

**Kendal Paige Ezell**  
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**Education**

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Texas A&M University - College Station, Texas  
Bachelor of Science, Biomedical Engineering (Honors), minor in Neuroscience

Expected Graduation: May 2018  
GPA: 3.96/4.0

**Professional Experience**

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**Biomedical Engineering Summer Internship Program – National Institute of Health**

*Research Intern*

June 2017 – August 2017

- Performed literature search to identify and develop a summer project proposal
- Observed preclinical trials
- Opportunity to join hospital rounds and observe human clinical trials
- Developing and characterizing a novel drug-device combination for the treatment of hepatocellular carcinoma

**Undergraduate Research Scholar Program – Texas A&M University**

*Biomedical Engineering Department – Dr. Duncan Maitland*

*Undergraduate Student Researcher*

August 2016 – May 2017

- Optimized radiopaque shape memory polymer foams for clinical treatments of brain aneurysms
- Characterized developed radiopaque shape memory polymer foams
- Attended writing seminars and thesis workshops
- Submitted first author paper to national conference

**Undergraduate Summer Research Grant Program – Texas A&M University**

*Biomedical Engineering Department – Dr. Duncan Maitland*

*Undergraduate Student Researcher*

May 2016 – August 2016

- Developed radiopaque shape memory polymer foams for clinical treatments of brain aneurysms
- Characterized radiopaque shape memory polymer foams
- Attended GRE prep courses and professional seminars

**Germany Biosciences Study Abroad Program**

*Bonn, Germany – Dr. Jeremy Wasser*

*Study Abroad Student*

January 2016 – May 2016

- Gained a cultural outlook through traveling and a homestay program
- Worked with a foreign biotech company on a paracorporeal lung device design
- Shadowed a clinical neuropsychologist at an International University Clinic
- Shadowed international researchers at the Center of Advanced European Studies and Research in Bonn, Germany

**Institute for Neuroscience – Texas A&M University**

*Psychology Department – Dr. Mark Packard*

*Undergraduate Student Research Assistant*

August 2015 – December 2015/January 2017 – Present

- Conducted human cognitive studies on relationships between emotions and learning-memory
- Prepared animal specimens for analysis of brain structures in relation to experimental procedures
- Primed animals for testing in memory and learning tasks such as the T-maze

**Biomedical Device Lab – Texas A&M University**

*Biomedical Engineering Department – Dr. Duncan Maitland*

*Undergraduate Student Research Assistant*

March 2015 – Present

- Analyzed cold plasma surface modification techniques to control the *in-vivo* expansion kinetics of shape memory polymer devices for neurovascular embolization
- Developed and published synthetic approaches for creating shape memory polymer foams with enhanced x-ray contrast
- Developed a plasma deposition map for the Aurora 0350 Plasma Surface Treatment System

**Leadership Development and Service**

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**Phi Kappa Phi (National Academic Honor Society)**

*Member*

March 2017 – Present

- Selected as Texas A&M University Dwight Look College of Engineering Outstanding Junior
- Selected as Texas A&M University Biomedical Engineering Department Outstanding Junior

**Biomedical Engineering Student Ambassadors**

*Student Ambassador*

May 2016 – Present

- Conducted research laboratory and facility tours for venture capitalists, prospective students, guest lecturers, and biotechnology company representatives
- Served as a representative for the biomedical engineering student body

**Alpha Eta Mu Beta (Biomedical Engineering Honor Society)**

*Treasurer*

April 2017 – Present

- Managed accounts for society events and activities
- Member* **December 2015 – Present**
- Inducted into the prestigious honor society on basis of grades and involvement
- Student Engineers' Council**
- Philanthropy Committee Member* **February 2015 – Present**
- Coordinated and participated in outreach events such as Engineering Week and Engineering Day
  - Represented the council through a professional trip to San Francisco to speak with engineering companies
  - Selected as one of ten students to represent the Council and College in Santiago, Chile at the International Seminar for Engineering Leaders
- American Medical School Association**
- Member* **September 2014 – May 2015**
- Learned about the medical profession and academia through speakers and events
  - Volunteered for medical service activities
- Kappa Alpha Theta, Delta Omega Chapter (Texas A&M University)** **August 2014 – Present**
- Spring Philanthropy Promotions Committee* **February 2017 – April 2017**
- Coordinated decorations and crafts for kids at the event
  - Helped raise over \$128,000 for national and local organizations fighting child abuse
- Fall Philanthropy Promotions Chairman* **November 2016 – Present**
- Planned community outreach and logistics for Fall 2017 event
- Fall Philanthropy Silent Auction Committee* **September 2016 – November 2016**
- Spoke to businesses and sponsors for donations
  - Organized operational aspects of silent auction for event
  - Helped raise over \$47,000 for a local philanthropy, Scotty's House
- Fall Philanthropy Operations Sub-Committee Leader* **September 2015 – November 2015**
- Managed donations and sponsor communication for Thetafest
  - Delegated member's roles for the event
  - Helped raise over \$36,000 for a local philanthropy, Scotty's House
- Scholarship Committee Member* **February 2015 – November 2015**
- Organized a chapter directory by major for academic reference
  - Coordinated study events for chapter members
- Spring Philanthropy Promotional Committee Member* **February 2015 – April 2015**
- Organized promotional events for Theta 5K, an event to raise money for organizations fighting child abuse
  - Communicated to schools and businesses for community involvement
  - Helped raise over \$97, 000 for national and local organizations fighting child abuse
- Fall Philanthropy Promotional Committee Member* **September 2014 – October 2014**
- Coordinated promotional events and designed promotional material
  - Helped raise over \$41,000 for local philanthropy, Scotty's House
- University Honors and Engineering Honors Programs**
- Member* **August 2014 – Present**
- Participated in Honors classes and seminars as well as cultural and higher-level educational experiences
  - Lived in the Freshman-learning environments to interact with other honors students

