

AD \_\_\_\_\_

Award Number: DAMD17-99-2-9047

TITLE: Support for the Resident Research Associateship Program  
with the U.S. Army Medical Research and Materiel Command

PRINCIPAL INVESTIGATOR: Judith K. Nyquist, Ph.D.

CONTRACTING ORGANIZATION: National Academy of Sciences  
Washington, DC 20418

REPORT DATE: November 2001

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;  
Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

20020131 164

**REPORT DOCUMENTATION PAGE***Form Approved*  
**OMB No. 074-0188**

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

**1. AGENCY USE ONLY (Leave blank)****2. REPORT DATE**

November 2001

**3. REPORT TYPE AND DATES COVERED**

Annual (30 Sep 00 - 29 Sep 01)

**4. TITLE AND SUBTITLE**Support for the Resident Research Associateship Program  
with the U.S. Army Medical Research and Materiel Command**5. FUNDING NUMBERS**

DAMD17-99-2-9047

**6. AUTHOR(S)**

Judith K. Nyquist, Ph.D.

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**National Academy of Sciences  
Washington, DC 20418

E-Mail: jnyquist@nas.edu

**8. PERFORMING ORGANIZATION  
REPORT NUMBER****9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)**U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012**10. SPONSORING / MONITORING  
AGENCY REPORT NUMBER****11. SUPPLEMENTARY NOTES****12a. DISTRIBUTION / AVAILABILITY STATEMENT**

Approved for Public Release; Distribution Unlimited

**12b. DISTRIBUTION CODE****13. ABSTRACT (Maximum 200 Words)****14. SUBJECT TERMS****15. NUMBER OF PAGES**  
38**16. PRICE CODE****17. SECURITY CLASSIFICATION  
OF REPORT**

Unclassified

**18. SECURITY CLASSIFICATION  
OF THIS PAGE**

Unclassified

**19. SECURITY CLASSIFICATION  
OF ABSTRACT**

Unclassified

**20. LIMITATION OF ABSTRACT**

Unlimited

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)  
Prescribed by ANSI Std. Z39-18  
298-102

## Table of Contents

Cover.....	
SF 298.....	
Table of Contents.....	
Introduction.....	
Body.....	
Key Research Accomplishments.....	
Reportable Outcomes.....	
Conclusions.....	
References.....	
Appendices.....	

## NATIONAL RESEARCH COUNCIL

Resident Research Associateship Program

with the

U.S. Army Medical Research and Materiel Command  
Annual Status Report

September 30, 2000 – September 30, 2001

DAMD17-99-2-9047

### ***PUBLICITY***

The National Research Council (NRC) Resident Research Associateship Programs for the reporting period were announced to the scientific community in the fall of the preceding year, 1999. Publicity materials describing the NRC-AMRMC Program were distributed in November to presidents, graduate deans, and heads of appropriate science and engineering departments of all academic degree-granting institutions in the United States. These materials also were sent to Laboratory Program Representatives, Associateship Advisers, and other interested persons. The publicity materials and other related information were made available on the Internet as well. In addition, Program Staff attended numerous annual society meetings to promote the various programs and meet with prospective applicants through out the year.

### ***REQUESTS***

Application materials were distributed in response to specific requests for information about the NRC-AMRMC Associateship Program or as a result of general requests by persons whose fields of specialization appeared to be appropriate for the research opportunities available in the AMRMC laboratories.

**AMRMC Report****September 30, 2000 – September 30, 2001****Page 2**

---

**COMPETITION**

Panel reviews of applicants for the Associateship Programs, including those with the U.S. Army Medical Research and Materiel Command, are conducted in February, June, and October of each year. The following is a breakdown of the action taken with the applications during the period of the report.

**U.S. Army Medical Research Institute of Infectious Diseases**

	<u>Oct 00</u>	<u>Feb 01</u>	<u>Jun 01</u>	<u>Total</u>
<b>Total Applications</b>	1	5	6	12
Actions taken on the applications:				
Application Too Late for Review	-	-	-	-
Applicant Withdrew before Review	-	-	-	-
Application Deferred to Next Review	-	-	-	-
Application Ineligible	-	-	-	-
Incomplete/Missing Documentation	-	-	-	-
Application Not Approved/Reviewed by Lab	-	-	-	-
Laboratory Rejection After Its Review	-	-	-	-
Active Application Pending Lab Response	-	-	-	-
 <b>Number of Applications Reviewed</b>	 1	 5	 6	 12
Actions taken on the reviewed applications:				
Non-Recommended	-	-	-	-
Recommended	1	5	6	12
Actions taken on Recommended Applications:				
Applicant Accepted Award	1	3	2	6
Applicant Offered Alternate Status	-	-	-	-
Applicant Declined the Award	-	-	2	2
Applicant Withdrew After Review/Recommended	-	1	-	1
Offer was Withdrawn by NRC	-	-	-	-
Applicant Recommended but No Action Taken	-	-	1	1
Alternate with Final Turndown	-	-	-	-
Applicant Recommended but No Funding Available	-	1	1	2

**AMRMC Report****September 30, 2000 – September 30, 2001****Page 3**

---

**COMPETITION**

Panel reviews of applicants for the Associateship Programs, including those with the U.S. Army Medical Research and Materiel Command, are conducted in February, June, and October of each year. The following is a breakdown of the action taken with the applications during the period of the report.

**U.S. Army Institute of Surgical Research**

	<u>Oct 00</u>	<u>Feb 01</u>	<u>Jun 01</u>	<u>Total</u>
<b>Total Applications</b>	2	-	2	4
Actions taken on the applications:				
Application Too Late for Review	-	-	-	-
Applicant Withdrew before Review	-	-	-	-
Application Deferred to Next Review	-	-	-	-
Application Ineligible	-	-	-	-
Incomplete/Missing Documentation	-	-	-	-
Application Not Approved/Reviewed by Lab	-	-	-	-
Laboratory Rejection After Its Review	-	-	-	-
Active Application Pending Lab Response	-	-	-	-
 <b>Number of Applications Reviewed</b>	 2	 -	 2	 4
Actions taken on the reviewed applications:				
Non-Recommended	-	-	-	-
Recommended	2	-	2	4
Actions taken on Recommended Applications:				
Applicant Accepted Award	2	-	2	4
Applicant Offered Alternate Status	-	-	-	-
Applicant Declined the Award	-	-	-	-
Applicant Withdrew After Review/Recommended	-	-	-	-
Offer was Withdrawn by NRC	-	-	-	-
Applicant Recommended but No Action Taken	-	-	-	-
Alternate with Final Turndown	-	-	-	-
Applicant Recommended but No Funding Available	-	-	-	-

**AMRMC Report****September 30, 2000 – September 30, 2001****Page 4**

---

**COMPETITION**

Panel reviews of applicants for the Associateship Programs, including those with the U.S. Army Medical Research and Materiel Command, are conducted in February, June, and October of each year. The following is a breakdown of the action taken with the applications during the period of the report.

**Walter Reed Army Institute of Research**

	<u>Oct 00</u>	<u>Feb 01</u>	<u>Jun 01</u>	<u>Total</u>
<b>Total Applications</b>	5	3	1	9
Actions taken on the applications:				
Application Too Late for Review	-	-	-	-
Applicant Withdrew before Review	-	-	-	-
Application Deferred to Next Review	-	-	-	-
Application Ineligible	-	-	-	-
Incomplete/Missing Documentation	-	-	-	-
Application Not Approved/Reviewed by Lab	-	-	-	-
Laboratory Rejection After Its Review	-	-	-	-
Active Application Pending Lab Response	-	-	-	-
 <b>Number of Applications Reviewed</b>	 5	 3	 1	 9
Actions taken on the reviewed applications:				
Non-Recommended	-	-	-	-
Recommended	5	3	1	9
Actions taken on Recommended Applications:				
Applicant Accepted Award	3	2	1	6
Applicant Offered Alternate Status	-	-	-	-
Applicant Declined the Award	-	-	-	-
Applicant Withdrew After Review/Recommended	-	1	-	1
Offer was Withdrawn by NRC	1	-	-	1
Applicant Recommended but No Action Taken	1	-	-	1
Alternate with Final Turndown	-	-	-	-
Applicant Recommended but No Funding Available	-	-	-	-

## ASSOCIATES' ACTIVITIES

Associates who ended tenure during the report period were on tenure for an average of 23 months, ranging from 6 months to 36 months.

