

GATEWAYS TO THE LABORATORY SUMMER PROGRAM

A unique summer program for under-represented minority college students who wish to pursue the combined MD-PhD degree.

Olaf S. Andersen, MD

Program Director

Ruth Gotian, MS

Administrative Director



AAMC/GREAT MD-PhD Section Annual Meeting

Keystone, CO

Friday, July 27, 2007

BACKGROUND

- Initiated as a means of increasing the pool of qualified underrepresented minority (URM) applicants to MD-PhD Programs.
- Program started with 4 students in 1993, and is now up to 15 students per year.



MD-PHD TRAINING

- The mission of MD-PhD programs is to educate and train physician-scientists, who can bridge the (widening) gap between clinical medicine and laboratory research, which is brought about by technological developments and specialization in both fields.

RESEARCH:

Basic Research
Disease-Oriented Research
Patient-Oriented Research
Population-Oriented Research

TEACHING:

Basic Science
Clinical Disciplines

CLINICAL MEDICINE



MD-PHD TRAINING

The mission of the physician-scientist is to promote better health and enhance the quality of life by reducing disability and death from disease.

In order to promote health, it is necessary to understand not only normal body function but also how, and why, disease develops.

How do our genes (and gene products) interact among each other and with the environment?



PROGRAM GOALS

- To prepare URM and disadvantaged college students for the challenges associated with applying to and successfully completing MD-PhD Programs.



PROGRAM OVERVIEW

- Freshman and sophomores only.
- 10 week program.
- On campus housing.
- \$4,300 stipend.
- Travel reimbursement.
- Focus on independent research with time allotted for clinical observations

