

Thoughts ▶



# Louisiana State University

## HHMI Professors Program

*An Innovative Hierarchy Model  
Integrating Research, Education, and Peer Mentoring*



*Our mission is to improve student comprehension of  
science and mathematics at all levels of education.*

*Destiny*



A Letter from.....

***Isiah M. Warner, Ph.D.***  
**HHMI Professor**

Joining the LSU faculty in 1992 as the West Chair of Chemistry, I had some definite ideas about the contributions I wanted to make to the Department of Chemistry, the university, and the scientific community in general. Holding an endowed chair, I later served as chairman of the Department of Chemistry. I also had the honor of being named Boyd professor (the highest honor for a professor in the LSU system). Now I am serving as vice chancellor for the University's Office of Strategic Initiatives, where one of my charges is to create an environment in which all students can thrive! The \$1 million HHMI professorship will certainly assist me in this effort.

As an HHMI Professor, I along with the HHMI staff, have built a mentoring program we believe will improve undergraduate performance in early science and math courses, in addition to providing a support system for students. Our plan is to ***empower*** students to gain knowledge about their own cognitive system. This will, be in part, facilitated through a "mentoring ladder" involving faculty, graduate students, undergraduates, high school teachers, and high school students, as well as elementary teachers and students, i.e. **LSU HHMI Mentor(s)**.

There is a great need to increase the number of underrepresented students in science, technology, engineering, and mathematics (*STEM*). The future of science in America depends on it. Our program provides a realistic approach to meeting this need through the mission set forth, "... ***to improve student comprehension of science and mathematics at all levels of education.***" Our goal is to change the way students *think!* Please come and be a part of this effort.

Sincerely,

A handwritten signature in cursive script that reads "Isiah M. Warner". The signature is written in black ink on a white background.

Isiah M. Warner

# *What is LSU HHMI Professors Program?*

*What are the goals?*

*How will I benefit?*

*Howard Hughes Medical Institute (HHMI)* awarded four-year grants to research-active undergraduate faculty. The grants are intended to empower leading scientists at doctoral and research universities to work more closely with undergraduates at their home institutions and provide other institutions with innovative models for transmitting the excitement and values of scientific research to undergraduate education.

Announced in 2001, Howard Hughes Medical Institute began a competitive grant program called the *HHMI Professors Program*. Institutions were invited by HHMI to nominate faculty members to compete for the HHMI Professors awards. Invitations were based on the institutions' classifications by the Carnegie Foundation for the Advancement of Teaching as doctoral and research universities and their records of post-baccalaureate student achievement in the sciences.

Nationwide, only 20 institutions were honored with the distinction of receiving this \$1 million dollar award. Accompanying LSU are institutions such as *Cornell University*, Ithaca, New York; *Harvard University*, Cambridge, Massachusetts; *Massachusetts Institute of Technology*, Cambridge, Massachusetts; *Vanderbilt University*, Nashville, Tennessee; and *Yale University*, New Haven, Connecticut.

The *Louisiana State University's HHMI Professors Program* plans to combine undergraduate research with mentoring and new teaching strategies, and to develop a new model for undergraduate training that creates a self-perpetuating atmosphere for encouraging students to advance into science, technology, engineering, and math (STEM). The formal incorporation of a mentoring ladder for education is an innovative way of transferring student enthusiasm for research and science to other students in STEM areas. Undergraduate students selected to participate will receive a *financial award!*

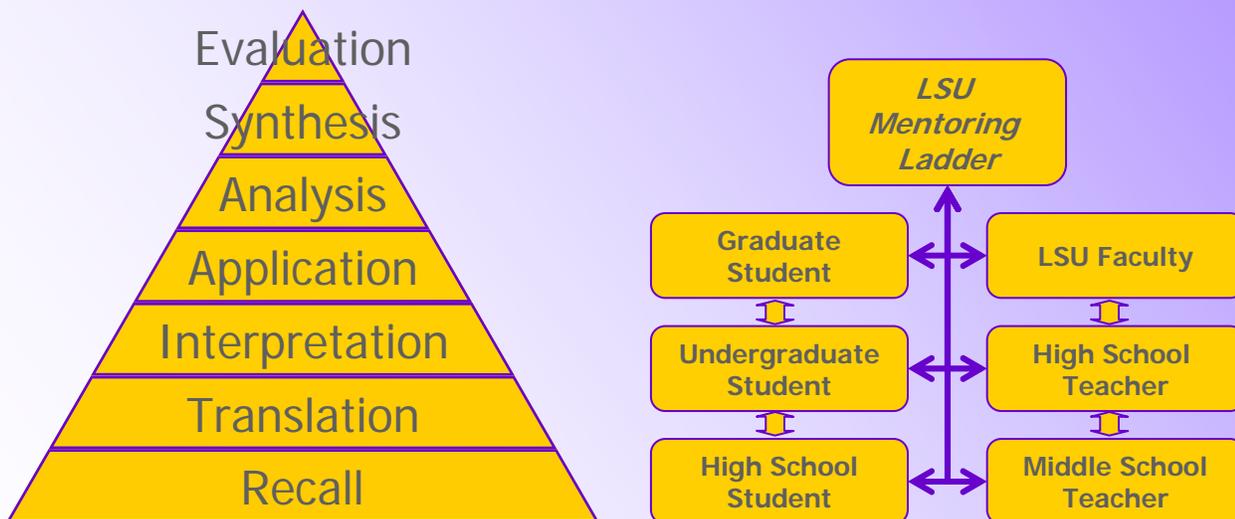
*"Watch your WORDS, because your words become your actions,..."*

## LSU HHMI Mentor

*A wise and trusted person who assumes responsibility for another person, to impart knowledge or skill by example and experience through an exchange of opinions and ideas in order to reach a decision for a plan of action that facilitates increased learning ability.*

Lisa Batiste-Evans

Integrating Bloom's Taxonomy and the Mentoring Ladder will considerably increase the depth and the breadth of the undergraduate's education. Having research students acting as teachers and mentors will increase their conceptual understanding of the material that they are conveying, thus moving them up Bloom's taxonomy towards a higher level of comprehension.



