

SUMMARY OF THE FOURTH ANNUAL MEETING
NHGRI RESEARCH TRAINING ADVISORY COMMITTEE MEETING WITH MAP GRANTEES
SEPTEMBER 25-26, 2006
UNIVERSITY OF SOUTHERN CALIFORNIA

Prepared for the NHGRI MAP Advisors

Table of Contents

Report	3
Meeting Attendees	7
Meeting Agenda	14

SUMMARY OF THE FOURTH ANNUAL MEETING
NHGRI RESEARCH TRAINING ADVISORY COMMITTEE MEETING WITH MAP GRANTEES
25-26 SEPTEMBER, 2006
UNIVERSITY OF SOUTHERN CALIFORNIA

Invitees to the meeting included all NHGRI grantees that were required to have a Minority Action Plan (MAP) as part of their research programs (Centers of Excellence in Genomic Sciences, production sequencing laboratories, databases), the program directors of our institutional training grants, and members of the NHGRI Research Training Advisors Committee. The purpose of the meeting was several-fold: (1) to provide information about the programs to Advisors who have a responsibility to advise the NHGRI on its research training activities; (2) to share program development, implementation and evaluation information among grantees; (3) to identify areas of programmatic concern and to discuss possible solutions; and (4) to discuss issues, concerns, and other topics suggested by the participants, the Advisors or the NHGRI staff. The agenda and the list of participants are included in the appendices. The format of the meeting included seven or ten minute presentations followed by three or five minute discussions, respectively.

The Advisors were overall optimistic that the grantees had taken ownership of their training activities based on the progress reports. As the activities are beginning to mature, the need for program evaluations, both of individual activities and the overall MAP program should be made a priority. Several of the individual programs have implemented evaluations and the NHGRI has applied for NIH evaluation funds, but the status of this request is still pending.

The presentation by Dr. Clif Poodry, Director of the Division of Minority Opportunities in Research, NIGMS, engaged participants by the provocative proposition that summer undergraduate research internships as they have been traditionally conducted are not solving the problem of attracting minorities into science careers and described strategies for recruiting students into their programs. This topics engendered a strongly and candidly engaged conversation with PIs that yielded some substantive messages:

- The need to evaluate programs more quantitatively than just qualitatively and what such an evaluation should focus on, specifically: (1) What are the program's objectives? (2) What are appropriate baseline data from which to determine progress toward achieving the objectives? (3) What can be done to identify initiatives that will best achieve the desired (needed) change? (4) What are the products of the changes needed to achieve the outcome (objective).
- Additional strategies for recruiting under-represented minorities (URMs). A few salient points were: (1) the importance of scientists at conferences visiting student posters and engaging students about their research projects, rather than waiting for them to come to your booth; (2) the need to extend recruitment to include majority institutions that graduate significant numbers of underrepresented students, such as the University of California Berkeley, Massachusetts Institute of Technology, University of Texas at Austin, UCLA, etc.
- Refine strategies for increasing the number of URM going into science, e.g.: (1) piquing student interest in the relevance and rewards of science careers; (2) , providing academic enhancements activities, such as tutoring, additional academic courses, etc; (3) sustaining (ongoing) academic and mentoring support throughout the higher education process; and (4) developing non-academic personal and professional skills.
- The role of mentors covering topics like encouraging students, giving students good advice about how to get into top notch graduate schools, informing students what they need to focus on academically and most importantly, encouraging all faculty to participate in student activities.

A summation of the overall meeting can be captured in the observations and action items listed below (in no particular order).