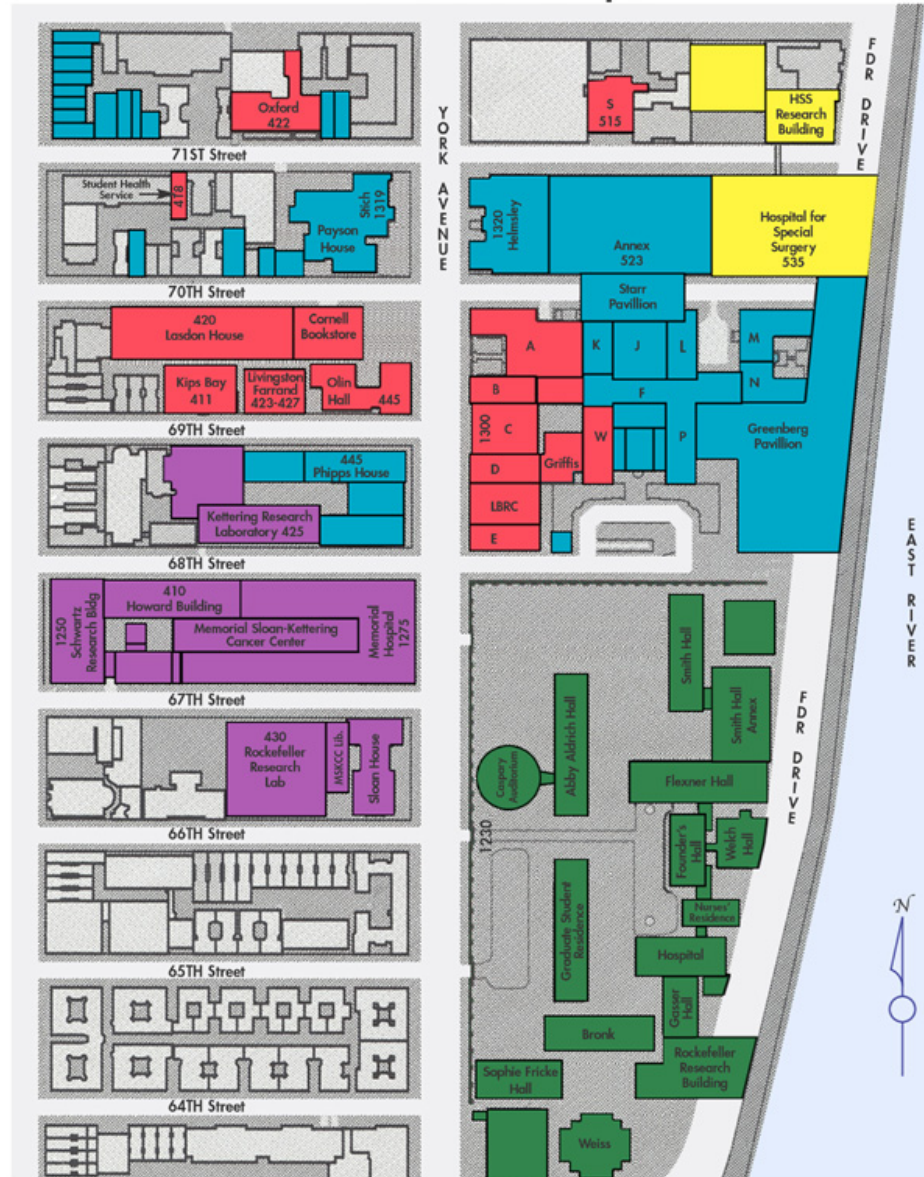


PROGRAM HIGHLIGHTS

- Independent research projects - *Weill Cornell Medical College, The Rockefeller University or the Sloan-Kettering Institute.*
- Weekly Journal Club
- Laboratory Techniques Workshop
- Clinical Skills Workshop
- Specialty Observations
- Gross Anatomy Lab—lecture and tour
- Final Presentations
 - Written paper;
 - Oral presentation;
 - Poster presentation.



Weill Cornell/Rockefeller/Sloan-Kettering Tri-Institutional Campus



- Weill Medical College
of Cornell University
- NewYork-Presbyterian
Hospital
- Memorial Sloan-
Kettering Cancer Center
- The Rockefeller
University
- Hospital for
Special Surgery



CAREER GUIDANCE

- Mock MCAT exam and strategy session.
- Writing a Scientific CV Workshop
- Interview Workshop
- Mock MD-PhD Interview
- *ABC's of applying to medical, graduate and MD-PhD Programs.*
- *How to present your research in an oral, written and poster format*
- *“Lessons Learned” A presentation by the Big Sibs and MD-PhD Program Alumni*



SOCIAL EVENTS

- New York Yankees Baseball Game
- Late Show with David Letterman
- Apollo Theatre
- Puerto Rican Day Parade
- New York Liberty Basketball Game
- BBQ
- Broadway Shows
- Dinners
- Much, much more!!



BIG BROTHER/BIG SISTER PROGRAM

- Each Gateways student is assigned a Big Brother/Sister who is a current MD-PhD student in our Program.
 - Serve as advisors;
 - Answer research and career related questions.
 - Organize educational, social and cultural events.



PARENTAL INVOLVEMENT

- Need to educate parents about the career options for MD-PhD's.
 - Continuous communication throughout the summer regarding planned Gateways activities.
- Invite parents to final presentations:
 - Stay in local hotel as our guest;
 - Complimentary airline ticket for one family member.



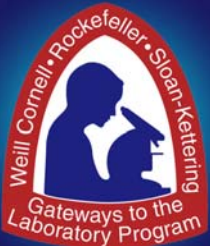
RESULTS

- Attendance and presentations at national conferences
 - SACNAS (*Society for the Advancement of Chicanos and Native Americans in Science*)
 - Nearly all of our Gateways students are selected for a poster presentation and several receive *Best Poster Awards*
 - The Leadership Alliance Symposium
 - MTRF (*Minority Trainee Research Forum*)
 - ABRCMS (*Annual Biomedical Research Conference for Minority Students*)



RESULTS, CONTINUED

- Research positions
 - Gateways students get top research positions upon their return to their undergraduate institution.
 - For following summers, Gateways students accepted into most competitive summer programs.
 - Gateways alumni may return to the Gateways Program for a second summer or they may enroll in the Gateways Honors Program at the NIH.



RESULTS, CONTINUED

- Alumni
 - 159 alumni (1993-2006)
 - 40.3% (52.9%) pursuing/pursued a MD degree (or MD-MPH or MD-MBA);
 - 8.8% (11.6%) pursuing a PhD degree;
 - 13.2% (17.3%) in/completed MD-PhD Programs;
 - 3.8% pursuing a post-baccalaureate research year;
 - 23.9% currently in college;
 - 5% pursuing other health related careers;
 - 3.1% pursuing other non-health related careers;
 - 5.7% unknown.



IDEAS FOR FUTURE SUCCESS

- Increase educational initiatives relating to the existence and importance of combined MD-PhD programs.
 - Fund additional summer programs to be run by MD-PhD Programs;
 - Promote attendance/presentations at national conferences.
 - Encourage parental involvement.



Questions??

