SCONA 2019

Society for Computational Fluid Dynamics of the Nose & Airway

June 5 | Chicago USA

PROGRAM

VENUE: SUPERIOR ROOMS A & B, SHERATON GRAND, CHICAGO

7:30: REGISTRATION

10:00: COFFEE

8:00 SESSION 1: CFD IN THE NOSE: THE MISSING LINK IN RHINOLOGY?

No.	TITLE
1.1	Convener's welcome (Garcia G, Frank-Ito D)
1.2	CFD in Rhinology: Clinical motivation and historical perspective (Rhee J, Kimball J)
1.3	Experimental validation of CFD in the nose and upper airways (Doorly D)
1.4	CFD validation of nasal airflow under various breathing conditions (Li C)
1.5	Automatic reconstruction of the nasal geometry from CT scans (Koch W)
1.6	Impact of segmentation uncertainty on CFD variables (Frank-Ito D)

10:30: SESSION 2: CLINICAL APPLICATIONS OF SINONASAL CFD

No.	TITLE
2.1	Clinical perspective: The importance of objective testing in rhinology (Singh N)
2.2	Diagnosis of nasal obstruction via CFD (Garcia G)
2.3	Virtual surgery driven by nondimensional estimators (Burgos M)
2.4	Virtual septoplasty using CFD (Moghaddam M)
2.5	Nasal obstruction and empty nose syndrome – what are our noses sensing? (Zhao K)
2.6	Modelling respiratory airflow in obstructive sleep apnea with prescribed motion from cine MRI (Bates A)

12:15: LUNCH

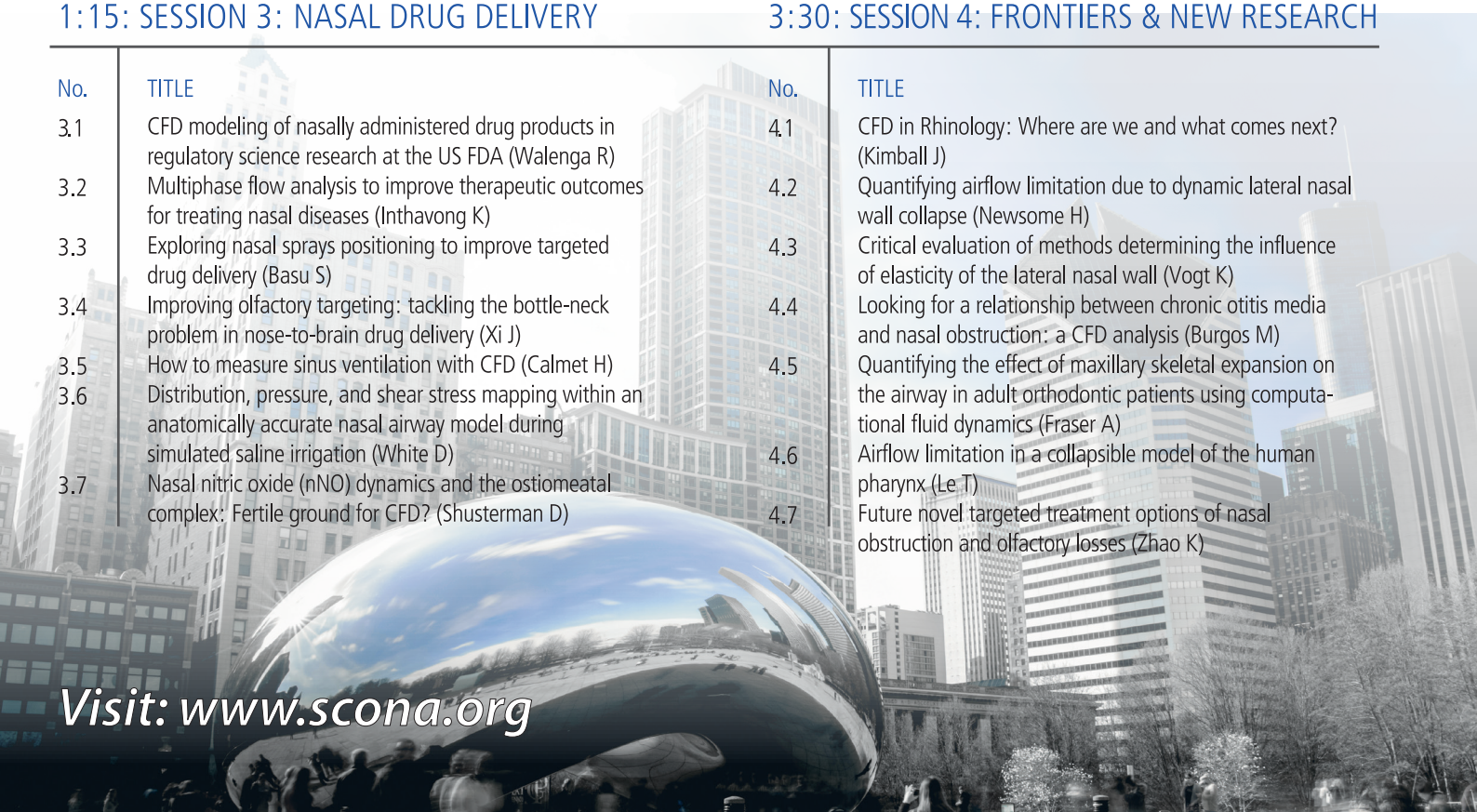
3:00: COFFEE

1:15: SESSION 3: NASAL DRUG DELIVERY

No.	TITLE
3.1	CFD modeling of nasally administered drug products in regulatory science research at the US FDA (Walenga R)
3.2	Multiphase flow analysis to improve therapeutic outcomes for treating nasal diseases (Inthavong K)
3.3	Exploring nasal sprays positioning to improve targeted drug delivery (Basu S)
3.4	Improving olfactory targeting: tackling the bottle-neck problem in nose-to-brain drug delivery (Xi J)
3.5	How to measure sinus ventilation with CFD (Calmet H)
3.6	Distribution, pressure, and shear stress mapping within an anatomically accurate nasal airway model during simulated saline irrigation (White D)
3.7	Nasal nitric oxide (nNO) dynamics and the ostiomeatal complex: Fertile ground for CFD? (Shusterman D)

3:30: SESSION 4: FRONTIERS & NEW RESEARCH

No.	TITLE
4.1	CFD in Rhinology: Where are we and what comes next? (Kimball J)
4.2	Quantifying airflow limitation due to dynamic lateral nasal wall collapse (Newsome H)
4.3	Critical evaluation of methods determining the influence of elasticity of the lateral nasal wall (Vogt K)
4.4	Looking for a relationship between chronic otitis media and nasal obstruction: a CFD analysis (Burgos M)
4.5	Quantifying the effect of maxillary skeletal expansion on the airway in adult orthodontic patients using computational fluid dynamics (Fraser A)
4.6	Airflow limitation in a collapsible model of the human pharynx (Le T)
4.7	Future novel targeted treatment options of nasal obstruction and olfactory losses (Zhao K)



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