



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?

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

No.	TITLE	No.	TITLE
1.1	Convener's welcome (Garcia G, Frank-Ito D)	2.1	Clinical perspective: The importance of objective testing in rhinology (Singh N)
1.2	CFD in Rhinology: Clinical motivation and historical perspective (Rhee J, Kimbell J)	2.2	Diagnosis of nasal obstruction via CFD (Garcia G)
1.3	Experimental validation of CFD in the nose and upper airways (Doorly D)	2.3	Virtual surgery driven by nondimensional estimators (Burgos M)
1.4	CFD validation of nasal airflow under various breathing conditions (Li C)	2.4	Virtual septoplasty using CFD (Moghaddam M)
1.5	Automatic reconstruction of the nasal geometry from CT scans (Koch W)	2.5	Nasal obstruction and empty nose syndrome – what are our noses sensing? (Zhao K)
1.6	Impact of segmentation uncertainty on CFD variables (Frank-Ito D)	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

3:30: SESSION 4: FRONTIERS & NEW RESEARCH

No.	TITLE	No.	TITLE
3.1	CFD modeling of nasally administered drug products in regulatory science research at the US FDA (Walenga R)	4.1	CFD in Rhinology: Where are we and what comes next? (Kimbell J)
3.2	Multiphase flow analysis to improve therapeutic outcomes for treating nasal diseases (Inthavong K)	4.2	Quantifying airflow limitation due to dynamic lateral nasal wall collapse (Newsome H)
3.3	Exploring nasal sprays positioning to improve targeted drug delivery (Basu S)	4.3	Critical evaluation of methods determining the influence of elasticity of the lateral nasal wall (Vogt K)
3.4	Improving olfactory targeting: tackling the bottle-neck problem in nose-to-brain drug delivery (Xi J)	4.4	Looking for a relationship between chronic otitis media and nasal obstruction: a CFD analysis (Burgos M)
3.5	How to measure sinus ventilation with CFD (Calmet H)	4.5	Quantifying the effect of maxillary skeletal expansion on the airway in adult orthodontic patients using computational fluid dynamics (Fraser A)
3.6	Distribution, pressure, and shear stress mapping within an anatomically accurate nasal airway model during simulated saline irrigation (White D)	4.6	Airflow limitation in a collapsible model of the human pharynx (Le T)
3.7	Nasal nitric oxide (nNO) dynamics and the ostiomeatal complex: Fertile ground for CFD? (Shusterman D)	4.7	Future novel targeted treatment options of nasal obstruction and olfactory losses (Zhao K)

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