

Sujatha Jagannathan

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EDUCATION AND TRAINING

2013 – present	Fred Hutchinson Cancer Research Center, Seattle, WA <i>FSH Society Postdoctoral Fellow</i>
2006 – 2013	Duke University, Durham, NC Ph.D. in Cell Biology
2004	Center for DNA Fingerprinting, Hyderabad, India <i>Summer Research Fellow of Indian Academy of Sciences</i>
2002 - 2006	Center for Biotechnology, Anna University, Chennai, India B. Tech in Industrial Biotechnology

FELLOWSHIPS, HONORS, AND AWARDS

2016, 2017	Recognized as an Outstanding Postdoc at the FHCRC Postdoc Appreciation Week (nominated by peers and colleagues)
2014 – present	FSH Society Postdoctoral Fellowship (Link)
2013	William J. Griffith University Service Award for Outstanding Service to Duke Community (annually presented to a select number of graduating students for service and contributions to Duke University and larger communities; Link)
2011	Grant-in-Aid of Research Award , Sigma Xi national chapter
2010	Graduate student mini-grant , Duke Chapter of Sigma Xi, Durham, NC.
2006	Graduated First Class with Distinction , Anna University, Chennai, India (Equivalent of <i>summa cum laude</i>)
2004	Summer Research Fellowship , Indian Academy of Sciences, India

PUBLICATIONS

Feng Q, **Jagannathan S** and Bradley R. The RNA Surveillance Factor UPF1 Represses Myogenesis via Its E3 Ubiquitin Ligase Activity. *Molecular cell*. 2017; 67(2):239-251.e6.

Jagannathan S and Bradley RK. Congenital myotonic dystrophy-an RNA-mediated disease across a developmental continuum. *Genes & development*. 2017; 31(11):1067-1068

Shadle SC, Zhong JW, Campbell AE, Conerly ML, **Jagannathan S**, Wong CJ, Morello TD, and Tapscott SJ. DUX4-induced dsRNA and MYC mRNA stabilization activate apoptotic pathways in human cell models of facioscapulohumeral dystrophy. *PLoS genetics*. 2017; 13(3):e1006658.

Jagannathan S and Bradley R. Translational plasticity facilitates the accumulation of nonsense genetic variants in the human population. *Genome Res*. 2016 Sep 19.

Jagannathan S*, Shadle SS*, Resnick R, Snider L, Tawil RN, van der Maarel SM, Bradley RK and Tapscott

SJ. Model systems of DUX4 expression recapitulate the transcriptional profile of FSHD cells. *Hum Mol Genet.* 2016 Aug 15. (*Equal Contribution)

Feng Q, Snider L, **Jagannathan S**, Tawil R, van der Maarel SM, Tapscott SJ, Bradley RK. A feedback loop between nonsense-mediated decay and the retrogene DUX4 in facioscapulohumeral muscular dystrophy. *Elife.* 2015 Jan 7;4.

Jagannathan S, Reid DW, Cox AH, Nicchitta CV. *De novo* translation initiation on membrane-bound ribosomes as a mechanism for localization of cytosolic protein mRNAs to the endoplasmic reticulum. *RNA.* 2014 Oct; 20(10):1489-98.

Jagannathan S*, Hsu JC*, Reid DW, Chen Q, Thompson WJ, Moseley AM, Nicchitta CV. Multifunctional roles for the protein translocation machinery in RNA anchoring to the endoplasmic reticulum. *J Biol Chem.* 2014 Sep 12; 289(37): 25907-24. (*Equal Contribution).

Lacsina JR, Marks OA, Liu X, Reid DW, **Jagannathan S**, Nicchitta CV. Premature translational termination products are rapidly degraded substrates for MHC class I presentation. *PLoS One.* 2012; 7(12):e51968.

Chen Q*, **Jagannathan S***, Reid DW*, Zheng T, Nicchitta CV. Hierarchical regulation of mRNA partitioning between the cytoplasm and the endoplasmic reticulum of mammalian cells. *Mol Biol Cell.* 2011 Jul 15; 22(14):2646-58. (*Equal Contribution).

Jagannathan S, Nwosu C, Nicchitta CV. Analyzing mRNA localization to the endoplasmic reticulum via cell fractionation. *Methods Mol Biol.* 2011; 714:301-21.

