Public Health and Well Being

Mapping Institutions, Researchers and Funders in India

Report prepared for RCUK India and UK Science and Innovation Network
by

Amaltas, India

UK Science
& Innovation
Network

RESEARCH
COUNCILS UK
INDIA

DISCLAIMER

The technical information in the report should not be construed as advice of any form. Amaltas shall not be liable for any loss, damage, liability or expense incurred or suffered by use of this report, including, without limitation, any fault, error, omission with respect thereto. Amaltas makes no warranty, express or implied nor assumes legal liability or responsibility for accuracy, completeness, or use of any third party information in the report.

TRADEMARK DISCLAIMER

Any specific name, logo, trademark, sign, and/or design or any other intellectual property referenced herein are merely used for research purpose and are the property of their respective owners. Their reference in this publication does not either implicitly or explicitly constitute a suggestion, warranty, indication or recommendation of the products manufactured, produced, marketed or traded by the respective intellectual property owners/holders.

April 2015

Acknowledgements

This report 'Public Health and Well Being: Mapping Institutions, Researchers and Funders in India' has been prepared for the Science and Innovation Network and the Research Councils UK by Amaltas Consulting Private Limited, India. The Head of the Project was Mr. JS Kang and the Technical Lead was Dr. Suneeta Singh. Team members who have contributed to this report are Ms. Anjali Krishan, Ms. Apurva Rastogi, Mr. Ujjwal Gupta, Ms. Kavya Ghai, Ms. Rhea Chawla and others of the Amaltas team.

Experts who kindly provided a quick review of the draft document include Dr. Himangi Bhardwaj, British High Commission, Dr. Shirshendu Mukherjee, Wellcome Trust and Dr. Shahid Jameel, Wellcome Trust/ DBT. The report has also gained much from the comments of Mr. Sunil Kumar and Dr. Rita Sharma of the Science and Innovation Network, and Dr. Nafees Meah, Ms. Sukanya Kumar-Sinha and Mr. Andrew Telford of the Research Councils UK, India. We would also like to acknowledge the assistance of the many researchers we interviewed, who provided us with great insights into the health research sector.

Amaltas is a Delhi based organisation with a mission to work within the broad scope of development to provide high quality consulting and research in support of accelerating improvements in the lives of people. Amaltas has garnered a wide range of experience through its portfolio of prestigious projects with foundations such as the Bill and Melinda Gates Foundation, World Vision, Save the Children; research institutions such as Johns Hopkins University and IDRC, Canada; the UN including UNDP, UNICEF, UNAIDS, UNWomen; bilateral and multilaterals such as the World Bank, DFID, USAID; and governments including Government of India, the Royal Government of Cambodia among others. It has core competencies in high quality research, documentation and evaluation. A detailed profile of Amaltas may be found at www.amaltas.asia.

Table of Contents

Acknowledgements

This report 'Public Health and Well Being: Mapping Institutions, Researchers and Funders in India' has been prepared for the Science and Innovation Network and the Research Councils UK by Amaltas Consulting Private Limited, India. The Head of the Project was Mr. JS Kang and the Technical Lead was Dr. Suneeta Singh. Team members who have contributed to this report are Ms. Anjali Krishan, Ms. Apurva Rastogi, Mr. Ujjwal Gupta, Ms. Kavya Ghai, Ms. Rhea Chawla and others of the Amaltas team.

Experts who kindly provided a quick review of the draft document include Dr. Himangi Bhardwaj, British High Commission, Dr. Shirshendu Mukherjee, Wellcome Trust and Dr. Shahid Jameel, Wellcome Trust/ DBT. The report has also gained much from the comments of Mr. Sunil Kumar and Dr. Rita Sharma of the Science and Innovation Network, and Dr. Nafees Meah, Ms. Sukanya Kumar-Sinha and Mr. Andrew Telford of the Research Councils UK, India. We would also like to acknowledge the assistance of the many researchers we interviewed, who provided us with great insights into the health research sector.

Amaltas is a Delhi based organisation with a mission to work within the broad scope of development to provide high quality consulting and research in support of accelerating improvements in the lives of people. Amaltas has garnered a wide range of experience through its portfolio of prestigious projects with foundations such as the Bill and Melinda Gates Foundation, World Vision, Save the Children; research institutions such as Johns Hopkins University and IDRC, Canada; the UN including UNDP, UNICEF, UNAIDS, UNWomen; bilateral and multilaterals such as the World Bank, DFID, USAID; and governments including Government of India, the Royal Government of Cambodia among others. It has core competencies in high quality research, documentation and evaluation. A detailed profile of Amaltas may be found at www.amaltas.asia.

research councils, Indian and UK policy makers, public and private companies, academics, and researchers working in the area of Public Health and Well Being in the UK.

5. The study draws upon several sources of evidence:
   - Desk review of existing reports and commentaries on social science research in India
   - Detailed search on Web of Science and Google Scholar to identify institutions, and their researchers publishing non-academic works as well as in indexed, peer reviewed journals between 2010 - 2014
   - Delphi interviews with active researchers in the field to drive an iterative process to identify key institutions and researchers.
   - Thorough study of the websites of key organisations engaged with research on health.
   - Sense checking of key results by experts in the subject areas

6. Two approaches to data collection were applied. In the first approach, Web of Science and Google Scholar were utilised as the search engines of choice to carry out the bibliometric review of the work of researchers. Bibliometric data was captured between 18 December 2014 and 13 April 2015. Just over 80 institutions and 139 researchers were located through this exercise. Over 2180 papers relevant to the subthemes of interest were captured. The data was analysed in order to understand the most prolific and well cited researchers in the eight subthemes. In order to rank institutions, the number of publications appearing on their websites was also considered.

7. In a second approach, researchers and experts in the field were asked to provide additional inputs with respect to institutions active in the subthemes. Over 80 email requests for information were sent and 14 researchers interviewed. Supplementary data from an additional 20 institutions resulted in a final listing of 101 institutions, 526 researchers and more than 5500 papers during the course of the study. Further, 12 funders that provide funds in the area were researched.

Research Context

8. Science has played a central role in the Indian knowledge systems in medicine, mathematics, astronomy, dance and music. More recently, successes such as the Green and White Revolutions, and India's capabilities in information technology and space science are noteworthy. India has the third largest scientific and technical manpower in the world. There are 634 universities with a total intake of 3.3 million students per year. Masters level enrolments in 2012 were 0.2 million, and PhD level were 0.1 million. The R&D sector has been growing at 20% in India over the past several years, albeit from a relatively small base. Over 1000 multinational companies have based their R&D operations here. In fact, contract research is a fast growing segment in the Indian healthcare industry. Driving the growth is technological innovation in the areas of diagnostics, pharmaceuticals and bio-pharmaceuticals, bio-services, internet-supported solutions, analytics and disruptive technologies.

9. India has shown its determination to claim a leading position in science and innovation. The President of India declared in 2009 that 2010 – 2020 would be the 'Decade of Innovation'. In 2013, a new 'Science, Technology and Innovation' policy was announced. The policy puts its emphasis on science and technology based solutions for some of India's most trenchant

problems. The National Innovation Foundation set up in 2010, has fostered over 2 million ideas, innovations and traditional knowledge practices from across the urban and rural areas of the country.

10. Nonetheless, significant problems still burden the sector: there is severe faculty shortage and poor quality training leading to a poor track record of accreditation of institutions. Although India ranks ninth globally in terms of research publications, it has one of the lowest citation impacts of all countries. The 12th Five Year Plan also notes several *a priori* requirements for achieving India's ambitions in research. These include enrichment of knowledge base; incentivising research and development in public and private sector; improving governance in science and technology institutions; university, industry, and scientific establishment collaborations; promoting collaboration through clusters; supportive financial systems; platform for best practices and innovations; improving the flow of technology; intellectual property rights; and use of Geographic Information Systems for development**.**

11. Policy pronouncements such as the 'Atal Innovation Mission', 'Skill India Mission' and the 'Global Initiative of Academic Networks' are all directed towards building capacity among Indian students and entrepreneurs. 'Make in India' is a flagship programme of the new Government which encompasses initiatives to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country.

12. The XII Plan Document (2012 – 2017) of the Department of Health Research offers an ambitious plan to carry out several intra-mural and extra-mural activities including establishing centres (among others) for: Nutrition Research and Training, Research on Maternal and Child Health, Research on Reproductive Health and Nutrition, Molecular and Transplant Immunology, Molecular Medicine, Human Genetics, Oncology, Research on Drug Resistance, Nanomedicine, Clinical Pharmacology and Mental Health. The Government has also announced a universal health plan will offer guaranteed benefits to a sixth of the world's population at an estimated INR 1.6 trillion (GBP ~17 million) over the next four years and a slew of other initiatives in the health sector such as an integrated pharmaceutical city. The private sector too has several major plans including a new vaccine manufacturing facility and other acquisitions and associations.

Findings from Bibliometric Analysis

13. Data from Web of Science and Google Scholar was analysed to develop observations on research activity in the subthemes of interest to this study. It is clear that the Indian public health domain is well established and highly diverse. Research on the subthemes is not limited to institutions and departments working specifically on public health, rather it includes those working in fields as diverse as chemical and biological sciences and environmental studies. Research outputs in the majority of subthemes is either constant or growing. The relatively smaller and newer fields of Diagnostics and Drug & Vaccine Discovery have grown exponentially from 2010. Cancer Biology and Regenerative Medicine, particularly dominates the research landscape, with a much greater number of publications than the other subthemes.

14. Bibliometric analysis yielded over 10 institutions working on each subtheme except Drug and Vaccine Discovery and Diagnostics. The high number of institutions working in almost all

subthemes suggests that there is useful capacity in India on these subthemes. Diagnostics however, is the exception - it has both a low number of institutions working within it and comparatively lower publication counts. Certain subthemes have a high concentration of researchers.

15. The 15 leading institutions are more productive than the rest. The 15 leading institutions are not only home to almost 32% of researchers; they also produce 56% of total publications. The top 10 institutions are particularly productive, producing almost half (49%) of total publications. The majority of researchers are housed in academic institutions, with 72% of researchers affiliated to academic institutions. This indicates that the academic setting is more accommodating of researchers and their needs.

16. There is a high concentration of researchers linked to leading institutions (RLI) working in subthemes such as Cancer Biology and Regenerative Medicine, Biological Sciences and Antimicrobial Resistance. RLI are usually much more influential than researchers in other institutions (ROI) as judged by their citation counts.

17. ROI tend to have lower bibliometric counts than RLI. While ROI are concentrated in the same subthemes as RLI, they have fewer citations. Leading ROI on the other hand, publish in large numbers and are also well cited within this subtheme suggesting that although the number of publications is lower, they are well supported by their institutions.

18. There are several instances of collaboration with UK institutions. The highest numbers of collaborations with the UK are with the Public Health Foundation of India with 16 institutional collaborations; IIT Kharagpur with three, and the National Centre for Biological Sciences and Tata Memorial Hospital follow with two collaborations each. Collaborations range across a large number of UK universities.

Input from Delphi Interviews

19. Despite triangulating the bibliometrics through two search engines, the analysis did not pick up all institutions active in the subthemes of interest. A further 20 institutions were suggested by experts in the field. These institutions are home to 386 researchers and work primarily in the subthemes of Cancer Biology and Regenerative Medicine and Drug and Vaccine Discovery. An additional 3521 relevant papers by these researchers were accessed.

Funders

20. Most sources of funding for public health are well established. As the Government of India is the primary funder in this sector, it is not surprising to see that funders are overwhelming longstanding entities. Government of India provides the majority of identified grant windows. It is the key funder in public health providing crucial financial support directly to grantees. The Department of Biotechnology, Department of Science and Technology, Indian Council of Medical Research, as well as the University Grants Commission are some of the prominent government funders in India.

21. Despite the predominance of funding for implementation-based projects, Indian Trusts and Foundations such as Sir Dorabji Tata and Sir Ratan Tata Trusts also support research funding in Public Health. In several instances, national and state governments partner with local institutions to facilitate funding for research. This model can be observed in the Government of

India funding to Jawaharlal Nehru Centre for Advanced Scientific Research and the Indian Institute of Science.

22. Most funding opportunities are not specifically directed to any one of the eight subthemes. Instead they are normally directed to broader, more generic categories such as funding for science and technology or funding for particular demographics such as women and other marginalised groups.

At least 101

institutions and 526

researchers work on the eight subthemes in India.

More than 5500 relevant

papers were produced in the past 5 years.

15 research institutions in India are home to 32% of researchers working on the eight public health subthemes and produce 56% of all publications accessed.

The majority of the 12 Indian funders are government organisations and were established before 2000.

Section I

About the Study
Methodology
Structure of the Report

About the Study

Science and innovation are a critical input to the prosperity and sustainable growth of a country. They ensure that the country can meet emerging challenges, ranging from water-energy demands and natural disasters, to climate change and public health. Countries require an excellent research base with the right infrastructure and skilled people to generate solutions to such challenges. International collaborations are an excellent way to develop research and knowledge, nurture new capabilities, encourage new ideas and foster new opportunities to support growth.

The United Kingdom and India have longstanding research ties that function through a variety of mechanisms. In 2014, the UK set up the Newton Fund to develop science and innovation partnerships that promote the economic development and welfare with a number of countries.[i] In India, this partnership takes the form of the Newton Bhabha Fund, which is operationalised through a core group of Delivery Partners including Research Councils UK.[1] The Newton Bhabha Fund augments existing research collaboration with India to jointly deliver innovative solutions to global development challenges.

The Public Health and Well Being thematic area which this report addresses, was identified by the UK-India Task Force Meeting held in February 2014. It was further endorsed by the UK-India Science and Innovation Council in November 2014, at which the science ministers of the two countries signed the Newton-Bhabha Fund Memorandum of Understanding.

The priority subthemes identified under Public Health and Well Being for the UK-India partnership are:

1. Strengthening UK and Indian partnership in the area of antimicrobial resistance in order to acquire new insights into the emergence and spread of antimicrobial resistance, the evolution of resistance and to drive the discovery of new diagnostic, preventative and therapeutic strategies for infections, particularly drug resistant strains.
2. Building UK and Indian research collaborations in the mental health field to further our understanding of the aetiology and life-course of substance misuse and the relationship with mental illness, to inform future policy making and intervention strategies.
3. Building communities of researchers in the UK and India to be well placed to address programmes of research in cancer biology, regenerative medicine and antimicrobial resistance including anthelmintic.
4. Working with India to develop trilateral research partnerships including low-income countries focused on improving maternal and child health by developing solutions to ensure availability of safe, nutritious food for all.
5. Studying various toxic air pollutants and their sources with an aim to develop abatement options for their effects on human health especially in mega-cities.
6. Drug & Vaccine Discovery.

[1] See Annexure I for more on SIN, Research Councils UK and the Newton Bhabha Fund.

7. Diagnostics.
8. Biomedical Services.

UK-India research funded under this theme will pave the path towards healthier global populations through a multi-pronged approach addressing important challenges around antimicrobial resistance, care for the elderly, mental well being, the effects of atmospheric pollutants on human health, and maternal and child health, among others. This will be achieved through working together to strengthen both UK and India's mutual capabilities and expertise and to further develop understanding of key strategic health issues. The aim is to ensure that the research outcomes inform future thinking in these important areas, guiding the development of policy measures and health interventions for improved human health standards.

Methodology

This study was commissioned to understand the research and innovation ecosystem in the area of Public Health and Well Being in India. Amaltas was asked to locate the leading institutions actively engaged in research in the subthemes, and identify researchers affiliated with these institutions or independent of them through bibliometric study. Amaltas was also asked to map funders active in this area and understand their research priorities and modalities.

Through the study, it is hoped that the knowledge base about the research landscape in India can be enlarged, and potential partners in Indian universities and institutions can be identified. The intended audience for this study are the seven Research Councils in UK, RCUK India, UK's Science and Innovation Network, Indian research councils, Indian and UK policy makers, public and private companies, academics, researchers working in the area of Public Health and Well Being in the UK.

The study draws upon the following sources of evidence:

- Desk review of existing reports and commentaries on social science research in India
- Detailed search on Web of Science and Google Scholar to identify institutions, and their researchers publishing non-academic work as well as articles in indexed, peer reviewed journals between 2010 - 2014
- Delphi interviews with active researchers in the field to drive an iterative process to identify key institutions and researchers
- Thorough study of the websites of key organisations and funders engaged with research on health
- Sense checking of key results by experts in the subject areas

The study followed a two-track process. Along Track 1, a research-oriented approach was undertaken to identify key researchers and institutions. The first step in track 1 was to use bibliometric analysis to identify researchers in the eight subthemes of interest. Bibliometric study for each subtheme of interest yielded the names of researchers. Publication and citation data for these researchers was accessed from both Web of Science and Google Scholar. Two search engines helped to ensure that there was a high rate of capture. During this phase of the study, 81 institutions and 139 researchers were identified, and 2181 papers accessed after scanning many more for their

relevance to the subthemes. Bibilometric data referred to in the study was accessed between 18 December 2014 and 13 April 2015.

Data for the institutions to which these researchers were affiliated was aggregated and leading institutions in that field of study were identified, as well as any funders with which they were associated. Data points for each institution were constructed using the data on each researcher identified from the institution in the last five years. Data were gathered and weighted in order to construct these scores. The relative score assigned to each data point was fine-tuned in light of the purpose of the study and is provided in the chapter on findings. Institutions were ranked based on these scores to identify the most active ones. Data points used to construct the rankings include total number of relevant researchers and publications in the institution (based on website data), publication and citation counts of researchers, nature of the publication and the impact factor of the journals in which published. Leading institutions were then identified based on natural inflection points in the rank data. Accordingly, 15 leading institutions working in the priority subthemes within the overall theme of Public Health and Well Being were identified.

The ranks that have been arrived at reflect the purpose with which the study is being conducted, availability and type of data as well as the relative importance that each data point was assigned to construct the score. Hence the likelihood that these scores would match say, the QS college rankings (http://www.topuniversities.com/university-rankings/brics-rankings) is low since the nature and type of data used to construct those rankings, as well as the weights assigned differ significantly from the ones used in this report. The research players identified in this study belong to sector specific departments of public and private research institutes, research centres and university departments that are active in the eight subthemes of interest.

Researchers were also scored, using a scoring protocol outlined in the findings chapter. As per the terms of reference, researchers were grouped into those affiliated to the leading institutions (RLI) and those working in the other institutions (ROI). Data for the two sets of researchers is presented and some general observations have been made regarding research in leading and other institutions, as well as that in the subthemes of interest.

Bibliometric analysis, by its very nature, left out several institutions that are doing good work in the subthemes in India. In the next step, Delphi inquiry yielded several more institutions and researchers of interest. Over 80 email requests for information were sent and 15 researchers interviewed. Three external and one internal expert provided further names. Inputs from researchers and experts yielded names of additional institutions that they were aware were active in the subthemes of interest. For these institutions, a different approach had to be adopted. Faculty from all relevant departments were scanned, their papers sought in the two search engines and publication and citation counts captured. This resulted in the identification of an additional 20 institutions and 386 researchers. An additional 3521 papers from the subthemes of interest were noted and the citation counts accessed. This data is also presented in the chapter on findings of the study.

Track 2 investigated Indian funders within these subthemes. The approach adopted to identify funders was different. The study identified funders from a variety of sources – publication declarations, conference proceedings, reports on various institutional websites and advice from subject experts. For the purposes of this study, funders are those institutions or organisations that

provide public or private funds to individuals or organisations not merely for academic but for independent research. A long list of funders was investigated on the basis of extensive web search to distil a shorter list of Indian funders active in the subthemes in the past five years. In all 12 funders have been identified using this methodology.

Structure of the Report

The analysis in this report focuses on the past five years (2010 - 2014). Section I provides an overview of the purpose of the study, its main sources of information and how it was carried out. Section II describes how the research landscape in the subthemes has evolved, its present situation, and summarises the findings of the study in respect of the institutions and universities that concentrate on this area, the researchers who carry out work in the subthemes of interest and the funders who support their work. It draws on data from two distinct research processes – the first relies on the bibliometric analysis, while the second derives from a directed search on the basis of advice by senior researchers in the field. Finally Section III provides a detailed description of the research landscape. It presents a matrix of researchers and their focus areas. This section also carries a full listing of mapped institutions in the subthemes of interest as well as one page dossiers on the 15 leading institutions. These dossiers will provide a snapshot of the institution including key research projects in the past five years, relevant departments, institutional strength, international and national collaborations and main funders. Finally the section has dossiers on funders with a brief introduction to each along with their key grant windows and funding patterns. However, in spite of every effort, it is possible that small research players who lack web presence or wide networks may not appear in this report.

