsubtotal *		4/21/89		0.5
37721		4/21/89	23.3260	1.0
37723		"		1.0
* Total Millicuries S-35				
36165 -	DADA1588M0534	08/12/88	5.0000	0
36299 -	DADA1588M0534	09/07/88	5.0000	0
36417 -	DADA1588M0534	09/23/88	5.0000	0
36645 -	DADA1589M0373	11/04/88	1.0000	0
36926 -	DADA1589M0373	12/21/88	5.0000	0
37043 -	DADA1589M0373 REPL	01/12/89	5.0000	0
37293 -	DADA1589M0373	02/21/89	5.0000	0
* Subsubtotal *			5.0	5.0
37600		4/5/89	31.0000	
** Subtotal **				
			94.7460	
*** Total ***				
			94.7460	

25 Apr 89  
D. Brubaker

AUTHORIZATION ISOTOPE INVENTORY

INFO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
*** Authorization Number: 615				
* Total Millicuries C-14				
35335	8121841400200 500	03/25/88	0.0100	<u>.010</u>
* Subsubtotal *			0.0100	
* Total Millicuries Cr-51				
35332	DADA1588M5501	03/25/88	5.0000	<u>0</u>
35492	DADA1588M5501	04/18/88	5.0000	<u>0</u>
35663	DADA1588M5501	05/16/88	5.5000	<u>0</u>
35984	DADA1588M8972	07/13/88	5.0000	<u>0</u>
36153	DADA1588M8972	08/09/88	5.0000	<u>0</u>
36345	DADA1588M8972	09/14/88	5.0000	<u>0</u>
36399	DADA1588MA631	09/21/88	5.0000	<u>2.5</u>
* Subsubtotal *			35.5000	
* Total Millicuries H-3				
35583	DADA1588M0737	05/03/88	0.0050	<u>.005</u>
* Subsubtotal *			0.0050	
* Total Millicuries I-125				
35008	DADA1588M0737	02/03/88	0.0050	<u>0</u>
35108	DADA1585A0185 2UM8	02/18/88	0.0100	<u>0</u>
35211	DADA1588M0737	03/08/88	0.0050	<u>0</u>
35234	DADA1585A0185 3UM2	03/11/88	0.0020	<u>0</u>
35237	DADA1585A0185 3UM2	03/11/88	0.0100	<u>0</u>
35401	DADA1588M0737	04/06/88	0.0050	<u>0</u>
35518	DADA1588F2049	04/20/88	0.0200	<u>0</u>
35668	DADA1585A0185 5UM3	05/16/88	0.0100	<u>0</u>
35687	DADA1588M6881	05/19/88	0.0100	<u>0</u>
35778	DADA1588M0737	06/07/88	0.0050	<u>0</u>
35928	DADA1588M0737	07/06/88	0.0050	<u>0</u>
36114	DADA1588M0737	08/03/88	0.0050	<u>0</u>
36304	DADA1588M0737	09/07/88	0.0050	<u>0</u>
36362	DADA1588A0036 IM03	09/16/88	0.0100	<u>0</u>
* Subsubtotal *			0.1070	
* Total Millicuries NONRAD				
36315	DADA1587A0027	09/07/88	0.0000	<u>0</u>
* Subsubtotal *			0.0000	
* Total Millicuries P-32				
35337	DADA1588M4862	03/25/88	0.5000	<u>0</u>

AUTHORIZATION ISOTOPE INVENTORY

INFO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====
35380	DADA1588M5504	04/01/88	0.1391	0
35426	DADA1588M0115 10UMI	04/08/88	0.2500	
35449	DADA1588A0013	04/12/88	0.3230	
35481	DADA1588M4862	04/15/88	0.5000	
35525	DADA1588M0400	04/22/88	1.0000	
35526	DADA1588M0115	04/22/88	0.2500	
35529	DADA1588M5504	04/22/88	0.0245	
35556	DADA1588M5504	04/29/88	0.1486	
35563	DADA1588M4862	04/29/88	0.5000	
35564	DADA1588M0588	04/29/88	0.2500	
35609	DADA1588M0115 10UMI	05/06/88	0.2500	
35639	DADA1588M5504	05/12/88	0.0991	
35652	DADA1588M4862	05/13/88	0.5000	
35683	DADA1588A0013	05/18/88	0.0390	
35697	DADA1588M0400	05/20/88	1.0000	
35699	DADA1588M0115	05/20/88	0.2500	
35717	DADA1588A0013	05/24/88	0.1590	
35735	DADA1588M4862	05/27/88	0.5000	
35758	DADA1588M0115 10UMI	06/03/88	0.2500	
35788	DADA1588A0013	06/08/88	0.1750	
35794	DADA1588M4862	06/10/88	0.5000	
35835	DADA1588M0115	06/17/88	0.2500	
35836	DADA1588M0400	06/17/88	1.0000	
35866	DADA1585A0185 7UM7	06/24/88	1.5000	
35869	DADA1588M4862	06/24/88	0.5000	
35870	DADA1588M8361	06/24/88	0.0509	
35892	DADA1588M8361	06/29/88	0.0586	
35952	DADA1588M0115 10UMI	07/08/88	0.2500	
35958	DADA1588M8361	07/08/88	0.0650	
35982	DADA1588M8361	07/13/88	0.0498	
35997	DADA1588M0588	07/15/88	0.2500	
35999	DADA1588M4862	07/15/88	0.5000	
36021	DADA1588M8361	07/20/88	0.0497	
36042	DADA1588M0400	07/22/88	1.0000	
36043	DADA1588M0115	07/22/88	0.2500	
36076	DADA1588M0588	07/29/88	0.2500	
36078	DADA1588M4862	07/29/88	0.5000	
36117	DADA1588M8361	08/03/88	0.0450	
36136	DADA1588M0115	08/05/88	0.2500	
36158	DADA1588M8361	08/10/88	0.0450	
36167	DADA1588M4862	08/12/88	0.5000	
36190	DADA1588M8361	08/17/88	0.0516	
36201	DADA1588M0400	08/19/88	1.0000	
36203	DADA1588M0115 10UMI	08/19/88	0.2500	
36225	DADA1588M8361	08/24/88	0.0550	
36241	DADA1588M4862	08/26/88	0.5000	
36271	DADA1588M0115 10UMI	09/02/88	0.2500	
36331	DADA1588M4862	09/09/88	0.5000	

