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AREAS OF INTEREST	Internal Medicine and Pediatrics Public Health and Epidemiology Vaccine Access for Children and Families Clinical Decision Making	College Mental Health Teaching Methods for Evidence Based Medicine Global Health	
EDUCATION	Bachelor of Arts History of Science., May 1994, <i>Johns Hopkins University</i> , Baltimore, MD Masters in Public Health May 2010, <i>Johns Hopkins Bloomberg School of Public Health</i> , Baltimore, MD	Doctor of Medicine , May. 1999, <i>Johns Hopkins University School of Medicine</i> , Baltimore, MD, USA Doctor of Philosophy , June 2013, <i>Indian Institute of Technology Kharagpur</i> , India	
POST DOCTORAL TRAINING	Resident Physician July 1999 – June 2003 Combined Residency Program in Internal Medicine and Pediatrics (Med/Peds) <i>Christiana Care Health System</i> , Newark, DE, USA <i>Dupont Hospital for Children</i> , Wilmington, DE, USA		
PROFESSIONAL RECOGNITION	Fellow , American Academy of Pediatrics, elected April 2005	Fellow , American College of Physicians, elected June 2016	
PROFESSIONAL LICENCE	Board certified , American Board Internal Medicine, October 2003, recertified 2013	Board certified , American Board of Pediatrics, December 2004, recertified 2014	Licensed Physician , State of Delaware, USA 2003 – present Registered Physician , Medical Council of India, 2011 – present
FACULTY EXPERIENCE	At Indian Institute of Technology Kharagpur, India Professor , Feb 2018 - present Associate Professor , July 2013 – Feb 2018 Assistant Professor , February 2006 – July 2013	At Johns Hopkins University, Bloomberg School of Public Health, Baltimore, Maryland Associate Faculty, Dept. of International Health 2011-present Visiting Faculty <i>International Vaccine Access Center</i> , 2014-2015	At Christiana Care Health Systems, Delaware, USA Preceptor , Adult Medicine Clinic Wilmington Hospital, Jan 2004 – February 2006

TEACHING EXPERIENCE	At Indian Institute of Technology Kharagpur, India <i>Evidence Based Medicine I and II</i> , 2006 – present <i>Health Care Management</i> , 2011 – present <i>Medicine Technology Ethics in Biomedical Research</i> , 2018 - present	<i>Vaccines and Immunity</i> , 2018 – present <i>Introduction to the Science of Happiness</i> , 2016 - present
STUDENT SUPERVISION	Post doctoral Dr. Tila Khan, 2017- present Doctoral Students Sabut Ph.D. 2011, (co-advised) Abhay Singh Ph.D. 2013 (co-advised)	Bikas Arya Ph.D. 2017 Arunava Biswas, PhD 2019 Tushar Mungle, PhD expected 2020 (co-advised)

