

Rachel Shreter

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OBJECTIVE

A position in life sciences communications

EDUCATION

M.S. Molecular and Cell Biology
University of California, Berkeley
May 2005

B.A. Biochemistry and Religious Studies
Rice University, Houston, Texas
May 2001

RESEARCH EXPERIENCE

Graduate Doctoral Research in Biochemistry
Laboratories of Robert Tjian, Ph.D and Eva Nogales, Ph.D
University of California, Berkeley, 2001-Present

Examined the mechanisms of eukaryotic transcriptional regulation through structural studies of large biochemical complexes in the SWI/SNF family of chromatin remodeling factors. Characterized protein complexes purified from *Drosophila* embryos using a variety of biochemical techniques. Applied and developed electron microscopy and computational three-dimensional reconstruction methodologies to create molecular models of purified factors.

Undergraduate Research in Medical Ethics

Rice University, 2001

Reviewed nine patient cases at Memorial Hermann Hospital (Houston, Texas) in which life-sustaining treatment had been suspended. Interviewed attending physicians and other hospital personnel involved in the decision-making process. Presented policy analysis and recommendations to hospital head of Patient Relations.

Undergraduate Research in Biochemistry

Laboratory of Kathleen S. Matthews, Ph.D
Rice University, 1999-2001

Examined intra- and inter-subunit allosteric communication between ligand binding and DNA binding sites of the lactose repressor protein. Employed techniques in molecular biology, protein purification, and x-ray crystallography to characterize specifically designed mutants.

Internship in Biotechnology

Tularik, Inc. (now Amgen, Inc.), Summer 2000

Employed x-ray crystallography to characterize potential drug targets in cellular pathways associated with inflammatory disease. Explored the drug development process at Tularik through a weekly seminar series designed for interns.

RELATED EXPERIENCE

Graduate Student Instructor

University of California, Berkeley, Spring 2003

Developed curriculum for a seminar course entitled "Genomics in the 21st Century" which explored the intersection of science, biotechnology and culture. Organized guest speakers from the scientific and business communities. Constructed lectures and case studies. Guided bi-weekly discussions and debates.

Graduate Student Instructor

University of California, Berkeley, Fall 2004

Co-instructed introductory biochemistry course of 400 students. Facilitated group (40 students) discussions as well as individual tutorials on lecture topics. Incorporated creative pedagogical methodologies

AWARDS

U.S. Graduate Student Delegate to the 53rd Annual Meeting of Nobel Laureates, Lindau, Germany

UC Berkeley Outstanding Graduate Student Instructor, 2005

Rice University President's Honor Roll, 2000, 2001