Of the 22 Associates who completed their tenure during the report period, 17 (77%) submitted reports. In their termination reports, the Associates indicated the following scholarly activity while on tenure as an Associate.

26	Domestic Presentations	9	Published Articles in Refereed Journals
12	International Presentations	2	Patents applied for

After completing their tenure Associates, indicated their future plans as follows:

5	Research - National government	-	Non-Profit
-	Administration- government lab	-	Self-employed
6	Remain at Host Agency	-	Unemployed
-	Different NRC Sponsoring Agency	2	Industry
2	Academic -- College or University	-	Post-Doctoral Appointment
-	Student	2	Other/No Information Provided

In their final reports, the Associates were asked to evaluate certain aspects of their experiences on a scale of 1 (low) to 10 (high). The average rating for each item follows.

- 9.4 Career: Of what value was the NRC experience to your career?
- 8.9 Lab: What is your evaluation of your experience in the laboratory?
- 9.1 NRC: What is your evaluation of your interaction with the NRC?

Advisers also were asked to complete an evaluation of the Associate. The following summarizes the Adviser evaluations for Associates completing tenure during the report period. Of the 22 number of Associates, 7 (32%) Adviser evaluations were completed. Assessments were made on four criteria using the following rating scale: 1-Below Average, 2-Average, 3-Above Average, 4-Good, and 5-Outstanding, Exceptional. The average rating for each item follows.

4.3	<i>Knowledge in Field</i>	4.4	<i>Research Techniques</i>
4.6	<i>Independence</i>	4.4	<i>Motivation</i>

The Adviser was asked, "Would you like this Associate as a Professional Colleague?" The following is a breakdown of the Adviser's response.

6	86 %	Yes
-	0 %	No
1	14 %	No Comment/No Answer

Other information about the Associates' activities can be found in the attachments and appendix.



### ***ASSOCIATES' Citizenship***

Associates on tenure as of September 30, 2000, are citizens of the following countries:

Albania	1	Israel	6
Australia	2	Italy	1
Bangladesh	1	Kenya	1
Croatia	1	Mexico	1
Ecuador	1	People's Republic of China	6
France	1	Poland	1
Ghana	1	Russia	4
Hungary	3	Ukraine	1
India	5	United States	31

### ***Description of Attachments***

*Attachment 1* is a list of Associates who completed their appointments during the period of September 30, 2000, through September 30, 2001. It includes the Associates' laboratory location, their starting and termination dates, and the names of their Advisers. Associates are required to submit reports upon termination, and Advisers are asked to submit a final evaluation of each Associate. Associates who have not submitted a termination report have received a follow-up letter.

*Attachment 2* provides a roster of Associates on Tenure as of October 1, 2001. This listing includes the Associate's Adviser, laboratory location, start and expected termination date, and country of citizenship.

*Attachment 3* lists the applicants who received awards during the period September 30, 2000, through September 30, 2001. It includes the title of their Research Proposals.

*Attachment 4* provides a roster of all recommended candidates by category (e.g., Accepted, No Funding, Declined, etc.). This report includes information about the recommended Ph.D. school, proposed research, starting date and Adviser.

*Attachment 5* details a cross tabulation of how many Associates were on tenure for the year by center for each quarter within the report period and other yearly periods.

*Attachment 6*, if applicable, lists any of the Associates ending tenure who applied for patents, and the summary of the Associates' research.

# Associates Who Ended Tenure 9/30/2000 - 9/30/2001

## Attachment 1

### U.S. Army Medical Research and Materiel Command

12/12/2001 Page 1 of 2

Associate Name+ Adviser	Division	Tenure Dates		Termination Report	Adviser Report
		Start	End		
Allon, Nahum(S) Dr. C. R. Alving	Division Of Biochemistry	8/01/00	7/31/01	Received	Received
Baker, Robert Owen Dr. John W. Huggins	Virology Division	1/06/00	7/16/01	Received	Not Recd
Baranyi, Lajos(S) Dr. C. R. Alving	Division Of Biochemistry	6/22/98	6/21/01	Received	Not Recd
Biba, Edmond Dr. Ai J. Lin	Division Of Experimental Therapeutics	6/28/99	8/27/01	Not Recd	Received
Bosio, Catharine Mans Dr. Alan L. Schmaljohn	Virology Division	9/11/00	8/31/01	Received	Not Recd
Bosio, Christopher Francis Dr. Alan L. Schmaljohn	Virology Division	2/04/99	8/31/01	Not Recd	Not Recd
Byrd, Wyatt(S) Dr. Frederick J. Cassels	Division Of Medicine	1/20/98	1/19/01	Not Recd	Not Recd
Dutta, Sheetij Dr. David E. Lanar	Division Of Commun Diseases/Immunology	7/27/98	7/26/01	Received	Not Recd
Hensley, Lisa Ellen Dr. Peter B. Jahrling	Pathology Division	9/01/98	11/30/00	Received	Not Recd
Hulet, Stanley Warren Dr. Tsung-Ming A. Shih	Pharmacology Division	1/10/00	9/28/01	Received	Not Recd
Jenner, Jennifer Louise Dr. Harris R. Lieberman	Divison not specified	6/01/98	5/31/01	Received	Not Recd
Jensen, Melody Janet(S) Dr. Leonard A. Smith	Toxinology Division	8/10/98	9/30/00	Not Recd	Not Recd
Kanjilal, Partha Partim(S) Dr. Richard R. Gonzalez	Divison not specified	8/02/99	7/20/01	Received	Received
Korolev, Sergey Vasilyevich Dr. Jeenan Tseng	Division Of Pathology	9/01/99	4/14/01	Received	Received
Kwik, Jeanne Frieda Dr. Sina Bavari	Toxinology Division	6/05/00	8/31/01	Received	Not Recd
Leader, Haim Nissan(S) Dr. Richard K. Gordon	Division Of Biochemistry	5/10/99	11/09/00	Received	Received
Markotic, Alemka Dr. Connie S. Schmaljohn	Virology Division	10/25/99	10/24/00	Received	Not Recd
Marvaud, Jean-Cristophe Dr. Leonard A. Smith	Toxinology Division	12/01/99	11/30/00	Received	Received
Mendelson, Itai(S) Dr. Arthur M. Friedlander	Bacteriology Division	4/24/00	6/30/01	Received	Received
Rayner, Jonathan Ole Dr. Jonathan F. Smith	Virology Division	5/01/00	10/31/00	Received	Not Recd
Waitumbi, John Njenga(S) Dr. Jose A. Stoute	Medical Research Unit-Kenya	2/09/98	2/08/01	Received	Not Recd

+ (S) indicates the associate was a Senior.

**Associates Who Ended Tenure 9/30/2000 - 9/30/2001****Attachment 1****U.S. Army Medical Research and Materiel Command**

12/12/2001 Page 2 of 2

Associate Name+ Adviser	Division	Tenure Dates		Termination Report	Adviser Report
		Start	End		
Weeks, Steven Douglas Dr. Susan L. Welkos	Bacteriology Division	5/04/98	5/03/01	Not Recd	Not Recd

22 Associates Listed

+ (S) indicates the associate was a Senior.