JOURNAL ARTICLES

1. Khan T, Das R, Arya B, Chaudhary A, Chatterjee J, Bhattacharya SD. Impact of pneumococcal conjugate vaccine on the carriage density of *Streptococcus pneumoniae* and *Staphylococcus aureus* in children living with HIV: A nested case control study. *Human Vaccines and Immunotherapeutics*, January 2020, 16:8,1918-1922
2. Arya BK, Bhattacharya SD, Harigovind G, Das RS , Ganaie F, Niyogi SK, Manoharan A, Ravi Kumar KL, Bhattacharyya S, Panda S, Mandal S. Acquisition of nasopharyngeal carriage of *Streptococcus pneumoniae* in HIV-infected Indian children and their parents a longitudinal cohort study. *Indian Journal of Pediatrics*. 2019 Nov;86(11):1002-1010.
3. Biswas A, Bhattacharya SD. Color batching of bed linens in a low resource neonatal intensive care unit for infection control. *Pediatric Quality and Safety*. (under review)
4. Khan T, Das RS, Bhattacharya SD. Increased household exposure to respiratory pathogens in HIV exposed uninfected children due to maternal HIV, *Journal of Family Medicine and Primary Care*, Wolters Kluwer, vol 8, no 3. 2019.
5. Biswas A, Bhattacharya SD, Singh AK, Saha M. Developing a Conceptual Framework for Improving Hand Hygiene in a Low Resource Neonatal Intensive Care Unit. *Journal of Pediatric Infectious Disease*. Oxford. September 4, 2018. (Epub ahead of print doi:10.1093/jpids/piy076)
6. Arya BK, Bhattacharya SD, Sutcliffe CG, Ganaie F, Bhaskar A, Bhattacharyya S, Niyogi SK, Moss WJ, Panda S, Ravi Kumar KL, Das RS, Mandal S. Nasopharyngeal pneumococcal colonization and impact of single dose of PCV13 in children with HIV and their unvaccinated parents. *Pediatric Infectious Disease Journal*, 37(5):451-458. May 2018.
7. Bhattacharya SD and Das R. Reach Out Week-The Story of breaking a suicide contagion on an Indian college campus. *Psychology International Newsletter*. American Psychological Association, Division 17. 2017.
8. Arya, BK, Bhattacharya, SD. Time to provide immediate access to Anti-retroviral Therapy for HIV Infected Children. *Journal of Family Medicine and Primary Care*. Wolters Kluwer;5:860-2. 2016.
9. Arya, BK, Bhattacharya, SD, Sutcliffe, CG, Niyogi, SK, Bhattacharyya, S, Hemram, S, Moss, WJ, Panda, S, Das, RS, Mandal, S, Robert, D, and Ray, P. Impact of Haemophilus influenzae type b Conjugate Vaccine (HibCV) on Nasopharyngeal Carriage in HIV infected Children and their Parents from West Bengal, India. *The Pediatric Infectious Disease Journal*. Kluwer, 35(11):e339-e347, 2016
10. Arya, BK, Bhattacharya, SD, Sutcliffe, CG, Saha MK, Niyogi, SK, Bhattacharyya,S, Moss, WJ, Panda, S, Das, RSMallick M, and Mandal, S, Immunogenicity and safety of two doses of catch-up immunization with Haemophilus influenzae type b conjugate vaccine in Indian children living with HIV. *Vaccine*. 34(19):2267-74. 2016.
11. Arya BK and Bhattacharya SD. Impact on Haemophilus Influenzae Type b Vaccine in Children and Their Families Affected By HIV. *Pediatrics*. 137 (Supplement 3):391A-391A · February 2016.
12. Das R, and Bhattacharya SD. College Psychotherapy at an Indian Technical Education University's Student Counseling

Center, *Journal of College Student Psychotherapy*, 29:2, 90-93. 2015.