- Mentoring of Training Coordinators.** As new training coordinators are hired, it will be important for them to quickly get up to speed with their MAP program and its requirements and goals. The Advisors reiterated the need to have as training coordinators individuals with doctoral level degrees and experience in setting up and running laboratories and perhaps grant writing. This is especially critical as the MAP program moves toward providing research and education experiences for those at the undergraduate level and above. The Advisors discussed how best to do this and realized that such a training session should also include the principal investigators. Thus, no decision was made about developing a training session for coordinators. However, it was strongly recommended that new training coordinators: (1) familiarize themselves with and adhere to their institution's approved MAP plan; (2) visit programs that have experienced training coordinators and sound evaluation plans; and (3) contact NHGRI staff or individual Advisors for assistance and information about the MAP program and its goals.
- Transitions.** Transitions between higher education degree stages and even between experiential programs represent the weakest link in most of the MAP training programs. There are several areas that need attention: (1) PIs should be encouraged assist students in making the transitions to the next step by helping them to find additional training and educational opportunities. (2) PIs should actively ensure that students move to the next phase by contacting potential mentors in other programs and providing assistance with the application process, etc. (3) Students pursuing graduate studies should be encouraged to apply for the Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships (F31) to Promote Diversity in Health-Related Research (<http://grants.nih.gov/grants/guide/pa-files/PA-06-481.html>); or participate in NHGRI-supported institutional training grants. (4) Undergraduate, graduate students and faculty should be encouraged to participate in research through the Research Supplements to Promote Diversity in Health-Related Research (<http://grants.nih.gov/grants/guide/pa-files/PA-05-015.html>). (5) Post doctoral fellows/trainees should be encouraged to apply for the NIH Pathway to Independence (PI) Award (K99/R00) (<http://grants1.nih.gov/grants/guide/pa-files/PA-06-133.html>). (6) URM faculty members participating in MAP activities should be encouraged to apply for R01 grants and where appropriate should include on their grant application mentors who may be helpful in getting URM's faculty's research program started.
- Broader Training Mission for Institutional Training Programs.** In addition to providing outstanding academic and research experiences for trainees, training grants should integrate into their programs broad professional and survival skills needed for advancement to and success at independent research. Example skills include how to build a community of scholars/collaborators, how to be effective communicators and teachers , how to manage time effectively, how to negotiate, how to mentor, how to deal with and effect change, how to be an innovator, etc. Such programs exist and the PIs and their coordinators should identify these programs, utilize to the greatest extent possible the information before developing their own de novo. Members of the Advisory Committee would be a good source for getting such programs started and developing evaluations for their effectiveness. As an example, Baylor College of Medicine has a series of skills workshops for graduate students. Please visit this website for additional information: <http://www.bcm.edu/gradschool/?pmid=3210>. Dr. Gayle Slaughter, one of our Advisors, has a PowerPoint presentation that she is willing to provide to interested MAP grantees. Individuals interested in receiving copies of this presentation should be sent to Dr. Slaughter at: gayles@bcm.tmc.edu. Dr. Skip Bollenbacher has developed similar initiatives at UNC Chapel Hill for post-graduate training. Both have developed PowerPoint presentations that they would gladly provide to interested MAP grantees. Individuals interested in receiving copies of this presentation should be sent to Dr. Slaughter at gayles@bcm.tmc.edu or Dr. Bollenbacher at skipbollenbacher@mac.com. In addition, the following Advisors have offered to provide advice based on their experiences: Dr. Bronya Keats (bkeats@lsuhsc.edu); Dr. Kim Nickerson (knickerson@bsos.umd.edu) and Dr. Merna Villarejo (bkeats@lsuhsc.edu).

