

### 3:00 WRAP-UP AND CLOSING REMARKS

Featured Speakers:

#### SHANNON WOODEN

Professor of English at Missouri State University

Shannon Wooden chairs the Gender Studies and Disability Studies Committees and teaches courses in British Literature, Literature and Medicine, and Disability Studies at Missouri State University. She has spent the past several years developing her earliest research interests, in Victorian science, race, and narrative, to include the foundational concepts of medical humanities and to examine narrative representations of illness, wellness, and disability. With training at the Columbia University Program in Narrative Medicine and the Center for Narrative Practice, she has focused on the ways that narrative patterns not only reflect but shape lived human experience. Her recent scholarship demonstrates how a medical-oriented examination of narrative patterns can contribute to purposefully ethical reading and teaching of literature.

#### ANNE STILES

Associate Professor of English and Coordinator of Medical Humanities  
Saint Louis University

Anne Stiles is the author of *Popular Fiction and Brain Science in the Late Nineteenth Century* (Cambridge UP, 2012) and the editor of *Neurology and Literature, 1866-1920* (Palgrave, 2007). She also co-edited two volumes published by Elsevier in 2013 as part of their Progress in Brain Research series. Her work has been supported by long-term grants from the Institute for Research in the Humanities at the University of Wisconsin, Madison (AY 2016-2017); the Huntington Library (AY 2009-2010); and the American Academy of Arts and Sciences (AY 2006-2007). Her most recent research focuses on literary responses to Christian Science and New Thought on both sides of the Atlantic.

#### CENTER FOR SCIENCE, TECHNOLOGY, AND SOCIETY

The Center for Science, Technology, and Society (CSTS) provides opportunities for humanists, scientists, and engineers to collaborate on innovative research that addresses how science and technology shape, and are shaped by, our society, culture, politics, and the environment. The CSTS brings scholars and students together to work on critical issues related to technical problems and controversies from a global and interdisciplinary perspective.

#### CENTER FOR BIOMEDICAL RESEARCH

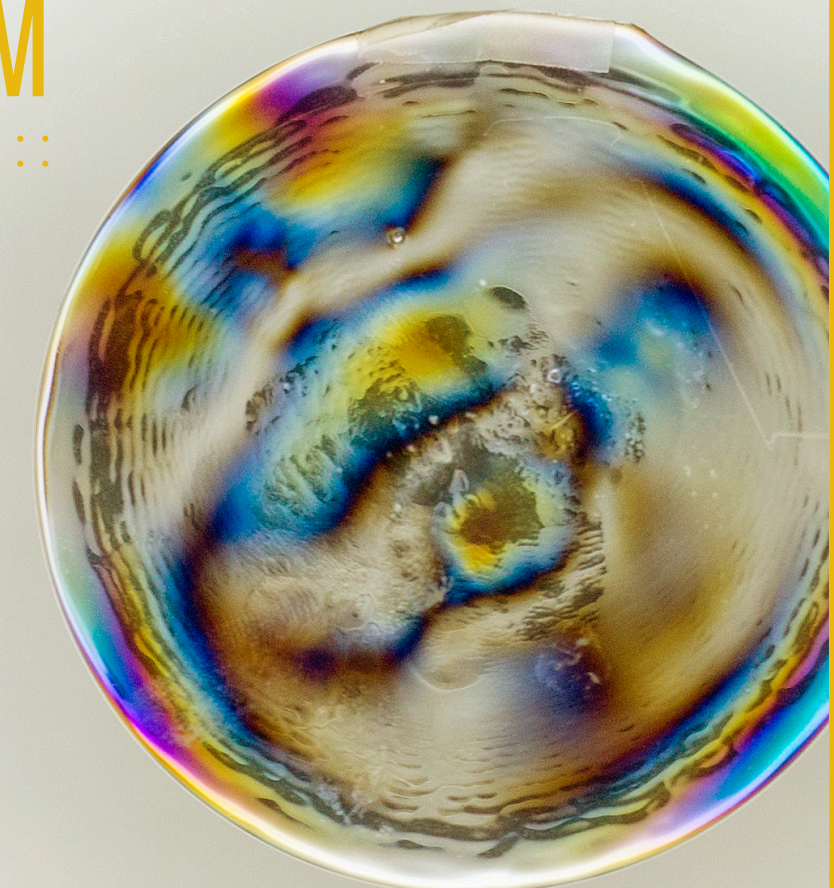
The Center for Biomedical Research (CBR) is a multidisciplinary research center with a mission to research and develop advanced biomaterials, devices, and therapeutics for applications in the biomedical industry. Research in the CBR covers a variety of areas in biomedical engineering, including biomaterials, tissue engineering, biofabrication, biosensors, biomedical imaging, and biomedical therapeutics.

