

10<sup>th</sup> ANNUAL DEPARTMENT OF PATHOLOGY YOUNG INVESTIGATORS' DAY  
POSTER SESSION

POSTER #

28

(for Admin. use)

Thursday, April 17<sup>th</sup>, 2008  
TURNER CONCOURSE  
REGISTRATION FORM

Applicant's Name: \_\_\_\_\_ Julie Karp \_\_\_\_\_ Degree: MD  
Applicant's Division: \_\_\_\_\_ Pathology \_\_\_\_\_

Faculty Preceptor: \_\_\_\_\_ Karen King \_\_\_\_\_  
(Must hold a primary appointment in Pathology)

Appointment Category:  House Staff  Clin Fellow  Research Fellow  
 Medical Student  Graduate Student (Program: \_\_\_\_\_)

Register for:  Clinical Research  Translational Research  Basic Research

Full Poster Title \* \_\_\_\_\_ International Variation in Volunteer Whole Blood Donor Eligibility  
Criteria \_\_\_\_\_

Where has the work been presented?

Meeting Name \_\_\_\_\_

Meeting Date \_\_\_\_\_

Not Previously Presented  Not previously presented (Hope to present at the AABB conference  
in October 2008) \_\_\_\_\_

Where is this work being published? \_\_\_\_\_

Journal Name, Volume, Page, Date \_\_\_\_\_

In Preparation (Y/N) - Where? \_\_\_\_\_

Author(s) (First & Last) \_\_\_\_\_ Julie Karp and Karen King

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(Room # and Building Name, Lab, etc.)

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**\*INCLUDE A ONE-PAGE ABSTRACT (including title and all authors) OF THE WORK  
YOU WILL BE PRESENTING**

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**E-mail COMPLETED Registration form and abstract to:  
Stacey Morgan ([smorgan9@jhmi.edu](mailto:smorgan9@jhmi.edu)) on or before  
Friday, March 14th, 2008**

**If you have questions or problems regarding your submission, please  
contact Stacey Morgan via e-mail (smorgan9@jhmi.edu)**

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International Variation in Volunteer Whole Blood Donor Eligibility Criteria

JK Karp, JHH, Baltimore MD; and KE King, JHH, Baltimore MD.

**Background:** Personal experience has demonstrated that the practice of volunteer whole blood donation exhibits international variation. We aimed to assess the differences in international volunteer whole blood donor eligibility criteria. **Study:** In February 2008, the websites of major blood collection organizations in 17 countries were queried for six volunteer whole blood donor eligibility criteria: frequency of whole blood donation, donor age, hemoglobin, weight, and tattoo and pregnancy/breast feeding deferrals. The volume of whole blood donations was also noted. None of the queried criteria was consistent across all countries. The frequency of whole blood donation ranged from 56 to 119 days, with some countries imposing sex- and age-specific limitations. Parental consent was required for 16 and/or 17 year-old donors in four countries. The United States, Canada, and Switzerland did not have an upper age limit for whole blood donation. The latter two countries required physician approval for whole blood donors older than 71 and 66 years-old, respectively. The remaining countries mandated donor retirement at ages ranging from 60 to 81 years. The required hemoglobin for whole blood donation was 12.5g/dL for both sexes in four countries. Five countries required a hemoglobin of 12.5g/dL for women and 13.5g/dL for men. Hong Kong required a hemoglobin of 11.5g/dL for women and 13.0g/dL for men. While twelve countries stipulated a minimum whole blood donor weight of 50kg, Hong Kong required a minimum donor weight only of 41kg. India, Singapore, and Australia required a minimum donor weight of only 45kg, with Australia mandating that 16 and 17-year-old donors weigh at least 50kg. Tattoo and pregnancy deferrals ranged from 4 to 12 months and 6 weeks to 12 months, respectively. Only four countries reported specific deferral periods for breast feeding. The volume of whole blood donations ranged from 300 to 500mL. Based on the data above, the grams of hemoglobin expected to be restored per day of donor deferral was calculated for each country. This value ranged from 0.3 to 1g/day, indicating that some countries define their allowed frequency of whole blood donation more liberally than others. **Conclusion:** There is significant variation in international volunteer whole blood donor eligibility criteria. The reasons underlying these dissimilarities may include cultural views of age, gender, pregnancy, breast feeding, and the elderly, as well as average donor body habitus. This data also suggests that there is likely international variation in the prevalence of iron deficiency anemia in whole blood donors.