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Hari Prasad

Objective

One person's life influences the lives of an unbelievable number of people, one of the most important lessons I learned from my Father's life. Being an **M.B.B.S.**, (M.D.) Graduate, and currently a final year of **post-graduate** student at **Indian Institute of Technology Kharagpur**, I intend to pursue doctoral studies in **Public Health**, and broaden my knowledge and deepen my expertise to use the best available evidence to inform health policy decisions aimed at improving health and reducing health disparities.

Research Interests

Public Health, Molecular Medicine, Mental Health, Evidence Based Medicine

Education

Master of Medical Science and Technology (MMST) at IIT Kharagpur, CGPA- 8.76/10 (up to 4th semester)

2008 to current; School of Medical Science and Technology, Indian Institute of Technology Kharagpur.

Relevant Courses taken:

Immunotechnology, Recombinant DNA technology, Cancer Drug Discovery, Biostatistics, Biomedical Mathematics, Evidence Based Medicine, Medical Ethics, Human subject research project, Medical Imaging, Molecular Imaging, Instrumentation and control, Biomedical instrumentation, Computer aided drawing and visualization, Programming and data structures, Information technology in medicine, Telemedicine, Physics for medicine and biology, Basic medical electronics, Engineering mechanics, Biomaterials I, II, & III (basic and advanced courses).

Bachelor of Medicine, Bachelor of Surgery (MBBS) at RGUHS University. (Degree is recognized by the Medical Council of India- MCI).

2001 to 2007; K.S. Hegde Medical Academy, Mangalore; Rajiv Gandhi University of Health Sciences, Bangalore; Distinctions in I and III MBBS, Overall percentage 72.3%

Relevant Courses taken:

Human Anatomy (including embryology, Histology and Neuroanatomy), Human Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Forensic Medicine, Ophthalmology, Otorhinolaryngology (ENT) and Head and Neck surgery, Preventive and Social Medicine (Community Medicine), General Medicine (including Neurology, TB, Chest Diseases, Psychiatry, Radiology, Dermatology & STD), General Surgery (including orthopedics & Anesthesia), Pediatrics, Obstetrics & Gynecology (OBG), Accident and Emergency Medicine.

Medical license and certification

Karnataka Medical Council, Indian Medical Registry
(Registration No. 76899)

Work experience**'Khorana Scholar' at University of Wisconsin-Madison, United States**

Summer 2009, Ansari lab, Dept. of Biochemistry and Genome center, University of Wisconsin-Madison, United States

Third SERC School in Neurosciences- Imaging the Nervous system

Winter 2009, Indian Institute of Science Education and Research, Pune

Medical Officer at BC Roy Technology Hospital, Kharagpur

2008 to current, Out-patient, Clinical and Emergency Services, B.C. Roy Technology Hospital, Kharagpur

Research Intern in *Pseudomonas* sp. Antibiotic Sensitivity Project

Winter internship (winter 2008) with Nitte Institute of Medical Laboratory Sciences, Mangalore.

Tutor (Teaching cum Research Assistant) at K.S. Hegde Medical Academy, Mangalore

2007 to 2008, Department of Microbiology, K.S. Hegde Medical Academy, Mangalore

House Officership (Internship) at K.S. Hegde Medical Academy

2006 to 2007; Compulsory Rotatory Residential Internship at K.S. Hegde Medical Academy, Mangalore.

Evidence to Inform Health Policy and Health Decisions

2010, South Asian Cochrane Centre at Christian Medical College, Vellore from December 13-18, 2010.

Member/Other Post held**Vice-Chair (2010-2011), IEEE Engineering in Medicine and Biology Society (EMBS) Student Club of IIT Kharagpur**

(Received EMBS Outstanding Performance Award for New Student Branch Chapter or Club at the 2010 EMBS Conference in Buenos Aires).
www.ieee.org/go/embsiitkgp

Community Service Committee (2009-2010), IEEE Engineering in Medicine and Biology Society (EMBS) Student Club of IIT Kharagpur.

Editor, "SMST Window"- Institute Magazine (2009-10 & 2010-11).

Member, IEEE & EMB (Membership No. 91125285).

Member, Art of Living Organization (Membership No. 2071).

Editor of inaugural issue of "MICROSEARCH", a Microbiology news bulletin.

Life Member of the Indian Society for Sleep Research (ISSR).