AUTHORIZATION ISOTOPE INVENTORY

INFO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY IN MILLICURIES	NEW ACTIVITY IN MILLICURIES
=====	=====	=====	=====	=====
36351	DADA1588M8361	09/14/88	0.0490	0
36363	DADA1588M0588	09/16/88	0.2500	
36378	DADA1588M0115 10UMI	09/19/88	0.2500	
36405	DADA1588M83	09/21/88	0.0460	
36413	DAMD1788M0400	09/23/88	1.0000	
36439	DADA1588M4862	09/28/88	0.5000	
36445	DADA1588M8361	09/28/88	0.0510	
36480	DADA1588M8361	10/05/88	0.0520	
36514	DADA1588M8361	10/12/88	0.0240	
36522	DADA1588M4862	10/14/88	0.5000	.25
36586	DADA1588M4862	10/28/88	0.5000	.25
* Subsubtotal *			20.7999	
* Total Millicuries S-35				
35172		03/02/88	5.0000	0
35258	DADA1587A0027	03/16/88	0.1260	
35865	DADA1585A0185	06/24/88	5.0000	
* Subsubtotal *			10.1260	
** Subtotal **			66.5479	
*** Total ***			66.5479	

Ken Burren  
15 NOV 88



AUTHORIZATION ISOTOPE INVENTORY

INFO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY	NEW ACTIVITY
=====	=====	=====	=====	=====
*** Authorization Number: 615				
* Total Millicuries C-14				
335	8121841400200	500	03/25/88	0.0100
* Subsubtotal *				<u>.01</u>
				0.0100
* Total Millicuries Cr-51				
332	DADA1588M5501		03/25/88	5.0000
* Subsubtotal *				<u>5.0</u>
				5.0000
* Total Millicuries I-125				
34832	DAMD1588M0737		01/06/88	0.0050
34949	FOR EVLUATION		01/22/88	0.0100
35008	DADA1588M0737		02/03/88	0.0050
35108	DADA1585A0185	2UM8	02/18/88	0.0100
35210	DADA1588M4493		03/08/88	0.0100
35211	DADA1588M0737		03/08/88	0.0050
35234	DADA1585A0185	3UM2	03/11/88	0.0020
35237	DADA1585A0185	3UM2	03/11/88	0.0100
* Subsubtotal *				<u>.01</u>
				0.0570
* Total Millicuries P-32				
34743	DADA1588M0115	10UMI	12/11/87	0.2500
34745	DADA1588M0588		12/11/87	0.2500
34768	DADA1588M0641		12/17/87	0.2540
34768	DADA1588M2385		12/17/87	0.2000
34773	DADA1588 0400		12/18/87	1.0000
34855	DADA1588M0641		01/08/88	0.1330
34856	DADA1588M2385		01/08/88	0.1060
34870	DADA1588M0115	10UMI	01/11/88	0.2500
34890	DADA1588M0115		01/12/88	0.2500
34917	DADA1588M0115	10UMI	01/15/88	0.2500
34944	DADA1588M2385		01/21/88	0.2400
34956	DADA1588 0440		01/22/88	1.0000
34964	FOR EVLUATION		01/25/88	0.2500
34983	DADA1588A0013	1UE1	01/28/88	0.2070
34991	DADA1588M0588		01/29/88	0.2500
35036	DADA1588M0115	10UMI	02/05/88	0.2500
35054	DADA1588A0013		02/09/88	0.0940
35104	DADA1588M2385		02/18/88	0.2510
35119	DADA1588 0400		02/19/88	1.0000
35121	DADA1588M0115	10UMI	02/19/88	0.2500
35140	DADA1588		02/23/88	0.0580
35190	DADA1588M0115	10UMI	03/04/88	0.2500
35208	DADA1585A0185	3UM1	03/08/88	1.0000
35209	DADA1585A0185	3UM1	03/08/88	1.0000

