

# OSA Big Data in Cultural Heritage Imaging Incubator

2-4 May 2018  
Washington, DC USA

HOSTED BY:

**John Delaney**, National Gallery of Art, United States; **Martin Fischer**, Duke University, United States; **David Saunders**, British Museum, United Kingdom

## AGENDA

### Wednesday 2 May 2018

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- Afternoon                      Arrival/Hotel Check-in  
  The Fairfax at Embassy Row  
  2100 Massachusetts Ave. NW
- 17:45                              Arrival & Welcome at OSA Headquarters  
  2010 Massachusetts Ave, NW
- 18:00**                              **Keynote Welcome Speaker**  
  Warren S. Warren, Duke University, United States
- 18:30                              Welcome Dinner  
  Ezme, 2016 P Street, NW

### Thursday 3 May 2018

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- 8:00                              Breakfast  
  OSA Headquarters, 2010 Massachusetts Ave, NW
- 8:30**                              **Welcome**  
  Elizabeth Rogan, CEO, OSA, United States
- 8:45**                              **Program Overview & Goals**  
  Hosts
- Session: Spectroscopic Macro or Remote Mapping Modalities**
- 9:00**                              **Opportunities & Challenges of Reflectance & Fluorescence Imaging Spectroscopy**  
  John Delaney, National Gallery of Art, United States

## Thursday 3 May 2018, continued

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**9:25**                    **Macroscopic X-ray Fluorescence & X-ray Diffraction Analysis & Imaging**  
Koen Janssens, University of Antwerp, Belgium

**9:50**                    **Hyperspectral Imaging: Revealing the Unseen**  
James Jafolla, Surface Optics, United States

**10:15**                  **Mid-IR Instrumentation & Processing Methods**  
Jason Zeibel, US Army Night Vision & Electronic Sensors  
Directorate, United States

10:40                    Coffee Break/Poster Time

**11:00**                  **Facilitated Discussion – Leader John Delaney**

### **Session: Large Data Set Analysis Tools**

11:40                    **Hyperspectral Imaging of Historical Artifacts:  
A Novel Imaging Approach for the Study of Materials & Methods**  
David Messinger, Rochester Institute of Technology, United States

12:05                    **Image Analysis for the Ghent Altarpiece**  
Ingrid Daubechies, Duke University, United States

12:30                    Lunch, provided

### **Session: Large Data Set Analysis Tools, continued**

**13:30**                  **Current Image Data Cube Processing – XRF & Reflectance Image Cubes**  
Kathryn Dooley, National Gallery of Art, United States

**13:55**                  **Image Registration & Multi Modal Fusion Plus New Processing Ideas**  
Murray Loew, George Washington University, United States

**14:20**                  **Facilitated Discussion – Leader David Messinger**

**15:00**                    Coffee Break, Poster Time

## Thursday 3 May 2018, continued

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### Session: Micro Imaging Modalities – Towards Virtual Cross-sections

- 15:20**                    **Multi-photon, Multi-color Microscopy in Cultural Heritage**  
Martin Fischer, Duke University, United States
- 15:45**                    **Lattice Light Sheet Microscopy - Innovations, Applications, & Future Directions**  
Wesley Legant, University of North Carolina, United States
- 16:10**                    **Opportunities & Challenges in Confocal XRF for Cultural Heritage Research**  
Louisa Smieska, Cornell High Energy Synchrotron Source, United States
- 16:35**                    **Fast & Flexible Multiphoton Imaging in Biological Research**  
Craig Szymanski, Thorlabs, United States
- 17:00**                    **Raman session: Vibrational Spectroscopy & Mapping**  
Pablo Londero, Yale University, United States  
Silvia Centeno, Metropolitan Museum of Art, United States  
Karen Trentelman, Getty Conservation Institute, United States
- 17:25**                    **Facilitated Discussion – Leader Martin Fischer**
- 18:00**                    Dinner  
Bistro Bistro, 1727 Connecticut Ave, NW

## Friday 4 May 2018

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- 8:00**                    Breakfast  
OSA Headquarters, 2010 Massachusetts Ave, NW
- 8:30**                    **Break-out Group Discussions**  
**Spectroscopic Macro or Remote Mapping Modalities**  
John Delaney, National Gallery of Art  
**Large Data Set Analysis Tools**  
David Messinger, Rochester Institute of Technology  
**Micro Imaging Modalities – Towards Virtual Cross-sections**  
Martin Fischer, Duke University
- 10:20**                    Coffee Break/Poster Time
- 10:40**                    **Break-out Session Reporting**
- 12:20**                    Lunch, Provided
- 13:20**                    Depart to National Gallery of Art