

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME USHA NARAYAN	POSITION / TITLE POST-DOCTORAL FELLOW
eRA COMMONS USER NAME	

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Bombay, India	B.S.	1994	Zoology
University of Bombay, India	M.S.	1997	Life Science
Case Western Reserve University, Cleveland	Ph.D.	2000	Genetics
Emory University, Atlanta	Post-doctoral fellow	2004-present	Neuroscience

PROFESSIONAL EXPERIENCE:

Teaching assistant, Spring 2000.
Department of Biology, University of Connecticut, Storrs, CT.
Courses: Biology lab 101 for undergraduates

HONOURS AND AWARDS:

- Ranked first in B.S. Zoology in the University of Bombay; 1995, 1996.
- Awarded first place in a Basic Sciences and Biotechnology inter-collegiate competition hosted by University Department of Chemical Technology (UDCT), Bombay; 1997.
- Ranked first in Biotechnology in the University of Bombay during B.S. Zoology; 1997.
- Ranked second in the University of Bombay during M.S. in Life Sciences; 1998.

AFFILIATIONS:

- American Society of Human Genetics, 2005.
- American Society of Cell Biology, 2002.
- RNA society, 2002.

PUBLICATIONS:

Narayanan U, Ospina JK., Frey M, Herbert MD and Matera AG. SMN, the spinal muscular atrophy protein, forms a pre-import snRNP complex with snurportin1 and importin beta. *Hum Mol Genet.*; 11 (15): 1785-95 (2002).

Mouaikel J, Narayanan U, Verheggen C, Matera AG, Bertrand E, Tazi J and Bordonne R. Interaction between the small-nuclear-RNA cap hypermethylase and the spinal muscular atrophy protein, survival of motor neuron. *EMBO Rep.*; 4 (6): 616-22 (2003).

Narayanan U, Achsel T, Luhrmann R and Matera AG, Coupled import of UsnRNPs and SMN, the Spinal Muscular Atrophy protein. *Mol. Cell Oct*; 16: 223-234 (2004).

Narayanan U and Warren ST, *Neurobiology of Related Disorders, Autism in the Post-Genomic Era* (Moldin, S and Rubenstein, J eds), CRC press (2005) *In preparation.*

Narayanan U and Matera AG, SMN: A chaperone for RNA social occasions?, (2005) *In preparation*.

PAPERS PRESENTED AT INTERNATIONAL CONFERENCES:

- Nuclear import of snRNPs without snurportin. Poster presentation at 42nd American Society for Cell Biology (ASCB) Annual Meeting, San Francisco, CA (2002).
- Nuclear import of snRNPs without snurportin. Oral presentation at the 7th Annual Meeting of the RNA Society, Madison, WI (2002).
- "Journey of a thousand snRNP miles". Oral presentation at Cell Biology Retreat, Case Western Reserve University (CWRU) and Cleveland Clinic Foundation, OH (2002).
- Molecular determinants of SMN nuclear import. Poster presentation at 2003 Eukaryotic mRNA processing meeting. Cold Spring Harbor Laboratory, NY (2003).
- Molecular determinants of SMN nuclear import. Oral presentation at 8th Annual Meeting of the RNA society, Vienna, Austria (2003).
- Identification of a candidate FMRP phosphatase and investigation of phosphorylation as a regulator of FMRP translational suppression. Oral presentation at 55th Annual meeting of Human Genetics, Salt Lake City, UT (2005).

PAPERS PRESENTED AT COLLOQUIUMS AND SYMPOSIA:

- "Journey of a thousand snRNP miles". Poster presentation at Biomedical Sciences symposium at CWRU, OH (2002).
- Molecular determinants of SMN nuclear import. Oral presentation at Genetics Graduate Student's Colloquium at CWRU, OH (2003).
- "Journey of a thousand snRNP miles". Poster presentation at Genetics Graduate Student's Colloquium at CWRU, OH (2003).

UNDERGRADUATE RESEARCH:

Short term projects/trainings undertaken at research institutions in India:

Diagnostic analyses via serological and microbiological techniques (1995).

Institution: PSG Institute of Medical Sciences and Research, Coimbatore.

Advisor: Dr. Appalaraju

Training in immunological techniques primarily ELISA (1996).

Institution: Indian Institute of Sciences, Bangalore.

Advisor: Dr. A. Karande

Growth curve studies of leucocytes (1997).

Institution: KET's V.G.Vaze college of Arts, Commerce and Sciences, Bombay.

Advisor: Dr. Hardikar

Polymorphism analysis of various DNA samples with Short Tandem Repeats & Random Amplified Polymorphic DNA. (1998).

Institution: Centre for Cellular and Molecular Biology, Hyderabad.

Advisors: Drs. K. Majumdar and A.J.Rachel