#### **Duke General Surgery Interest Group**

Making a Difference in the Community

ACS Clinical Congress 2015

October 5, 2015

Trey Sinyard (Class of 2017) Harold Leraas (Class of 2017)



How can we serve?

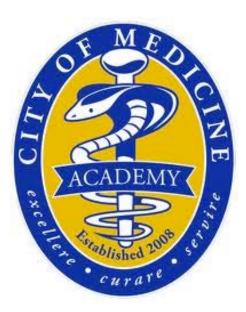
What do we have?

# Surgical Education & Activities Lab (SEAL)





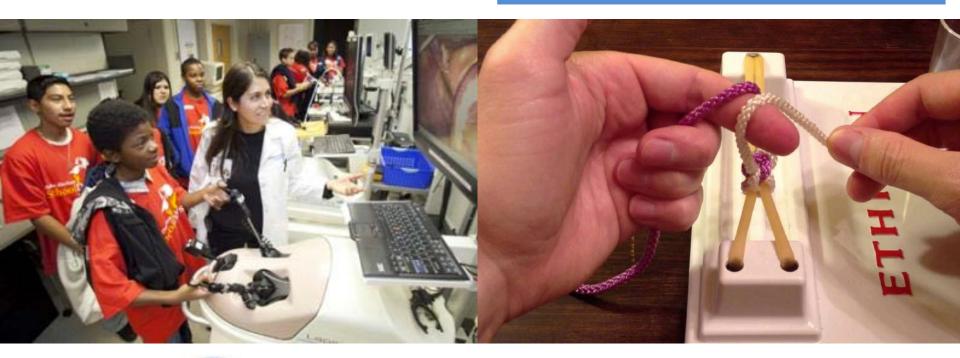




# City of Medicine Academy



# Surgical Workshop Training for City of Medicine Academy Students









# What do we have?

# Medical Students with Basic Medical Knowledge







### Medical Careers Club Leesville Road High School



#### **Leesville Road High School**



# Case-Based Curriculum

#### 1. Patient Presentation

2. History & Physical Exam Discussion

3. Diagnosis & Treatment 4. Connection to High School Science Curriculum

#### **Case Examples & Accompanying Objectives**

#### Case Topic: Infant with Cystic Fibrosis

High School Science Principles:

- Diffusion Gradients
- Protein folding/transport
- Genetic inheritance



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#### **Case Topic: Breast Cancer**

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- DNA Transcription
- Cell Cycle Regulation



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**High School Science Principles:** 

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#### Case Topic: Carbon Monoxide Poisoning

High School Science Principles:

- Bonding (quaternary structure of hemoglobin)
- Cellular respiration & metabolism



Thank You