Awards and achievements

'Khorana Scholar' sponsorship by University of Wisconsin-Madison (UW), the Department of Biotechnology (DBT), Govt. of India and Indo-US Science and Technology Forum (IUSSTF) .

http://www.biochem.wisc.edu/faculty/ansari/khorana_program/

South Asia 1st and overall winner in **South Asian Level Cochrane Network Essay** competition. (Complete essay is available at: <http://www.cochrane-sacn.org/symposium/images/Abstract.pdf>)

All India 1st in Indian Psychiatry Society (IPS) **Neuropsychiatry Quiz (National level)**.

South India 1st in **Otorhinolaryngology (ENT) Quiz**.

South India 2nd in Indian Psychiatry Society **Neuropsychiatry Quiz**.

State 1st in Indian Psychiatry Society (IPS) **Neuropsychiatry Quiz**.

State 1st in Indian Academy of Pediatrics (IAP) **Pediatrics Quiz**.

State 2nd in Indian Psychiatry Society (IPS) **Neuropsychiatry Exam** for record two consecutive years (2005 & 2006).

South Asia 3rd in South Asian Cochrane Network's **poster** presentation.

Divisional 1st in Indian Academy of Pediatrics (IAP) **Pediatrics Quiz**.

1st in Alzheimer Society **Geriatric Medicine Quiz**.

Best Paper (*Eros Pharma Award*) in IAOH (K) 2007 for "Occupational Hazards in Construction Industry."

Best Poster in JBTDRC – ICMR national symposium for "*Holistic Health - an original Indian approach.*"

Academic Excellence Award from Government of Karnataka.

Presented two posters titled "*The Chemical Genomic Portrait of The CTD Code of RNA Pol II*" and "*A New Strategy to Develop a Zinc Finger Library*" in **33rd Steenbocks Symposium** at University of Wisconsin-Madison, United States.

One of the finalists selected to present our work for the prestigious Rotary International Young achiever award 2008 at Bangalore.

Distinctions in 10th, 11th, 12th, I MBBS, and III MBBS.

Certificate of appreciation for participation in the **National Filarisis control program**.

Nitte Education Trust Awards for being top scorer in all subjects of III MBBS (Ophthalmology, Otorhinolaryngology and Community Medicine).

'**Union Youth**' awards for three consecutive times (2006, 2007 & 2008) from UBI, Mumbai.

Awarded **Certificate of Recognition** for voluntary services rendered towards organizing *National Workshop on Technology in Health Care: Prospects & Challenges* at IIT Kharagpur.

Awarded **Certificate of Appreciation** for successfully organizing free community health check-up camps for rural-tribal people in association with IEEE EMB Club of IIT Kharagpur, Lions Club and Society of School of Medical Science and Technology, IIT Kharagpur.

<http://ewh.ieee.org/sb/kharagpur/iit/embs/health%20camp/Press%20release/index.html>

Research Experience

Projects at IIT Kharagpur

1. **Epidemiology of coronary artery diseases in West Bengal and automated feature extraction and pattern classification of *Electrocardiogram (ECG)* and *Arterial Blood Pressure (ABP)* waveforms in aid for cardiovascular disease diagnosis.**

Guides:

Dr. Manjunath M, PhD (IIT Kharagpur)

Dr. K M Mandana, MBBS, MS, MCh, FETCS (UK), (AMRI Hospitals, Kolkata)

Sponsorship: Department of Atomic Energy, Government of India.

Relevant Publications:

Book Chapter

Martis RJ, **Prasad H**, Chakraborty C, Ray AK. The application of Genetic Algorithm for improved accuracy of unsupervised classification of electrocardiograms. *Data Mining in Biomedical Imaging, Signaling, and Systems*. Editor(s): Sumeet Dua, Louisiana Tech University, Ruston, USA; Rajendra Acharya U, Ngee Ann Polytechnic, Singapore, to be published by CRC Press (*Taylor and Francis group*).

Journal Article

Martis RJ, **Prasad H**, Chakraborty C, Ray AK. ECG pattern classification between atrial flutter and fibrillation using its texture, mean heart beat interval and sample entropy. Submitted to: *Pattern Recognition and Image Analysis* - SpringerLink Journal.

2. **Translating evidence into policy: The case for Isoniazid preventive therapy (IPT) programs for health care workers in India.**

Guide:

Dr. Sangeeta Das Bhattacharya, MD, MPH, FAAP (IIT Kharagpur)

The study was awarded at the 3rd South Asian Regional Symposium on Evidence Informed Healthcare at **Christian Medical College, Vellore**.

Relevant Publications:

Raj R, **Prasad H**, Arya BK, Bhattacharya SD. Translating evidence into policy: The case for Isoniazid preventive therapy (IPT) programs for health care workers in India. Submitted to: *National Medical Journal of India*.