13. Bhattacharya SD, Bhattacharya S, Chatterjee D, Niyogi SK, Chauhan N, Sudar A. Risk Factors for Incomplete Immunizations in HIV infected Children. *Indian Journal of Pediatrics*. Vol 81, Issue 9, pp 850–855, 2014.
14. Arya, BK, Robert, D., Bhattacharya, SD, & Mukhopadhyay, J. (2013). A framework for web based geographical information system for country wide antimicrobial resistance monitoring. *Health Policy and Technology*, 2, 85-93. 2013.
15. Sabut SK, Bhattacharya SD, Manjunatha M. Functional Electrical Stimulation on Improving Foot Drop Gait in Poststroke Rehabilitation: A Review of its Technology and Clinical Efficacy. *Critical Reviews in Biomedical Engineering*, 2013
16. A framework for web based geographical information systems for country wide antimicrobial resistance monitoring. Arya B, Robert D, Bhattacharya S, Mukhopadhyay J. *Health Policy and Technology*. 2013(2) 85-93.
17. Bhattacharya, SD, Niyogi, SK, Bhattacharyya, S, Arya, BK, Chauhan, N and Mandal, S. Associations Between Potential Bacterial Pathogens in the Nasopharynx of HIV Infected Children. *Indian Journal of Pediatrics*, 2012 Nov;79(11). Epub 2012 May 9.
18. Raj R, Hari Prasad, Arya BK, Bhattacharya, SD. Isoniazid preventive therapy programmes for healthcare workers in India: Translating evidence into policy. *National Medical Journal of India*. Vol 24(4) pp. 201-207. July/August 2011.
19. Patra D, Mukherjee J, Majumdar AK, Majumdar B, Bhattacharya SD, Paul S. A Standard, Knowledge Integrated Consultation Document for Pediatric HIV Information Exchange. *Journal of Healthcare Engineering*. Vol 2 (2) June 2011. pp.161-182.
20. Do children receiving HAART need to be revaccinated? Bhattacharya SD, Bhattacharyya S. *Lancet Infectious Disease*. Vol 11(6) June 2011. p. 425.
21. Bhattacharya SD, Niyogi SK, Bhattacharyya S, Fitzwater S, Chauhan N, Sudar A, Mandal S. High rates of colonization with drug resistant Haemophilus Influenzae B and Streptococcus Pneumoniae in Unvaccinated HIV Infected Children from West Bengal. *Indian Journal of Pediatrics*. Vol 78(4) April 2011. pp 423-9.
22. Isolation and Sequencing of a Novel Tropomyosin Isoform Preferentially Associated With Colon Cancer; J Lin, X Geng, S Bhattacharya, et al. *Gastroenterology* Vol 123, July 2002; pp. 152-162

CONFERENCE PUBLICATIONS/PRESENTATIONS:

1. SD Bhattacharya. Mindless to Mindful Thinking: Addressing Cognitive Bias in Clinical Decision Making. Presented at SPARC Indo-UK Workshop on Inherited Pediatric Hematological Disorders. January 6th-January 8th 2020. IIT Kharagpur. Workshop Covenor.
2. T Khan, RS Das, SD Bhattacharya, BK Arya, A Chaudhary, J Chatterjee. Density of pneumococcal carriage in children with and without HIV before and after PCV-13. ISPPD-0087. Poster. ISPPD-11 April 15-19, 2018, Melbourne, Australia.
3. T Khan, RS Das, SD Bhattacharya, BK Arya, A Chaudhary, J Chatterjee. Respiratory microbiome in HIV affected and HIV unaffected families from Eastern India. ISPPD-0397. Oral. ISPPD-11 April 15-19, 2018, Melbourne, Australia.
4. T Khan, RS Das, G Harigobind, SD Bhattacharya, BK Arya, A Chaudhary, J Chatterjee. Association of human rhino virus with Streptococcus pneumoniae in children with and without HIV from Eastern India. ISPPD-0460. Poster. ISPPD-11 April 15-19, 2018, Melbourne, Australia.
5. T Khan, RS Das, SD Bhattacharya, A Chaudhary, J Chatterjee. Comparison of pneumococcal carriage in households with HIV infected child, HIV exposed uninfected child and HIV uninfected child: A case series from Eastern India. ISPPD-0548. Poster. ISPPD-11 April 15-19, 2018, Melbourne, Australia.
6. RS Das, G Harigovind, T Mungle, T Khan, BK Arya, SD Bhattacharya. Improved nutritional status increases pneumococcal clearance in HIV infected children. ISPPD-0506. ISPPD-11, April 15-19, 2018, Melbourne, Australia.
7. Harigovind G, Mungle T, Bhattacharya SD, Impact of PCV-13 on dual colonization of S.pneumoniae with S. aureus in HIV affected families. ISPPD-0529. ISPPD-11, April 15-19, 2018, Melbourne, Australia.
8. Roy P, Mungle T, Bhattacharya SD, Mukhopadhyay J, Saha V. Clinical decision support system for management of maintenance chemotherapy for children with ALL. PHOCON 2017. Kolkata India. November 2017.
9. Arunava Biswas, Romil Roy, Jayanta Mukhopadhyay, Deepak Khaneja, Sangeeta Das Bhattacharya, and Sourya Bhattacharyya. Android Application for Therapeutic Feed and Fluid Calculation in Neonatal Care - A Way to Fast, Accurate and Safe Health-care Delivery. IEEE BIBM 2016. Shenzhen , China Dec. 2016.
10. Bhattacharya SD, Das R, Abeer KC. Administrative Challenges in College Mental Health, International Conference on Current Trends in Clinical Psychology- 2016 (ICCTCP-2016), 17-19 th November 2016 at NIMHANS, Bangalore.
11. B. Arya, SD Bhattacharya et. al. Impact of one dose of 13-valent pneumococcal conjugate vaccine on pneumococcal colonization in Indian children with HIV and their unvaccinated parents, International Symposium on Pneumococcus and Pneumococcal Disease ISPPD 10, Glasgow, June 2016.
12. B. Arya, R Das, SD Bhattacharya et. al. ISPPD-0408: Willingness to pay for Pneumococcal conjugate vaccines in HIV affected and unaffected families in West Bengal, India International Symposium on Pneumococcus and Pneumococcal Disease ISPPD 10, Glasgow, June 2016.
13. B. Arya, SD Bhattacharya et. al. ISPPD-0417: Risk factors for pneumococcal colonization in unvaccinated HIV infected Indian Children and their parents. International Symposium on Pneumococcus and Pneumococcal Disease ISPPD 10, Glasgow, June 2016.
14. B. Arya, SD Bhattacharya et. al. ISPPD-0421: Co-colonization of pneumococcus and staphylococcus in HIV infected and uninfected children and their parents. International Symposium on Pneumococcus and Pneumococcal Disease ISPPD 10, Glasgow, June 2016.
15. B. Arya, SD Bhattacharya et. al. ISPPD--0592: Antibiotic Susceptibility of Pneumococcal Isolates from nasopharyngeal carriage in children with and without HIV International Symposium on Pneumococcus and Pneumococcal Disease ISPPD 10, Glasgow, June 2016.
16. BK Arya, SD Bhattacharya et. al. Potential risk factors for vaccine failures in HIV infected Indian children (2-15 years) vaccinated with Hib conjugate vaccines as catch-up. European Society of Pediatrics Infectious Disease, Brighton, UK, May 2016.