Sponsored by the CENTER FOR SCIENCE, TECHNOLOGY, AND SOCIETY and the CENTER FOR BIOMEDICAL RESEARCH

# 2018 BIOMEDICAL HUMANITIES SYMPOSIUM

April 11<sup>th</sup>, 2018

8:00am – 3:30pm  
Toomey Hall



MISSOURI  
**S&T**

# PROGRAM

## 8:00 REGISTRATION OPENS

Coffee and continental breakfast available in 140 Toomey Hall

## 8:45 WELCOME AND OPENING REMARKS

All panels will take place in 140 Toomey Hall

9:00

PANEL

1

### CASEY BURTON

Director of Medical Research at PCRMC  
*"Biomedical and Humanities Research Opportunities at Phelps County Regional Medical Center"*

### ANDREA TAYLOR

Lecturer of Philosophy  
*"Ethical Responses to Healthcare Epidemics: The Opioid Crisis"*

### XINHUA LIANG

Associate Professor of Chemical and Biochemical Engineering  
*"Thin Film Coating for Biomedical Applications"*

10:00

PANEL

2

### JULIE SEMON

Assistant Professor of Biological Sciences  
*"Redesigning Humans: Ethics in Tissue Engineering"*

### KRISTINE SWENSON

Professor of English  
*"Phrenology as Neurodiversity: The Fowlers and Modern Brain Disorders"*

### JIE HUANG

Assistant Professor of Electrical and Computer Engineering  
*"Introduction to Fiber Optic Sensors and their Potential Applications in Chemical and Biological Engineering"*

11:00

PANEL

3

### DAVE WESTENBERG

Associate Professor of Biological Sciences  
*"The Effect of Education on the Public Opinion of Synthetic Biology"*

### ZHAOZHENG YIN

Associate Professor of Computer Science  
*"Microscopy Image Analysis Using Computer Vision and Machine Learning"*

### LUCE MYERS

Assistant Teaching Professor of Art  
*"Communicating Science through the Arts"*

12:00

## LUNCH AND POSTER PRESENTATIONS

Toomey Atrium

### CHANG-SOO KIM

Professor of Electrical and Computer Engineering  
*"Bioinstrumentation Research at Intelligent Microsystem Laboratory"*

### CHENG WANG

Assistant Professor of Mechanical and Aerospace Engineering  
*"Magnetic Separation of Microparticles by Shape"*

### NATHAN TWYMAN

Assistant Professor of Business and Information Technology  
*"Patient Engagement in the Waiting Room: Gamification for Health Care"*

### SHUO YANG

Graduate Student in Chemistry  
*"Time-Lapse Living Cell Imaging to Monitor Doxorubicin Release from DNA Origami Nanostructures"*

### HONGLAN SHI

Research Professor of Chemistry  
*"Rapid Analysis of Silver Nanoparticle"*

1:00

PANEL

4

### SHANNON WOODEN

Professor of English, Missouri State University  
*"Why Medicine Needs Stories"*

### YUN SEONG SONG

Assistant Professor of Mechanical and Aerospace Engineering  
*"Human Acceptance of Physical Assistance from Robotic Devices"*

### SUTAPA BARUA

Assistant Professor of Chemical and Biochemical Engineering  
*"Lab-in-a-Particle: To Combat Infectious Diseases"*

2:00

PANEL

5

### ANNE STILES

Associate Professor of English and Coordinator of Medical Humanities  
Saint Louis University  
*"Experimentalism in Late-Victorian Fiction"*

### MANASHI NATH

Associate Professor of Chemistry,  
*"Designing Nanobiosensors"*

### YINFA MA

Curators' Distinguished Teaching Professor of Chemistry  
*"Early Cancer Detection Using Urinary Biomarkers and Challenges"*

*Uptake by Saccharmyces Cerevisiae Yeast Cells and Nanotoxicity Using Single Cell-ICP-MS"*

### NATHAN THYPARAMBIL

Graduate student in Biological Sciences  
*"Borate Based Bioactive Glass Effects on Human Adipose Derived Stem Cells"*

### GRACE YAN

- Assistant Professor of Civil Engineering
- HONGXIAN ZHANG
- Assistant Professor of Business and Information Technology
- "Make Tornado Alley a Better Place to Live—Apply Prospect Theory and Game Theory to Facilitate a Unanimous Decision on Structural Reinforcement"

### DEBARATI MAJUMDAR

- Graduate student in Industrial and Organizational Psychology
- SUMBLE NATHAINAIL, CLAIR KUENY, PH.D.
- "Modeling Cancer Care Provision in a Rural Setting: A Case Study"

