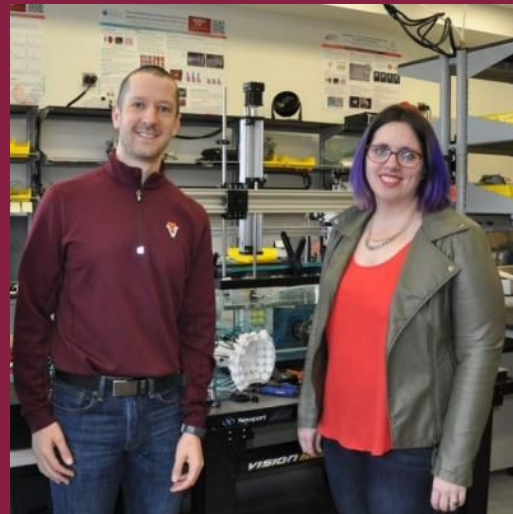




SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

FACULTY EXPERTISE BOOKLET



2023

Graça Almeida-Porada, M.D., Ph.D.



Title: Professor of Regenerative

Department Wake Forest Institute for Regenerative Medicine

Campus Downtown

Phone Number 336-713-1630

Email galmeida@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

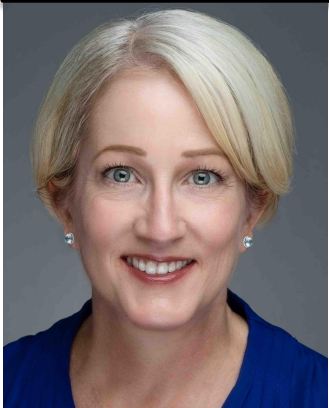
Expert In

- Stem Cell Biology
- Stem Cell Niches
- Stem Cell Therapies
- Gene Therapy
- Transplant Immunology
- Fetal Transplant
- Hematopoiesis
- Inherited Bleeding and other Genetic Disorders

Links

- <https://school.wakehealth.edu/Faculty/A/Graca-Almeida-Porada>
- <https://www.linkedin.com/in/graca-almeida-porada-6b60b429/>

Evelyn (Lynn) Y. Anthony, MD, FACR



Professor, Radiology & Pediatrics
Senior Associate Dean for Faculty Affairs

Department of Radiology
Wake Forest Campus
(336) 716-1066 (Radiology)
(336) 716-4454 (Dean's Office)

eanthony@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Diagnostic Imaging
- Cancer Imaging
- Neonatal and Pediatric Imaging
- Fetal MRI
- Global Health and Radiology
- Faculty Vitality
- Faculty Career Development & Mentoring

Links

- <https://school.wakehealth.edu/Faculty/A/Lynn-Anthony>
- <https://www.wakehealth.edu/Providers/A/Lynn-Anthony>

Chris Arena, PhD



Collegiate Associate Professor

Biomedical Engineering and Mechanics (BEAM)

Virginia Tech

540-232-8427

carena@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Medical Devices
- Translational Cancer
- Bioinstrumentation
- Bioelectrics
- Imaging
- Biodesign process
- Engineering pedagogy

Links

- <https://www.linkedin.com/in/christopher-arena-1686022b/>

Sara Arena, PhD



Biomedical Engineering Undergraduate Chair & Collegiate Associate Professor

Biomedical Engineering and Mechanics

Virginia Tech

540-232-8441

sarena@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Slips, Trips, and Falls
- Analysis of Human Movement
- Computational Modeling
- Engineering Education
- Problem-Based Learning
- Cooperative Learning

Links

- <https://beam.vt.edu/people/faculty/arena-s.html>

Anthony Atala, MD



**G. Link Professor and Chair, Department of Urology
Director of the WF Institute for Regenerative Medicine**

Wake Forest Institute for Regenerative Medicine

Wake Forest University

(336) 713-7293

aatala@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

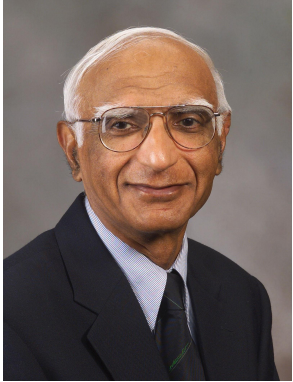
Expert In

- Urology
- Tissue Engineering
- Translational Cancer Research
- Cardiovascular Physiology and Hypertension
- Regenerative Medicine
- Cancer Therapeutics Endocrinology
- Neuro- and Behavioral Pharmacology
- Organ Systems
- Biomechanics and Biomedical Imaging
- Genetics and Gene Regulation
- Cell Therapy
- Biomaterials
- Body on a Chip

Links

- <https://school.wakehealth.edu/Faculty/A/Anthony-Atala>
- <https://www.wakehealth.edu/Providers/A/Anthony-Atala>

Romesh C. Batra, PhD



University Distinguished Professor and Clifton C. Garvin Professor

Biomedical Engineering & Mechanics Department

Virginia Tech Campus

540-231-6051

rbatra@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expertise

- Material Failure at High Strain Rates
- Soft Tissue Mechanics
- Penetration & Impact Problems
- Functionally Gradient Materials/Structures
- Molecular Mechanics/Dynamics Simulations of Nanostructures
- Smart structures/Piezoelectric materials

Links

<https://scholar.google.com/citations?user=QpAXXoEAAAAJ&hl=en>

Home page: <https://www.sites.beam.vt.edu/batra/>

Lectures on Continuum Mechanics:

https://www.youtube.com/watch?v=HkNuNEI_de4

ASME Honorary Membership Award Ceremony:

<https://www.youtube.com/watch?v=iVX8kHLzruA&list=PLq-Gm0yRYwTg9gY-xhVpZ5LoctjVi-m2S>

List of former Ph.D. students:

<http://genealogy.math.ndsu.nodak.edu/id.php?id=105522>

Bahareh Behkam, PhD



Associate Professor, John J. Jones III Faculty Fellow

Mechanical Engineering Department

Virginia Tech Campus

540-231-7491

behkam@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES


Expert In

- Bio-Hybrid Microrobotics Systems
- Drug Delivery for Cancer Therapy
- Medical Device-Associated Infection
- Host-Pathogen Interactions
- Biomechanics and Mechanobiology
- Nanobioengineering
- Biotransport
- Biomaterials
- Bioadhesion
- Computational Modeling
- Synthetic Biology

Links

- <https://behkam.me.vt.edu/>
- <https://me.vt.edu/people/faculty/behkam-bahareh.html>

 @BBEHKAM

 bahareh-behkam-1380784

J. Daniel Bourland, PhD



Professor

Department of Radiation Oncology

Wake Forest University

(336) 713-6503

bourland@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Medical Physics
- Radiation Oncology
- Radiation Countermeasures
- Gamma Radiosurgery
- Small Field Radiation Dosimetry
- Radiation-Induced Brain Injury
- Oncology and Biomedical Imaging
- Translational Cancer Research

- President-Elect, American Association of Physicists in Medicine

Links

<https://school.wakehealth.edu/Faculty/B/John-Daniel-Bourland>

Philip J. Brown, Ph.D.



Assistant Professor, Biomedical Engineering Department
Director, Translational Engineering and Design Core Lab

Wake Forest Campus, Biotech Place Bldg

336.716.0945

phibrown@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

- Biomechanics
- Mechanical Design
- Medical Devices
- Material Testing
- Surgical Simulation
- Robotic Surgery
- Additive Manufacturing

- www.linkedin.com/in/philip-brown-71a24553
- <https://www.wakeforestinnovations.com/experts/philip-brown-phd/>
- <https://school.wakehealth.edu/faculty/b/philip-jayson-brown>

John C. Chappell, PhD



Associate Professor

Biomedical Engineering and Mechanics & Fralin Biomedical Research Inst.