## **Honors and Awards**

<b>International Seminar for Engineering Leaders Texas A&amp;M Representative</b>	<b>June 2017</b>
<b>Astronaut Scholar (Astronaut Scholarship Foundation)</b>	<b>May 2017</b>
<b>Cornell Calvin Resse '49 Memorial Southerland Aggie Leader Scholarship</b>	<b>May 2017</b>
<b>BMES Coulter College Texas A&amp;M Team Member</b>	<b>May 2017</b>
<b>Dr. W. Dan Turner Engineering Leadership Award</b>	<b>May 2017</b>
<b>Phi Kappa Phi Texas A&amp;M University Overall Outstanding Junior</b>	<b>April 2017</b>
<b>Phi Kappa Phi Dwight Look College of Engineering Outstanding Junior</b>	<b>March 2017</b>
<b>Barry Goldwater Foundation Fellowship Honorable Mention</b>	<b>March 2017</b>
<b>First Place Oral Presentation at Texas A&amp;M University Student Research Week</b>	<b>March 2017</b>
<b>Inventor on two provisional patents</b>	<b>October 2016</b>
<b>Stars Scholarship Award</b>	<b>August 2016</b>
<b>Kappa Alpha Theta Leading Women March Spotlight</b>	<b>March 2016</b>
<b>Undergraduate Summer Research Grant</b>	<b>March 2016</b>
<b>Peter Chaplinsky Memorial Scholarship (Top Biomedical Engineering Junior)</b>	<b>March 2016</b>
<b>Roland and Margaret Prove Southerland Aggie Leader Scholarship</b>	<b>March 2016</b>
<b>George M and Mary B Lewis Merit Endowed Scholarship (2 years)</b>	<b>March 2016</b>

Barry Goldwater Foundation Fellowship Honorable Mention	March 2016
George Bush Presidential Library Foundation Undergraduate Student Travel Grant	January 2016
Texas A&M Bookstore Study Abroad Scholarship	November 2015
Endowed Study Abroad Lechner Stipend	November 2015
International Programs Scholarship	November 2015
International Education Fee Scholarship	November 2015
College of Veterinary Medicine International Programs for Student Travel Scholarship	November 2015
Benjamin A. Gilman International Scholarship	November 2015
Second Place Poster Presentation at the Texas A&M University System Pathways Symposium	October 2015
Association of Former Students Southerland Aggie Leader Scholarship	May 2015
U-Ignite Engineering Innovation Competition Winner	February 2015
Texas A&M President's Endowed Scholar	August 2014
Texas A&M Regents' Scholar	August 2014
Texas A&M Opportunity Scholar	August 2014
Department of Biomedical Engineering Freshman Scholarship	August 2014
Iris Schroder Bullard Memorial Scholarship	August 2014
Burger King McLamore Foundation Scholarship	August 2014
Texas Society of Professional Engineers Scholarship	August 2014
Padre Island Enrichment Foundation Scholarship	August 2014
John Paul Barta Memorial Scholarship	August 2014
Texas State Valedictorian Tuition Exemption	August 2014
Raytheon FIRST Robotics Scholarship	August 2014
Top 10% State Scholarship	August 2014
Corpus Christi Pan American Golf Association Scholarship	August 2014
National Pan American Golf Association Scholarship	August 2014
Flint Hills Scholar	August 2014

