BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME	POSITION TITLE
Mukhopadhyay, Archana	Research Scientist, Institute of Metabolic Disorders
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 Calcutta, India	BS	1994	Chemistry
University of Calcutta, India	MS	1996	Chemistry
Eastern Michigan University	MS	1998-2000	Biochemistry
Virginia Polytechnic Institute and State University	PhD	2001-2006	Biochemistry
Medical University of South Carolina	Post-doc	2006-2009	Cancer research
University of Kansas	Post-doc	2009-2011	Drug delivery & discovery

Please refer to the application instructions in order to complete sections A, B, and C of the Biographical Sketch.

A. PROFESSIONAL POSITIONS:

1996-1998 Drug Analytical Chemist, Calcutta, India
1998-2000 Graduate Research Assistant, Department of Chemistry
Eastern Michigan University, Ypsilanti, MI
2001-2006 Research Assistant, Department of Biochemistry
Virginia Polytechnic Institute and State University, Blacksburg, VA
2006-2009 Post-doctoral Fellow, Department of Biochemistry
Medical University of South Carolina, Charleston, SC
2009-2011 Post-doctoral Researcher, Department of Pharmaceutical Chemistry
University of Kansas, Lawrence, KS
2011-2015 Research Associate, Department of Medicinal Chemistry
University of Kansas, Lawrence, KS
2015-2016 Senior Biological Scientist, Department of Medicinal chemistry
University of Florida, Gainesville, FL
2016-Present Research Scientist, Institute of Metabolic Disorders
Medical Diagnostic Laboratories, Hamilton, NJ

PROFESSIONAL AWARDS AND HONORS:

2004 Selected Speaker, 8th Cyanobacterial Molecular Biology Workshop, Quebec, Canada
2006 Avanti Polar Lipids Award, 41st Southeastern Regional Lipid Conference, Cashiers, NC
2007 Selected Speaker, 4th International Charleston Ceramide Conference, Pacific Grove, California
2008 Selected Speaker, Gordon Research Conference, Glycolipid & Sphingolipid Biology, Lucca, Italy
2012-2013 Reviewer, Molecular Cancer Therapeutics, American Association for Cancer Research
2013-2014 Reviewer, Current Medicinal Chemistry, Bentham Science
2013-2014 Reviewer, Frontier Biosciences, Aging Neuroscience

B. PUBLICATIONS:

1. Archana Mukhopadhyay, Sahar A. Saddoughi, Pengfei Song, Iyad Sultan, Suriyan Ponnusamy, Can E. Senkal, Christopher F. Snook, Hugh K. Arnold, Rosalie C. Sears, Yusuf A. Hannun and Besim Ogretmen (2009) Direct interaction between the inhibitor 2 and ceramide via sphingolipid-protein binding is involved in the regulation of protein phosphatase 2A activity and signaling. *FASEB J.* **23(3):** 751-63

2. Joshua Oaks, Paolo Neviani**,** Archana Mukhopadhyay, Ramasamy Santhanam, Y Ma, Charlene Mao, Guido Marcucci, Ching-Shih Chen, Jorge Cortes, Michael A Caligiuri, Peter Hokland Sr, Claudia Huettner, Steffen Koschmieder, Jose Cancelas, Roger Briesewitz, Ravi Bhatia, Denis-Claude Roy, Besim Ogretmen, Danilo Perrotti (2009) FTY720 but not its immunosuppressive phosphorylated form FTY720-P exerts anti-leukemic activity towards Ph (+) and Ph (-) myeloproliferative disorders through reactivation of the PP2A tumor suppressor. *Blood* **114 (22):** 1261-1262

3. Archana Mukhopadhyay, Christopher W. Cunningham*, Gerald H. Lushington, Brian S. J. Blagg, Thomas E. Prisinzano, and Jeffrey P. Krise (2010) Uptake, Distribution and Diffusivity of Reactive Fluorophores in Cells: Implications Toward Target Identification. *Molecular Pharmaceutics* **7(4):**1301-10

4. Oaks JJ, Mukhopadhyay A, Santhanam R, Saddoughi SA, Walker C, Neviani P, et al. (2010) Pharmacologic Restoration of PP2A Activity and Interference with the SET-PP2A Interplay by FTY720 and Its Non-Immunosuppressive Derivative as a Novel and Efficient Therapy for Ph-Negative Myeloproliferative Disorders. *Blood* **116(21):** 775

5. Archana Mukhopadhyay and Peter J. Kennelly (2011) Identification of a Low Molecular Weight Protein Tyrosine Phosphatase and Its Potential Substrate(s) in *Synechocystis* sp. PCC 6803. *J Biochem.* **149(5)**, 551-562.

6. Oaks JJ, Mukhopadhyay A, Santhanam R, Saddoughi SA, Walker C, Neviani P, et al. (2011) FTY720 Restores PP2A Tumor Suppressor Activity in Polycythemia Vera CD34 (+) Progenitors Through Inhibition of Jak2 V617F-and PI-3K gamma-Dependent SET Serine Phosphorylation and Enhancement of NOS-Dependent PP2A Tyrosine Nitration. *Blood* **118 (21):** 1067-1068

7. Sahar Saddoughi, George Simon, Archana Mukhopadhyay, Yuri Peterson, Angen Liu, Can E Senkal, Joshua Oaks, Danilo Perrotti, Yusuf Hannun, Besim Ogretmen (2011) Targeting I2PP2A by FTY720: A Novel, Mechanism-Based Treatment Strategy for Patients with Advanced and Previously Treated Non-Small Cell Lung Cancer (NSCLC). *Journal of Thoracic Oncology* **6(6):** S771-S771

8. Can E. Senkal, Suriyan Ponnusamy, Yefim Manevich, Marisa Meyers-Needham, Sahar A. Saddoughi, Archana Mukhopadyay, Paul Dent, Jacek Bielawski, and Besim Ogretmen (2011) Alteration of ceramide synthase 6/C16-ceramide induces activating transcription factor 6-mediated ER-stress and apoptosis via perturbation of cellular Ca+2 and ER/Golgi membrane network. *J Biol Chem.* **286(49):** 42446-58

9. Saddoughi SA, Gencer S, Peterson YK, Ward KE, Mukhopadhyay A, Oaks J, Bielawski J, Szulc ZM, Thomas RJ, Selvam SP, Senkal CE, Garrett-Mayer E, De Palma RM, Fedarovich D, Liu A, Habib AA, Stahelin RV, Perrotti D, Ogretmen B (2013) Sphingosine analogue drug FTY720 targets I2PP2A/SET and mediates lung tumour suppression via activation of PP2A-RIPK1-dependent necroptosis. *EMBO Mol Med*. **5(1):**105-21

10. Archana Mukhopadhyay, Kayann Tabonar, Rathnam Chaguturu and Jane V Aldrich (2013) Targeting the Function of Inhibitor 2 of Protein Phosphatase 2A as a Therapeutic Strategy for Prostate Cancer Treatment. *Cancer Biology and Therapy* **14(10):**962-72

11. Archana Mukhopadhyay, Solomon Gisemba, Sanjeewa Senadheera, and Jane V Aldrich (2016) Macrocyclic peptides decrease c-Myc protein levels and reduce prostate cancer cell growth (Manuscript is submitted to Cancer Biology & Therapy).