
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

Anita Thakur, Ph.D.

POSITION TITLE

Postdoctoral Fellow

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

Institution and location	Degree (if applicable)	Years	Field of Study
Himachal Pradesh University, India	Bachelor of Science	1999-2002	Biological Sciences
School of Life Sciences, Jawaharlal Nehru University, New Delhi, India	Master of Science	2002-2004	Life Sciences
School of Life Sciences, Jawaharlal Nehru University, New Delhi, India	Pre Ph.D.	2004-2005	Life Sciences
School of Life Sciences, Jawaharlal Nehru University, New Delhi, India	Ph.D.	2005-2011	Life Sciences
Feinberg Cardiovascular Research Institute, Northwestern University, Chicago	Postdoctoral Fellow	2011-2013	Cardiovascular and mitochondrial research
Faculty of Biology, Technion, Israel	Postdoctoral Fellow	2013-2016	Ubiquitin and mitochondria

1. Variances from Ordinary Career Progression

None

2. Positions and Employment

- 08/04-08/06. **Junior Research Fellow** under the Scheme of **Council of Scientific and Industrial Research, Govt of India** at School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.
- 09/06-09/09 **Senior Research Fellow** under the Scheme of **Council of Scientific and Industrial Research, Govt of India** at School of Life Sciences, Jawaharlal Nehru University, New Delhi, India
- 01/10-10/10 **Senior Research Fellow** on project sponsored by **Department of Biotechnology, Govt of India** at School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.
- 11/10-03/11 **Guest Lecturer** at **Department of Zoology, SGTB Khalsa College, University of Delhi, India.**
- 04/11-04/13 **Postdoctoral Fellow, FCVRI, Feinberg School of Medicine, Northwestern University, Chicago, IL.**
- 04/13-12/16. **Postdoctoral Fellow, Faculty of Biology, Israel Institute of Technology, Technion, Israel.**

3. Professional Memberships

American Heart Association
COST Proteostasis (2014-2016)

4. Professional Honors and Activities:

- Awarded **PBC Postdoctoral Scholarship** from Planning and Budgeting Committee of the Council for Higher Education of Israel from Sept 2012- Sept 30, 2015.
- Awarded **Senior Research Fellowship** under **Department of Biotechnology, Govt of India** project of Prof Shyamal K Goswami on “**Identification and characterization of the SG2NA variants**” from January 22nd- October 31, 2010.
- Awarded **International Travel Grant** from **Department of Biotechnology, Govt of India** for attending **Gordon Research Conference on Cardiac Regulatory Mechanisms** at Colby-Sawyer College, New London, NH, USA from June 6th -12th, 2010.
- Awarded **International Travel Grant** from **Department of Biotechnology, Govt of India** for attending **Keystone Symposia: Cardiovascular Development and Repair** at keystone Colorado, USA from February 28th – March 5th, 2010.
- Won the **Best Poster award** in **77th Annual Meeting of the “Society of Biological Chemists (India)”** held at Indian Institute of Technology Madras (IITM), Chennai from December 18-20, 2008.
- Awarded **Senior Research Fellowship** from **Council of Scientific & Industrial Research (CSIR), India** from 2006-2009.
- Awarded **Junior Research Fellowship** from **Council of Scientific & Industrial Research (CSIR), India** from 2004-2006.

