

**USF's Pre-Medical Summer Enrichment  
Program:  
Overcoming Health Disparities through Recruiting  
a More Diverse Physician Workforce**

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# The Need for a More Diverse Physician Workforce

- One of the most pressing health care challenges today;
- An overall shortage of physicians is projected by the year 2020;
- The need is particularly great for minority physicians.

# Increasing Minority Populations

- While African Americans and Hispanics are among the fastest growing segments of the population, they are the most severely underrepresented minorities in medicine;
- Today, African Americans, Hispanics, and Native Americans make up 25% of the U.S. population, yet they comprised only 6.4% of all physicians graduating from allopathic medical schools in 2006.

# Why Don't Minority Students Choose Medicine?

- Cost of a medical education;
- Time it takes to become a physician;
- Demands of the physician lifestyle;
- Concerns about the MCAT;
- Worries about not being accepted to medical school;
- Uncertainties about whether medicine is the right career choice.

# Benefits of a Diverse Physician Workforce

Physician diversity addresses *health disparities* in at least 3 important ways:

1. Improved access (51% Black; 41% Native American; 33% Hispanic; 18% White graduates planned to practice in underserved areas);
2. Increased patient satisfaction;
3. Ensuring culturally competent care.

AAMC, 2004

# Obstacles to Success Among Minority Medical Students

- Inhibitors to success:
  - Lack of support
  - Discrimination
  - Cultural representation
  - Testing
  - Self limitations
  - Financial factors

Academic Medicine, February 2007

# Opportunities for Success Among Minority Medical Students

- Facilitators of success:
  - Scholarships
  - Social support (family, friends, colleagues, religion, school administration)
  - Professional exposure (enrichment programs, mentors, minority role models)

Academic Medicine, February 2007



# USF's Pre-Medical Summer Enrichment Program (PSEP)



- Began in 2003; 5 completed programs;
- Coordinated by the University of South Florida College of Medicine (COM) Office of Student Diversity and Enrichment and the Area Health Education Center (AHEC);
- Funded by AHEC;
- Targets underrepresented and disadvantaged college juniors/seniors at USF and elsewhere;
- An intensive 6-week full time summer program for highly motivated students who are preparing for medical school.

## Goals of PSEP

- PSEP goals include the following:
  - Enhance the science and communication skills needed for quality performance on the MCAT;
  - Explore test taking strategies to enhance learning skills;
  - Provide exposure to medicine through clinical experiences;
  - Provide a positive minority physician role model and mentor;
  - Understand the medical school admissions process.

# Eligible Applicants

- Requirements:
  - Completed a minimum of 60 hours
  - Completed Biology I, Chemistry I and Physics I;
  - **Overall** GPA no less than 3.0
  
- Applicants must meet the following criteria:
  - Underrepresented in medicine and/or
  - Disadvantaged
    - First generation college
    - Low SES
    - Rural county residence (within FL)

# Application Process

- Applicants must submit:
  - Completed and signed application
  - Official transcript
  - Essay (on why they want to participate in PSEP; how it will benefit them; their motivation to pursue medicine)
  - One science faculty recommendation
  - One character recommendation
- Applications posted online in October; due in March; decisions made by mid-April; program starts late June each year.

- **Academic Enrichment:**

- **Biology, Chemistry and Physics:** Review and enhance their comprehension of concepts in biology, general and organic chemistry, and physics (48 hours).
- **Verbal Reasoning and Writing Skills:** Enhance reading and reading inference skills as well as gain writing experience through personal essays and other assignments (30 hours).
- **Test Preparation:** Take a pre and post half-test and simulated MCAT exams during the program (24 hours).

- **Test Taking Strategies**: Work closely with L.E.A.R.N. Program faculty in the areas of reading skills, test taking skills, etc. (24 hours).
- **Clinical Experience**: Paired with a minority physician in the local community to develop an appreciation of the "real world of medicine" (1/2 day per week).
- **Clinical Seminars**: Take part in one hour per week of exposure to the "real world of medicine" through clinical topics related to health disparities (5 hours).