# Associates On Tenure

October 1, 2001

# Attachment 2

## U.S. Army Medical Research and Materiel Command

12/12/2001 Page 1 of 3

Associate Name+ Adviser	Division Citizenship	Starting Date	Ending Date
Ayyagari, Vijay Lakshmi Naga Dr. Jayasree Nath	Division Of Medicine India	7/03/00	7/02/02
Babai, Ilan Dr. C. R. Alving	Division Of Biochemistry Israel	7/17/00	7/16/02
* Batchinsky, Andriy Ivanovich Dr. Leopoldo C. Cancio	974000 Not found Ukraine	1/09/01	1/08/03
Bodo, Michael Mihaly (S) Dr. Frederick J. Pearce	Division Of Surgery Hungary	2/14/00	2/13/02
* Cohen, Sara (S) Dr. Luther E. Lindler	Division Of Commun Diseases/Immunology Israel	8/02/01	8/01/02
Darko, Christian Asare Dr. Jeffrey A. Lyon	Division Of Commun Diseases/Immunology Ghana	11/09/98	5/08/02
Dekonenko, Alexander Evgenievich Dr. Connie S. Schmaljohn	Virology Division Russia	11/02/98	11/01/01
Dillman, James F., III Dr. John J. Schlager	Pharmacology Division United States	11/29/99	11/28/02
Dow, Geoffrey Stuart Dr. Rodger K. Martin	Division Of Experimental Therapeutics Australia	8/07/00	8/06/02
Erwin, James Lawrence Dr. Tran C. Chanh	Pathology Division United States	8/10/98	2/09/02
* Fisher, Robert Walt St. George, IV Dr. Kevin Anderson	Virology Division United States	3/14/01	3/13/02
* Fleming, Sherry D. Dr. George C. Tsokos	Division Of Medicine United States	1/02/01	1/01/02
* Godkar, Praful Babaji Dr. Haresh Ved	Walter Reed Army Institute of Research India	2/23/01	2/22/02
* Gonzalez, Liza Marie Dr. Connie S. Schmaljohn	Virology Division Italy	1/08/01	1/07/02
* Gooch, Jan Woodall (S) Dr. Albert T. McManus	974000 Not found United States	7/23/01	7/22/02
* Gorbounov, Nikolai Viktorovich (S) Dr. Jayasree Nath	Division Of Medicine US Permanent Resident	10/10/00	10/09/02
Grogan, Case Kyn Dr. Alan L. Schmaljohn	Virology Division United States	6/26/00	6/25/02
Guerrero-Ontiveros, Maria de Lourde Dr. Luther E. Lindler	Division Of Commun Diseases/Immunology Mexico	2/16/99	2/15/02
* Heller, Elimelech Dan (S) Dr. Marcia K. Wolf	Division Of Commun Diseases/Immunology Israel	10/02/00	10/01/01
* Hillier, Collette Jane Dr. David E. Lanar	Division Of Commun Diseases/Immunology Australia	2/12/01	2/11/02
* Islam, Dilara (S) Dr. Ladaporn Bodhidatta	Armed Forces Res Inst Med Sci-Bangkok Bangladesh	9/04/01	9/03/02
Kan, Robert Kwai Dr. John P. Petrali	972500 Not found United States	5/10/99	5/09/02

\*Indicates that the associate started tenure between 10/1/2000 and 9/30/2001.

(S) Associate is a Senior.

# Associates On Tenure

October 1, 2001

# Attachment 2

## U.S. Army Medical Research and Materiel Command

12/12/2001 Page 2 of 3

Associate Name+ Adviser	Division Citizenship	Starting Date	Ending Date
* LaJambe, Cynthia Marie	Walter Reed Army Institute of Research	1/03/01	1/02/02
Dr. Nancy J. Wesensten	United States		
Leon Villalba, Luis Renato	Virology Division	5/25/00	11/24/01
Dr. Michael J. Turell	Ecuador		
Liu, Liang Ming	974000 Not found	4/08/99	10/07/01
Dr. Michael A. Dubick	People'S Republic Of China		
* McElroy, Anita Katherine	Virology Division	4/05/01	4/04/02
Dr. Connie S. Schmaljohn	United States		
Milosevits, Janos (S)	Division Of Biochemistry	7/03/00	7/02/02
Dr. C. R. Alving	Hungary		
Myers, Todd Matthew	Division of Neurosciences	5/15/00	5/14/02
Dr. Richard A. Bauman	United States		
* Nair, Lalitha PUNCHAYIL Velayudhan (S)	Division Of Commun Diseases/Immunology	10/11/00	10/10/02
Dr. David E. Lanar	India		
* Olinger, Gene Garrard, Jr	Virology Division	6/04/01	6/03/02
Dr. Mary K. Hart	United States		
* Paragas, Jason Jared	Virology Division	7/24/01	7/23/02
Dr. Michael Bray	United States		
* Peachman, Kristina Kathryn	Division Of Biochemistry	6/01/01	5/31/02
Dr. C. R. Alving	United States		
Peng, Daizhi (S)	974000 Not found	1/05/99	5/04/02
Dr. Albert T. McManus	People'S Republic Of China		
Riemenschneider, Jenny Lynn	Virology Division	3/01/00	2/28/02
Dr. Connie S. Schmaljohn	United States		
Roberson, Melinda Rice	Pharmacology Division	5/02/00	5/01/02
Dr. John H. McDonough	United States		
* Savransky, Vladimir (S)	Division Of Pathology	2/12/01	2/11/02
Dr. Jeenan Tseng	Russia		
* Steffen, Scott Edward	Virology Division	1/02/01	1/01/02
Dr. Connie S. Schmaljohn	United States		
* Swietnicki, Wieslaw, Sr (S)	Toxinology Division	6/01/01	5/31/02
Dr. Robert G. Ulrich	US Permanent Resident		
* Tang, Qidong (S)	974000 Not found	3/29/01	3/28/02
Dr. Phillip D. Bowman	People'S Republic Of China		
Troyer, Jill Michelle	Walter Reed Army Institute of Research	1/04/99	1/03/02
Dr. Daniel A. Strickman	United States		
* Ulrich, Ricky Lee	Bacteriology Division	7/16/01	7/15/02
Dr. Patricia L. Worsham	United States		
Weyand, Peter Gregory (S)	973000 Not found	9/20/99	9/19/02
Dr. Reed W. Hoyt	United States		
Winter, David Bicknell (S)	Division Of Medicine	7/28/00	7/27/02
Dr. George C. Tsokos	United States		
* Yuan, Huijun	Division Of Biochemistry	4/09/01	4/08/02
Dr. C. R. Alving	People'S Republic Of China		

\*Indicates that the associate started tenure between 10/1/2000 and 9/30/2001.

(S) Associate is a Senior.

**Associates On Tenure**

October 1, 2001

**Attachment 2****U.S. Army Medical Research and Materiel Command**

12/12/2001 Page 3 of 3

Associate Name+ Adviser	Division Citizenship	Starting Date	Ending Date
Zhang, Peng (S)	Division Of Biochemistry	2/01/99	1/31/02
Dr. Peter K. Chiang	US Permanent Resident		
Zhu, Shuren	Division Of Experimental Therapeutics	11/01/99	10/31/02
Dr. Ai J. Lin	US Permanent Resident		

\*Indicates that the associate started tenure between 10/1/2000 and 9/30/2001.

(S) Associate is a Senior.

