CURRICULUM VITAE Manish Kumar, Ph.D., MPH, MSc, PMP

PERSONAL: Email: manishk@unc.edu

EDUCATION:

2021 Ph.D. University of North Carolina, Chapel Hill, North Carolina

Carolina Health Informatics Program

2015 MPH University of North Carolina, Chapel Hill, North Carolina

Public Health Leadership

Graduate Certificate in Public Health Informatics

Graduate Certificate in International Peace and Conflict Resolution

2003 MSc Wageningen University and Research Center, The Netherlands

Management of Agriculture Knowledge Systems

Govind Ballabh Pant University of Agriculture and Technology, India 2000 MSc

Development Communication

Rajendra Agriculture University, Bihar, India 1998 BSc

Agriculture

PROFESSIONAL EXPERIENCE:

2022

2022

February 2022- present Guidehouse Inc., Virginia

Global Health Finance Data Team Lead (Supporting the Office of the Global

AIDS Coordinator, United States (U.S.) Department of State)

Interoperability expert for Health Information System project, ASTHO Co-chair, Digital Health and Interoperability Working Group, Health Data

Collaborative, WHO

July-August 2022: Grant reviewer, Regenerative AI Challenge. data.org, with support from Microsoft, is launching the Generative AI Skills Challenge, a global grant for organizations to help train and upskill teams on generative AI to

drive social impact.

December 2021-Carolina Population Center, University of North Carolina at Chapel Hill

February 2022 Technical Lead – Health Systems and Digital Health

May 2021 – February Carolina Population Center, University of North Carolina at Chapel Hill

Senior Technical Specialist for the U.S. Agency for International Development

(USAID) funded- The TB Data, Impact Assessment and Communications Hub

(TB DIAH) project

Carolina Population Center, University of North Carolina at Chapel Hill May 2021 – February

Senior Technical Specialist for the U.S. President's Malaria Initiative (PMI) and

the USAID funded PMI Measure Malaria project

October 2020 – February 2022	Carolina Population Center, University of North Carolina at Chapel Hill Health Information System Evaluation Advisor for the U.S. Centers for Disease Control and Prevention funded Health Informatics Technical Assistance Platform Initiative
June 2020– February 2022	Carolina Population Center, University of North Carolina at Chapel Hill Senior Technical Specialist – Health Systems Strengthening for the USAID – Digital Square initiative funded DATIM Support and Maturity Model project
October 2015-present	Gillings School of Global Public Health, University of North Carolina at Chapel Hill Adjunct Assistant Professor, Public Health Leadership Program
June 2015-May 2020	Carolina Population Center, University of North Carolina at Chapel Hill Senior Technical Specialist – Health Systems Strengthening for the USAID funded <u>MEASURE Evaluation Phase IV</u> project
April 2013- July 2013	Abt Associates Inc., New Delhi, India (<u>www.hfgproject.org</u>) Health Information Systems Senior Advisor
January 2007- February 2013	IntraHealth International, Inc., New Delhi, India Technical Advisor
June 2004- January 2007	South Asia Regional Office (New Delhi) of OneWorld International (www.oneworld .net), a United Kingdom-based non-government organization Manager-Information and Communication Technology Research
July 2003- May 2004	Centre for Spatial Database Management and Solutions (now called Centre for Science, Development and Media Studies, Noida, India Senior Research Associate
November 2000- November 2001	Directorate of Agriculture Communication, G. B. Pant University of Agriculture and Technology, Uttarakhand, India Senior Research Fellow (World Bank funded – National Agriculture Innovation Project)

HONORS & AWARDS:

Year	Honor/Award
2017	Office of the United States Global HIV/AIDS Coordinator, Department of State — Certificate of Appreciation. Kumar was the only researcher at the University of North Carolina at Chapel Hill to receive the award. The award was in recognition of the outstanding contributions to strengthen the U.S. President's Emergency Plan for AIDS Relief's (PEPFAR) efforts to promote use of data and data systems for reducing HIV burden in more than 50 countries.
2017	Department of State, United States Government-Certificate of Appreciation for capacity building of public health researchers and implementers supporting PEPFAR in more than 50 countries.

2015	Delta Omega Service Award, Gillings School of Global Public Health.
2015	Inductee, Frank Porter Graham Graduate and Professional Student Honor Society, University of North Carolina, Chapel Hill.
2014	Miriam L. Cole Scholarship, Gillings School of Global Public Health, University of North Carolina, Chapel Hill.
2013	Rotary Peace Fellowship of the Rotary International Foundation, United States.
2006	Nominated to the United Nations Strategy Council of the Global Alliance for Information and Communication Technology (ICT) for Development.
2004	Asian Development Bank Fellowship for Water Journalists, India, February 2004.
2001-2003	Anne van den Ban Fund, Wageningen University, The Netherlands.
1998-2000	Junior Research Fellowship, Indian Council of Agricultural Research, India.
1994-1998	University Merit Scholarship, Rajendra Agriculture University, Bihar, India.

MEMBERSHIPS:

Professional Society		
Year	Name	
2022	Project Management Institute, USA	
1999 – present	Indian Association of Information Technology in Agriculture (Life membership), India	
1998 – present	Society of Extension Education (Life membership), India	
Global Expert Working Group		
2022 – present	Co-Chair, <u>Digital Health and Interoperability Working Group</u> of the Health Data Collaborative led by the World Health Organization of the United Nations.	
2020 – 2021	Member, Collaborative on administrative data, <u>United Nations Statistics Division</u> /Global Partnership for Sustainable Development Data	
2019 - present	Health information system expert for the Pan American Health Organization, Regional office of the United Nations World Health Organization	

2019-2020 Co-chair, Policy and Governance group of the Health Information Exchange Policy and Standards Task Force of the Africa Centers for Disease Control and Prevention, African Union.

2016-2022 Member Digital Health and Interoperability Working Group of the Health Data Collaborative led by the World Health Organization of the United Nations.

Co-chair, Maturity Model- Small Working Group.

BIBLIOGRAPHY:

Book Chapters

- 1. **Kumar M,** Pathak C. Indigenous Knowledge for Sustainable Mountain Development- Some examples from Himalayan Region. In Neelendra K Joshi and Vir Singh ed., Traditional Ecological Knowledge of Mountain People, Daya Publishing House, Delhi, India. 2010, pp: 35-45. http://www.vedamsbooks.com/product_detail_print.htm?pid=40734
- 2. **Kumar M,** Pathak C. Desirability of E-Governance: A Review of ATMA Pilot Project in Muzaffarpur. In M.P. Gupta and Prabhat Kumar ed., Promise of e-Governance-Operational Challenges, Tata Mc GrawHill Publications, New Delhi, India, 2003 pp:338-343. http://www.iceg.net/2007/download/Promise of E Governance.pdf#page348

Referred Paper/Article Under Consideration

1. Habte D, Wilkins K, Abellera JP, Ghosh S, Miller C, **Kumar M**. A Maturity Model-based Practical Tool to guide the development of HIV data useroadmap in Ethiopia. Journal of Health Informatics in Africa (submitted for publication after acceptance), 2022.