*"Watch your ACTIONS, because your actions become your habits,..."*



# *Criteria for Undergraduates*

“How Can I become an **LSU HHMI MENTOR**?”

***To become an LSU HHMI Mentor, you will need the following:***

1. Official Transcript both LSU and High School, – ***Minimum gpa 2.5***
2. Two (2) letters of recommendation from LSU Professors
3. Two (2) letters of recommendation from high school science and math instructors
4. One (1) letter of recommendation from a group or organization in which you are a member
5. A one page essay including: (No less than 10 point font size, double spaced)
  - a. Mentoring in education
  - b. Diversity in education
  - c. Your responsibility in the educational assistance of others
  - d. A general discussion of a plan for you to incorporate each of the three items (a,b,c) into pre-college education while following current school rules.
6. Provide a list of organizations in which you are currently a member. Please include:
  - a. Name, address, telephone of organization, contact person including title and email address.
  - b. Note whether the organization has district, regional, or national affiliations
  - c. Note any offices you have held and the respective dates
  - d. Note services the organization provides that are parallel to the mission of LSU's HHMI Professors Program
7. Provide a list of all your volunteer activities, including:
  - a. Name, address, telephone of organization, contact person including title and email address
  - b. Note services the organization provides that are parallel to the mission of LSU's HHMI Professors Program
8. Personal Statement – one page, double spaced (No less than 10 point font size)
  - a. Why do you believe you are a good candidate for an **LSU HHMI Mentor**?
  - b. How do you believe your experience as an **LSU HHMI Mentor**, should you be selected, will affect you in 7 years to come?
  - c. What are some of your personal mentoring experiences?
  - d. How do the choices you've made thus far parallel with the definition of an **LSU HHMI Mentor**?
  - e. What choices could you make in the next five years to maintain the parallel with the **LSU HHMI Mentor**?

***“Watch your HABITS, because your habits become your character,...***



Louisiana State University

# HHMI Professors Program



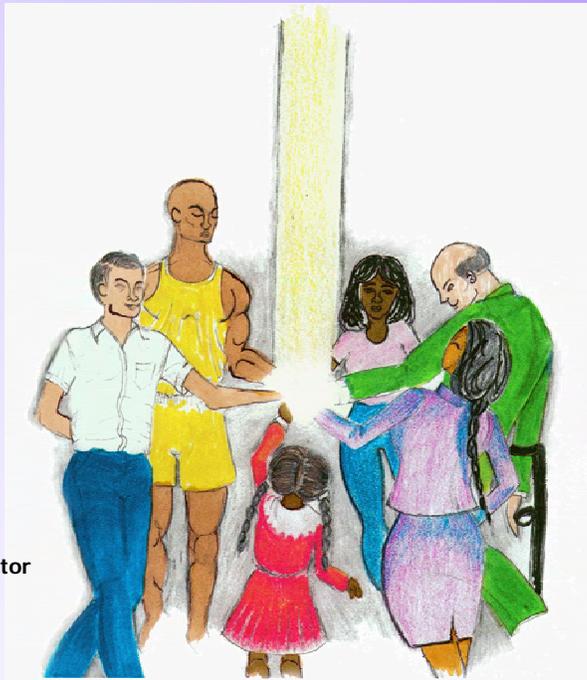
Dr. Isiah M. Warner  
HHMI Professor  
LSU HHMI Professors Program



Lisa Batiste-Evans  
HHMI Professors Program Coordinator



Dr. Sandra McGuire  
HHMI Professors Program Collaborator



Dr. Su-Seng Pang  
HHMI Professors Program Collaborator



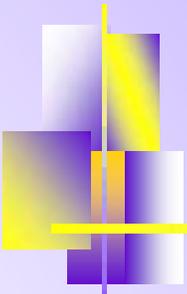
Albertha Lawson  
HHMI Professors Program Collaborator



Dr. George Stanley  
HHMI Professors Program Collaborator

*"Watch your CHARACTER, because your character becomes your DESTINY!"*

Anonymous



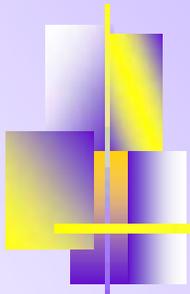
**For Additional Information,  
contact:**

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***Office of Strategic Initiatives***  
**Louisiana State University**  
**HHMI Professors Program**  
**240 Thomas Boyd Hall**  
**225 / 578-0281**

**Web Site:**

**<http://www.hhmi.org/news/091802.html>**



**•LSU IS AN EQUAL  
OPPORTUNITY/ACCESS  
UNIVERSITY**