**Applicants Who  
Received Awards**

**9/30/2000 - 9/30/2001  
AMRMC - Medical Research Institute of Infectious  
Diseases**

**Attachment 3**

12/12/2001 Page 1 of 3

---

**Name/  
Research Title**

---

**October 2000 Awardees**

Awardees Listed 1

Fisher, Robert W, IV  
Analysis of Differential Cellular Gene Expression to Define New Targets for Therapeutic Intervention for Viral Hemorrhagic Fevers

**February 2001 Awardees**

Awardees Listed 3

McElroy, Anita K  
Viral and Cellular Factors Mediating Hantavirus Pathogenesis and Persistence

Olinger, Gene G, Jr  
Identification of Ebola Proteins that Elicit Cell-Mediated Immunity for Use in a Cocktail Vaccine Strategy Using Venezuelan Equine Encephalitis Virus Replicons

Swietnicki, Wieslaw , Sr  
Engineering of Spe-C Superantigen for use as a Vaccine Against Streptococcus Pyogenes

**June 2001 Awardees**

Awardees Listed 2

Paragas, Jason J  
Rational Development of Ebola Virus Antiviral Targets

Ulrich, Ricky L  
Using Proteomics To Create Molecular Fingerprints for the Causative Agents of Plague, Anthrax, Glanders and Melioidosis

Total Associates Listed for Center 6

\* \* \*

**Applicants Who  
Received Awards**

**9/30/2000 - 9/30/2001**  
**AMRMC - U.S. Army Institute of Surgical Research**

**Attachment 3**

12/12/2001 Page 2 of 3

---

**Name/  
Research Title**

---

**October 2000 Awardees**

Awardees Listed 2

Batchinsky, Andriy I

Effective of Extremity Ischemia and Reperfusion on Muscle and Nerve Physiology in a Porcine Model

Tang, Qidong

Transcriptional Response of Human Umbilical Vein Endothelial Cells to Hypoxic Injury and Development of Protective Means

**June 2001 Awardees**

Awardees Listed 2

Gooch, Jan W

Biocompatible Hydrophilic Films from Acrylic Mini-emulsions: Protection of Wounds

Yershov, Andrey L

Blunt Trauma and Burn Injury as Predisposing Factors for Developing Pneumonia in Ventilated Patients

Total Associates Listed for Center 4

\* \* \*



---

**Name/  
Research Title**

---

**October 2000 Awardees**

Awardees Listed 3

Fleming, Sherry D

Role of Complement Inhibitors in Mesenteric Ischemia-Reperfusion Injury

LaJambe, Cynthia M

Chronotype Contributions to Sleep-Deprivation Decrements in Cognitive Performance and Alertness

Savransky, Vladimir

Mucosal Immune Responses to Staphylococcal Enterotoxin B (SEB) Mutants Cloned into Lactobacillus Casei

**February 2001 Awardees**

Awardees Listed 2

Cohen, Sara

Universal ORF Plasmid Library for Directed Mutagenesis of Potential Virulence Genes in Y.pestis, F.tularensis and B.melitensis Bacteria

Peachman, Kristina K

Transcutaneous HIV Vaccines

**June 2001 Awardees**

Awardees Listed 1

Islam, Dilara

Establishment of the Immunological Assays for Shigella-Vaccine Trial and To Explore the Role of Specific and Innate Mechanisms of Immune Responses in Vaccinees

Total Associates Listed for Center 6

\* \* \*

**Recommended Candidates     9/30/2000 - 9/30/2001**  
**AMRMC- Medical Research**  
**Institute of Infectious Diseases**

**Attachment 4**

12/12/2001 Page 1 of 6

---

**October 2000**

**A- Accepted Award**

FISHER, ROBERT W, IV	Ph.D. Date: 2000
Citizenship: United States	U of North Carolina-Chapel Hill
Adviser: Dr. Kevin Anderson	Actual Starting Date: 3/14/01
Research Field: Molecular Pathology	Termination Date: 3/13/02
Research Title: Analysis of Differential Cellular Gene Expression to Define New Targets for Therapeutic Intervention for Viral Hemorrhagic Fevers	

**February 2001**

**A- Accepted Award ( 3 Applicants listed)**

MCELROY, ANITA K	Ph.D. Date: 2000
Citizenship: United States	Univ of California-San Diego
Adviser: Dr. Connie S. Schmaljohn	Actual Starting Date: 4/05/01
Research Field: Virology	Termination Date: 4/04/02
Research Title: Viral and Cellular Factors Mediating Hantavirus Pathogenesis and Persistence	

OLINGER, GENE G, JR	Ph.D. Date: 2001
Citizenship: United States	Rush University/IL
Adviser: Dr. Mary K. Hart	Actual Starting Date: 6/04/01
Research Field: Viral Immunology	Termination Date: 6/03/02
Research Title: Identification of Ebola Proteins that Elicit Cell-Mediated Immunity for Use in a Cocktail Vaccine Strategy Using Venezuelan Equine Encephalitis Virus Replicons	

SWIETNICKI, WIESLAW , SR	Ph.D. Date: 1995
Citizenship: Poland	University of Florida
Adviser: Dr. Robert G. Ulrich	Actual Starting Date: 6/01/01
Research Field: Biochemistry	Termination Date: 5/31/02
Research Title: Engineering of Spe-C Superantigen for use as a Vaccine Against Streptococcus Pyogenes	

**W- Withdrew after Review/Recommend**

O'SULLIVAN, CHRISTOPHER T	Ph.D. Date: 2001
Citizenship: United States	Johns Hopkins University/MD
Adviser: Dr. Sina Bavari	
Research Field: Virology	
Research Title: The Role of Lipid Raft Microdomains in Cellular Infection and Budding by Marburg Virus	

**Recommended Candidates      9/30/2000 - 9/30/2001**  
**AMRMC- Medical Research**  
**Institute of Infectious Diseases**

**Attachment 4**

12/12/2001 Page 2 of 6

---

**Z- Recommended/No Funding**

THEREGOWDA, VEERABASAPPA G      Ph.D. Date: 1973  
Citizenship: India      University of Mysore/India  
Adviser: Dr. Leonard A. Smith  
Research Field: Biochemistry  
Research Title: Development of Therapeutic Interventions Against Botulism

**June 2001**

**1- Recommended**

SHURTLEFF, AMY C      Ph.D. Date: 2002  
Citizenship: United States      U of Texas, Medical Br-Galveston  
Adviser: Dr. Mary C. Guttieri  
Research Field: Molecular Virology  
Research Title: Development of Human Monoclonal Antibody Therapy for Lassa Fever

**A- Accepted Award ( 2 Applicants listed)**

PARAGAS, JASON J      Ph.D. Date: 2001  
Citizenship: United States      Mt Sinai School of Medicine-CUNY  
Adviser: Dr. Michael Bray      Actual Starting Date: 7/24/01  
Research Field: Virology      Termination Date: 7/23/02  
Research Title: Rational Development of Ebola Virus Antiviral Targets

ULRICH, RICKY L      Ph.D. Date: 1999  
Citizenship: United States      Clemson University/SC  
Adviser: Dr. Patricia L. Worsham      Actual Starting Date: 7/16/01  
Research Field: Bacteriology      Termination Date: 7/15/02  
Research Title: Using Proteomics To Create Molecular Fingerprints for the Causative Agents of Plague, Anthrax, Glanders and Melioidosis

**8- Declined ( 2 Applicants listed)**

KERCHER, LISA A      Ph.D. Date: 2001  
Citizenship: United States      Baylor College of Medicine/TX  
Adviser: Dr. Mary K. Hart  
Research Field: Molecular Virology  
Research Title: Maturation and Function of the Venezuelan Equine Encephalitis (VEE) Virus Glycoprotein E3

PETRO, JAMES B      Ph.D. Date: 2001  
Citizenship: United States      Vanderbilt University/TN  
Adviser: Dr. Erik A. Henchal  
Research Field: Immunology  
Research Title: Characterization of Cellular Gene Expression Induced by Yersinia Pestis Infection

**Recommended Candidates    9/30/2000 - 9/30/2001**  
**AMRMC- Medical Research**  
**Institute of Infectious Diseases**

**Attachment 4**

12/12/2001 Page 3 of 6

---

**Z- Recommended/No Funding**

HURRELBRINK, ROBERT J

Ph.D. Date: 2001

Citizenship:     Australia

Western Australia, U

Adviser:         Dr. Kevin Anderson

Research Field:   Virology

Research Title:   Intertypic Chimeras, Site-Directed Mutagenesis and Gene Rearrangement as Molecular Genetic  
                         approaches to Ebola Virus Vaccine Development