Referred Paper/Article Published

- 1. Haron W. Gichuhi ,Mark Magumba, **Manish Kumar**, Roy William Mayega.2023. A machine learning approach to explore individual risk factors for tuberculosis treatment non-adherence in Mukono district. July 2, 2023: https://doi.org/10.1371/journal.pgph.0001466 PLOS Global Public Health.
- 2. Kumar M, Chauffour J, Silver M, Garcia-Mendoza Y, Boone D. Development and expert validation of a 'Data-to-Action Continuum' to measure and advance the data-use capabilities of national tuberculosis programs. *Journal of Global Health Reports*. 2022;6:e2022058. doi:10.29392/001c.55760
- 3. Mirza M, Grant-Greene Y, Valles M, Joseph P, Juin S, Brice S, **Manish Kumar**, *et al*. Leveraging PEPFAR-Supported Health Information Systems for COVID-19 Pandemic Response. Emerg Infect Dis. 2022;28(13):49-58. https://doi.org/10.3201/eid2813.220751
- 4. Cai Y, Yu F, **Kumar M**, Gladney R, Mostafa J. Health Recommender Systems Development, Usage, and Evaluation from 2010 to 2022: A Scoping Review. nt. J. Environ. Res. Public Health 2022, 19, 15115. https://doi.org/10.3390/ ijerph192215115
- Bohlmann A, Mostafa J, Kumar M. Machine Learning and Medication Adherence: Scoping Review. JMIRx Med 2021;2(4):e26993, URL: https://xmed.jmir.org/2021/4/e26993;DOI: 10.2196/26993

- 6. **Kumar M,** Silver M, Chauffour J, Boyle C, Boone D. Research gaps in transforming tuberculosis data to action for better health outcomes: A systematic literature review. J Glob Health 2021 Sep 18;11:04058. doi: 10.7189/jogh.11.04058. eCollection 2021
- 7. Thomas JC, Doherty K, Watson-Grant, S, **Kumar M.** Advances in monitoring and evaluation in low- and middle-income countries, Evaluation and Program Planning, 2021, 101994, ISSN 0149-7189, https://doi.org/10.1016/j.evalprogplan.2021.101994.
- 8. **Kumar M,** Mostafa J. Standard health data exchange model enables the use and reuse of datato improve maternal health programs and services: a case study from India. *Journal of Global Health Reports*. 2021;5:e2021066. doi:10.29392/001c.24949.
- 9. Simmons EM, Singh K, Mpiima J, Kumar M, Weiss W. Assessing coverage of essential maternal and child health interventions using health-facility data in Uganda. *Popul Health Metr*. 2020;18(1):26. Published 2020 Oct 9. doi:10.1186/s12963-020-00236-x
- Kumar, M. and Mostafa, J. "Electronic health records for better health in the lower- and middle-income countries: A landscape study", <u>Library Hi Tech</u>, 2020, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/LHT-09-2019-0179
- 11. Danny TYW, Chen AT, Manning JD, Levy-Fix G, Backonja U, Borland D, Caban JJ, Dowding DW, Hochheiser H, Kagan V, Kandaswamy S, **Kumar M**, Nunez A, Pan E, Gotz D. Evaluating visual analytics for health informatics applications: a systematic review from the American Medical Informatics Association Visual Analytics Working Group Task Force on Evaluation, 2019, *Journal of the American Medical Informatics Association*, https://doi.org/10.1093/jamia/ocy190.
- 12. **Kumar M,** Mostafa J. Research evidence on strategies enabling integration of electronic health records in the health care systems of low- and middle-income countries: A literature review. *International Journal of Health Planning and Management.* 2019 Feb 14. Doi: 10.1002/hpm.2754.
- 13. Kumar M, Gotz D, Nutley T, Smith JB. Research gaps in routine health information system design barriers to data quality and use in low- and middle-income countries: A literature review. *International Journal of Health Planning and Management*. 2018;33(1):e1-e9. doi:10.1002/hpm.2447
- Kumar M, Mostafa J, Ramaswamy R. Federated health information architecture: Enabling healthcare providers and policymakers to use data for decision-making. *Health Information Management Journal*. Published online 2017:183335831770970. doi:10.1177/1833358317709704
- 15. **Kumar M**, Ramaswamy R, Mostafa J. Why India Needs to Change the Architecture of its Public Health Information Systems. *Journal of Health Systems*. 2016, Vol. II, Issue 2, July-Dec. India.
- Reddy HM, Kumar M, Kumar A, Millett C. State, and socio- demographic group variation in outof-pocket expenditure, borrowings, and Janani Suraksha Yojana (JSY) program use for birth deliveries in India. *BMC Public Health*. 2012, 12:1048. http://www.biomedcentral.com/1471-2458/12/1048
- 17. Pathak C, **Kumar M,** Bhardwaj N. Information needs of Hill Women on Health and Nutrition: A Study in the Kumaon Division of Uttaranchal. *Journal of Communication Studies*, 2005, Vol. XXIII (2).
- 18. Pathak C, **Kumar M**, Kwatra JK. Extension Training for Agricultural Development. *Agricultural Extension Review*, India. Vol. 17, July-August 2005, No. 04.

- 19. Kumar B, Bhardwaj N, **Kumar M**. Training of Farm Women- Issues & Strategy. *Indian Journal of Training & Development*. 30(2): 11-18, 2001.
- 20. **Kumar M**. Communication of Development Messages among rural poor An ethnographic study. *Media Asia, 2001, Vol. 28, Issue 2.* Available at http://www.tandfonline.com/doi/abs/10.1080/01296612.2001.11726639
- 21. **Kumar M,** Pathak C, Singh AK. Information source of rural poor-a study in U.S. Nagar District of Uttaranchal. *IASSI Quarterly*. June 2001
- 22. **Kumar M,** Pathak C, Kumar B. Communication of Development Messages. *Indian Research Journal of Extension Education*, 2001, 1(2).
- 23. Kumar B, **Kumar M**. Designing Media Based Extension Training Issues and Strategy. *Indian Journal of Training & Development*. 30(2): 11-18, 2000.
- 24. **Kumar M,** Pathak C, Joshi L. Participatory Rural Development : Myth or Reality? *Kurukshetra*, Ministry of Rural Development, 2000, Vol. 48 No.9.