# PSEP Curriculum

- **Workshop Series**: Participate in one hour per week of workshops on a variety of topics (AHEC and NHSC, clinical literature review, mock interview and admissions committee meeting, motivational interviewing, etc. (7.5 hours).
- **Field Experiences**: field trips to local clinics and hospitals (6 hours).
- **Other**: Small group presentations on clinical topics (4 hours).

# PSEP Program Management

- COM revises application each year and posts to COM and AHEC websites;
- COM and AHEC promote program;
- COM receives applications and communicates with applicants;
- COM and AHEC review applications and select students;
- COM develops program schedule;

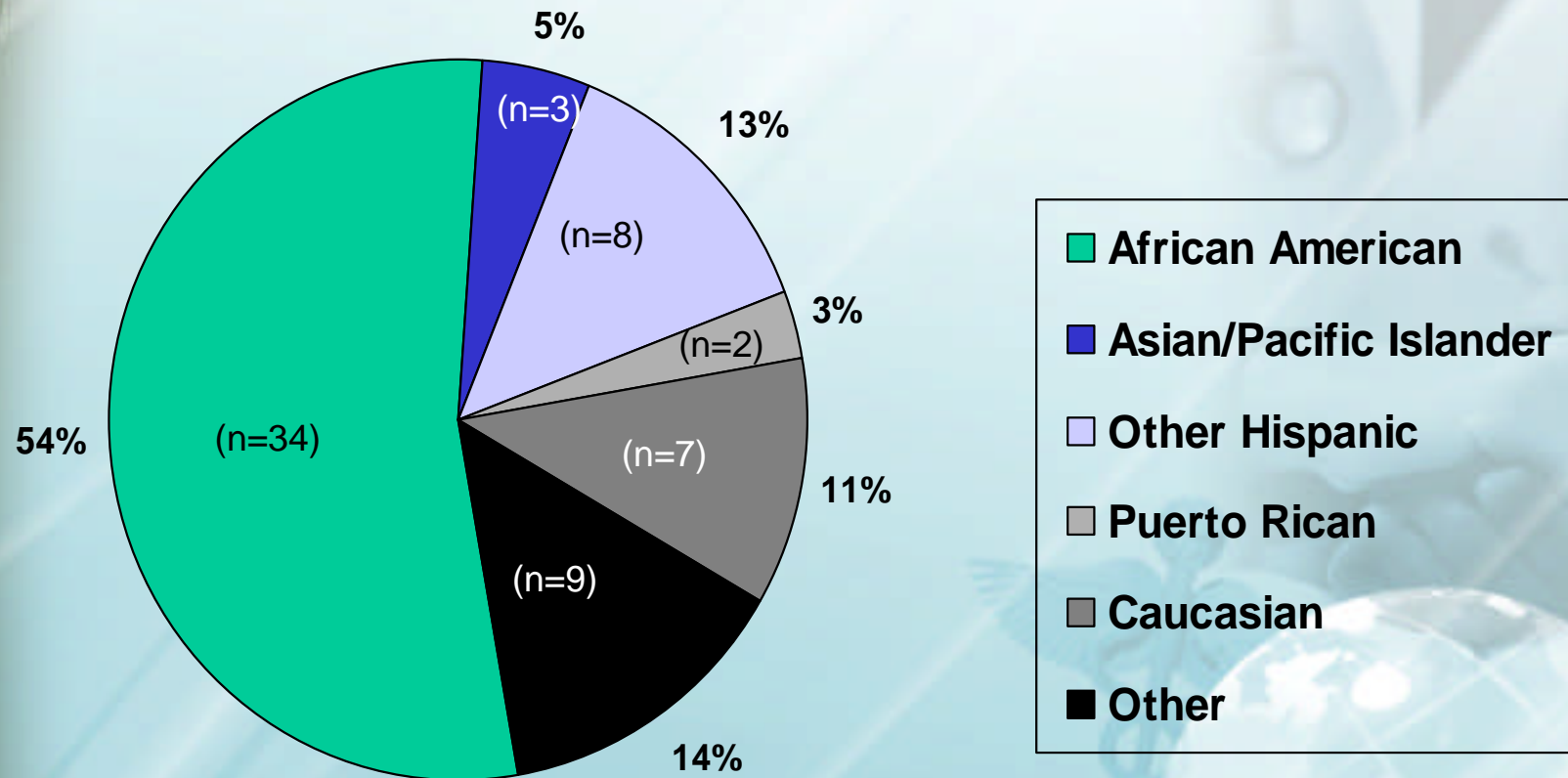
# PSEP Program Management

- AHEC plans clinical seminars and clinical shadowing experiences;
