

Message from Roger Chalkley

**ROGER CHALKLEY, D. PHIL.,
SENIOR ASSOCIATE DEAN**

There is such a lot going on that I will allude to a number of things amplified in this the second edition of the BRET Newsletter, and then mention several key items that we will expand upon in a later edition. In this edition you will find information on the implementation of ongoing changes in the IGP. I particularly want to welcome Tony Weil as the new Curriculum Director. We also have a lot of information on success in applying for individual fellowship awards and how we can help individuals write such applications. We also announce the upcoming Postdoc recruiting event in March. Everyone is encouraged to participate and I hope you will.

In other news, we are proud to announce that the Medical School as a whole has now graduated 50 PhDs from Under-Represented (UR) students. The definition of UR students has also been broadened by the NIH to include physically challenged students as well as students from low socioeconomic backgrounds. Talking of the NIH, they have just dramatically revised the requirements for RCR training. This is going to impact us all. Much of what we have done in recent years is still working for us, there is no doubt that we will have to do quite a bit more!

Message from Jim Patton: IGP News

I am pleased to announce that Tony Weil has accepted our offer to become the IGP Curriculum Director. Tony will chair a new Curriculum Committee designed to make changes in the first year curriculum consistent with the goals and concerns developed over a year long internal and external review process. A second component of that process is that a new IGP Steering Committee has been formed with representation from all the participating IGP departments and programs.

The IGP Admissions Committee has begun reviewing files for the upcoming recruiting season. Nine weekends are currently set to bring in approximately 170 students to interview. Please see page 8 for interview dates to mark your calendars.

New this year, we instituted literature *Continued on page 2...*

**FOCUS OF
NEXT ISSUE :**

◆ Postdoctoral Fellows

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IGP News

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discussion sections called FOCUS sessions. A faculty member, senior graduate student, and post-doctoral fellow served as leaders for groups of 9-10 first year students. FOCUS has been remarkably successful in teaching students how to critically evaluate the literature, an important skill for beginning scientists. FOCUS sessions will continue for 6 weeks in the Spring but the faculty leaders will step aside, providing a unique teaching opportunity for a select group of senior grad students and postdocs.

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IGP Committee Members:

Dept. / Program	Steering Committee	Curriculum Committee	Admissions Committee
Biochemistry	David Cortez *	Richard Armstrong	Kevin Schuy
Biological Sciences	Andrzej Krezel	Todd Graham	Brandt Eichman
Cancer Biology	Jin Chen	Alissa Weaver	Charles Lin
Cell & Devel. Biology	Kathy Gould	Ethan Lee	Matt Tyska
Human Genetics	Scott Williams	David Samuels	Ela Knapik
Micro. & Immunol.	Chris Aiken	Earl Ruley	Sebastian Joyce
Mol. Phys. & Biophys.	Danny Winder	Tony Weil*	Alyssa Hasty
Neuroscience	Doug McMahon	Bruce Carter	BethAnn McLaughlin
Pathology	Sarki Abdulkadir	Andries Zijlstra	Bill Valentine
Pharmacology	Joey Barnett	Alan Brash	Seva Gurevich
	Susan Wente *		Jim Patton *
			Michelle Grundy
			Roger Chakley
			Bharati Mehrotra

*=Chair / Co-Chair

NIH Funding Options for Students & Postdocs

Training grants: A major method of funding the initial training of graduate students and postdoctoral fellows is through training grants. In fiscal year 2008, Vanderbilt had 41 training grants that funded 156 students and 114 postdocs. So training grants are an important part of the funding mix, and the BRET office plays a substantial role in putting applications together. After one to two years on a training grant, many students and postdocs apply to the NIH and other organizations for individual fellowships. The BRET office can help with the expanding interest from students and postdocs in applying for fellowships.

Individual NRSA Fellowships: Over the past three years, Vanderbilt students and postdocs have enjoyed funding success rates **above the national average** for NIH individual NRSA fellowships (F30, F31, F32). Vanderbilt applications for F30 fellowships have an average 50% success rate (national average is 44%), and applications for F31 fellowships have an average 41% success rate (national average is 31%). Vanderbilt postdoctoral fellows applying for F32 awards have an average success rate of 42% (national average is 28%). For advice on applying for an NRSA fellowship, click [here](#).