REFEREED OTHER PRODUCTS OF SCHOLARSHIP:

Published Technical Reports/Briefs

- 1. Kumar, M., Kim, T. E., Millar, E., Ongechi, K. S., & Weiss, W. <u>Enabling and Expanding the Scope of Public Health Decision Making in Uganda to Reduce Maternal Mortality: Concept Note and Use Case</u>. Chapel Hill, NC, USA; MEASURE Evaluation, University of North Carolina.
- 2. Thomas, JC, **Kumar M.** Questions as an organizing framework for health information systems. United States Agency for International Development MEASURE Evaluation, North Carolina, USA, 2019.
- 3. World Health Organization. <u>Classification of digital health interventions</u>. Geneva: World Health Organization; 2018(WHO/RHR/18.06). Licence: CC BY-NC-SA 3.0 IGO. **Manish Kumar** is one of the contributors to this publication.
- 4. **Kumar M,** Millar L. <u>Stages of Health Information System Improvement- Strengthening the Health Information System for Improved Performance</u>. United States Agency for International Development MEASURE Evaluation, North Carolina, USA, 2017
- 5. **Kumar M,** Wambugu S. A Primer on the Privacy, Security, and Confidentiality of Electronic Health Records. United States Agency for International Development MEASURE Evaluation, North Carolina, USA, 2016. Available at http://www.cpc.unc.edu/measure/resources/publications/sr-15-128-en

PRODUCTS OF SCHOLARSHIP IN PRACTICE AND TEACHING:

Products of Engaged Scholarship (global teaching/training curriculum development)

- 1. **Health data system course** developed by the Evidence for Policy Design-India program of the John F. Kennedy School of Government at the Harvard University. **Kumar contributed a case study and reviewed the course (2018).** The e-learning course is used to train senior government officials in the South Asian countries.
- 2. **Monitoring, Learning and Evaluation course module** of the Regional Workshop on "Capacity building for Digital Health Leadership" in Maseru, Lesotho, 21-30 November 2018. **Kumar** led the development of the course module while the International Telecommunications Union (ITU) and the World Health Organization's (WHO) Regional Office for Africa lead the interdisciplinary team. The course curriculum was adapted as an e-learning course titled 'Digital Health Leadership' is being delivered through the ITU Virtual Academy.
- 3. Health Information Assessment Framework e-learning course. Kumar led the research and developed the content for the course titled "health information assessment framework". This course was offered as a specialty course in the Virtual Workshop organized by the PEPFAR in September 2018. The virtual workshop was targeted at researchers and managers engaged in the PEPFAR and the Ministries of Health (MoH) data alignment work in 23 PEPFAR funded countries. The purpose of the workshop was to strengthen capacity of MoH and U.S. government researchers and program managers to use data for controlling the HIV epidemic.
- 4. **PEPFAR Health Information System- User and Site Management courses. Kumar** developed and delivered courses on HIV data systems for the 2017 United States President's Emergency Plan for AIDS Relief (PEPFAR) Data and Systems Applied Learning Summit (PALS), Johannesburg, South Africa, September 12-22, 2017. The summit educated more than 500 participants from Africa, Asia, Europe, and Latin America.
- 5. Routine Health Information Systems: A Curriculum on Basic Concepts and Practice. As a member of the core research team, Kumar collaborated with a group of global health information systems experts-the University of North Carolina at Chapel Hill, in the United States; Word Health Organization of the United Nations, in Switzerland; the Free University of Brussels/European Agency for Development and Health (AEDES), in Belgium; the University of Oslo, in Norway; the National Institute of Public Health (INSP), in Mexico; the University of Queensland, in Australia; and the Public Health Foundation of India (PHFI)- to publish this curriculum. Public health professionals in Mali, Africa trained using the curriculum. Curriculum was downloaded from MEASURE Evaluation website by more than 1,200 users from about 100 countries.
- 6. **PEPFAR Health Information System- Introduction to Data Systems course and training. Kumar d**eveloped course content and trained more than 100 participants from 25 countries during the Regional Data for Accountability, Transparency, and Impact Monitoring (DATIM) training in Johannesburg, South Africa, January 2016. Training was conducted in collaboration with the University of Oslo, Norway and the Health Information Systems Program, Uganda.

7. Role Mapping Resources – Global Academic Curricula Competencies for Health Information Professionals. As a member of the expert group, Kumar developed the resources that was published by the Global Health Workforce Council (GHWC) of the American Health Information Management Association (AHIMA) Foundation, United States. Role mapping document aimed to strengthen global health workforce development.

Products of Interdisciplinary Scholarship (Kumar as the lead researcher/expert)

- Navigator for Digital Health Capability Models. 2022. Published by the USAID-Digital Square project, PATH, Seattle, Washington. Published in collaboration with USAID, UNICEF, WHO, World Bank, Kati Collective Inc., USAID-Country Health Information System and Data Use project, and a global group of experts from Africa, Asia, Latin America.
- 2. Health Data Privacy, Security, and Confidentiality Guidelines. 2021. Led an interdisciplinary team to develop the guidance document. Pending approval by the U.S. Centers for Disease Control and Prevention for publication in the public domain by PATH, Seattle, Washington.
- 3. Health Data Privacy, Security, and Confidentiality Guidelines Implementation Framework. 2021. Led an interdisciplinary team to develop the implementation framework document. Pending approval by the U.S. Centers for Disease Control and Prevention for publication in the public domain by PATH, Seattle, Washington.
- 4. Health Data Privacy, Security, and Confidentiality Guidelines Implementation Assessment Plan. Led an interdisciplinary team to develop the assessment plan document. Pending approval by the U.S. Centers for Disease Control and Prevention for publication in the public domain by PATH, Seattle, Washington.
- 5. Health Data Access, Sharing, and Use Generic Guidelines. 2021. Led an interdisciplinary team to develop the guidance document. Pending approval by the U.S. Centers for Disease Control and Prevention for publication in the public domain by PATH, Seattle, Washington.
- 6. Health Data Access, Sharing, and Use Implementation Framework. 2021. Led an interdisciplinary team to develop the implementation framework document. Pending approval by the U.S. Centers for Disease Control and Prevention for publication in the public domain by PATH, Seattle, Washington.
- Health Data Access, Sharing, and Use Implementation Assessment Plan. Led an
 interdisciplinary team to develop the assessment plan document. Pending approval by the U.S.
 Centers for Disease Control and Prevention for publication in the public domain by PATH,
 Seattle, Washington.
- 8. <u>Health Information System Stages of Continuous Improvement Toolkit.</u> 2019/2020. Published by United States Agency for International Development-MEASURE Evaluation, North Carolina.
- 9. <u>Health Information System Interoperability Maturity Toolkit</u>. 2017. Published by United States Agency for International Development-MEASURE Evaluation, Chapel Hill, North Carolina

- 10. Nutrition Workforce Mapping Toolkit. 2014. Published by United States Agency for International Development-Strengthening Partnerships, Results, and Innovations in Nutrition Globally Project. Toolkit was published to support the nutrition workforce strengthening efforts of the USAID funded project 'Strengthening Partnerships, Results and Innovations in Nutrition Globally' in more than 15 countries.
- Opportunities, Ecosystem requirements & Roadmap to Innovation in the Health Sector. Sector Innovation Council-Health, Ministry of Health and Family Welfare, Government of India, New Delhi, 2012-2013.

