Biographical Description for The HistoryMakers® Video Oral History with Stephen McGuire

PERSON

McGuire, Stephen, 1948-

Alternative Names: Stephen McGuire;

Life Dates: September 17, 1948-

Place of Birth: New Orleans, Louisiana, USA

Residence: Baton Rouge, LA

Work: Baton Rouge, LA

Occupations: Nuclear Physicist

Biographical Note

Nuclear physicist and physics professor Stephen C. McGuire was born on September 17, 1948 in New Orleans, Louisiana. McGuire was the first generation of his family to attend high school and college. McGuire's parents were supportive of his education and inspired him to high achievements. By the time that McGuire graduated as valedictorian of his class at Joseph S. Clark Senior High in New Orleans, Louisiana, he knew that he wanted to pursue a career in physics. McGuire went on to attend Southern University and Agricultural and Mechanical (A&M) College on a four-year academic scholarship. He received his B.S. degree in physics, magna cum laude, in 1970. McGuire then continued his education at the University of Rochester where he studied under Professor Harry W. Fulbright and graduated with his M.S. degree in nuclear physics in 1974. In 1979, McGuire obtained his Ph.D. degree from Cornell University in nuclear science with a focus on low energy neutron physics under the guidance of Professor David D. Clark.

Between 1979 and 1982, McGuire conducted research as a staff scientist at Oak Ridge National Laboratory. In 1982, McGuire joined the faculty at Alabama A&M University in the department of physics and applied physics, and he began research with the National Aeronautics and Space Administration (NASA). McGuire was honored by NASA in 1987 with its Office of Technology Utilization Research Citation Award. While at Alabama A&M, he also served as a consultant to the National Institutes of Health (NIH) and the U.S. Department of Energy, and spent time as a physics researcher at Lawrence Livermore National Laboratory (LLNL). In 1989, he became the first African American faculty member at the endowed College of Engineering at Cornell University. In 1992, he became a charter fellow of the National Society of

Black Physicists (NSBP). With research focusing on experimental nuclear physics and nuclear radiation and microelectronics, McGuire was appointed to be a visiting scientist at the Center for Neutron Research at the National Institute of Standards and Technology in 1998.

Since 1999, McGuire has served as professor and chair of the department of physics at Southern University and A&M College in Baton Rouge, Louisiana. McGuire has pursued his interest in optical materials as part of the Laser Interferometer Gravitational-Wave Observatory (LIGO). During his tenure with the university, McGuire has led the establishment of the partnership between LIGO and Southern University and A&M College, and he served as the LIGO Scientific Collaboration Principal Investigator (PI). He considers this his greatest achievement. McGuire is a Fellow of the American Physical Society. He is married to the former Saundra E. Yancy. They have two adult daughters, Carla and Stephanie.

Stephen McGuire was interviewed by The HistoryMakers on August 18, 2012.

Related Entries

```
Joseph S. Clark Preparatory High School [STUDENT OF]
 [from? to?]
   High School Diploma
Columbia University [STUDENTOF]
 [from? to?]
   Summer Program Participant
University of California, Los Angeles [STUDENTOF]
 [from? to?]
   Visiting Undergraduate Fellow
Southern University and Agricultural and Mechanical College [STUDENT OF]
 [from? to?]
   B.S.
University of Rochester [STUDENTOF]
 [from? to?]
   M.S.
Cornell University [STUDENTOF]
 [from? to?]
   Ph.D.
Oak Ridge National Laboratory [EMPLOYEEOF]
 [from 1978 to 1982]
   Member, Technical Staff
Alabama A&M State University [EMPLOYEEOF]
 [from 1982 to 1988]
   Asst.-Assoc. Professor
```

```
Lawrence Livermore National Laboratory [EMPLOYEE OF]
 [from 1983 to 1984]
   Summer Physics Research Staff
Cornell University [EMPLOYEEOF]
 [from 1989 to 1998]
   Associate Professor
Southern University Baton Rouge [EMPLOYEEOF]
 [from 1999 to ?]
   Physics Professor/ Department Chair
California Institute of Technology [EMPLOYEEOF]
 [from 2000 to ?]
   Visiting Associate in Physics
Stanford Linear Accelerator Center [EMPLOYEEOF]
 [from 197608 to 197608]
   Lecturer
American Physical Society (APS) [MEMBER OF]
 [from 1979 to ?]
   Chair, Committee on Minorities
American Nuclear Society [MEMBEROF]
 [from 1979 to ?]
   NEED Committee
National Society of Black Physicists (NSBP) [MEMBER OF]
 [from 1979 to ?]
   President
American Association of Physics Teachers [MEMBEROF]
 [from 1983 to ?]
   Member
Materials Research Society [MEMBEROF]
 [from 1994 to ?]
   Member
```