NIH Predoctoral Fellowships:

The NIH awards the F30 and F31 Ruth L Kirschstein National Research Service Award (NRSA) to individual predoctoral students. The NIH awards different types of individual predoctoral NRSA awards:

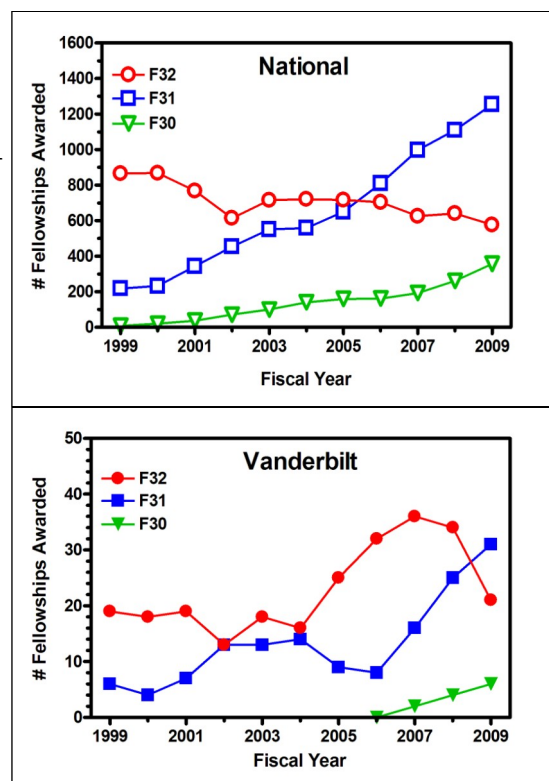
- o **NRSAs to promote diversity in health-related research (F31).** Eligible students include those that are members of underrepresented groups. These awards are funded by the following institutes: NCI, NEI, NHLBI, NHGRI, NIA, NIAAA, NIAID, NIAMS, NIBIB, NICHD, NIDCD, NIDCR, NIDDK, NIDA, NIEHS, NIGMS, NIMH, NINDS, NINR, NCCAM, NCRR, and ODS. (For more information, click on the program announcement: [PA-09-209.](#))
- o **NRSAs to students performing dissertation research in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers (F31).** The following institutes fund all types of F31 NRSA awards: NIA, NIAAA, NIDCD, NIDCR, NIDA, NIMH, NINDS, NCCAM, and ODS. (For more information, click on the program announcement: [PA-09-208.](#))
- o **NRSAs for individual predoctoral MD/PhD or other dual doctoral degree students (F30).** The following institutes fund F30 NRSA awards: NHLBI, NIA, NIAAA, NIDCD, NIDCR, NIDDK, NIDA, NIEHS, NIMH, NINDS, ODS. (For more information, click on the program announcement: [PA-09-207,](#) [PA-09-232.](#))

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Individual NIH Fellowship Trends

National: The number of predoctoral NRSA fellowships (F30 & F31) awarded nationally by the NIH has increased dramatically since 1999. In contrast, the number of postdoctoral NRSA fellowships (F32) has declined by 33% since 1999.

Vanderbilt: The number of F30 & F31 fellowships awarded to Vanderbilt graduate students has increased since 2006, closely mirroring the national trend. In contrast, the number of F32 fellowships awarded to Vanderbilt postdoctoral fellows was relatively unchanged from 1999-2004, then dramatically increased to a highpoint in 2007. The decrease in 2009 is largely due to a decrease in submitted applications.



Summary of Current Individual Awards: Vanderbilt Students & Postdoctoral Fellows

Below is a summary of the different types of awards currently held by Vanderbilt graduate students and postdoctoral fellows. For a detailed list of all student awards, [click here](#). For a detailed list of all postdoctoral fellow awards, [click here](#).

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Student Awards	Total #	# Continuing	# New
F30 NRSA awards (NIH)	8	5	3
F31 NRSA awards (NIH)	33	18	15
American Heart Association Fellowship	12	6	6
AAAS Graduate Scholars Grant	1	1	0
Department of Defense Fellowship	1	1	0
Total Student Awards	55	31	24

FOR A DETAILED
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HERE](#).”