Refereed Oral presentations and Abstracts

- 1. Mirza M, **Kumar M**, **et al.** 2021. Landscape assessment and PEPFAR technical enhancement design for supporting COVID-19 case-based surveillance and response. The PAN African Health Informatics Conference, October 20, 2021 (virtual), Kampala, Uganda. The other panelists included Veronica Muthee, Peninah (University of California San Francisco), Peter Mwiti Arimi (University of Nairobi, Kenya), Steven Wanyee (Intellisoft), Daniel Futerman (Jembi Health Systems, Inc., South Africa), Chinedu Aniekwe (CDC-Nigeria), Christopher Seebregts (Jembi Health Systems, Inc., South Africa), Amitabh Adhikari and Tadesse Wuhib (CDC-Atlanta).
- 2. **Kumar M,** Mbaka P, Kamasaka C, Behumbiize P, Tumwesigye A. 2021. Implementing Adaptive Low-cost Knowledge Integration Platform- Uganda Experience. The PAN African Health Informatics Conference, October 19, 2021 (virtual), Kampala, Uganda.
- 3. **Kumar M,** Brugh K, Liyanaarachchige N, Norwood K, Puttkammer N, Wuhib T. 2021. Advancing Site-Level Health Informatics Capabilities Using a Maturity Model-Based Assessment Framework to Improve PEPAR Program Performance. The PAN African Health Informatics Conference, October 19, 2021 (virtual), Kampala, Uganda.
- 4. Habte D, Wilkins K, Abellera JP, Ghosh S, Miller C, **Kumar M**. 2021. A Maturity Model-based Practical Tool to guide the development of HIV data use roadmap in Ethiopia. The PAN African Health Informatics Conference, October 19, 2021 (virtual), Kampala, Uganda.
- 5. Mirza M, **Kumar M**, et al. 2021. Multi-country effort for Leveraging PEPFAR Health Information Systems to Support COVID-19 Response; The PAN African Health Informatics Conference, October 19, 2021 (virtual), Kampala, Uganda. The other panelists included Sisay Alemayehu (CDC-Ethiopia), Kenneth Musenge (CDC-Uganda), Chinedu Aniekwe (CDC-Nigeria), Ibrahim Dalhatu (CDC-Nigeria), Mustapha Bello (CDC-Nigeria), Jean Solon Valles, Amitabh Adhikari and Tadesse Wuhib (all from (CDC-Atlanta).
- 6. **Kumar M**. 2021. Advancing Digital Health Capability of Healthcare Organizations—How to Navigate the Maze of Capability Model-Based Tools? The PAN African Health Informatics Conference, October 18, 2021 (virtual), Kampala, Uganda. The other panelists included Adele Waugaman from USAID- Washington, Carol Kamasaka from the Ministry of Health Uganda, Gabriel Catan from the World Bank, Washington D.C., and Jyothiswaroop Jayaprakash, IBM
- 7. **Kumar M. 2020.** Panel presentation on Enhancing Intersectoral Digital Health Maturity to Harness Digital Health Benefits for Everyone. Annual global digital health forum 2020, December 7, 2020. The other panelists included Daniel Rosen, CDC, Atlanta, Chief, Health Informatics, Data Management, and Statistics Branch of Global HIV/TB, Bobby Jefferson DAI Global Health, Vice President, and Chief Technology Officer, and Ayoade Alakija, Nigeria's former Chief Humanitarian Coordinator (CHC) at the helm of the Emergency Coordination Centre.

- 8. **Kumar M. 2019**. Panel presentation on 'What makes a global good successful? Enabling effective scale & sustainability' presented at the 2019 Global Digital Health Forum, Washington, D.C., December 9-11, 2019. Other panelists included Tamara Goldschmidt, BAO Systems and Scott Russpatrick, University of Oslo, Norway.
- 9. **Kumar M. 2019.** Panel presentation on 'Maturity Models for Improving Health Information System and Digital Health Capacity in Low Resource Settings: Sharing and Discussing Implementation Experiences' presented at the American Medical Informatics Association (AMIA) Annual Symposium 2019, Washington D.C., November 16-20, 2019. Other panelists included Xenophon Santas and James Kariuki at the United States Centers for Disease Control and Prevention, Adele Waugaman at the United States Agency for International Development, and Patricia Mechael at the HealthEnabled, South Africa
- 10. Kumar M. 2019. Integrating Electronic Health Records in the Healthcare System of Low- and Middle-Income Countries: Challenges and Strategies. American Medical Informatics Association (AMIA) Informatics Summit 2019, San Francisco March 25-28, 2019. Kumar led the panel presentation which included AMIA Electronic Health Records Task Force 2020 Chair, Prof. Thomas Payne at the University of Washington, Seattle, and other global experts
- 11. **Kumar M.** 2018. How to assess and continuously improve health information systems for better health outcomes? Seminar on Digital Health Building a Future-proof Workforce, Session Two: Strategy, HIS & Interoperability Maturity, and Emerging Trends, 30 October 2018. Organized by HealthEnabled- South Africa in collaboration with the Digital Frontiers Institute, New York.
- 12. **Kumar M.** 2018. How to assess and continuously improve maturity of health information systems for achieving better health outcomes? Session 7 -Diagnostics: How Ready is My Country for Digital Transformation? Digital Transformation of the Health Sector in Latin America and the Caribbean, Inter- American Development Bank, October 10, 2018, Washington D.C.
- 13. **Kumar M.** 2018. How to assess and continuously improve maturity of HIS for achieving better health outcomes?1st Open Health Information Exchange Community Meeting, Arusha, Tanzania July 31- August 3, 2018. Hosted by the Government of Tanzania.
- 14. **Kumar M**. 2018. Digital Health in Low-Resource Settings. Xavier Institute of Social Service, Jharkhand, India, July 13, 2018. Invited by the Institute to present as part of its global seminar series.
- 15. **Kumar M.** 2017. Integrating Data from Multiple Data Systems- Streamlining data use for health system decision-making. Global Digital Health Forum, December 4-8, 2017, Washington D.C.
- 16. **Kumar M**. 2017. Cooperability for Interoperability. Global Digital Health Forum, December 4-8, 2017, Washington D.C. The Global Digital Health Forum is the largest congregation of global health information systems professionals in around the world.
- 17. **Kumar M.** 2017. Whither the Impact Evaluation? Experiences and Gaps Using Data Sources and Systems for Program Evaluation in Low- and Middle-Income Countries. Panelist, American Evaluation Association Conference, November 6-11, Washington D.C. 2017.
- 18. **Kumar M**, Millar L. 2017. Enabling health impact measurement through health information system improvement model. Triangle Global Health Conference, September 25, 2017, Raleigh, NC.

- 19. **Kumar M,** Yu F, Mostafa J. 2017. Making a difference: Research evidence on impact of global digital health on health outcomes. Poster presentation, Triangle Global Health Conference, September 25, 2017, Raleigh, NC.
- 20. **Kumar M,** Tengesdal S. 2016. Managing Global DHIS2 Helpdesk-Lessons Learned, DHIS 2 Experts Academy, August 8-12, 2016, Oslo, University of Oslo, Norway. DHIS 2 Experts Academy is the only annual conference of global health experts engaged in research and implementation with emphasis on data quality and data use in public health through the application of open-source software (District Health Information Software 2).
- 21. **Kumar M**. Participatory Message Development on Anemia-A Case Study from Uttaranchal. Papers Selected by the Scientific Committee for the World Congress on Communication for Development organized by FAO, World Bank, Rome, October 25-27, 2006.