- Outcomes.** This is a key next step for all of the MAP grantees. With the implementation of activities it is time to focus these activities upon achieving the targeted tangible, quantitative outcomes established by the NHGRI. Outcomes assessment will focus on specific student accomplishments inclusive of publications, the quality of the journals publications are appearing in, presentations at conferences, writing and winning of grants, academic performance, time of progression to next academic level, academic positions attained, and research grants awarded. Meaningful outcomes can be determined only by establishing an accurate baseline from which to make comparisons over time and by identifying as meaningfully as possible a “control” population. An outcomes-driven assessment must include formative evaluation as well to provide a complete picture of program design, implementation, and accomplishments. The NHGRI will look into what role it can play in facilitating this more quantitative and efficient approach to assessment because many of the outcomes are the same for MAP programs.
- Develop Collaborations Between and Among MAP Centers:** As with the value of research collaborations, collaborations between and amongst MAP programs to achieve the NHGRI’s diversity goals are a key next evolutionary step of MAP. In this light, grantees are encouraged to have discussions amongst themselves especially in sharing information about opportunities available through their centers and students they have trained and are ready for a next step toward a career in genomics research. This collaborative network will serve as another way to facilitate the students’ transitions. To begin, MAP programs should keep the most current information about their programs updated on the NHGRI MAP Portal (<http://www.genome.gov/14514219>). Earlier, NHGRI developed a ListServ as a means for MAP grantees to share information. Information about how to subscribe to the ListServ will be sent to all PIs and training coordinators. While these resources can help with achieving meaningful collaborations for student advancement, the NHGRI acknowledges from the meeting that additional activities and strategies can enrich and enhance grantee success. The NHGRI will look into ways it can further enhance collaborations in ways that will directly impact on the quantitative outcomes to be assessed.
- Need to Increase the Number of URM Faculty in Majority Institutions.** An issue related to transitions as well as to increasing the number of URM pursuing science is to increase the number of URM faculty members in biomedical departments. Institutions may want to pursue a strategy of hiring former graduate students and postdoctoral fellows after spending several years pursuing research in other academic institutions. Although there are many factors that affect faculty appointments that are beyond the control of this initiative, producing more high quality URM candidates and a better assessment of trainee development for refining and modifying initiatives are critical to achieving this goal.
- Attendance of PIs at the MAP meeting.** The Advisors feel strongly that success of the MAP depends upon participation of the PIs or Co-PIs at these meetings. The Advisors expressed concern that in some cases, the PIs had abrogated their responsibilities and left the running of the MAP activities entirely to the training coordinators. The Advisors felt that the PIs/Co-PIs must be actively engaged in these activities if the MAP program is to be successful.
- Format of Future Meetings.** The Advisors thought that the MAP activities had progressed to a point where a format change would yield more productive outcomes. Current ideas include: (1) shorten the annual progress report by all PIs, having it focus on specific qualitative and quantitative data that will inform the Advisors and NHGRI of program accomplishments; (2) have half the PI present at the annual meeting every other year, with presentations focusing on innovations, changes, challenges, and what programs will do next; (3) have one or two breakout and discussion sessions on topical issues suggested by PIs will allow participants to share information, problem solve as a group, and increase the amount of time attendees have to interact with each other and the Advisors; (4) have a web-based system to report outcomes that could be used for analyses of MAP activities; and (5) invite, as appropriate, speakers who can bring added value to the issues of interest to the group.

- **Literature Citations.** During the meeting, Dr. Vanessa Gamble, one of the Advisors, provided the following references as a resource for PIs and training coordinators: (1) [Kevin Grumbach, et.al](#), Strategies for Improving the Diversity of the Health Professions, August 2003 (<http://www.calendow.org>); (2) Lessons Learned from the Health Profession Partnership Initiative, 1995-2005, Supplement to Academic Medicine, June 2006 which includes several articles analyzing, reviewing, and evaluating K-12 programs to increase diversity in the health professions; and (4) Barlow, A.E. and Villarejo, M., Making a Difference for Minorities: Evaluation of an Educational Enrichment Program. J. Res Sci Teach **41**: 861-881, 2004.
- **Training Challenge.** In recruiting trainees to the program, PIs will have to consider that science requires the highest level of skills so it is important that participants' interests be matched with their capabilities; if there is a gap, the programs must develop strategies to close it, such as tutoring, mentoring, etc.