AUTHORIZATION ISOTOPE INVENTORY

HDO TAG NUMBER	PURCHASE ORDER & CALL NUMBER	DATE RECEIVED	ORIGINAL ACTIVITY	NEW ACTIVITY
240	DADA1588M4862	03/11/88	0.5000	0
276	DADA1588M0115 10UMI	03/18/88	0.5000	0
278	DADA1588M0400	03/18/88	1.0000	0
320	DADA1588A0	03/23/88	0.0260	0
337	DADA1588M4862	03/25/88	0.5000	✓ 0.250
380	DADA1588M5504	04/01/88	0.1391	✓ 0
Subsubtotal *			11.7081	
* Total Millicuries S-35				
172		03/02/88	5.0000	5.0
258	DADA1587A0027	03/16/88	0.1260	0.126
* Subsubtotal *			5.1260	
** Subtotal **			21.9011	
*** Total ***			21.9011	

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER

DESCRIPTION

5-35

Endometablin

09-01739-02 1615

5 mci

UNIT AS RECEIVED

CONVERSION FACTOR

ACCOUNTABLE UNIT

DATE	DEBIT (Receipts) ACT mci	DEBIT (V.O.) OR CREDIT (RX) NO	CREDIT (Expenditures)	BALANCE ON HAND	DATE	DEBIT (Receipts)	DEBIT (V.O.) OR CREDIT (RX) NO	CREDIT (Expenditures)	BALANCE ON HAND
26 Jun 86	2.0	NA			14 APR 87	1.0 mci	DADA 1587 M 1066	33454	
1 JUL 86	5.0 mci	DADA 1586 M 9873	32075	031164	22 APR 87	0.166 mci	DADA 1587 A 0027	33491	44m2
13 Aug 86	1.0 mci	DADA 1586 M 9873	32277		14 May 87	0.423 mci	11	33614	44m4
18 Aug 86	5.0 mci	DADA 1586 M 9873	32299		27 May 87	0.5 mci	DADA 1587 M 1066	33668	
3 Sep 86	1.0 mci	DADA 1586 M 9873	32376		15 Jun 87	10.0 mci	DADA 1587 M 1066	33758	5um2
5 Sep 86	6.0 mci	DADA 1586 M 9873	32390		16 Jun 87	1.0 mci	DADA 1587 M 1066	33766	-
17 Sep 86	2.0 mci	DADA 1586 M 9873	32455	078919	8 Jul 87	1.0 mci	11	33865	
17 Sep 86	1.0 mci	DADA 1586 M 9873	32459	078961	10 Jul 87	5.0 mci	85A0185	33895	7um7
25 Sep 86	1.0 mci	DADA 1586 M 9873	32498		05 AUG 87	0.905 mci	A 0027	34055	6um3
15 Oct 86	1.0 mci	DADA 1586 M 9873	32587		10 AUG 87	1.0 mci	A 0185	34079	7um2
2 Dec 86	1.0 mci	DADA 1587 M 1066	32802		18 AUG 87	1.0 mci	M 1066	34129	
9 Dec 86	1.0 mci	11	32835		31 AUG 87	1.0 mci	DADA 1585 A 0185	34185	7um2
10 Dec 86	1.0 mci	DADA 1587 M 1066	32851		02 Sept 87	0.112 mci	DADA 1587 M 1066	34218	
16 Jan 87	0.120	DADA 1587 M 1066	32991		21 Sept 87	1.0 mci	DADA 1585 A 0185	34301	7um2
20 Jan 87	1.0 mci	DADA 1587 M 1066	33012		24 Sept 87	0.0978 mci	DADA 1587 M 1066	34327	
11 Feb 87	1.0 mci	11	33104		30 Sept 87	1.0 mci	DADA 1587 M 1066	34356	
3 Mar 87	1.0 mci	DADA 1587 M 1066	33201		9 Nov 87	12.0 mci	DADA 1588 M 0534	34558	



# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER		DESCRIPTION							
		P-32							
UNIT AS RECEIVED		Endo-Metabolism 08-01738-02/615							
		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
2 JUN 87	1.0 mCi	33697	DADA 1587 M2880		24 Jul 87	0.25 mCi	85 A0185	33993	7um3
27 MAY 87	1.0 mCi	33666	M2661		24 Jul 87	1.0 mCi	"	33994	7um4
"	1.0 mCi	33665	M4765		12 Mar 87	0.685 mCi	87 M 4425	33263	
4 JUN 87	0.25 mCi	33709	DADA 1585 A0185		29 JUL 87	1.0 mCi	DADA 1587 M2661	34006	
12 JUN 87	0.236 mCi	33751	DADA 1587 A0027	6um3	31 JUL 87	0.2856 mCi	A0027	34020	6um3
26 JUN 87	0.352 mCi	DADA 1587 A0027	33819	6um3	04 AUG 87	1.0 mCi	DADA 1587 M2880	34044	
1 JUL 87	1.0 mCi	DADA 1587 M2661	33836		05 AUG 87	0.914 mCi	A0027	34055	6um3
2 JUL 87	0.25 mCi	DADA 1585 A0185	33850		07 AUG 87	0.250 mCi	A0085	34061	
8 Jul 87	0.25 mCi	"	33861	—	07 AUG 87	0.250 mCi	A0185	34062	7um3
8 Jul 87	0.25 mCi	"	33862	7um3	07 AUG 87	0.250 mCi	"	34064	
8 Jul 87	1.0 mCi	1587 M2880	33869		14 AUG 87	1.0 mCi	A0185	34100	7um4
10 Jul 87	2.5 mCi	85 A0185	33896	7um7	14 AUG 87	0.250 mCi	"	34102	7um3
10 Jul 87	0.5 mCi	"	33897	7um3	21 AUG 87	0.25 mCi	"	34141	7um3
10 Jul 87	1.0 mCi	"	33898	7um4	21 AUG 87	0.25 mCi	"	34142	7um3
17 Jul 87	0.25 mCi	"	33949	7um3	26 AUG 87	1.0 mCi	DADA 1587 M2661	34154	
17 Jul 87	0.25 mCi	"	33950	"	27 AUG 87	0.21 mCi	DADA 87 A0027	34165	6um3
20 Jul 87	1.0 mCi	"	33955	7um2	02 Sept 87	0.098 mCi	DADA 1587 MA 354	34218	

