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14. ABSTRACT During this reporting period, the NRC promoted research opportunities at AMRMC institutes through a broad outreach plan. A total of 12 applications were received during the period and of these, 10 were reviewed by NRC panels. 8 awards were offered and all 8 were accepted. A total of 13 Associates ended their tenure during the reporting period and of these 9 submitted a final report. The productivity of these Associates is listed in the technical report.					
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During the reporting period, the National Academies of Sciences, Engineering, and Medicine (the Academies) NRC conducted the following activities in support of the subject contract:

Outreach and Promotion

The promotional schedule to advertise the NRC Research Associateship Programs included the following: 1) attendance at meetings of major scientific and engineering professional societies; 2) advertising in programs and career centers for these and other professional society meetings; 3) direct mailing and emailing of announcements and program materials to presidents, graduate deans, and heads of appropriate science and engineering departments and minority-affairs offices of all academic degree-granting institutions in the United States; 4) posting announcements on internet job sites, electronic newsletters and professional society websites; 5) print advertising in high profile publications (e.g., Science magazine, the Chronicle of Higher Education); and, 6) maintaining a presence on social media sites such as Facebook.

The Academies attended a number of minority focused events in which we maintained exhibit booths, participated in workshops and advertised in meeting literature, newsletters and websites or submitted materials for distribution. In addition, ads were placed in a variety of minority publications (e.g., Affirmative Action, Black Collegian).

In advertising the Research Opportunities available to prospective applicants, the Academies maintained an up-to-date listing of all active Research Advisers, current Adviser contact information and details of each Research Opportunity.

Processing and Review of Applications

Applications to the Research Associateship Programs were submitted via a web-based application system. Each application cycle opened two months prior to the application deadline. Academies staff provided support to prospective applicants including providing application instructions, technical support and additional information as requested.

A summary of applications for the reporting period is shown in Table 1.

For each applicant, the Academies received and processed an application form, a research proposal, transcripts, a statement of previous and current research, and confidential reference reports. An application file check was made prior to the review and each applicant was notified if required documents were missing.

The Academies convened panels in five broad discipline areas for the competitive review of applications in the NRC Research Associateship Programs. Results of the review were made available to Laboratory Program Representatives immediately following the conclusion of the each review.

A summary of the outcome of the review of applications for the reporting period is shown in Table 1.

Administration of Awards

The Academies made awards to applicants based on sponsor authorization. A summary of awards authorized and the acceptance or declination by the applicant during the current reporting period is shown in Table 1.

For NRC Research Associates beginning or continuing tenure, the Academies provided the administrative functions described in the contract Statement of Work. These functions included stipend payments,

management of a major medical benefits insurance program, and reimbursement for relocation and travel to professional meetings.

A summary of NRC Research Associates on tenure during the reporting period is shown in Table 2.

Outcomes Reporting

All NRC Research Associates who completed tenure were requested to submit a final report that described the outcome of their Research Associateship award. A summary of the activities of NRC Research Associates who submitted final reports during this reporting period, including publications, presentations and patents, as well as an assessment of their experience in the program, are summarized in Table 3. Specific accomplishments of NRC Research Associates completing tenure during the reporting period are summarized in individual Final Reports (attached to annual technical reports).

Table 1. Summary of applications and awards

Table 2. NRC Research Associates on tenure during the reporting period

Table 3. Activities of NRC Research Associates who completed tenure during the reporting period

AMRMC - U.S. Army Institute of Surgical Research

Table 1: Summary of applications and awards

	Applications			Lab Decision/Outcome		
	Submitted	Reviewed	Recommended	Awards Offered	Awards Accepted	No Offer
May 2012	4	4	4	4	4	0
Aug 2012	13	13	13	8	8	5
Nov 2012	1	1	1	0	0	0
Feb 2013	0	0	0	0	0	0
May 2013	0	0	0	0	0	0
Aug 2013	0	0	0	0	0	0
Nov 2013	2	0	0	0	0	0
Feb 2014	2	2	2	1	1	1
May 2014	1	1	1	1	1	0
Aug 2014	2	2	1	1	1	0
Nov 2014	0	0	0	0	0	0
Feb 2015	2	2	2	1	1	0
May 2015	0	0	0	0	0	0
Aug 2015	0	0	0	0	0	0
Nov 2015	0	0	0	0	0	0
Feb 2016	0	0	0	0	0	0
May 2016	0	0	0	0	0	0
Aug 2016	1	1	1	1	1	0
Nov 2016	1	1	1	1	1	0
Feb 2017	0	0	0	0	0	0
May 2017	2	2	2	0	0	0
Aug 2017	0	0	0	0	0	0
Nov 2017	1	1	1	1	1	0
Feb 2018	1	1	1	0	0	0
Total (All Reviews)	33	31	30	19	19	6

