SUMMARY SIXTH ANNUAL MAP MEETING 14-15 October 2008 The Langham Huntington Hotel & Spa 1401 South Oak Knoll Avenue Pasadena, California 91106

The Sixth Annual MAP meeting was hosted by the California Institute of Technology in Pasadena, CA. A copy of the agenda and the participants' list can be found in Appendix I and II, respectively. **MEETING SUMMARY**

Discussion of Targets and Outcome Measures. The first part of the panel was presented by Debra Murray and Louise Pape: they first discussed data that might be used to determine appropriate targets and outcomes for the MAP initiatives. Data were presented from the following groups: NSF population data, Meyerhoff Scholars Program, Council of Graduate Studies; McNair Scholars Program and the Alliance for Graduate Education and the Professional Program. All these documents were included in the CD distributed to participants. The second part of the panel was a discussion of what targets and what measurable outcomes were appropriate for each career level and was presented by Bruce Birren. Participants expressed many views, such as, should increasing the number of PH.Ds be the only indicator of success, should a tenure-track position in academia be the only measure of success; how difficult it is to change the mindset of students who have not had researchers as role models; would programs be penalized if they do not meet the targets; should success be measure against long-standing traditional programs or against comparable institutions, etc. No conclusions were reached, but it was decided that individuals will be given additional time to review the materials, to survey programs in their own institution, etc. One way to facilitate that would be to place the information on the MAP portal. The discussion will continue at the sub-committee level and more concrete decisions would be made at the Training Coordinators' Meeting in February. It was also noted that this is a dynamic process, so what is decided in February will be subject to discussion and evaluation at a later date. All participants were encouraged to join one or more of the subcommittees so that their opinions could be expressed. At some point, NHGRI's national advisory council will approve a plan.

Progress Reports of T32 and MAP Programs. The following institutions were asked to present their program goals, progress, and challenges: (i) T32s University of California, Los Angeles; Harvard/MIT (no show) and University of Michigan; (ii) Centers of Excellence in Genome Science from Harvard University, University of Southern California; Arizona Sate University/University of Washington; and California Institute of Technology; (iii) Database-University of California, Santa Cruz; and (4) Large Scale Sequencing Center-BROAD/MIT.

Some of the challenges/suggestions discussed were: (1) Recruitment—knowing when students make the decision to go into research; efficient ways of finding postdoctoral fellows; the need to use a variety of mechanisms to recruit, but face-to-face communications work best; MAPS needing to provide information about all MAP programs when recruiting; providing faculty with a slide or two about the MAP program when they give talks at other institutions; getting postbac students to go to graduate school once they have become involved in research projects; writing letters of recommendation for graduate school (participants were cautioned about saying that this

is the "best URM" student that I have had; this could be considered a negative); paying students sufficient funds to motivate them to accept research positions; approaching professional engineering societies, such as: The Organizations are the Society of Hispanic Professional Engineers (SHPE-www.shpe.org/); the National Society of Black Engineers (NSBEwww.nsbe.org/); the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc.(GEM-www.gemfellowship.org/); and the Achievement Rewards for College Students(ARCS- www.arcsfoundation.org/), etc for recruitment purposes. (2) Retention—finding good mentors; providing mentors with adequate resources; finding ways to keep URMS focused on the research and educational experience when some may have other requirements, such as family, church, etc; post bac balancing research with other career development activities such as additional academic preparations and writing workshops; more advanced students and faculty getting distracted from their research because they are the only role models at their institution; having an annual dinner at a professional society, such as ASHG where URMs are introduced to science leaders in the field; helping visiting faculty continue the intensity of their research once they return to their home institution. (3) Evaluation—there is still the need for some programs to develop adequate internal evaluation programs. Tracking is also a challenge, given the mobility of students and families.

Subcommittee Reports:

Graduate and Postdoctoral Subcommittee (Louise Pape, Jeff Long and Bruce Birren, Reporters). The graduate and postdoc subcommittee has had numerous calls to discuss areas of interest to the group. Initial teleconference discussions after 1st MAP Training Coordinators Meeting revolved around which topics were the most pressing for entire subcommittees, including 1) Funding Opportunities (HS, UG, postbac, grad, postgrad, faculty)--

http://www.genome.gov/26525576; 2) defining parameters for successful postdoc or graduate training program (documenting best practices; formalizing our knowledge on what works /what doesn't); 3) creating a document on this for advisors & students / postdocs (in and outside of MAP programs); 4) potentiating further training of URM trainees in other MAP programs (ensuring minority trainees have academic and research experience for becoming leaders in the field); 5) encouraging, helping trainees seek independent funding; 6) creating annotated list of options (for leveraging funding, helping with transitions) and use cases; 7) compiling list of resources (at our institutes or others).

Additional teleconferences discussed Consent Forms and Statement of Participation for MAP Program participants. Key points made were that Individual institutions and their Institutional Review Boards will have the final say on what they require (whether IRB exempt or not); Consent for collecting data was discussed. Each program would need to run this by their legal counselors and Human Resources group.

Images for websites: Permission for using images is a legal issue; you will need a legal document approved by university counsel. Student permission for using images is not a prerequisite for funding by the MAP program! MAP Training coordinators sent NHGRI staff their institutions' IRB forms. Goal - have template / boilerplate document for answering generic queries on IRB forms. Templates will differ for program types and academic levels.