\* \* \*

**Recommended Candidates      9/30/2000 - 9/30/2001**  
**AMRMC- U.S. Army Institute of**  
**Surgical Research**

**Attachment 4**

12/12/2001 Page 4 of 6

---

**October 2000**

**A- Accepted Award ( 2 Applicants listed)**

BATCHINSKY, ANDRIY I	Ph.D. Date: 1994
Citizenship: Ukraine	Uzhgorod Municipal Hosp/Ukraine
Adviser: Dr. Leopoldo C. Cancio	Actual Starting Date: 1/09/01
Research Field: Cell Physiology	Termination Date: 1/08/03
Research Title: Effective of Extremity Ischemia and Reperfusion on Muscle and Nerve Physiology in a Porcine Model	

TANG, QIDONG	Ph.D. Date: 1993
Citizenship: People's Republic of China	Sun Yat-Sen Univ of Med Sci/China
Adviser: Dr. Phillip D. Bowman	Actual Starting Date: 3/29/01
Research Field: Medical Research	Termination Date: 3/28/02
Research Title: Transcriptional Response of Human Umbilical Vein Endothelial Cells to Hypoxic Injury and Development of Protective Means	

**June 2001**

**A- Accepted Award ( 2 Applicants listed)**

GOOCH, JAN W	Ph.D. Date: 1980
Citizenship: United States	Univ of Southern Mississippi
Adviser: Dr. Albert T. McManus	Actual Starting Date: 7/23/01
Research Field: Material Science	Termination Date: 7/22/02
Research Title: Biocompatible Hydrophilic Films from Acrylic Mini-emulsions: Protection of Wounds	

YERSHOV, ANDREY L	Ph.D. Date: 1992
Citizenship: Russia	St Petersburg Acad Postgrad Edu
Adviser: Dr. Michael A. Dubick	Actual Starting Date: 10/15/01
Research Field: Microbiology	Termination Date: 10/14/02
Research Title: Blunt Trauma and Burn Injury as Predisposing Factors for Developing Pneumonia in Ventilated Patients	

\* \* \*

**Recommended Candidates      9/30/2000 - 9/30/2001**  
**AMRMC- Walter Reed Army**  
**Institute of Research**

**Attachment 4**

12/12/2001 Page 5 of 6

---

**October 2000**

**1- Recommended**

COX, DONNA S  
Citizenship: United States  
Adviser: Dr. Gary H. Kamimori  
Research Field: Pharmacology  
Research Title: Pharmacokinetics and Pharmacodynamics of Caffeine Administered by a Multiple Dosing Regimen via a Novel Formulation

Ph.D. Date: 2000  
U of Maryland-Baltimore County

**A- Accepted Award ( 3 Applicants listed)**

FLEMING, SHERRY D  
Citizenship: United States  
Adviser: Dr. George C. Tsokos  
Research Field: Immunology  
Research Title: Role of Complement Inhibitors in Mesenteric Ischemia-Reperfusion Injury

Ph.D. Date: 1998  
University of Colorado-Denver  
Actual Starting Date: 1/02/01  
Termination Date: 1/01/02

LAJAMBE, CYNTHIA M  
Citizenship: United States  
Adviser: Dr. Nancy J. Wesensten  
Research Field: Biobehavioral Sciences  
Research Title: Chronotype Contributions to Sleep-Deprivation Decrements in Cognitive Performance and Alertness

Ph.D. Date: 2000  
The Pennsylvania State University  
Actual Starting Date: 1/03/01  
Termination Date: 1/02/02

SAVRANSKY, VLADIMIR  
Citizenship: Russia  
Adviser: Dr. Jeenan Tseng  
Research Field: Immunology  
Research Title: Mucosal Immune Responses to Staphylococcal Enterotoxin B (SEB) Mutants Cloned into Lactobacillus Casei

Ph.D. Date: 1994  
St. Petersburg State Univ/Russia  
Actual Starting Date: 2/12/01  
Termination Date: 2/11/02

**X- NRC Withdrew Award**

BOYAPATY, GOKUL  
Citizenship: India  
Adviser: Dr. Peter K. Chiang  
Research Field: Immunology  
Research Title: Recombinant Expression of an MHC Class II Binding Epitope of Staphylococcal Enterotoxin B in E Coli and S Aureus

Ph.D. Date: 2000  
Indian Inst of Technology, Madras

**February 2001**

**A- Accepted Award ( 2 Applicants listed)**

COHEN, SARA  
Citizenship: Israel  
Adviser: Dr. Luther E. Lindler  
Research Field: Microbial Genetics  
Research Title: Universal ORF Plasmid Library for Directed Mutagenesis of Potential Virulence Genes in Y.pestis, F.tularensis and B.melitensis Bacteria

Ph.D. Date: 1979  
Tel Aviv University/Israel  
Actual Starting Date: 8/02/01  
Termination Date: 8/01/02

**Recommended Candidates    9/30/2000 - 9/30/2001**  
**AMRMC- Walter Reed Army**  
**Institute of Research**

---

**Attachment 4**

12/12/2001 Page 6 of 6

PEACHMAN, KRISTINA K  
Citizenship:    United States  
Adviser:        Dr. C. R. Alving  
Research Field: Viral Immunology  
Research Title: Transcutaneous HIV Vaccines

Ph.D. Date: 2000  
Wake Forest University/NC  
Actual Starting Date:    6/01/01  
Termination Date:        5/31/02

**W- Withdrew after Review/Recommend**

REBEIL, ROBERTO  
Citizenship:    United States  
Adviser:        Dr. Luther E. Lindler  
Research Field: Bacteriology  
Research Title: Genomic Subtractive Hybridization of Yersinia pestis

Ph.D. Date: 2001  
University of Arizona

**June 2001**

**A- Accepted Award**

ISLAM, DILARA  
Citizenship:    Bangladesh  
Adviser:        Dr. Ladaporn Bodhidatta  
Research Field: Immunology  
Research Title: Establishment of the Immunological Assays for Shigella-Vaccine Trial and To Explore the Role of Specific and Innate Mechanisms of Immune Responses in Vaccinees

Ph.D. Date: 1995  
Caroline Inst  
Actual Starting Date:    9/04/01  
Termination Date:        9/03/02

\* \* \*

**On Tenure Report  
by Quarter and Center**

**For the year starting  
September 30, 2000**

**Attachment 5**  
12/12/2001 Page 1 of 1

**U.S. Army Medical Research and Materiel Command**

Division	Number of Associates on tenure as of					
	9/30/99	9/30/00	12/31/00	3/31/01	6/30/01	9/30/01
972500 Not found	1	1	1	1	1	1
973000 Not found	3	3	3	3	2	1
974000 Not found	2	2	2	4	4	5
Armed Forces Res Inst Med Sci-Bangkok	-	-	-	-	-	1
Bacteriology Division	2	2	2	2	1	1
Division Of Biochemistry	5	6	5	5	6	5
Division Of Commun Diseases/Immunology	5	3	5	6	6	6
Division Of Experimental Therapeutics	1	3	3	3	3	2
Division Of Medicine	1	3	4	4	4	4
Division of Neurosciences	-	1	1	1	1	1
Division Of Pathology	1	1	1	2	1	1
Division Of Surgery	-	1	1	1	1	1
Medical Research Unit-Kenya	1	1	1	-	-	-
Pathology Division	2	2	1	1	1	1
Pharmacology Division	2	3	3	3	3	2
Toxinology Division	3	2	1	1	2	1
Virology Division	4	9	7	10	12	10
Walter Reed Army Institute of Research	1	1	1	3	3	3
	34	44	42	50	51	46

[r\_tenure\_by\_quarter]