Section II

The Research Context
Findings from Bibliometric Analysis
Input from Delphi Interviews
Funders

The Research Context

Health is an important indicator of a population's well being. Modern man has faced several scourges in the last two centuries, including smallpox, syphilis, poliomyelitis, river blindness, cholera etc., which have been solved by scientific endeavour. As the world continues further into the 21st century, public health and well being are facing new challenges. Many of these have their genesis in more subtle aspects of human life, and require far more sophisticated solutions than the ones before. More needs to be understood about the cellular basis for life and disease, both of humans as well as of the microbes that infect us; mental illness and substance abuse; air pollution in large urban settlements; and better nutrition to improve maternal and child health.[ii,iii]

There is a great demand for evidence-based, context-specific responses to disease prevention and healthcare solutions worldwide. As India transitions in its epidemiological profile, India's own needs in this field are also beginning to make themselves felt. Public Health and Well Being research has a long history in India and as such, researchers in this field are many and well connected with key institutions in UK and elsewhere.[iv]

Before considering research in the area of health, it may be worthwhile to dwell upon the general research landscape in India. India has a long and venerable history as a country in which science has played a central role of its everyday life. This has resulted in many path-breaking gifts to the world such as the invention of zero and the decimal system, yoga, architectural and engineering marvels. World-renowned universities at Nalanda and Taxila taught Indian and foreign students the Arthshastra, Rigveda and Indian knowledge systems in medicine, mathematics, astronomy, dance and music. Modern achievements have been the Green and White Revolutions leading to self-sufficiency in agriculture and milk respectively. India is also one of an elite group of nations which has capabilities in space science and technology.[v]

India has the third largest scientific and technical manpower in the world. There are 634 universities with a total intake of 3.3 million students per year. Masters level enrolments in 2012 were 0.2 million, and PhD level were 0.1 million. About 16,000 doctorate degrees are awarded each year.[vi] In the overall landscape, four types of research institutions can be found: public sector established centres of research; academic research institutes/ universities; non government research bodies supported by private or public funds; and private sector research laboratories.

More recently, India has shown its determination to reclaim its leading position in science and innovation by declaring that India will become one of the top five global scientific powers by 2020.[vii] A 2007 World Bank report titled 'Unleashing India's Innovation: Toward sustainable and inclusive growth', describes the reasons that India is seen to have promising innovation potential including its large research and development human resource base and technical publications and patents.[viii] In 2009, the President of India declared that 2010 – 2020 would be the 'Decade of Innovation', marked by policy reforms, new funding schemes and programmes promoting public-private partnerships, international collaborations, technology transfers, applied research and development (R&D), academia - industry linkages, cluster development, rural innovations and skill development.[ix]

In 2013, a new 'Science, Technology and Innovation' policy was announced to replace the Science and Technology policy of 2003.[x] The policy puts emphasis on science and technology based solutions for some of India's most trenchant problems, while advocating that innovations should be frugal, distributed and affordable. The government feels that "developing solutions to social problems [must become] the new grammar of modern science".[xi]

The National Innovation Foundation set up in 2010, has fostered over two hundred thousand ideas, innovations and traditional knowledge practices from across the urban and rural areas of the country.[xii] The R&D sector has been growing at 20% in India over the past several years, albeit from a relatively small base. Projections indicate that the Indian healthcare industry will continue to expand and will attain a market value of USD 280 billion by 2020.[xiii] In fact, contract research is a fast growing segment in the Indian healthcare industry. Driving the growth is technological innovation in the areas of diagnostics, pharmaceuticals and bio-pharmaceuticals, bio-services, internet-supported solutions, analytics and disruptive technologies.[xiv,xv] Over 1000 multinational companies have based their R&D operations here. India is also the third most preferred destination for R&D after Silicon Valley and cities in USA. India is now gearing up to expand and upgrade innovation and research especially in the sectors of engineering, agriculture, pharmaceuticals and information technology. But significant problems still burden the sector: there is severe faculty shortage (amounting to over a third) and poor quality training leads to a poor track record of accreditation of institutions. Although India ranks ninth globally in terms of research publications, it has one of the lowest citation impacts of all countries.

The 12th Five Year Plan (2012 – 2017) has identified the following thrust areas for renewed attention: energy and environment; food and nutrition; water and sanitation; habitat; affordable health care; and skill building and unemployment; while science and technology promotion is proposed through induction of scientific temper, improving skills for the application of science, providing for careers in science, and making research and innovation more attractive.[xvi] However the Plan also notes several *a priori* requirements for achieving these ambitions, among which are enrichment of knowledge base; incentivising research and development in public and private sector; improving governance in science and technology institutions; university, industry, and scientific establishment collaborations; promoting collaboration through clusters; supportive financial systems; platform for best practices and innovations; improving the flow of technology; intellectual property rights; and use of Geographic Information Systems for development.[xvii]

The most recent Union Budget of India (2015-16) has committed money to supporting this ambition.[xviii] Policy pronouncements such as the Atal Innovation Mission to be established in NITI Aayog, Skill India Mission and the Global Initiative of Academic Networks (GIAN) are all directed towards building capacity among Indian students and entrepreneurs. Some draw upon and amplify capacities within the country's universities and research bodies, while others seek partnerships with nations that are willing to share ideas and learning.[xix]

'Make in India' is a flagship programme of the new Government in India. It encompasses several initiatives to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country. Announced at Prime Minister Modi's maiden Independence Day speech on 15 August 2014, it focuses on 25 sectors

namely automobiles, aviation, chemicals, Information Technology & Business Process Management, pharmaceuticals, construction, defence manufacturing, electrical machinery, food processing, textiles and garments, ports, leather, media and entertainment, wellness, mining, tourism and hospitality, railways, automobile components, renewable energy, biotechnology, space, thermal power, roads and highways and electronics systems. Its official website at www.makeinindia.com provides more details.[xx]

The draft National Health Policy, recently in the public domain for comments, makes reference to the plans of the Department of Health Research/ ICMR with regard to health research. The XII Plan Document (2012 – 2017) of the Department of Health Research offers an ambitious plan to carry out several intra-mural and extra-mural activities including establishing centres (among others) for: Nutrition Research and Training, Research on Maternal and Child Health, Research on Reproductive Health and Nutrition, Molecular and Transplant Immunology, Molecular Medicine, Human Genetics, Oncology, Research on Drug Resistance, Nanomedicine, Clinical Pharmacology and Mental Health.[xxi,xxii]

The Government has announced a universal health plan which will offer guaranteed benefits to a sixth of the world's population at an estimated INR 1.6 trillion (GBP ~17 million) over the next four years. It has also announced several new medical and pharmaceutical research and training institutes including a National Cancer Institute at the Jhajjar campus of the All India Institute of Medical Sciences and three National Institutes of Pharmaceuticals Education and Research.[xxiii] Other initiatives are the unveiling of Pharma Vision 2020 and a bid by the Government of Telangana to establish the world's largest integrated pharmaceutical city near Hyderabad.[xxiv] Private sector initiatives include plans by Indian Immunologics Ltd to set up a new vaccine manufacturing facility in Pondicherry, investment by CDC, UK's development finance institution in Narayana Hrudalaya a multi-speciality healthcare provider, and a slew of other acquisitions and associations.[xxv]

Findings from Bibliometric Analysis

General Findings

Eight subthemes under the broader theme of Public Health and Well Being were identified by a UK-India Roundtable organised by RCUK India and Science and Innovation Network that were used as the basis for this report. These have each been assigned an acronym and a colour code for ease of reference in the discussion that follows. The eight subthemes, their related acronyms and colour codes are:

AP	Air Pollution especially in mega-cities
AMR	Antimicrobial Resistance
BS	Biomedical Services
CBRM	Cancer Biology & Regenerative Medicine
DN	Diagnostics
DVD	Drug & Vaccine Discovery
MCHN	Maternal, Child Health & Nutrition
MH	Mental Health & Substance Abuse

The Indian public health domain is well established and highly diverse. The bibliometric exercise located 81 active institutions, 137 researchers and 12 funders. It scrutinised over 2181 publications from the past five years across the eight subthemes. Research on these subthemes is not limited to institutions and departments working specifically on public health. Rather, a wide range of researchers, institutions and departments working in fields as diverse as chemical and biological sciences and environmental studies are also active in this domain.

Research outputs in the majority of subthemes is either constant or growing. A survey of public health publications revealed an expansion of publications in six subthemes – Air pollution; Cancer Biology & Regenerative Medicine; Drug & Vaccine Discovery; Maternal, Child Health & Nutrition; Mental Health & Substance Abuse and Diagnostics – over the past five years. Particularly, the relatively smaller field of Diagnostics has grown exponentially from 2010. Overall, the subthemes of Cancer Biology & Regenerative Medicine and Air Pollution particularly dominates the research landscape, with a significantly greater number of publications within them, than

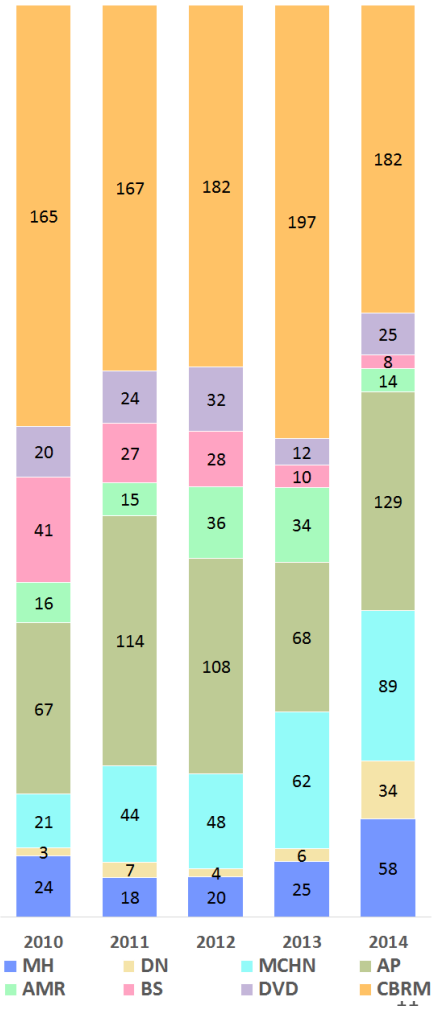


Figure 1 Subtheme publications by year

the other subthemes. Figure 2 displays the absolute number of publications accessed through the bibliometric exercise.

For the remaining subthemes of Antimicrobial Resistance and Biomedical Services, publications counts have dropped over the past five years. This decline has been particularly severe for Biomedical Services.

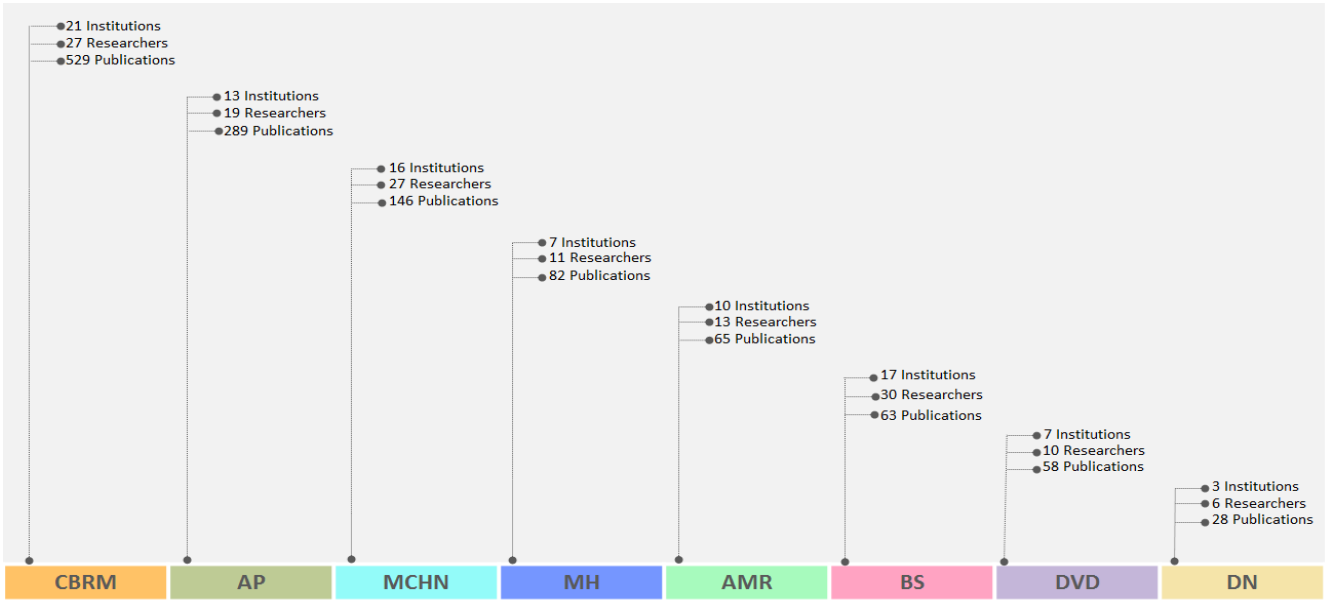


Figure 2 Overview of research by theme

Institutions

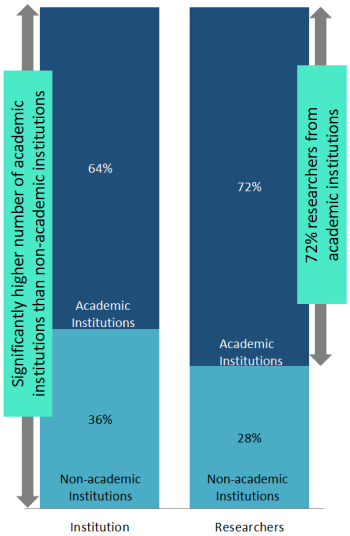


Figure 3 Distribution of academic institutions

Academic institutions are highly active in the public health landscape. Of the 81 public health institutions surveyed, almost 65% are academic, pointing to how research in the public health domain is dominated by academic institutions. This study classifies academic institutions as organisations which offer degrees and primarily identified universities and teaching hospitals in this sector. Non-academic institutions encompass a range of institutions such as hospitals, government research centres, non-government organisations as well as private sector players.

Unsurprisingly, the majority of researchers are also housed in academic institutions, with 72% of researchers affiliated to academic institutions. This indicates that the academic setting is more accommodating of researchers and their research needs.

The 15 leading institutions are more productive than the rest. These 15 institutions are home to almost 32% of all researchers mapped. However, these researchers are highly productive, producing 56% of total publications. This high concentration of productive researchers indicates that leading institutions are able to nurture researchers, thereby not only attracting larger numbers of researchers but also enabling them to be productive in terms of their research output. The top 10 institutions have a particularly high concentration of productive researchers, with almost half of all publications being produced by researchers in these institutions. Nevertheless, the remaining institutions are also quite productive and have a greater number of researchers. The remaining researchers are responsible for 44% of the total publications surveyed in this study and are home to 67% of researchers. See Annexure II for a graphic of the ranking of all 81 institutions.

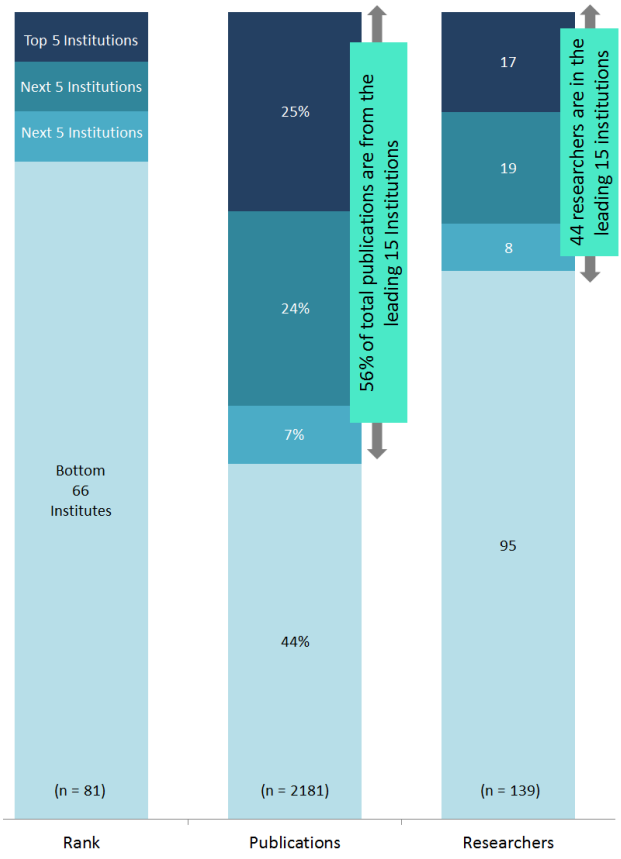


Figure 4 The 15 leading institutions

Most subthemes have at least 10 institutions that work on them. The high number of institutions working in most subthemes suggests that there is useful capacity in India on these subthemes. Diagnostics however, is the exception - it has both a low number of institutions working within it and with comparatively lower publication counts. The greatest number of institutions work in the Cancer Biology & Regenerative Medicine subtheme. This, not surprisingly, results in the much higher publications in the subtheme. See figure 5A and B on next two pages. Note that all graphs are on the same Y-axis range.

There are several instances of collaboration with UK institutions. The highest numbers of collaborations with the UK are with the Public Health Foundation of India with 16 institutional collaborations; IIT Kharagpur with three, and the National Centre for Biological Sciences and Tata Memorial Hospital follow with two collaborations each. Most collaboration is through partnerships, memorandums of understandings and faculty/student exchange agreements. Collaborations on specific public health projects within the eight themes are less frequent. Institutions in the UK with which the 81 identified institutes collaborate with include: King's College London, University of Cambridge, London School of Hygiene and Tropical Medicine, Newcastle University, and University of Southampton with two collaborations each. Several others have one collaboration, as follows:

- Faculty of Public Health
- Health Protection Agency
- Imperial College London
- King's Health Partners
- University of Aberdeen
- University of Birmingham

- University of Bristol
- University College London
- University of Edinburgh
- University of Glasgow
- University of Leeds
- University of Liverpool
- University of Nottingham
- University of Oxford
- University of Warwick
- University of York

Figure 5A Institutions in subthemes - Part I

Figure 5B Institutions in subthemes - Part II

Researchers

Researchers have been classified into two categories. Those associated with the 15 leading Institutions are categorised as Researchers in Leading Institutions (RLI). Researchers not associated to the leading Institutions are classified as Researchers in Other Institutions (ROI). Amongst the RLI, those who were primary authors or secondary author on publications where the first author does not have an Indian affiliation are considered for some further analysis.

Certain subthemes have a high concentration of Researchers. Given the nature of the subthemes being studied, it is clear that Researchers would require the support of the institutions to carry out useful research in these areas. This is reflected in the distribution of the Researchers. There is a high concentration of RLI working in subthemes such as Biological Services; Cancer Biology & Regenerative Medicine and Antimicrobial Resistance. There are, on the other hand, fewer RLI who are working in the subthemes of Mental Health & Substance Abuse; Diagnostics and Drug & Vaccine Discovery.

Additionally, there are trends across citation counts – Cancer Biology and Regenerative Medicine and Biomedical Services tend to be highly citied. However, there is no clear cut relation between researcher's impact as evidenced by citations, with the subthemes that have a large number of researchers.