# 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						
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
04 Sept 87	0.250 mCi	DADA 1585 34234 A0185	34234	7UM3	13 Nov 87	0.106 mCi	DADA 1588 M0641	3457.3	
04 Sept 87	0.25 mCi	DADA 1585 A0185	34235	7UM3	20 Nov 87	0.250 mCi	DADA 1588 M0621	34627	
04 Sept 87	1.0 mCi	DADA 1587 M2880	34236		24 Nov 87	1.0 mCi	DADA 1588 0400	34646	
03 Sept 87	0.25 mCi	DADA 1585 A0185	34225		4 Dec 87	0.173 mCi	DADA 1588 M0641	34689	
11 Sept 87	0.25 mCi	"	34266	7UMS	4 Dec 87	0.250 mCi	DADA 1588 M0115	34699	
18 Sept 87	0.25 mCi	"	34293	7UM3	11 Dec 87	0.250 mCi	"	34743	10UMI
18 Sept 87	0.25 mCi	"	34294	7UMS	11 Dec 87	0.250 mCi	DADA 1588 M0588	34745	
18 Sept 87	0.232 mCi	DADA 1587 MA254	34298		10 Dec 87	0.1414 mCi	DADA 1588 M0641	34735	
25 Sept 87	0.1277 mCi	DADA 1587 MA254	34327		17 Dec 87	0.454 mCi	DADA 1588 M2385, M0641	34768	
25 Sept 87	0.25 mCi	DADA 1585 A0185	34335	7UMS	18 Dec 87	1.0 mCi	DADA 1588 0400	34773	
30 Sept 87	1.0 mCi	87 M261	34359						
02 Oct 87	0.250 mCi	DADA 1585 A0185	34367	7UM3					
02 Oct 87	0.25 mCi	DADA 1585 A0185	34368	7UMS					
09 Oct 87	0.25 mCi	DADA 1585 A0185	34407	7UM8					
23 Oct 87	0.25 mCi	DADA 1588 M0115	34481	10UMI					
23 Oct 87	0.25 mCi	DADA 1588 0400	34482						
30 Oct 87	0.25 mCi	DADA 1588 M0115	34517	Transferred USCHHS 10UMI					

# 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						
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
19 JAN 81	0.1 mCi	DADA 1581 F 2533	23446						
3 MAR 81	0.05 mCi	DADA 1581 M 0847	23660						
6 MAR 81	0.002 mCi	80 A0010 C 3UK	23682						
<del>27 APR 81</del>	<del>0.03 mCi</del>	<del>MEMO</del>	<del>23951</del>						
2 Sept '81	.1 mCi	DADA 1581 M 0847	24571						
2 Nov '81	.1 mCi	DADA 1581 F 2533	24808						
3 Nov '81	.1 mCi	DADA 1581 F 9779	24820						
3 Nov '81	.1 mCi	DADA 1581 F 2051	24821						
9 Feb 82	.002 mCi	DADA 1580 A0010	25250						
2 MAR 82	.05 mCi	DADA 1582 F 2051	25323						
9 Jun 82	.05 mCi	DADA 1582 F 2051	25788						
8 Sept 82	.05 mCi	DADA 1582 F 2051	26195						
23 Dec 85	0.05 mCi	DADA 1586 M 0202	31162						
19 Sep 86	1.0 mCi	DADA 1586 M 3370	32464	078949					
19 Jun 87	0.05 mCi	DADA 1585 A0185	33783	6um4					
17 AUG 87	0.001 mCi	DADA 1586 A 0035	34109	8um3					

## 6

**STOCK NUMBER**

UNIT AS RECEIVED

CONVERSION FACTOR
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ACCOUNTABLE UNIT	
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[illegible]