NHGRI ACTION ITEMS

- Provide feed-back to all participants
- Have Director, NHGRI send a letter to all grantees commending them on progress, urging PIs to attend meetings, and discussing the need for improved assessments of program activities
- Remind PIs to update MAP Portal
- Reactivate the MAP ListServ
- Develop model evaluation instruments for the various activities
- Explore the design of an outcomes plan that will meet the goals and needs of the MAP program (NHGRI and grantees) that can be used to assess progress and to recommend refinements as needed for success
- Work with the Advisors to streamline the progress review form and a web-site to assess annual outcomes.
- Develop a method to count all URM in training even if not supported by training program. If appropriate, they should be encouraged to take advantage of the academic enhancement activities of the training programs.
- Set up a feed-back meeting between the Advisors and NHGRI Director.

MAP GRANTEE ACTION ITEMS

- Update NHGRI MAP Portal (<http://www.genome.gov/14514219>). Send update information to bettie_graham@nih.gov December 1, 2006.
- Network with other MAP grantees to share information about programs and students looking for opportunities.
- Share information about evaluation instruments.



National Human Genome Research Institute (NHGRI)

National Institutes of Health
Department of Health and Human Services

**Fourth Annual NHGRI Research Training Advisory Committee Meeting
With the Minority Action Plan (MAP) Grantees**

September 25-26, 2006

Los Angeles Athletic Club
Los Angeles, California

PARTICIPANT LIST

**Research Training Advisory
Committee**

Walter "Skip" Bollenbacher

Department of Biology
UNC, Chapel Hill
Chapel Hill, NC 27517
(919) 370-9425
skipbollenbacher@mac.com

Bronya Keats

Department of Genetics
Louisiana State University
Health Sciences Center
533 Bolivar Street
New Orleans, LA 70112
(504) 568-7932
bkeats@lsuhsc.edu

Gayle Slaughter

Baylor College of Medicine

MS-N215
One Baylor Plaza
Houston, TX 77041
(713) 798-6644
gayles@bcm.tmc.edu

Vanessa Northington Gamble

44-107 Bioethics Building
National Center for Bioethics
Tuskegee University
Tuskegee, AL 36088
(334) 724-4870
vngamble@earthlink.net

Kim J. Nickerson

College of Behavioral and Social
Sciences
University of Maryland
4121 Tydings Hall
College Park, MD 20742
(301) 405-7599
knickerson@bsos.umd.edu

Merna Villarejo

School of Education,
University of California, Davis
One Shields Avenue
Davis, CA 95616
(530) 756-2342
mrvillarejo@ucdavis.edu

Consultants

Julie Foertsch

Leading Edge Evaluation
901 High Street, Suite 2
University of Wisconsin
Madison, WI 53715
(608) 257-1310
foertsch@wisc.edu

Clifton A. Poodry

National Institute of General Medical
Sciences
National Institutes of Health
45 Center Drive, Room 2As.37
Bethesda, MD 20892
(301) 594-3900
poodryc@nigms.nih.gov

NHGRI Grantees

Centers of Excellence in Genomic Science

Roger Brent

Molecular Sciences Institute
2168 Shattuck Avenue, 2nd Floor
Berkeley, CA 94704
(510) 647-0690
brent@molsci.org

George M. Church

Harvard Medical School
New Research Building, Room 238
77 Avenue Louis Pasteur
Boston, MA 02115
(617) 432-7562
g1m1c1@receptor.med.harvard.edu

Ghia Euskirchen

Department of Molecular, Cellular and
Development Biology
Yale University
KBT Room 918
266 Whitney Avenue
New Haven, CT 06511
(203) 432-3510
ghia.euskirchen@yale.edu

Andrew P. Feinberg

Johns Hopkins University
School of Medicine
720 Rutland Avenue, Ross 1064
Baltimore, MD 21205
(410) 614-3489
afeinberg@jhu.edu

Steven Finkel

University of Southern California
MCB 201
Los Angeles, CA 90089-2910
(213) 821-1498
sfinkel@usc.edu

Scott Fraser

California Institute of Technology
MC 139-74
1200 East California Boulevard
Pasadena, CA 91125
(626) 395-2790
sefraser@caltech.edu