Digital Scholarship

- Kumar M, Jefferson B, Thomas JC. 2020. COVID-19: This pandemic offers a lesson we
 must learn before the next. Published by Science Speaks, a digital publication of Infectious
 Diseases Society of America, Virginia, USA. Available at
 https://sciencespeaksblog.org/2020/04/14/covid-19-this-pandemic-offers-a-lesson-we-must-learn-before-the-next/
- 2. **Kumar M,** Reynolds HW. 2018. Health information systems for program evaluation: How to connect the dots? MEASURE Evaluation, University of North Carolina at Chapel Hill. Available at https://www.measureevaluation.org/resources/newsroom/blogs/health-information-systems-for-program-evaluation-how-to-connect-the-dots
- 3. **Kumar, Manish. 2017.** Health Information System Architecture: Harmonized and Interoperable. MEASURE Evaluation, University of North Carolina at Chapel Hill. Available at https://www.measureevaluation.org/news/health-information-system-architecture-harmonized-and-interoperable
- 4. **Kumar, Manish** and Jackson, Kate. 2015. Preparing Health Information Professionals for Health Information Systems Challenges. Available at http://www.rhinonet.org/439-2/
- 5. **Kumar, Manish**. 2014. SPRING beyond Spring- Early insights from applied field work in a global nutrition project. Available at http://rotarypeacecenternc.org/2014/06/25/manish-kumar-afe-blog-spring-jsi-research-and-training-institute-inc-virginia-usa/
- 6. **Kumar, Manish.** 2006. Sacred Ganges River Goes Wireless. Government Technology, United States. Available at http://www.govtech.com/dc/articles/Sacred-Ganges-River-Goes-Wireless.html

Other Scholarship Activities

Journal/Conference Paper Review

- 1. Reviewed paper for the International Journal of Medical Informatics (2022, 2023)
- 2. Reviewed paper for the Health Information Management Journal (2021)
- 3. Reviewed paper for the Journal of American Medical Informatics Association (2021)

- 4. Reviewed paper for the European Conference on Information Systems (2021).
- 5. Reviewer for the American Medical Information Association Annual Symposium and Informatics Conference (2021)
- 6. International Journal of Medical Informatics (2021)
- 7. Reviewed paper for the Global Health: Science and Practice Journal (2020)
- 8. Reviewed papers for the BMC Medical Informatics and Decision-Making (2020).
- 9. Reviewed paper for the International Journal of Medical Informatics (2020).
- 10. Reviewed paper for the BMJ Global Health journal (2019), a reputed global journal with editorial board comprised of eminent researchers from more than 15 countries.
- 11. Editors of the *International Journal of Medical Informatics* certified Kumar's reviewer status for the journal. The journal provides an international medium for dissemination of original results and interpretative reviews concerning the field of medical informatics
- 12. Reviewed a paper for 27th European Conference on Information Systems (ECIS 2019). ECIS is a meeting platform for European and international researchers in the field of Information Systems to discuss and debate studies that reflect upon and provide innovative solutions that contribute to the sustainable development of the sharing society.
- 13. Reviewed paper for the Global Health: Science and Practice Journal (2018). Published by the Johns Hopkins University, United States and funded by the United States Agency for International Development.
- 14. Reviewed more than 40 papers submitted for the Triangle Global Health Consortium Annual Conference, September 2018, Raleigh, North Carolina. This is the premier global health conference in North Carolina and in the East Coast of United States.
- 15. Reviewed paper for the *BMJ Open* journal (2018) published by the BMJ Publishing Group Ltd. *BMJ Open* is a medical journal considering papers addressing research questions in clinical medicine, public health, and epidemiology.
- 16. Reviewed conference abstracts for the American Medical Information Association (AMIA) Annual Symposium (2017-2020) and Informatics Summit (2019-2020). The AMIA Annual Symposium is world's premier health informatics and public health informatics conference.
- 17. Reviewed Paper for the *Bulletin* of the World Health Organization (WHO) at the United Nations (2017). The *Bulletin of the World Health Organization* is an international journal of public health with a special focus on developing countries.
- 18. Reviewed paper for the *South Asian Journal of Human Resources Management (Journal of South Asian Development)* in 2017. The journal has a regional focus in Asia.
- 19. Reviewed papers for the *International Journal of Education and Development Through Information and Communication Technology* (2018). It is an online peer-reviewed global journal

20. Reviewed papers for the *Journal of Community Informatics*, Canada. The Journal of Community Informatics speaks to a network of academics, community informatics practitioners and national and multi-lateral policy makers.

Book and Report/Guidance Review

- 1. <u>Digital Implementation Investment Guide (DIIG)</u>: Integrating Digital Interventions into Health Programmes. The United Nations World Health Organization, Geneva Switzerland, 2020.
- 2. <u>Digital Health Platform: Building a Digital Information Infrastructure (Infostructure) for Health.</u> This handbook was developed jointly by the World Health Organization and International Telecommunication Union, 2020 in the context of the "Be Healthy, Be Mobile", a joint ITU-WHO digital health initiative.
- 3. Expert reviewer for the technical brief on '<u>Digital Health to Support Family Planning Providers HIP Enhancement'</u> (2020) published by the International Best Practices Network.
- 4. Peer reviewer for Norwegian Satellite of Cochrane Effective Practice and Organisation of Care, Norway (2020).
- 5. International Peer Review Committee Member for Grant Proposals of the Digital Square project. The United States Agency for International Development and the Bill and Melinda Gates Foundation provide the grant money (2018-continuing).
- 6. Grant Proposal Development for the Institute for Global Health and Infectious Diseases and Carolina Population Center of the University of North Carolina at Chapel Hill, USA (2018).
- Reviewed "Health information system strengthening: Standards and best practices for data sources (2018)". Chapel Hill, NC, USA: United States Agency for International Development-MEASURE Evaluation project.
- 8. Reviewed modules of the Technical Efficiency Guide for Lower and Middle-Income Countries. The guide was created by the Abt Associates, Inc., one of the top 50 research consulting organizations in global health (2018).
- 9. Reviewed "Barriers to and Facilitators of Sex- and Age-Disaggregated Data" report for Kenya. Chapel Hill, NC, USA: United States Agency for International Development-MEASURE Evaluation project.
- 10. Reviewed the scope and search strategy of the research focused on 'Information systems for health policy systems and ecosystems: A scoping review' Europe Regional Office of the World Health Organization, Denmark (2017-18).
- 11. Reviewed the maturity model section of the Digital Health Platform Handbook: Building a Digital Information Infrastructure (Infostructure) for Health (October 2017), a joint International Telecommunication Union-World Health Organization mHealth for non-communicable diseases initiative
- 12. Reviewed data systems module developed by the Evidence for Policy Design, (EpoD), a research