# 7 CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER

DESCRIPTION

H-3  
Endo-metabolism, NMTF

08-01738-02 / 615

UNIT AS RECEIVED

CONVERSION FACTOR

ACCOUNTABLE UNIT

DATE	DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO	TAG# CREDIT (Expenditures)	PR# BALANCE ON HAND	DATE	DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO	TAG# CREDIT (Expenditures)	PR# BALANCE ON HAND
13 Apr 84	5.0 mCi	DADA 1584 m4753	28450		24 JUN 85	1.0 mCi	DADA 1585 M 9678	30387	28362
13 Apr 84	1.0 mCi	DADA 1583 MK043	28451		12 AUG 85	5.0 mCi	DADA 1585 MC182	30606	80717
13 Apr 84	1.0 mCi	DADA 1583 m6842	28456		8 Apr 86	5.0 mCi	DADA 1586 m6383	61610	199410
18 Apr 84	0.01 mCi	DADA 1584 m5351	28473		9 JUL 86	2.2E-8	DADA 1586 M9858	32110	-
2 May 84	5.0 mCi	DADA 1584 m4753	28535		20 OCT 86	0.25	DADA 1585 A0185	32638	
23 May 84	0.01 mCi	DADA 1584 m5351	28619		12 Nov 86	0.025	DADA 1585 A0185	32715	114141
1 Jun 84	5.0 mCi	DADA 1584 m4753	28658		28 JAN 86	0.005	DADA 1586 A0180	33043	44113
20 Jun 84	0.01 mCi	DADA 1584 m5351	28748		16 Mar 87	0.25 mCi	DADA 1587 m4769	33280	
2 Jul 84	1.0 mCi	DADA 1583 MK043	28798		30 MAR 87	0.010 mCi	DADA 1585 A0185	33350	40111
5 Jul 84	5.0 mCi	DADA 1584 m4753	28809		20 APR 87	0.25	DADA 1587 m4769	33479	
16 Jul 84	0.01 mCi	DADA 1584 m5351	28884		2 JUL 87	0.25 mCi	DADA 1585 A0185	33851	
7 Aug 84	5.0 mCi	DADA 1584 m4753	28981		8 Jul 87	0.005 mCi	11	33882	70116
13 Aug 84	60.0 mCi	DADA 1584 M5005	28994		02 Sept 87	0.25 mCi	11	34216	60112
5 Sept 84	5.0 mCi	DADA 1584 m4753	29100						
3 Oct 84	5.0 mCi	DADA 1584 m4753	29230						
7 Nov 84	5.0 mCi	DADA 1584 m4753	29374						
13 MAR 85	5.0 mCi	DADA 1585 m6695	29898						

# 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		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
25 FEB 81	2mCi	DADA 1580 A0010-62424	23635		17 Aug 83	.01 mCi	DADA 1583 M6755	27510	
6 APR 81	2 mCi	DADA 1580 A0010-4422	23844		26 Aug 83	.315 mCi	DADA 1583 MG808	27538	
2 Sept 81	1 mCi	DADA 1581 F6707	24570		3 Oct 83	1 mCi	DADA 1583 MG842	27670	
17 Sept 81	2 mCi	DADA 1580 A0010	24637		19 Oct 83	.01 mCi	DADA 1583 M6755	27732	
3 Feb 82	1 mCi	DADA 1580 A0010	25210		31 Oct 83	1 mCi	DADA 1583 MK043	27763	
9 Feb 82	.022 mCi	DADA 1580 A0010	25250		12 Dec 83	5 mCi	DADA 1584 M4753	27927	
22 APR 82	.01 mCi	DADA 1581 F6874	25574		16 Dec 83	1.0 mCi	DADA 1583 A0008	27952	
3 Sept 82	.01 mCi	DADA 1582 MP112	26177		23 Dec 83	0.01 mCi	DADA 1583 M6755	27985	
1 Dec 82	1 mCi	DADA 1583 A0008A11	26526		4 Jan 84	5.0 mCi	DADA 1584 M4753	28002	
4 Feb 83	1 mCi	DADA 1583 M5795	26754		4 Jan 84	1.0 mCi	DADA 1583 MK043	28010	
16 May 83	.01 mCi	DADA 1583 M6755	26913		4 Jan 84	1.0 mCi	DADA 1584 M5060	28018	
18 APR 83	1 mCi	DADA 1583 M5795	27048		13 Jan 84	1.0 mCi	DADA 1583 MG842	28051	
20 APR 83	.01 mCi	DADA 1583 M6755	27062		8 Feb 84	5.0 mCi	DADA 1584 M4753	28166	
24 Jun 83	2 mCi	DADA 1583 M5797	27314		22 Feb 84	0.01 mCi	DADA 1584 M5351	28234	
18 Jul 83	1 mCi	DADA 1583 M5795	27392		22 Feb 84	0.05 mCi	DADA 1584 M5588	28236	
27 Jul 83	.25 mCi	DADA 1583 ME667	27424		7 Mar 84	5.0 mCi	DADA 1584 M4753	28291	
29 Jul 83	.25 mCi	DADA 1583 M5705	27439		23 Mar 84	0.01 mCi	DADA 1584 M5351	28346	