Roanoke

540-526-2219

JChappell@vtc.vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Vascular Biology
- Developmental Biology
- Computational Modeling
- High-resolution Imaging Modalities
- Conditional Genetic Animal Models
- In Vitro / Ex Vivo Tissue Engineered Models

Links

- [FBRI Faculty Profile](#)
- [BEAM Faculty Profile](#)
- [FBRI Lab Profile](#)
- [PubMed Publications](#)

Raja Chatterjee, MD, MS



Professor of Medicine and Pediatrics

Pulmonary, Critical Care, Allergy & Immunologic Diseases

Wake Forest Campus

(336) 716-7765

achatter@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Internal Medicine
- Sleep Medicine
- Critical Care Medicine
- Pulmonary Disease
- Clinical Informatics
- Data Collection
- Data Interpretation
- Human Clinical Research
- Medical Devices
- Military Medicine (currently serving as a Captain –O6 in the US Navy)

Links

- <https://school.wakehealth.edu/Faculty/C/Raja-Chatterjee>
- <https://www.wakehealth.edu/Providers/C/Raja-Chatterjee>
- <https://faculty senate.wfu.edu/senators/>
- @WakePCCM

Caitlyn Collins, PhD



Assistant Professor

Biomedical Engineering and Mechanics, Health Sciences

Blacksburg, VA

540.231.2210

cjcollins@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Bone Biomechanics and Mechanobiology
- Biomedical Imaging (microCT, HR-pQCT, CT, DXA)
- Computational Modeling
- Multiscale Mechanical Testing
- Osteoporosis and Aging
- Bone Fracture Healing

Links

- <https://beam.vt.edu/people/faculty/collins.html>
- <https://www.bone.ethz.ch/research/clin-mech.html>
- Twitter: @osteocollins
- <https://www.linkedin.com/in/caitlyn-collins>

Christina Kehl Cramer, MD



Assistant Professor

Radiation Oncology

Wake Forest Campus

(336) 713-3600

ccramer@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Cancer-related cognitive impairment
- Gamma knife radiosurgery
- Spine radiosurgery and stereotactic body radiotherapy
- Hippocampal-avoidance
- Brain and spine metastases
- Glioblastoma and anaplastic astrocytomas
- Low-grade astrocytomas and oligodendrogliomas
- Brain and spine meningiomas
- Pituitary adenomas
- Ependymomas
- Craniopharyngiomas
- Palliative radiotherapy
- Trigeminal neuralgia
- Essential tremor

Links

- <https://school.wakehealth.edu/Faculty/C/Christina-Kehl-Cramer>
- <https://www.wakehealth.edu/Providers/C/Christina-Kehl-Cramer>
- @ChristyCramerMD
- <https://www.linkedin.com/in/christina-cramer-a75b6622/>

Tracy L. Criswell, PhD



Assistant Professor

Wake Forest Institute for Regenerative Medicine

Wake Forest Campus

(336) 716-1615

tcriswel@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Skeletal Muscle Physiology, Injury and Regeneration
- Aging, Menopause
- Sex and Gender Differences
- Development of Pituitary Organoids
- Ovary Tissue Engineering
- Tissue Engineering and Regeneration
- Graduate Education, Teaching, Mentoring

Links

- <https://school.wakehealth.edu/Faculty/C/Tracy-L-Criswell>

Kerry A. Danelson, PhD



Associate Professor with Tenure & Director of Orthopaedic Research

Orthopaedics

Wake Forest Campus

(336) 716-1738

kdanelso@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Injury and Orthopedic Biomechanics
- Military Injury Biomechanics (Warrior Injury Assessment Manikin)
- Biomechanical Testing
- Finite Element Analysis
- Orthopedic Clinical Outcomes

Links

- <https://school.wakehealth.edu/Faculty/D/Kerry-A-Danelson>

Rafael V. Davalos, PhD



L. Preston Wade Professor, ASME Fellow, AIMBE Fellow

Biomedical Engineering and Sciences, Center for Engineered Health

Blacksburg

540-231-1979

Davalos@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

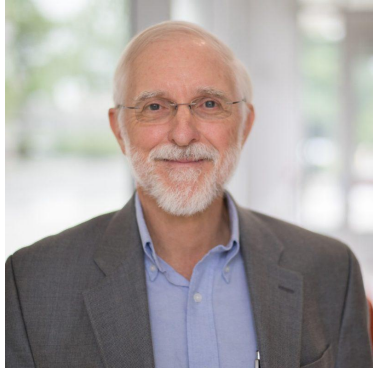
Expert In

- Biotransport
- Medical Devices
- Translational Cancer
- Microfluidics
- Computational Modeling
- Electroporation
- Dielectrophoresis

Links

- <https://www.sbes.vt.edu/davalos/>
- <https://scholar.google.com/citations?user=D0lYzZIAAA AJ&hl=en>

David A. Dillard, PhD, PE



Adhesive and Sealant Science Professor

Biomedical Engineering and Mechanics

Virginia Polytechnic Institute and State University

540-231-4714

dillard@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Experimental mechanics
- Fracture mechanics
- Stress analysis
- Adhesion science
- Adhesive and sealant applications
- Coatings
- Durability and environmental effects
- Viscoelasticity
- Hydrogel and elastomer behavior

Links

- <https://beam.vt.edu/people/faculty/dillard.html>

Thomas Diller, PhD



Professor

Mechanical Engineering Department

Blacksburg

540-231-7198, 540-750-5846

tdiller@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Medical Devices
- Bio-Thermal Modeling and Measurements
- Blood Perfusion

Links

- <https://me.vt.edu/people/faculty/diller-thomas.html>
- <http://www.me.vt.edu/heat-transfer-mobile-lab-3/>

Raffaella De Vita, PhD



Professor and Associate Department Head

Biomedical Engineering and Mechanics

Virginia Tech

540-231-5905

devita@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Soft tissue mechanics
- Reproductive biomechanics
- Experimental mechanics
- Continuum mechanics
- Computational mechanics
- Biomaterials
- Bioengineering for women's health

Links

- <https://www.vtstretchlab.com>
- <https://beam.vt.edu/people/faculty/devita.html>

Zachary Doerzaph, PhD, CHFP



Executive Director,
Virginia Tech Transportation Institute

Associated Professor,
Biomedical Engineering and Mechanics Department

Blacksburg

540-231-1046

zdoerzaph@vti.vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Automotive safety and crash causation
- Advanced Driver Assistance Systems
- Automated driving systems
- Driver behavior monitoring systems
- Connected vehicles
- Prototype development
- Computational modeling
- Naturalistic, field, epidemiological, and controlled study designs
- Vehicle and driver modeling
- Vehicle sensor systems and data acquisition
- Biomechanics

Links

- www.vtti.vt.edu
- beam.vt.edu/people/faculty/doerzaph.html

Kevin Edgar, PhD



Professor, and Associate Dean of the Graduate School

Sustainable Biomaterials Department, and Macromolecules Innovation Inst.