Jingyue Ju

Columbia University

Sean Megason

California Institute of Technology

Russ Berrie Medical Science Pavilion
1150 St. Nicholas Avenue, Room 402A
New York, NY 10032
(212) 851-5271
dj222@columbia.edu

Katherine Montero
Harvard Medical School
New Research Building, Room 232
77 Avenue Louis Pasteur
Boston, MA 02115
(617) 432-6515
kmontero@genetics.med.harvard.edu

Richard M. Myers (and T32)
Stanford University School of Medicine
Department of Genetics, M-344
Stanford, CA 94305-5120
(650) 725-9687
myers@shgc.stanford.edu

Lisa Peterson
University of Washington
Box 352180
Seattle, WA 98195
(206) 685-2593
lisapete@u.washington.edu

Leonore Reiser
Molecular Sciences Institute
2168 Shattuck Avenue, 2nd Floor
Berkeley, CA 94704
(510) 981-8738
lreiser@molsci.org

James John Russo
Columbia University
Russ Berrie Medical Science Pavilion
1150 St. Nicholas Avenue, Room 402A
New York, NY 10032
(212) 851-5271
Jjr4@columbia.edu

Beckman Institute MC 139-74
Pasadena, CA 91125
(626) 395-2863
megason@caltech.edu

Leonid L. Moroz
Department of Neuroscience
University of Florida
The Whitney Lab for Marine Bioscience
9505 Ocean Shore Boulevard
St. Augustine, FL 32080
(904) 461-4020
moroz@whitney.ufl.edu

Kenneth Nelson
Yale University
Department of Molecular, Cellular and
Developmental Biology, BT 725
P.O. Box 208103
New Haven, CT 06520-8103
(203) 432-5013
kenneth.nelson@yale.edu

Niles Pierce
California Institute of Technology
MC 114-96
Pasadena, CA 91125
(626) 395-8086
niles@caltech.edu

Seth Ruffins
California Institute of Technology
Beckman Institute MC 139-74
Pasadena, CA 91125
(626) 395-2026
sruffins@caltech.edu

M. Victoria Schneider
Johns Hopkins Medical Institute
McAuley Hall, Suite 400
5801 Smith Avenue
Baltimore, MD 21211
(410) 735-6219
vschneider@jhu.edu

Michael Snyder (and T32)

Professor of Molecular Biophysics and
Biochemistry
Yale University
219 Prospect Street, KBT 926
New Haven, CT 6520
(203) 432-6139
michael.snyder@yale.edu

Michael S. Waterman

University of Southern California
1050 Childs Way
Los Angeles, CA 90089-2910
(213) 704-2408
mshw@usc.edu

Production Sequencing Laboratories**Bruce Birren**

Broad Institute of MIT and Harvard
7 Cambridge Center
Cambridge, MA 02142
(617) 258-0913
bwb@broad.mit.edu

Lisa McDonald

J. Craig Venter Institute
9704 Medical Center Drive
Rockville, MD 20850
(240) 268-2794
lmcdonald@venterininstitute.org

Debra Murray

Human Genome Sequencing Center
Baylor College of Medicine
N1519
One Baylor Plaza
Houston, TX 77030
(713) 798-8083
ddm@bcm.tmc.edu

Dawayne Whittington

(Consultant to Washington University)
Strategic Evaluations, Inc.
5501 Woodberry Road
Durham, NC 27707
(919) 402-9584
dawayne.whittington@verizon.net

Delsa Sy Tan

Center of Excellence in Genomic Science
University of Southern California
1050 Childs Way, MCB 403C
Los Angeles, CA 90089-2910
(213) 740-7439
delsa@usc.edu

Lucinda L. Fulton

Genome Sequencing Center
Washington University
School of Medicine
4444 Forest Park Parkway
St. Louis, MO 63108
(314) 286-1460
lfulton@watson.wustl.edu