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER		DESCRIPTION							
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
5 Dec	10.0 mCi	DADA 1585 W0238	29496	163456	17 Mar 86	2.2	DADA 1586 M2974	31508	221630
10 Dec 84	10.0 mCi	DADA 1585 W0238	29529	163457	17 Mar 86	5.5	DADA 1586 m6119	31509	
24 Dec 84	10 mCi	DADA 1585 W0238	29599	163458	11 Apr 86	2.2	DADA 1586 M2974	31628	225003
7 Jan 85	10.0 mCi	DADA 1585 W0238	29642	163459	11 Apr 86	5.5	DADA 1586 m6119	31629	225033
14 Jan 85	5.6 mCi	DADA 1585 M2857	29668	17352	9 May 86	2.2 mCi	DADA 1586 M2974	31805	228503
23 Jan 85	10.0 mCi	DADA 1585 W0238	29699	163460	16 May 86	5.5 mCi	DADA 1586 m6119	31843	
5 Feb 85	10.0	DADA 1585 W0238	29758	163461	13 Jun 86	2.2	DADA 1586 M2974	31985	
20 Feb 85	5.5 mCi	DADA 1585 M2857	29809	178151	16 Jun 86	5.5	DADA 1586 m6119	31999	
18 Mar 85	5.0 mCi	DADA 1585 M2857	29911	181294	11 Jul 86	2.0	DADA 1586 M2974	32121	236824
11 Apr 85	5.0 mCi	DADA 1585 M2857	30044	184471	11 Jul 86	5.5 mCi	DADA 1586 m6119	32116	
10 May 85	5.5 mCi	DADA 1585 M2857	30191	187471	18 Aug 86	5.5	DADA 1586 m6119	32303	
12 Jul 85	5.6 mCi	DADA 1585 M2857	30464	194542	18 Aug 86	2.21	DADA 1586 M2974	32304	
16 Aug 85	5.0	DADA 1585 M2857	30652	198414	11 Sep 86	2.0 mCi	DADA 1586 M2974	32426	
10 Oct 85	5.0	M2857	30888	204341	11 Sep 86	5.0 mCi	DADA 1586 m6119	32427	
6 Nov 85	5.5 mCi	M2857	30981	206753	10 Oct 86	10.0 mCi	DADA 1586 M2974	32558	
3 Dec 85	5.0 mCi	DADA 1585 M3857	31089		14 Nov 86	5.5 mCi	DADA 1587 M0441	32729	
18 Feb 86	2.2 mCi	DADA 1586 M2974	31373		15 Dec 86	5.5 mCi	11	32860	





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# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER		DESCRIPTION							
		I-125							
		Endo Met 46. 08-01738-02/615							
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
29 JAN 87	0.005 mCi	DADA 1587 M 1955	33036		12 JUN 87	1.0 mCi	DADA 1585 D0031	33743	
4 FEB 87	0.005 mCi	DADA 1587 M 1955	33064		8 JUL 87	0.005 mCi	87M1955	33874	
11	0.025 mCi	DADA 1587 N 2752	33075		14 JUL 87	0.5 mCi	8500031/29	33933	
11	0.1 mCi	DADA 1585 AC 155	33079		24 JUL 87	0.01 mCi	87M9720	33990	
9 FEB 87	0.046 mCi	DADA 1585 AC 034	33097	24 HI	11 Mar 87	0.007 mCi	87M 3577	33252	
20 FEB 87	0.1 mCi	DADA 1585 AC 035	33165	I 4 HI	04 AUG 87	0.005 mCi	M 1955	34041	
3 MAR 87	0.005 mCi	DADA 1587 M 1955	33199		09 Sept 87	0.005 mCi	"	34253	
18 Mar 87	0.1 mCi	DADA 1587 M 4774	33298		7 Oct 87	0.005 mCi	DADA 1587 M 1955	34387	
20 Mar 87	0.45 mCi	DADA 1585 A 0185	33312		12 NOV 87	5.0 mCi	DADA 1586 M 5587	34571	
03 APR 87	0.004 mCi	DADA 1587 M 5276	33377		9 Dec 87	0.005 mCi	DADA 1588 M 0737	34721	
07 Apr 87	0.010 mCi	DADA 1585 A 0185	33397	24 HI					
07 Apr 87	0.005 mCi	DADA 1587 M 1955	33398						
10 APR 87	0.006	DADA 1587 M 5791	33426						
16 APR 87	0.006 mCi	DADA 1587 M 3410	33461						
20 APR 87	0.10 mCi	DADA 1587 M 4774	33480						
5 May 87	0.005 mCi	DADA 1587 M 1955	33565						
2 JUN 87	0.005 mCi	M 1955	33693						

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14

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# 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							
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
11 JUN 86	D1020mCi	DADA1586 M0310	31965	2091001	6 OCT 86	0.0015	DADA1586 M8001	32542	
8 JUL 86	5.0	DADA1586 M5587	32100	185683	7 OCT 86	0.1	DADA1586 M C 552	32545	
14 JUL 86	.005 mCi	DADA1586 M9070	32131	037950	7 OCT 86	0.005	DADA1586 M 9070	32546	
11 JUL 86	.0015 mCi	DADA1586 M8001	32115	478348	21 OCT 86 <del>15 OCT 86</del>	0.1	DADA1586 A0185	32607	7442
24 JUL 86	0.032	DADA1586 A0027	32191	2779880	29 OCT 86	0.1 mCi	11	32645	
1 AUG 86	0.002	DADA1586 M 7606	32224		6 NOV 86	0.01	DADA1586 M 9070	32669	
6 AUG 86	0.005	DADA1586 M 9070	32250		6 NOV 86	0.006 mCi	DADA1587 M0436	32674	
11 AUG 86	0.0015	DADA1586 M 8001	32267		11	0.1 mCi	DADA1586 M 5552	32683	
18 AUG 86	0.002	DADA1586 M 7606	32309		7 NOV 86	0.004 mCi	DADA1587 M0917	32692	
18 AUG 86	5.0	DADA1586 M 5587	32316		14 NOV 86	0.0004	DADA1587 M0341	32725	
19 AUG 86	0.1	DADA1585 A0185	32319		17 NOV 86	0.02	DADA NO charge	32735	
20 AUG 86	0.040	DADA1585 A0027	32324		26 NOV 86	0.02	DADA1586 M0310	32772	
3 SEP 86	0.005	DADA1586 M 7070	32380		2 DEC 86	0.1 mCi	DADA1586 M C 522	32794	
8 SEP 86	0.0015	DADA1586 M 5001	32399		2 DEC 86	0.1 mCi	DADA1586 A0185	32800	
17 SEP 86	0.1 mCi	DADA1585 A0185	32456	7442	9 DEC 86	0.004	DADA1587 M0917	32837	
14 SEP 86	0.006 mCi	DADA1586 M180	32465	133081	24 DEC 86	5.0 mCi	DADA1586 M 5587	32906	
10 OCT 86	5.0 mCi	DADA1586 M 5587	32518		7 JAN 87	0.1	DADA1586 A0185	32950	