INVITED TALKS AND ORAL PRESENTATIONS

Jagannathan S. "When to shoot the messenger RNA: Understanding the rules and exceptions of mRNA surveillance", 2017 Symposium on RNA Biology XII: RNA Tool and Target; October 2017; Chapel Hill, NC; **Selected for oral presentation**

Jagannathan S, Tapscott ST and Bradley RK. "Disruption of RNA and protein quality control in facioscapulohumeral muscular dystrophy", The Center for NeuroGenetics 2nd Annual Brainstorm Symposium; December 2015, Gainesville, FL. **Invited talk**

Jagannathan S, Feng Q, Snider L, Tapscott ST and Bradley RK. "Quantitative proteomic analysis of DUX4-expressing muscle cells reveals widespread post-transcriptional regulation", FSH Society FSHD International Research Consortium and Research Planning workshops; October 2015; Boston, MA. **Selected for oral presentation**

Jagannathan S, Chen Q, and Nicchitta CV. "mRNAs encoding ER-resident proteins undergo translation-independent localization to detergent resistant membrane domains of the ER", NC RNA Society Symposium on RNA Biology IX: RNA Tool and Target; October 2011; RTP, NC. **Selected for oral presentation**

SELECTED POSTER PRESENTATIONS

Jagannathan S, Tapscott ST and Bradley RK. "When to shoot the messenger RNA: Understanding the rules and exceptions of mRNA surveillance", FHCRC Division of Human Biology Annual Retreat; 2016, Islandwood, WA. **Third Prize for Poster presentation**

Jagannathan S, Feng Q, Tapscott ST and Bradley RK. "Extensive post-transcriptional regulation by a myopathic transcription factor, DUX4", Gordon Research Conference on Post-transcriptional gene regulation; July 10-15, 2016, Stowe, VT.

Jagannathan S, Feng Q, Snider L, Tapscott ST and Bradley RK. "Inefficient nonsense-mediated RNA decay underlies perturbed proteostasis in a human myopathy", RNA stability meeting; June 2015, Estes Park, CO. **RNA Society Award for the Best Poster Presentation**

Jagannathan S and Nicchitta CV. "Selective recruitment of mRNAs into stress granules upon UPR induction", ASBMB special symposium on the multitasking endoplasmic reticulum in health and disease; May 2013; Warrenton, VA.

Jagannathan S, Chen Q, and Nicchitta CV. "Endoplasmic reticulum (ER) resident protein-encoding mRNAs undergo translation-independent localization to subdomains of the ER membrane", Cell Biology Department Retreat, Duke University 2012. **Jo Rae Wright Prize for the Best Poster presentation.**

Jagannathan S, Chen Q, and Nicchitta CV. "Endoplasmic reticulum (ER) resident protein-encoding mRNAs undergo translation-independent localization to subdomains of the ER membrane", ASCB Annual Meeting; December 2011; Denver CO.

Jagannathan S, Chen Q, Reid DW, and Nicchitta CV. "Bimodal mechanism of mRNA association with the endoplasmic reticulum (ER)", ASBMB Annual Meeting; April 2011; Washington, D. C.

Jagannathan S, Nwosu C, Zheng T, and Nicchitta CV. "Subcellular compartmentalization of mRNA in mammalian cells", 4th RNA Stability Meeting; Oct 2010; Montreal, Canada.

TEACHING, MENTORING, OUTREACH AND SERVICE ACTIVITIES

2017 - 2018	Next Scholars program mentor, The New York Academy of Sciences
2017	Science Teaching Experience for Postdocs (STEP) program
2017	Weintraub Graduate Student Award Selection Committee
2016	Reviewer for Hutch United Fellowships for under-represented minorities
2011 – 2013	Associate Faculty Member, Faculty of 1000
2011 – 2012	Undergraduate student research mentor, Duke University
2010 – 2011	Women and Mathematics Mentoring Program, Durham County, NC (Mentored three under-represented minority 8 th grade girls)
2010	Cell Biology Distinguished Lecture Series Committee, Duke University, Durham, NC

MEMBERSHIP IN PROFESSIONAL SOCIETIES

RNA Society

American Society for Cell Biology

Sigma Xi, The Scientific Research Society