Mike A. Metzker

Human Genome Sequencing Center
Baylor College of Medicine
N1519
One Baylor Plaza
Houston, TX 77030
(713) 798-7565
mmetzker@bcm.edu

Cherilynn R. Shaddings

Genome Sequencing Center
Washington University
School of Medicine
4444 Forest Park Parkway
St. Louis, MO 63108
(314) 286-1800
cshaddin@watson.wustl.edu

Databases

LeManuel “Lee” Bitsoi

Harvard University
16 Divinity Avenue, Room 4093
Cambridge, MA 02138
(617) 496-7185
bitsoi@fas.harvard.edu

Phoenix Egelshadow

University of California, Santa Cruz
1156 High Street, CBSE
Santa Cruz, CA 95064
(831) 459-1702
phoenix@soe.ucsc.edu

Susan McClatchy

The Jackson Laboratory
600 Main Street
Bar Harbor, ME 04609
(207) 288-6431
smc@informatics.jax.org

Training Programs and Society for Advancement of Chicanos and Native Americans in Science (SACNAS)

Marina Bobadilla

SACNAS
P. O. Box 8526
Santa Cruz, CA 95061-8526
(207) 288-6431
marina@sacnas.org

Michael Boehnke

University of Michigan
1420 Washington Heights
Ann Arbor, MI 48109-2029
(734) 936-1001
boehnke@umich.edu

Michael Brent

Washington University
Campus Box 1045
One Brookings Drive
St. Louis, MO 63108
(314) 935-6621
brent@wustl.edu

Isaac Kohane

Countway Library
Harvard Medical School
10 Shattuck Street, Suite 514
Boston, MA 02115
(617) 432-2144
isaac_kohane@harvard.edu

Kenneth L. Lange

Department of Human Genetics
University of California, Los Angeles
695 Charles Young Drive South, Suite 5357A
Los Angeles, CA 90095-7088
(310) 206-8076
klange@ucla.edu

Joy Miller

Department of Human Genetics
University of California, Los Angeles
695 Charles Young Drive South,
Suite 5357A
Los Angeles, CA 90095-7088
(310) 206-0920
joymiller@mednet.ucla.edu

David C. Schwartz

Biotechnology Center, Room 5434
425 Henry Mall
University of Wisconsin, Madison
Madison, WI 53706
(608) 265-0546
dcschwartz@wisc.edu

Mona Singh

Department of Computer Science and
the Lewis Sigler Institute for
Integrative Genomics
Princeton University
244 Carl Icahn Laboratory
Princeton, NJ 08544
(609) 258-7059
mona@cs.princeton.edu

Willie J. Swanson

Department of Genome Sciences
University of Washington

Maria Elena Zavala

California State University, Northridge
18111 Nordhoff Avenue

HSC K340B
Box 357730
Seattle, WA 98195-7730
(206) 616-9702
wswanson@gs.washington.edu

Northridge, CA 91330
(818) 677-3342
mariaelena.zavala@csun.edu

NHGRI Staff

Francis S. Collins

National Human Genome Research Institute
National Institutes of Health
Building 31, Room 4B09
31 Center Drive
Bethesda, MD 20892-2152
(301) 594-7185
francisc@mail.nih.gov

Carla Easter

National Human Genome Research
Institute
National Institutes of Health
Building 2, room 4W13
2 Center Drive
Bethesda, MD 20892
(301) 594-1362
easterc@mail.nih.gov

Bettie J. Graham

National Human Genome Research Institute
National Institutes of Health
5635 Fishers Lane, Suite 4076
Bethesda, MD 20892-9305
(301) 496-7531
bettie_graham@nih.gov

Mark Guyer

National Human Genome Research
Institute
National Institutes of Health
5635 Fishers Lane, Suite 4076
Bethesda, MD 20892-9305
(301) 496-7531
guyerm@exchange.nih.gov

Michelle Hamlet

National Human Genome Research Institute
National Institutes of Health
Building 12A, Room 1039
12 South Drive
Bethesda, MD 20892-56130
(301) 451-3645
hamletm@mail.nih.gov

