

Graduate Education Office Annual Report 2006/2007  
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A centralized and coordinated Office of Graduate Education was formed in late 2004 and Alison Hall PhD named as the first Director of Graduate Education at Case SOM. The GE office occupied newly renovated space in TG1 in Feb 2005 and is designed to support graduate programs and enhance postdoctoral training at the School of Medicine. This Office also oversees the Biomedical Sciences Training Program, the umbrella program for incoming laboratory-based PhD students at the SOM. The Office has several goals and functions. The Graduate Education Office participates in a comprehensive plan to provide access to outstanding educational programs in biomedical sciences. We work to increase high quality applicants to graduate programs, monitor program activities and student accomplishments, support training grant applications, increase program effectiveness, communicate between programs and administration, and assist with postdoctoral programs. In 2006 an NIH R25 grant led by Dr. Hall was earned to establish the new Case PREP program. Twenty-eight NIH T32 training grants support pre- or postdoctoral trainees in SOM programs. Over 400 PhD students are pursuing their studies in 13 PhD programs, along with over 200 Master's Degree students based at the School of Medicine. These activities are described below, and a number of more detailed reports have already been distributed.

**Graduate Research Training and Education.** A major function of the office is to oversee graduate training programs in biomedical sciences at the School of Medicine. These activities follow the "life cycle" of graduate training, from recruitment to admissions to performance and outcomes. The Office is directed by Dr. Alison Hall, and includes two half-time staff, Sarah O'Keeffe (Dept Assistant) and Pete Spanos (Web Coordinator; paid by PREP, below) as well as the BSTP office with full time staff Deborah Nouredine (Dept Assistant) with oversight from Dr. Martin Snider and assistance from Dr. Jim Bruzik. To coordinate graduate activities, the Office interacts with 1) the BSTP Admissions Committee and Graduate Program Directors of PhD programs at the SOM, 2) the Graduate Studies Office, with monthly meetings with Dean Charles Rozek and Graduate Studies staff, 3) CWRU central administration, including the Registrar, Research Showcase, PRI, innovation incentive, CCF, ORA, and 4) the School of Medicine leadership including the Dean, the Basic Science Chairs, the Research Office and the Vice Dean for Academic Affairs.



BSTP and Office of Graduate Education Staff  
(from left: Deborah Nouredine, Martin Snider, Alison Hall, Pete Spanos, Sarah O'Keeffe)

A. Graduate Recruitment. Recruiting top-notch young scientists requires visible excellence in our programs and the formation and maintenance of many personal relationships.

**Develop and maintain promotional materials.** The new Graduate Education website (<http://casemed.case.edu/gradprog/>) leads visitors to our programs and activities, as well as directing prospective students to graduate admissions. The web is the main portal to our graduate and postdoctoral programs nationwide and is maintained in a timely and interesting fashion. It also serves as an important repository of policies, forms, and resources for trainees. In 2007, the BSTP website (<http://www.case.edu/med/BSTP/>) was redesigned, and undergoes maintenance and new postings at least once a week. Tracking devices provide information about visitors. The online BSTP application continues in a separate database, and has been effectively adapted by two PhD programs to feed into the same system for student reporting on grants, and two additional programs will be approached this year.

**BSTP Brochures, PowerPoint presentations, campus visits and meetings.** Personal contact with potential students and their instructors continues to be important in recruiting, and new brochures, Case milestones, and PowerPoint presentations are developed and updated often for large mailings and for “use on the road.” Dr. Hall makes campus visits and arranges campus visits by other faculty to encourage college students to think of Case. For example, we arrange to have faculty speak at their undergraduate institutions, or in undergraduate programs in their disciplines. In addition, we regularly attend national meetings such as ABRCMS, SACNAS and AAMC-GREAT.

**Summer Research Internships.** Many undergraduates are interested in visiting Case as summer interns, and the Graduate Education directs undergraduates to these programs including SPUR, SURP, etc. Dr. Hall is particularly interested in recruiting minority students to these programs (see below).

**Case recruiting weekends.** The BSTP program brings prospective graduate students to campus over several weekends in the Spring. We designed a schedule of student interactions, five faculty interviews, student data blitz, and campus and affiliate facility activities. An exit survey identifies positive and negative aspects of this event among visitors.

**Matriculation in Graduate Programs.** The target size for each year in laboratory based programs is discussed annually with the Basic Science Chairs. New matriculants have their photo, name and institution posted on the kiosks, and are welcomed with a variety of activities in the Summer and Fall. Graduate student matriculation to our various programs was evaluated and reported to the Deans, Basic Science Chairs and training grant directors.

