The Eighth Annual DAP meeting was hosted by Ira H. Fulton Schools of Engineering, Arizona State University. A copy of the agenda and the participants' list can be found in Appendix I and II, respectively.

**PURPOSE OF MEETING**: This meeting had three sessions, two of which were held concurrently: (1) Session 1a: Meeting with T32 Training Directors to discuss plans for developing individual profiles on trainees; (2) Session 1b: IRB Clinic DAP directors to assist those who were undergoing the IRB approval process to have their participants information submitted to REDCap managed by the Data Analysis and Coordinating Center at Washington University, St. Louis; and (3) Session 2: Meeting with DAP grantees, including T32 Program Directors with DAP activities to: (a) review data on past participants employing the spreadsheet and report format developed by the DACC in collaboration with the DAP grantees and the Advisors to the Program and (b) discuss refinements of the spread sheet. (3) General discussion of topics, issues, concerns, etc suggested by the participants, the advisors or the staff.

**INTRODUCTIONS**

Deirdre Meldrum, the host of the Centers of Excellence in Genomic Science and Dean, Fulton Schools of Engineering, Arizona State University, welcomed the participants to the meeting. After short introductions and a short review of the two day meeting, the participants dispersed to their various sessions.

Eric Green, Director, NHGRI, greeted the group and indicated his interest in attending the meeting and participating to the discussions.

**MEETING SUMMARY**

**Session IA. T32 TRAINING PROGRAM**

The purpose of this session was to determine: (1) what data elements should be collected on each trainee at enrollment and follow-up; (2) what data elements could be extracted from the tables in the competing application and the training appointment form; (3) how to get the missing information; (4) how often to request follow-up data; and (5) how to account for URMs that are recruited under the program, take advantage of the academic enhancements of the training program, are funded through other sources, but should be credited to the NHGRI T32 efforts to recruit URMs.

As a follow up from last year’s meeting, Michael Boehnke and David Botstein worked with the DACC and NHGRI staff to generate a list of follow-up/evaluation questions and information needed on each trainee. In an effort to reduce the burden on the T32 program directors, it was suggested that the some of the tables included in the T32 competing application would include much of this information. Therefore, Botstein and Boehnke agreed to allow the DACC to review the tables that were included in their most recent T32 competing application to determine what data elements could be extracted.

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1 DAP is the Diversity Action Plan. The name was changed to be more in line with the NIH diversity programs. The goals of the DAP are the same as they were for the DAP.
The DACC reviewed the tables and Treva Rice presented their findings which are summarized here: (1) no single table included all of the information; (2) some tables had critical information, such as GRE scores, but there were no names attached to them. (3) Tables 6, 9, 12 and the Training Appointment Form (TAF) have most of the required information. (4) the instructions for filling out the tables were ambiguous so that important information, such as dates, what “research topic” means, area of training, especially interdisciplinary training, etc., was not consistently represented.

There is additional key information which is not available on the tables, such as: (1) how to get credit for students, especially URMS, that were recruited under the program and take advantage of what the T32 program has to offer, but receive scholarships/fellowships from other sources. (2) the need to know time to degree so that information about when graduate students matriculated and when they completed their degree and how many years of T32 support they received. (3) indicators of research progress, such as the award of fellowships, career awards, grants, etc. The follow-up information was limited to publications and employment. It would be important to have information about the past trainees’ publications, such as which ones were associated with the training program and their employment history with dates.

The group indicated that it was more important to get key, in depth information on participants, rather than a lot of information that provides very little detail about the individual’s research and trajectory as an independent scientist. Regarding how often to collect follow-up information, it was decided that every five years on the anniversary of the submission of the institutional training grant application would be sufficient. (It should be noted that a two year follow up was recommended for participants in DAP programs.)

The generation of individual profiles of T32 trainees in REDCap (Research Electronic Data Capture) will require that T32 program directors seek IRB approval to collect and share trainees’ personal data with the DACC. The DACC will modify the IRB package that was prepared for the DAPs. A teleconference training session will be set up with the T32 program directors to answer their questions. It was also noted that some T32 training programs have DAPs associated with them. Those DAP participants must be entered into REDCap.

NIH is in the process of developing a new set of tables. There is the possibility that institutes and centers will have the flexibility to select which tables are more appropriate for the review of their applications. Should this happen, NHGRI will work with the T32 program directors, the reviewers and the DACC to determine which tables provide the maximum amount of useful information, both for review and evaluation. In addition, the reviewers will be asked if they need information on all trainees of mentors and departments or just the NHGRI supported trainees in order to evaluate T32 applications submitted to NHGRI.