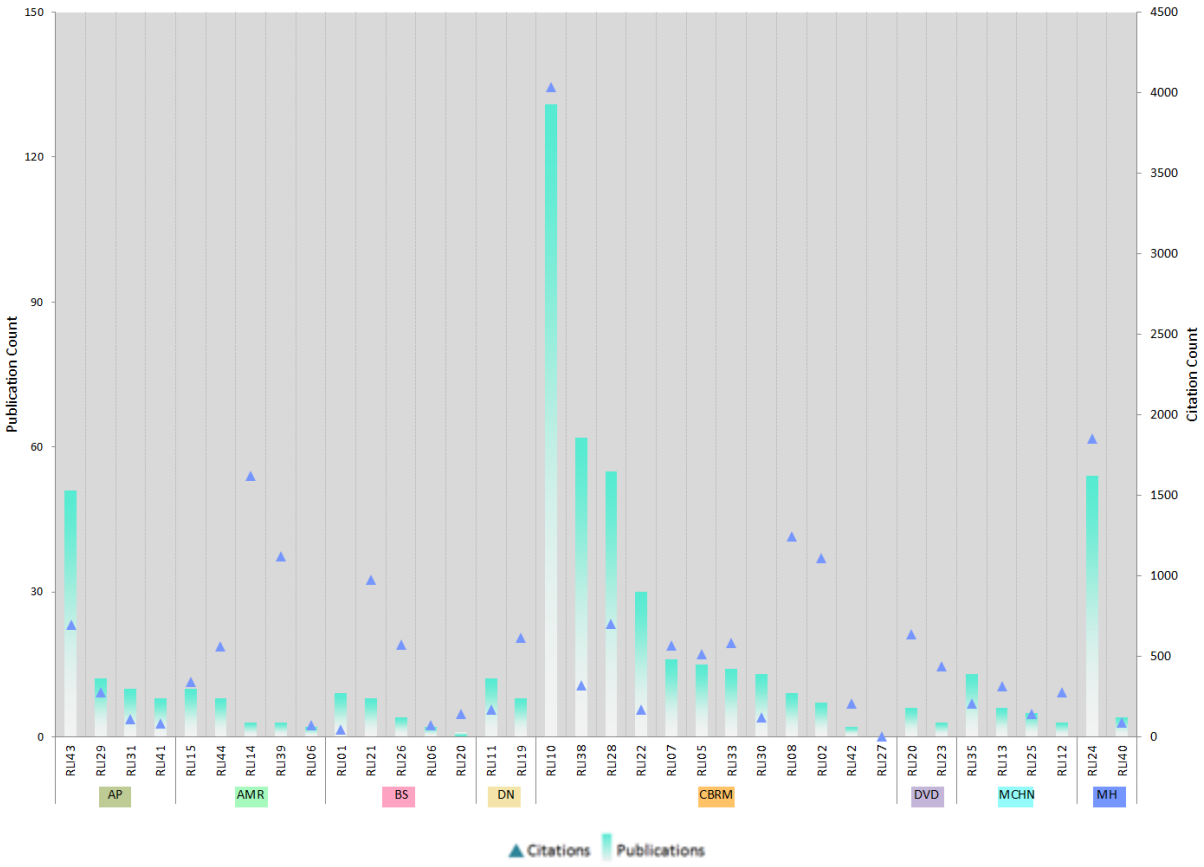


Figure 6 RLI Bibliometric counts by subthemes

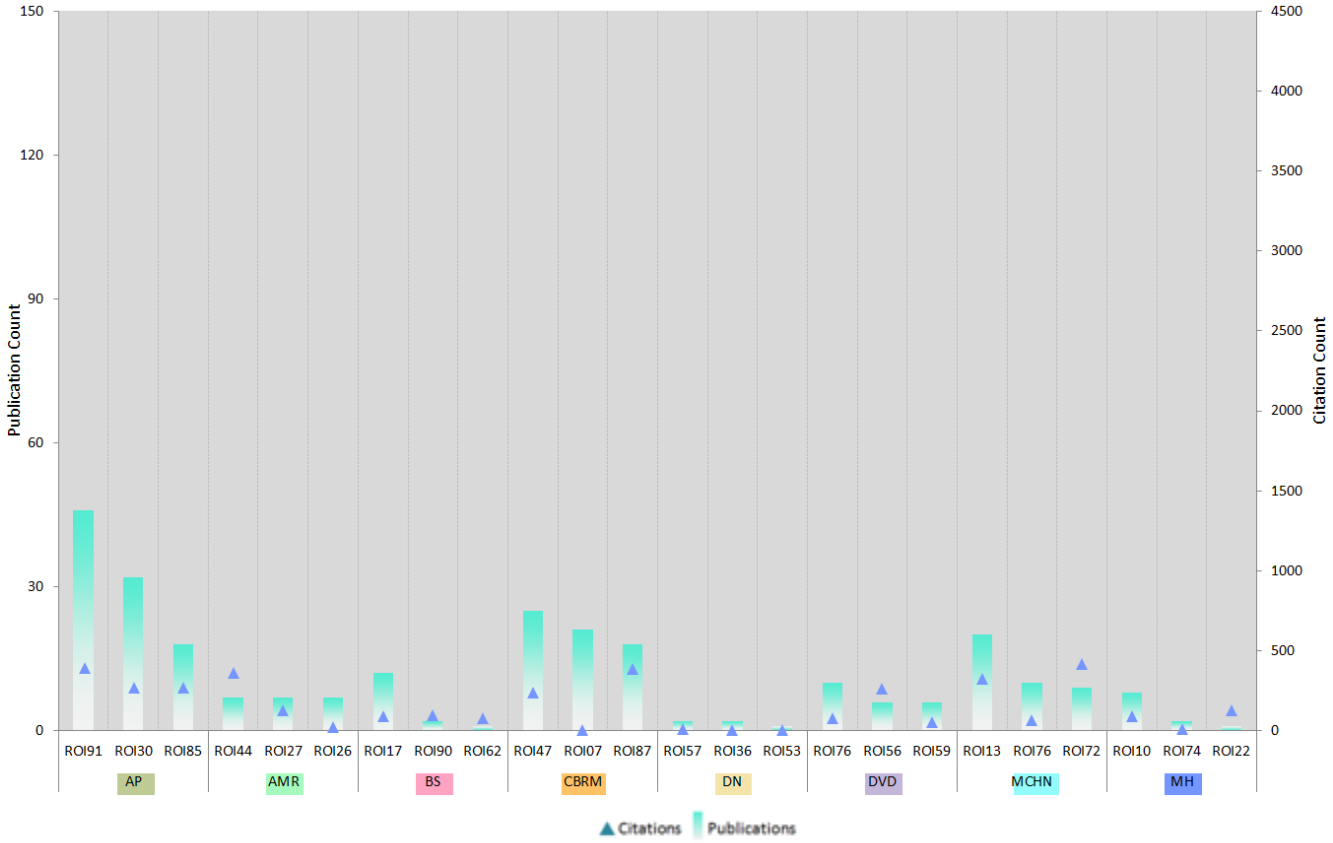


Figure 7 ROI Bibliometric counts by subtheme

Highly scoring ROI tend to have lower bibliometric counts than RLI. The role of infrastructure and institutional support is evident in the fewer publications that ROI generate. Furthermore, even when considering the top three ROI in each subtheme, citation counts for ROI are much lower than those for RLI for the most part. Notably the low number of citations and publications for Diagnostics continues. However, ROI are highly productive in Air Pollution. Not only do leading ROI publish in large numbers but they are also well cited within this subtheme suggesting that although the number of publications is lower, they are well supported by their institutions.

RLI are usually much more influential than ROI as judged by their citation counts. While ROI tend to be concentrated in the same subthemes as RLI, figure 6 shows that they have fewer publications and citations. The comparison has been highlighted in figure 8, which shows that the RLI have both higher publications and number of citations per publication (represented by the size of the bubble) than the ROI. RLI institutions by comparison, have greater influence in the field as shown by their larger number of citations. Thus the 15 leading institutions are clearly able to nurture Researchers to not only publish more but to also publish more impactful publications.

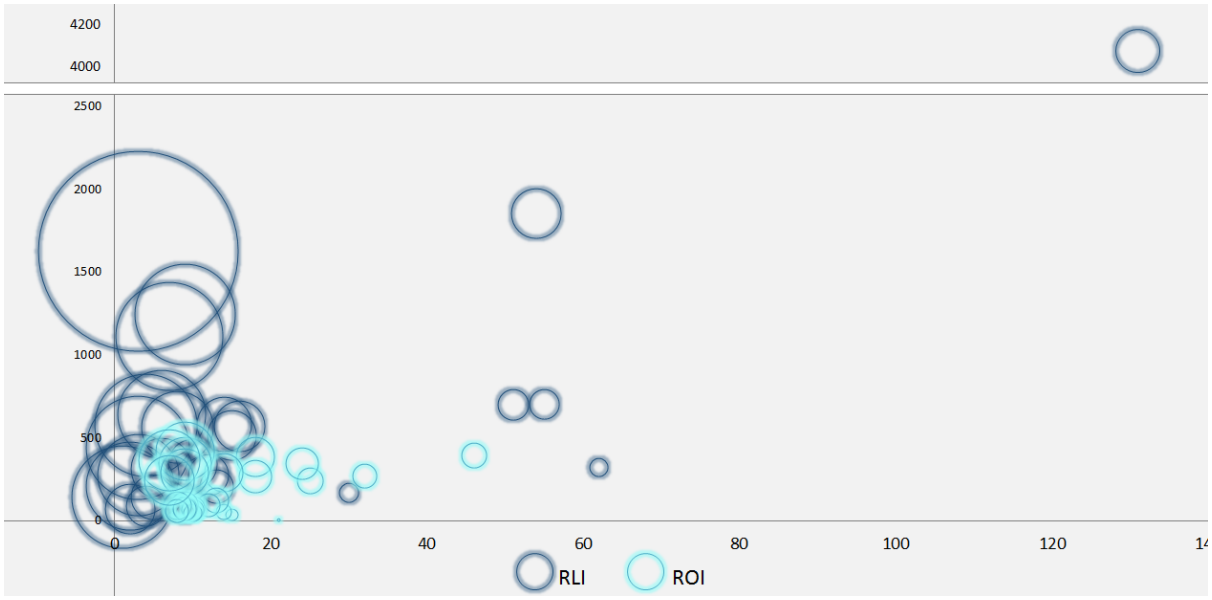


Figure 8 Impact of RLI and ROI

Input from Delphi Interviews

The bibliometric findings presented above portray the landscape of influential institutions within the eight subthemes. However, these findings do have their limitations. Search engines, tend to return results which favour those publications that are highly cited, that are internationally published and are clearly connected to the subthemes. This means that Institutions that are focused on practice rather than publishing, are underrepresented in a bibliometric study. Furthermore, given the scarcity of Indian journals in major search engines, those institutions that primarily publish nationally are also underrepresented. Similarly several institutions may have many publications, but if the citation counts are low, their researchers are less likely to be found on bibliometric searches. Nevertheless, these institutions are often doing innovative work and are worthy of further consideration.

Expert Name	Affiliation
Dr. Himangi Bhardwaj	Senior Adviser – Health, British High Commission
Dr. Shahid Jameel	CEO, Wellcome Trust/DBT India Alliance
Dr. Shirshendu Mukherjee	Senior Strategic Advisor, Wellcome Trust
Dr. Suneeta Singh	CEO, Amaltas Consulting Pvt Ltd

To capture these Institutions, the bibliometric findings were sense-checked by interviews of Public Health experts. Three external experts and one in-house expert reviewed the report and gave recommendations on additional institutions of interest in the subtheme areas.

The additional institutions were reviewed using a different approach. The faculty from all relevant departments were scanned, and their bibliometrics sought in the two search engines. Many of the

recommended institutions work in the areas of Cancer Biology and Regenerative Medicine and Drug and Vaccine Discovery. Drug and vaccine Discovery is of particular interest since very few institutions had shown up in the bibliometric analysis. Below is an alphabetical listing of the 20 additional institutions, the subthemes they work in and the number of researchers who work in these subthemes and also have bibliometric citations.

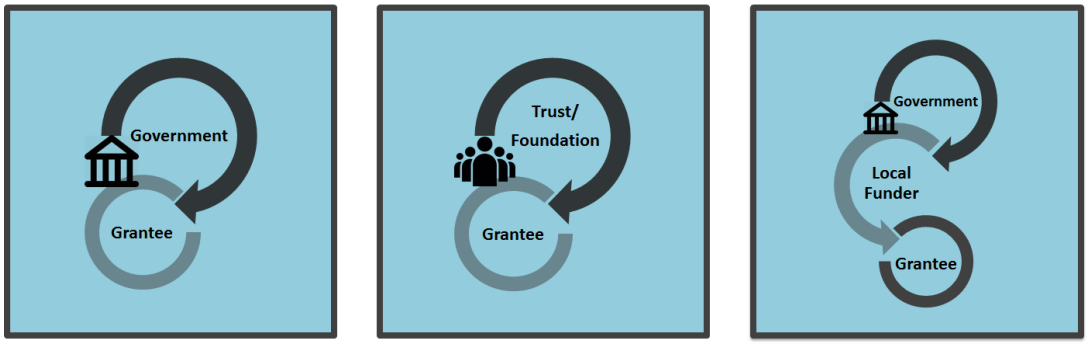
Institution Name	Researchers	Subthemes							
Aligarh Muslim University, Aligarh	5	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Central Drug Research Institute, Lucknow	14	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Centre for Cellular and Molecular Biology, Hyderabad	6	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Indian Institute of Chemical Biology, Kolkata	5	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Institute of Genomics and Integrative Biology, Delhi	1	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Institute of Microbial Technology, Chandigarh	3	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - National Environmental Engineering Research Institute, Nagpur	2	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - National Institute of Cholera & Enteric Diseases, Kolkata	4	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - North-east Institute of Science and Technology, Jorhat	2	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - Institute of Cytology and Preventive Oncology, Noida	15	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - National Institute for Research in Tuberculosis, Chennai	9	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - National Institute of Virology, Pune	4	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Science, Bengaluru	1	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Institute for Stem Cell Biology and Regenerative Medicine, Bengaluru	1	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
International Centre for Genetic Engineering and Biotechnology, Delhi	3	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Brain Research Centre, Gurgaon	7	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Centre of Biological Sciences, Bangalore	5	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Institute of Immunology, Delhi	3	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum	7	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Translational Health Science and Technology Institute, Faridabad	3	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Additionally, experts highlighted six institutions that were covered by the bibliometric study but may have additional researchers of interest. These institutions were also examined for relevance to the subthemes and additional researchers identified in four of them. The following table summarises this information:

Institution Name	Additional Researchers	Subthemes							
Christian Medical College, Vellore	215	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Bombay, Mumbai	1	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Delhi, Delhi	7	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Post Graduate Institute of Medical Education and Research, Chandigarh	65	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Funders

The availability of funds is an essential input to the growth of research in any field. Almost all Indian funders are well-established entities. The study looked across the broad spread of funding avenues available and identified three models of funding. All three are actively used in the public health domain.



Funding through the Government of India. When examining the grant windows identified by this study, it emerges that the Government of India provides the majority of identified grant windows. It thus is the key funder in public health providing crucial financial support directly to grantees. The Department of Biotechnology, Department of Science and Technology, Indian Council of Medical Research, as well as the University Grants Commission are some of the prominent government funders in India.

Funding through national Trusts and Foundations. Despite the predominance of funding for implementation-based projects, Indian Trusts and Foundations such as Sir Dorabji Tata and Sir Ratan Tata Trusts also support research funding in Public Health.

Funding from the local partner of a Government Agency. In several instances national and state governments partner with local institutions to facilitate funding for research. This model can be observed in the Government of India funding to Jawaharlal Nehru Centre for Advanced Scientific Research and the Indian Institute of Science.

Most sources of funding for public health are well established. As the Government of India is the primary funder in this sector, it is not surprising to see that funders are overwhelming longstanding entities. Most funding opportunities are not specifically directed to any one of the eight subthemes. Instead they are normally directed to broader, more generic categories such as funding for science and technology or funding for particular demographics such as women and other marginalised groups. However, many Researchers and Institutions working with the eight subthemes would be eligible for these funding opportunities. Funding can be provided on an input basis i.e., for specific cost items of research, such as salary, reagents, etc. or on an outcome basis i.e., results delivered. Much of the funding available through these sources is of the input type.

Section III

Researcher Matrices
Institution Map, List & Dossiers
Funder List & Dossiers

Researcher Matrices

Three matrices are presented in this section. The first matrix presents an alphabetically arranged list of RLI, their institutional affiliation and the subtheme in which they work. The second matrix provides the same data for ROI. The third matrix is an alphabetical listing of additional researchers from expert recommend Institutions.

Researchers at Leading Institutions

Researcher Code	Researcher name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
RLI01	Basak, Kausik	Indian Institute of Technology Kharagpur, Kharagpur			■					
RLI02	Bhardwaj, Nandana	Indian Institute of Technology Kharagpur, Kharagpur				■				
RLI03	Chatterjee, Jyotirmoy	Indian Institute of Technology Kharagpur, Kharagpur			■					
RLI04	Chitturi, Bhadrachalam	Amrita Vishwa Vidhyapeetham University, Coimbatore			■					
RLI05	Dikshit, Rajesh	Tata Memorial Hospital, Mumbai				■				
RLI06	D'Souza, Namita	PD Hinduja National Hospital and Medical Research Centre, Mumbai		■						
RLI07	Dutt, Amit	Tata Memorial Hospital, Mumbai				■				
RLI08	Ebrahim, Shah	Public Health Foundation of India, Gurgaon				■				
RLI09	Gupta, Vijay	All India Institute of Medical Sciences, Delhi					■			■
RLI10	Jayakumar, R	Amrita Vishwa Vidhyapeetham University, Coimbatore				■				
RLI11	Kabra, Sushil Kumar	All India Institute of Medical Sciences, Delhi					■			
RLI12	Kumar, Aarti	Community Empowerment Lab, Shivgarh							■	
RLI13	Kumar, Vishwajeet	Community Empowerment Lab, Shivgarh							■	
RLI14	Kumarasamy, Karthikeyan K	University of Madras, Chennai		■						
RLI15	Laxminarayan, Ramanan	Public Health Foundation of India, Gurgaon		■						
RLI16	Mahadevappa, Manjunatha	Indian Institute of Techology Kharagpur, Kharagpur			■					
RLI17	Manzoor, K	Amrita Vishwa Vidhyapeetham University, Coimbatore			■					
RLI18	Menon, Deepthy	Amrita Vishwa Vidhyapeetham University, Coimbatore			■					
RLI19	Michael, Joy S	Christian Medical College, Vellore					■			
RLI20	Misra, Ranjita	Institute of Life Sciences, Bhubaneswar			■			■		
RLI21	Nair, SV	Amrita Vishwa Vidhyapeetham University, Coimbatore			■					
RLI22	Parikh, PM	Tata Memorial Hospital, Mumbai				■				
RLI23	Parveen, Suphiya	Institute of Life Sciences, Bhubaneswar						■		
RLI24	Patel, Vikram	Sangath,Goa								■
RLI25	Paul, Vinod Kumar	All India Institute of Medical Sciences, Delhi							■	
RLI26	Prabaharan, M	SRM University, Kattankulathur			■					
RLI27	Prabhakaran, Dorairaj	Public Health Foundation of India, Gurgaon				■				
RLI28	Raina, Vinod	All India Institute of Medical Sciences, Delhi				■				

Researcher Code	Researcher name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
RLI29	Ram, Kirpa	Physical Research Laboratory, Ahmedabad	■							
RLI30	Reddy, Srinath K	Public Health Foundation of India, Gurgaon				■				
RLI31	Rengarajan, R	Physical Research Laboratory, Ahmedabad	■							
RLI32	Sahoo, Sanjeeb K	Institute of Life Sciences, Bhubaneswar			■			■		
RLI33	Sahoo, Tarini Prasad	Jawaharlal Nehru Cancer Hospital & Research Centre, Bhopal				■				
RLI34	Sankar, Jhuma	All India Institute of Medical Sciences, Delhi							■	
RLI35	Sankar, M Jeeva	All India Institute of Medical Sciences, Delhi							■	
RLI36	Sarin, MM	Physical Research Laboratory, Ahmedabad	■							
RLI37	Selvamurugan, N	SRM University, Kattankulathur			■					
RLI38	Sharma, Atul	All India Institute of Medical Sciences, Delhi				■				
RLI39	Shenai, Shubhada	PD Hinduja National Hospital and Medical Research Centre, Mumbai		■						
RLI40	Shidhaye, Rahul	Public Health Foundation of India, Gurgaon								■
RLI41	Sudheer, AK	Physical Research Laboratory, Ahmedabad	■							
RLI42	Swetha, Maddela	SRM University, Kattankulathur				■				
RLI43	Tripathi, Sachchida N	Indian Institute of Technology Kanpur, Kanpur	■							
RLI44	Udwadia, Zarir F	PD Hinduja National Hospital and Medical Research Centre, Mumbai		■						

Researchers at Other Institutions

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ROI01	Adak, Sudeshna	Independent			■					
ROI02	Alagarajan, M	International Institute for Population Sciences, Mumbai							■	
ROI03	Arokiasamy, Perianayagam	International Institute for Population Sciences, Mumbai							■	
ROI04	Arvind, R	Sri Sivasubramaniya Nadar College of Engineering, Chennai			■					
ROI05	Balakrishnan, Biji	Indian Institute of Technology, Mumbai				■				
ROI06	Bandyopadhyay, Subhadip	International Institute of Information Technology, Hyderabad			■					
ROI07	Barh, Debmalya	Institute of Integrative Omics and Applied Biotechnology, Purba Medinipur				■				
ROI08	Barhanpurkar, Amruta P	National Centre for Cell Science, Pune				■				
ROI09	Basu, Mausumi	Institute of Post-Graduate Medical Education and Research, Kolkata							■	
ROI10	Benegal, Vivek	National Institute of Mental Health and Neurosciences, Bengaluru								■
ROI11	Bhakat, Soumendranath	Birla Institute of Technology and Science Pilani, Ranchi						■		
ROI12	Bhan, Maharaj Kishan	Biotechnology Industry Research Assistance Council, Delhi				■				
ROI13	Bhandari, Nita	Centre for Health Research and Development, Delhi						■	■	
ROI14	Bhati, Shweta	Indian Institute of Technology Delhi, Delhi	■							
ROI15	Bhatia, Triptesh	Dr Ram Manohar Lohia Hospital, Delhi								■
ROI16	Boominathan, Lakshmanane	Genome-2-Bio-Medicine Discovery Centre, Puducherry				■				
ROI17	Chakravarty, Rubel	Bhabha Atomic Research Center, Mumbai			■					
ROI18	Chatterjee, Abhijeet	Bose Institute, Kolkata	■							
ROI19	Chatterjee, Aditya	University of Calcutta, Kolkata	■							
ROI20	Chattopadhyay, Aparajita	International Institute for Population Sciences, Mumbai							■	
ROI21	Das, Ila	Chittaranjan National Cancer Institute, Kolkata				■				
ROI22	Das, Jishnu	Centre for Policy Research, Delhi								■
ROI23	Das, Sushmita	Society for Nutrition Education and Health Action, Mumbai							■	
ROI24	Dash, Tapan K	National Institute of Science Education and Research, Bhubaneswar				■				
ROI25	Dubey, Debasmita	Buxi Jagabandhu Bidyadhar College, Bhubaneswar		■						
ROI26	Ghafur, Abdul	Apollo Hospital, Chennai		■						
ROI27	Goel, Neeraj	Sir Ganga Ram Hospital, Delhi		■						