DA FORM 1 JUNE 72 3862

REPLACES DA FORM 8-235, 1 AUG 51, WHICH WILL BE USED.

## CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER			DESCRIPTION I-125 ENDO-METAB 08-01738-02/615						
UNIT AS RECEIVED			CONVERSION FACTOR				ACCOUNTABLE UNIT		
DATE	DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO	TAG # -CREDIT (Expenditures)	PR. # BALANCE ON HAND	DATE	mg DEBIT (Receipts)	DEBIT (VO.) OR CREDIT (RX) NO	CREDIT (Expenditures)	BALANCE ON HAND
10 Jul 85	5.0 mCi	DADA 1585 M 3390	30455	977532	9 Sep 85	DADA 5.0 mci	DADA 1585 M 0275	30755	938158
16 Jul 85	5.0 mCi	DADA 1585 M 0275	30476	938156	30 SEP 85	0.01 mCi	DADA 1585 M 3400	30841	18025
16 Jul 85	0.15 mCi	DADA 1585 M 3400	30478	18014	7 Oct 85	0.04	DADA 1585 M 2479	30861	173135
24 Jul 85	0.006 mCi	DADA 1585 M 3311	30500	55041	7 Oct 85	0.15	DADA 1585 M 3400	30863	18017
20 Jul 85	0.001 mCi	DADA 1585 M 9063	30560	44370	4 Nov 85	0.04	M 2479	30969	173136
2 Aug 85	0.02	DADA 1585 M 2479	30576	173133	3 Dec 85	0.006	DADA 1585 M 2479	31090	
6 Aug 85	0.005	DADA 1585 M 2479	30593	280115	10 Dec 85	0.024 mCi	DADA 1585 M A0027 #1244	31110	906125
6 Aug 85	6.0	DADA 1585 M 3390	30591	977533	21 Mar 86	0.006 mCi	DADA 1586 M 3528	31529	451125
12 Aug 85	0.15 mCi	DADA 1585 M 3400	30629	18015	21 Mar 86	0.1 mCi	DADA 1586 M 6039	31530	440251
12 Aug 85	5.0 mCi	DADA 1585 M 0274	30632	938157	9 Apr 86	0.1 mCi	DADA 1586 M 6030	31617	440236
14 Aug 85	1.0 mCi	DADA 1585 M 4286	30648	976767	15 Apr 86	5 mCi 24 mCi	DADA 1586 M 5587	31654	185681
13 Aug 85	0.01	DADA 1585 M 4286	30641	976767	23 Apr 86	0.1 mCi	DADA 1586 M 6039	31706	440250 62855
20 Aug 85	0.1 mCi	DADA 1585 M 4054	30669	965488	7 May 86	0.1 mCi	DADA 1585 M 6039	31796	44035
30 Aug 85	0.02 mCi	DADA 1585 M 2479	30717	173134	14 May 86	0.01 mCi	DADA 1586 M 8001	31831	478346
4 Sep 85	0.3 mCi	DADA 1585 M 3400	30728	18024	21 May 86	0.1 mCi	DADA 1586 M 6039	31863	
4 Sep 85	5.0 mCi	DADA 1585 M 3370	30731	977534	22 May 86	5.0 mCi	DADA 1586 M 5587	31892	185682
9 Sep 85	0.05 mCi	DADA 1585 M 3400	30754	18016	06 Jun 86	0.01 mCi	DADA 1586 M 8001	31944	

# CONTROLLED SUBSTANCES STOCK RECORD

(AR 40-2)