Virginia Tech

540.961.0141

kjedgar@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Polysaccharide chemistry
- Drug delivery
- Biodegradation
- Hydrogels
- Cellulose chemistry
- Alginate chemistry
- Dextran chemistry
- Solubility and bioavailability enhancement

Links

- <https://sbio.vt.edu/our-people/faculty-directory/edgar.html>
- <https://graduateschool.vt.edu/about/contactus/directory/kevin-edgar.html>

Wu Feng, PhD



Professor, NSF SHREC Co-Director, SEEC Director
Computer Science, Electrical & Computer Engg., Biomedical Engg. & Sciences

Blacksburg Campus

540-951-1006

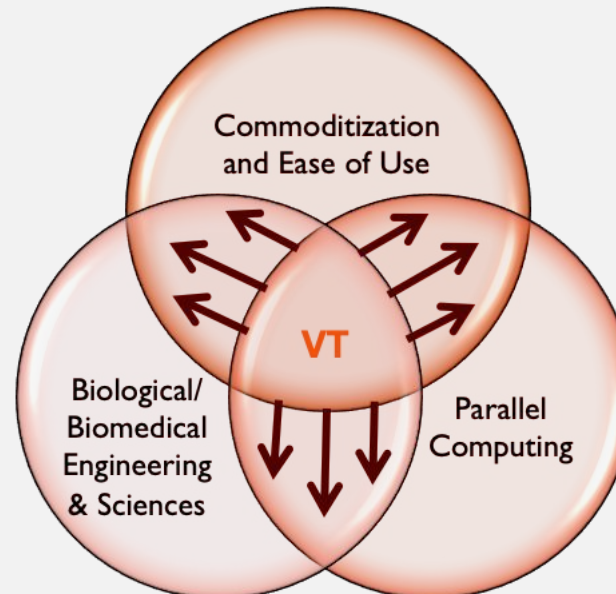
wfeng@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Computational Science & Engineering
 - Biomedical Imaging
 - Carcinogenesis
 - DNA Sequence Analysis
- Computational Modeling
- Telehealth
- Parallel & Distributed Computing
- Machine Learning / Deep Learning



Links

- <http://synergy.cs.vt.edu/>
- <http://seec.cs.vt.edu/>
- <http://www.nsf-shrec.org/>
- <https://www.facebook.com/vtsynergy/>



F. Scott Gayzik, PhD



Associate Professor, Course Director SBES Clinical Rotation

Biomedical Engineering Department, Center for Injury Biomechanics

Wake Forest Campus

(336) 716-6643

sgayzik@wakehealth.edu




SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Computational Human Body Modeling
- Biomedical Imaging
- Morphological Studies
- Injury/Trauma/Risk Curve Development
- Database Analysis
- Automotive Safety
- Military Safety/Solider Protection
- Global Health

Links

- <https://school.wakehealth.edu/Faculty/G/F-Scott-Gayzik>
- www.linkedin.com/in/scott-gayzik-7126a560 

 @ScottGayzik; @WakeBME

William Gmeiner, PhD, MBA



Professor

Cancer Biology, Comprehensive Cancer Center, Physiology & Pharmacology, Center for Precision Medicine

Wake Forest Campus

336-716-6216

bgmeiner@Wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- **Fluoropyrimidine chemotherapy**
- **Nucleic acid therapeutics**
- **Overcoming barriers to drug delivery**
- **Translational Cancer**
- **Biomaterials**
- **Computational Modeling**

Links

- <http://www.wakehealth.edu/Faculty/Gmeiner-William-Henry.htm>
- <https://www.linkedin.com/in/william-gmeiner-5465426/>
- @bgmeiner1

Aaron Goldstein, Ph.D



Associate Professor

Department of Chemical Engineering

540-231-3674

goldst@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomaterials Synthesis and Characterization
- Polymer Processing
- Interfacial Phenomena
- Bone Tissue Engineering
- Bioreactors
- Computational Modeling of Transport Phenomena

Links

- Lab Website:
<https://stem.che.vt.edu/research.html>
- Recent Publications:
<https://stem.che.vt.edu/faculty-publications.html>

Robert Gourdie, PhD, FAHA



Professor and Center Director

Biomedical Engineering and Mechanics and Fralin Biomedical Research
Institute at Virginia Tech Carilion

Roanoke, VA

843 860 8971

gourdier@vtc.vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Drug delivery
- Peptide therapeutics
- Cardiovascular disease
- Wound healing
- Radiation injury
- Nanoparticles
- Exosomes
- Translational Biomedicine
- Biomedical Entrepreneurialism

Links

- <https://beam.vt.edu/people/faculty/gourdie.html>
- <https://scholar.google.com/citations?user=lyhLuaQAAAAJ>
- <https://www.linkedin.com/in/robert-gourdie-207a30a/>
- <https://fbri.vtc.vt.edu/people-directory/primary-faculty/gourdie.html>

Netta Gurari, Ph.D.



Assistant Professor

Biomedical Engineering and Mechanics

540-231-3073

gurari@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Somatosensation
- Sensorimotor Control
- Stroke
- Robotics
- Biomechanics
- Human Subjects Experimental Research
- Neuroengineering

Links

- [BEAM Faculty Profile](#)
- [Robotics and Sensorimotor Lab Website](#)

 [@NettaGurari](#)

Metin Nafi Gurcan, PhD



Director, Center for Biomedical Informatics,
Professor, Internal Medicine, Pathology, Biomedical Engineering

Center for Biomedical Informatics

Wake Forest Campus

(336) 716-5422

mgurcan@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Image Interpretation, Computer-Assisted
- Image Processing, Computer-Assisted
- Pattern Recognition, Automated
- Algorithms
- Biomedical Informatics
- Artificial Intelligence

Links

- <https://school.wakehealth.edu/Faculty/G/Metin-Nafi-Gurcan>
- <https://school.wakehealth.edu/research/labs/clinical-image-analysis-lab/>

 @metingurcan

 <https://www.linkedin.com/in/metin-gurcan-abb1025/>

Adam R. Hall, PhD



Assistant Professor

Department of Biomedical Engineering

Wake Forest Campus

(336) 716-5384

arhall@wakehealth.edu




SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Nanomedicine and Nanobioengineering
- Nano- and Microfabrication
- Molecular Biophysics
- Epigenetic Analysis
- Glycomic Analysis
- Assay Development
- Microfluidics
- Biomaterials
- Tissue Engineering
- Translational Cancer Research

Links

- <http://www.thehalllab.org>
- <https://school.wakehealth.edu/Faculty/H/Adam-Roger-Hall>

 @the_adam_hall

 adam-r-hall-b787106

Craig A. Hamilton, PhD



Associate Professor

Biomedical Engineering Department, J. Paul Sticht Center for Healthy Aging

Wake Forest Campus

(336) 716-2819

crhamilt@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

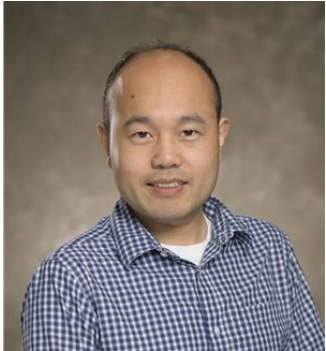
Expert In

- Biomedical MRI Imaging
- Image Analysis
- Signal and Image Processing

Links

- <https://school.wakehealth.edu/Faculty/H/Craig-A-Hamilton>

Aiguo Han, PhD



Assistant Professor

Biomedical Engineering and Mechanics (BEAM)

