

# **CALL FOR APPLICANTS**

## **Dana-Farber Cancer Institute**

### **Center of Excellence in Genomic Science**

#### **“Bridges to Graduate School” Post-Baccalaureate Program**

The Dana-Farber Cancer Institute-*NIH Center of Excellence in Genomic Science (CEGS)*, funded by the *National Human Genome Research Institute (NHGRI)*, provides interdisciplinary research and training opportunities for students from underrepresented minority groups as part of our *Minority Action Plan*.

**Overview:** Our “*Bridges to Graduate School*” (*BGS*) *Post-Baccalaureate Program* is a two-year scientifically diversified training opportunity for recent college graduates and post-baccalaureate students who are preparing to apply to graduate programs in genomics or a related field. Our CEGS encompasses a collaboration of eight basic and clinical research groups from the Dana-Farber Cancer Institute, Harvard Medical School, Brigham and Women’s Hospital and Northeastern University.

This CEGS will examine the effects of genetic and environmental perturbations on human cellular networks using protein-protein interaction mapping, proteomic analysis, and transcriptional profiling. Our central hypothesis is that both human genetic variations and pathogens such as viruses induce “disease states” by influencing local and global properties of cellular networks. Our overall goal in this proposal is to develop strategies to test this network hypothesis to probe the structure and dynamics of disease-related networks in response to exogenous perturbations. The knowledge gained will be used to develop better models to interpret genome-wide genetic variations in the context of human disease.

**Program Description:** It is now widely accepted that the traditional approach of “one gene at-a-time” in biology should be combined with genomic approaches and more integrative, systems biology approaches. Our BGS Program will provide a rich, unique and rewarding training environment to introduce participants to this new and rapidly evolving field of biological research. Each of the participants will be rigorously exposed to an interdisciplinary set of skills and scientific disciplines. While any one trainee may choose an experimentalist approach or a computational and integrative systems approach, all trainees will participate in and be exposed to the full range of technologies, concepts and disciplines employed in this CEGS.

Under the guidance of CEGS scientists, BGS trainees will participate in a 2-year research program in the fields of functional genomics and systems biology. Program participants will access multiple research environments and gain experience in the following research areas: proteomics, gene expression analysis, protein interaction mapping, bioinformatics, computational biology and laboratory automation. At the end of the two-year internship, BGS students will be expected to enroll in competitive graduate schools with the goal of developing a career in the genomic sciences.

**Program Benefits:** Competitive salary including benefits; Tuition Reimbursement; Scientific and Professional Development Seminars; GRE preparation

**Eligibility:** Applicants must **(A)** be a US citizen or permanent resident; **(B)** be a member of an underrepresented minority group in genomic science (*African-American, Hispanic, Native American, or Alaskan Native, Pacific Islander*); **(C)** obtained a BS/BA within the past year; **(D)** have a competitive academic record; **(E)** Significant research experience (honors thesis or summer research); **(F)** Able to make a two year commitment to the program

**Application:** Application packets must include **(A)** official copies of academic transcripts for all college and post-baccalaureate work completed; **(B)** two letters of recommendation; **(C)** 800 to 900 word essay; **(D)** a résumé.

### **Questions?**

For further information or questions, please contact Karen Burns White by email at:  
[karen\\_burnswite@dfci.harvard.edu](mailto:karen_burnswite@dfci.harvard.edu)

# Dana-Farber Cancer Institute Center of Excellence in Genomic Science Post-Baccalaureate Program

*NOTE: Only U.S. citizens and permanent residents who have completed their undergraduate studies and fall within the federally-designated minority classifications indicated below are eligible to apply for this Post-Bacc Program. All information requested below is required and is subject to verification.*

**Submit to:**  
Karen Burns White  
Deputy Associate Director  
Dana-Farber/Harvard Cancer Center  
44 Binney Street, BP322A  
Boston, MA 02115-6084  
karen\_burnswhite@dfci.harvard.edu

**Have you applied to our program before? Yes \_\_\_\_\_ No \_\_\_\_\_ (check one)**  
If "Yes", in what year? \_\_\_\_\_