Anna Rossoshek

National Human Genome Research
Institute
National Institutes of Health
5635 Fishers Lane, Suite 4076
Bethesda, MD 20892-9305
(301) 451-8323
rossosheka@mail.nih.gov

Jeffrey A. Schloss

National Human Genome Research Institute

National Institutes of Health

5635 Fishers Lane, Suite 4076

Bethesda, MD 20892-9305

(301) 496-7531

schlossj@exchange.nih.gov

DRAFT

FOURTH ANNUAL MEETING
NHGRI RESEARCH TRAINING ADVISORY COMMITTEE MEETING WITH MAP GRANTEES
1:00 PM 25 SEPTEMBER 2006 to 1:00 PM 26 SEPTEMBER 2006
Los Angeles Athletic Club
421 West 7th Street
Los Angeles, CA

PURPOSE OF MEETING: (1) to provide information about the programs to Advisors who have a responsibility to advise the NHGRI on its research training activities; (2) to share program development, implementation and evaluation information among grantees; (3) to identify areas of programmatic concern and to discuss possible solutions; and (4) to discuss topics, issues, concerns, etc suggested by the participants, the Advisors or the staff.

AGENDA

25 September 2006 (Monday)

(Break at 4:00-4:20)

1:00 P.M. Welcome and Introductions

1:30 **Session #1: Update of Activities**

**Institutional Training Grants/SACNAS/
(Recruitment/Retention/Tracking)
(Format: 7 minutes presentation; 3 minutes discussion)**

- R. Myers at Stanford University
- L. Ungar at University of Pennsylvania
- M. Brent at Washington University
- S. Fields at University of Washington
- M. Boehnke at U. Michigan
- I. Kohane at Harvard University
- D. Rokhsar at University of California, Berkeley
- K. Lange at University of California, Los Angeles
- D. Schwartz at U. Wisconsin
- M. Snyder at Yale
- D. Botstein at Princeton
- M. Linton at SACNAS

Databases

(Format: 7 minutes presentation; 3 minutes discussion)

- W. Gelbart at Harvard University
- J. Eppig at The Jackson Laboratory

- P. Sternberg at Stanford (see CEGS)
- D. Haussler at UC, Santa Cruz
- P. Sternberg at California Institute of Technology (see CEGS)
- M. Westerfield at University of Oregon

Centers of Excellence in Genomic Sciences (CEGS)
(Format: 10 minutes presentation; 5 minutes discussion)

- D. Meldrum/M. Olson-University of Washington
- M. Waterman at U. Southern California

Presentation: Discovering Genomics: A Career Resource Tool
 Carla Easter, OD/NHGRI

6:30 p.m. Adjourn

26 September 2006 (Tuesday)

(Break from 10:00-10:20)

8:00 Informal Gathering for Coffee and Danish

8:30 **Session #1: Update of Activities (Participants)--Continued**

Centers of Excellence in Genomic Sciences (CEGS)--Continued
(Format: 10 minutes presentation; 5 minutes discussion)

- A. Feinberg at Johns Hopkins
- R. Brent at Molecular Sciences Institute
- J. Ju at Columbia U.
- Synder at Yale
- Talbot at Stanford (+ Cherry DB)
- G. Church at Harvard
- M. Bronner-Fraser at Cal Tech (+Sternberg DB)

Production Sequencing Laboratories

(Format: 10 minutes presentation; 5 minutes discussion)

- D. Smith at Agencourt
- R. Gibbs at Baylor
- E. Lander at Broad/MIT
- R. Strausberg at The J. Craig Venter Institute
- R. Wilson at Washington University

12:00

Session #2:

Strategies for Identifying/Recruiting/Retaining Special
Populations in Graduate Programs
Clif Poodry, Director, Division of Minority Opportunities in Research, NIGMS

12:30

Session #3 Open Discussion

Topics to be added by Participants

1:00

Wrap Up and Adjourn