**ACTION ITEMS:**

- DACC will generate a list of data elements to be captured from the tables and data that will need to be collected by the T32 program directors.
- DACC will modify the IRB package for T32 trainees.
- NHGRI will set up a training teleconference with the T32 Program Directors and the DACC to review the IRB documents.
- NHGRI will provide an update on new tables as the information becomes available.
Session IB. IRB/REDCAP CONSULTATION WITH DACC

Approximately half of the DAPs have received IRB approval to share participants’ data with the DACC. In order to facilitate the process at the individual institutions, a workshop was led by Karen Clark Laseter, a member of the DACC. The purpose was to have a face-to-face discussion of the issues and to have participants share helpful tips. The session was very informative to the participants.

The REDCap database was demonstrated and several helpful database suggestions were made: (1) Add jobs such as humanitarian service (Peace Corps, AmeriCorps…), Clinical therapist; (2) Add MPH and MD/PhD to educational levels; (3) Add a place to enter faculty research fields (genomics, biology…); (4) Consider separating the options for African American, Black, and Negro to let a trainee choose preference – we can always collapse to meet current guidelines; (5) Add unique identifier for the different programs within an institution; (6) Allow for gender change; (7) For GPAs and test scores, add a field to select if self-reported versus verified; (8) Add sub question to STEM – is trainee in medical health field; (9) Consider obtaining GPAs only at point of entry and after subsequent degree completion; (10) Add end of training date for each trainee; and (11) In publications, a) allow PubMed ID and/or citation, b) add words “peer-reviewed” to screen/form for authored presentations, c) consider adding a new category for any publications in which the trainee has been Acknowledged (not authored).

In addition to the database suggestions, there were many other helpful suggestions that might help with completing follow-up: Consider offering $5-$10 Amazon gift cards to the first 5 follow-up responders as incentives; create targeted email “nagging” to help get those who have not completed follow-up; and ask alumni office to help contact trainees or use national student clearinghouse; etc.

ACTION ITEMS:
- DACC to make suggested changes to REDCap database upon approval.

The next step is to get those who have received approval to share their information with the DACC to directly input their information into REDCap. Since the system has not been beta tested, it was suggested that a couple of DAPs, representing the full range of career levels test the system before opening it up to all approved users. Lisa Peterson, Arizona State University/U Washington, and Eboney Smith, The Broad Institute volunteered to beta test the system.

ACTION ITEMS:
- Those DAPs that do not have IRB approvals should continue to work with their institutions to facilitate the process.
- The DACC will work with Lisa Peterson and Eboney Smith to beta test REDCap.
- DACC to send copy of our IRB to CalTech.

Session II: DAP PROGRESS REPORT ON PAST TRAINEES

The main focus of this meeting was to determine the comprehensiveness of the data capture from past trainees by each program. Because REDCap was not available to all participants, the DACC generated an excel spreadsheet to capture a subset of the data elements in REDCap and a standard report format. This spreadsheet, while useful, did not allow the implementation of “skip logic,” thus resulting in the collection of some data elements that were not relevant to specific career levels. Nevertheless, it was

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2 It should be noted that government funds cannot be used for incentives.
sufficient to demonstrate what enrollment and follow-up information was available (or not) using the excel spreadsheet generated by the DACC. The DACC also generated a standard report format that captured data from the excel file that was then used by each program for reporting the results of their data capture exercise. A summary of this enrollment and tracking exercise includes the following observations: (1) program continuity is essential; change of training coordinators should be seamless. PIs are responsible for ensuring continuity of information; (2) programs need to be more diligent and vigorous in ensuring that ALL participants are added to the database, even though not all relevant cells can be filled; (3) enrollment tables describing race and ethnicity for many programs were not consistent; (4) because most participants are very mobile at this stage of their lives and career, updates should be at least every two years; (5) short-courses were not included in the database; a new track should be added. (6) most programs had more females than male participants. (7) most programs use networking means to contact former participants, such as facebook, LinkedIn, etc.

**ACTION ITEMS:**

- A new set of data elements for courses needs to be developed. The DACC will work with NHGRI staff to generate a set of questions.
- PIs and training coordinators are responsible for collecting information on all participants starting when the grant was funded, not when a new coordinator was hired.
- PIs and training coordinators must exhaust all possibilities to generate a comprehensive profile on each participant and to collect follow up data.
- As soon as IRB approval has been obtained and REDCap has been “debugged,” PIs must enroll and provide follow-up data on each trainee.

This exercise clearly demonstrated the need to have a central repository for data on DAP participants for several reasons: (1) when there is a change in Training Coordinators, files on participants are not always transferred to the new; (2) when programs are terminated, data in individual program files are not saved; and (3) common information on participants makes it easier to (a) consolidate information across programs similar in career levels and training duration and programs and (b) evaluate similar career-level programs.