**Name:** \_\_\_\_\_  
Last First Middle

**Permanent Mailing Address:**

**Line 1:** \_\_\_\_\_  
Street Apt. #

**Line 2:** \_\_\_\_\_  
City State Zip

**Phone:** ( ) \_\_\_\_\_ **E-Mail:** \_\_\_\_\_

<b>Date of Birth:</b> _____ MM/DD/YYYY	<b>Are you a U.S. citizen? Yes _____ No _____ (check one)</b> If "Yes", indicate your <i>Social Security Number</i> _____ If "No", are you a permanent resident? Yes _____ No _____ (check one) If you are a permanent resident, indicate your ID# _____
<b>Gender: Male _____ Female _____</b> (check one)	

**Minority Status:** For qualifying purposes, please indicate the minority group(s) in which you would classify yourself: (check at least one)  
African American \_\_\_\_\_ Latin American \_\_\_\_\_ Native American \_\_\_\_\_  
Alaskan Native \_\_\_\_\_ Pacific Islander \_\_\_\_\_

**College/University:** In the space provided, please indicate the Department and School with which you are affiliated.  
*NOTE: Applicants must submit an official, stamped copy of all college-level academic transcripts.*

_____ Major	_____ Department	_____ Institution
_____ Major	_____ Department	_____ Institution
_____ Major	_____ Department	_____ Institution

**Cumulative GPA:** \_\_\_\_\_ **Credits Completed\*:** \_\_\_\_\_

**Related Coursework:** In the space provided, list the *Title, Grade* and *Credit Hours* of the science/related coursework you have completed to date. (Attach a separate sheet if necessary.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Recommendations:** In the space provided, indicate the *Name, Title,* and *Institution* of each recommender.  
*NOTE: All recommendations should be submitted in sealed, signed envelopes on department letterhead.*

_____ Name	_____ Title	_____ Institution
_____ Name	_____ Title	_____ Institution

**Essay:** In 800-900 words, describe your academic and professional interests, your reason for applying to this CEGS program and the way(s) in which this experience will help you meet your long- and short-term professional goals.

**Additional Documents:** A copy of your résumé must be included in this application packet.

*I hereby certify that all the information I have provided, on both the master application and its corresponding attachments, is true and correct to the best of my knowledge. I understand that any form of misrepresentation may be considered just cause for being removed from consideration for this position.*

\_\_\_\_\_  
Name Date

**Dana-Farber Cancer Institute**  
**Center of Excellence in Genomic Science**  
**“Bridges to Graduate School” Post-Baccalaureate Program**  
**Letter of Reference**

***To the Applicant:***

This letter of reference is to be used solely to support your application for admission to the DFCI CEGS “Bridges to Graduate School” Post-Baccalaureate Program. It will not be returned or forwarded to any other college, university, or place of business.

*Please type or print your name, address and the name of the person who will be writing your letter of reference.*

**Applicant Name:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

\_\_\_\_\_

**School:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Major:** \_\_\_\_\_ **Minor:** \_\_\_\_\_

*(if applicable)*

***To the Recommender:***

The above-referenced person is applying to a summer internship program at the Center for Excellence in Genomic Science at Dana-Farber Cancer Institute. Please comment on the academic and/or professional traits that qualify the applicant to pursue an internship in this intensive, highly competitive graduate training program. Please return this form and your letter of recommendation to the applicant in a sealed, signed envelope which the applicant will submit (unopened) as part of his/her application packet.

*Please complete your recommendation letter on your official departmental letterhead and attach to this form.*

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Institution:** \_\_\_\_\_

**Year you met the applicant:** \_\_\_\_\_

**Course/Project through which you met the applicant:** \_\_\_\_\_

**E-Mail:** \_\_\_\_\_

**Phone:** (\_\_\_\_) \_\_\_\_\_ **Office Hours:** \_\_\_\_\_

**Submit to:**

Karen Burns White  
Deputy Associate Director  
Dana-Farber/Harvard Cancer Center  
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