17. BK Arya, SD Bhattacharya et. al. Immune response of two doses of Haemophilus influenzae type b conjugate vaccine in vaccine naive children with HIV (2-15 years) European Society of Pediatrics Infectious Disease, Brighton, UK, May 2016.
18. Rajasee Das and Sangeeta Das Bhattacharya. Understanding suicide at Indian residential college campuses: An analysis of archives for infrastructural remedies, 42nd National Annual Conference of Indian Association of Clinical Psychologist (NACIACP) 2016, At Imphal, India.
19. Das R, Mohammed AKC, Bhattacharya SD, counselling services in a residential college campus in india: clinical services, crisis interventions and outreach. Centenary Conference on Psychology, University of Calcutta. India. November 2015.
20. Arya BK, Bhattacharya SD. Impact of Hib Conjugate Vaccine in Children and their Families Affected by HIV. AAP National Conference and Exhibition. Section on Global Pediatric Health. Washington DC October 2015.
21. Mukhopadhyay J; Saha B; Majumdar B; Majumdar A K; Gorain S; Arya B.K.; Bhattacharya SD; Singh A (2013). An evaluation of human perception for neonatal cry using a database of cry and underlying cause. Medical Informatics and Telemedicine (ICMIT), 2013 Indian Conference on ,64-67. (Proceedings)
22. Pneumonia Prevention in Families Affected by HIV: Ground Work Behind the Conduct of an Ongoing Study in Rural West Bengal, Ranjan Saurav Das; BK Arya; S. Das Bhattacharya et al. 9th International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, March 2014
23. Pneumococcal Carriage In Hiv Infected Children And Mothers From West Bengal, BK Arya, S. Das. Bhattacharya, S K Niyogi et al. 9th International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, March 2014
24. Streptococcus pneumoniae, Staphylococcus aureus, and Haemophilus influenzae Nasopharyngeal Colonization in HIV Infected Children and Their Mothers During a Haemophilus influenzae type b Vaccine Study. BK Arya, S. Das Bhattacharya, SK Niyogi, 9th International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, March 2014
25. Pneumococcal serotypes isolated in nasopharyngeal samples from vaccine naïve HIV infected mothers and children. Banuja K Acharya, , S. Niyogi, R. Jalagandeeswaran, S. Mandal, A. Manoharan, S. Das Bhattacharya, S. Bhattacharya. 9th International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, March 2014
26. Association Between Baseline Plasma HIV Viral Load And Nasopharyngeal Pneumococcal Colonization in Children with HIV Infection. D. Robert, B.K. Arya, M. Mallick, S. Das Bhattacharya et al. 9th International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, March 2014
27. An Evaluation of Human Perception For Neonatal Cry Using a Database of Cry and Underlying Cause. Gorain S, Mukhopadhyay J, Arya BK, Saha B, Singh A, Majumdar B, Bhattacharya SD and Majumdar AK. Indian Conference on Medical Informatics and Telemedicine (ICMIT-2013), 28-30 March, 2013, Kharagpur, India.
28. Protecting children with HIV from vaccine preventable disease perspectives from India. Global Health Series, Delaware Academy of Medicine, Newark, DE, USA, February 2013.
29. A Web Enabled Information System for the Neonatal Intensive Care Unit (NICU). Ray S, Dogra D, Bhattacharya S, Saha B, Biswas A, Majumdar A, Mukherjee J, Majumdar B, Singh A, Paria A, Mukherjee S, Bhattacharya SD. Services (SERVICES), 2011 IEEE 7th World Congress on Services, July 2011 pp. 451-458.
30. Internet use among IIT Kharagpur students and the risk of developing troublesome pathological internet dependence that interferes with normal daily life: an emerging concern. Rishi Raj, Hari Prasad, Anupama Verma, Ranjan Das, Sachin Verma, SD Bhattacharya. Proceedings of International Conference on Student Mental Health: Issues and Challenges. July 2011. p. 124.
31. High rates of colonization with drug resistant Haemophilus Influenzae B and Streptococcus Pneumoniae in Unvaccinated HIV Infected Children from West Bengal. S. Das Bhattacharya, SK Niyogi, S. Bhattacharyya, S. Fitzwater, N Chauhan, A Sudar, S. Mandal. First Global Forum on Bacterial Infections New Delhi, Oct. 2011.
32. Innovations that address Global Health. "Decision Support System for Pediatric HIV." WHO First Global Forum on