- COM coordinates all other aspects of program and provides oversight during implementation;
- COM provides summary evaluation of all program aspects and facilitates debriefing meeting after program completion.

# PSEP Results After 5 Years

- Now it its 6<sup>th</sup> year (class of 2008 in process;
- Total of 90 students have completed so far;
- Follow up survey:
  - Survey distributed spring 2007 and again in winter 2008 to classes '03-'07;
  - 90 PSEP completers were contacted via email, mail and phone and asked to complete a web-based survey on their status;
    - 63 students completed the survey for a response rate of 70%.

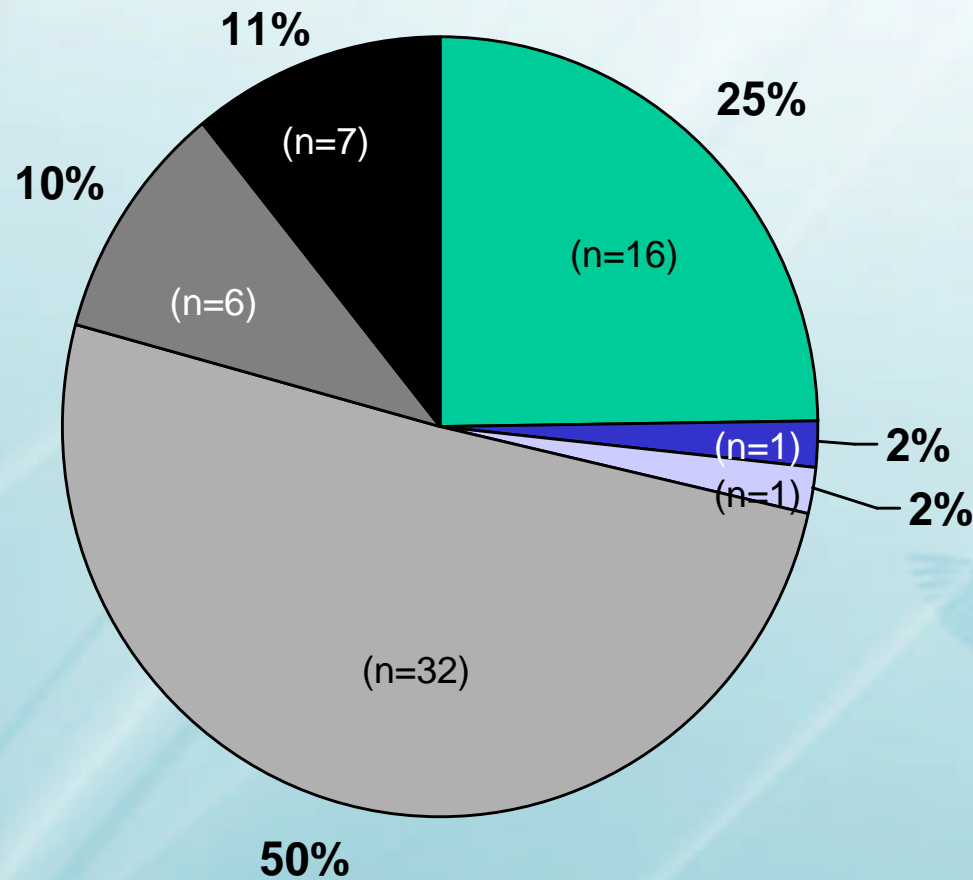
# Ethnicity of Survey Respondents (N=63)