3. **Internet use among students of IIT Kharagpur and the risk of pathological internet dependence that interferes with normal daily life.**

Duties included design of the study, literature review, institutional ethical committee (IEC) presentation and clearance, conduct of study, data analysis and presentation. Manuscript is under preparation for journal submission.

Semester Project: Got highest grade (Ex) for the project work.

Guide:

Dr. Sangeeta Das Bhattacharya, MD, MPH, FAAP (IIT Kharagpur)

Projects at UW-Madison

- 1. The Chemical Genomic Portrait of the CTD Code of RNA Pol II**
- 2. A New Strategy to Develop a Zinc Finger Library**

Guide:

Dr. Aseem Z. Ansari, PhD

Dr. Fang Wan, PhD

Techniques used:

Chromatin immunoprecipitation and microarray technology (ChIP-chip), polymerase chain reaction (PCR), Kinase assay, Animal Cell culture, Real time PCR and other molecular biology techniques.

Relevant Publications:

Prasad H, Akhtar Md S, Wan F, Ansari AZ. *"The Chemical Genomic Portrait of the CTD Code"* in the proceedings of the 33rd Steenbock Symposium, University of Wisconsin-Madison, USA, July 30- August 2, 2009.

Projects completed in the Medical School

- 1. "A study on Faith Healers and their awareness about Psychiatric Illness,"** under the guidance of **Prof. (Dr.) Nagesh Pai**, Head, Department of Psychiatry and submitted to **Indian Council of Medical Research (ICMR)** for the award of short term studentship for the year 2006.
- 2. "Occupational Hazards and Psychological Well-being in Construction Industry,"** under the guidance of **Prof. (Dr.) Das Acharya**, Head, Department of Community Medicine and won the **best project award** for the year 2006-2007.
(Presented in the National conference of Indian Association of Occupational Health- IAOH)
- 3. "Assessment of antioxidant and plasma Sialic acid concentration in Indian type 2 diabetic patients with or without complications: the role of Glycemic control and duration of diabetes,"** under the guidance of **Prof. (Dr.) Suchetha Kumari**, Department of Biochemistry.

Publications

Hari Prasad. Relevance of core body temperatures in post-stroke depression sufferers. *Medical Hypotheses*. Volume 72, Issue 2, 2009, Pages 226-227. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S0306987708005318>

Hari Prasad. Amelioration of pathological yawning after tracheostomy in a patient with locked-in syndrome: A thermoregulatory approach. *European Journal of Neurology*. Vol. 15, No. 12. (December 2008), pp. e114-e114. (Blackwell Publishers).

<http://www3.interscience.wiley.com/journal/121460316/abstract?CRETRY=1&SRETRY=0>

Hari Prasad. Yawning...and why yawns are contagious: A theory on evolution and atavism. *Medical Hypotheses*, Volume 71, Issue 2, 2008, Pages 307. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S0306987708000996>

Hari Prasad. Drug-induced yawning: A vital protective reflex. Medical Hypotheses. Volume 71, Issue 3, 2008, Pages 457. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S0306987708001175>

Hari Prasad. Is sexual activity itself a zeitgeber? Sleep Medicine Reviews 2008; 12 (3):245. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S1087079208000105>

Hari Prasad. Role of Prolactin in Obesity: Extending the Hypothesis. Medical Hypotheses. Volume 72, Issue 3, 2009, Pages 363-364. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S030698770800532X>

Hari Prasad. Asymmetric testicular levels in the crotch: A thermodynamic perspective. Medical Hypotheses, Volume 71, Issue 1, 2008, Pages 148-149. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S0306987708000911>

Hari Prasad. Defective spermatogenesis in undescended testes: cause or effect? Environ Health Perspect. Volume 116, Issue 8, 2008, Pages A 331-332. (National Institute of Environmental Health Sciences Journal).

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2516575/>

Hari Prasad. Laterality in cooling mechanisms of the scrotum: Another interpretation. Laterality: Asymmetries of Body, Brain and Cognition 2008; 13 (4): 387 — 389. (Taylor & Francis Publishers).

<http://www.informaworld.com/smpp/content~content=a794176979&db=a>

Hari Prasad, Krishnaprasad M. S., Vimal Kumar Karnaker. Therapeutic induction of Helicobacter pylori bacteraemia in multiple sclerosis: how far from reality? Medical Hypotheses. Volume 71, Issue 4, 2008, Pages 610-611. (Elsevier Publishers).

<http://linkinghub.elsevier.com/retrieve/pii/S0306987708002466>

Hari Prasad. Excessive yawning: an auto-protective mechanism in cerebral ischemia? SMST Window 1(1):8-9.