**FUTURE MEETINGS**

Over the past several meetings, in both the fall and in February, most of our efforts have been focused on getting questions related to enrollment and follow-up plans in order to address specific evaluation questions. Significant dedicated time at both these meetings has been devoted to this one effort. Although we are not at the point where we have a comprehensive and perfect system, the NHGRI staff believes that we can accomplish much by having the fall meeting: (1) focus on program development activities, such as inviting guest speakers who have conducted research or scholarly work on some aspects of training; (2) have panels/workshops on best practices for improving program activities, such as the post baccalaureate program or short courses; (3) discuss ways to encourage partnerships among DAP participants and among DAP groups and other similar programs, etc. In an effort to be timelier with concerns and issues, we will continue to have an “all hands” meeting in the fall and throughout the year use on-line meeting tools such as gotomeeting, WebEx, webinars, etc., to address timely issues, such as a tutorials on the REDCap system and IRB package preparation for T32 program directors, etc.
APPENDIX I

National Human Genome Research Institute
National Institutes of Health

AGENDA
NHGRI Research Training Advisory Committee Meeting with DAP\(^3\) Grantees
Eighth Annual Meeting

Arizona State University
Marriott Buttes Resort
Tempe, AZ

8:30 am October 26, 2010 - 1:00 pm October 27, 2010

PURPOSE OF MEETING: This meeting will have two sessions: (1) Session 1: Meeting with T32 Training Directors to discuss plans for developing individual profiles on trainees and (2) Session 2: Meeting with DAP grantees, including T32 Program Directors with DAP activities to: (a) review data on past participants employing the spreadsheet and report format developed by the DACC in collaboration with the DAP grantees and the Advisors to the Program; (b) discuss refinements of the spread sheet; (c) get an update of problems encountered with IRB approvals; and (3) discuss topics, issues, concerns, etc suggested by the participants, the advisors or the staff. Concurrent with Session I will be a session for DAP participants who wish to discuss their issues of IRB approvals, use of REDCap, use of spreadsheet, etc. with the DACC team.

Tuesday, October 26, 2010

8:30 am Registration

9:00 am Welcome and Introductions

Concurrent Session 1a: T32 Training Program\(^2\) (Kachina)

9:15 am Recap of Training Grant Presentation to Council
   Bettie J. Graham

10:00 am Developing the System to Incorporate T32 Trainees into the Tracking Database
   DACC
   - DAPping Common Data Elements for DAP versus Proposed CDEs for T32 Training Programs
   - Pre-Test Using Data from Two Program
   - Gap areas
   - How/Where to Collect Information Not in Tables

12:00 pm Open Discussion

\(^3\) Diversity Action Plan, formerly Minority Action Plan
Concurrent Session 1b: IRB/REDCap Consultation with DACC\textsuperscript{4} (Papago)

9:15 am - 12:00 pm  
This session is mandatory for DAPs that do not have approved IRB protocols. However, all DAP participants are encouraged to attend this session if you have questions about IRB issues, REDCap, excel spreadsheets, etc.

12:30  
Lunch

Session 2: DAP Progress Report on Past Trainees (Kachina)

1:30 pm  
Introduction  
Bettie J. Graham

1:45 pm  
Process for Collecting Data and Generating the Report  
DACC

2:30 pm  
Progress Reports (each presentation will be 15 minutes each for Q&A (30’ maximum per presentation)

A. Centers of Excellence in Genomic Sciences

Arizona State University/U. Washington  
Yale/Stanford University (Snyder)  
Johns Hopkins University  
Stanford University (Kingsley)  
University of Southern California  
Harvard Medical School  
Dana Farber Cancer Institute  
California Institute of Technology

6:30 pm  
Adjourn

7:00 pm  
Dinner and Networking (on your own)

\textsuperscript{4} Concurrent Sessions
**Wednesday, October 27, 2010**

8:00 am  Coffee  
(Meet/Greet/Networking)

8:30-11:30 am  Progress Reports Continued (each presentation will be 15 minutes each for Q&A  
(30’ maximum per presentation)

**B. Large Scale Sequencing Centers**

The Broad Institute  
Washington University, St. Louis  
Baylor College of Medicine

**C. Databases**

Harvard University  
University of California, Santa Cruz  
The Jackson Laboratory

11:30-12:45 pm  Working Lunch: Discussion and Feed Back

2011 Training Coordinators’ Meeting  
(Potential Date: February 17-18, 2011)

1:00 pm  Adjourn

1:30-4:00 pm  Advisors/DACC/NHGRI Meeting (Closed Session - Papago)
National Human Genome Research Institute (NHGRI)
National Institutes of Health

Department of Health and Human Services

EIGHTH ANNUAL MEETING

NHGRI RESEARCH TRAINING ADVISORY COMMITTEE MEETING WITH DAP GRANTEE

HOST: Arizona State University

MEETING LOCATION:
Marriott Buttes Resort
2000 Westcourt Way
Tempe, AZ 85282

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