

**ATS INTEREST GROUP ON INFANT & PRESCHOOL LUNG FUNCTION MEETING MINUTES**

**1. Open/Welcome**

- Introductions

**2. Infant PFT/chloral hydrate updates**

- Hospital pharmacies still often not willing to make chloral hydrate
- Needing to coordinate with anesthesia for other sedation regimens – makes timing harder
  - Problems with general anesthesia – oversedation
  - Precedex – few sites have experience, issues with braking vocal cords even with good sedation
- Is there further need for epidemiologic analysis to formally address cancer risk?
  - Unclear – issues with hospital or FDA/CU approval seem to have stabilized – more with pharmacies being willing to compound/supply to labs
- Possible need for other formulations – e.g. suppositories
  - Unlikely to get traction, as anesthesiologists don't like chloral, so being used less and less outside of the iPFT lab – specialized and small number of sedations done.

**3. MBW discussion/updates – Paul Robinson**

- New ATS working group document – technical standards for MBW in preschoolers
  - Submitted for publication
- Consensus document from 2013 – Paul Robinson may discuss with ATS whether an addendum/update is needed, in particular to help manufacturers
- Infant MBW still pending
  - PR and Per Gustafsson w Vertex Innovation grant looking at effects of different gasses on infant breath pattern – very pronounced in 100% O<sub>2</sub>, not in SF<sub>6</sub>. Haven't looked at 40% to 100% FiO<sub>2</sub>.
- PR may put in application for preschool MBW lunchtime session/workshop to address the technical document for ATS 2018.

**4. FOT updates**

- Task force currently working
- Indiana and Portland just starting for research
- Issue of what device to use

**5. Update from the ERS – Claudia Calogero**

- ERS task force just started on Lung Function in the adult assembly
- PFT ERS School Course – application due October 2017
  - Similar to what adults do
  - Hands-on training on how to perform testing – perhaps in preschoolers
- Meeting will be in Milan on Saturday September 9, 2017

**6. GLI updates – Sanja Stanojovic**

- Reference equations for DLCO
  - For DLCO, VA, KCO age 5 – 80 years old
  - Accepted by ERJ May 2017
  - Under consideration for endorsement by several respiratory societies

- Reference equations for lung volumes
  - ERS task force has been approved
  - Data collection to open shortly
  - Will include plethysmography, gas dilution, and MBW
- GLI Network
  - ERS clinical research collaborative network
  - Goal of creating a living repository of GLI data
  - Accessible to researchers to investigate physiologic questions
  - Ongoing data collection to facilitate GLI updates
- PFT proficiency committee is submitting a proposal to collect more DLCO data focusing on minority populations

## **7. PFT needs assessment & new document proposal**

- Needs assessment survey
  - Goal of determining most pressing clinical & research needs for published guidelines for pediatric pulmonary function testing
  - Brief survey being sent out to Pediatric members of international societies including ATS, ERS, Thoracic Society of Australia and New Zealand, Pan-African Respiratory Society, Latin American Thoracic Association
- Will likely result in a project proposal for the coming year
  - Unclear if this will be expert recommendations vs. PICO-type analysis
- Those interested in participating should contact Jessica Pittman
- Plan to use survey responses to date to create project proposal for submission to ATS for next year's conference (as document/working group)

## **8. New project suggestions – June 28<sup>th</sup> deadline?**

- Addressing physiologic measurements in critically ill patients (e.g. NICU, PICU)
  - Stacey Peterson-Carmichael just published document related to this
  - Limited bedside capability, particularly in NICU
  - Use and application varies widely by site and expertise
  - SPC will consider submitting ATS noon workshop proposal relating to publication for 2018
- Linking structure and function in infant/preschool testing for lung disease
  - Look at linking between CT, MRI, and physiologic measures?
  - Measures that can be performed simultaneously – e.g. functional MRI with washout?
  - Means of integrating structural and functional testing to better define lung disease
  - Paul Robinson tried for ERS project 5 years ago and was rejected
  - Some experience in ERS long ago, but radiologists lost interest in group quickly
    - Field also changing very quickly – hard to publish before out of date
  - Need to bring in radiologists, physicists, those working with animal models
  - May be best served as an ATS and ERS joint project
    - ERS small conference with goal of producing document at the end vs. ATS workshop with combination of lectures and open discussions
    - Goal of submitting proceedings as a document for publication
    - Then do a hot topic session once the document is published
  - Will continue discussion with goal of submission in 2018 for project starting 2019
- PFT needs assessment / Pediatric PFT guidelines document

ATS INTEREST GROUP ON INFANT & PRESCHOOL LUNG FUNCTION MEETING – May 21, 2017  
Renaissance DC Hotel

Jessica Pittman, MD MPH, Chair

- Will review survey responses to date and JP will submit to ATS as a working group / document group proposal
- JP will distribute survey address to all working group members for further distribution / responses
- Those interested should contact JP