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ROI28	Goli, Srinivas	Giri Institute of Developmental Studies, Lucknow							■	
ROI29	Gupta, NC	Guru Gobind Singh Indraprastha University, Delhi	■							
ROI30	Gurjar, BR	Indian Institute of Technology Roorkee, Roorkee	■							
ROI31	Hameed, Zohaib	National Institute of Technology, Warangal			■					
ROI32	Inamdar, Maneesha S	Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru				■				
ROI33	Janaki, C	Centre for Development of Advanced Computing, Bengaluru			■					
ROI34	Jose, Sam P	National Institute of Mental Health and Neurosciences, Bengaluru								■
ROI35	Kar, Abhishek	The Energy and Resources Institute, Delhi	■							
ROI36	Karande, Kiran P	HR Patel Institute of Pharmaceutical Education and Research, Dhule					■			
ROI37	Karthik, B	Sri Sivasubramaniya Nadar College of Engineering, Chennai			■					
ROI38	Karuna, Mangala N	Centre for Development of Advanced Computing, Bengaluru			■					
ROI39	Kashyap, Manoj Kumar	Institute of Bioinformatics and Applied Biotechnology, Bengaluru				■				
ROI40	Kumar, Abhishek	International Institute for Population Sciences, Mumbai							■	
ROI41	Kumar, Chandan	Indian Institute of Technology Roorkee, Roorkee							■	
ROI42	Kumar, Rajesh	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
ROI43	Laha, Arijit	International Institute of Information Technology, Hyderabad			■					
ROI44	Lalitha, MK	Madras Medical Mission, Chennai		■						
ROI45	Mahapatra, Bidhubhusan	Population Council India, Delhi							■	
ROI46	Mahmood, Zafar	CSIR - Indian Institute of Toxicology Research, Lucknow				■				
ROI47	Malik, Fayaz	Indian Institute of Integrative Medicine, Jammu				■				
ROI48	Mamatha, Ballal	Manipal University, Manipal		■						
ROI49	Mandal, Jharna	Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry		■						
ROI50	Mandana, KM	Advanced Medicare & Research Institute Hospital, Kolkata			■					
ROI51	Mathur, Devika	International Institute of Information Technology, Hyderabad			■					
ROI52	Mohan, Manju	Indian Institute of Technology Delhi, Delhi	■							
ROI53	More, Mahesh P	HR Patel Institute of Pharmaceutical Education and Research, Dhule					■			
ROI54	Mukherjee, Shoibal	Independent			■					
ROI55	Murdeshwar, Prashant	Infovet, Thane			■					
ROI56	Nangia, Ashwini	University of Hyderabad, Hyderabad						■		
ROI57	Pandey, Abhijeet P	HR Patel Institute of Pharmaceutical Education and Research, Dhule					■			

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ROI58	Pandian, Dhanasekara	National Institute of Mental Health and Neurosciences, Bengaluru								■
ROI59	Patel, Harun M	RC Patel Institute of Pharmaceutical Education & Research, Shirpur						■		
ROI60	Pathak, Praveen Kumar	Shivaji University, Kolhapur							■	
ROI61	Payra, Swagata	Birla Institute of Technology Extension Centre, Jaipur	■							
ROI62	Pothan, Laly A	Bishop Moore College, Mavelikara			■					
ROI63	Pradhan, Jalandhar	International Institute for Population Sciences, Mumbai							■	
ROI64	Praharaj, Ira	Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry		■						
ROI65	Prakash, Ravi	Population Council India, Delhi							■	
ROI66	Rai, Rajesh Kumar	Tata Institute of Social Sciences, Mumbai							■	
ROI67	Rajaraman, Divya	St John's Research Institute, Bengaluru								■
ROI68	Ranade, Anantbhushan	Deenanath Mangeshkar Hospital & Research Center, Pune				■				
ROI69	Rani, Pratibha	International Institute of Information Technology, Hyderabad			■					
ROI70	Ray, Ajoy K	Indian Institute of Engineering Science and Technology, Howrah			■					
ROI71	Rehman, IH	The Energy and Resources Institute, Delhi	■							
ROI72	Sachdev, Harshpal Singh	Sitaram Bhartia Institute of Science & Research, Delhi							■	
ROI73	Samad, Abdul	Bombay Veterinary College, Mumbai	■							
ROI74	Satyanarayana, VA	National Institute of Mental Health and Neurosciences, Bengaluru								■
ROI75	Sejian, Veerasamy	ICAR - Central Sheep and Wool Research Institute, Jaipur			■					
ROI76	Shah, Anamik	Saurashtra University, Rajkot						■		
ROI77	Shah, Jinesh S	Global Nanotech, Mumbai				■				
ROI78	Shaikh, Faraz	Saurashtra University, Rajkot						■		
ROI79	Sharma, Abhinay	Jawaharlal Nehru University, Delhi		■						
ROI80	Sharma, Sunil Kumar	University of Delhi, Delhi						■		
ROI81	Singh, Abhishek	International Institute for Population Sciences, Mumbai							■	
ROI82	Singh, Ashish	Indira Gandhi Institute of Development Research, Mumbai							■	
ROI83	Singh, Lucky	Tata Institute of Social Sciences, Mumbai							■	
ROI84	Singh, Prashant Kumar	International Institute for Population Sciences, Mumbai							■	
ROI85	Singh, Sachchidanand	CSIR - National Physical Laboratory, Delhi	■							
ROI86	Soni, Kirti	CSIR - National Physical Laboratory, Delhi	■							
ROI87	Swaminathan, Rajaraman	Cancer Institute (Women India Association), Chennai				■				

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ROI88	Thakur, Neha	Lady Hardinge Medical College, Delhi							■	
ROI89	Thara, R	Schizophrenia Research Foundation, Chennai								■
ROI90	Thomas, Sabu	Mahatma Gandhi University, Kottayam			■					
ROI91	Tiwari, Suresh	Indian Institue of Tropical Meteorology, Pune	■							
ROI92	Tomar, Geetanjali B	National Centre for Cell Science, Pune				■				
ROI93	Trivedi, PL	Indian Institute of Technology Bombay, Mumbai	■							
ROI94	Viswanath, Biju	National Institute of Mental Health and Neurosciences, Bengaluru								■
ROI95	Yajnik, Chittaranjan	King Edward Memorial Hospital, Pune							■	

Researchers at Expert Recommended Institutions

Serial Number	Researcher Name	Institution of Affiliation	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
1	Abraham, Asha	Christian Medical College, Vellore						■		
2	Abraham, OC	Christian Medical College, Vellore					■			
3	Abraham, Premila	Christian Medical College, Vellore				■		■		
4	Agarwala, Manoj	Christian Medical College, Vellore						■		
5	Aggarwal, Ritu	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
6	Agrewala, Javed N	CSIR - Institute of Microbial Technology, Chandigarh						■		
7	Ajay, Kumar	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
8	Ajjampur, SS	Christian Medical College, Vellore							■	
9	Amritanand, R	Christian Medical College, Vellore		■						
10	Anand, R	Christian Medical College, Vellore				■		■		
11	Anand, Sneh	Indian Institute of Technology Delhi, Delhi			■					
12	Antonisamy, B	Christian Medical College, Vellore		■						■
13	Appaiahgari, Mohan Babu	Translational Health Science and Technology Institute, Faridabad						■		
14	Arora, Shalabh	Christian Medical College, Vellore				■				
15	Arora, Sunil K	Post Graduate Institute of Medical Education and Research, Chandigarh		■		■		■		
16	Arulappan, N	Christian Medical College, Vellore					■			
17	Babji, Sudhir	Christian Medical College, Vellore						■		
18	Backianathan, Selvamani	Christian Medical College, Vellore				■				
19	Bal, Amanjit	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
20	Balaji, Veeraraghavan	Christian Medical College, Vellore						■		
21	Balamugesh, T	Christian Medical College, Vellore					■			
22	Balinga, PR	Christian Medical College, Vellore		■						
23	Balraj, Vinohar	Christian Medical College, Vellore							■	
24	Balukrishna, Sasidharan	Christian Medical College, Vellore			■	■				
25	Bamba, A	Christian Medical College, Vellore						■		
26	Bandyopadhyay, Santu	CSIR - Indian Institute of Chemical Biology, Kolkata				■				
27	Banerjee, Arpan	National Brain Research Centre, Gurgaon			■					
28	Banerjee, Dibyajyoti	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■	■		

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
29	Banerjee, Dibyendu	CSIR - Central Drug Research Institute, Lucknow				■				
30	Banu Rekha, VV	ICMR - National Institute for Research in Tuberculosis, Chennai		■			■	■	■	
31	Basu, Atanu	ICMR - National Institute of Virology, Pune		■						
32	Basu, Debasish	Post Graduate Institute of Medical Education and Research, Chandigarh								■
33	Basu, G	Christian Medical College, Vellore						■		
34	Bezbaruah, Rajib Lochan	CSIR - North-east Institute of Science and Technology, Jorhat		■						
35	Bhadauria, Smrati	CSIR - Central Drug Research Institute, Lucknow				■				
36	Bhagat, SK	Christian Medical College, Vellore				■				
37	Bhalla, Anil	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
38	Bhambhani, Suresh	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
39	Bhanarkar, AD	CSIR - National Environmental Engineering Research Institute, Nagpur	■							
40	Bharadwaj, Mausumi	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
41	Bharti, Alok Chandra	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
42	Bharti, Bhavneet	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
43	Bhaskar, Sangeeta	National Institute of Immunology, Delhi						■		
44	Bhatia, Alka	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
45	Bhatnagar, Shinjini	Translational Health Science and Technology Institute, Faridabad							■	
46	Biswal, Manisha	Post Graduate Institute of Medical Education and Research, Chandigarh					■			
47	Brahmadathan, KN	Christian Medical College, Vellore		■						
48	Chacko, A	Christian Medical College, Vellore		■						
49	Chacko, AG	Christian Medical College, Vellore				■				
50	Chacko, Ashok	Christian Medical College, Vellore					■			
51	Chacko, NK	Christian Medical College, Vellore				■				
52	Chacko, Raju Titus	Christian Medical College, Vellore				■				
53	Chakrabarti, Amitava	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
54	Chakrabarti, Arunaloke	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
55	Chakraborti, Anuradha	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
56	Chandy, Mammen	Christian Medical College, Vellore				■				
57	Chapla, Aaron	Christian Medical College, Vellore					■			
58	Charles, H	Christian Medical College, Vellore								■
59	Chattarji, Sumantra	National Centre of Biological Sciences, Bangalore								■

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
60	Chatterjee, Parangama	Christian Medical College, Vellore				■				
61	Chatterjee, S	Christian Medical College, Vellore		■						
62	Chaturvedi, Swasti	Christian Medical College, Vellore						■		
63	Chaudhary, Manohar Lal	ICMR - National Institute of Virology, Pune					■			
64	Chauhan, Virander S	International Centre for Genetic Engineering and Biotechnology, Delhi						■		
65	Chellappan, Sheeba	Christian Medical College, Vellore				■				
66	Chhabra, Seema	Post Graduate Institute of Medical Education and Research, Chandigarh				■		■		
67	Chhatwal, Jugesh	Christian Medical College, Vellore						■		
68	Chitra, Mandal	CSIR - Indian Institute of Chemical Biology, Kolkata				■				
69	Chopra, Manu	Christian Medical College, Vellore						■		
70	Chopra, Sidharth	CSIR - Central Drug Research Institute, Lucknow		■						
71	Chourasia, Manish Kumar	CSIR - Central Drug Research Institute, Lucknow						■		
72	Chowdhury, Goutam	CSIR - National Institute of Cholera & Enteric Diseases, Kolkata		■						
73	Chrispal, Anugrah	Christian Medical College, Vellore					■			
74	Christopher, DJ	Christian Medical College, Vellore					■			
75	Christopher, Solomon	Christian Medical College, Vellore				■				
76	Christudoss, Pamela	Christian Medical College, Vellore				■				
77	Daley, P	Christian Medical College, Vellore		■						
78	Das, Ashim	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
79	Das, Padma	CSIR - Indian Institute of Chemical Biology, Kolkata						■		
80	Das, Saikath	Christian Medical College, Vellore				■				
81	Datta, Dipak	CSIR - Central Drug Research Institute, Lucknow				■				
82	David, T	Christian Medical College, Vellore		■						
83	Dayal, Devi	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
84	Deodhar, Divya	Christian Medical College, Vellore						■		
85	Devakumar, D	Christian Medical College, Vellore			■					
86	Devasahayam, Suresh R	Christian Medical College, Vellore			■					
87	Dhananjayan, S	Christian Medical College, Vellore				■				
88	Dhanasekar, KR	Christian Medical College, Vellore						■		
89	Dhawan, Jyotsna	CSIR - Centre for Cellular and Molecular Biology, Hyderabad				■				
90	Dhindsa, N	Christian Medical College, Vellore				■				

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
91	Digumarathi, R	Christian Medical College, Vellore						■		
92	Dutta, AK	Christian Medical College, Vellore		■						
93	Dutta, Amit Kumar	Christian Medical College, Vellore					■			
94	Dutta, Shanta	CSIR - National Institute of Cholera & Enteric Diseases, Kolkata		■						
95	Eapen, Anu	Christian Medical College, Vellore				■				
96	Ezhilarasu, Punitha	Christian Medical College, Vellore				■				■
97	Faith, Minnie	Christian Medical College, Vellore				■				
98	Fleming, Denise H	Christian Medical College, Vellore						■		
99	Fleming, Jude Joseph	Christian Medical College, Vellore				■				
100	Garg, Mandeep	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
101	Gautam, Vikas	Post Graduate Institute of Medical Education and Research, Chandigarh		■			■			
102	George, Leni	Christian Medical College, Vellore						■		
103	George, Reena	Christian Medical College, Vellore			■	■				
104	Ghosh, Amit	CSIR - National Institute of Cholera & Enteric Diseases, Kolkata		■						
105	Ghosh, Sujata	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
106	Gill, Karan Dip	Christian Medical College, Vellore						■		
107	Giri, Ranjit K	National Brain Research Centre, Gurgaon				■				
108	Giri, Sidhartha	Christian Medical College, Vellore						■		
109	Gnanadurai, Angela	Christian Medical College, Vellore				■				
110	Godson, Henry Finlay	Christian Medical College, Vellore			■					
111	Gogtay, N	Christian Medical College, Vellore						■		
112	Gopalakrishnan, Ganesh	Christian Medical College, Vellore				■				
113	Gorsi, Ujjwal	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
114	Goyal, Kapil	Post Graduate Institute of Medical Education and Research, Chandigarh					■	■		
115	Gulati, Ajay	Post Graduate Institute of Medical Education and Research, Chandigarh			■					
116	Gupta, Kirti	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
117	Gupta, Madhu	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
118	Gupta, Mayank	Christian Medical College, Vellore					■			
119	Gupta, R	Christian Medical College, Vellore		■			■			
120	Gupta, Sanjay	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
121	Hariprasad, Roopa	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
122	Hedau, Suresh	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
123	Hota, Debasish	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
124	Hussain, Showket	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
125	Isaac, Bina	Christian Medical College, Vellore						■		
126	Isaac, Rita	Christian Medical College, Vellore				■				
127	Isiah, R	Christian Medical College, Vellore			■	■				
128	Jacob, KS	Christian Medical College, Vellore					■			■
129	Jadhav, MP	Christian Medical College, Vellore						■		
130	James, P	Christian Medical College, Vellore		■						
131	James, Prince	Christian Medical College, Vellore					■			
132	Janardhanan, Jeshina	Christian Medical College, Vellore					■	■		
133	Jasmine, S	Christian Medical College, Vellore		■						
134	Jayaseelan, L	Christian Medical College, Vellore					■			
135	Jennifer, P	Christian Medical College, Vellore				■				
136	Jeremiah, SS	Christian Medical College, Vellore		■						
137	Jha, Sandeep Kumar	Indian Institute of Technology Delhi, Delhi			■					
138	Job, Victoria	Christian Medical College, Vellore					■			
139	Joel, Anjana	Christian Medical College, Vellore				■				
140	John, Anulekha Mary	Christian Medical College, Vellore				■				
141	John, J	Christian Medical College, Vellore		■						
142	John, Jacob	Christian Medical College, Vellore					■			
143	John, Subhashini	Christian Medical College, Vellore			■	■				
144	John, Sushil M	Christian Medical College, Vellore							■	
145	Joseph, AJ	Christian Medical College, Vellore							■	
146	Joseph, P	Christian Medical College, Vellore				■				
147	Jude, J	Christian Medical College, Vellore		■						
148	Julka, Pramod K	Christian Medical College, Vellore				■				
149	Kakkar, Nandita	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
150	Kalaiselvan, S	Christian Medical College, Vellore		■						
151	Kallivayalil, RA	Christian Medical College, Vellore					■			

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
152	Kalra, Naveen	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
153	Kalyanasundaram, Dinesh	Indian Institute of Technology Delhi, Delhi			■					
154	Kanakasabapathy, Indirani	Christian Medical College, Vellore				■				
155	Kandasamy, Subramaniam	Christian Medical College, Vellore				■				
156	Kang, Gagandeep	Christian Medical College, Vellore						■	■	
157	Kang, Mandeep	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
158	Kannan, P	ICMR - National Institute for Research in Tuberculosis, Chennai						■		
159	Kapoor, Nitin	Christian Medical College, Vellore					■			
160	Karthikeyan, Arun S	Christian Medical College, Vellore						■		
161	Kashyap, Veena	ICMR - Institute of Cytology and Preventive Oncology, Noida					■			
162	Kasthuri, N	Christian Medical College, Vellore						■		
163	Katti, SB	CSIR - Central Drug Research Institute, Lucknow		■						
164	Kattula, Deepthi	Christian Medical College, Vellore						■		
165	Katumalla, Francis S	Christian Medical College, Vellore				■				
166	Kaul, Deepak	Post Graduate Institute of Medical Education and Research, Chandigarh				■		■		
167	Kekre, N	Christian Medical College, Vellore		■						
168	Kekre, Nitin S	Christian Medical College, Vellore				■				
169	Kesavan, LM	Christian Medical College, Vellore		■						
170	Keshava, Shyamkumar N	Christian Medical College, Vellore				■				
171	Khan, Fatima	Aligarh Muslim University, Aligarh		■						
172	Khan, Haris Manzoor	Aligarh Muslim University, Aligarh		■						
173	Khan, Mohammad Aijaz	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
174	Khandelwal, Niranjan	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
175	Khanna, Navin	International Centre for Genetic Engineering and Biotechnology, Delhi						■		
176	Khullar, Madhu	Post Graduate Institute of Medical Education and Research, Chandigarh				■		■		
177	Kirubakaran, R	Christian Medical College, Vellore				■				
178	Kolli, Viswa Kalyan	Christian Medical College, Vellore				■		■		
179	Konwar, Rituraj	CSIR - Central Drug Research Institute, Lucknow				■				
180	Koppiker, CB	Christian Medical College, Vellore				■				
181	Korula, A	Christian Medical College, Vellore				■				

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
182	Koul, Veena	Indian Institute of Technology Delhi, Delhi			■					
183	Krishnan, V	Christian Medical College, Vellore		■						
184	Krishnan, V Kalliyana	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum						■		
185	Kshirsagar, NA	Christian Medical College, Vellore						■		
186	Kumar Yashwant	Post Graduate Institute of Medical Education and Research, Chandigarh		■		■		■		
187	Kumar, Aniket	Christian Medical College, Vellore						■		
188	Kumar, Atul	CSIR - Central Drug Research Institute, Lucknow						■		
189	Kumar, Lekha Dinesh	CSIR - Centre for Cellular and Molecular Biology, Hyderabad				■				
190	Kumari, Malasha	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
191	Kunju, Nissan	Christian Medical College, Vellore			■					
192	Kurian, S	Christian Medical College, Vellore								■
193	Kurien, Reuben Thomas	Christian Medical College, Vellore				■				
194	Kurien, Roshan	Christian Medical College, Vellore					■			
195	Laksmhi, PVM	Post Graduate Institute of Medical Education and Research, Chandigarh	■							
196	Lal, Anupam	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
197	Lalitha, MK	Christian Medical College, Vellore		■						
198	Lalwani, Sanjay K	Christian Medical College, Vellore						■		
199	Lazarus, RP	Christian Medical College, Vellore		■						
200	Livingstone, Roshan S	Christian Medical College, Vellore					■			
201	Madhan, M	Christian Medical College, Vellore		■						
202	Maheswaran, S	Christian Medical College, Vellore						■		
203	Mahmood, Safrun	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
204	Majumdar, A	Christian Medical College, Vellore				■				
205	Majumdar, Amitabha	National Brain Research Centre, Gurgaon								■
206	Majumdar, Sekhar	CSIR - Institute of Microbial Technology, Chandigarh						■		
207	Malhotra, Samir	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
208	Malhotra, Savita	Post Graduate Institute of Medical Education and Research, Chandigarh								■
209	Mandal, Pravat K	National Brain Research Centre, Gurgaon					■			
210	Manipadam, Marie Therese	Christian Medical College, Vellore				■				
211	Manoharan, A	Christian Medical College, Vellore		■						