- organization led at the Harvard Kennedy School in Cambridge, United States (2017).
- 13. Reviewed "mHealth for Health Information Systems in Low- and Middle-Income Countries: Challenges and Opportunities in Data Quality, Privacy, and Security (2016) guideline document. Chapel Hill, NC, USA: United States Agency for International Development-MEASURE Evaluation project.
- 14. Evaluated "Repository on Maternal Child Health project portal" developed under the Norway-India Partnership Initiative of the Government of India. The project findings were published in the journal BMC Public Health 2013 (13:2).
- 15. Reviewed "Research study on ICTs and Empowerment of Indian Rural Women. What can we learn from ongoing initiatives? (2011" published by the Centre for Research on Innovation and Science Policy (CRISP), India.
- 16. Shared review inputs for the "Health Information Systems in Developing Countries- A Landscape Analysis" research paper and strategic briefing, commissioned by the Bill and Melinda Gates Foundation and executed by the Vital Wave Consulting, United States, May 2009.
- 17. Edited and published report titled 'Exploring Partnerships for Improving Health Outcomes', 7th United States Agency for International Development /India SO14 Partners' Meeting Report, December 07, 2007, New Delhi, India.
- 18. Managing Editor for Mainstreaming ICTs Research Publication, South Asia- OneWorld International, New Delhi, India (2004-2006).
- 19. Senior Research Associate Information for Development (i4D), first publication on information and communication technology for development in Asia published by the Center for Spatial Data Management and Systems, Noida, India (2003-2004).

Requests for Expert Advise

Year Request Detail

- The Open Health Information Exchange community has invited **Kumar** to discuss and guide the terminology management maturity model initiative.
- The United Nations World Health Organization in Geneva, Switzerland invited **Kumar** to join the planning team for the Health Data Governance summit held in September 2021.
- The United Nations World Health Organization in Geneva, Switzerland invited **Kumar** to join a select group of experts to discuss and guide how to assess and improve use of routine health data in the maternal and child health programs.
- The Department of Planning and Finance at the United States Department of State sought **Kumar's** expertise to review and develop a maturity model-based tool to measure and monitor sustainability of governments investments in health information system development.

- The Inter-American Development Bank (IADB), Washington D.C. sought **Kumar's** technical contributions for the development of a tool aimed at measuring total cost of ownership for digital health solutions.
- The Pan American Health Organization (PAHO), Regional Office of the United Nations World Health Organization invited **Kumar** to join the regional policy dialogue with Ministry of Health, donors, and international organizations. The dialogue was meant to facilitate the development of the digital transformation agenda for the Latin American and Caribbean region countries.
- The United Nations World Health Organization in Geneva, Switzerland invited **Kumar** to join the expert group responsible for the development and validation of the Dynamic Digital Health Maturity Model. The maturity model is expected to be used by the member states for improving national digital health capabilities.
- The Pan American Health Organization (PAHO), Regional Office of the United Nations World Health Organization asked **Kumar** for his expert inputs on the 'Plan of Action on Information Systems for Health (IS4H) in the Americas'.
- The Inter-American Development Bank (IADB), Washington D.C. sought **Kumar's** expertise for its research work on Electronic Health Record Maturity Model.
- The World Health Organization (WHO) Regional Office for the Eastern Mediterranean Region (EMRO) invited **Kumar** as a facilitator for the Regional Consultation on strengthening country health information systems and capacities to monitor universal health coverage and health sustainable development goals, held in Amman, Jordan, from 21 to 23 January 2019.
- 2019 The Inter-American Development, Washington D.C. asked **Kumar** (2019) to recommend relevant evidence based on his recent research to advocate for investment in using digital health technologies in the Latin America and the Caribbean region countries.
- The United States Agency for International Development and the Bill and Melinda Gates Foundation funded Digital Square project invited **Kumar** to the Global Goods Implementers Meeting in Washington D.C. on December 13, 2018.
- The International Telecommunications Union and the World Health Organization's (WHO)
 Regional Office for Africa had asked **Kumar** to lead content development for the Monitoring,
 Learning and Evaluation module of the Regional Workshop on "Capacity building for Digital
 Health Leadership" in Maseru, Lesotho, 21-30 November 2018.
- The Permanent Secretary-Health, Ministry of Health, Republic of Uganda invited **Kumar** to assist with the Health Information System Maturity Health Sector Assessment in November 2018. The Permanent Secretary is the highest ranked civil servant in the Ministry of Health.
- The U.S. Department of State, Office of the US Global AIDS Coordinator and Health Diplomacy (S/GAC) asked **Kumar** to review practitioner-focused interoperability guide that was released during the <u>United Nations World Data Forum</u> in late October 2018.
- The Open Health Information Exchange (HIE) Community invited **Kumar** to participate in the community discussion and contribute to the data exchange deliberations in the 2018 OpenHIE Community Conference in Arusha, Tanzania from 31 July to 4 August 2018.

The OpenHIE community of practice formed in early 2013, evolving from the work that initially began in 2009 to establish the Rwandan Health Information Exchange (RHIE). As the benefits of the approach adopted in Rwanda became apparent, interest gathered from other countries looking to apply similar architectural tactics within their environments. Today, OpenHIE's approaches, reference technologies, and community processes are being leveraged or explored in multiple countries.

- The Inter-American Development Bank, the credit agency for the Americas, invited **Kumar** to share his expertise and support the digital health transformation efforts of the Bank in Latin America and the Caribbean.
- The Department of Information, Evidence and Research at the headquarters of the World Health Organization (WHO) of the United Nations in Geneva sought **Kumar's** technical inputs through email for its work on health data technical package intended for use by more than 190 WHO member countries.
- The Triangle Global Health Consortium of North Carolina asked **Kumar** to join the Annual Conference Planning Committee (2018) and share his expertise. This consortium includes research universities in North Carolina and international global health organizations such as the Family Health International 360, Research Triangle Institute, Development Alternative International, Inc., etc.
- The World Health Organization Regional Office for Europe found Kumar's paper titled 'Research gaps in routine health information system design barriers to data quality and use in the low- and middle-income countries: A literature review' very relevant to its work and asked Kumar to serve as an expert for their related research study.
- The U.S. Department of State Office of the U.S. Global AIDS Coordinator and Health Diplomacy (S/GAC) invited **Kumar** to share his expertise with the participants of the 2017 United States President's Emergency Plan for AIDS Relief (PEPFAR) Data and Systems Applied Learning Summit (PAS) from September 11-22 in Johannesburg, South Africa. The summit was focused on delivering continuing education for researchers and implementers from the U.S. government agencies, non-profit organizations, and ministries of health.
- 2017 Research Director, Evidence for Policy Design (EpoD)-India, John F. Kennedy School of Government at Harvard University sought **Kumar's** expertise for the data systems training course module.
- The Pan American Health Organization (PAHO), Regional Office of the United Nations World Health Organization invited **Kumar** to join a network of experts for supporting Information Systems for Health activities in the Latin America and the Caribbean region countries.
- A researcher from the Institute of Development Studies (IDS) in the United Kingdom asked **Kumar** to use his research paper in a research study focusing on the public health system of developing countries.
- Senior Associate/Economist in the International Health Division of the Abt Associates, Inc. invited **Kumar** to join the Consultation on Technical Efficiency Guide for Lower and Middle-Income Country Health Systems on March 30, 2017, in Bethesda, Maryland.