## Other Demographics

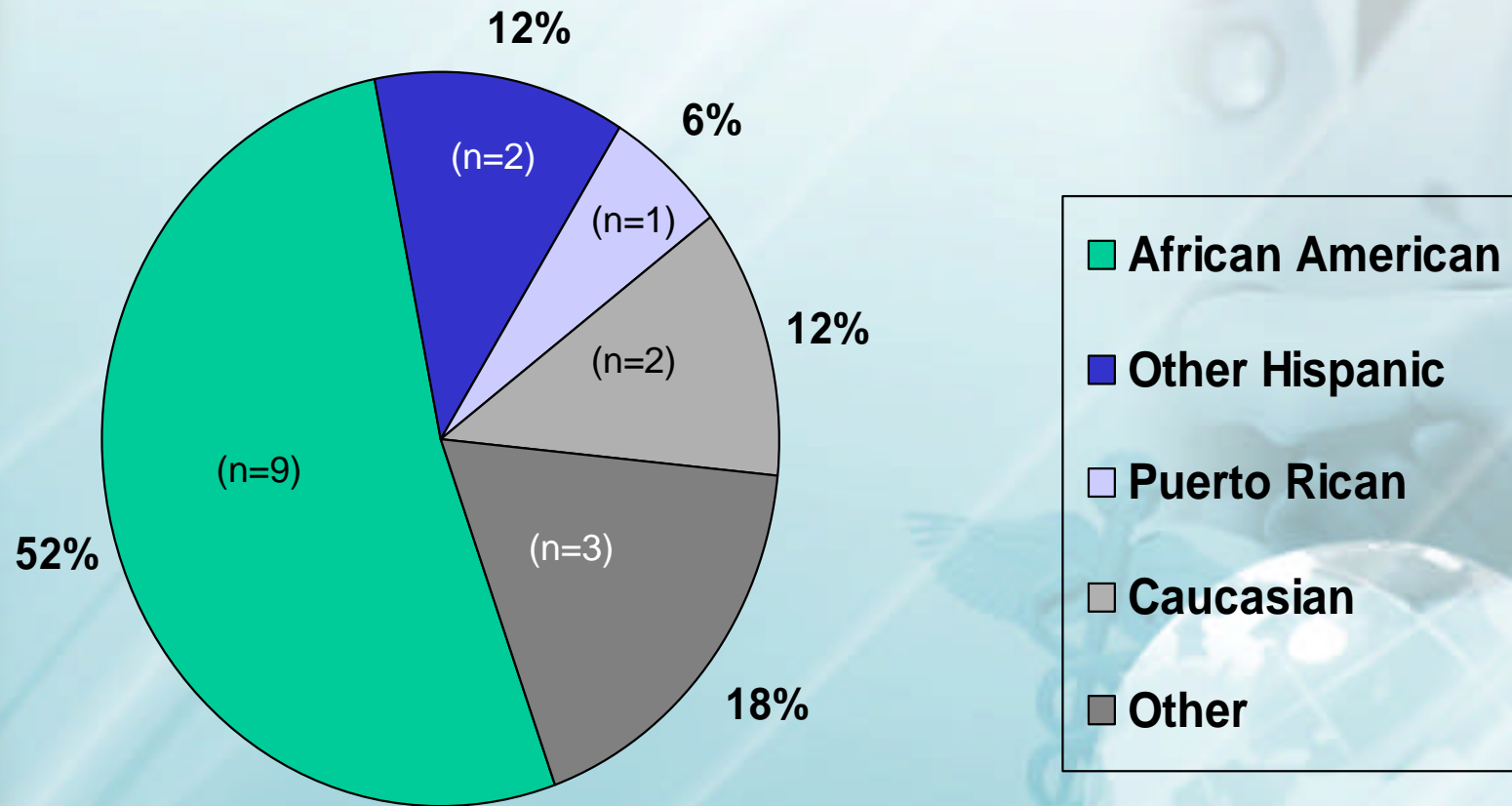
- Mirroring a national trend, the majority of PSEP participants and survey respondents are female (n=46; 73%);
- 26% speak a language other than English at home; 16% (n=10) reported French/ Creole and 10% (n=6) reported Spanish as their primary language spoken;
- 30% (n=19) of respondents were first in their family to attend college.