Serial Number	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
212	Manvizhi, S	Christian Medical College, Vellore						■		
213	Mathai, D	Christian Medical College, Vellore		■						
214	Mathai, E	Christian Medical College, Vellore					■			
215	Mathew, Anoop	Christian Medical College, Vellore					■			
216	Mathew, George	Christian Medical College, Vellore				■				
217	Mathew, Leni	Christian Medical College, Vellore				■				
218	Mattoo, SK	Post Graduate Institute of Medical Education and Research, Chandigarh								■
219	Medhi, Bikash	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
220	Mehndiratta, Amit	Indian Institute of Technology Delhi, Delhi			■					
221	Menon, Pradeep Aravindan	ICMR - National Institute for Research in Tuberculosis, Chennai		■						
222	Mewara, Abhishek	Post Graduate Institute of Medical Education and Research, Chandigarh		■			■			
223	Michael, Rajiv C	Christian Medical College, Vellore					■			
224	Minz, Ranjana W	Post Graduate Institute of Medical Education and Research, Chandigarh		■		■				
225	Misra, Amit	CSIR - Central Drug Research Institute, Lucknow						■		
226	Mohan Balvinder	Post Graduate Institute of Medical Education and Research, Chandigarh		■						
227	Moorthy, RK	Christian Medical College, Vellore		■						
228	Moses, Vinu	Christian Medical College, Vellore				■				
229	Mukhopadhyay, Kanya	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
230	Muliyil, Jayaprakash	Christian Medical College, Vellore						■	■	
231	Muraleedharan, CV	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum			■			■		
232	Muralidharan, Jayashree	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
233	Nada, Ritambhra	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
234	Nag, Shona	Christian Medical College, Vellore				■				
235	Nagaraju, Ganesh	Aligarh Muslim University, Aligarh		■						
236	Nahar, Uma	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
237	Naik, Dukhabandhu	Christian Medical College, Vellore					■			
238	Nair, Veena V	Christian Medical College, Vellore					■			
239	Narasimhaiah, Deepti A	Christian Medical College, Vellore				■				
240	Narendran, G	ICMR - National Institute for Research in Tuberculosis, Chennai		■			■	■		

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
241	Nehru, G	Christian Medical College, Vellore				■				
242	Ojha, Rajdeep	Christian Medical College, Vellore			■					
243	Oommen, Regi	Christian Medical College, Vellore					■			
244	Pai, R	Christian Medical College, Vellore				■				
245	Pal, Rahul	National Institute of Immunology, Delhi						■		
246	Pal, Sandip	Christian Medical College, Vellore				■				
247	Panda, Amulya	National Institute of Immunology, Delhi						■		
248	Parshad, R	Christian Medical College, Vellore				■				
249	Patel, Anant Bahadur	CSIR - Centre for Cellular and Molecular Biology, Hyderabad				■				■
250	Paul, Anu	Christian Medical College, Vellore						■		
251	Paul, Hema	Christian Medical College, Vellore					■			
252	Pavamani, Simon Pradeep	Christian Medical College, Vellore				■				
253	Pawar, SD	ICMR - National Institute of Virology, Pune		■						
254	Pazhani, GP	CSIR - National Institute of Cholera & Enteric Diseases, Kolkata		■						
255	Peedicayil, Jacob	Christian Medical College, Vellore				■		■		
256	Perakath, Benjamin	Christian Medical College, Vellore				■				
257	Peter, Dincy	Christian Medical College, Vellore					■			
258	Ponnuraja, C	ICMR - National Institute for Research in Tuberculosis, Chennai		■						
259	Potdar, Varsha	ICMR - National Institute of Virology, Pune					■			
260	Prabhakaran, SS	Christian Medical College, Vellore						■		
261	Prakash SS	Christian Medical College, Vellore				■				
262	Prakash, JA	Christian Medical College, Vellore		■						
263	Prakash, JAJ	Christian Medical College, Vellore					■			
264	Prakash, Mahesh	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■			
265	Premkumar, Jennifer Anne	Christian Medical College, Vellore				■				
266	Premlatha, K	Christian Medical College, Vellore		■						
267	Pulimood, Anna B	Christian Medical College, Vellore				■	■			
268	Puri, T	Christian Medical College, Vellore				■				
269	Rabi, Suganthy	Christian Medical College, Vellore						■		
270	Radotra, B. D.	Post Graduate Institute of Medical Education and Research, Chandigarh				■		■		

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
271	Raghava, GPS	CSIR - Institute of Microbial Technology, Chandigarh						■		
272	Raghavan, SC	Indian Institute of Science, Bengaluru				■				
273	Rajaian, S	Christian Medical College, Vellore				■				
274	Rajashekhar, V	Christian Medical College, Vellore		■						
275	Raju, RS	Christian Medical College, Vellore				■				
276	Ram, TS	Christian Medical College, Vellore				■				
277	Ramachandran, Geetha	ICMR - National Institute for Research in Tuberculosis, Chennai						■		
278	Ramachandran, Jeyamani	Christian Medical College, Vellore				■				
279	Ramakrishna, Balakrishnan	Christian Medical College, Vellore							■	
280	Ramamoorthy, Hemalatha	Christian Medical College, Vellore						■		
281	Ramani, Sasirekha	Christian Medical College, Vellore						■		
282	Ranganathan, Uma Devi K	ICMR - National Institute for Research in Tuberculosis, Chennai						■		
283	Rao, K Lakshmi	CSIR - Centre for Cellular and Molecular Biology, Hyderabad					■			
284	Rao, PS	CSIR - National Environmental Engineering Research Institute, Nagpur	■							
285	Ravindran, B Paul	Christian Medical College, Vellore			■					
286	Ravindran, BP	Christian Medical College, Vellore				■				
287	Ray, Pallab	Post Graduate Institute of Medical Education and Research, Chandigarh		■		■	■			
288	Raza, Adil	Aligarh Muslim University, Aligarh		■						
289	Rebekah, G	Christian Medical College, Vellore				■				
290	Rizvi, Meher	Aligarh Muslim University, Aligarh		■						
291	Rongsen-Chandola, T	Christian Medical College, Vellore						■		
292	Roychowdhury, Susanta	CSIR - Indian Institute of Chemical Biology, Kolkata				■				
293	Rupali, Priscilla	Christian Medical College, Vellore						■		
294	Saha, Lekha	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
295	Sahu, MK	Christian Medical College, Vellore		■						
296	Saini, Neeru	CSIR - Institute of Genomics and Integrative Biology, Delhi				■				
297	Sajith, KG	Christian Medical College, Vellore					■			
298	Samuel, P	Christian Medical College, Vellore				■				
299	Sarin, Apurva	National Centre of Biological Sciences, Bangalore				■				
300	Sarkar, R	Christian Medical College, Vellore							■	

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
301	Sarkar, Rajiv	Christian Medical College, Vellore						■		
302	Savarimuthu, RJS	Christian Medical College, Vellore								■
303	Saxena, Akshay Kumar	Post Graduate Institute of Medical Education and Research, Chandigarh			■	■				
304	Sehgal, Ashok	ICMR - Institute of Cytology and Preventive Oncology, Noida					■			
305	Sehgal, Rakesh	Post Graduate Institute of Medical Education and Research, Chandigarh		■			■	■		
306	Selvakumar, Ratnasamy	Christian Medical College, Vellore				■				
307	Selvaraj, P	ICMR - National Institute for Research in Tuberculosis, Chennai					■			
308	Sen, Ellora	National Brain Research Centre, Gurgaon				■				
309	Seth, A	Christian Medical College, Vellore				■				
310	Seth, Pankaj	National Brain Research Centre, Gurgaon								■
311	Sethi, Sunil	Post Graduate Institute of Medical Education and Research, Chandigarh		■			■			
312	Shafiq, Nusrat	Post Graduate Institute of Medical Education and Research, Chandigarh						■		
313	Shankar, Prinja	Post Graduate Institute of Medical Education and Research, Chandigarh						■	■	
314	Sharma, Shiv K	National Brain Research Centre, Gurgaon					■			
315	Sharma, Amit	International Centre for Genetic Engineering and Biotechnology, Delhi						■		
316	Sharma, JK	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
317	Sharma, Kusum	Post Graduate Institute of Medical Education and Research, Chandigarh		■			■			
318	Sharma, Shashi	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
319	Shinde VM	Christian Medical College, Vellore						■		
320	Shubhankar, M	Christian Medical College, Vellore		■						
321	Shukla, PK	CSIR - Central Drug Research Institute, Lucknow		■						
322	Sijwali, Puran Singh	CSIR - Centre for Cellular and Molecular Biology, Hyderabad		■						
323	Simon, Aby	Christian Medical College, Vellore						■		
324	Simon, Ebby George	Christian Medical College, Vellore				■				
325	Sindhu, KNC	Christian Medical College, Vellore							■	
326	Singh, A	Christian Medical College, Vellore			■	■				
327	Singh, Anil Kumar	CSIR - North-east Institute of Science and Technology, Jorhat		■						
328	Singh, Anup	Indian Institute of Technology Delhi, Delhi			■					
329	Singh, Neetu	Indian Institute of Technology Delhi, Delhi			■					
330	Singh, Pradyumn	Christian Medical College, Vellore				■				

Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
331	Singh, Veena	ICMR - Institute of Cytology and Preventive Oncology, Noida				■				
332	Singhal, Manphool	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
333	Sinha, Subrata	ICMR - National Institute for Research in Tuberculosis, Chennai				■		■		
334	Sitaram, Venkatraman	Christian Medical College, Vellore				■				
335	Sivadasan, Ajith	Christian Medical College, Vellore					■			
336	Sivarathinaswamy, Prabhu	Christian Medical College, Vellore							■	
337	Sodhani, Pushpa	ICMR - Institute of Cytology and Preventive Oncology, Noida					■			
338	Sodhi, Kushaljit	Post Graduate Institute of Medical Education and Research, Chandigarh			■	■	■			
339	Sophia, A	Christian Medical College, Vellore							■	
340	Sowmyanarayanan, TV	Christian Medical College, Vellore		■				■		
341	Sreedhar, AS	CSIR - Centre for Cellular and Molecular Biology, Hyderabad						■		
342	Sreedharan, Sujesh	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum			■					
343	Srivastava, A	Christian Medical College, Vellore				■				
344	Srivastava, Kishore K	CSIR - Central Drug Research Institute, Lucknow		■						
345	Srivastava, Kumkum	CSIR - Central Drug Research Institute, Lucknow		■						
346	Srivastava, Mrigank	CSIR - Central Drug Research Institute, Lucknow		■						
347	Srivastava, Rohit	Indian Institute of Technology Bombay, Mumbai			■					
348	Subhashini, J	Christian Medical College, Vellore				■				
349	Sugumar, M	Christian Medical College, Vellore		■						
350	Sundararaj, GD	Christian Medical College, Vellore		■						
351	Swarnakar, Snehasikta	CSIR - Indian Institute of Chemical Biology, Kolkata						■		
352	Sylaja, PN	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum			■					
353	Taneja, Neelam	Post Graduate Institute of Medical Education and Research, Chandigarh		■						
354	Taneja, Sunita	Christian Medical College, Vellore						■		
355	Thakur, Jarnail Singh	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
356	Thangaraj, B	Christian Medical College, Vellore							■	
357	Thankagunam, Balamugesh	Christian Medical College, Vellore		■						
358	Thankappan, KR	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum							■	
359	Tharyan, P	Christian Medical College, Vellore								■
360	Thomas, Hannah Mary	Christian Medical College, Vellore			■					

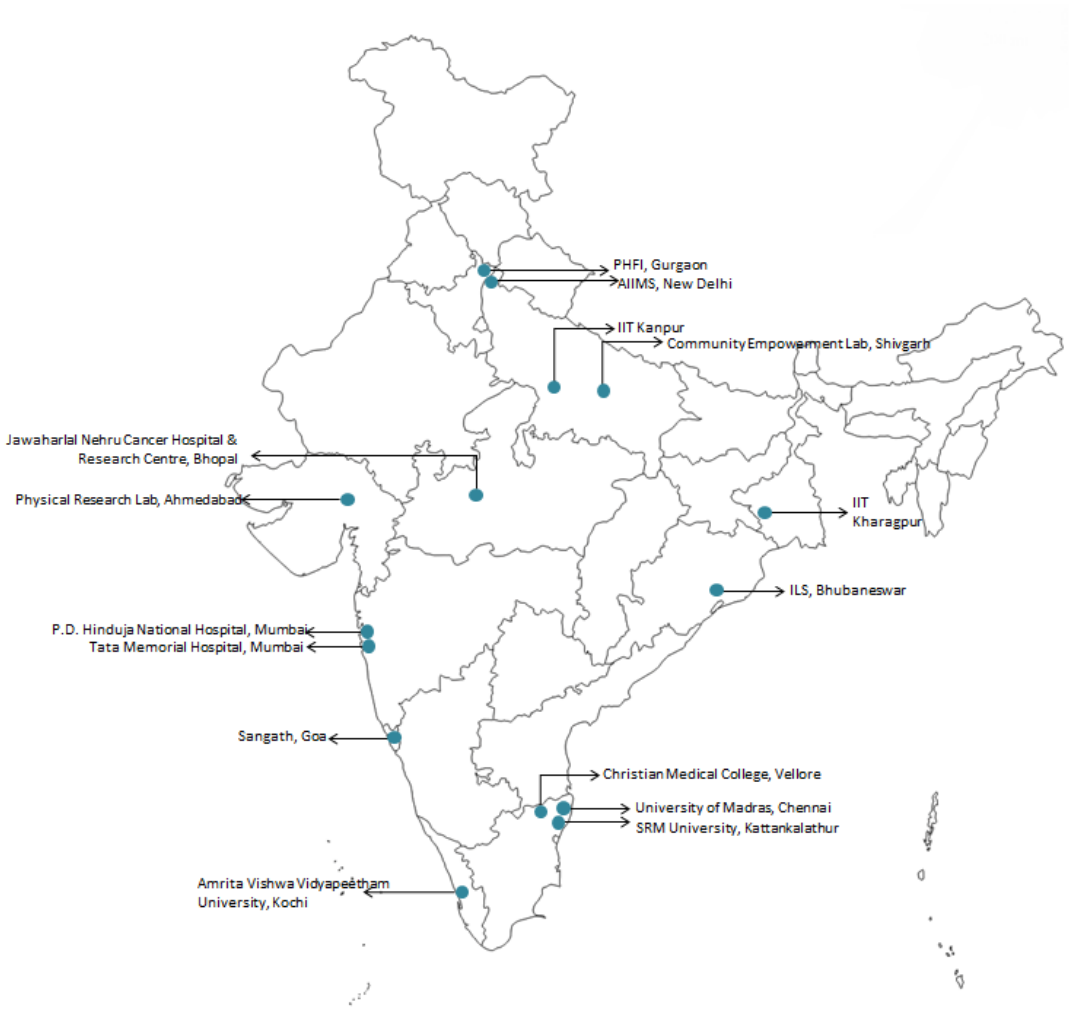
Researcher Code	Researcher Name	Institution of Affiliation	Subthemes							
			AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
361	Thomas, K	Christian Medical College, Vellore		■						
362	Thomas, Meera	Christian Medical College, Vellore						■		
363	Thomas, N	Christian Medical College, Vellore							■	
364	Thomas, Naveen	Christian Medical College, Vellore					■			
365	Thomas, Sanjeev V	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum		■						
366	Tripathi, Renu	CSIR - Central Drug Research Institute, Lucknow		■						
367	Turel, MK	Christian Medical College, Vellore		■						
368	Udgaonkar, Jayant B.	National Centre of Biological Sciences, Bangalore				■				■
369	Vaiphei, Kim	Post Graduate Institute of Medical Education and Research, Chandigarh				■	■	■		
370	Varghese, George M	Christian Medical College, Vellore					■			
371	Varghese, Shiny Sherlie	Christian Medical College, Vellore				■				
372	Varma, Ravi Prasad	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum			■					
373	Vashishta, Rakesh	Post Graduate Institute of Medical Education and Research, Chandigarh				■				
374	Veeramanikandan R	Christian Medical College, Vellore				■				
375	Veeraraghavan, B	Christian Medical College, Vellore		■						
376	Venkitaraman, Ashok R	Institute for Stem Cell Biology and Regenerative Medicine, Bengaluru				■				
377	Verghese, Valsan P	Christian Medical College, Vellore						■		
378	Verma, Savita	Post Graduate Institute of Medical Education and Research, Chandigarh							■	
379	VijayRaghavan, K	National Centre of Biological Sciences, Bangalore				■				
380	Viswabandya, Auro	Christian Medical College, Vellore				■				
381	Viswanathan, PN	Christian Medical College, Vellore				■				
382	Vivek, Gupta	Post Graduate Institute of Medical Education and Research, Chandigarh			■	■				
383	Vrati, Sudhanshu	Translational Health Science and Technology Institute, Faridabad						■		
384	Vyas, F	Christian Medical College, Vellore				■				
385	Vyas, Sameer	Post Graduate Institute of Medical Education and Research, Chandigarh			■	■				
386	Warier, A	Christian Medical College, Vellore					■			

Institution Map, List & Dossiers

This section provides a full alphabetically organised list of all institutions mapped to the subthemes of interest.

In addition, detailed dossiers on each of the 15 leading institutions have been developed from their websites which provides an overview of the institution, some relevant research projects in the past five years, collaborations, institutional strengths and funders.

Location of Leading 15 Institutions



List of 101 Identified Institutes

Advanced Medicare & Research Institute Hospital, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Aligarh Muslim University	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
All India Institute of Medical Sciences, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Amrita Vishwa Vidhyapeetham University, Coimbatore	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Apollo Hospital, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Bhabha Atomic Research Center, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Biotechnology Industry Research Assistance Council, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Birla Institute of Technology and Science Pilani, Ranchi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Birla Institute of Technology Extension Centre, Jaipur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Bishop Moore College, Mavelikara	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Bombay Veterinary College, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Bose Institute, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Buxi Jagabandhu Bidyadhar College, Bhubaneswar	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Cancer Institute (Women India Association), Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Centre for Development of Advanced Computing, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Centre for Health Research and Development, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Centre for Policy Research, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Chittaranjan National Cancer Institute, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	
Christian Medical College, Vellore	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Community Empowerment Lab, Shivgarh	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - National Physical Laboratory, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Central Drug Research Institute, Lucknow	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Centre for Cellular and Molecular Biology, Hyderabad	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Indian Institute of Chemical Biology, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Indian Institute of Toxicology Research, Lucknow	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Institute of Genomics and Integrative Biology, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - Institute of Microbial Technology, Chandigarh	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - National Environmental Engineering Research Institute, Nagpur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - National Institute of Cholera & Enteric Diseases, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
CSIR - North-east Institute of Science and Technology, Jorhat	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Deenanath Mangeshkar Hospital & Research Center, Pune	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Dr Ram Manohar Lohia Hospital, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Genome-2-Bio-Medicine Discovery Centre, Puducherry	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Giri Institute of Developmental Studies, Lucknow	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Global Nanotech, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Guru Gobind Singh Indraprastha University, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

HR Patel Institute of Pharmaceutical Education and Research, Dhule	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICAR - Central Sheep and Wool Research Institute, Jaipur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - Institute of Cytology and Preventive Oncology, Noida	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - National Institute for Research in Tuberculosis, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
ICMR - National Institute of Virology, Pune	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institue of Tropical Meteorology, Pune	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Engineering Science and Technology, Howrah	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Integrative Medicine, Jammu	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Science, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Bombay, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Delhi, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Kanpur, Kanpur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Roorkee, Roorkee	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indian Institute of Technology Kharagpur, Kharagpur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Indira Gandhi Institute of Development Research, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Infovet, Thane	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Institute of Bioinformatics and Applied Biotechnology, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Institute of Integrative Omics and Applied Biotechnology, Purba Medinipur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Institute of Life Sciences, Bhubaneswar	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Institute of Post-Graduate Medical Education and Research, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
International Centre for Genetic Engineering and Biotechnology, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
International Institute for Population Sciences, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
International Institute of Information Technology, Hyderabad	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Jawaharlal Nehru Cancer Hospital & Research Centre, Bhopal	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Jawaharlal Nehru University, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
King Edward Memorial Hospital, Pune	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Lady Hardinge Medical College, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Madras Medical Mission, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Mahatma Gandhi University, Kottayam	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Manipal University, Manipal	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Brain Research Centre, Gurgaon	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Centre for Cell Science, Pune	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Centre of Biological Sciences, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Institute of Immunology, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Institute of Mental Health and Neurosciences, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Institute of Science Education and Research, Bhubaneswar	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
National Institute of Technology, Warangal	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

PD Hinduja National Hospital and Medical Research Centre, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Physical Research Laboratory, Ahmedabad	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Population Council India, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Post Graduate Institute of Medical Education and Research, Chandigarh	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Public Health Foundation of India, Gurgaon	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
RC Patel Institute of Pharmaceutical Education & Research, Shirpur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sangath, Goa	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Saurashtra University, Rajkot	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Schizophrenia Research Foundation, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Shivaji University, Kolhapur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sir Ganga Ram Hospital, Delhi, India	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sitaram Bhartia Institute of Science & Research, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Society for Nutrition Education and Health Action, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Sri Sivasubramaniya Nadar College of Engineering, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
SRM University, Kattankulathur	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
St John's Research Institute, Bengaluru	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Tata Institute of Social Sciences, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Tata Memorial Hospital, Mumbai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
The Energy and Resources Institute, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
Translational Health Science and Technology Institute, Faridabad	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
University of Calcutta, Kolkata	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
University of Delhi, Delhi	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
University of Hyderabad, Hyderabad	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH
University of Madras, Chennai	AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

All India Institute of Medical Sciences

www.aiims.edu

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The All India Institute of Medical Sciences (AIIMS) is a leading Indian medical institute that was established in 1956 in New Delhi, as an autonomous institution under the Ministry of Health and Family Welfare. AIIMS was set up through an Act of Parliament as a medical public research university to serve as a nucleus for nurturing excellence in all aspect of health care. It consistently scores high on rankings, with the annual India Today survey placing it as the no. 1 Medical University in the country.