5. Peer Reviewed Publications:

- **Thakur A, Alam MJ, Ajayakumar MR, Ghaskadbi S, Sharma M, Goswami SK.** Norepinephrine-induced apoptotic and hypertrophic responses in H9c2 cardiac myoblasts are characterized by different repertoire of reactive oxygen species generation. **Redox Biol.** 2015 Aug; 5: 243-52. doi:10.1016/j.redox.2015.05.005. **Impact Factor: 11.799**
- **Chang HC, Wu R, Shang M, Sato T, Chen C, Shapiro JS, Liu T, Thakur A, Sawicki KT, Prasad SV, Ardehali H.** Reduction in mitochondrial iron alleviates cardiac damage during injury. **EMBO Mol Med.** 2016 Feb 19;8(3): 247-67. doi: 10.15252/emmm.201505748. **Impact Factor: 12.13**
- **Nakasone MA, Lewis TA, Walker O, Thakur A, Mansour W, Castañeda CA, Goeckeler-Fried JL, Parlati F, Chou TF, Hayat O, Zhang D, Camara CM, Bonn SM, Nowicka UK, Krueger S, Glickman MH, Brodsky JL, Deshaies RJ, Fushman D.** Structural Basis for the Inhibitory Effects of Ubistatins in the Ubiquitin-Proteasome Pathway. **Structure** 2017 Nov 15. pii: S0969-2126(17)30335-0. doi: 10.1016/j.str.2017.10.007. **Impact Factor: 4.862**
- **Sulkshane P, Duek I, Ram J, Thakur A, Reis N, Ziv T, Glickman MH.** Inhibition of proteasome reveals basal mitochondrial ubiquitination. **J Proteomics.** 2020 Oct 30;229:103949. doi: 10.1016/j.jprot.2020.103949. **Impact Factor: 3.509**
- **Prasad Sulkshane, Jonathan Ram, Anita Thakur, Noa Reis, Oded Kleifeld, Michael H Glickman.** Ubiquitination and receptor-mediated mitophagy converge to eliminate oxidation-damaged mitochondria during hypoxia. **Redox Biol** 2021 Sep;45:102047. (**Impact Factor: 11.799**)
- **Sylvia Zerath Gurevich, Abhishek Sinha, Joseph Longworth, Rajesh K. Singh, Betsegaw E. Lemma, Anita Thakur, Oliver Popp, Daniel Kornitzer, Noa Reis, Martin Scheffner, Gunnar Dittmar, Elah Pick, David Fushman, Michael H. Glickman.** Rub1/NEDD8, a ubiquitin-like modifier, is also a ubiquitin modifier. **Biorxiv** doi: <https://doi.org/10.1101/2020.06.18.159145>

• BOOK CHAPTER PUBLISHED

Praveen Kumar and Anita Thakur. *Phytochemicals in Cancer Chemoprevention: A Brief Perspective.* Springer Nature Singapore Pte Ltd. 2020 https://doi.org/10.1007/978-981-15-5999-0_1

In Conferences

- Poster presented at 7th PROTEASOME & AUTOPHAGY WORKSHOP, 2015: E3 Ubiquitin Ligases Contribute to Mitochondria Adaptation Under Hypoxia.
- Invited Talk entitled "*Ubiquitin is phosphorylated by PINK1 to activate parkin*" Technion Ubiquitin Studies Section, Wednesday, July 30, 2014, Biology Auditorium, Technion, Israel
- Full active participation in UPSTREAM ITN WORKSHOP on Proteasome isolation and Detection at Technion, March 2nd-6th, 2014
- Attended the HUJI-Hands-On: Mitochondria Course at Jerusalem January 7th-9th, 2014.
- Attended the American Heart Association Scientific Sessions 2012 at Los Angeles, CA from 03-08, November 2012.
- Anita Thakur and Hossein Ardheali. Reduction of Mitochondrial Iron by Decreasing Mitochondrial Iron Import or by Iron Chelation can Rescue the Effects of ABCB8 Knockdown, Poster presented at 9th Annual North American ABC Genetic Workshop 2012, September 27-28, 2012, held at Frederick national laboratory, USA
- Attended the American Heart Association Scientific Sessions 2011 at Orlando, Florida from 12- 16 November 2011.
- Poster Presented at Gordon Research Conference: Cardiac Regulatory Mechanisms on "Distinctive Redox Dynamics Control Adrenergic Signalling in H9c2 Cardiac myoblasts " at Colby- Sawyer College, New London, NH, USA from June 6th -12th, 2010.
- Anita Thakur and Shyamal K Goswami. Norepinephrine Induces Hypertrophy and Apoptosis in Cardiac Myocytes by Distinct Redox Signaling Rather Than a General Surge of ROS. Abstract No 324, page no156 Keystone Symposia: Cardiovascular Development and Repair 2010
- Given poster presentation in "13th Transcription Assembly" held at School of Life Sciences, Jawaharlal Nehru University, New Delhi India, 26-27 February 2010.
- Participated in Indo-US Bilateral Workshop on "Redox Signalling in Degenerative Diseases" held at Heritage Village, Manesar, Gurgaon, 19-21 December, 2009.
- Oral presentation on "Differential redox signaling in cardiac myocytes under adrenergic stress" at Biosparks; The 7th Annual Research Festival 2009 at School of Life Sciences, Jawaharlal Nehru University, New Delhi India.
- Given poster presentation on "Differential redox signaling in cardiac myocytes under adrenergic stress" at 77th Annual Meeting of the "Society of Biological Chemists (India)" held on December 18-20, 2008, at IITM, Chennai.
- Participated in the Indo-US Workshop and National Congress on "Molecular Biology and Microbial Bio-Technology" held during March 23-28, 2003 in the School of life Sciences, Jawaharlal Nehru University, New Delhi.

6. Research Support

None