Virginia Tech

217-244-1167

han51@illinois.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomedical imaging
- Ultrasound imaging
- Machine learning in biomedical imaging and diagnostics
- Transcranial ultrasound brain imaging and neuromodulation
- Quantitative ultrasound
- Simulation and modeling of ultrasonic wave propagation
- Clinical applications of biomedical ultrasound, e.g.,
 - Noninvasive liver fat quantification
 - Noninvasive cancer diagnosis (e.g., hepatocellular carcinoma)
 - Tumor characterization
 - Preterm birth risk assessment

Links

- <https://aiguohan.github.io/>
- <https://beam.vt.edu/people/faculty/han.html>

Erin Henslee, MS, PhD



Assistant Professor

Department of Engineering

Wake Forest Campus

(336) 702-1963

hensleea@wfu.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Electrophysiologic Characterization of Cells
- Cellular Disease
- Cellular Drug Response
- Circadian Biology
- Cell Patterning and 3D Cell Culture
- Sustainable Practice of Lab-Based Research
- E-Sport (video gaming) Science
- Engineering Education
- Public Engagement and Science Communication

Links

- <https://engineering.wfu.edu/people/faculty/erin-henslee/>

 @e_henslee; @WakeEngineering

 www.linkedin.com/in/erin-henslee/

Adam Katz, MD



Title: Professor

Department of Plastic Surgery

Campus: WFBH

Phone Number: 336.716.4416

Email: akatz@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Translational Cell Therapies
- Adipose-derived Cell Biology
- Medical Devices
- Wound healing
- Vascular Remodeling

Links

- https://www.wakehealth.edu/Providers/K/Adam-J-Katz?utm_source=local&utm_campaign=google%20my%20business&utm_medium=organic

Jeongchul Kim, PhD



Assistant Professor

Diagnostic Radiology

Wake Forest

336-716-0931

jeokim@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Neuroimaging
- Alzheimer's Disease
- Brain Development
- Traumatic Brain Injury
- Hemodynamics
- Medical Devices

Links

- <https://school.wakehealth.edu/research/labs/radiology-informatics-and-image-processing-laboratory>

Andrew R Kemper, MS, PhD



Associate Professor, Center for Injury Biomechanics Laboratory Director

Dept. of Biomedical Engineering and Mechanics, Center for Injury Biomechanics

Virginia Tech Campus

540-231-2465

akemper@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Injury/Trauma
- Injury Mechanisms
- Automotive Safety
- Military Safety
- Thoracic Response and Injury Tolerance
- Material/Structural Properties of Bone and Soft Tissue
- Response of Human Surrogates during Impact/Accelerative Loading
- Effect of Muscle Activation on Occupant Kinetics and Kinematics

Links

- <https://beam.vt.edu/people/faculty/kemper.html>
- <https://beam.vt.edu/research/Center-for-Injury-Biomechanics.html>

Oleg Kim, PhD



Assistant Professor

Biomedical Engineering and Mechanics

Virginia Tech Campus

olegkim@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics and Mechanobiology
- Blood clot structure and function
- Biomaterials
- Experimental and Computational Biophysics
- Cancer model systems
- Microscopy
- Dispersed systems

Links

- <https://beam.vt.edu/people/faculty/kim1.html>

Ken T. Kishida, PhD



Assistant Professor

Physiology and Pharmacology

Wake Forest Campus

(336) 716-0419

kkishida@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Human Neuroscience
- Decision Making
- Computational Neuroscience
- Reinforcement learning
- Dopamine
- Serotonin
- Norepinephrine
- Consciousness
- Computational Psychiatry
- Neuroimaging
- Neuro-methods Development

Links

- <https://school.wakehealth.edu/Faculty/K/Ken-T-Kishida>
- www.kishidalab.com
- <https://www.linkedin.com/in/ken-kishida-8a022542/>
- <https://twitter.com/kenkishida>
- <https://www.freethink.com/articles/computational-psychiatry>

Arina Korneva, PhD



Assistant Professor

Biomedical Engineering and Mechanics

Virginia Tech

540-231-2044

arina.korneva@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Combining mechanics, biology, and genetics to answer cutting-edge questions in human diseases
- Biomechanics
- Solid mechanics
- Nerve mechanics
- Ocular mechanics
- Cardiovascular solid mechanics
- Soft tissue mechanics
- Multiscale mechanical testing

Links

<https://beam.vt.edu/people/faculty/korneva.html>

Google Scholar

Paul J. Laurienti, MD, PhD



Professor

Department of Radiology

Wake Forest School of Medicine

336-716-3261

plaurien@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Neuroscience
- Network Science
- Brain Imaging
- Complex systems
- Brain networks and alcohol use
- Neural contributions to mobility disability
- Effects of pesticides on the brain

Links

- <http://lcbn.wakehealth.edu/>

Sang Jin Lee, PhD



Professor

Wake Forest Institute for Regenerative Medicine

Wake Forest Campus

(336) 713-7288

sjlee@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES


Expert In

- Biomaterials
- Regenerative Medicine
- 3D Biofabrication / Bioprinting
- In Vitro Microphysiological Models / Organs-on-a-Chip
- Polymer / Hydrogel Synthesis
- In Situ Tissue Regeneration
- Cardiovascular Tissue Engineering
- Musculoskeletal Tissue Engineering
- Biointegration
- Stem Cells

Links

- <https://school.wakehealth.edu/Faculty/L/Sang-Jin-Lee>
- <https://profiles.wakehealth.edu/display/Person/sjlee>

@bio2002

 [sang-jin-lee-a3282935](#)



Yong W. Lee, PhD



Associate Professor, SBES Graduate Program Chair

Department of Biomedical Engineering and Mechanics

Virginia Tech Campus

540-231-8484

ywlee@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomaterials
- Nanobioengineering
- Neuroengineering
- Translational Cancer Research

Links

- <https://beam.vt.edu/people/faculty/lee.html>
- <https://beam.vt.edu/people/staff.html>
- <https://www.linkedin.com/in/yong-lee-4a44b9132/>
- <https://www.facebook.com/yongwoo.lee.5895/>

Da Ma, MS, PhD



Assistant Professor,

Center for Biomedical Informatics, Alzheimer's Disease Research Center

Wake Forest Campus

336-713-6172

dma@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomedical Imaging (MRI, CT, PET, SPECT, etc.)
- Neuroimaging / Ophthalmic Imaging (OCT, etc.)
- Computational neuroanatomy
- Neurodegenerative diseases
- Aging, Alzheimer's Disease
- Artificial Intelligence / Deep Learning / Machine Learning
- Computational biomarker
- Anatomical Modeling for Medical Image Data
- Imaging genomics
- Multi-modal information fusion
- Longitudinal disease progression modelling

Links

- **Websites:**

<https://da-ma-dm.github.io>

<https://school.wakehealth.edu/faculty/m/da-ma>

- **Google Scholar:** [_5oigaVwAAAAJ](#)

- **LinkedIn:** [dama01](#)

- **Twitter:** [da_ma_dm](#)

- **Email:** dma@wakehealth.edu



Michael L. Madigan, PhD



Professor

Industrial and Systems Engineering

Blacksburg Campus

540-231-3543

mlm@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Dynamics and Neuromuscular Control of Movement
- Slips, Trips, and Falls
- Factors Affecting Human Balance
- Balance Training
- Effects of Aging on Physical Capability and Mobility
- Occupational Biomechanics and Ergonomics
- Prosthetics
- Low Back Pain
- Work Physiology and Fatigue
- Expert Witness Consulting