Selected Research Projects

Identification of barriers and facilitators for education of nurses, care of sick and at risk newborn babies in India funded by Indo Shastri grant, Canada and South-East Asia Research Office, World Health Organisation (SEARO, WHO)

A randomised double blind multicentre placebo controlled study of adjuvant i apatinib in women with early stage Erb B2 over expressing breast cancer EGF 105485 funded by GlaxoSmith Kline Asia Private Ltd.

Is antenatal breast-feeding education useful for improving breast-feeding practice? A study conducted on primigravidae

A study to identify the periodicity of deliveries on the basis of data on deliveries from selected hospitals in India

Hepatitis E virus super infection on chronic Hepatitis B associated liver disease: patho-biological study funded by DST

Institutional Strength

AIIMS has 52 teaching departments and centres. It has a manpower of over 10,000 personnel with over 500 faculty members as well as numerous resident doctors, nurses, scientists, non-medical officers and staff.

Collaborations

AIIMS has multiple collaborations with both international and domestic partners. Domestic collaborations are with national bodies like the Indian Council for Medical Research (ICMR) and government ministries. AIIMS also works closely with the Department of Biotechnology DBT). Key international collaborations include a Memorandum of Understanding for collaborative development of health sciences with Meiji Pharmaceutical University, Japan and with The Stanford-India Biodesign Programme with Stanford University, USA.

Funders

AIIMS receives core funding from the Government of India. Additionally, the DBT, ICMR and Department of Science and Technology provide support for development of research projects.

Amrita Vishwa Vidyapeetham University

www.amrita.edu

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Amrita Vishwa Vidyapeetham University (Amrita) was established in 1994 in Coimbatore, Tamil Nadu by the University Grants Commission, Government of India. Amrita is mandated to provide value-based education through science and spirituality. In 2009, Amrita was placed in Category A of Deemed Universities, granting it official recognition as a university by the Ministry of Human Resource Development, Government of India.

Selected Research Projects

1. *Chemically modified biopolymers: synthesis, characterisation and application* funded by Amrita Vishwa Vidhyapeethan University.
2. *Modelling the effects of decreased level of GABA and accumulation of GHB on GABA receptors and its effect on paediatric/ neonatal seizures* funded by Kerala State Council for Science, Technology and Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram.
3. *Preparation of carboxymethyl chitin and chitosan derivatives* funded by Marshall Marine Products.
4. *Identification and functional analysis of probiotic bacterial surface associated proteins in preventing enteropathogenic infections* funded by International Foundation for Science.
5. *Role of staphylococcal pathogen associated molecular patterns in septic arthritis* funded by Department of Science and Technology (DST), Science and Engineering Research Board (SERB).

Institutional Strength

Amrita's Research Centres include the Centre for Cancer Biology, the Centre for Nanosciences, the Centre for Applied Biochemistry, the Centre for Allied Health Sciences, and the Centre for Biomedical Engineering. The University also has several Schools for Biotechnology, Medicine, and Pharmacy. The total institutional strength of Amrita is 1750, which includes over 600 faculty members.

Collaborations

Amrita collaborates frequently with leading US universities such as University of California, Berkeley; Princeton University and Harvard University. It participates in the Erasmus Mundus exchange programme and through it has deputed a 100 faculty members, research scholars and students to various universities in England, Ireland, Italy, Sweden, Finland and Bulgaria. Amrita also partakes in twinning programmes with universities such as State University of New York and Vrije University of Amsterdam.

Funders

International funders of Amrita include the International Foundation for Science, Canada and the European Union. National funding is through Government of India organisations such as DST (SERB), Indian Space Research Organisation; Bhabha Atomic Research Centre; and the Kerala State Council for Science, Technology.

Christian Medical College & Hospital, Vellore

http://www.cmch-vellore.edu/

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Christian Medical College (CMC) Vellore is a large multispecialty teaching hospital and research institute located in Tamil Nadu, India. It was founded in 1900 and is consistently listed among the top ranked medical colleges in India. It has achieved significant milestones in the field of health, such as performing the first Reconstructive Surgery for Leprosy in the World (1948), performing the first successful Open Heart Surgery in India (1961), performing the first Kidney Transplant in India (1971), performing first Bone Marrow Transplantation (1986) in India and performing the first successful ABO incompatible Kidney Transplant in India (2009). CMC has a huge researcher pool producing vast amounts of research in diverse fields every year and is highly published in indexed peer reviewed journals.

CMC is home to the South Asian Cochrane Network and Centre and the internationally recognised Infectious Diseases Training and Research Centre. It also boasts a state of the art Stem Cell Research Centre funded as a Centre of Excellence by the Government of India.

Selected Research Projects

1. *Randomised, double blind, placebo controlled trial to evaluate the safety and immunogenicity of Peru 15 vaccine given simultaneously with measles in healthy Indian infants* funded by International Vaccine Institute, Seoul, Korea.
2. *Establishment of the core vaccine research unit* funded by the DBT.
3. *An advance centre for research and training evidence based health centre at CMC, Vellore* funded by ICMR.
4. *Effective Health Care Alliance Programme (EHCAP)* funded by Liverpool School Tropical Medicine.
5. *Nanobiotechnology in anticancer therapy and development of nanoparticlebased drug delivery system of Temozolamide for central nervous systemtumours* funded by CMC-NCBS Collaboration

Institutional Strength

CMC has over 8,100 staff which includes 1300 doctors and 1800 teaching and technical staff.

Collaborations

CMC Vellore has international collaborations include charitable organisations and universities such as International Asthma Services, Johns Hopkins University, University of Copenhagen and McGill University.

Funders

CMC Vellore receives funding from both national and international institutes. National funders include ICMR, DBT and DST. Regular international funders include WHO, International Vaccine Institute, Seoul, European Union, GlaxoSmithKline, Aventis, Novartis, Bill & Melinda Gates Foundation and Wellcome Trust.

Community Empowerment Lab

www.community.org.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Community Empowerment Lab (CEL) is a global health research and innovation organisation based in Shivgarh, central Uttar Pradesh, India. Set up in 2011, it works in developing community-centric innovations. Its areas of work are improving new born and maternal health, assessing neuro-cognitive development of children, assessing school quality and re-designing the basic education model and development of a platform to deliver impact at scale.

Selected Research Projects

1. *Shivgarh Community Health Intelligence Platform (CHIP).*
2. *Hospital-based sentinel surveillance system to track incidence of childhood meningitis caused by Hemophilus influenzae and Streptococcus pneumonia.*
3. *Community-based skin-to-skin contact for all new borns in community settings as a strategic point of convergence for interventions related to breastfeeding, hypothermia prevention, preterm management and neurodevelopment.*

Institutional Strength

The organisation has a field office in Shivgarh, Uttar Pradesh and its' administrative office and data centre in Lucknow, Uttar Pradesh. Its' institutional strength is under 40.

Collaborations

CEL has worked in collaboration with Harvard University, Johns Hopkins University, King George's Medical University and the National Health Mission.

Funders

CEL receives funding from Grand Challenges Canada and The World Health Organization for fostering evidence-based innovations for disadvantaged communities around the world.

Indian Institute of Technology Kanpur

www.iitk.ac.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The Indian Institute of Technology, Kanpur (IITK) is a public research university established in 1959. The mandate of the institution is to provide meaningful education, to conduct original research of the highest standard and to provide leadership in technological innovation. It was the first institute in India to offer computer science courses. It is ranked consistently in top five engineering schools in India and in the top ten public schools.

IIT-K has 20 academic departments and 11 Centres, which offer courses at the Bachelor's, Postgraduate and the doctoral level. The institute runs research and doctoral work in all its departments.

Selected Research Projects

1. *Operation & maintenance of air quality stations.*
2. *Comprehensive study on air pollution and greenhouse gases (GHGS) in Delhi - Vetting of basic engineering package design for the 10 & 21 MLD STP projects for KMDA.*
3. *Development & Field Application of A Multipurpose Sampler for Indoor Air Pollution measurement.*
4. *Analysis of Size-Segregated Composition and Distribution of Organic Compounds on Ambient Air Particles: Season Variations in Urban Environment in Northern India.*

Institutional Strength

The Department of Civil Engineering works on projects in the field of Air Pollution. The total strength of this department is 36.

Collaborations

IIT-K has collaborated with various national and international organisations. At the national level, the institute partners regularly with government bodies such as the Government of Delhi, Gujarat State Disaster Management Authority, Airport Authority of India, and the Archaeological Survey of India. Internationally it has collaborated closely with USAID.

Funders

IIT-K, is sponsored by a variety of government agencies including the Department of Science and Technology, Department of Electronics and Information Technology and Council of Scientific & Industrial Research. It also has international and national funding from private sector organisations such as Samsung, General Electric and Boeing International.

Indian Institute of Technology Kharagpur

www.iitkgp.ac.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

In 1951 the first Indian Institute of Technology (IIT) was established in Kharagpur, West Bengal. It has a two-fold vision; to be a Centre of Excellence in Education and Research producing global leaders in science, technology and management, and to be a place where knowledge is created in frontier areas of national and global importance. In 2014, it was ranked 20 by the QS-BRICS rankings.

Selected Research Projects

1. *Development of multifunctional dendritic polymers for injectable bone tissue engineering* funded by Department of Biotechnology.
2. *Aerosol chemical and optical characteristics over an urban coastal city in the Ganges Delta* funded by Sponsored Research and Industrial Consultancy (SRIC), IIT.
3. *Improving breast cancer diagnosis and prognostication: automated multimodality image analytics to develop easily accessible quick throughput solutions* funded by Ministry of Human Resource Development, Government of India.
4. *Impact of immunization programs in children with HIV in West Bengal* funded by SRIC, IIT.
5. *Evaluation of atmospheric boundary layer parameters for validating atmospheric flow models at Kalpakkam* funded by Board of Research in Nuclear Sciences, Department of Atomic Energy, Indira Gandhi Centre for Atomic Research.

Institutional Strength

IIT Kharagpur has five relevant departments; Biotechnology, Medical Science and Technology, Civil Engineering, Centre for Ocean, Rivers, Atmosphere and Land Sciences and the School of Bioscience. It has 67 faculty members across these departments.

Collaborations

IIT Kharagpur has over thirty international collaborations through Memorandums of Understanding, Institutional Partnership and Exchange programs. International collaborations include the Virginia Commonwealth University, USA; the Gwangju Institute of Science & Technology, South Korea and the RWTH Aachen University, Germany. It collaborates extensively with UK through MOUs with University of Southampton, University of Warwick and the University of Birmingham. Nationally, it collaborates with the other IITs such as IIT Bombay on several research projects as well as with Government of India agencies.

Funders

IIT Kharagpur has received more than 6.3 billion rupees of funding in the last 5 years. Most of this funding is from Government of India, private and international funding agencies and enterprises. Additionally, DBT, the Ministry of Human Resource Development and the Indian Council of Medical Research, provide support for development of research projects.

Institute of Life Sciences

www.ils.res.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The Institute of Life Sciences (ILS) was established in 1989 by the Government of Odisha in Bhubaneswar. In August 2002, ILS was been brought under the fold of the Department of Biotechnology (DBT) as an autonomous institute. The mandate of ILS is to undertake basic and translational research in frontier areas of Life Sciences. Infectious Disease Biology, Gene Function and Regulation and Translation Research and Technology Development are the three main research interests of the faculty at ILS.

Selected Research Projects

1. *Magnetic nano particles: as a delivery vehicle for brain tumor* funded by Department of Science and Technology (DST) – Science and Engineering Research Board (SERB).
2. *Evaluation of cytotoxicity& mechanism of apoptosis of doxorubicin using folate decorated chitosan nanoparticles for targeted delivery of ratinoblastoma* funded by Council of Scientific and Industrial Research (CSIR).
3. *A comprehensive understanding of the Nasopharyngeal Carcinoma (NPC) in the North Eastern Region of India* funded by Department of Biotechnology.
4. *Studies on antibiotic resistance virulance pattern and biofilm formation among Staphylococous haemolyticus strains isolated from ocular infection* funded by DST (SERB).
5. *A study of role of novel orphan family members of Estrogen Receptor (ER) and their interacting corepressors in chromating remodelling leading to deregulation of ER-a in Breast Cancer* funded by DST.

Institutional Strength

The three primary research divisions under ILS are Infectious Disease Biology; Gene Function; and Regulation and Translational Research. The Infectious Disease Biology research area includes 55 scientists and other staff members.

Collaborations

ILS enjoys close collaborations with the government of India, through departments like CSIR, DBT and DST.

Funders

Most of the extra mural projects at ILS are funded by the Government of India through DBT, CSIR and DST.

Jawaharlal Nehru Cancer Hospital & Research Centre (JNCH)

http://jnch.nic.in/

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Jawaharlal Nehru Cancer Hospital & Research Centre is a private-sector cancer care hospital in Bhopal, India. It was founded in 1995 by Madhya Pradesh Cancer Chikitsa Evam Seva Samiti with large scale public contributions and support of the State Government. Its mandate is to provide excellent treatment facilities affordably. It is a major cancer cure and care institute in central India. It provides complete diagnostic and therapeutic facilities of all cancers through all the modalities such as Radiotherapy, Oncosurgery, Chemotherapy (Medical Oncology), Anaesthesiology, Nuclear Medicine, Radio-diagnosis & Imaging, Pathology, Palliative Care and Community Oncology.

Selected Research Projects

1. *'Tobacco Cessation Clinic', an initiative providing specialized services (medical and psychological) to combat tobacco addiction* funded by World Health Organisation (WHO).
2. *Formulation of cheaper and effective alternative medicines based on Tulsi and Ashwagandha roots to reduce the side effects of chemotherapy and radiotherapy.*

Institutional Strength

It has the following specialties – Surgical, Medical and Radiation Oncology, Pain & Palliative Care and Community Oncology Departments. The department of Pathology has Haematology, Biochemistry, Microbiology, and Immunology units as well as Tumour marker assays facility and Immuno Histochemistry.

Collaborations

WHO, ICMR, Government of Madhya Pradesh.

Funders

The hospital is funded by the State Government and Government of India, as well has various public and private undertakings, charitable organizations, NRIs and international organisations. These include the WHO, Atomic Energy Commission, Government of India, Defence Research and Development Organization, ICMR, Department of Science and Technology and Madhya Pradesh Council of Science and Technology.

P.D. Hinduja Hospital and Research Centre

www.hindujahospital.com

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

P.D. Hinduja Hospital & Research Centre was established in the early 1950's under the leadership of the late Shri P.D. Hinduja with a vision to deliver quality healthcare. This tertiary care hospital is stationed in Mumbai, India with the aim to lead the pathway to medical excellence with world-class healthcare treatments and services.

Selected Research Projects

1. Dr. Zarir F. Udwadia: *Impulsis study of the 1st novel ILD/ IPF drug NINTEDANIB*.
2. Dr. Shubuda Shenai: *Evaluation of the performance outcome of LED microscopy in high TB incidence setting*
3. Dr. Shubuda Shenai: *Blinded, cross-sectional study to determine the performance of FIND/ Cepheid Xpert MTB assay for rapid detection of TB & Rifampicin resistance*
   Dr. Shubuda Shenai: *Examination of Pyrazinamide resistance in clinical isolates of M. tuberculosis complex using different phenotypic and genotypic methods*
4. Dr. Shubuda Shenai: *Analysis of different molecular techniques for diagnosis of abdominal & osteoarticular TB*
5. Dr Namita D'souza: *Molecular detection and characterization of MRSA by PCR using a sequencing methods like MLST.*

Institutional Strength

P.D. Hinduja Hospital & Research Centre has three consultants in Psychiatry, one consultant in Nuclear Medicine, four consultants in Cancer Chemotherapy, three consultants in Cancer Radiation Therapy, nine consultants in Cancer Surgery and two consultants in Cancer Urology.

Collaborations

P.D. Hinduja Hospital & Research Centre has collaborated with many international and national partners. International collaborators include Massachusetts General Hospital (MGH), Boston, USA, and American Association of Physicians of Indian origin. Additional, it has partnered in India with Institute for Research in Reproduction, Indian Council of Medical Research and Tata Institute of Fundamental Research.

Funders

Hinduja Foundation is the main source of funding for P.D. Hinduja Hospital & Research Centre.

Physical Research Laboratory

www.prl.res.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Known as the cradle of space sciences in India, the Physical Research Laboratory (PRL) was established in 1947 in Ahmedabad, Gujarat. As a unit of the Department of Space, Government of India, PRL carries out fundamental research in select areas of Physics, Space and Atmospheric Sciences, Astronomy, Astrophysics and Solar Physics, and Planetary and Geosciences. AcSIR was was established by an Act of Parliament, the Academy of Scientific Innovative Research Act, 2011. AcSIR has adopted the mandate to create and train the best of tomorrow's S&T leaders through a combination of innovative and novel curricula, pedagogy and evaluation.

Selected Research Projects

1. Dr. Tanveer Ahmad: *Mechanistic Understanding of the Role of Asymmetric Dimethyl Arginine and Mitochondrial Dysfunction in Asthma Pathogenesis* funded by CSIR-IGIB, New Delhi.
2. Dr. Sukhdeb Saha: *Synthesis of Photoactive Molecular Probes for the Recognition of Cations and Anions of Biological Significance* funded by CSIR-CSMCRI, Bhavnagar.
3. Dr. Gulshan Singh: *Development of Molecular Techniques for the Rapid Culture-Free Detection of Bacteria in Environment* funded by CSIR-IITR, Lucknow.
4. Dr. Amit Kumar Gupta: *Molecular Modeling Based Design, Synthesis and Biological Studies of Novel Antimalarial and Antiulcer Agents* funded by CSIR-CDRI, Lucknow.
5. Dr. Shalini Asthana: *Development of nanoreservoir systems for effective delivery of chemotherapeutic agent against experimental visceral leishmaniasis* funded by CSIR-CDRI, Lucknow.

Institutional Strength

The relevant department of PRL is the Academy of Scientific& Innovative Research (AcSIR) is a world class research academy functioning within 37 national laboratories, six units and 39 extension centres, encompassing biological, physical, chemical and engineering sciences, of the Council of Scientific & Industrial Research (CSIR) that have the country's best infrastructural facilities. The faculty consists of ~2000 CSIR scientists as well as another ~1000 from other institutions.

Collaborations

Faculty in the department of Space and Atmospheric Sciences collaborate with other faculty from universities such as The Open University, UK, National Synchrotron Radiation Research Centre, Taiwan and University of Notredame, USA. Indian institutions that collaborate with PRL are National Atmospheric Research Laboratory, Indian Institute of Astrophysics, Inter-University Centre for Astronomy and Astrophysics, IIST, Tata Institute of Fundamental Research, Defence Research and Development Organisation and Raman Research Institute.

Funders

PRL receives support mainly from the Department of Space, Government of India.

Public Health Foundation of India

PUBLIC HEALTH FOUNDATION OF INDIA

www.phfi.org

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The Public Health Foundation of India (PHFI) was established in 2006 and is headquartered in the National Capital Region, India. This public-private partnership is focused on improving institutional capacity in India to strengthen policy development, training and research in the area of Public Health.