**Summary of  
Associate Patent Activity**

9/30/2000 - 9/30/2001

**Attachment 6**

12/12/2001 Page 1 of 1

**U.S. Army Medical Research and Materiel Command**

**Dutta, Sheetij 7/27/1998 7/26/2001**

1 Patent Title: Process for Expression and Purification of Plasmodium vivax MSP1-p42 Expressed in Escherichia coli.

Co-authors: David E. Lanar, Sheetij Dutta and Lisa A. Ware

Date Applied For: 3/19/2001 Date Approved For:

2 Patent Title: Process for Purification of Recombinant plasmodium falciparum AMA-1 from E. coli.

Co-authors: David E. Lanar, Sheetij Dutta, Lalith Nair and Lisa A. Ware

Date Applied For: 3/26/2001 Date Approved For:

**Korolev, Sergey Vasilyevich 9/01/1999 4/14/2001**

1 Patent Title:

Co-authors:

Date Applied For:

Date Approved For:

2 Patent Title:

Co-authors:

Date Applied For:

Date Approved For:

**U.S. Army Medical Research and Materiel Command**

---

**Allon, Nahum**

**8/01/2000 7/31/2001**

- 2 A plasmid containing human butyrylcholinesterase gene was successfully encapsulated in small unilamellar liposomes (150-200nm) with high efficiency (>60%). The encapsulated liposomes were purified from the non encapsulated DNA.
- 4 Fusion peptides were designed synthesized and tested in in-vitro and in-vivo system. The fusion peptides are designed to change their conformation due to changes in the pH and thus disrupt the endosomal membrane and release the plasmid.
- 6 Six targeting peptides for lung cells were designed and tested for their selectivity to various lung cell lines.
- 8 Various linkers for the conjugation between the peptides and the liposomes were tested. The direct linkage to the phospholipid was finally adopted for further research.
- 10 An animal model using an otoscopic intra-tracheally instillation of liposomes containing plasmid were tested and adopted for the in-vivo testing of the delivery system.

**Baker, Robert Owen**

**1/06/2000 7/16/2001**

- 1 GFP expressed from vaccinia virus can be used as a simple and rapid reporter for virus growth. This system can be used to test antiviral drugs, and viral growth curves were obtained from single plates assayed on consecutive days with minimal handling.
- 3 Lesional and lethal models for both monkeypox and smallpox were developed by i.v. injection of virus into monkeys. These models are still being characterized. These models will allow the testing of antiviral drugs in vivo for possible FDA approval.
- 5 The DNA polymerase gene from 45 strains of Variola Virus were cloned and are being sequenced to determine possible sources for observed differences in drug sensitivities.
- 7 Some 800 potential antiviral drugs have been tested against a panel of pox viruses, including smallpox, monkeypox, cowpox, camelpox, and vaccinia viruses. Some of the most active of these drugs are being tested in animal models.
- 8 Progress was made towards rodent models of camelpox and monkeypox. If these systems can be validated, it will minimize the need for either large animals or non-human primates in drug testing.

**Baranyi, Lajos**

**6/22/1998 6/21/2001**

- 1 We showed that the pseudo allergic reactions to liposomes are the result of the ability of the microvesicles to activate the complement system in pigs, rats and humans, due to naturally occurring antibodies as well as direct complement activation.
- 2 Release of the anaphylatoxins, especially the C5a during the complement activation is the major component of the observed reaction.

**U.S. Army Medical Research and Materiel Command**

---

- 3 We found that changing the size and composition of lipids in the liposomes affects highly the ability of liposomes to activate the complement system and therefore their ability to induce the adverse reactions termed CARPA.
- 4 We determined a new formulation of liposomes that have a reduced ability to activate complement and established a strong complement activator liposome for testing the effects of complement activation in new animal models.
- 5 We were successful in developing a new drug candidate, a C5a receptor inhibitor. A highly potent antagonist of C5a receptor was developed by oligomerizing 226-LLRTWSRRATSTKTLKV using a MAP resin resulting in a potent C5a receptor inhibitor.

**Bosio, Catharine Mans**

9/11/2000 8/31/2001

- 1 Primary human dendritic cells were cultured and successfully infected with both Marburg and Ebola viruses. I demonstrated that dendritic cells were susceptible to infection but were also suitable for logarithmic growth of both viruses.
- 2 Cytokine profiles from Ebola and Marburg infected dendritic cells revealed that, unlike many other pathogens, neither of these viruses induced secretion of essential proinflammatory cytokines, including TNF-alpha, IL-10, IFN-alpha, IL-6 and IL-1beta.
- 3 I demonstrated that both Ebola and Marburg viruses specifically interfered with the ability of dendritic cells to secrete IFN-alpha and not other proinflammatory cytokines such as TNF-alpha and IL-6.
- 4 Additionally, I produced evidence that Ebola and Marburg viruses interfered with the ability of dendritic cells to stimulate T lymphocytes following exposure to irradiation inactivated Ebola or Marburg virus.
- 5 Dendritic cells were also shown to be capable of infection with VEE replica particles encoding a variety of antigens.

**Dutta, Sheetij**

7/27/1998 7/26/2001

- 1 Developed a process for the production of human vaccine grade *P. vivax* Merozoite surface protein 42 kDa fragment. Immunogenicity of the expressed product in mice was done and is being tested in Rhesus monkeys.
- 2 Developed a process for the production of human vaccine grade *P. falciparum* Apical membrane antigen-1. Antigen was viald under cGMP conditions and is awaiting human testing at WRAIR. Also various biochemical tests for an IND submission were done.
- 3 Expressed the *P. vivax* Merozoite surface protein 42 kDa fragment in the Venezuelan equine encephalitis virus system. The virions are being evaluated for immunogenicity in mice.
- 4 Expressed the *P. vivax* Duffy binding protein region II in the baculovirus system, the protein was purified and was tested for its RBC binding properties.

**U.S. Army Medical Research and Materiel Command**

---

- 5 Expressed the P. cynomolgi Merozoite surface protein -1 42 kDa fragment in bacterial system and the purified protien was tested for immunogenicity in mice. The protein ias being tested in Rhesus monkeys for protective potential against the parasite.

**Hensley, Lisa Ellen**

**9/01/1998 11/30/2000**

- 1 Development of a detection assay for Simian Hemorrhagic fever.
- 2 Identification of apoptosis as the mechanism of cell death in Ebola infections of non-human primates.
- 3 Identification of apoptotic genes that may be involved in triggering apoptosis during Ebola infections.
- 4 Detection of cytokines and chemokines in vitro and in vivo Ebola infections.
- 5 Detection of tissue factor in Ebola infected non-human primates.

**Hulet, Stanley Warren**

**1/10/2000 9/28/2001**

- 1 0.4 and 0.5 x LD50 GB can be injected (s.c.) into guinea pigs 1 per day for 2 weeks (Mon-Fri) without eliciting cortical EEG seizures.
- 3 Dose related decreaes in body weight gain and red blood cell acetylcholinesterase were observed.
- 5 While there were no obvious signs of nerve agent intoxication in the animals receiving 0.4 x LD50 GB there were subtle neurobehavioral changes observed with a functional observational battery.
- 7 After 10 days recovery from GB exposure baseline choline levels where depressed compared to baseline levels in control animals and there was an increase acetylcholine release in response to atropine challenge.
- 9 There were decreased in power of low frequency Delta and Theta EEG recordings, as compared to saline controls, which were still identifiable 6 days after the last GB injection.