Postdoctoral Fellow Awards	Total #	# Continuing	# New
F32 NRSA awards (NIH)	30	24	6
K99 Award (NIH)	5	0	5
American Heart Association Fellowship	9	9	0
American Cancer Society Fellowship	2	1	1
Department of Defense Fellowship	6	4	2
Juvenile Diabetes Res. Fdn. Fellowship	2	0	2
PhRMA Fellowship	2	2	0
K01 Research Scientist Development Award (NIH)	1	0	1
R03 Small Research Grant (NIH)	1	0	1
Cancer Research Institute Fellowship	1	1	0
Canadian Assn. of Med. Oncologists Fellowship	1	1	0
Children’s Brain Tumor Fdn. Fellowship	1	1	0
Crohn’s & Colitis Fdn. of America Fellowship	1	0	1
Hope Street Kids	1	1	0
Muscular Dystrophy Assn. Fellowship	1	0	1
Orthopaedic Trauma Assn. Fellowship	1	1	0
Soc. of Nuclear Medicine Research Fellowship	1	1	0
UNCF-Merck Fellowship	1	1	0
Total Postdoctoral Fellow Awards	68	47	21

Early Outcomes of the National NIH K99/R00 Program

Brief program description

In November 2006, the NIH began the Pathway to Independence Award program (K99/R00). The award consists of two phases: (1) one to two years of mentored postdoctoral research (K99 phase) and (2) up to three years of independent research support when the awardee obtains a faculty position (R00 phase). Applicants must have less than 5 years of postdoctoral research training experience at the time of application or resubmission ([click here](#) for more details).

National K99 program outcomes

As of June 2009, 453 K99 grants have been awarded nationwide. Of the K99 awardees:

- >98% stayed at the same institution at which they were already training.
- 85% requested two years of K99 phase funding.
- 35% had prior postdoctoral NRSA support.
- 20% were for human subjects research.
- 4% ended without a transition to R00.

Fiscal Year	# Reviewed Applications	# New Awards	K99 Success Rate (%)
2007	893	183	20.5%
2008	795	180	22.6%
2009	n/a	n/a	n/a
Total	1689	364	21.6%

National R00 program outcomes

As of June 2009, 120 K99 awardees have transitioned to the R00 phase. Of this group:

- 20% stayed at their K99 institution for the R00 phase.
- 73% transitioned to the R00 phase prior to the end of the originally requested K99 project period.

Source: "Update on New Investigators" by Jeremy M. Berg (Director, NIGMS), Advisory Committee to the Director, 6/4/09. Click on the following for [Presentation](#) and [Summary](#).

Early Outcomes of Vanderbilt K99/R00 Awardees

As of November 2009, 14 individuals at Vanderbilt had been awarded a K99. Vanderbilt postdoctoral fellows have an average success rate of 37% in applying for K99 awards, while the national average rate is 21.6%.

Continued on page 5...

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Early Outcomes of Vanderbilt K99/R00 Awardees

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Vanderbilt K99 recipient outcomes

- 12 stayed at Vanderbilt for the K99 portion of the award
- 2 had prior NRSA support
- 6 have converted to the R00 phase (1 stayed at Vanderbilt for the R00 phase)

Fiscal Year	# Reviewed Applications	# New Awards	K99 Success Rate (%)	# Converted to R00
2007	10	4	33%	4
2008	13	4	31%	1
2009	15	6	40%	1
Total	38	14	37%	6

FIND Grants: Development for Biomedical Research

As part of Medical Center Development and Alumni Relations, Development for Biomedical Research seeks to find and utilize both established and untapped sources of non-federal funding for Vanderbilt University Medical Center faculty members and trainees. This program serves as the matchmaker between Vanderbilt scientists and various grant-making foundations by establishing and stewarding relationships with foundations whose funding interests best fit the academic aims of the individual scientists and research groups.

In order to promote our mission of matching researchers with foundation funding, we have invested resources to establish and maintain a searchable database of available grants called the **Foundation INitiatives Database** or [FIND Grants](#). Once you have identified potential funders for your research, you can contact us to help you tailor your application to the specific mission of the foundation you have in mind.

Please contact [Julie Y. Koh](#), Ph.D., director of Development for Biomedical Research, or [Ashley E. Brady](#), Ph.D., associate director, to discuss your funding interests.



JULIE KOH, PH.D.



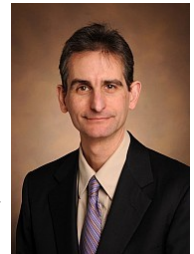
ASHLEY BRADY, PH.D.

