PROGRAM

16th Hemoglobin Switching Conference
October 11–14, 2008
Asilomar Conference Center, Monterrey, California

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
12:10-12:20	Brief Break

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 <u>not</u> 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
9:15-9:25	Bodine- Identification and Characterization of Insulator Elements in Loci Active in Red Blood 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 ß-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
12:55-13:05	Miller: Signaled expression of fetal hemoglobin in adult human erythroblasts: transcriptome profiling studies
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
19:40-19:50	Pace- Competitive Stat3/GATA-1 Promoter Binding in Gamma Gene Regulation
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

20:25-20:40	Persons- Gamma-Globin Lentiviral Vectors: Efficacy, Safety and Vector Production
20:45-21:00	Malik- Gene Therapy for Hemoglobinopathies: Tribulations and trials

21:05 End of Conference