STOCK NUMBER			DESCRIPTION I-125 ENDO-METAB 08-61738-02/ 615						
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
25 FEB 85	5.0 mCi	DADA 1585 M 6975	29830	938151	20 MAY 85	0.15 mCi	DADA 1585 M 3400	30230	18012
4 MAR 85	0.04 mCi	DADA 1585 M 2479	29862	173128	20 MAY 85	0.005 mCi	DADA 1585 M 0275	30231	938154
20 MAR 85	5.0 mCi	DADA 1585 M M 3390	29923	977528	21 MAY 85	0.0325 mCi	DADA 1585 M 9036	30244	187951
20 MAR 85	0.020 mCi	M 5370	29929	178593	3 JUN 85	0.04 mCi	DADA 1585 M 2479	30290	173131
20 MAR 85	0.1 mCi	DADA 1585 M 3400	29938	18018	7 Jul 85	0.04 mCi	DADA 1585 M 102	30310	12151
2 Apr 85	0.1 mCi	DADA 1585 M 4054	29997	965480	7 Jun 85	0.004 mCi	DADA M 9063 M 9063	30312	43605
15 Apr 85	0.1 mCi	DADA 1585 M 3400	30057	18019	12 JUN 85	0.10 mCi	DADA 1585 M 3400	30341	18021
17 Apr 85	5.0 mCi	DADA 1585 M 3390	30073	977529	12 JUNE 85	5.0 mCi	DADA 1585 M 3390	30345	977531
23 Apr 85	5.0 mCi	DADA 1585 M 0275	30098	938153	17 JUN 85	0.15 mCi	DADA 1585 M 3400	30363	18013
23 Apr 85	0.15 mCi	DADA 1585 M 3400	30100	18011	17 JUN 85	5.0 mCi	DADA 1585 M 0275	30365	938155
23 Apr 85	1.0 mCi	DADA 1585 M 4286	30094	976765	19 JUNE 85	0.020 mCi	DADA 1585 M 4286	30370	976766
23 Apr 85	0.01 mCi	DADA 1585 M 4286	30097	976765	19 JUNE 85	1.0 mCi	DADA 1585 M 4286	30373	976766
3 May 85	0.012 mCi	DADA 1585 M 2632	30148	18590	26 Jun 85	0.1 mCi	DADA 1585 M 4054	30398	965486
3 May 85	1.0 mCi	DADA 1585 M 4286	30154	35854	28 Jun 85	0.02 mCi	DADA 1585 M 2479	30415	173132
6 May 85	0.004 mCi	DADA 1585 M 2479	30165	173150	3 Jul 85	0.05 mCi	DADA 1585 M A 267	30432	280114
13 May 85	0.3 mCi	DADA 1585 M 3400	30198	18020	5 Jul 85	0.0001 mCi	DADA 1585 M 9063	30439	
14 May 85	5.0	DADA 1585 M 3390	30205	977530	10 Jul 85	0.1 mCi	DADA 1585 M 3400	30457	18022

# CONTROLLED SUBSTANCES STOCK RECORD

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

1118

STOCK NUMBER		DESCRIPTION		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
18 Jul 84	0.01 mCi	DADA 1584 M 5351	28884		12 Sept 84	1.0 mCi	DADA 1584 M 4469	29130	
18 Jul 84	1.0	DADA 1584 M 4469	28887		17 Sep 84	0.006 mCi	DADA 1584 M 4280	29150	
18 Jul 84	0.3 mCi	DADA 1584 M 4292	28890		18 Sep 84	0.3 mCi	DADA 1584 M 4297	29162	
24 Jul 84	0.1 mCi	DADA 1584 M 4500	28914		21 Sep 84	0.015 mCi	DADA 1584 M 6467	29174	
31 Aug 84	5.0 mCi	DADA 1584 M 4452	28943		20 Oct 84	5.0 mCi	DADA 1584 M 4470	29220	
31 Jul 84	0.01 mCi	DADA 1584 M 4159	28944		15 Oct 84	0.06 mCi	DADA 1584 M 5900	29273	
6 Aug 84	0.025 mCi	DADA 1584 M 6597	28961		29 Oct 84	0.025 mCi	DADA 1584 M 6596	29333	
<del>6 Aug 84</del>	<del>2.00 mCi</del>	D			7 Nov 84	5.0 mCi	DADA 1584 M 4470	29381	
7 Aug 84	0.005	DADA 1584 M 7482	28975		16 Nov 84	0.04 mCi	DADA 1584 M 223	29430	150042
13 Aug 84	0.15 mCi	DADA 1584 M 4298	28993		3 Dec 84	5.0 mCi	DADA 1584 M 2275	29486	938148
14 Aug 84	1.0 mCi	DADA 1584 M 4469	29002		13 Dec 84	0.24 mCi	DADA 1584 M 2148	29551	165201
15 Aug 84	0.05 mCi	DADA 1584 M 5900	29011		2 Jan 85	5.0 mCi	DADA 1584 M 2275	29624	
22 Aug 84	0.3 mCi	DADA 1584 M 4297	29036		7 Jan 85	0.04 mCi	DADA 1584 M 2479	29629	173126
22 Aug 84	0.1 mCi	DADA 1584 M 4500	29043		28 Jan 85	5.0 mCi	DADA 1584 M 2275	29711	938150
17 Aug 84	0.012 mCi	DADA 1584 M 6467	29017		5 Feb 85	0.04	DADA 1584 M 2479	29750	173127
10 Sept 84	0.15 mCi	DADA 1584 M 4298	29120		5 Feb 85	0.1 mCi	DADA 1584 M 4054	29759	964668
12 Sept 84	5.0 mCi	DADA 1584 M 4452	29127		20 Feb 85	5.0 mCi	DADA 1584 M 3390	29810	977527

DA FORM 1 JUNE 72 3862

REPLACES DA FORM 8-235, 1 AUG 51, WHICH WILL BE USED.