Selected Research Projects

1. *Andhra Pradesh children and parents study: nutritional challenges, abdominal adiposity and type 2 diabetes in Indians: parental and offspring cardio-metabolic risk: a trans-generational extension of Hyderabad nutrition trial.*
2. *Mental health consequences in children orphaned by AIDS: implications for service delivery.*
3. *A smart-phone enabled diagnosis and management services for hypertension and diabetes at primary health settings in Kerala, India.*
4. *Challenges to accessing and remaining on ART In India: Perspectives of women and children living with HIV.*
5. *Barriers to access maternal health services in rural Andhra Pradesh with special focus on spatial access.*

Institutional Strength

PHFI has a research faculty strength of 100 personnel including over 30 PhDs. It has several Centres of Excellence including the Center for Cardio-metabolic Risk Reduction in South Asia, the South Asia Centre for Disability Inclusive Development and Research**,** the South Asia Network for Chronic Disease, the Centre for Mental Health and the Ramalingaswami Centre for Social Determinants of Health.

Collaborations

PHFI has partnered with numerous international and national collaborators including governments, development organisations, universities and foundations. Some of the international collaborators include USAID, AusAID, European Commission, The World Bank Group and the World Health Organization. Additionally, it partners with the government of India through the Ministry of Health and Family Welfare; Ministry of Science and Technology; and the Planning Commission.

Funders

The Ministry of Health and Family Welfare, foundations and private donors are the main sources of funding for PHFI. Since PHFI's inception, it has obtained donor funds exceeding 2 billion rupees. Additionally it has won several competitively adjudged research and project grants from international agencies including Wellcome Trust; the US-based National Institutes of Health; Bill and Melinda Gates Foundation; Norwegian Government; Bloomberg Global Initiative; World Health Organization; World Bank; USAID; and UNICEF. Major national funding agencies include Ministry of Health and Family Welfare, Indian Council of Medical Research, National Human Rights Commission, Department of Science and Technology, and several State level organisations.

Sangath

www.sangath.com

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

Sangath is a not for profit organisation established in 1996 and is recognised by the Ministry of Science and Technology as a Scientific and Industrial Research Organisation. It is a nodal agency for the National Trust for the welfare of persons with Autism, Mental Retardation, Cerebral Palsy and Multiple Disabilities. Sangath's headquarters are in Goa, India. They work across 10 Indian states with offices in key cities such as Bangalore, Bhopal, Nagpur and Tezpur.

Selected Research Projects

1. *Sustainable programme incorporating nutrition and games for maximising child development growth and survival.*
2. *Parent-mediated intervention for autism spectrum disorders in South Asia plus.*
3. *South Asian hub for advocacy research and education on mental health.*
4. *Programme for improving mental healthcare.*
5. *Programme for effective mental health interventions in under-resourced health systems.*

Institutional Strength

The General Body of Sangath is a 31 member team which is supported by fellows and interns.

Collaborations

Sangath has previously collaborated with national institutes as well as international partners. It has collaborated with the UK through DFID, London School of Hygiene and Tropical Medicine as well as Wellcome Trust. National partners include the Public Health Foundation of India and the National Trust.

Funders

Sangath receives most of its funding from the Wellcome Trust. Additionally, the National Institute of Mental Health through the London School of Hygiene and Tropical Medicine, Autism Speaks, USA and the Department for International Development through the University of Capetown, South Africa provide support for development of research projects. Sangath has also received funding from the Public Health Foundation of India and the Jamsetji Tata Trust.

Sri Ramaswamy Memorial University

www.srmuniv.ac.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The Sri Ramaswamy Memorial (SRM) University is a co-educational private university with its campus in Kattankulathur, Tamil Nadu. It was founded in 1985 as SRM Engineering College in Kattankulathur, under University of Madras. It aims to be a world-class university in creating and disseminating knowledge, and providing students with a unique learning experience in Science, Technology, Medicine, Management and other areas of scholarship that will best serve the world and betterment of mankind.

Selected Research Projects

1. *Molecular mechanism of neonatal sepsis* funded by Department of Biotechnology (DBT)
2. *Studies on characteristics of aerosols* funded by Indian Space Research Organisation (ISRO)
3. *Regulation of mesenchymal stem cell towards osteogenetic cell lineage by micro RNAs* funded by Indian Council of Medical Research (ICMR)
4. *A potential target gene for breast cancer progression in-vivo* funded by ICMR
5. *Evaluation of the smoke free Chennai mass media campaign* funded by World Lung Foundation, USA.

Institutional Strength

The university has 11 relevant departments working in the areas of Biochemistry, Biomedical Engineering, Biotechnology, Civil Engineering, Clinical Psychology, Community Medicine, Genetic Engineering, Microbiology, Psychiatry, Public Health, Pathology and Radiology. There are a total of 265 faculty members across these departments.

Collaborations

SRM University collaborates extensively with foreign universities across Asia, United States, Europe and Australia. These include partnerships and Memorandums of Understanding with Tokyo Institute of Technology, Japan; Chinese Academy of Sciences, China; University of Nottingham, UK and University of Melbourne, Australia. It has tie ups with 70 top class universities from USA and Australia for twinning programmes. It also partners with UK based University such as Warwick University, University of Manchester, University of Birmingham for twinning programmes.

Funders

SRM University is actively involved in various funded projects, and has received over 57 million rupees from various governmental agencies such as DBT, ISRO, ICMR and Department of Science and Technology.

Tata Memorial Hospital

tmc.gov.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The Tata Memorial Hospital (TMH) was initially commissioned by the Sir Dorabji Tata Trust in 1941 in Mumbai. The Tata Memorial Hospital and Cancer Research Institute merged as the two arms of the Tata Memorial Centre (TMC) in 1966, to create the first comprehensive cancer centre in India. TMC is an example of private philanthropy augmented by government support with a mandate for service, education and research in Cancer.

Selected Research Projects

1. *Pathobiology and clinical profile of HIV - associated cancers in India and the West.*
2. *Retromolartrigone squamous cell cancers: The unexplored wisdom of MDCT in assessing bone invasion.*
3. *Improving cervical cancer prevention among HIV-infected women using novel HPV based biomarker assays: an Intramural-to-India study.*
4. *Role of HPV in etiology and progression of head and neck cancer.*
5. *PCR detection of Schistosoma haematobium DNA in bladder cancer tissue.*

Institutional Strength

Tata Memorial Hospital consists of multiple specialised divisions including the Clinical Research Secretariat, the Cancer Research Institute, the Clinical Research Centre, Psychiatry Division, Pathology Division, Biochemistry Division, Cytopathology Division, Molecular Pathology Division, Cancer Cytogenetics Division, Microbiology Division, Transfusion Medicine Division, Nuclear Medicineand Radio-Diagnosis. Over 150 personnel work across these departments. The Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) is the Research & Development satellite of TMC.

Collaborations

Tata Memorial Hospital has collaborated with several international partners such as King's Health Partners Integrated Cancer Centre (ICC) to facilitate joint research, fellowships, training and exchange visits between Tata Memorial Hospital and ICC. It has also partnered with other collaborators such as the International Agency for Research on Cancer, Lyon France, University of North Carolina, Mt. Sinai School of Medicine, Centre for Global Health Research, and the School of Public Health, Newcastle.

Funders

TMH receives its core funding from the Government of India. ACTREC receives funding from governmental agencies such as Department of Biotechnology, Department of Science and Technology, Indian Council of Medical Research, and philanthropies including the Lady Tata Memorial Trust.

University of Madras

www.unom.ac.in

AP	AMR	BS	CBRM	DN	DVD	MCHN	MH

Overview

The University of Madras is a public state university in Chennai, Tamil Nadu. Established in 1857, it is one of the oldest and premier universities in India. The National Assessment and Accreditation Council has confed 'five star' accreditation to it and the university has been given the status of 'University with Potential for Excellence' by the University Grants Commission. Furthermore, the QS-BRICS Ranking places the University of Madras in 76th place.

Selected Research Projects

1. *Magnetic Nanoparticles for effective target drug delivery of carvacrol against liver carcinogenesis – A molecular approach* funded by Indian Council of Medical Research (ICMR).
2. *Development of rapid detection method for the identification of Begomoviruses based on gold nanoparticles conjugated DNA probe* funded by National Centre for Nanoscience and Nanotechnology, University of Madras.
3. *Antineoplastic effect of Semecarpus anacardium Linn. nut extract with reference to tumour marker (muc-1) in experimental mammary carcinoma in Sprague-Dawley rats* funded by ICMR.
4. *Studies on mumps virus infections among MMR vaccine recipients and mumps associated infertility* funded by ICMR.
5. *Impact of perceived parental expectation, perceived competence and academic pressure on psychological well-being of students during adolescence* funded by University Grants Commission (UGC).

Institutional Strength

The university has 68 teaching and research departments grouped under 18 schools, covering languages, humanities, science, technology and medicine. The university has eight departments working in the areas of Biochemistry, Biotechnology, Medical Biochemistry, Microbiology, Pharmacology and Environment Toxicology, Genetics, Pathology and Psychology. It has 32 faculty members across these departments.

Collaborations

The University of Madras has a very extensive network of international institutions and universities for academic collaborations and joint research. Nationally, ICMR, UGS and Department of Science and Technology (DST) are some agencies that collaborate with the University of Madras on research projects.

Funders

Funding for research has been provided by government bodies such as ICMR, DST and UGC.

Funder List & Dossiers

This section provides dossiers on each of Indian funders mapped that fund research on the subthemes of Public Health and Well Being. Each dossier provides information on the funder from its website, eligibility for its grant funds, and description of relevant grant windows.

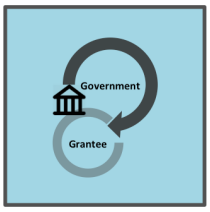
The list is arranged alphabetically.

List of Funders

S. No.	Name of the Funder
1	Council of Scientific & Industrial Research
2	Department of Biotechnology
3	Department of Science &Technology
4	Indian Council of Agricultural Research
5	Indian Council of Medical Research
6	Indian Space Research Organisation
7	Kerala State Council for Science and Technology & Environment
8	Department of Health Research Ministry of Health & Family Welfare
9	Science and Engineering Research Board
10	Sir Dorabji Tata Trust and the Allied Trusts
11	Sir Ratan Tata Trust & Navajbai Ratan Tata Trust
12	University Grants Commission

Council of Scientific & Industrial Research

www.csir.res.in



Overview

The Council of Scientific and Industrial Research (CSIR) was established in 1942 and is headquartered in New Delhi. CSIR has a pan-India presence. It focuses on research and development covering a wide range of science and technology. The Ministry of Science and Technology is the main source of funding for CSIR and was allocated 37 billion rupees in 2014. The duration of offered grant windows vary from 2 years to 3 years. Most grant windows under CSIR pay a monthly stipend to the grantees.

Eligible Recipients

Only individual researchers are eligible to receive funding from CSIR.

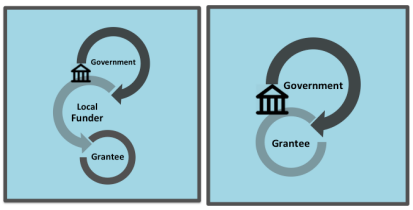
Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Senior Research Associateship	To provide temporary placement to enable the Associate to do research/teaching in India while looking for a regular position. The SRA is also applicable to Medical Sciences, Social Sciences and Humanities	Input	3 yrs	No
CSIR Research Grants	For financial assistance to promote research work in the fields of Science & Technology, including Agriculture, and Medicine. Under this, funds provided are for one or more Junior Research Fellows, Senior Research Fellows and Research Associates, contingencies and equipment	Input	NA	No
CSIR-Nehru Science Postdoctoral research Fellowship Scheme	To facilitate promising young researchers' transition from mentored to independent research career in the fields of basic science, engineering, medicine and agriculture	Input	2 yrs	No

Department of Biotechnology

www.dbtindia.gov.in

DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology



Overview

The Department of Biotechnology (DBT) was established in 1986 and is headquartered in New Delhi. The Department aims to promote Biotechnology on a large scale in India. The main focus of DBT is to provide manufacturing and research and development support in the area of Biology. It looks to facilitate institution and University interaction along with establishing successful international collaborations. DBT has previously collaborated with national institutes as well as international partners from the USA and the UK. The Ministry of Science and Technology is the main source of funding for DBT and allocated 15 billion rupees in 2014. The durations of grant windows offered by DBT vary from 10 weeks to 5 years. Most grant windows under DBT pay a monthly stipend to the grantees. In some cases an annual research contingency grant and a house rent allowance is also set aside.

Eligible Recipients

Universities, institutions and individual researchers are all eligible to receive funding from DBT.

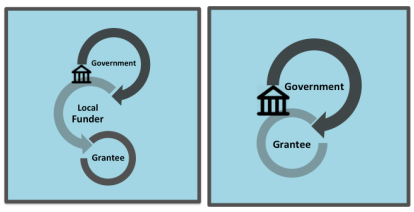
Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
DBT- Research Associateship	For post doctoral research.	Input	2 yrs	Indian Institute of Science, Bangalore
Khorana Program for Scholars	For Indian students of BTech, MTech and MSc to undertake research internships.	Input	10 weeks	Wisconsin-Madison University (USA) and other American universities such as Minnesota, Michigan, Iowa, Indiana and Georgetown
Ramalingaswamy Re-entry Fellowship	For biotechnologists, providing them an attractive avenue to pursue R&D in Indian institutions.	Input	5 yrs	No
TATA Innovation Fellowships	To promote innovation in science, especially in the area of Biotechnology, to find path-breaking solutions to the major challenges.	Input	3 yrs	No
The DBT Wellcome	To build excellence in the	Input	5 yrs	Wellcome Trust

Trust Alliance Fellowships	Indian bio-medical scientific community by supporting future leaders in the field.			
National Bioscience Awards for Career Development	To boost outstanding research in basic and applied bioscience.	Input	3 yrs	No
National Women Bio-scientist Awards	Senior and young women scientists.	Input	5 yrs	No

Department of Science &Technology

www.dst.gov.in



Overview

Department of Science & Technology (DST) was established in May 1971, with the objective of promoting new areas of Science & Technology and to play the role of a nodal department for organising, coordinating and promoting science and technology activities in the country. The head office is located in New Delhi. DST is mandated to formulate policy statements and guidelines, develop technology and support basic and applied research. DST aims to foster national and international collaboration in science and technology. It supports entrepreneurship development and promotes socially oriented interventions for rural & weaker sections. The department offers fellowships and research grants to scientists. The duration of these grants ranges from 3 to 5 years.

Eligible Recipients

Universities, institutions and individual researchers are all eligible to receive funding from DST.

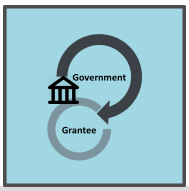
Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Ramanujan fellowships	For brilliant scientists and engineers from all over the world to take up scientific research positions in India	Input	5 yrs	Indian Institute of Science, Bangalore
Swarnajayanti Fellowships Scheme	To provide special assistance and support to a selected number of young scientists, with proven track record, enable them to pursue basic research in frontier areas of science and technology.	Input	5 yrs	No
Women Scientists Scheme	To provide opportunities to women scientists and technologists for pursuing research in basic or applied sciences in frontier areas of science and engineering.	Input	3 yrs	No
Kishore Vaigyanik Protsahan Yojana	To encourage students of the Sciences, Engineering and Medicine to take up careers in research in the aforementioned fields.	Input	5 yrs	Indian Institute of Science, Bangalore

Innovation in Science Pursuit for Inspired Research (INSPIRE) Programme Fellowship	To provide opportunities for research careers.	Input	5 yrs	No
Grant-in-aid to Industry for Clinical trials for developing drugs for neglected diseases	To enable any Indian Pharma, including new and small, to conduct R&D projects involving clinical trials (phase-I, II and II) and development of drugs for neglected diseases such as tuberculosis, malaria, kala-azar, filariasis, etc.	Input	2-5 yrs	No
Collaborative R&D Projects	To support research in all systems of medicines including setting up of facilities.	Input	2-3 yrs	No

Indian Council of Agricultural Research

www.icar.org.in



Overview

The Indian Council of Agricultural Research (ICAR) was established in 1986 under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of India. ICAR is headquartered in New Delhi. It aims to undertake, aid and promote research and implementation in areas related to agriculture. The Council is also involved in providing consultancy, education and information dissemination services in the fields relevant to agriculture. The durations of grant windows offered by ICAR vary from 3 years to 5 years.

Eligible Recipients

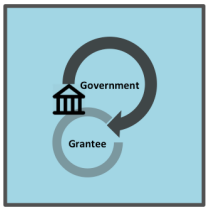
Universities, institutions and individual researchers are all eligible to receive funding from ICAR.

Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
ICAR Junior Research Fellowships for pursuing Master's degree	For Master's students studying in Agricultural Universities	Input	NA	No
ICAR Senior Research Fellowships for pursuing PhD degree	For PhD students studying in Agricultural Universities	Input	3 yrs	No
ICAR International Fellowships	For study abroad in the identified overseas Universities/Institutions having strong research and teaching capabilities	Input	3 yrs	No
National Agricultural Science Fund	To encourage collaborative and multi-institutional research based on innovative ideas of scientists for solving advanced scientific and technological problems in agriculture	Input	5 yrs	No

Indian Council of Medical Research

www.icmr.nic.in



Overview

The Indian Council of Medical Research (ICMR) was established in 1949 and is headquartered in New Delhi, India. ICMR is mandated to promote biomedical research in India through both extramural and intramural research. In addition, it focuses on building human resources for biomedical research. The Government of India funds ICMR through the Department of Health Research, Ministry of Health & Family Welfare. ICMR has established an Indo-Foreign Cell to actively coordinate collaborations between international agencies and India. The duration of the grant windows offered by ICMR vary from 1 year to 5 years. Most grant windows under ICMR pay a monthly stipend to the grantees. In some cases an annual research contingency grant and a house rent allowance is also set aside.

Eligible Recipients

Universities, institutions and individual researchers are all eligible to receive funding from ICMR.

Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Ad-hoc research Schemes	For extramural research projects	Input	NA	No
Research Associateship	For research and training leading to PhD/MD etc. under experienced researchers/investigators of repute in the field of biomedicine	Input	3 yrs	No
Junior Research Fellowships	For individuals less than 28 years with an MA/MSc degree	Input	3 yrs	No
Post-Doctoral Research Fellowship	To foster high quality research opportunities to promising fresh PhD/ MD/MS holders in the cutting edge areas of basic science, communicable & non communicable diseases, and reproductive health including nutrition at ICMR Institutes /Centres.	Input	2 yrs	No
The Talent Search programme	To identify young medical graduates with brilliant academic records for postgraduate training, and later to absorb them in the ICMR research cadre.	Input	5 yrs	No
Financial Assistance	To promote good quality research in	Input	1 yrs	No

for MD/MS/DM/MCH thesis	medical colleges through students pursuing post graduation courses as well as improve visibility and accessibility of their research work to larger research audience.			
Medical Innovation Fund	To accelerate medical innovation and to test and validate novel and highly creative ideas even if they have a high probability of failure.	Input	2 yrs	No
ICMR-MRC joint initiative: Substance Abuse	To promote research collaboration between Indian and UK investigators in the area of substance misuse and mental health in order to exploit their mutual strengths.	Input	2-3 yrs	No

Indian Space Research Organisation

www.isro.gov.in

Overview

The Indian Space Research Organisation (ISRO) was established in 1962. It has its headquarters in New Delhi. ISRO pursues planetary exploration and space science research, harnessing space technology for the development of India. The Research Scientists, Research Fellows and Research Associates under the RESPOND grant window are paid a monthly stipend for the duration of the grant. The duration of grant windows offered by ISRO are for a maximum period of 3 years. The ISRO grant window funds research in the area of Air Pollution.

Eligible Recipients

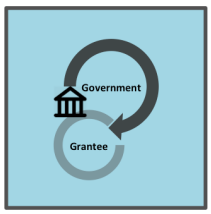
Universities, institutions and individual researchers are all eligible to receive funding from ISRO.

Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Sponsored Research (RESPOND)	To encourage quality research in areas of relevance to the Indian space programme through research fellowships, research associates, research scientists and Space Technology Cells	Input	3 yrs	No

Kerala State Council for Science and Technology & Environment

www.kscste.kerala.gov.in



Overview

The Kerala State Council for Science and Technology & Environment (KSCSTE) was established in 1972 and is headquartered in Thiruvananthapuram. KSCSTE aims to achieve excellence in basic and applied research. In addition, it focuses on strengthening industry-academia interactions and indigenous initiatives. This autonomous body aims to develop high quality infrastructure and a strong education system. The durations of grant windows offered by KSCSTE vary from 1 year to 3 years. Most grant windows under KSCSTE offer a monthly stipend to the grantees. In addition, other expenses such as manpower, travel, equipment and other contingencies are also covered.

Eligible Recipients

Universities, institutions and individual researchers are all eligible to receive funding from KSCSTE.