**U.S. Army Medical Research and Materiel Command**

**Jenner, Jennifer Louise**

**6/01/1998 5/31/2001**

- 1 A single twenty minute bout of eccentric exercise on a specially designed motorized cycle ergometer is an excellent model for studying military training-related musculoskeletal injuries in soldiers.
- 2 There was no significant difference between the placebo and antioxidant supplemented groups with respect to muscle injury (assessed by serum creatine kinase and myoglobin) or muscle recovery (assessed by muscle power and force).
- 3 Subjects consuming the supplement did not experience significantly improved mood states (assessed by Profile of Mood States Questionnaires) during recovery from muscle injury compared to the placebo group.
- 4 Delayed Onset muscle Soreness scores were not significantly different between the antioxidant and placebo group for any of the recovery days.
- 5 Supplementation with vitamin C and E (400 mg/day and 800 mg/day, respectively) for four weeks prior to and one week following a single bout of eccentric cycling exercise did not appear to offer protection against muscle damage or enhance recovery.

**Kanjilal, Partha Partim**

**8/02/1999 7/20/2001**

- 2 Variability of the Blood Pressure pattern or wave-shape can reflect state of cardiovascular condition through linear spectral analysis and nonlinear analysis of weighted singular value distribution profiles of the signal against surrogates.
- 4 Analysis of data obtained from animal studies show distinct correlation between the spectral characteristics of the ECG signal and the thermal accimation state, which may be usable as a signature of the state of heat-acclimation.
- 6 Nonlinear analysis of the Pulse Transit Time (PTT) series shows that there is a strong link between PTT and the level of blood pressure of the subject.
- 7 Singular value ratio spectrum can also be obtained by Singular value decomposition of rank-ordered information matrices instead of matrices formed by the successive segments of actual data.

**Korolev, Sergey Vasilyevich**

**9/01/1999 4/14/2001**

- 2 Ten mutants of staphylococcal enterotoxin B (SEB) have been developed with histidine residues replaced by tyrosine residues at different positions. All SEB mutants were cloned into plasmid pET22B(+) and expressed in E.coli as soluble proteins.
- 4 The antigenic determinant feature of the mutant proteins decreases as the number of replaced histidine residues increased, which was shown by immunoblotting on the periplasmic fractions extracted from the mutants.
- 6 Detailed protocol of purification has been developed for SEB proteins (both intact and mutant) from E.coli. The SEB proteins can be isolated by FPLC using red-dye A column and mono Q column.

**U.S. Army Medical Research and Materiel Command**

---

- 8 Five isolated mutant proteins have been tested by flow cytometry for binding to human MHC class II antigen on Hut-78 cells and in BALB/c mice. One of them seems to be potential vaccine candidate.
- 10 Set of different cassettes of expression (shuttle vectors) has been developed for production of heterologous proteins in *L. casei* and established expression of SEB genes in *Lactobacillus casei*.

**Kwik, Jeanne Frieda**

6/05/2000 8/31/2001

- 1 Superantigens which crosslink MHC II, such as SEA or SEE, utilize discrete membrane domains called lipid rafts, while non-crosslinking superantigen toxicity is not dependent upon lipid raft integrity.
- 3 Gamma/delta T cells expand after Marburg protein application.
- 4 TLR1 expression is enhanced on THP-1 cells after Marburg protein application.

**Leader, Haim Nissan**

5/10/1999 11/09/2000

- 1 Synthesis and purification of all phosphonylated oximes (POX'S) which are derived from the interaction of nerve agents (GB, GD, GFL, VX) with mono-pyridinium oxime reactivators (2-PAM and 4-PAM).
- 2 Synthesis and isolation of POX's derived from the interaction of the above nerve agents with bis-pyridinium oxime reactivators such as Toxogonin, TMB-4 and HI-6.
- 3 Biochemical characterisation (enzymology and toxicology) of the synthtic POX'S.

**Markotic, Alemka**

10/25/1999 10/24/2000

- 1 Proinflammatory cytokines and chemokines and their receptors may play an important role in the immunopathogenesis of hemorrhagic fever with renal syndrome (HFRS) and hantavirus pulmonary syndrome (HPS).
- 2 There are differences in cytokine/chemokine profile and dynamics between HFRS and (HPS) viruses.
- 3 We could also observe the differences between the viruses which caused the same syndrome as well as some similarities between the viruses which cause different syndromes.

**U.S. Army Medical Research and Materiel Command**

---

4 RANTES and RANTES receptors may play an important role in the pathogenesis of HFRS and HPS.

6 Hantaviruses are able to induce apoptosis in 293HEK cells.

**Marvaud, Jean-Cristophe**

12/01/1999 11/30/2000

1 Characterization of iota toxin domains.

2 Purification of single chain fragment variable against light chain botulinum toxin.

**Mendelson, Itai**

4/24/2000 6/30/2001

2 Nineteen target ORFs were selected, using the available B. anthracis preliminary sequence database from TIGR Website and various programs available from the NCBI Web site.

3 The target ORF DNA fragments and the parallel unique DNA-tags were linked and cloned into the temperature-sensitive-suicide pDSTM vector (developed in IIBR, formerly named pEO-3).

4 The library of ts-suicide pDSTM-vectors, carrying different PCR amplified tagged-ORF1N fusions, was used to transform B. anthracis Ames cells.

5 Detailed protocols aimed to induce the curing of pDSTM from transformed B. anthracis Ames cells and to select for the integration events were developed.

6 Five B. anthracis mutants were generated by directing the knockout of four chromosomal targets and one pXO1 gene (pagA that encodes the protective antigen).

**Rayner, Jonathan Ole**

5/01/2000 10/31/2000

1 Developed negative strand VEE replicon and assessed its utility in trans.

2 Developed VEE replicon expressing a puromycin resistance gene for stable virus production.

**Waitumbi, John Njenga**

**2/09/1998      2/08/2001**

- 1 Red blood cells of children with severe malaria anemia have reduced expression of complement regulatory proteins CR1 and CD55.
- 2 Severe malarial anemia emanates from cumulative damage to the RBC surface membrane.
- 3 The level of expression of erythrocyte CR1 and CD55 is age dependent, being lowest in age group most susceptible to severe malaria anemia.
- 4 The level of expression of erythrocyte CR1 and CD55 is highest in children who develop cerebral malaria.
- 5 Red blood cells with reduced CR1 and CD55 are liable to classical complement mediated lysis.



# Termination Report Summary

## U.S. Army Medical Research and Materiel Command For Associates Who Ended Tenure Between

9/30/2000 and 9/30/2001

12/12/2001 Page 1 of 3  
[r\_term\_summary]

Name	Id Number	Level	Dates		Journal Articles	Presentations		Patents	Know	Tech	Motiv	Rsch	Colleg
			Start Term Rpt Received	Term Advr Rpt Received	Mnths*	Domestic	Intl						
Allon, Nahum	0038180	Senior	8/01/00	7/31/01	12	-	1	-	-	5	5	5	Y
			7/31/01	7/31/01		10	10	10					Research - National government (US or Foreign)
Baker, Robert Owen	9931210	Regular	1/06/00	7/16/01	18	-	1	1	-				
			9/18/01			10	10	8					Remain at Host Agency
Baranyi, Lajos	9716730	Senior	6/22/98	6/21/01	36	3	3	2	-				
			7/09/01			9	9	8					Remain at Host Agency
Biba, Edmond	9926460	Regular	6/28/99	8/27/01	26				2	2	3	4	NC
				10/11/01									
Bosio, Catharine Mans	0035870	Regular	9/11/00	8/31/01	12	-	-	1	-				
			10/16/01			10	10	10					College or University Professor
Bosio, Christopher Francis	9822750	Regular	2/04/99	8/31/01	31								
Byrd, Wyatt	9716580	Senior	1/20/98	1/19/01	36								
Dutta, Sheetij	9818400	Regular	7/27/98	7/26/01	36	3	3	-	2				
			11/06/01			10	10	10					Remain at Host Agency
Hensley, Lisa Ellen	9820060	Regular	9/01/98	11/30/00	27	1	2	3	-				
			11/29/00			10	8	8					Remain at Host Agency
Hulet, Stanley Warren	9931110	Regular	1/10/00	9/28/01	21	-	1	-	-				
			9/20/01			10	10	10					Industry
Jenner, Jennifer Louise	9819910	Regular	6/01/98	5/31/01	36	-	3	-	-				
			5/21/01			10	7	10					Research - National government (US or Foreign)
Jensen, Melody Janet	9822730	Senior	8/10/98	9/30/00	26								

\* "Mnths" reflects the actual months the Associate was on Tenure accounting for leave of absences, etc. between the first award date and final termination date.