For the Fall 2007, the BSTP received 378 applications, of which 118 were TG eligible, and 17 were from minority applicants. We accepted 48 individuals (47 TG eligible, 7 minority), and of the 22 matriculants for Fall 2007, three are minorities. While Case continues to enjoy sufficient numbers of good quality applicants to support our programs or expand admissions, sustainable mechanisms for financial support of graduate programs remains a challenge, and requires ongoing study. Focused recruiting has brought in new matriculants, and will be directed to additional institutions.

**B. Graduate Trainee Performance, training grant data.** Until the formation of the Graduate Education Office, the PhD programs based at the School of Medicine evolved independently without coordination or discussion of common values, eventually resulting in variable programs, as well as information disseminated only at the program level. Graduate Program Directors from each program now attend monthly meetings to discuss student progress, faculty engagement, and program performance (minutes are available). Early objectives were to identify common publication guidelines for PhD students, goals for time to degree and common PhD trainer requirements. In addition, a stipend bonus for PhD students who garnered substantial stipend support from extramural fellowships was approved. The GE Office periodically compares the BSTP stipend to NRSA stipend, to the top 25 US News medical school graduate stipends and to the cost of living index to support timely stipend increases.

**Resource development.** Institutional rankings, training grant participation, grantwriting materials etc have been placed on the Graduate Education website. An early goal was to create a common, web-based, password protected graduate student database that includes all graduate trainees at the SOM, to include information about student qualifications and achievements throughout their training. This effort would standardize record-keeping and facilitate training grant reporting among programs. This project was deferred in 2006 due to budgetary constraints, but information was instead gathered in large Excel files that continue to be updated. Periodic trainee reports and comparisons are placed on the password protected portion of the website.

**Training Grant Support.** The GE Office has generated files on more than the last 10 years of PhD earners in our programs, with outcome information, for training grant preparation. Tables on applicants and matriculants among the BSTP are prepared annually. The faculty listed as trainers on each training grant are collated. The GE Office prepares a review of first-author publications by graduate students annually, and provides publications per PhD graduate in each program, the number of students and graduates, as well as time to degree information that are useful for program evaluation and training grant preparation. Much of this information is provided to Chairs and Directors during the year, and report assistance for training grant preparation is available.



Hui Zhu in the Department of Genetics was selected as a 2007 recipient of the prestigious Harold M. Weintraub Graduate Student Award. The highly selective award recognizes outstanding achievement during graduate studies in the biological sciences.

Graduate students continue to be outstanding creative contributors to our research programs. A list of publications in which a current or graduating student was a author was distributed in 2006 to reflect the range of accomplishments among our trainees.

C. Graduate Program Evolution and Periodic Review. Graduate programs are encouraged to revitalize programs over time. Graduate Programs require periodic review, and several programs underwent or are in the process of review, including Physiology and Biophysics, Anatomy and Epidemiology/Biostatistics. An additional program voluntarily suspended PhD matriculation to allow for Program restructuring.

The GE Office assisted in the formation of the MD/MS Biomedical Investigation that engages many medical students in a Master's degree in multiple tracks. The new PhD in Molecular Medicine, based in the Lerner Research Institute at CCF was approved by the Ohio Regents in September 2006, and matriculated it's first class of ten students in Fall 2007, and the GE Office was intimately involved in shepherding this process along.

The Graduate Education Office assists in graduate program materials, and serves as the medical school resource for course action forms, completion of the Graduate Bulletin, the NRC and NSF surveys. Current development of additional responsible conduct coursework is underway to comply with NIH training grant initiatives.

Sustainable financial mechanisms to support graduate programs and training are needed to keep Case SOM programs strong. It remains crucial to support continuing and new training grants. In addition, support from the School of Medicine, Graduate Studies and other sources is needed to stabilize these programs.

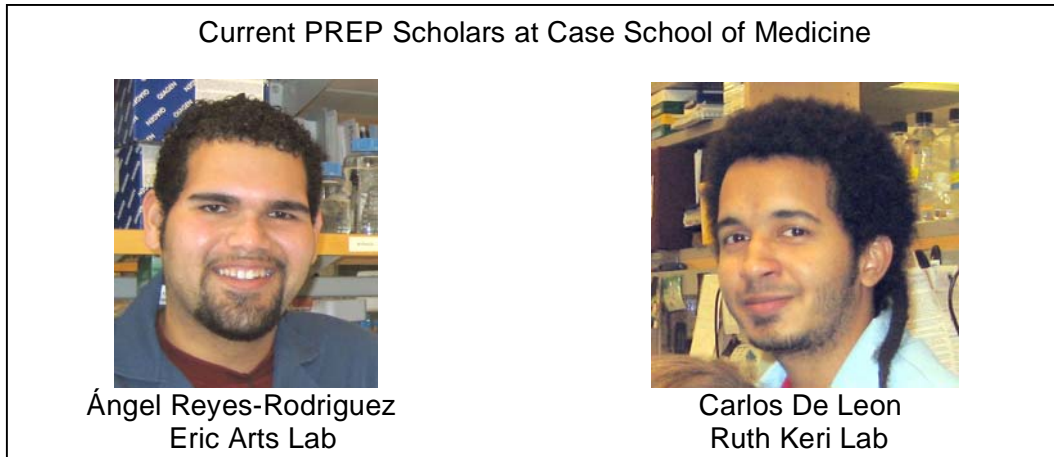
D. Diversity Activities. We utilize a comprehensive minority recruitment plan that includes publicizing the programs, targeting selected institutions and students, and working within established recruiting relationships between Case and undergraduate institutions nationwide. Many of these efforts rely upon coordinated efforts by Dr. Hall and Joseph Williams, Director of Multicultural Office in Student Affairs at the SOM.