Links

- <https://www.madbiogroup.org/>
- <https://oeb.ise.vt.edu/>

Joshua Maxwell, PhD



Assistant Professor

Wake Forest Institute for Regenerative Medicine

Richard H. Dean Building

336-713-9056

jtmaxwel@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Cardiac Physiology
- Cardiac Regenerative Medicine
- Cardiac Biomaterials for Therapeutic Delivery
- Cell-based Therapies
- Stem Cell Secretomes
- Multi-omic Approaches to Stem Cell Biology
- Induced Pluripotent Stem Cell-Derived Cardiac Myocytes
- Disease Modeling
- Animal Models

Links

- <https://school.wakehealth.edu/Faculty/M/Joshua-T-Maxwell>
- <https://www.linkedin.com/in/josh-maxwell-7840002b>

Andre A Muelenaer, Jr, MD, MS



Professor of Practice, Department of Biomedical Engineering and Mechanics, VT
Professor, Department of Pediatrics, VTCSOM

Blacksburg
540-520-9091
andrem1@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Clinical Medicine, with focus on pediatric respiratory diseases
- Telemedicine
- Medical Devices
- Global Health
- Medical Ethics/Institutional Review Board
- Team Science/Transdisciplinary Research

Links

- TEAM Malawi
<https://team.cired.vt.edu>

Michael T. Munley, PhD, DABR, FAAPM



Professor and Section Head, Physics

Radiation Oncology

Wake Forest Campus

(336) 713-6538

mmunley@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

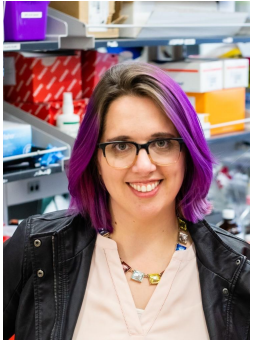
Expert In

- Radiation Oncology
- Radiation Dosimetry
- Radiosurgery
- Gamma Knife
- Image-Guided Radiation Therapy
- Radiation Injury: Lung, Musculoskeletal
- Radiation Response Modeling
- Medical Imaging

Links

- <https://school.wakehealth.edu/Faculty/M/Michael-Thomas-Munley>
- <https://www.wakehealth.edu/Providers/M/Michael-Thomas-Munley>

Jenny Munson, PhD



Associate Professor

Biomedical Engineering & Mechanics
Fralin Biomedical Research Institute t VTC
Virginia Tech-Roanoke Campus

(540) 526-2352

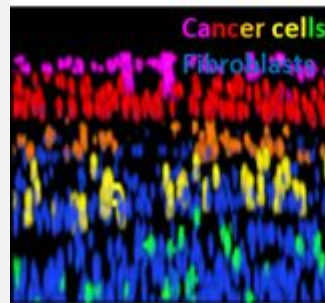
munsonj@vt.edu



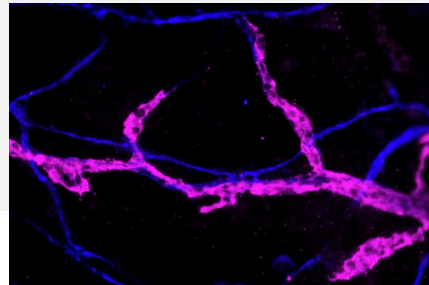
SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

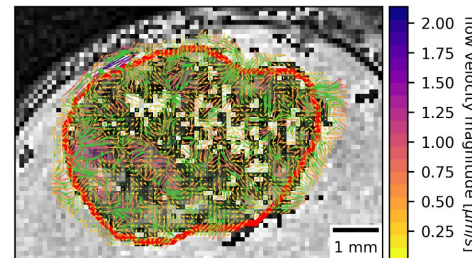
- Tumor microenvironment
- Interstitial fluid flow
- Brain cancer
- Breast cancer
- Lymphatics
- Tissue engineering
- Alzheimer's Disease
- Drug delivery
- In vivo imaging



Logsdon et al. (2017) CMBE




Harris et al. (2022) *Frontiers Oncology*



Kingsmore, et al. (2018) *APL Bioengineering*

Links

- [Munson Lab Website:](http://www.munsonlab.com)
www.munsonlab.com
 - [Faculty Page:](https://fbri.vtc.vt.edu/people-directory/primary-faculty/munson.html)
<https://fbri.vtc.vt.edu/people-directory/primary-faculty/munson.html>
-  [@MunsonOEL](https://twitter.com/MunsonOEL)



Sean Vincent Murphy, PhD



Assistant Professor

Wake Forest Institute for Regenerative Medicine

Wake Forest Campus

(336) 713-7277

semurphy@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Regenerative Medicine
- Stem Cells and Cell Therapies
- Tissue Engineering
- Wound Healing
- Biomaterials
- Lung Diseases
- 3D Bioprinting for Organ Biofabrication
- Organ-on-a-chip
- Clinical Trials

Links

- <https://school.wakehealth.edu/Faculty/M/Sean-Vincent-Murphy>
- www.linkedin.com/in/sean-murphy-3741bb49
- <https://seanmurphylab.wordpress.com/>

Kristen Nicholson, PhD



Assistant Professor

Orthopaedic Surgery, Biomedical Engineering

Wake Forest Campus

336-716-1787

kfnichol@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Motion Analysis
- Upper Extremity Mechanics
- Sports Biomechanics
- Orthopaedic Biomechanics
- Baseball Pitching
- Gait Analysis

Links

- <http://www.wakeforestpitchinglab.com/>
- <https://school.wakehealth.edu/Faculty/N/Kristen-Nicholson>

 [@WakePitchingLab](https://twitter.com/WakePitchingLab)

Maury A. Nussbaum, PhD



H.G. Prillaman Professor

Department of Industrial & Systems Engineering

Blacksburg Campus

(540) 231-6053

nussbaum@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Occupational Biomechanics & Ergonomics
- Applied Biomechanics
- Work Physiology
- Balance & Postural Control
- Electromyography & Muscle Fatigue
- Slip, Trip, & Fall Prevention
- Ergonomics Design and Interventions
- Occupational Exoskeletons

Links

- <https://ise.vt.edu/nussbaum>
- <https://oeb.ise.vt.edu>
- http://www.researchgate.net/profile/Maury_Nussbaum/
- <http://scholar.google.com/citations?user=XMRtFS8AAAAJ>



maury-nussbaum-96275499

Boris Claude Pasche, MD, PhD, FACP



Chair & Professor, Cancer Biology
Director, Comprehensive Cancer Center

Comprehensive Cancer Center

Wake Forest Campus

(336) 716-7971

BorisCPasche@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Transforming Growth Factor Beta Receptors
- Colorectal Neoplasms
- Breast cancer
- Hepatocellular carcinoma
- Biological effects of radiofrequency electromagnetic fields

Links

- <https://school.wakehealth.edu/Faculty/P/Boris-Claude-Pasche>
- <https://school.wakehealth.edu/Research/Labs/Pasche-Lab>

Miguel A. Perez, PhD, CPE



Associate Professor

Biomedical Engineering and Mechanics Department

Virginia Tech Campus

540-231-1537

mperez@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Automotive Safety
- Emergency Vehicles
- Driving and Medical Conditions
- Biomechanics
- Human Factors
- Ergonomics
- Dynamics and control
- Data Analytics
- Research Design
- Computational Modeling

