Saturday, October 11th

13:00-20:00  REGISTRATION - front desk, Main building
17:00-18:00  NO HOST COCKTAILS - RECEPTION
18:00-19:00  DINNER
Sunday, October 12th

7:30 - 8:25  BREAKFAST

SESSION I: Developmental Hemopoiesis and Stem Cells
Chairs: Thalia Pappayanopoulou + Stu Orkin
(Merrill Hall)
8:30-8:50  Dzierzak- To be or not to be…a hematopoietic stem cell
8:55-9:10  Patient- Differential programming of adult and embryonic blood cells
9:15-9:30  Francastel- Epigenetic signatures of multipotent and committed human hematopoietic progenitors
9:35-9:50  Baron- Development of embryonic red blood cells
9:55-10:10 Palis- Early ontogeny of erythropoiesis

10:15-10:45  COFFEE BREAK

10:45-11:00  Choi- ER71 in hematopoietic and vascular development
11:05-11:15  Townes- iPS cell gene replacement for sickle cell disease
11:25-11:35  Bouhassira- Erythroid cell production from human ES and iPS Cells
11:45-12:05  J. Stamatoyannopoulos- Digital analysis of chromatin structure in erythroid cells

SESSION II : Haemoglobin Switching I
Chairs: Tim Townes + Marie Trudel
12:20-12:40  Orkin- Genetic approaches to globin switching
12:45-12:55  Tuan- The ERV-9 LTR retrotransposon in the regulation of globin gene switching
13:00-13:10  Peterson- Transactivation of fetal globin gene expression
13:15-13:25  Lavelle- DNA Methylation and Globin Gene Expression

13:30-14:45  LUNCH

14:45 - 15:15  Bishop-Funding Opportunities at NIDDK (Merrill Hall)
14:45 - 17:00  POSTER SESSION I (Heather Hall)

18:00 - 19:00  DINNER

SESSION III: Control of erythropoiesis and globin gene expression
Chairs: Ann Dean + Masi Yamamoto
19:05-19:25  Grosveld- Transcription factor networks
19:30-19:50  Zon- Use of the zebrafish to study globin gene expression
19:55-20:10  Gallagher-Transcription factor binding in erythroid cells: ChIP-chip and ChIP-Seq

20:10-20:20  Brief Break

20:20-20:30  Bungert- The role of USF and NF-E2 in the recruitment of transcription complexes to the LCR and to the beta-globin gene promoter
20:35-20:45  Noordermeer- Long range gene activation by an ectopic beta-globin LCR
20:50-21:00  Tanimoto- Regulation of beta-like globin gene expression in primitive erythroid cells of human beta-globin YAC transgenic mice
Monday, October 13th

7:30 - 8:25       BREAKFAST

SESSION IV : Transcription factors and co-factors controlling globin gene expression
Chairs: Doug Higgs + Cecelia Trainor

8:30-8:50        Yamamoto- GATA factor switching in the regulation of erythroid gene expression
8:55-9:10        Bresnick- GATA factor-dependent transcriptional mechanisms
9:15-9:25        Vyas-Transcriptional regulation of GATA-1
9:30-9:40        Hardison: Biological functions of DNA occupied by the erythroid transcription factor GATA1: evolutionary history and current events
9:45-10:00       Blobel- Co-activators and co-repressors in erythroid/megakaryocytic transcription

10:00-10:30      COFFEE BREAK

10:35-10:50      Bieker- Novel aspects of EKLF epigenetic and transcriptional control of erythroid gene expression
10:55-11:05      Lloyd- Interactions between KLF genes in erythroid and cardiovascular development
11:10-11:20      Zhou- Role of EKLF in human gamma- to beta-globin gene switching
11:25-11:35      Perkins- EKLF, the cell cycle and chromatin
11:40-11:50      Crossley- A network of Klfs
11:55-12:05      Cunningham- Mechanisms of EKLF action in vivo

12:10-12:20      Brief Break

SESSION V : Transcription factors/accessory factors
Chairs:  Swee Lay Thein + Bill Wood

12:20-12:30      Ginder- The role of methyl CpG binding proteins in globin gene switching
12:35-12:45      Huang- Methylation of H4R3 mediates long-range chromatin interaction and beta-globin transcription
12:50-13:00      Milot- Ikaros nucleates a GATA-1-containing repressosome in erythroid cells
13:05-13:15      Shen- Activation by Post-translational Modifications of Erythroid Transcription Factors During Erythroid Differentiation

13:20-14:45      LUNCH
14:45-17:00      Poster Session II
18:00- 19:25      Dinner - BANQUET ON THE BEACH

SESSION VI: Quick Fire
Chair: Roger Patient

19:30 - 20:45      Powerpoint presentation of 8 posters (7 minutes each; 2 minutes for Q&A) selected by the organizers and session chairs from the two poster sessions; only work that has ___ not been presented by lab PIs is eligible for the quick fire session

SESSION VII: Chromatin
Chair: Jim Bieker

20:45-20:55       Liu- SATB1
21:00-21:20       Higgs- Long-range effects of globin gene activation
Tuesday, October 14th

7:30 - 8:25  BREAKFAST

SESSION VIII : Epigenetic control of gene expression during erythropoiesis
Chairs: Doug Engel + Claire Francastel

8:30-8:50  Felsenfeld- Dissection of a complex boundary element in the chicken beta-globin locus
8:55-9:10  Li- Distinctive chromatin structures of the beta-globin LCR in embryonic and definitive erythroid cells
9:30-9:40  Fiering- Chromatin structure of the b-globin locus in primary human erythroblasts
9:45-9:55  Brand- Dual role for the H3K9 methyltransferase G9a in regulating stage-specific transcription at the b-globin locus
10:00-10:10 Engel: DRED species and subunits
10:15-10:30 Dean- Contribution of Enhancer and Insulator Loops to Long Range Gene Regulation

10:30-11:00 COFFEE BREAK

SESSION IX : Erythroid regulation beyond transcription
Chairs: Frank Grosveld + Sherman Weissman

11:00-11:10 Weiss- Structural determinants of alpha hemoglobin stabilizing protein function
11:15-11:25 Ney- NIX and autophagy in programmed mitochondrial clearance
11:30-11:45 Romeo- Red blood cells: from the beginning to the end
11:50-noon Noguchi- Disregulated erythrocytosis associated with SCL/Tal1 and EpoR expression

12:05-12:10 Brief Break

12:10-12:20 Shimizu- Induction of hyperproliferative fetal megakaryopoiesis by an N-terminally truncated GATA1 mutant
12:25-12:35 Philipsen- An shRNA “bookshelf” screen aimed at reactivation of g-globin

SESSION X : Haemoglobin Switching II: Fetal globin expression in vivo
Chair: G. Stamotoyannopoulos

12:40-12:50 Lowrey- A Unifying Theory of Pharmacologic Induction of Fetal Hemoglobin Based on Cell Stress Signaling - What Doesn't Kill Red Cells May Make Them Stronger

13:05-14:05 LUNCH
18:00 - 19:00 DINNER

SESSION XI : Haemoglobin Switching II: Continued
Chair: G. Stamotoyannopoulos

19:05-19:20 Thein- Genetic architecture underlying common fetal hemoglobin variation
19:25-19:35 Ikuta- Fetal hemoglobin inducers share a common signaling
19:55-20:05 Jane- Epigenetic silencing of fetal globin gene expression
20:10-20:20 Brief Break
SESSION XII: Gene Therapy
Chair: Y.W. Kan

20:45-21:00  Malik- Gene Therapy for Hemoglobinopathies: Tribulations and trials

21:05  End of Conference