

*Johns Hopkins*

**Provost's  
Teaching with Technology  
DELTA Showcase**

March 28, 2019  
Charles Commons  
Homewood Campus



**JOHNS HOPKINS**  
UNIVERSITY

# AGENDA

8:30-9:15AM		<b>Check-in and Continental Breakfast</b>	
9:15-9:30AM	<p><b>Welcome by Provost Sunil Kumar</b>  <i>Provost and Senior Vice President for Academic Affairs, Johns Hopkins University</i></p> <p>(Ballroom)</p>		
9:30-10:30AM	<p><b>Keynote by Dr. George Siemens</b>  <i>Executive Director of the Learning Innovation and Networked Knowledge (LINK) Research Lab, University of Texas at Arlington</i></p> <p>(Ballroom)</p>		
10:30-11:00AM	<b>Break</b>		<p><b>DELTA Grantee Exhibits Open</b></p> <p>(Ballroom)</p>
Session 1 11:00-11:30AM	<p><b>Conducting Educational Research</b>  <i>(East Room)</i></p>	<p><b>Uncovering Forbidden Fruit</b>  <i>(Barber Room)</i></p>	
Session 2 11:40-12:10PM	<p><b>MOOCs at JHU</b>  <i>(East Room)</i></p>	<p><b>Hopkins Universal Design for Learning</b>  <i>(Barber Room)</i></p>	
Lunch 12:15-1:00PM	<p><b>Roundtable Conversations and Closing Remarks by Stephen Gange</b>  <i>Executive Vice Provost for Academic Affairs, Johns Hopkins University</i></p> <p>(Ballroom)</p>		

## Keynote Presented by Dr. George Siemens



George Siemens is the Executive Director of the LINK Research Lab at the University of Texas at Arlington. He is an educator and researcher on learning, networks, analytics and visualization, openness, and organizational effectiveness in digital environments. He is the author of *Knowing Knowledge*, an exploration of how the context and characteristics of knowledge have changed and what it means to organizations today, and the Handbook

of Emerging Technologies for Learning. *Knowing Knowledge* has been translated into Mandarin, Spanish, Persian, and Hungarian.

Siemens is also the Associate Director of the Technology Enhanced Knowledge Research Institute at Athabasca University, leading the learning analytics research team. Previously, he was the Associate Director, Research and Development, with the Learning Technologies Centre at University of Manitoba.

His PhD, through University of Aberdeen, was on sensemaking and wayfinding in complex information settings. He is a frequent keynote speaker at conferences detailing the influence of technology and media on education, organizations, and society, having presented at conferences in more than 30 countries.

His work has been profiled in provincial, national, and international newspapers (including NY Times), radio, and television. His research has received numerous national and international awards. Siemens has maintained the elearnspace blog ([www.elearnspace.org/blog](http://www.elearnspace.org/blog)) for eleven years and [www.connectivism.ca](http://www.connectivism.ca) for six years.

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## About the Digital Education & Learning Technology Acceleration (DELTA) Grants

Over the past several years, Johns Hopkins University has established itself as a leader in digital education. Innovative faculty, staff, and students throughout the university have seized on the promise of new technologies to transform teaching and learning in surprising and meaningful ways. The

Office of the Provost is eager to encourage digital education innovations and magnify their impact by introducing the 2018 DELTA grants, six awards of up to \$75,000 each.

It is our hope that DELTA grants will unleash the potential of digital technology and encourage the Johns Hopkins community to think creatively about how to enhance our shared teaching and learning enterprise.

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## **DELTA 2018 Grantee Exhibits: Ballroom**

### **Augmented Reality for Immersive 3-D Education in Complex Pelvic Trauma Surgery**

*Principal Investigator: Greg M. Osgood, chief of Orthopedic Trauma, Department of Orthopedic Surgery, School of Medicine*

The key challenge in treating unstable pelvic fractures, the proposal says, is that the doctors have to do mental mapping of plate positioning and screw trajectories to the fractured anatomy, a skill that surgeons-in-training cannot easily acquire from conventional two-dimensional materials. The grant will be used to create a three-dimensional learning environment that incorporates augmented reality.

### **Faculty Forward: A Faculty Fellows Program Focused on Best Practices in Teaching and Learning and Technology**

*Principal Investigator: Tim Collins, program chair of Engineering Management and of Technical Management, Engineering for Professionals, Whiting School of Engineering*

Faculty Forward is designed as a blended faculty development program for instructors who teach online or with digital technology. The program includes several days of intensive workshop sessions combined with online modules that will model the best practices in teaching and learning, online course design, and innovative uses of technology. The project team anticipates that the faculty fellows who complete the program will push the boundaries for what is possible in online and digital learning.

### **Personalized Augmented Reality as an Interactive Teaching Tool for Facial Anatomy**

*Principal Investigators: Nikki Tang and Elise Ng, cutaneous surgery and oncology unit, Department of Dermatology, School of Medicine*

According to the proposal, anatomy is one of the most challenging subject matters to both teach and learn, and facial anatomy is one of the most complex regions. This project proposes to design an augmented reality simulator that will help teach this especially challenging aspect of anatomy.

### **Hacking Harmony**

*Principal Investigator: Susan Forscher Weiss, professor of Musicology, Peabody Institute*

Traditionally, hackathons focus on teams leveraging their technical expertise to find new solutions to a problem. This project proposes asking Peabody music students to partner with students in computer science and engineering from the Homewood campus to create apps, devices, or wearable tech items that allow the user to explore and learn about an aspect of music performance or music history.

