

## A Cross Cultural Longitudinal Assessment of FASD



#### Facial Imaging Core P.I.: Tatiana M. Foroud, Ph.D.

# **Project Progress**

- Cross calibration assessment of the new cameras
  - Scanned one model (plastic skull) with all cameras to record differences between them
  - Preliminary analysis: cameras are on par with each other with respect to accuracy
  - Undergoing more detailed analysis

### **Project Progress**

- Acquired a standard model (plastic skull) to "calibrate" cameras at remote sites
  - Protocol being developed by Jeff Rogers
- AVL scanned a plaster dental model provided by Dr. Ken Jones to Dr. Fang
  - After images are merged Dr. Fang will analyze the model and use it for quality control

## **Camera Deployment**

- Camera was sent to Dr. Robinson in Buffalo, NY
  - Scanning going well
  - 20 images sent for merging and analysis
  - Camera will remain in Buffalo for several months
- Camera sent to Dr. Hoyme in Finland
  - Has scanned a few subjects
  - Camera will remain in Finland for several months



## **Camera Acquisition**

A third camera was ordered with INGEN provided funds

- The camera is to remain at Indianapolis
- AVL (Jeff Rogers) needs the camera to provide technical support to remote sites

## Software Development (AVL)

- AVL (Jeff Rogers) developed a custom plug-in for the Rapidform software.
  - Designed for FAS data point entry, examination, and measurement extraction
  - Protocol for data capture is being written
- Data from Rapidform will be extracted and read into the Central Repository



# **Data Analysis**

- 20 subjects from Dr. Luther Robinson
- 6 scans of each subject
- Images imported in Rapidform
- Currently in process of merging images



### **Protocol Development**

- Image capture protocol documents updated
  - Included as hard copy in each camera case
- Protocol for merging images in Rapidform software created
- Data extraction protocol is being written

## **Imaging Problems**

- Subject positioning
  - Hard to get subject to keep the same position and expression
- Lighting
  - Too much for the room size
- Movement
  - Too much (0.6 second seems very long)
  - Camera beeps



## **Imaging Problems**

- Face marking
  - Dots too large
- Age of subjects
  - Child <2 years of age difficult to scan</li>
- Functional ability of subjects
  - Many unable to understand and/or complete simple instructions



### **Future Strategies**

- Purchase another camera
  - 2<sup>nd</sup> year of the grant
  - Plan to dedicate it to South Africa
- Camera itinerary
  - Buffalo
    - San Diego or Seattle
    - Plains
  - Finland-Russia
  - Italy
  - Indianapolis



### **Cameras Tentative Schedule**

	Year 1	Year 2	Year 3	Year 4
Camera 1	Buffalo (3) San Diego (3)	Italy, San Diego, or Seattle (3) Plains (9)	San Diego (6 mo) Plains (6 mo)	
Camera 2	Finland (6) Italy?	Finland (6) Russia (6)	Finland (3-6) Russia (6-9)	Russia
Camera 3	Stays in Indianapolis			
Camera 4	South Africa			