

**UAB** THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM.

# Building a new Graduate-Level Health Physics Program: Challenges and Successes

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# Outline

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# About UAB

- Public institution
- Located in Birmingham, Alabama (1.2M people)
- One of the largest Academic Medical Centers in the United States.
- Alabama's largest single employer with 23,000+ employees and an annual \$7.5B in annual economic impact
- *Forbes* 2021: America's Best Large Employer
- Recognized as a 2018 Diversity Champion by Insight Into Diversity Magazine
- Ranked the #1 Young University two consecutive years by Times Higher Education



# Health Physics @ UAB

University of Alabama at Birmingham

School of Health Professions

Biomedical & Health Sciences  
Biotech  
Genetic Counseling  
Clinical & Lab Sciences  
Nuclear Medicine  
.....  
**Health Physics!!**

Clinical and Diagnostic Sciences





# Challenges

- SHP + CDS = an odd place for HP
- No faculty connected to the industry (only 1 full time HP faculty)
- No ongoing HP research within the department
- Minimal supervised practice sites (2 semesters, 12 credit hours REQUIRED in the curriculum)
- No funding for students
- No clear recruitment plan or strategy
- No data on past applicants, alumni
- No advisory board

# Successes

- **VERY supportive Chair (\$120,000+ in new lab equipment immediately)**
- **Increased class size from Fall 2021 cohort to Fall 2022 cohort (4 → 12 students)**
- **Increased supervised practice sites (5 → 20+ sites)**
- **Started marketing campaign (including website revamp)**
- **Awarded NRC student fellowship grant to fund students (\$375k)**





# Strategic plan for Health Physics at UAB

- **Pillar 1: Education**

- **Priorities**

- ABET accreditation
- PhD program

- **Other Initiatives**

- Fund graduate students
- Improve hybrid learning
- Expand elective courses



# Strategic plan for Health Physics at UAB

- **Pillar 2: Community and Professional Society Engagement**
  - **Priorities**
    - Restart local HPS chapter (ACHPS)
    - Increasing student engagement in HPS
      - ACHPS will become student led
      - Students are joining HPS programs and committees
      - Students will participate in HPS annual meetings
      - 10 students presenting papers in July 2023
  - **Other Initiatives**
    - Annual outreach programs for ages 5-18
    - Radiation risks center for excellence





# Strategic plan for Health Physics at UAB



- **Pillar 3: Research & Innovation coupled with Clinical & Industry Enterprise**
  - **Priorities**
    - *NRC Fellowship (Caffrey, \$375k) ✓*
    - *Research & Development Grant, May 2023 (\$500k)*
    - *Second NRC Fellowship F2023 (\$400k)*
    - *Faculty Development Grant F2023 (\$400k+\$100k)*
    - Annual Research Days event
  - **Other Initiatives**
    - Two peer-reviewed papers annually per faculty

# Strategic plan for Health Physics at UAB




***Long term goal: Establish UAB Center for Excellence in Health Physics to produce a skilled, diverse, and ethically sound workforce that meets the national need for radiation protection professionals***



# Summary

- **Three pieces were synergistically fundamental to the quick growth of this program and will continue to contribute to its sustained growth and development:**
  - 1. Goal driven and passionate leadership**
  - 2. Strong administrative support**
  - 3. A strong employment market for graduates to fill**
- **All educational programs face uncertainty in a post-COVID world and must learn to adapt to the needs of a new generation of students. Successful educational programs are likely to be those that partner with industry, research, and government to ensure their graduates are prepared to fulfill workforce needs.**

# Contact us

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 <https://www.uab.edu/shp/cds/health-physics>



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**Thank you!**