Links

- <https://beam.vt.edu/people/faculty/perez.html>
- <https://www.vtti.vt.edu/staffdir/bio.php?&pn=112350>
- <https://www.vtti.vt.edu/hfts/index.html>



miguel-perez-577b8310



0000-0003-0437-5603

Christopher D. Porada, PhD



Professor

Wake Forest Institute for Regenerative Medicine

Wake Forest Campus

(336) 713-1655

cporada@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- In Vivo Gene Transfer
- Stem Cell-Based Gene Therapy
- Hematopoiesis
- Hemophilia A
- Prenatal Therapies
- Microgravity
- Risks of Space Flight and Space Radiation
- Radiation-Induced Carcinogenesis
- Molecular Medicine and Translational Science
- Integrative Physiology and Pharmacology

Links

- <https://school.wakehealth.edu/Faculty/P/Christopher-Porada>

Robin Queen, PhD, FACSM, FIOR



Professor, Director Kevin Granata Lab, Virginia Tech Faculty Senate Vice President

Department of Biomedical Engineering and Mechanics
Department of Orthopaedic Surgery, Virginia Tech Carilion School of Medicine

Virginia Tech
(540) 231 - 3134
rmqueen@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES


Expert In

- Biomechanics
- Human Subjects Experimental Research
- Clinical Trials
- Orthopaedic / Musculoskeletal Health
- Clinical and Functional Outcomes
- Movement and Loading Symmetry
- Remote Data Collection Methods
- Rehabilitation Engineering
- Data Health Analytics

Links

- <https://beam.vt.edu/people/faculty/queen.html>
- <https://www.granatalab.beam.vt.edu/>
- <https://www.research.vt.edu/sirc/contact/robin-queen.html>

 @GranataLab,
@rmqueen_VT

 robin-queen-a941074b

Elaheh (Ellie) Rahbar, PhD



Assistant Professor

Department of Biomedical Engineering

Wake Forest University

Phone: (336) 713-1553

E-mail: erahbar@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics & Biofluids
- Computational Fluid Modeling
- Hemorrhagic shock
- Resuscitation & Transfusions
- Biomarkers for trauma
- Omega-3 fatty acid metabolism
- Metabolomics and Lipidomics
- Precision Medicine
- Acute lung injury
- Traumatic brain injury
- Translational Trauma Research

Links

- <https://school.wakehealth.edu/Faculty/R/Elaheh-Rahbar>
- <https://rahbarlab.wordpress.com/>

Luke E. Riexinger, PhD



Research Assistant Professor

Biomedical Engineering and Mechanics

Virginia Tech

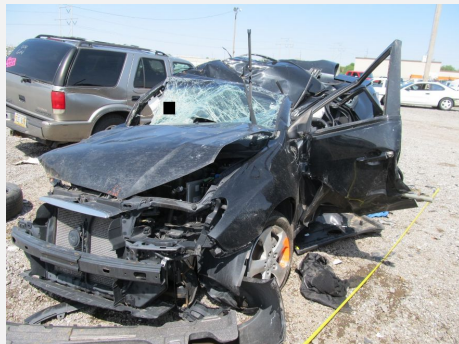
riexinger@vt.edu



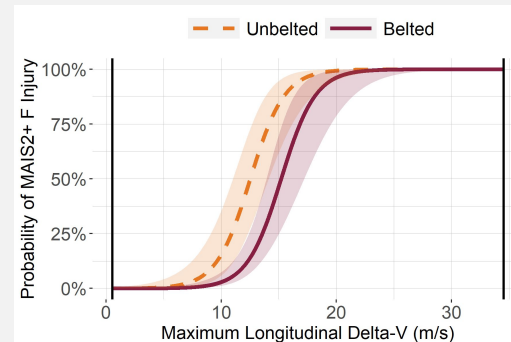
SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Event Data Recorders
- Evaluation of Active Safety Systems
- In-Service Performance Evaluation



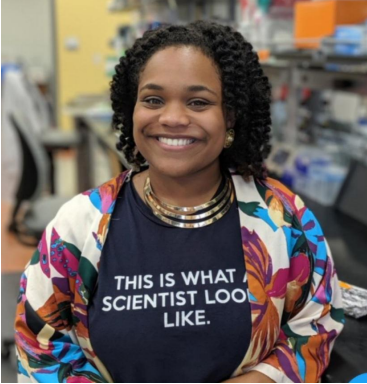
- Roadside Safety Design
- Crash Injury Biomechanics
- Occupant Injury Modeling
- Road Departure Crashes
- Rollover Crashes



Links

- www.beam.vt.edu/people/faculty/riexinger
- www.linkedin.com/in/lukeriexinger/
- www.safetyimpact.beam.vt.edu

Monét Roberts, PhD



Assistant Professor

Department of Biomedical Engineering and Mechanics

Virginia Tech

Phone Number

monetr@vt.edu





SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Glycocalyx/glycocalyx engineering
- Cancer Cell Biology
- Scanning Electron Microscopy
- Translational Cancer Research
- Tissue Engineering
- Tumor Microenvironment
- Meningeal lymphatics
- Extracellular Vesicles

Links

- Website under construction
-  @PhunsizeDPhD
-  ladeidra-monet-roberts

Steve Rowson, PhD



Associate Professor

Biomedical Engineering and Mechanics

Virginia Tech

540-231-8254

rowson@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Injury Biomechanics
- Concussion
- Protective Design
- Safety Evaluation Systems
- Data Science
- Computer Vision
- Risk Analysis
- Helmets
- Sport Injury Prevention

Links

- SteveRowson.com
- vt.edu/helmet
- Twitter: [@strowson](https://twitter.com/@strowson)

Sean L. Simpson, PhD



Professor

Department of Biostatistics and Data Science, Division of Public Health Sciences

Wake Forest Campus

336-716-8369

slsimpso@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Statistical Methods for Network- and Complexity-Based Neuroimaging
- Repeated Measures Analysis
- Covariance Modeling
- Health/Social Disparities

Links

- <https://school.wakehealth.edu/Faculty/S/Sean-L-Simpson>
- <https://www.phs.wakehealth.edu/public/profile.cfm?staffid=7DF7D34F-A955-4D3D-B70D-FCCD6EC1FAA4>
- <http://lcbn.wakehealth.edu/>

Jake Socha, Ph.D.



Samuel Herrick Professor

Department of Biomedical Engineering and Mechanics

Virginia Tech

540-231-6188

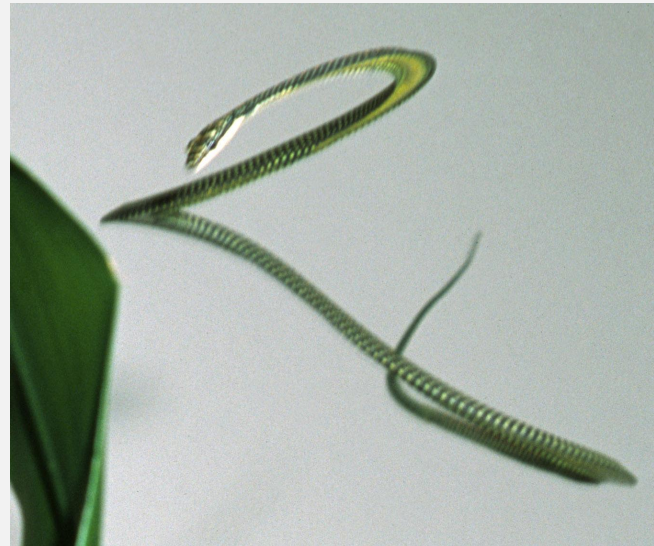
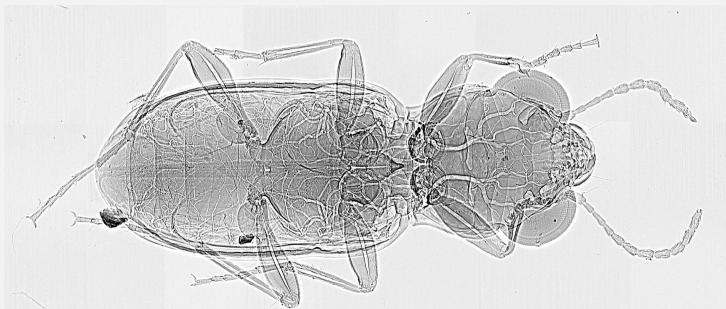
jjsocha@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Comparative biomechanics
- Bio-inspired engineering
- Synchrotron x-ray imaging
- Computed tomography
- Animal locomotion



