

# Dinesh Kumar Singh

Senior Scientist  
CSIR-Indian Institute of Toxicology Research  
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## Education

**2001–2005** PhD, Immunology, International Center for Genetic Engineering and Biotechnology (*ICGEB*), Immunology Group, New Delhi, INDIA.

**1999–2001** Master of Science (Biotechnology), Department of Biotechnology, *Panjab University*, Chandigarh, INDIA

**1996–1999** Bachelor of Science (Physiology Honours.), Department of Physiology, *Calcutta University*, Serampore, Hooghly, W.B, INDIA.

## Research and Work Experience

**Dec 2014- Current: Senior Scientist**, Immuno-toxicology Division, **CSIR-IITR**, Lucknow, India.

**Feb 2012- Nov 2014:** Research Scientist, Department of Neurology and Neurotherapeutics, **UTSouthwestern Medical Center**, Dallas, TX, USA.

**June 2010-Jan2012:** Postdoctoral Researcher II, Department of Human Growth and Development, **UTSouthwestern Medical Center**, Dallas, TX, USA.

**2006–June 2010** Postdoctoral Researcher II, Green Center for Systems Biology in the Department of Pharmacology, **UT Southwestern Medical Center**, Dallas, TX, USA.

**2001–2006** Graduate Student, **International Center for Genetic Engineering and Biotechnology, (ICGEB)**, New Delhi, INDIA.

## Honors, Awards and Fellowships

1. *Simmons Cancer Center Poster Presentation Travel Award 2008*. Awarded Outstanding Poster Presentation Award by Harold C. Simmons Comprehensive Cancer Center at UTSouthwestern Medical Center, Dallas, TEXAS, USA.
2. *Shyama Prasad Mukherjee (SPM) Fellowship Award 2001-2006*: First **Shyama Prasad Mukherjee (SPM) Fellow** in Biological Sciences.
3. *Council of Scientific and Industrial Research Fellowship (CSIR) 2001-2006*. Cleared CSIR Junior Research Fellowship (*CSIR JRF*).
4. *University of Grants Commission (UGC) Fellowship (2000)*: Cleared UGC Junior Research Fellowship (*UGC JRF*).
5. *Graduate Aptitude Test in Engineering (GATE) Fellowship (2001)*. All India rank 26<sup>th</sup> with a percentile of 98.64.

6. **Jagadananda Mukherjee Memorial Prize** for being the gold medalist in BSc Physiology Honours (1999) in Serampore College, (Calcutta University) West Bengal, INDIA.
7. **Awarded 3<sup>rd</sup> Prize in Wall Magazine Contest (2000)** by Panjab University, Chandigarh on National Science Day Celebrations by the local chapter of ISCA & INSA and DST (UT).
8. **Awarded 3<sup>rd</sup> Prize in Essay Competition on Integrative Biology (2000)** by Panjab University, Chandigarh on National Science Day Celebrations by the local chapter of ISCA & INSA and DST.

## Posters/Presentations

1. Deciphering the SOX2-regulated Genetic Program in Squamous Cell Lung Cancer. **Dinesh Kumar Singh**, Rahul Kollipara, Caroline G. Humphries, Viren Amin, Chi-Wan Chow, Milind Suraokar, Ignacio I. Wistuba, John D. Minna, Ralf Kittler. Cancer Prevention and Research in Texas (CPRIT) Conference, **2010**.
2. Elucidating the Mechanism of PPAR $\gamma$ -mediated Inhibition of Lung Cancer Cell Growth. Nishi Srivastava, **Dinesh Kumar Singh** Rahul Kollipara, Caroline Humphries, John D. Minna, David J. Mangelsdorf and Ralf Kittler. Cancer Prevention and Research in Texas (CPRIT) Conference, **2010**.
3. Single Cell Measurement of Basal signaling State Can Predict Drug Sensitivity in Cancer. **Dinesh Kumar Singh**, Chin-Jen Ku, Chonlarat Wichaidit, Robert J Steininger III, Lani F Wu and Steven J Altschuler. Simmons Cancer Comprehensive Center at UTSouthwestern Medical Center Dallas, **2008**.

## Publications

1. Tomoyuki Mashimo, Kumar Pichumani, Vamsidhara Vemireddy, Kimmo J. Hatanpaa, **Dinesh Kumar Singh**, Shyam Sirasanagandla, Suraj Nannepaga, Sara G. Piccirillo, Zoltan Kovacs, Chan Foong, Zhiguang Huang, Samuel Barnett, Bruce E. Mickey, Ralph J. DeBerardinis, Benjamin P. Tu, Elizabeth A. Maher, Robert M. Bachoo . Acetate Is a Bioenergetic Substrate for Human Glioblastoma and Brain Metastases. *Cell* **158**, 1603-1614, **2014**.
2. Nishi Srivastava, Rahul K. Kollipara, **Dinesh Kumar Singh**, Jessica Sudderth, Zeping Hu, Hien Nguyen, Shan Wang, Caroline G. Humphries, Ryan Carstens, Kenneth E. Huffman, Ralph J. DeBerardinis, Ralf Kittler. Inhibition of Cancer Cell Proliferation by PPAR $\gamma$  Is Mediated by a Metabolic Switch that Increases Reactive Oxygen Species Levels. *Cell Metabolism*, **20**, 650-661, **2014**.
3. **Dinesh Kumar Singh**, Chin-Jen Ku, Chonlarat Wichaidit, Robert J Steininger III, Lani F Wu and Steven J Altschuler (2010) Patterns of basal signaling heterogeneity can distinguish cellular populations with different drug sensitivities. *Molecular Systems Biology*; **6**:369, **2010**
4. Lit-Hsin Loo, Hai-Jui Lin, . **Dinesh Kumar Singh**, Kathleen M. Lyons, Steven J. Altschuler, Lani F. Wu (2009) Heterogeneity in the physiological states and pharmacological responses of differentiating 3T3-L1 preadipocytes. *J Cell Biol* **2009** **187**:375-384.
5. Basu, S.K., Kumar, D., **Singh, D.K.**, Ganguly, N., Siddiqui, Z., Rao, K.V., and Sharma, P. (2006). Mycobacterium tuberculosis secreted antigen (MTSA-10) modulates macrophage function by redox regulation of phosphatases. *FEBS J* **273**, 5517-5534, **2006**.

6. **Singh, D.K.**, Kumar, D., Siddiqui, Z., Basu, S.K., Kumar, V., Rao, K.V.S. 2005. The strength of receptor signaling is centrally controlled through a cooperative loop between Ca<sup>2+</sup> and an oxidant signal. *Cell* **121**, 281-293, 2005.