Hari Prasad. Nanosilver: The Medical Silver Bullet. SMST Window. 1(1):34-36.

Hari Prasad. Youth suicide prevention. Canadian Medical Association Journal. ELETTERS. 13 Feb 2008. Available at:

<http://www.cmaj.ca/cgi/eletters/178/3/282#18717>

Hari Prasad. Some physiological considerations of the difference in testicular swinging levels and the temperature-gradient hypothesis of testicular descent. Medical Hypotheses, 2009 Aug 26. (Elsevier Publishers).

[http://linkinghub.elsevier.com/retrieve/pii/S0306-9877\(09\)00541-6](http://linkinghub.elsevier.com/retrieve/pii/S0306-9877(09)00541-6)

Hari Prasad. Asymmetric testicular levels in the crotch: Authors' reply. Medical Hypotheses 2010; 74(4):757-757.

<http://linkinghub.elsevier.com/retrieve/pii/S0306987709006252>

Hari Prasad. Is it immoral for an academician to work with the pharmaceutical industry? British Medical Association Journal ELETTERS. 1 March 2008. Available at:

<http://www.bmj.com/cgi/eletters/336/7641/416#191239>

Hari Prasad, Vimal Kumar Karnaker, Rekha Rai, et al. Bacteraemia due to Escherichia hermannii in an oncologic patient: Description of an emerging pathogen. (Submitted to Canadian Journal of Infectious Diseases).

Hari Prasad. Clinical Information: to the patient or for the patient? (Submitted to Indian Journal of Medical Ethics).

Hari Prasad. Aortic Arch Physiodynamics: an Evolutionary Perspective. (Submitted to Journal of Human Evolution).

Hari Prasad. Synergistic inhibition of neural progenitor cell proliferation by cocaine-induced maternal hyperthermia: A brief note. (Submitted to Pediatric Neurology).

Hari Prasad. Chaotic oscillations of spermatozoa in a highly convoluted duct: A new insight into epididymal function (Submitted to Journal of Andrology).

**Innovative
Techniques**

1. Chlamyospore slide preparation for teaching (Submitted to *Mycoses*)
2. Low-cost Float sensor (Instrumentation and Control Project)

**Papers/Posters
presented**

1. **“Quality of Life and Psychological Wellbeing among Construction Workers in Coastal Karnataka”** at the 58th annual **national** conference of Indian Association of Occupational Health (IAOH) held in Mumbai.

2. **“Translating Evidence into Policy: The Case for INH Prophylaxis Programs for Health Care Personnel in India”**. **“Care for the health of those, who care for the health of others”** at 3rd **South Asian level** Regional Symposium on Evidence Informed Healthcare at Christian Medical College Vellore.

3. **"Chikungunya epidemic in India"** at 8th Dorabji Tata **international** Symposium on "Arthropod borne Viral infections" organized by Sir Dorabji Tata Centre for Research in Tropical diseases, Indian Institute of Sciences, Bangalore.

4. **“Chronobiology and Psychiatry”** at the 2nd **national** conference of Indian Society for Sleep Research at National Institute of Mental Health and Neurosciences, Bangalore.

5. **"A case of Tubular Colonic Duplication associated with Pseudoexstrophy of Bladder and Hypoplasia of Clitoris"** at a **national** scientific congress at Rajah Muttiah Medical College, Annamalai University, Tamil Nadu.

6. **"Uncommon delayed presentation of Organophosphorous poisoning -a case report"** in 2nd National conference of Toxicology.

7. **"Present trends and future in the management of Alzheimer's disease"** on World Alzheimer day 2006.

**Workshops
attended**

1. National workshop on molecular technologies in infectious diseases.
2. DST sponsored national sleep medicine and neurophysiology course.
3. National workshop on application of radioisotopes in biology.
4. Short Term Course on Recent Trends & Techniques in Medical Imaging and Image Processing.
5. National Workshop on Technology in Health Care.

Knowledge & Skills *Epi Info*, Molecular and cell biology techniques, Evidence based medicine, Systematic Literature search (Haynes “5S” Model), systematic review, C programming, Matlab, Web-Designing (html and php), Database management, Biomaterials, Biomedical Instrumentation, Networking and telemedicine.

Languages known Proficiency in English and 4 Indian languages (Kannada, Hindi, Sanskrit, Tulu) and working knowledge in Malayalam.

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References

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Foundation Professor of Psychiatry
Graduate School of Medicine (GSM)
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Principal, Nitte Inst. of Med. Lab. Sciences
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