Preliminary program 1st Jan Beneken Conference on Modeling and Simulation of Human Physiology

See www.benekenconference.com for updates

Thursday April 25, 2013

8:30 - 9:00	Registration and Coffee	
9:00 - 9:30	**Welcome and video**	G. Oei, J. van Oostrom
9:30 - 10:00	**Plenary lecture: Physiologic modeling by Dutch investigators**	W. van Meurs
10:00 - 10:45	**Plenary lecture: Evolution of some models of human physiology and anesthesia**	J. Beneken
10:45 - 11:00	Coffee	
11:00 - 12:00	**Keynote lecture: Modeling and simulation of melting polar ice sheets**	M. van den Broeke
12:00 - 13:00	Lunch	
13:00 - 14:45	**Oral presentations 1: Modeling and simulation of perinatal physiology**	Moderator: W. van Meurs
	Model-based ECG estimation in for optimal abdominal electrode placement	M. Rooijakkers et al.
	Toward an electrophysiological model of the uterine muscle activity	C. Rabotti et al.
	Modeling the contribution of humoral feedback to fetal heart rate responses during labor	G. Jongen et al.
	A mathematical model to evaluate the effect of maternal hyperoxygenation during labor	L. Bullens et al.
	"Push it to the limit": A simulation model used to evaluate a clinical intervention during labor	L. Bullens et al.
	Modeling autonomic cardiovascular regulation of the preterm infant	W. Jennekens et al.
14:45 - 15:00	Coffee	
15:00 - 16:00	**Workshop: CircAdapt: Model-based learning of physiology by medical students**	Moderator: J. van Oostrom
	A user-friendly simulation tool for education of cardiovascular (patho)physiology	J. Lumens et al.
	A comprehensive simulation tool for research and education in pulmonary hypertension-related cardiac pathophysiology	J. Lumens et al.
	An in-silico model to gain insight into pediatric pathophysiology	Y. Koeken et al.
16:00 - 17:00	**Plenary lecture: The role of arterial models in understanding hypertension**	N. Westerhof et al.
19:00 - 21:00	Diner (location to be determined)	

Friday April 26, 2013

8:30 - 10:00	**Oral presentations 2: The breadth of modeling and simulation of human physiology**	Moderator: J. van Oostrom
	Why SIT works: Normal function despite abnormal myofiber pattern in Situs Inversus Totalis	M. Pluijmert et al.
	Global sensitivity analysis of Beneken's hemodynamic model	P. Sa Couto et al.
	Development of a patient specific mathematical model to predict fluid responsiveness	J. Veelenturf et al.
	A Bayesian network for detection of seizures	C. Ungureanu et al.
	Contrast ultrasound dispersion imaging for prostate cancer localization	T. Saidov et al.
10:00 - 10:15	Coffee	
10:15 - 11:30	**Expert panel: Generation and validation of physiologic waveforms for educational simulation**	Moderator: W. van Meurs
	Two validation approaches for a 12-lead ECG generator	B. Gariepy et al.
	Validity in a high-resolution, dynamic model for ECG generation	K. Gilpin
	Validation of an intrauterine pressure model	L. Ferreira Bastos et al.
	Validation of cardiotocograms for use in simulation training	B. van der Hout et al.
11:30 - 12:00	**Future of conference and conference closing**	Organizing committee