**Summer Undergraduate Research Internships.** Short-term research training for minority students has been a long commitment by the SOM, and is currently supported in part by a NIH T35 (Claire Doerschuk, PI) as well as SPUR, ACES and other programs. These programs provide stipend support minority student research experiences (please see <http://mediswww.meds.cwru.edu/gradprog/undergraduateprograms.html>). For Summer 2007, we placed sixteen minority undergraduates in SOM labs from an applicant pool of 74 academically strong candidates.

**High School Internships.** The Scientific Enrichment & Opportunity Program directed by Dr. Nathan Berger provides 15 talented, mostly minority public high school students in the Cleveland area with a summer research experience in active biomedical laboratories.

**Postbaccalaureate Program.** In 2006, Case began the Postdoctoral Research Education Program (PREP) to prepare recent minority college graduates for graduate school and the professoriate. This program supports Scholars to work up to two years in laboratories and complete coursework and professional development programs to be

more competitive for graduate school entry and success, and is supported by an NIH R25 Hall, PI; please see <http://gradresed.meds.cwru.edu/prep/>). Development of this new program required substantial efforts in website design, and development of novel online tools for review and evaluation. Limited support is available for a PREP administrator (Pete Spanos), PREP coordinator (Joseph Williams) and PREP evaluator (Dr. Elaine Borawski).

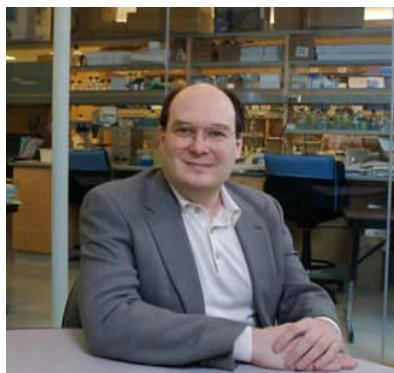


**Graduate Matriculation.** The BSTP common portal to Case graduate programs at the SOM has had reasonable success in *matriculating* minority students into our PhD programs over the last five years, and we take particular pride that in recent years, many of these students originally visited as summer interns.

**Minority Graduate Student Organization.** The MGSO provides longitudinal experiences for minority PhD students and is co-sponsored by Multicultural Affairs and Graduate Education at the SOM (please see [casemed.case.edu/gradprog](http://casemed.case.edu/gradprog)). The Minority Graduate Student Organization (MGSO) holds monthly meetings at which issues of common interest are discussed, students present their research, and minority faculty discuss their career experiences.

E. Postdoctoral Trainees. The Graduate Education Office works with the Office of Postdoctoral Affairs led by Rachel Begley to develop and implement policies that affect trainees. The Graduate Education Office, through support of Dr. Carole Liedtke hosts monthly Postdoctoral Mentoring Sessions and periodic workshops on grantwriting (<http://casemed.case.edu/gradprog/mentoring.html>). Dr. Hall has presented numerous grantwriting discussions for graduate students and postdocs (Genetics, Dermatology, MSTP). Professional skill development materials are posted online, and teaching options are made available to trainees who seek this career outcome.

The Graduate Education Office reviews postdoctoral compensation annually among the various appointment categories. In January 2007, programs at the School of Medicine enjoyed 62 postdoctoral fellows, 54 postdoctoral scholars, 234 research associates (staff), and 70 senior research associates (staff). In each category, approximately 40% were female. Good progress has been made in complying with salary guidelines and limited postdoctoral training periods.



Dr. Jonathan Karn, Reinberger Professor of Molecular Biology and Chairman of Molecular Biology and Microbiology, was selected for the 2006 Outstanding Mentor Award by the Postdoctoral Researchers Association at Case.

F. Budget for Graduate Education Office. The Graduate Education Office including the BSTP supports the equivalent of one and a half full time assistants, and provides salary supplements to four faculty for their activities. Additional office expenses and recruiting support bring the total direct budget to \$280,000 per year. The PREP program supported from an NIH grant additionally supports a half-time assistant, partial salary support for two faculty and an administrator and the stipends for five Scholars and additional activities, with a total direct budget of \$240,000 per year.