- A researcher from the Kenyan Medical Research Institute (KEMRI)-Wellcome Trust research program asked in email to access and use Kumar's research on visualization. The Wellcome Trust is United Kingdom's largest non-governmental source of funds for biomedical research.
- The Ministry of Health, Government of Kenya invited **Kumar**, as an international expert, to share his technical inputs for the public health information systems work in Kenya.
- The Project Director- Africa at the Wageningen Environmental Research, Wageningen University and Research Center, the Netherlands asked Kumar for his expert opinion and advice in DHIS 2 implementation and use.
- The Head of Global Infrastructures Group at the University of Oslo, Norway invited **Kumar** to the DHIS 2 Experts annual capacity building meeting. The annual gathering brings together experts from around the world with the objective to strengthen the available technical support to the many to improve health data use in Africa, Asia, the Pacific and Latin America.
- The organizing committee for the United States President's Emergency Plan for AIDS Relief (PEPFAR) invited **Kumar** as a training to its Data for Accountability, Transparency, and Impact Monitoring (DATIM) training in Johannesburg, South Africa from January 17-27, 2016. The purpose of this training was to enhance use of HIV data for achieving PEPFAR goal of HIV epidemic control in 60 plus countries.
- The United Kingdom's Department for International Development (DFID) supported project sought Kumar's expertise to support their team's public health workforce system research in the Indian state of Madhya Pradesh (2012). The United Kingdom's (DFID) is one of the largest government funding agencies in the world.
- The United Kingdom's Department for International Development (DFID) contracted Bihar Technical Assistance and Support Team (BTAST) asked **Kumar** to train a team of 38 consultants supporting the health workforce work in the Indian state of Bihar. The BTAST team lead the \$177 million the Sector Wide Approach to Strengthening Health (SWASTH) program to help improve health, nutrition and water and sanitation outcomes.
- Save the Children-India sought **Kumar's** expertise to develop their program (Scope, indicators, etc.) (2012).
- Save the Children-India invited **Kumar** to a Round Table meeting (2012) of key stakeholder organizations on Newborn and Child Survival issues in India. The project and meeting were funded by the Bill and Melinda Gates Foundation.
- Save the Children-India invited **Kumar** to join the Save the Children's Technical Advisory Group for its newborn and child survival project funded by the Bill and Melinda Gates Foundation (2012). Save the Children is a global non-profit organization which was founded in the year 1919 and works in more than 100 countries.
- The United Nations Office for Project Services (UNOPS) in India asked **Kumar** (2012) to share about his work in the Indian state of Bihar. The UNOPS is an operational arm of the United Nations, dedicated to implementing projects for the United Nations System, international financial institutions, governments, and other partners around the world.

The Academy for Educational Development led, and United States Agency for International Development (USAID) funded project asked **Kumar** for a meeting to learn from his rick experience in the field of knowledge management for health (2011). In 2011, the AED was merged with one of the largest public health organizations in the world, the Family Health International 360 (FHI360).

Profile Published by Organization

- 1. Fall 2020 Alumni Spotlight, Public Health Leadership Program, Gillings School of Global Public Health, University of North Carolina at Chapel Hill.
- 2. Profile Article Discussing <u>Health Information System Work</u> Published Online (2020) by the Infectious Diseases Society of America, Virginia.
- 3. Profile Article Discussing Research and Recognition Published Online (2017) by the Association of Schools and Programs for Public Health, United States.
- 4. Featured in the *Spring 2016 edition of* Carolina Public Health Magazine, Gillings School of Global Public Health, University of North Carolina at Chapel Hill.
- 5. Profile Article Discussing Research and Expert Opinion Published Online (2015) by the Desmond Tutu Peace Foundation.
- 6. Profile Article Discussing Research Featured in Wageningen World, Quarterly Magazine of the Wageningen University and Research Center in the Netherlands, 2012.
- 7. Profile Article Discussing Research Published in the Indian daily newspaper "Hindustan" on January 21, 2014.

TEACHING ACTIVITIES:

Invited Guest Lecture in Public Health Courses

Year	Lecture
2024	A Day in the Life of a Project Manager: Global and U.S. Healthcare Settings, PUBH 784 (PHLP), 04/25/2024
2023	Digitization of Healthcare, Evening MBA Program, UNC Kenan - Flagler Business School
2020	Global Health Program Planning and Proposal Development (HBEH 780) taught by Dr. Nora Rosenberg, Department of Health Behavior, Gillings School of Global Public Health
2019	Pierre Fabre Foundation to the 4 th conference of the Global South eHealth Observatory held on Monday, July 1 st 2019 in Lavaur, France.
2018	Guest lecture in mHealth course taught by Dr. Lavanya Vasudevan, Duke Global Health Institute

2018	Informatics Research Seminar: Health Information System Improvement in Low-and-Middle Income Countries. January 24, 2018, Duke Center for Health Informatics, Duke University, North Carolina.
2017	System analysis interactive lecture for the students in the Master of Hospital Administration degree program of the Tata Institute of Social Sciences, India.
2017	Delivered courses on HIV data systems for the 2017 United States President's Emergency Plan for AIDS Relief (PEPFAR) Data and Systems Applied Learning Summit (PALS), Johannesburg, South Africa, September 12-22, 2017. The summit educated more than 500 participants from Africa, Asia, Europe, and Latin America. Kumar's name is mentioned as the content developer in the summit documents.

Mentoring, Research, Career Guidance
Highlighting experiences from the academic, teaching and research work at UNC-CH and Duke
University only.

#	Name and Department/Program	Year
1	Adishri Satpute, BMHI	2024
2	Tanmayee Muppidi, BMHI	2024
3	Caroline Grace Sepencer, BMHI	2024
4	Haritha Sri Bhatta, BMHI	2024
5	Dr. Eesha Pisal, BMHI	2024
6	Allysha Rokeya Choudhury, Ph.D. student, Department of Maternal and Child Health	2023-2025
7	Ishaan Puranam, Ph.D. candidate, Biomedical Engineering, Duke University	2023
8	Eesha Pisal, MPS - Biomedical and Health Informatics	2023
9	Yachna Goyal, MPS - Biomedical and Health Informatics	2023
10	Sophia Hayes, BSPH-Gillings School of Global Public Health	2022
11	Gunjan Dhawan, MPH-Global Health	2022
12	Michaella Lennox Wu, MPH- Global Health	2022
13	Akshara Mamidala, MPS Biomedical Health Informatics	2022
14	Vibhor Gupta, Incoming PhD student, Carolina Health Informatics Program	2022
15	Muhammad Gulam Kibria, PhD, Health Informatics	2022
16	Sonora Stampfly, MPH, University of Washington, Seattle	2021
17	Matthew Lieske, MPH@UNC online program	2021
18	Chiraz BenAbdelkader, Incoming MPH student	2021
19	Samuel Elliot Krause, MPH	2021
20	Joseph Amarachi Ogbansiegbe, MPH Health Policy Concentration	2021
21	Lilly O'Toole- Incoming MPH Student	2021
22	Fouad Abu Hijleh, MPH	2021
23	Abhishek Bhatia, Incoming Ph.D. student in the Carolina Health Informatics Program	2021
24	Yao Cai- Ph.D., Carolina Health Informatics Program	2021
25	Meredith Silver, Public Health Leadership, Ashville	2020-2021