Undergraduate Subcommittee (Debra Murray, Reporter). The following projects have been completed during the past year: identifying undergraduate research programs with proven track record of preparing their students for STEM graduate programs (complete as of this meeting; developing chart of NHGRI funded summer research programs and

postbac programs for NHGRI web portal (submitted and ongoing); developing a recruitment packet for this committee (complete and attached; see Appendix III); and creating a contact list (of sorts) for our program participants (Face book, Linked In etc)

(ongoing). The following issues that were brought up at the February Training Coordinators' meeting were addressed: defining the goals for our summer research programs (in progress, see below) and assisting with developing common documents (complete).

Our feedback thus far has been: (1) We determined that the number of research summer programs (nation wide) saw their students move from undergraduate to graduate school averaged about 35%. (2) We need to determine what is reasonable in deciding on a target goal knowing this is at least a baseline for our group, we need to determine our target goal. (3) We also need to come up with a statement that will define the disciplines we think NHGRI should consider when determining their success (as well as ours) in reaching this goal. It will be ok for us to include everything we think is essential in order to define what success is for our collective programs.

MAP K-12 Subcommittee (Carla Easter, Reporter). The current activities of the subcommittee are: Monthly teleconferences; exchange of resource materials; development of a "Summary of Undergraduate and K-12 research opportunities for MAP students;" collaboration on programming; evaluation of career resource interview videos by students attending the CTY summer program (7/08); and NHGRI/CTY sponsored Family Academic Program at NIH (11/08). The future activities of the committee are: Continue monthly conference calls; continue to explore opportunities for collaborations (additional academic programs, career resource); complete and disseminate a summary of research opportunities (on the Career Resource website, Community of Genetic Educators website, NHGRI website); and explore opportunities to collaborate on professional development activities.

Remarks by NHGRI Staff: Alan Guttmacher, Acting Director, NHGRI addressed the group at the end of the meeting. He expressed the importance of the MAP program to NHGRI's goals and strongly encouraged the MAP program to mimic other NHGRI programs in being ambitious. He suggested a meeting at NIH of some of the MAP participants as a way to introducing the MAP participants to the NIH and vice versa. The participants were very enthusiastic about this, especially since NHGRI would be underwriting the event. Mark Guyer, Director, Extramural Research, NHGRI echoed Alan's comments and indicated that the MAP program was following the same trajectory as other NHGRI programs and that he viewed this as being very positive.

2009 ANNUAL MEETINGS

The Third Training Coordinators' Meeting will be held in February 2009 in Washington, DC. The Seventh Annual MAP meeting in 2009 will be hosted by HudsonAlpha Institute for Biotechnology n Huntsville, AL. The MAP meeting is scheduled for 13-14 October 2009.

AGENDA

SIXTH ANNUAL MEETING

NHGRI RESEARCH TRAINING ADVISORY COMMITTEE MEETING WITH MAP GRANTEES 10:00 AM 14 OCTOBER 2008 to 1:00 PM 15 OCTOBER 2008

The Langham Huntington Hotel & Spa 1401 South Oak Knoll Avenue Pasadena, California 91106

PURPOSE OF MEETING: (1) to discuss goals and outcome measures for different research training and career levels; (2) to provide information about the programs to Advisors who have a responsibility to advise the NHGRI on its research training activities; (3) to share program development, implementation and evaluation information among grantees; (4) to identify areas of programmatic concern and to discuss possible solutions; and (5) to discuss topics, issues,

concerns, etc suggested by the participants, the advisors or the staff.

Tuesday, 13 October 2008

10:00 a.m. Welcome and Introductions

10:15 Panel Discussion: Setting Goals and Outcomes

Background (Graham)

Review of Outcomes of National and Local Programs

(Pape and Murray)

Developing Program Goals for NHGRI Programs

(Birren)

Open Discussion

12:15 Working Lunch (Discussion continued and Summary)

1:30 MAP Presentations₁

Centers of Excellence in Genomic Science

Harvard University (Church)

U of Southern California (Waterman)

Arizona State University (Meldrum)

California Tech (Bonner-Fraser)

4:00 Break

4:30 Training Grants

UCLA (Lange)

Harvard/MIT (Kohane—no show)

U. Michigan (Boehnke)

6:00 Open Discussion

6:30 Adjourn

1 15 minutes of presentation; 15 minutes of discussion

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2 10 minutes of presentation; 5 minutes of discussion.

6:45 Networking

Wednesday, 14 October 2008

7:30 Continental Breakfast

(Meet/Greet/Networking)

8:30-9:30 MAP Presentations Continued

Databases/Large Scale Sequencing

UC, Santa Cruz (Haussler)

Broad (Lander)

9:30 to 11: 00 Discussion of Topics of Interest

- 1. SACNAS proposal
- 2. Discussion of data gathering experiences (profile of participants and summary data tables)

11:00 to Noon Report of Subcommitteees 2

Undergraduate (Debra Murray and Nancy Kerk)
Graduate (Jeff Long and Seth Ruffin)
Post Graduate (Louise Pape and Bruce Birren)
K-12 (Carla Easter and Vicky Schneider)
12:00-12:50 Summary; Feed-back (Working Lunch)
Schedule Next Training Coordinators' Meeting
(Potential Date: Friday, February 20, 2009)
1:00 Adjourn
1:15 Networking
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National Human Genome Research Institute (NHGRI)

National Institutes of Health Department of Health and Human Services

SIXTH Annual NHGRI Training Advisory Committee Meeting With the Minority Action Plan (MAP) Grantees

October 14-15 2008
The Langham
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