# Pipeline Status of Survey Respondents (N=63)



- In Medical School
- Accepted to Medical School
- Waitlisted
- In Process of Applying
- Entered Other Health Profession
- Undecided

# Ethnicity of Survey Respondents Attending or Accepted to Medical School (N=17)



## PSEP Survey Data

- Of those attending or accepted to medical school, 24% (n=4) took additional post-baccalaureate courses and 18% (n=3) completed a master's degree before acceptance into medical school;
- The average MCAT score of the respondents was 24; the average overall GPA 3.46 and science GPA was 3.29.

## Cost of PSEP

- The budget for PSEP is about \$55,000 per year; costs include:
  - Payment for contracted faculty who teach biology, chemistry, physics, reading and verbal reasoning and writing, and test taking strategies (approximately \$16,000);
  - Contract with *The Princeton Review* for customized MCAT prep course (\$6,000);
  - Books and supplies (\$3,000);
  - Student stipends (\$1,500 each).

## PSEP Vignette #1

21 y.o. disadvantaged Cuban male from Tampa. USF Honors College and McNair Scholar. Entered PSEP in 2003 with science and overall GPA 3.49. Graduated from USF in 2004 with BS in INS. MCAT 27. Applied and was wait listed at USF COM; eventually accepted and began in August 2004. Graduated in 2008 and matched to Internal Medicine residency at UF COM.

## PSEP Vignette #2

22 y.o. black female, first generation college, from Umatilla, FL. Entered PSEP in 2003 after graduating from USF with BS in Interdisciplinary Natural Sciences (INS) [3.17 science GPA, 3.42 overall GPA]. Completed MS in Med Micro at USF in 2005. Completed Drexel post-baccalaureate program in May 2006. MCAT 19/26. Accepted to Drexel College of Medicine and began August 2006.



## PSEP Vignette #3



26 y.o. black female from Tallahassee. Entered PSEP in 2003; graduated from USF in 2004 with BS in Biology; overall GPA 3.52. Entered the inaugural Doctoral Program for Physical Therapy at USF COM in 2005; graduated with DPT in May 2008.

## PSEP Vignette #4

40 y.o. black female, first generation college, from Orlando. Nursing degree from Valencia Community College. Entered PSEP in 2005 after graduating from UCF with a BS in Molecular Biology and Microbiology (cumulative GPA 3.4). MCAT 23 (8/05). Entered USF's Masters in Interdisciplinary Medical Science (IMS) program in 2006 and was accepted into USF COM 2007.



## PSEP Vignette #5



21 y.o. black male from Tampa. Previously a HS summer research student. Entered PSEP in 2006 with science GPA 3.42, overall GPA 3.51. Graduated from UM with BS in Biology in 2007. MCAT 25. Accepted to USF and UM Colleges of Medicine in 2007. Prior to PSEP was planning to pursue anesthesiology; now considering Internal Medicine and the NHSC.

- USF's PSEP :
  - Enhances the competitiveness of talented minority and disadvantaged students for admission into medical school;
  - Provides needed mentors for minority students;
  - Serves as a recruitment tool to USF COM Medicine.
- The ultimate goal is to retain more of these students in medical schools, residencies and practice settings in Florida where they can positively impact on the health disparities that are so prevalent in this state.

# USF's PSEP Program

- We are working hard to change the face of medicine by:
  - Enhancing the institutional climate for diversity;
  - Offering programs and activities that improve cultural awareness;
  - Reducing biases among students, faculty, staff and administration.
- We want to be the medical school of first choice!



## For Further Information



Office of Student Diversity & Enrichment  
College of Medicine  
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813-974-4707

[www.health.usf.edu/medicine/osde](http://www.health.usf.edu/medicine/osde)

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