# Termination Report Summary

## U.S. Army Medical Research and Materiel Command For Associates Who Ended Tenure Between

9/30/2000 and 9/30/2001

12/12/2001 Page 2 of 3  
[r\_term\_summary]

Name	Id Number	Level	Dates		Journal Articles	Presentations		Patents	Know	Tech	Motiv	Rsch	Colleg
			Start Term Rpt Received	Term Mnths* Adv Rpt Received		Domestic	Intl						
Kanjilal, Partha Partim	9824290	Senior	8/02/99	7/20/01	24	1	3	-	-	5	5	4	4
Korolev, Sergey Vasilyevich	9929010	Regular	7/27/01	5/23/01	8	8	8	8	Other				
Kwik, Jeanne Frieda	0037600	Regular	9/01/99	4/14/01	19	-	1	-	-	5	5	5	5
			6/12/01	6/28/01	8	10	10	10	Remain at Host Agency				
			6/05/00	8/31/01	15	-	-	1	-				
			10/03/01		8	5	8	8	College or University Professor				
Leader, Haim Nissan	9823600	Senior	5/10/99	11/09/00	18	-	3	-	-	5	5	5	5
			10/18/00	12/22/00	9	9	10	10	Research - National government (US or Foreign				
Markotic, Alemka	9928440	Regular	10/25/99	10/24/00	12	-	1	1	-				
			10/03/00						Research - National government (US or Foreign				
Marvaud, Jean-Cristophe	9925411	Regular	12/01/99	11/30/00	12	-	-	1	-	4	4	4	4
			1/08/01		10	8	8	8	Research - National government (US or Foreign				
Mendelson, Itai	9930040	Senior	4/24/00	6/30/01	14	-	2	-	-	4	5	5	5
			6/13/01	8/16/01	10	10	10	10	No Information provided				
Rayner, Jonathan Ole	0035650	Regular	5/01/00	10/31/00	6	-	-	-	-				
					8	8	10	10	Industry				
Waitumbi, John Njenga	9716480	Senior	2/09/98	2/08/01	36	1	2	2	-				
			3/07/01		10	10	8	8	Remain at Host Agency				

\* "Mnths" reflects the actual months the Associate was on Tenure accounting for leave of absences, etc. between the first award date and final termination date.

# Termination Report Summary

## U.S. Army Medical Research and Materiel Command For Associates Who Ended Tenure Between

9/30/2000 and 9/30/2001

12/12/2001 Page 3 of 3  
[r\_term\_summary]

Name	Id Number	Level	Dates			Journal Articles	Presentations		Patents	Know	Tech	Motiv	Rsch	Colleg
			Start Term Rpt Received	Term Advr Rpt Received	Mnth*	Domestic	Intl							
						Career	Lab	NRC						

Weeks, Steven Douglas 9820000 Regular 5/04/98 5/03/01 36

Totals for	Date Calculations			From Assoc Report			From Adviser Report			Summary of Post Tenure Plans			
AMRMC	Average:	23	Total	17	77%	Totals	Average	Total	7	32%	Research - National government (US or Fo	5	29%
	Max:	36	Jml Art	9	0.53			Knowledge	30	4.29	Remain at Host Agency	6	35%
	Min:	6	Domestic	26	1.53			Technique	31	4.43	College or University Professor	2	12%
	Std Dev:	10	International	12	0.71			Motivation	31	4.43	Other	1	6%
			Patents	2	0.12			Independence	32	4.57	Industry	2	12%
											No Information provided	1	6%
						Median	Average					Totals:	17

Number of Terminated Assocs: 22  
 Career 10 9.38 Colleg = Y 6 86%  
 Lab 10 8.88 Colleg = N - 0%  
 NRC 10 9.13 Colleg = No Cmt 1 14%

\* "Mnths" reflects the actual months the Associate was on Tenure accounting for leave of absences, etc. between the first award date and final termination date.

# Termination Report Summary

## AMRMC: Medical Res Inst of Chemical Defense For Associates Who Ended Tenure Between

9/30/2000 and 9/30/2001

12/12/2001 Page 1 of 6  
[r\_term\_summary]

Name	Id Number	Level	Dates		Journal		Presentations		Patents	Know	Tech	Motiv	Rsch	Colleg
			Start Term Rpt Received	Term Advr Rpt Received	Mnths*	Articles	Domestic	Intl						
Hulet, Stanley Warren	9931110	Regular	1/10/00	9/28/01	21	-	1	-	-	-	-	-	-	-
			9/20/01			10	10	10	10	Industry				

Totals for	Date Calculations	From Assoc Report	From Adviser Report	Summary of Post Tenure Plans
MRICD				

Average:	21	Total	1	100%	Total	-	0%	1	100%
Max:	21	Jml Art	-	0.00	Knowledge	-			
Min:	21	Domestic	1	1.00	Technique	-			
Std Dev:	0	International	-	0.00	Motivation	-			
		Patents	-	0.00	Independence	-			

Number of Terminated Assocs: 1		Median Average		Totals Average	
Career	10	10.00	Colleg = Y	-	
Lab	10	10.00	Colleg = N	-	
NRC	10	10.00	Colleg = No Cmt	-	

\* "Mnths" reflects the actual months the Associate was on Tenure accounting for leave of absences, etc. between the first award date and final termination date.

# Termination Report Summary

## AMRMC: Medical Research Institute of Infectious Diseases For Associates Who Ended Tenure Between

9/30/2000 and 9/30/2001

12/12/2001, Page 2 of 6  
[r\_term\_01/01/01]

Name	Id Number	Level	Dates		Journal		Presentations		Patents	Know	Tech	Motiv	Rsch	Colleg
			Start Term Rpt Received	Term Advr Rpt Received	Mnths*	Articles	Domestic	Intl						
Baker, Robert Owen	9931210	Regular	1/06/00	7/16/01	18	-	1	1	-					
			9/18/01			10	10	8		Remain at Host Agency				
Bosio, Catharine Mans	0035870	Regular	9/11/00	8/31/01	12	-	-	1	-					
			10/16/01			10	10	10		College or University Professor				
Bosio, Christopher Francis	9822750	Regular	2/04/99	8/31/01	31									
Hensley, Lisa Ellen	9820060	Regular	9/01/98	11/30/00	27	1	2	3	-					
			11/29/00			10	8	8		Remain at Host Agency				
Jensen, Melody Janet	9822730	Senior	8/10/98	9/30/00	26									
Kwik, Jeanne Frieda	0037600	Regular	6/05/00	8/31/01	15	-	-	1	-					
			10/03/01			8	5	8		College or University Professor				
Markotic, Alemlka	9928440	Regular	10/25/99	10/24/00	12	-	1	1	-					
			10/03/00							Research - National government (US or Foreign)				
Marvaud, Jean-Cristophe	9925411	Regular	12/01/99	11/30/00	12	-	-	1	-	4	4	4	4	Y
			1/08/01			10	8	8		Research - National government (US or Foreign)				
Mendelson, Itai	9930040	Senior	4/24/00	6/30/01	14	-	2	-	-	4	5	5	5	Y
			6/13/01	8/16/01		10	10	10		No Information provided				
Rayner, Jonathan Ole	0035650	Regular	5/01/00	10/31/00	6	-	-	-	-					
						8	8	10		Industry				

\* "Mnths" reflects the actual months the Associate was on Tenure accounting for leave of absences, etc. between the first award date and final termination date.