## Relevant Skills and Training

**Software:** MATLAB, LabView, Image J, Sigma Plot, Microsoft Office, EndNote

**Experimental:** Cold Plasma Surface Modification, Goniometry, Ellipsometry, DSC, Spin Coating, SEM, Foam Actuation, Thermogravimetric Analysis, Animal Handling Training, Animal Profusion, Cryostat, Polyurethane Synthesis, Mechanical Testing Analysis, Cell Culture Techniques

## Publications

1. Nash LD, Browning-Monroe MB, **Ezell KP**, Maitland DJ. "Chemically Modified Shape Memory Polymer Embolic Foams with Increased X-Ray Visualization." 2017. In preparation.
2. **Ezell KP**, Nash LD, Gordon S, Maitland DJ. "Synthesis and Characterization of Radiopaque Shape Memory Polymer Foams." *Design of Medical Devices Conference- Journal of Medical Devices*. 2017. In press.
3. Nash LD, Rivera NC, **Ezell KP**, Carrow JK, Hasan SM, Gaharwar AK, Maitland DJ. "Cold Plasma Reticulation of Shape Memory Polymer Embolic Foams." *Macromolecular Rapid Communications*. 2016.
4. Nash LD, **Ezell KP**, Hasan SM, Maitland DJ. "Characterization of Plasma Deposited Hydrocarbon Diffusion Barriers for Embolic Foam Devices." *9th IEEE International Conference on Nano/Molecular Medicine & Engineering (NANOMED)*. 2015.

## Abstracts (12)

**Ezell KP**, Nash LD, Gordon S, Maitland DJ. "Synthesis and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at *Design of Medical Devices Conference* at University of Minnesota Minneapolis, Minnesota (April 2017, poster presentation).

**Ezell KP**, Nash LD, Maitland DJ. "Synthesis and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at *Student Research Week* at Texas A&M University College Station, Texas (March 2017, oral presentation, first place).

**Ezell KP**, Nash LD, Muschalek RL, Maitland DJ. "Development and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at the *Gulf Coast Undergraduate Research Symposium* at Rice University Houston, Texas (October 2016, oral presentation).

**Ezell KP**, Nash LD, Muschalek RL, Maitland DJ. "Development and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at the *Engineering Health Science Symposium* at Texas A&M University-College Station, Texas (October 2016, poster presentation).

**Ezell KP**, Nash LD, Muschalek RL, Maitland DJ. "Development and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at the *Summer Undergraduate Research Symposium* at Texas A&M University-College Station, Texas (August 2016, poster presentation).

- Ezell KP**, Nash LD, Muschalek RL, Maitland DJ. "Development and Characterization of Radiopaque Shape Memory Polymer Foams." Presented by Kendal Ezell at the *Undergraduate Summer Research Grant Poster Session* at Texas A&M University-College Station, Texas (August 2016, poster presentation).
- L.D. Nash, N. Docherty, M.B. Monroe, **K.P. Ezell**, J. Carrow, S.M. Hasan, A. Gaharwar, D.J. Maitland. "Cold Plasma Reticulation of Shape Memory Embolic Tissue Scaffolds." Presented by Landon Nash at *CIMTEC 5<sup>th</sup> International Conference "Smart and Multifunctional Materials, Structures, and Systems"* in Perugia, Italy (June 2016, oral presentation).
- L.D. Nash, **K.P. Ezell**, S.M. Hasan, D.J. Maitland. "Characterization of Plasma Deposited Hydrocarbon Diffusion Barriers for Embolic Foam Devices." Presented by Landon Nash at *IEEE NanoMed 2015* in Waikiki, Hawaii (November 2015, oral presentation, best student paper award).
- Ezell KP**, Nash LD, Maitland DJ. "Characterization of Cold Plasma Film Deposition in a Reaction Chamber." Presented by Kendal Ezell at the *Society of Engineering Science Symposium* at Texas A&M University-College Station, Texas (October 2015, poster presentation).
- Ezell KP**, Nash LD, Maitland DJ. "Characterization of Cold Plasma Film Deposition in a Reaction Chamber." Presented by Kendal Ezell at the *Pathways Symposium* at Texas A&M University-Corpus Christi, Corpus Christi, Texas (October 2015, poster presentation, second place).
- L.D. Nash, **K.P. Ezell**, S.M. Hasan, D.J. Maitland. "Characterization of Plasma Deposited Hydrocarbon Diffusion Barriers for Embolic Foam Devices." Presented by Landon Nash at *BioInterface Symposium 2015* in Scottsdale, Arizona (September 2015, poster presentation, runner up).
- Ezell KP**, Nash LD, Maitland DJ. "Characterization of Cold Plasma Film Deposition in a Reaction Chamber." Presented by Kendal Ezell at the *Summer Undergraduate Research Symposium* at Texas A&M University-College Station, Texas (August 2015, poster presentation).