

**BIOGRAPHICAL SKETCH**Follow this format for each person. **DO NOT EXCEED 5 PAGES.**

| NAME<br>Smriti K. Raychaudhuri, MD  |                           |           |                      |
|---|---------------------------|-----------|----------------------|
| eRA COMMONS USER NAME<br>kunduray   |                           |           |                      |
| EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> ) |                           |           |                      |
| INSTITUTION AND LOCATION  | DEGREE<br>(if applicable) | YEAR(s)   | FIELD OF STUDY       |
| Medical College Calcutta, Kolkata, India  | MBBS                      | 1983      | Medicine             |
| All India Institute of Medical Sciences, N. Delhi, India  | MD                        | 1987      | Medical Microbiology |
| Stanford University School of Medicine  | Postdoctoral fellow       | 1989-1992 | Infectious Diseases  |

**A. POSITION TITLE**

**Professor, Infectious Diseases and Medical Microbiology,  
California Northstate University College of Medicine,**

**Research Biologist, Veterans Affairs Medical Center Sacramento  
Researcher, University of California, Davis**

**B. Personal Statement**

My main research goal is to understand the immune mechanisms of inflammatory and infectious diseases. We pursue this goal by carrying out both preclinical and clinical studies. My research field includes inflammation, cytokine network, cell signaling, cell biology, nerve growth factor (NGF), animal models of inflammation and human autoimmune diseases.

We have been working on NGF for almost three decades. In both *in vitro* and *in vivo* experiments we have demonstrated efficacy of anti-NGF therapy in psoriasis and psoriatic arthritis. Using the humanized SCID mouse model of psoriasis we were the first to report clinical efficacy of anti-NGF therapy in a human autoimmune inflammatory conditions. We have also established the role of IL-17 in the cytokine network of psoriasis and psoriatic arthritis.

In addition I teach immunology to medical students, graduate students and clinical immunology to various other disciplines of medicine at California Northstate University College of Medicine, UC Davis and VAMC Sacramento.

**C. Honors and Awards**

1. National merit scholarship from West Bengal Board of Secondary Education, 1974
2. College scholarship from Medical College Calcutta, 1977-1982
3. Certificate of Honor in Biochemistry by Calcutta University, Calcutta, India, 1977, during M.B.B.S. Course.
4. Best paper award by American College of Physicians, 1994 for "Role of IL-4 in disseminated herpes virus infection" - S.P. Raychaudhuri and S.Kundu-Raychaudhuri.
5. NIH Exploratory Research Award 2003
6. National Psoriasis Foundation Investigator award 2011. Principal Investigator. Overall goal of this project is to study the voltage-gated Kv1.3 channel in psoriatic disease and develop a novel therapeutic target

## **C. Professional Achievements**

Patent -Anti NGF and K252a for the treatment of psoriasis (Application in process. PCT/US01/14988).

Licenses -Internal Medicine, Indian Medical Council, India  
-Clinical Microbiologist Scientist, CA, USA  
-Public Health Microbiology, CA, USA

### Teaching

-Immunology and Infectious Diseases lectures: Post doctoral fellow seminar/Journal club, Stanford University, UC Davis and Sacramento VAMC, CA  
-CEU Lectures for laboratory personnel, DHS, CA approved CEU course at Stanford Hospital and Clinics

### Special Training

FACS system operation training at Beckman Center at Stanford University, Stanford, and at Becton Dickinson, San Jose, California, USA.

### Membership in Professional Organizations

American Society for Microbiology  
American Association for the Advancement of Science  
American Association of Immunologists  
New York Academy of Sciences  
Clinical Immunology Society

### Scientific Review Committee

Ad hoc member of scientific review committee, NIH, NIAID, 1995 onward.

### Service to Professional Publications

Reviewer/Member of the Manuscript Review Board:  
AIDS Research and Human retroviruses 1992 onward  
Yearbook of Medical Informatics, 2000 onward  
Nature Medicine, 2002  
J Invest Dermatol, 2000 onward

### Book Editor

**Recent Advances in Immunology, 2005**, Research Signpost, Trivandrum, India

**Psoriasis and Psoriatic Arthritis: Pathophysiology, Therapeutic Intervention, and Complementary Medicine (2017)** CRC Press, Taylor and Francis Group, USA (in Press)

## **D. Contributions to Science ( ≈ 100 Publications)**