

# BTI Institute

## Borders • Trade • Immigration

A Department of Homeland Security Center of Excellence

Newsletter  
July to September 2018

### Spotlight | BTI Research Committee

Meet the distinguished members of the BTI Institute Research Committee. They are responsible for providing advice and specific recommendations to the BTI Institute Director on the quality and promise of research and education projects and recommending improvements where possible to project principal investigators. They facilitate, monitor and measure scientific progress, engage stakeholders to keep projects aligned with the Department of Homeland Security missions and facilitate and assist with the transition to end users.



#### [George Zouridakis, Ph.D.](#)

Associate Dean for Research & Graduate Studies, College of Technology  
Director, Biomedical Imaging Lab  
Research Committee Chair



#### [Elaine M. Liu, Ph.D.](#)

Associate Professor, Department of Economics  
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#### [Luca Pollonini, Ph.D.](#)

Assistant Professor, Engineering Technology  
Director, Optical Bioimaging Lab



#### [Richard Willson, Ph.D.](#)

Huffington-Woestemeyer Professor of Chemical and Biomolecular Engineering  
Professor, Biochemical and Biophysical Sciences

## Research Highlights

### Kickoff Meeting | Kakadiaris, “EDGE”

Ioannis Kakadiaris, Ph.D., with the University of Houston, held his kickoff meeting on August 3, 2018. The project, titled *EDGE: The “Eye in the Woods” Image-based Human Detection and Recognition System*, aims to create a system to automatically detect and match human subjects from trail camera images. The abstract can be found [here...](#)

### Presentation | Hershberg, migration impacts

Eric Hershberg, Ph.D., with American University, presented his findings on the impact of Central American child and family migration on U.S. communities during two stakeholder engagements in Houston and Washington, D.C. Video of the presentation can be found [here...](#)

## Education Highlights



### Internship | Academy Summer

Three cadets from the United States Coast Guard and one cadet from the United States Military Academy at West Point participated in the BTI Institute's 2018 Homeland Security Summer Internship program located at the University of Houston June to July 2018. Read more [here...](#)



## Research Opportunity

The BTI Institute is looking for researchers with a novel approach to answering some of Custom and Border Protection's research needs. Read below for a sampling of research needs and a link to the Institute's white paper submission templates.

### 1) Facilitating Legitimate Trade and Travel

Considerations: E-Commerce, non-intrusive inspection, touchless movement of people and goods

### 2) Immigration

Considerations: quick turn around projects that can produce policy-informing data in a matter of months.

### 3) Border Security

Considerations: Multi-level biometrics, machine learning, computer vision

White Paper [Template](#) | [Instructions](#)