# Department of Biomedical Engineering

**FACULTY AND RESEARCH FACT SHEET (2017)**

*Research areas feature only a sample. Please visit websites for full research details and current projects.*

<table>
<thead>
<tr>
<th>Full-time Faculty</th>
<th>Research Spending</th>
<th>Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>$2.4M</td>
<td>49</td>
</tr>
</tbody>
</table>

## Grants & Collaborations

- American Heart Association
- Army Research Laboratory
- Commonwealth Research Commercialization Fund
- Food & Drug Administration
- Katzen Cancer Research Center
- National Institutes of Health
- National Science Foundation
- National Children’s Medical Center

## Department at a Glance (2017)

### Full-Time Faculty

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Faculty:</th>
<th>Website:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioelectronics</td>
<td>Igor Efimov, Department Chair &amp; Professor</td>
<td><a href="http://efimovlab.org">http://efimovlab.org</a></td>
</tr>
<tr>
<td>Biological Mechanisms of Cardiac Remodeling</td>
<td></td>
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<tr>
<td>Implantable &amp; Interventional Cardiac Devices</td>
<td></td>
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<tr>
<td>Cardiac Optogenetics</td>
<td>Emilia Entcheva, Professor</td>
<td><a href="entcheva.seas.gwu.edu">entcheva.seas.gwu.edu</a></td>
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<tr>
<td>High-Throughput Technologies</td>
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<tr>
<td>Optical Imaging</td>
<td></td>
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<tr>
<td>Cardiac Electrical Activity</td>
<td>Matthew Kay, Professor</td>
<td><a href="bme.seas.gwu.edu/matthew-kay">bme.seas.gwu.edu/matthew-kay</a></td>
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<tr>
<td>High-Speed Optical Assessment of Cardiac Physiology</td>
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<td>Mitochondrial Function</td>
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<tr>
<td>Motor System Disorders</td>
<td>David T. Lee, Professor of Practice</td>
<td><a href="bme.seas.gwu.edu/david-t-lee">bme.seas.gwu.edu/david-t-lee</a></td>
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<tr>
<td>Prone Infant Mobility Assist Devices</td>
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<tr>
<td>Microfluidics</td>
<td>Zhenyu Li, Associate Professor</td>
<td><a href="sites.google.com/site/gwulilab/">sites.google.com/site/gwulilab/</a></td>
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<tr>
<td>Nanophotonics</td>
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<tr>
<td>Wearable Biosensors</td>
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<tr>
<td>Hyperspectral Imaging</td>
<td>Murray H. Loew, Professor</td>
<td><a href="bme.seas.gwu.edu/murray-h-loew">bme.seas.gwu.edu/murray-h-loew</a></td>
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<tr>
<td>Image &amp; Signal Processing</td>
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<tr>
<td>Infrared Imaging</td>
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<tr>
<td>Assistive Robotics</td>
<td>Chung-hyuk Park, Assistant Professor</td>
<td><a href="chunghyukpark.com">chunghyukpark.com</a></td>
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<tr>
<td>Machine Learning</td>
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<tr>
<td>Telepresence Robotics</td>
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<tr>
<td>Cellular Therapeutics</td>
<td>Anne-Laure Papa, Assistant Professor</td>
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<tr>
<td>Diagnostic Platforms</td>
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<tr>
<td>Nanomedicine</td>
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- National Children’s Medical Center
• IMAGING INSTRUMENTATION
• MICROFABRICATED OCT SCANNERS
• SOFTWARE APPLICATION FOR HUMAN DISEASES

Faculty: Jason Zara, Associate Professor
Website: bme.seas.gwu.edu/jason-m-zara

• ENHANCED OCULAR DRUG DELIVERY
• NAIL DRUG DELIVERY
• ULTRASOUND DRUG DELIVERY

Faculty: Vesna Zderic, Associate Professor
Website: zdericlab.seas.gwu.edu