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Announcement: HHMI / VUMC Certificate Program in Molecular Medicine (CPMM)

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The complex nature of human disease and the advances in biomedical research increasingly require investigators with rigorous training in basic science, knowledge of clinical medicine, and the background for interacting effectively with clinicians. The new HHMI/VUMC Certificate in Molecular Medicine program (CPMM) will train a new generation of Ph.D. biomedical researchers with the skills necessary for understanding and developing breakthroughs in clinical research fields.



LOU MUGLIA, M.D., PH.D.,
CPMM DIRECTOR

The CPMM offers flexibility for each student to pursue training that integrates thesis work with important clinical, disease-based areas. A supervised experience with a clinical mentor and basic science mentor along with relevant didactic and experiential courses, seminars and individual experiences will culminate in the conferral of the Certificate in Molecular Medicine. The program is funded through the Howard Hughes Medical Institute and provides partial stipend support for participating students. For more information on the CPMM, click [here](#).

Announcement: Vanderbilt Scientist-Educator Program

The Vanderbilt Scientist-Educator Program is a three-year fellowship, aims to develop both the basic science research skills and the pedagogical expertise of postdoctoral fellows in medical gross anatomy or medical neurosciences. Applicants must hold a Ph.D. or equivalent doctoral degree in the life or physical sciences and preference will be given to applicants who are seeking their first postdoctoral position. Experience in gross anatomy or medical neurosciences is not necessary. All application materials are due Friday, January 22, 2010. Interviews will be held in May 2010 and fellowship positions will begin between April-October, 2010. **Those with current Vanderbilt affiliations are encouraged to apply.** For full details and application guidelines, click [here](#).

Announcement: Statistics for Biomedical Research (IGP 304)

IGP 304 is designed especially for basic biomedical, translational, and clinical research. Frank Harrell, Chairman of the Biostatistics Department, is updating the course, which will be offered again in the spring semester. To find current information about the course (including a syllabus, handouts, and other information) click [here](#). Dr. Harrell would appreciate input from faculty and potential students about the course content and format. Suggestions for particular experimental designs and data analysis methods to cover are sought, as are suggestions for interactive student involvement. To send suggestions about the course to Frank Harrell, click [here](#).

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TRAINING

BRET WEBSITE:

[HTTP://BRET.MC.VANDERBILT.EDU/BRET/](http://bret.mc.vanderbilt.edu/bret/)

Announcement: VUMC Postdoctoral Poster Symposium & Recruiting Event

Are you a faculty member who wants to recruit a new postdoc to your lab?

The First VUMC Postdoctoral Poster Symposium and Recruiting Event is a two-and-a-half-day event held at VUMC on **March 7-10, 2010**. Up to 25 prospective postdoctoral candidates will visit Vanderbilt to interview with faculty and present their graduate research alongside current postdoctoral fellows at the Annual Postdoctoral Research and Shared Resources Symposium.

To be eligible to present their research at the symposium, prospective postdocs must be nominated by their dissertation advisor, department chair, or dean. A committee of Vanderbilt faculty will review the nominees and select up to 25 promising, training grant-eligible candidates to visit Vanderbilt. Hotel and airfare expenses will be paid by VUMC for those candidates who are selected to attend.

All faculty members interested in recruiting a postdoc through this event are asked to please hold time on your calendar during these days so that you can interview candidates, attend their research talks and posters, and host them for dinner*. The CVs of candidates attending the event will be available closer to the event, after the nomination and application process concludes. For more details, [click here](#).

Upcoming Events for Spring, 2010

- **Jan 6:** Dean Balser Town Hall Meeting, Findings of the Task Force on Graduate Education (208 LH)
- **Jan. 8 & Feb. 5:** MSTP Interviews
- **January 12:** BRET English Class starts (taught by the TN Foreign Language Institute)
- **Jan. 13:** Dean Balser Town Hall Meeting with Students & Postdocs (208 LH)
- **Jan 15, 22, 29, Feb. 5, 12, 26, Mar. 5, 12, 26:** IGP & CPB Interviews
- **March 7-10:** School of Medicine Postdoctoral Fellow Recruiting days
- **March 18-21:** MSTP Second Visit Weekend
- **March 24:** Transitioning to Faculty Part 1: "Setting up a Laboratory"
- **April 27:** Transitioning to Faculty Part 2: "Achieving Tenure"
- **June 15 & 16:** Scientific Writing Workshops



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