MICHAEL J. BERRY II

The Pew Scholars Program in the Biomedical Sciences

Transcript of Interviews
Conducted by
Karen A. Frenkel

at
Princeton University
Princeton, New Jersey

on
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Michael J. Berry II

Education

1989  B.S., Physics, Minor in Philosophy, University of California at Berkeley
1991  A.M., Physics, Harvard University
1994  Ph.D., Physics, Harvard University
1994  Neural Systems and Behavior, Marine Biological Laboratory, Woods Hole

Professional Experience

Exxon Production Research
1987, 1988  Research Assistant

Harvard University
1989-1994  Doctoral Researcher
1994-1999  Post-Doctoral Researcher, Laboratory of Markus Meister

Princeton University
1999-2005  Assistant Professor, Department of Molecular Biology
2005 - present  Associate Professor, Department of Molecular Biology

Honors

1989  Phi Beta Kappa, UC Berkeley
1989-1992  National Science Foundation Graduate Fellow
1996-1999  National Eye Institute Postdoctoral Grant
2000-2001  Fellow-at-Large, Sante Fe Institute
2000-2003  Research Grant from the E. Matilda Ziegler Foundation for the Blind
2000-2004  Pew Scholar in the Biomedical Sciences
2001-2003  Old Dominion Faculty Fellow, Princeton University, Humanities Council
ABSTRACT

Michael J. Berry II begins his oral history discussing his childhood, which was heavily influenced by the chemistry careers of both his parents and involved several moves from California to Wisconsin, New Jersey, and then Texas. During high school Berry developed an interest in both physics and chemistry, while also engaging in some philosophical questions. Shortly after matriculating at the University of California, Berkeley, Berry decided to pursue physics as his major instead of chemistry. The questions at the heart of physics seemed both more intellectually stimulating and intriguing. Although Berry felt he had a calling within the field of physics, he still found time to wrestle with philosophical inquiry. As an undergraduate Berry began to think about neuroscience as the melding of his two interests: physics and philosophy. After earning his bachelor’s degree, however, Berry pursued a Ph.D. in physics at Harvard University under Robert M. Westervelt. While finishing his thesis work on semiconductor physics and chaotic systems, Berry decided to pursue post-doctoral research that led him farther from physics and closer to biology. Prior to beginning his post-doctoral work, Berry enrolled in a Marine Biological Laboratory course at Woods Hole focused on electrophysiology and found a community of physicists working in neuroscience and the biological fields. As such, the time spent with Markus Meister at Harvard University for post-doctoral research allowed Berry to transition successfully into the field of neuroscience (which he found better suited to his intellectual needs). By focusing his research on visual processing in the retina, Berry discovered the joys and challenges of working in a field that, unlike physics, did not yet have what he considered a well-defined framework. Before securing his faculty position at Princeton University in the Molecular Biology Department, Berry encountered some difficulty in choosing between physics-based and biology-based departments. Shortly after starting at Princeton, Berry was awarded the Pew Scholars in the Biomedical Sciences award. Throughout his oral history, Berry addressed such important issues as funding, mentoring his students, and attempting to balance his personal life with his career. The oral history concludes with a discussion of the connections between neuroscience and philosophy and the globalization of science.

and Television: Past Member of the Board and Director of Programming. Her website is www.Karenafrenkel.com
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Childhood

Parents both chemists. Moved throughout the United States in accordance with father’s career. High school science teachers. Interests in computer programming, philosophy, physics, and chemistry.

College Education

University of California, Berkeley. Switching from chemistry to physics. Continuing interest in philosophy. Teaching himself material instead of intellectually interacting with the physics department. Neuroscience

Graduate Education


Post-Doctoral Research


Principal Investigator


Funding, Mentoring, and Teaching


Biomedical Sciences


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