

**Mizuno Research Fund Post-Doctoral Fellowship Program for Japanese Researcher  
Children's Hospital of Philadelphia  
in Collaboration with the Noguchi Medical Research Institute**

**Invitation for Japanese Research Post-doctoral Fellowship in Benign Hematology**

**GOAL:**

To provide for 1-2 years of support, starting from January 1, 2018, to a Japanese scientist interested in a research training opportunity in benign hematology under the guidance of a member of the Division of Hematology at Children's Hospital of Philadelphia.

**OPPORTUNITY:**

The Mizuno Research Fund will support a Japanese scholar in collaboration with the Noguchi Medical Research Institute. Funding level is \$50,000 per year plus \$5,000 travel allowance with up to two years of support. Note, funds can be combined with other means of support. Will be paid on a monthly basis.

Children's Hospital of Philadelphia is one of the premier pediatric Institutions international and the Division of Hematology carries out outstanding research in the following areas:

- clotting and thrombosis
- bone marrow development
- bone marrow failure
- red cell biology
- megakaryocyte and platelet development

Please see the second page of this announcement for more details.

**CANDIDATE:**

1. Hold an M.D., Ph.D., M.D./Ph.D. or equivalent degree(s).
2. Is a post-doctoral, an instructor or is in the first three years of faculty position.
3. Japanese individual who is able to communicate well both in writing and speaking in English.
4. Prior related research experience, and
5. Able to be in the United States for the anticipated 1-2 years of support with appropriate visa.
6. Obtained Institutional permission to come for this training.

**APPLICATION PROCESS:**

Please forward the following before **July 31, 2017**:

1. Application form.
2. A cover letter including research experience of the candidate and future academic goals.
3. The candidate's curriculum vitae in English and Japanese.
4. A letter of reference/recommendation from the candidate's current/previous mentor or supervisor in Japan with a description of the candidate's potential for future academic success, past training and future academic opportunities back in Japan.
5. Screening : By documents and interview.
6. Please send to the application to :

〒105-0001

東京都港区虎ノ門1-22-13秋山ビル5F

米国財団法人野口医学研究所

医学教育&交流室 担当者宛

※封筒に『Japanese Research Fellow 応募書類在中』と記載すること。

<問い合わせ>

医学教育&交流担当

杉田恭子 / ステロラ・スンヨビ

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## **List of areas of research available with examples of potential projects.**

### Coagulation

- Crystallographic and functional of coagulation factors
- Structure/function of coagulation Factor X: Clinical application
- Structure/function of coagulation Factor V: Clinical application
- Coagulation factor VIII and IX biology
- Structural and functional studies of factor VIII increased specific activity mutations and their clinical application
- Immunomodulation of patients with hemophilia A and inhibitors
- Structure/function of thrombomodulin/thrombin
- Biology of FVII and its clinical application
- Studies of a rat model of hemophilia

### Thrombosis

- Spatial/temporal distribution of components in hemostasis/thrombosis
- Studies of the prothrombotic nature of HIT (heparin-induced thrombocytopenia)
- The biologic basis of thrombosis in immunothrombosis including HIT
- Platelet factor 4 in sepsis and NETosis

### Hematopoiesis/stem cell biology

- Epigenetic modulation of hematopoietic stem cells
- Lnk/STAT biology in hematopoiesis
- Role of ubiquitination in hematopoiesis

### Red blood cells and the hemoglobinopathies

- Novel gene therapy for sickle cell disease, including chromatin looping and altering Bcl11 biology in red cells
- Biology of transcriptional factor GATA1 short
- Lentiviral gene therapy for the hemoglobinopathies
- Iron metabolism and hepcidin
- Macrophages and inflammation

### Megakaryocyte biology and platelet production

- Megakaryopoiesis and its clinical application including targeted-drug delivery
- Pulmonary in vivo thrombopoiesis

### Blood banking

- Blood banking related to molecular polymorphisms in the Rh locus

### Bone marrow failure

- Evolution of spontaneous clones in acquired aplastic anemia
- Niche biology in hematopoiesis post chemo-radiotherapy