Medical Devices, Bangkok Thailand Sep. 2010.

33. The Impact of Differential Standards of Care Perspectives from the Pediatric HIV Epidemic in West Bengal. World Bioethics Congress, Singapore July 2010.
34. Addressing Campus Mental Health: QPR for Suicide Prevention. R. Guha, S. Das Bhattacharya, IIT-Kgp March 2010.
35. Translating Evidence into Policy: the Case for INH Prophylaxis Programs for Health Care Personnel in India, R.Raj, H Prasad, B. Arya, T. Shyam, S.D. Bhattacharya, South Asian Regional Symposium on Evidence Informed Healthcare, (poster winner) CMC Vellore, Jan 2010
36. iMedik a Smart web based EHR with a mobile interface for the Management of Pediatric HIV, S. Das Bhattacharya, S. Paul, A.K. Majumdar, S. Bhattacharyya mHealth Summit Washington DC Oct 2009
37. A Web-Based Electronic Health Care System for the Treatment of Pediatric HIV, S. Paul, S. Das Bhattacharya, D. Patra, A.K. Majumdar, J. Mukhopadhyay, B. Majumdar, A. Sudar. International Conference on e-Health Networking, Applications & Services (HEALTHCOM 2009),16-18 December, 2009, P. 175-180, Sydney, Australia.
38. Development of a Smart EHR for Improving the Standard of Care for the Management of Pediatric HIV, A. Sudar, S. Das Bhattacharya, Evidence Based Health Care Conference CMC Vellore India April 2008
39. Winter Blues – a case of Hypocalcemic Tetany, Relative Parathyroid Hormone Resistance and Vitamin D Deficiency,” S. Bhattacharya, Christiana Care Health Systems, Pediatric Grand Rounds, 2005.
40. “An Unusual Combination: Superior Mesenteric Artery Syndrome, Celiac Disease, and Small Bowel Carcinoma,” S. Bhattacharya, A. Friedland, ACP-ASIM Delaware Chapter Meeting and National Meeting San Diego, 2003.
41. Expression of Novel Human Tropomyosin Isoform, TC22, in gastric intestinal metaplasia associated with gastric carcinoma, S. Bhattacharya, J. Watari, J Lin, K Das, poster presented at Digestive Disease Week, San Francisco, 2002