26	Jennifer Young, Master's in Professional Science (online), Carolina Health	2020-2021
	Informatics Program	
27	Makala Carrington, Public Health Leadership	2020
28	Amy Cole, full-time employee now pursuing Professional Master's in Biomedical Informatics	2020
29	Tanvi Shah, Public Health Leadership Graduate	2020
30	Elizabeth Simmons, Ph.D. student in the Department of Maternal and Child Health	2019-2021
31	Tran Hoang, Public Health Leadership alum	2019
32	Emilya Huseynova, MPH-Epidemiology	2019
33	Matt Case, Public Health Leadership- Health Care & Prevention Track	2019
34	Eunsoo Timothy Kim, Ph.D. student in the Department of Maternal and Child Health	2019
35	Anshula Nathan (2017-2019)- Public Health Leadership, residential student	2017-2019
36	Lavanya Vasudevan, Ph.D., and faculty at Duke Global Health Institute	2017
37	Aninda Sen, Public Health Leadership	2017
38	Maria Ganama, Public Health Leadership international student	2017
39	Erin Escobar, Public Health Leadership	2017
40	Pooja Jani, Public Health Leadership- Health Care & Prevention Track	2016-
41	Victoria Taffe, Public Health Leadership	present 2016- present
42	Christie Pettitt-Schieber, Public Health Leadership	2016-2017
43	Dominique Primus, Public Health Leadership	2016-2017
44	Gabriel Gardenal, Rotary Peace Fellow in the Public Health Leadership	2016-2017
45	Emma Lauren Richard, MPH Health Behavior	2016-2017
46	Nicole Martin (US Navy), Public Health Leadership with an emphasis on global health	2016
47	Hallie Pritchett, Public Health Leadership (online)	2016
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GRANTS:

Active

Since 2021: Faculty Mentor- NIH funded Africa Data Science Research Training Grant, Makerere University, Uganda

Grants Under Review

1. Principal Investigator, <u>NextGen Comprehensive Technical Assistance for Health Supply Chain and Pharmaceutical Management</u>

Total Estimated Cost/Amount Range: Multi-million Multiple Indefinite Delivery Indefinite Quantity Contract

United States Agency for International Development, Washington D.C.

Anticipated Award Date: September 2023 Duration: 10 years from the award date

Past Funding (Approximate direct cost)

1. Principal Investigator and Senior Technical Specialist - <u>The TB Data, Impact Assessment and Communications Hub (TB DIAH) project</u>

Award total: \$36,000,000 Level of effort- 40%

United States Agency for International Development, Washington D.C.

May 2021 – February 2022

2. Principal Investigator and Senior Technical Specialist - <u>Malaria Surveillance, Monitoring and Evaluation (Malaria SME) project</u>

Award total: \$36,000,000 Level of effort - 5%

United States Agency for International Development, Washington D.C.

May 2021 – February 2022

3. Principal Investigator and Health Information System Evaluation Advisor - <u>Global Informatics</u> Collaborative-Technical Assistance Platform project (PATH as the consortium leader)

Award total: \$250,000/year

Level of effort - 25%

United States Centers for Disease Control and Prevention, Atlanta

October 2020 – February 2022

4. Principal Investigator and Senior Technical Specialist, Health Systems Strengthening - <u>Data for Accountability, Transparency and Impact Monitoring System and Maturity Model</u>

Award total: \$350,000/year

Level of effort- 30%

USAID- Digital Square project, PATH, Seattle

June 2020 – February 2022

5. Senior Technical Specialist, Health Systems Strengthening- MEASURE Evaluation Phase IV Award Total (managed directly) - \$ 45,000,000

Level of Effort – 100 %

United States Agency for International Development

June 2015 – May 2020

Unfunded proposal

- Collaborated with Prof. Lori Evarts for the Gilling's Innovation Lab grant, 2021. Title: Building digital health leaders to combat COVD-19 and future pandemics.
- Participated in the Gillings led Public Health Informatics and Technology workforce development grant proposal discussions funded by the Office of the National Coordinator.

SERVICE:

Department - Service to Public Health Leadership Program

2023 Participated in and provided feedback for the selection of the Mentoring Director.

Served as practicum site supervisor for an MPH student, University of Washington, Seattle

2021-22	Facilitated dialogue with the Pan American Health Organization to establish a Health Information System Collaborative Center	
2020	MPH Comprehensive Exam, Faculty Examiner for 15 students, Gillings School of Global Public Health, University of North Carolina at Chapel Hill	
2017	Member of search committee for hiring PHLP Quality Coordinator	
2014-2015	Member, Public Health Leadership Student Association, Gillings School of Global Public Health, University of North Carolina at Chapel Hill	
2014-2015	Senate member, Graduate and Professional Student Association, University of North Carolina at Chapel Hill	
Department	- Service to the Gillings School of Global Public Health	
2016- present	Share internship and job opportunities, ease collaboration with Gillings Research, Innovation and Global Solutions, and interactions with potential employers	
2018	Participated in group consultation contributing to the design of the culminating experience for the Global Health Concentration of the MPH program	
2017	IntraHealth Summer Fellows Review Committee	
2016	Featured in the international student recruitment video	
2014-2015	Co-founder, Health Informatics Hub (A student body), Gillings School of Global Public Health, University of North Carolina at Chapel Hill	
2014	Lead a breakout session on "Balancing Act: Work, Life and School" in the Gillings School of Global Public Health Diversity Orientation	
2014-2015	Public Health Leadership Program Buddies	
2013-2015	Member, Student Global Health Committee, Gillings School of Global Public Health, University of North Carolina at Chapel Hill	
Chapel Hill-Carrboro City Public Schools		
2019-2020	Member, District Technology Services Team	
2018-2020	Co-chair, School Improvement Team, Scroggs Elementary School	
2017-2018	Member, School Improvement Team, Scroggs Elementary School	
Global Community		
2006-2008	Deepshikha Samiti (a community-based organization working with HIV key population), New Delhi, India	

Founding member and Regional Representative-Asia, Young Professionals for Agricultural

Development, C/O Food and Agriculture Organization of the United Nations, Rome, Italy

2005-2012

1999-2000	General Secretary and Editor of Agriculture Communication Society, G.B. Pant University of Agriculture and Technology, Uttarakhand, India
1994-1996	National Social Service Volunteer, Rajendra Agriculture University, Bihar, India
1994-1996	Cadet and Senior Under Officer, National Cadet Corps Unit, Rajendra Agriculture University, Bihar, India