### **Voices from Afar: Introducing Global Perspectives into Public Health Teaching and Learning**

*Principal Investigator: Sukon Kanchanaraksa, director of the Center for Teaching and Learning and senior scientist, Department of Epidemiology, Bloomberg School of Public Health*

This project will acquire and deploy a system to enable simple and cost-effective production of high-quality video interviews with public health experts located all over the world, thereby incorporating a more diverse array of voices and perspectives into the Bloomberg School's online courses and degree programs. Previous efforts to produce video interviews with remote subject matter experts were hindered by technological and logistical barriers.

### **Yellowdig: Enhancing Student Engagement in Digital Settings**

*Principal Investigators: Kathleen Day, lecturer, Toby Gordon, associate professor, Brian Gunia, associate professor, Alexandra Klaren, assistant professor, Richard G. Milter, professor, and Supriya Munshaw, lecturer, Carey Business School*

Student participation in meaningful discussions is foundational to engagement and academic achievement in online courses. As a result, the Instructional Technology team at the Johns Hopkins Carey Business School will implement the Yellowdig online discussion platform in order to increase online interaction and engagement levels, improve quality of

discussion posts, increase retention rates for each course, and, ultimately, increase student satisfaction. Yellowdig allows students to connect and engage in ways not possible with the traditional LMS-based discussion boards. Students can up-vote, comment on posts, and gain a level of influence in the community. Content and discussions can be organized through topics, which helps to highlight individual-level contributions and promote more sophisticated social interactions and engagement.

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## **Breakout Session 1: East Room**

### **Conducting Educational Research**

*Mike Reese, Associate Dean, Center for Educational Resources*

*Ahmed Ibrahim, Sr. Education Research Consultant, Center for Educational Resources*

How do you know if your teaching methods impact student learning? Participants at this session will discuss educational research strategies used to publish scholarly work or leveraged by faculty to improve their own teaching. The discussion will be framed by case studies involving Johns Hopkins faculty. Considerations for human-subjects research will be described.

## **Breakout Session 1: Barber Room**

### **Uncovering Forbidden Fruit**

*Patricia McGuigan, Heritage Science for Conservation, Sheridan Libraries, Principal Investigator; Associate Research Professor, Department of Materials Science and Engineering*

*Andrea Hall, Heritage Science for Conservation, Sheridan Libraries & Museums*

JHU's Heritage Science for Conservation laboratory conducts research "at the intersection of science and art." Among its many projects, the team is poised to use hi-tech imaging to read a 450-year-old book, *The Works of St. Cyprian*, whose preface was expurgated to censor the words of Erasmus.

This recently acquired imprint contains sections smeared with toxic red and black opaque paint. The primary goal of this project is to non-destructively unveil the expurgated text using and perhaps, developing, a variety of imaging techniques. These studies will also enable us to

understand the provenance of the book from chemical analysis and to aid the teaching of undergraduate courses on the history of censorship, imaging analysis, and materials science characterization.

This project uniquely applies technology to the humanities.

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## **Breakout Session 2: East Room**

### **MOOCs at JHU**

*Ira Gooding, Open Education Lab Manager, Bloomberg School of Public Health, and Provost's Fellow for Digital Initiatives*

*Cassidy Dadaos, Partnership Manager, Coursera*

Over the past six years of JHU's partnership with Coursera, our faculty have developed more than 70 massive open online courses (MOOCs) that have collectively garnered more than 6.7 million enrollments and issued more than 800,000 certificates of completion. During this session, we'll discuss the past, present, and future of MOOCs at JHU and the instructional opportunities presented by teaching at scale.

## **Breakout Session 2: Barber Room**

### **Hopkins Universal Design for Learning (HUDL): An Initiative to Support Expert Teaching and Learning**

*Valerie Hartman, Lindsay Ledebur, Matt Schneider, and Donna Schnupp, Universal Design for Learning Ambassadors, HUDL Network*

Universal Design for Learning (UDL) is a unifying framework that can be used to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. In this presentation, participants will learn about the Hopkins Universal for Design Learning (HUDL) initiative, a university-wide initiative supported by the Provost's office. Presenters will provide a brief overview of UDL, as well as its relevance to all schools, faculty and students within the JHU community. Information about the HUDL initiative including the three-year implementation plan, the ambassadors network, what faculty are already doing with UDL in online courses, and the rollout of training at the university and school levels will also be provided. Faculty who teach both face-to-face and online will benefit from attending this informative presentation.

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## Lunch and Roundtable Conversations: Ballroom

During lunch, a number of tables will be marked for roundtable conversations. Conversation starter cards can be found on the designated tables, but please feel free to let the conversation develop organically. You are not obligated to set at the table indicating the topic selected at registration.

- **Leading Vibrant Discussions in the Classroom and Online** (4 tables)
- **Faculty Development/Teaching Professional Development** (4 tables)
- **Virtual Reality and Augmented Reality** (4 tables)
- **Classroom Flipping** (1 table)
- **Smart Classrooms** (1 table)

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### DELTA Showcase Organizing Committee

- **Stephen Gange**, *Executive Vice Provost for Academic Affairs*
- **Ira Gooding**, *Provost's Fellow for Digital Initiatives*
- **Lacey Henry**, *Events Coordinator, Center for Educational Resources*
- **Olysha Magruder**, *Instructional Designer, Center for Learning Design, Whiting School of Engineering*
- **Sharon Morris**, *Director of DC Regional Libraries, Sheridan Libraries*
- **Mike Reese**, *Associate Dean of University Libraries and Director, Center for Educational Resources*
- **Cheryl Wagner**, *Program Coordinator, Center for Educational Resources*



**Find out more about Digital Initiatives at JHU by visiting:**

<https://provost.jhu.edu/about/digital-initiatives/>