BOOK CHAPTER

Mobile Health Record System for Pediatric HIV in Compendium of new and emerging health technologies. WHO. Geneva Switzerland 2011.

What makes us thrive? Public Health as a Paradigm for Happiness: Understanding Vaccine Impact in forthcoming Science of Happiness. Sage Publications. 2020.

FUNDED RESEARCH

	Role and Title of Project	Duration	Agency	Status
1.	Mentor, Building the evidence base for maternal immunization to protect Indian infants from lower respiratory tract infections (Mentee Dr. Tila Khan)	5 yrs	Wellcome Trust DBT India Alliance	Sanctioned
2.	PI, Randomized Crossover Study of Mindfulness Training To Improve Resilience in Indian College Students	3 yrs	ICMR	On-going
3.	PI, Applying artificial intelligence to improve outcomes for children undergoing maintenance chemotherapy for acute lymphoblastic leukemia in low resource settings	2 yrs	MHRD (SPARC)	On-going
4.	PI, "Resilience Recovery and Reintegration of psychological health in young adults" (joint PI Rajlakshmi Guha)	3 yrs	Ministry of Human Resources, India	Completed
5.	PI, "Association of Pneumonia Causing Respiration Viruses & Pneumococcus in the Nasopharynx of Indian Children Living With HIV Before & After PCV-13 Vaccination" co-PI Tila Khan	2 yrs	Robert Austrian Grant (Pfizer ISPPD)	Completed
6.	co-PI, "Development of Index and Measurement of Happiness at New Town, Kolkata"	1.5 yr	NKDA	Completed
7.	PI, "Investigator Initiated Research Grant"	2 yrs	Pfizer	Completed
8.	PI, "Robert Austrian research award for pneumococcal vaccinology" (co-PI Bikas Arya)	2 yrs	Robert Austrian Grant (Pfizer ISPPD)	Completed
9.	PI, "Prevention of Childhood Pneumonia in Children with HIV"	3 yrs	Indian Council of Medical Research	Completed
10.	PI, "Pediatric HIV Infection and Childhood Immunization Coverage: A Study to Investigate whether Pediatric HIV-1 Infection is an Independent Risk Factor for Incomplete Childhood Immunization	3 yrs	IIT Kharagpur	Completed
11.	Co-PI, "Development of a web-enabled e-Healthcare system for neonatal patient care services") PI Arun Majumdar & Jayanta Mukhopadhyay)	2.5 yrs	DIT, Ministry of Communication and Information Technology Government of India	Completed
12.	Co-I, "Development of Electronic Medical Record System for the Management of Pediatric HIV in the Indian Context "Web Enabled Medical Information Access Using Handheld Devices in a Wireless Environment for Telemedicine Applications"	4 yrs	Ministry of Communication and Information Technology Government of India	Completed
13.	PI, "Surveillance of invasive pneumococcal disease in India"	2yrs	CMC Vellore/ GSK	Completed