Cloud-based Image Analytics

Amit Vasanji, Ph.D.
Chief Technology Officer
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ImageIQ – who we are

Imaging software research, development and service organization, spun out of Cleveland Clinic Innovations

Preclinical, clinical, imaging, analytics, software and IT experts

Plan and execute all imaging aspects of preclinical and clinical trials

Develop custom imaging and image analysis tools to improve scientific research, reduce costs, accelerate timelines and strengthen data
Image Analysis Pipeline

Maped corresponding image overlay for review

Database
- Original Images
- Overlay Images
- Output Metrics

Number of Digits: 5

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Faxitron Vertebrae Segmentation / Analysis

- Quantitative
- Fully Automated
- Cloud-based

- Objective
- Customizable
- Secure
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LacZ Stain Image Analysis

Automated LacZ Detection and Quantification

Original Image
LacZ Overlay
Registration Overlay

Confidential
3D Fracture Union Analysis
Lung Vascular Connectivity Analysis

Lung Vascular Thickness Map

Control  Diseased

Branching Level Classification

Control  Diseased

Graph showing thickness changes across branch levels.
Retinal Analysis

- Vessels
- Drop-out Regions
- Tufting
Skull Formation

Confidential

- Frontal
- Interparietal
- Basisphenoid
- Parietal
- Occipital
Benefits of Use in Scientific Research

• Scaling to a global level for universal access
• Increased operational efficiency, accelerated timelines, reduced costs
• Data is quantitative and more objective
• Annotated image overlays improve data quality control and validation
• Reduced manual error, subjectivity, inter- and intra-observer variability
• Consistent, reproducible analysis methodology
Platform: ImageQuantify.com

Cloud-based research software tool for universal access to automated quantitative image analysis

- Quantitative & Objective
- Fully Automated & Validated
- "Real-Time" Analysis Results
- Will Support Any 2D Assay
- Secure and Private
- www.ImageQuantity.com
- Available online in Q1 2015
- Seeking Validation Partners
Thank You!

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