Table 2: NRC Research Associates on tenure during the reporting period

Associate	Adviser	Tenure Dates	Final Report
U.S. Army Institute of Surgical Research			
Benov, Avi	Darlington, Daniel Norman	8/1/2014-7/31/2015	Not Recv'd
Burdette, Alexander Justin	Alvarez, Rene	10/1/2012-8/26/2013	Not Recv'd
Chen, Guojun	Devore, David I	8/8/2011-5/14/2012	Received
Cheppudira, Bopaiah Pooviah	Christy, Robert John	9/4/2012-6/18/2017	Received
Childers, Brandon Michael	Leung, Kai P	7/11/2011-12/31/2012	Not Recv'd
Choi, Jae hyek	Wang, Heuy-Ching H.	11/15/2011-11/14/2015	Not Recv'd
Flagg, Shannon Coates	Alvarez, Rene	5/14/2012-5/13/2013	Received
Greene, Whitney Ann	Wang, Heuy-Ching H.	4/25/2012-10/24/2017	Received
Holt, Andrew Whyte	Wang, Heuy-Ching H.	2/13/2017-5/31/2017	Received
Hurtgen, Brady Joe	Wenke, Joseph C	12/3/2012-9/18/2014	Received
Kaini, Ramesh Raj	Wang, Heuy-Ching H.	1/3/2013-1/2/2016	Received
Karna, Sai Lakshmi Rajasekhar	Leung, Kai P	4/1/2013-4/13/2017	Received
Kreyer, Stefan Franz Xaver	Batchinsky, Andriy I	12/7/2012-5/31/2014	Received
Langer, Thomas	Cancio, Leopoldo C.	8/29/2011-11/28/2012	Received
Meledeo, Michael Adam	Bowman, Phillip Dalton	3/1/2010-7/6/2012	Received
Miller, Christine Lindsay	Leung, Kai P	2/4/2013-2/3/2016	Received
Muniz, Alberto	Wang, Heuy-Ching H.	10/14/2008-1/13/2014	Received
Nguyen, Jesse Quoc	Leung, Kai P	3/1/2017-2/28/2019	
Nyland, Jennifer Elaine	Clifford, John L	2/1/2013-12/31/2014	Received
Olekson, Melissa Ann	Leung, Kai P	9/2/2014-9/1/2016	Received
Parida, Bijaya Kumar	Dubick, Michael A.	3/19/2012-9/18/2016	Received
Penn, Alexander Hayes	Torres Filho, Ivo P	1/14/2015-5/14/2017	Received
Pilia, Marcello	Rathbone, Christopher R	9/4/2012-2/6/2015	Received
Rose, Lloyd Frederick	Leung, Kai P	11/1/2012-10/2/2015	Received
Salas, Margaux Marie	Clifford, John L	10/10/2012-10/1/2015	Received
Samberg, Meghan	Christy, Robert John	10/1/2012-12/31/2013	Received
Sanchez, Carlos Jose	Wenke, Joseph C	9/7/2011-9/6/2014	Received
Scaravilli, Vittorio	Batchinsky, Andriy I	11/15/2012-3/14/2014	Received
Schneider Herrera, Bruno	Leung, Kai P	5/1/2012-7/31/2013	Received
Sosanya, Natasha	Christy, Robert John	4/20/2015-4/19/2018	
Torres, Luciana Neves	Dubick, Michael A.	5/18/2011-8/17/2012	Received
Van Laar, Tricia Annette	Leung, Kai P	4/9/2012-7/29/2015	Received
Vecchi, Vittoria	Cancio, Leopoldo C.	11/14/2011-10/22/2012	Received
Ward, Catherine Lindsey	Wenke, Joseph C	8/22/2011-9/4/2014	Received

Table 3: Activities of NRC Research Associates who completed tenure during the reporting period

- 32 Associates ended tenure during the report period
- 28 months was the average tenure length
- 66 months was the longest
- 3 months was the shortest
- 28 submitted final reports

In the final reports, Associates indicated the following scholarly activity while on tenure.

- 83 Articles published in refereed journals
- 15 Articles other (Proceedings, Book Chapters, other)
- 102 Domestic presentations
- 15 International presentations
- 1 Patent applications
- 8 Awards

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

- 1 Permanent position at the NRC host agency
- 10 Contract or temporary position at the NRC host agency
- 3 Research/administrative position with another U.S. government agency
- 1 Research/administrative position with foreign government agency
- 2 Research/teaching at US college/university
- 4 Research/teaching position at a foreign college or university
- 2 Research/administrative position in private industry in the U.S.
- 0 Research/administrative position in private industry outside of the U.S.
- 0 Research/administrative position with a non-profit
- 0 Self-employed/consulting
- 1 Postdoctoral Research
- 2 Other
- 2 No information provided

In their final reports, 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:

- 8.3 Short-term value (lab)-Development of knowledge, skills, and research productivity at lab
- 8.0 Long-term value (career)-How your Research Associateship affected your career to date
- 8.4 Laboratory Support-Equipment, funding, orientation, safety & health training, etc.
- 7.9 Adviser Mentoring-Quality of mentoring from the Research Adviser
- 8.8 LPR Support-Quality of administrative support from the LPR
- 9.4 NRC Support-Quality of administrative support from the NRC