Links

- www.thesochalab.org
- Twitter: [@SochaLab](https://twitter.com/SochaLab), [@snake_flyer](https://twitter.com/snake_flyer)



Shay Soker, PhD



Professor and Chief Science Program Officer

Wake Forest Institute for Regenerative Medicine

Wake Forest Campus

(336) 713-7295

ssoker@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Tissue Engineering
- Biomaterials
- Stem Cells
- Translational Cancer Research
- Cellular Mechanics
- Extracellular Matrix

Links

- <https://school.wakehealth.edu/Faculty/S/Shay-Soker>

Anne E. Staples, PhD



Associate Professor

Biomedical Engineering and Mechanics

Blacksburg Campus

540-231-7570

staplesa@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Fluid Dynamics
- Computational Modeling
- Microfluidics
- 3D Printing
- Finite Element Modeling
- Medical Devices
- Hemodialysis, Drug Delivery, Cardiovascular Flow Modeling
- Machine Learning/AI

Links

- [BEAM Faculty Profile](#)
- [Fluid Dynamics in Nature Lab Website](#)

 [@StaplesLabFluid](#)

 [anne-staples-4180834](#)

Joel D. Stitzel, Ph. D.



Professor, Chair of Biomedical Engineering (WFU), Program Leader (CIB)

Biomedical Engineering, VT-WFU Center for Injury Biomechanics (CIB)

Wake Forest University School of Medicine

(336) 705-1234

jstitzel@wakehealth.edu, jdstitzel@gmail.com



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Research Interests / Expertise

- Biomechanics
- Computational Modeling / Human Body Modeling
- Sports Safety
- Concussion / Neurotrauma / Traumatic Brain Injury
- Head Impact Measurement Instrumentation
- Field Head Impact Exposure Data Collection in Youth Sports
- Aerospace, Military, and Vehicle Safety
- Crash Injury Research and Engineering Network
- Finite Element Analysis

Links

- [CIB @ WFU](#)
- [LinkedIn](#)
- [NIH NLM Bibliography](#)
- [Loop Profile](#)
- [Wakehealth Profile \(CTSI\)](#)
- [ResearchGate](#)
- [Google Scholar](#)
- [WFU School of Medicine Profile](#)

Jeff Stein, PhD



Assistant Professor

Human Nutrition, Foods, and Exercise, Virginia Tech
Fralin Biomedical Research Institute (FBRI) at VTC

(540) 526-2124

jstein1@vtc.vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Behavioral economics
- Decision-making
- Type 2 diabetes
- Obesity
- Substance use disorders
- Tobacco regulatory science
- Clinical trials
- Human subjects experimental research

Links

- [FBRI Faculty Profile](#)
- [LinkedIn](#)
- [PubMed Bibliography](#)
- [ResearchGate](#)
- [Google Scholar](#)

Danesh Tafti, PhD



William S. Cross Professor

Mechanical Engineering

Virginia Tech

540-231-9975

dtafti@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Computational fluid dynamics
- Parallel computing
- Numerical methods development
- Turbulent flow and heat transfer
- Large-Eddy Simulations
- Multiphase liquid-gas-solid systems
- Turbomachinery
- Cardio-vascular modeling
- Natural flight aerodynamics
- Ocean energy harvesting

Links

<https://hpcfd.me.vt.edu>

<https://scholar.google.com/citations?user=gtDnS1YAAAAJ&hl=en&oi=ao>

<https://www.researchgate.net/profile/Danesh-Tafti>

Costin D. Untaroiu, PhD



Associate Professor

Department Of Biomedical Engineering and Mechanics, Center for Injury Biomechanics

Blacksburg Campus

(540)-231-5094
costin@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Computational (Bio)Mechanics
- Material Modelling
- Injury/Trauma
- Optimization
- Pattern Recognition

Links

- <https://beam.vt.edu/people/faculty/untaroiu-c.html>
- <https://beam.vt.edu/research/Center-for-Injury-Biomechanics.html>
- <https://scholar.google.com/citations?user=SRI2PMAAAAJ&hl=en>



costin-untaroiu-2082
573

Jillian E. Urban, PhD, MPH



Assistant Professor

Biomedical Engineering Department, Center for Injury Biomechanics

Wake Forest Campus

336-716-0947

jurban@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Injury Biomechanics
- Concussion / Traumatic Brain Injury
- Head Acceleration Measurement
- Sports Injury Prevention
- Public Health Research Methods
- Translational Research

Links

- <https://school.wakehealth.edu/Faculty/U/Jillian-Urban>
- <https://profiles.wakehealth.edu/display/Person/jurban>



Pamela J. VandeVord, PhD



N. Waldo Harrison Professor

Biomedical Engineering and Mechanics

Blacksburg, VA

540-231-1994

pvord@vt.edu



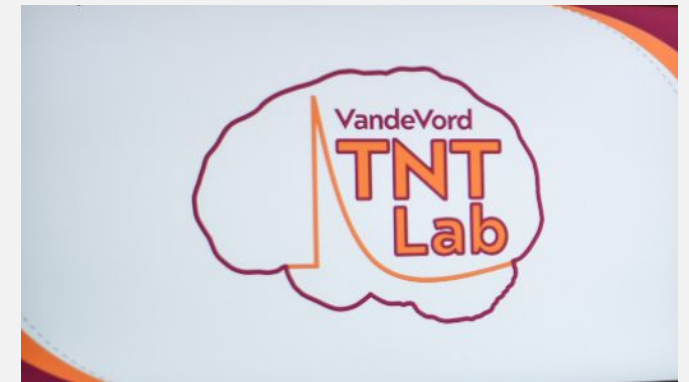
SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

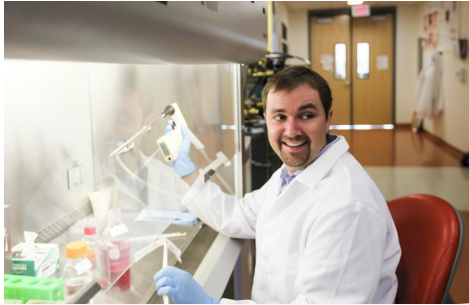
- Injury Biomechanics
- Neuroengineering
- Traumatic Brain Injury
- Cell Mechanics
- Biomaterials
- Glial Biology
- Nanobioengineering
- Neurodegeneration

Links

- [@pvandevord_VT](https://www.instagram.com/pvandevord_VT)
- <https://www.linkedin.com/in/pamela-vandevord-83948b32/>
- <https://tntlab.beam.vt.edu>



