

**Blake Deckard**  
**Biomedical Engineer**

Paustenbach and Associates  
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**Academic and Professional Profile**

Blake Deckard is a Biomedical Engineer with Paustenbach and Associates, focused on toxicology, industrial hygiene, risk assessment, and environmental engineering. His current interest is airborne chemicals, for which he works under the guidance of Dr. Dennis Paustenbach. With a B.S. in Biomedical Engineering from Rose-Hulman Institute of Technology, Blake uses his engineering background and technical knowledge to analyze data and problem-solve effectively. His interest in consulting and human health is driven by his passion for improving the quality of life for current and future generations.

**Education and Degrees Earned**

- Bachelor of Science in Biomedical Engineering, Rose-Hulman Institute of Technology, 2023

**Experience Summary**

**Paustenbach and Associates**  
**Biomedical Engineer**  
**Jackson Hole, Wyoming**  
**July 2023 – Present**

- Consultant in toxicology, consumer products, industrial hygiene, risk assessment, and safety.
- Involved in litigation work, interpreting toxicological studies, and characterizing risks posed by chemicals and radionuclides in the environment.
- Analysis of large data sets including identification of trends, statistical analysis, and data visualization.

**Cook Medical**  
**Manufacturing Quality Engineering Intern**  
**Ellettsville, Indiana**  
**Summer 2022**

- Completed investigations and documentation for process failures within laboratories.
- Assisted in audit preparation and pre-audit floor walkthroughs.
- Practiced 6S methods within departments being overlooked.
- Organized stock and waste management.

**Rose-Hulman Biomedical Robots Lab**  
**Humanoid Robot Research Assistant**  
**Terre Haute, Indiana**  
**August 2021 – February 2022**

- Assembled robotic limbs from 3D prints.
- Driven and controlled servo motors to provide function to the robotic limbs with an inputted Arduino code.
- Developed new and improved iterations for each limb.

**Rose-Hulman Biomedical Engineering Department**  
**Biomedical Engineering Workshop Assistant**  
**Terre Haute, Indiana**  
**August 2020 - May 2022**

- Prepared labs for Biomedical Engineering classes.
- Operated and maintained 3D printers and machinery.
- Assisted head technician in workshop orders.

**Cook Polymer Technology**  
**Summer Help**  
**Bloomington, Indiana**  
**Summer 2020**

- Shadowed head engineers of each of the 8 laboratories.
- Maintained the warehouse – sending out packages and organizing stock.
- Operated insertion machine that molded a polymer tip onto a metal rod.

## PUBLICATIONS

### **Peer-Reviewed Publications**

1. Stevens, M. E., Paustenbach, D. J., Lockhart, N. J., Busboom, D. E., **Deckard, B. M.**, and Brew, D. W. 2024. The presence of erionite in North American geologies and the estimated mesothelioma potency by region. *Inhalation Toxicology*. 1-16.

### **Published Abstracts**

1. The presence of erionite in North American soils and the estimated mesothelioma potency by region. M. E. Stevens, D. J. Paustenbach, N. J. Lockhart, D. E. Busboom, **B. M. Deckard**, and D. W. Brew. Poster Presentation at Society of Toxicology Annual Meeting. Abstract #4014. March 10-14, 2024. Salt Lake City, Utah.
2. Proposed Acceptable Daily Intake (ADI) for Humans for Chronic Oral Exposure to Hydrazine. D. J. Paustenbach, M. Hilsabeck, M. Stevens, **B. Deckard**, and D. Brew. Poster Presentation at Society of Toxicology Annual Meeting. Abstract #5148. March 10-14, 2024. Salt Lake City, Utah.

### Certifications

- AERMOD Air Dispersion Modeling – Lakes Environmental Software (2-Day Online Course), 2024
- Certified SOLIDWORKS Associate (CSWA – Mechanical Design), 2022

### Professional Honors/Awards

- Baseball Team Captain, Academic All-Conference. C.S.C. Academic All-District
- Phi Gamma Delta 1848 Club James “J.J.” Boyce Outstanding Pledge Award
- 12-time Dean’s list Honoree (graduated in 12 quarters)
- Rose-Hulman Merit Scholarship Recipient
- Robert Judah Memorial Scholarship
- Ellettsville Lions Club Talent Scholarship
- Dr. Jason Simmonds Scholarship
- Ellettsville Masonic Lodge Scholarship
- Stinesville High School Alumni Scholarship
- Indiana High School Baseball Coaches Association Academic All State Baseball Team
- Indiana High School Wrestling Coaches Association 1<sup>st</sup> Team Academic All State

## **Membership and Service to Professional Societies**

- Society of Toxicology (SOT)
  - Associate Member; 2024 conference attendee
- Phi Gamma Delta Fraternity
  - President (2021)
  - Recruitment Chair (2022)
- Blue Key Honor Society
- Alpha Lambda Delta, The National Honor Society for First-Year Success
  - President (2020)