Scott Verbridge, PhD



Associate Professor

Biomedical Engineering and Mechanics

Blacksburg

540-231-6908

sverb@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Translational Cancer
- Targeted Therapies
- Tumor Microenvironment
- Tumor Microbiome
- Tumor Evolution
- Tissue Engineering
- Neuroengineering

Links

- www.verbridgelab.org

Pierre Vidi, PhD



Associate Professor

Cancer Biology

Wake Forest Campus

(336) 716 7122

pvidi@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

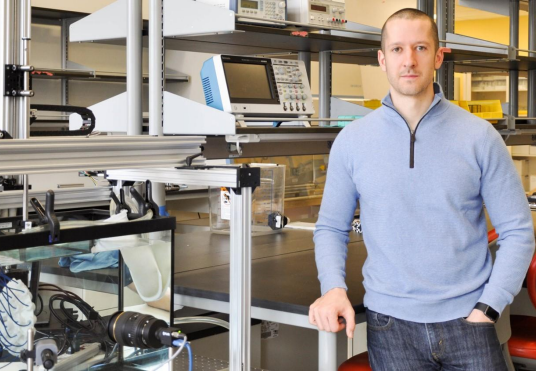
Expert In

- Cell Biology
- Cancer Prevention Models
- Translational Cancer Research
- Imaging
- Computational Image Analyses

Links

- <https://school.wakehealth.edu/Research/Labs/Pierre-Alexandre-Vidi-Lab>

Eli Vlaisavljevich, MS, PhD



Assistant Professor

Biomedical Engineering and Mechanics

Virginia Tech Campus

540-231-2136

EliV@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Focused Ultrasound
- Medical Devices
- Translational Cancer
- Non-invasive tissue ablation (Histotripsy, HIFU)
- Acoustic Cavitation
- Nanoparticle-mediated histotripsy (NMH)
- Ultrasound-guided tissue regeneration
- Ultrasonic neuromodulation
- Acoustically-active Biomaterials
- Bioengineering for Conservation and Global Health
- Clinical Translation

Links

- <https://ultrasound-lab.beam.vt.edu/index.html>
- <https://ultrasound-lab.beam.vt.edu/Doctor.html>
- <https://beam.vt.edu/people/faculty/vlaisavljevich.html>



William Wagner, MS, PhD



Assistant Professor

Plastic and Reconstructive Surgery; Regenerative Medicine

Wake Forest Campus

336-306-2426

wwagner@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Wound Repair
- Regenerative Medicine
- Biomaterial Fabrication
- Stem Cell-Biomaterial Interaction
- Cardiovascular Tissue Repair
- Musculoskeletal Tissue Repair
- Nutrition and Effects of Polyphenolics on Disease

Links

- <https://scholar.google.com/citations?user=flwWn9oAAAAJ&hl=en>
- https://www.researchgate.net/profile/William_Wagner3

Vincent M. Wang, Ph.D.



Associate Professor; Director, Orthopedic Mechanobiology Lab

Department of Biomedical Engineering and Mechanics

Virginia Tech Campus

540-231-1771

vmwang@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES


Expert In

- Orthopedic biomechanics
- Soft tissue biomechanics
- Mechanobiology
- Pre-clinical models of tendon healing
- Non-invasive therapeutic models
- Quantitative ultrasound imaging
- Machine learning analysis of ultrasound images

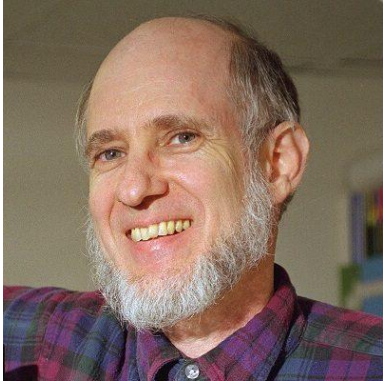
Links

- <https://wanglab.beam.vt.edu/>

 @vwang_VT

 vincent-wang-vt

Layne Watson, PhD



Professor

Computer Science, Math & Aerospace and Ocean Engineering

Virginia Tech Campus

540-231-7540

ltwatson@computer.org



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Numerical Analysis
- Nonlinear Programming
- Mathematical Software
- Image Processing
- Parallel Computation
- Bioinformatics

Links

- <https://people.cs.vt.edu/~ltw/>
- <https://people.cs.vt.edu/~ltw/shortvita.html>

Jennifer S. Wayne, Ph.D.



Professor and Department Head; Head SBES

Department of Biomedical Engineering and Mechanics

Virginia Tech Campus

540-231-2569

jswayne@vt.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Musculoskeletal Biomechanics
- Joint Biomechanics
- Hard and Soft Tissue Mechanics
- Computational Modeling
- Experimental Mechanics
- Solid Mechanics

Links

- [JSWayne with VT BEAM](#)
- [VT BEAM](#)



[JSWayne on LinkedIn](#)

Ashley A. Weaver, MS, PhD



Associate Professor, Graduate Recruitment Director, & REU Director

Biomedical Engineering Department, Center for Injury Biomechanics

Wake Forest Campus

336-716-0944

asweaver@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Biomedical Imaging (CT, MRI, DXA)
- Computational Modeling (Finite Element Analysis)
- Injury / Trauma
- Orthopedic / Musculoskeletal Health
- Automotive Safety
- Aerospace and Astronaut Injury Prevention
- Aging, Osteoporosis, and Sarcopenia
- Anatomical Modeling for Medical Device Virtual Testing
- Clinical Trials Research

Links

- <https://school.wakehealth.edu/Faculty/W/Ashley-Anne-Weaver>
- <https://www.wakeforestinnovations.com/experts/ashley-weaver-phd/>

 @AshleyAWeaver; @WakeBME;

 ashley-weaver-3808548

Jared A. Weis, PhD



Assistant Professor

Biomedical Engineering Department

Wake Forest Campus

(336) 716-0740

jweis@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomechanics
- Biomedical Imaging (MRI)
- Biophysics
- Cancer Model Systems (*in vitro* & *in vivo*)
- Computational Modeling
- Microscopy
- Translational Cancer Research

Links

- <https://school.wakehealth.edu/Faculty/W/Jared-A-Weis>
- <https://school.wakehealth.edu/Research/Labs/Weis-Lab>
- <https://WeisLab.org>

 @JaredWeis @WeisLab_WFU

Saami K. Yazdani, PhD



Associate Professor

Department of Engineering

Wake Forest University

336-702-1968

yazdanis@wfu.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Cardiovascular Mechanics
- Medical Devices
- Translational Research
- Drug Delivery
- Pre-clinical Modeling
- Fluid Mechanics
- Atherosclerosis
- Peripheral Arterial Disease
- Coronary Arterial Disease
- Tissue Engineering

Links

- <https://www.biofluids.org>
- <https://engineering.wfu.edu/people/faculty/saami-yazdani/>

Dawen Zhao, MD, PhD



Associate Professor

Biomedical Engineering

Wake Forest Campus

336-713-5783

dawzhao@@wakehealth.edu



SCHOOL OF BIOMEDICAL ENGINEERING AND SCIENCES

Expert In

- Biomedical Imaging (MRI, Optical)
- Image-guided drug delivery
- Imaging Contrast Agents
- Translational Cancer Research
- Nanotechnology
- Immunotherapeutic Nanoparticles

Links

- <https://school.wakehealth.edu/Research/Labs/Dawen-Zhao-Lab>