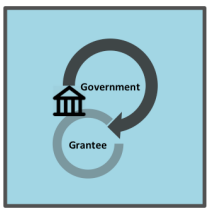
Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Young Scientists Scheme	To support promising researchers and to provide them research opportunities in niche areas of basic and applied sciences in well-established and recognised R&D Centres in Kerala	Input	3 yrs	No
Young Investigators Programme in Biotechnology	To provide quick research support to young scientists to pursue their ideas in newly emerging and front line areas of research in Biotechnology.	Input	3 yrs	No
Student Project	To provide financial assistance to the students of University Departments and Colleges in Kerala to carry out Scientific Projects.	Input	1 yr	No
Science Research Scheme	For promoting R&D activities in the State both in fundamental and applied sciences	Input	3 yrs	No
Scheme for promoting young talents in science	For students who have innovative ideas in science & technology and enrolled in polytechnic colleges and undergraduate courses in colleges, to provide financial assistance for conducting projects	Input	1 yr	No

Post doctoral Fellowship	To motivate PhD holders to pursue research and to develop career as scientists	Input	2 yrs	No
Post doctoral Fellowship - Biotechnology	For pursuing research in the frontier areas of Biotechnology	Input	2-3 yrs	No
Women Scientists Division	To facilitate women's active role in Science, Engineering, Medicine and allied disciplines as science researchers	Input	NA	No
KSCSTE fellowship Programme	To provide 100 research fellowships in the subject areas namely Mathematical Sciences, Life Sciences, Physical Sciences, Chemical Sciences, Earth, Atmospheric, Ocean and Planetary Sciences, Engineering Sciences and Environmental Sciences	Input	3 yrs	No
Back to Lab programme	To provide Research and Post-Doctoral Fellowship to qualified women who have break in their career to come back to the main-stream research	Input	3 yrs	No
Industry linked biotechnology research scheme	To provide financial assistance in the form of grants to Scientists and Technologists of R&D Centres/Academic Institutions/Organisations actively involved in biotechnological research with emphasis on areas relating to marine, agriculture, health and environment	Input	3 yrs	No

Department of Health Research
Ministry of Health & Family Welfare

www.dhr.gov.in



Overview

The Department of Health Research (DHR) was established in 2007 and is headquartered in New Delhi. The department aims to promote research in areas related to health, medicine and biomedicine in synergy with other departments under the Ministry of Health & Family Welfare. DHR focuses on the management of relevant information and development of human resources, skills and infrastructure to achieve its objectives. Promotion of research governance, which includes the issue of ethics in health and medical research, is another area of focus for the department. In addition, the Government of India funds the Indian Council of Medical Research through the Department of Health Research. Along with international liaison in health and medical research, DHR is also responsible for providing technical support for managing natural calamities and epidemics. The duration of grant windows offered by the Department of Health Research vary from 1 month to 5 years.

Eligible Recipients

Universities, institutions and individual researchers are eligible to receive funding from the Department of Health Research.

Grant Windows

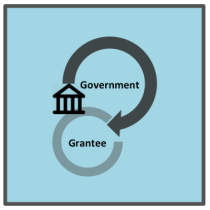
Grant Window	Brief Description	Input/ Output funding	Duration	Collaborations
Programme specifically for Women	For Short /Long term Training in Indian institutes followed by Fellowship to women candidates who have had a break in their career but have demonstrable aptitude in health research in front line and emerging areas	Input	NA	No
Support to Institutions	To support selected domestic institutions for providing training to candidates selected by the Department under this scheme in specially designed programmes/ identified priority areas	Input	5 yrs	No
Start-up Grant	To support Fellows /Trainees who have developed a research project	Input	3 yrs	No
Short Term	For Short term Training in Indian	Input	1-3 mths	No

Fellowships	institutions to researchers employed as regular faculty, Short Term Fellowships for training abroad in identified areas to persons employed as regular faculty, Short term Specialised Training to mid-career or senior level faculty of medical colleges working/involved with three other approved schemes of DHR			
Long Term Fellowships	For Long term Training/ Fellowships at Indian institutions to persons employed as regular faculty or for training abroad in identified priority areas to persons employed as regular faculty, Long term Training to the faculty of medical colleges in Indian institutes (at least 2 persons per medical college per year) working/involved with three other approved schemes of DHR	Input	6-12 mths	No

Science and Engineering Research Board

www.serb.gov.in

Science and Engineering Research Board (SERB)
Department of Science and Technology (DST)
Govt. of India



Overview

Science and Engineering Research Board (SERB) was set up under the Science and Engineering Research Board Act, 2008, an Act of Parliament. The office is stationed at New Delhi. Primarily, SERB mandated to promote basic research in science and engineering and to provide financial assistance to persons engaged in research and development activities. SERB aims to build the best management systems, which would match the best global practices in the area of promotion and funding of basic research. The duration of grant windows offered by SERB vary from 2 years to 10 years.

Eligible Recipients

Only individual researchers are eligible to receive funding from SERB.

Grant Windows

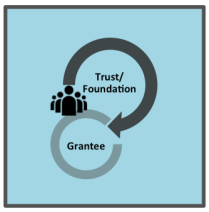
Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Extra mural Research Funding	To provide Individual centric competitive mode of funding	Input	3 yrs	No
Start-up Research Grant	To reap the benefit of research potentials of young minds for speeding up the processes and enhance the relative position of the Indian R&D system in global competitiveness	Input	3 yrs	No
Utilisation of the Scientific Expertise of Retired Scientists	To utilise expertise and potential of large number of eminent scientists in the country who remain active and deeply motivated to participate in S&T development activities even after their retirement	Input	2 yrs	No
Track based Research Funding	To promote originality in research with potential for high impact and for targeting long term research goals	Input	10 yrs	No
Ramanujan Fellowship	For brilliant scientists and	Input	NA	No

	engineers from all over the world to take up scientific research positions in India, especially those scientists who want to return to India from abroad			
JC Bose National Fellowships	To recognise active scientists and engineers for their outstanding performance and contributions	Input	NA	No

Sir Dorabji Tata Trust and the Allied Trusts

www.dorabjitatatrust.org

SIR DORABJI TATA TRUST AND THE ALLIED TRUSTS



Overview

The Sir Dorabji Tata Trust and the Allied Trusts were established in 1932 and are headquartered in Mumbai, India. The Trusts are mandated to promote international and national postgraduate studies for Indian students especially women and support scientific research in leukemia and other blood related diseases. The Trusts also focus on advancing issues such as education and health of children and women in India. Tata Sons (P) Ltd. and other companies in the Tata Group are the main sources of funding for the Sir Dorabji Tata Trust and The Allied Trusts. During 2010-11, more than INR 3250 million was disbursed by the Trusts. The duration of grant windows offered by the Trusts vary from 1 year to 5 years. Most grant windows under the Trusts pay a monthly stipend to the grantees. In some cases an annual research contingency grant and a house rent allowance is also set aside.

Eligible Recipients

Only institutions and individual researchers are eligible to receive funding from the Sir Dorabji Tata Trust and the Allied Trusts.

Grant Windows

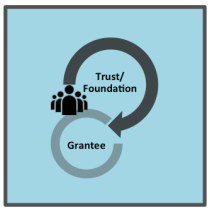
Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Lady Tata Memorial Trust Junior Scholarship	For scientific research work in the diseases of the blood, with special emphasis on leukaemia research, and for research in alleviation of human suffering from diseases	Input	2 yrs	No
Lady Tata Memorial Trust Senior Research Scholarship	For scientific research work in the diseases of the blood, with special emphasis on leukemia research, and for research in alleviation of human suffering from diseases on successful completion of 2 years of the Junior Scholarship	Input	3 yrs	No
Lady Tata Memorial Trust Young Researcher Award	To recognise and reward young Indian scientists below the age of 40 years, with outstanding track record in biological sciences, a deep commitment to	Input	3-5 yrs	No

	find innovative solutions to major problems related to human diseases and potential for high quality research			
Lady Tata Memorial Trust Post doctoral Fellowship	For research work done in India for any scientific investigation having a bearing, directly or indirectly, on the alleviation of human suffering from diseases	Input	1 yr	No
Lady Tata Memorial Trust Institutional Research Project Grant	For research work done in India for any scientific investigation having a bearing, directly or indirectly, on the alleviation of human suffering from diseases	Input	2 yrs	No

Sir Ratan Tata Trust & Navajbai Ratan Tata Trust

www.srtt.org

SIR RATAN TATA TRUST &
NAVAJBAI RATAN TATA TRUST



Overview

The Sir Ratan Tata Trust (SRTT) is established in the year 1919 in Mumbai. It works along with the Navajbai Ratan Tata Trust which was set up later in 1974 to bestow grants. The trusts seek to be a catalyst in development through giving grants to institutions in various areas. They focus their grants towards organisations that they can partner with to undertake innovative and sustained initiatives with the potential to make a visible difference. They also provide grants for endowments, have a separate program for small grants and give grants to individuals for education and medical relief. Key areas of their funding are in the areas of rural livelihoods and communities, and education, health, governance, arts and culture.

Eligible Recipients

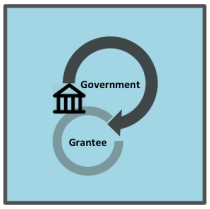
Only institutions are eligible to receive funding from SRTT.

Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Sir Ratan Tata Small Grant Programme	For small welfare oriented institutions for several activities including focused research activities	Input	NA	No

University Grants Commission

www.ugc.ac.in



Overview

The University Grants Commission (UGC) is a statutory body set up by the Union government in 1956. It is headquartered are stationed in New Delhi while six regional centres are located at Pune, Bhopal, Kolkata, Hyderabad, Guwahati and Bangalore. UGC is charged with coordination, determination and maintenance of standards of university education. It provides recognition to universities in India and disburses funds to such recognised universities and colleges. The primary focus of UGC is to determine and maintain standards of teaching, examination and research in universities and framing regulations on minimum standards of education. They monitor developments in the field of collegiate and university education; disbursing grants to the universities and colleges. UGC serves as a vital link between the Union and state governments and institutions of higher learning. The duration of these grants ranges from 6 months to 5 years.

Eligible Recipients

Individual researchers, academic institutions and universities are eligible to receive funding from UGC.

Grant Windows

Grant Window	Brief Description	Input/ Output Funding	Duration	Collaborations
Maulana Azad National Fellowship For Minority Students	To pursue higher studies such as MPhil and PhD.	Input	5 yrs	No
Rajiv Gandhi National Fellowship for SC/ST Candidate	For candidates who belong to Scheduled Caste & Scheduled Tribe and wish to pursue higher studies such as regular and full time MPhil and PhD degrees in Sciences, Humanities, Social Sciences and Engineering & Technology.	Input	2 yrs	No
Post Doctoral Fellowship to SC/ST Candidates	To provide an opportunity to SC/ST candidates to undertake Postdoctoral research in Sciences, Engineering & Technology, Humanities and Social Sciences in Indian Universities/Institutions/Colleges.	Input	2 yrs	No

Post Doctoral Fellowship To Women Candidates	To provide an opportunity to carry out advanced studies and research.	Input	5 yrs	No
Research Awards	To provide opportunities to regularly appoint permanent teachers of universities/institutions to pursue research in their area(s) of specialisation.	Input	2 yrs	No
Raman Fellowship for Post Doctoral Research for Indian Scholars in USA	To provide them an opportunity to have international collaborative research opportunities.	Input	6-12 mths	No
Emeritus Fellowship	To provide an opportunity to superannuated teachers of all recognized universities and colleges approved under UGC Act, to pursue active research in their respective field of specialization.	Input	2 yrs	No
Junior Research Fellowship in Engineering & Technology	To provide an opportunity to research scholars to undertake advanced study and research.	Input	2 yrs	No
Rajiv Gandhi National Fellowship for Students with Disabilities (North Eastern States)	For students with disabilities.	Input	2-5 yrs	No
Major Research Project	To promote excellence in research in higher education by supporting research programmes of University and College teachers in various disciplines.	Input	NA	No

Annexure I

Science and Innovation Network

UK's Science and Innovation Network (SIN) consists of 93 staff, based in 28 countries and 47 cities around the world, who work with the local science and innovation community in support of UK policy overseas. It is jointly funded by UK's Department for Business, Innovation and Skills and the Foreign and Commonwealth Office.

SIN teams in-country act as the first point of contact and gateway to science and innovation opportunities for UK and host country research institutions, universities and research and development intensive business. They provide Policy insight to improve science and innovation policy in the UK and partner countries. SIN events and networking activities aim to identify new partnership opportunities, often acting as a catalyst for new projects. SIN officers work at the heart of the UK's overseas Posts and work closely with UK partner organisations e.g. Research Councils, Innovate UK, researchers from universities and a range of other bodies including the Royal Society and learned societies, to promote a coherent UK engagement. Among its strategic partners within the UK, is the Research Councils UK.

Research Councils UK

Research Councils UK (RCUK) is a strategic partnership of the UK's seven Research Councils which invest close to £3 billion annually in research. RCUK has overseas teams in several countries that work with research funding organisations in their respective countries to facilitate collaboration between researchers in the UK and abroad. SIN and RCUK work closely together across the globe.

The Seven Research Councils are:

Arts & Humanities Research Council
www.ahrc.ac.uk

Biotechnology & Biological Sciences Research Council
www.bbsrc.ac.uk

Economic & Social Research Council
www.esrc.ac.uk

Engineering & Physical Sciences Research Council
www.epsrc.ac.uk

Medical Research Council
www.mrc.ac.uk

Natural Environment Research Council
www.nerc.ac.uk

Science & Technology Facilities Council
www.stfc.ac.uk

Research Councils UK India

Since its launch in 2008, RCUK India has supported an impressive portfolio of research in collaboration with the Government of India totalling over £150 million. RCUK India aims to enhance the impact of UK-India research collaborations and works towards a stronger, deeper UK-India research relationship that contributes to key global challenges through high quality research partnerships. RCUK India is playing a key role in enhancing collaboration in high priority areas. There are over 60 UK-India co-funded collaborative research projects facilitated by RCUK India and over 90 industry partners involved in these projects. RCUK India is actively involved in co-funded research activities with seven major Indian research funders on a wide array of research themes addressing global challenges such as energy, climate change, social sciences, healthcare and life sciences.

RCUK India proposes to achieve the following important goals through its joint work with India:

1. Influence: Increase RCUK influence in UK-India international research strategy and policy development

2. Excellence: Provide opportunities to enable excellent researchers to flourish through UK and Indian research collaborations.
3. Impact: Enhance the value and impact of joint research through UK-India international collaboration.
4. Responsibility: Show RCUK's commitment to key global responsibilities in a world where challenges cross national boundaries.

The Newton Fund

The Newton Fund is a UK initiative intended to strengthen science, research and innovation partnerships between the UK and emerging knowledge economies. It was launched in April 2014, and will deliver £375 million of funding over the course of five years.

The UK has allocated £50 million over five years for such collaborations with India, where it's known as the Newton Bhabha Fund. Under an MoU signed by UK and Indian ministers at the last Science and Innovation Council, held in November 2014, India has committed equivalent resources to the UK's contribution. Activities under this fund are managed by a core group of Delivery Partners and is guided by priorities identified by a UK-India Task Force set up with participation from key research and innovation funders and decision makers from both countries. The Task Force identified three grand societal challenges for research and innovation programmes between the UK and India:

1. Sustainable Cities and Rapid Urbanisation
2. Public Health and Well Being
3. Energy-Water-Food Nexus

And two underpinning capabilities, namely high value manufacturing and big data.

The Newton Bhabha fund will be delivered through three broad categories of activity:

1. People: Building research and innovation capacity in natural sciences, engineering, social sciences and humanities, and clinical sciences through programmes including PhD exchanges (e.g. Newton PhD Programme), Post-doctoral training and mobility schemes (e.g. International Collaboration Programme, Newton Advanced Fellowships; Newton International Fellowships) and professional development (e.g. lnnovation Leadership Programme, Professional Development and Engagement Programme, STEM Education Programme).
2. Programme: Collaborative research through Joint Centres, Joint Research Projects and access to Research and Innovation Infrastructures. Collaborations will be based on research excellence, in areas that make the maximum contribution towards jointly approved grand societal challenges.
3. Translation: Building UK-India research and innovation partnerships and capacity to address major societal and economic challenges, including through programmes to build partnerships between business and academia to accelerate the deployment of research knowledge (e.g. Research and Innovation Bridges) and innovation capacity building (e.g.

Global Innovation Capacity Building Programmes for Government and Innovation Agencies and for Entrepreneurs).

Annexure II


0
200
400
600
800
1000
1200
1400
2200
2400
Amrita Vishwa Vidhyapeetham, Coimbatore
Public Health Foundation of India, Gurgaon
Institute of Life Sciences, Bhubaneswar
Sangath, Goa
PD Hinduja National Hospital and Medical Research Centre, Mumbai
All India Institute of Medical Sciences, Delhi
University of Madras, Chennai
Indian Institute of Techology Kharagpur, Kharagpur
Tata Memorial Hospital, Mumbai
Physical Research Laboratory, Ahmedabad
SRM University, Kattankulathur
Indian Institute of Technology Kanpur, Kanpur
Community Empowerment Lab, Shivgarh
Christian Medical College, Vellore
Jawaharlal Nehru Cancer Hospital & Research Centre, Bhopal
Leading 15 Institutions
Indian Institue of Tropical Meteorology, Pune
Sitaram Bhartia Institute of Science & Research, Delhi
University of Hyderabad, Hyderabad
CSIR - National Physical Laboratory, Delhi
National Institute of Mental Health and Neurosciences, Bengaluru
Cancer Institute (Women India Association), Chennai
Indian Institute of Technology Roorkee, Roorkee
Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru
University of Delhi, Delhi
Madras Medical Mission, Chennai
Centre for Health Research and Development, Delhi
National Centre for Cell Science, Pune
Post Graduate Institute of Medical Education and Research, Chandigarh
Global Nanotech, Mumbai
Indian Institute of Integrative Medicine, Jammu
CSIR - Indian Institute of Toxicology Research, Lucknow
Deenanath Mangeshkar Hospital & Research Center, Pune
Biotechnology Industry Research Assistance Council, Delhi
Jawaharlal Nehru University, Delhi
The Energy and Resources Institute, Delhi
International Institute for Population Sciences, Mumbai
Chittaranjan National Cancer Institute, Kolkata
Genome-2-Bio-Medicine Discovery Centre, Puducherry
Shivaji University, Kolhapur
Centre for Policy Research, Delhi
Apollo Hospital, Chennai
National Institute of Science Education and Research, Bhubaneswar
King Edward Memorial Hospital, Pune
Tata Institute of Social Sciences, Mumbai
Indian Institute of Technology Bombay, Mumbai
Jawaharlal Institute of Postgraduate Medical Education & Research,...
Indian Institute of Technology Delhi, Delhi
Institute of Bioinformatics and Applied Biotechnology, Bengaluru
Sir Ganga Ram Hospital, Delhi, India
Mahatma Gandhi University, Kottayam
Birla Institute of Technology Extension Centre, Jaipur
Bhabha Atomic Research Center, Mumbai
Saurashtra University, Rajkot
Indira Gandhi Institute of Development Research, Mumbai
Bishop Moore College, Mavelikara
Schizophrenia Research Foundation, Chennai
Institute of Integrative Omics and Applied Biotechnology, Purba...
Bose Institute, Kolkata
RC Patel Institute of Pharmaceutical Education & Research, Shirpur
Population Council India, Delhi
St John's Research Institute, Bengaluru
National Institute of Technology, Warangal
Institute of Post-Graduate Medical Education and Research, Kolkata
Buxi Jagabandhu Bidyadhar College, Bhubaneswar
Guru Gobind Singh Indraprastha University, Delhi
HR Patel Institute of Pharmaceutical Education and Research, Dhule
International Institute of Information Technology, Hyderabad
Bombay Veterinary College, Mumbai
Infovet, Thane
Giri Institute of Developmental Studies, Lucknow
Manipal University, Manipal
University of Calcutta, Kolkata
Sri Sivasubramaniya Nadar College of Engineering, Chennai
Society for Nutrition Education and Health Action, Mumbai
Advanced Medicare & Research Institute Hospital, Kolkata
Indian Institute of Engineering Science and Technology, Howrah
Centre for Development of Advanced Computing, Bengaluru
Lady Harding e Medical College, Delhi
Birla Institute of Technology and Science Pilani, Ranchi
Dr Ram Manohar Lohia Hospital, Delhi
ICAR - Central Sheep and Wool Research Institute, Jaipur

Acronyms

AMR	Antimicrobial Resistance
AP	Air Pollution
BS	Biomedical Sciences
CBRM	Cancer Biology & Regenerative Medicine
DN	Diagnostics
DVD	Drug & Vaccine Discovery
MCHN	Maternal, Child Health & Nutrition
MH	Mental Health
R&D	Research & Development
RCUK	Research Councils United Kingdom
SIN	Science and Innovation Network

Key References

[i] Government of UK. Policy paper: Newton Fund - Building Science and Innovation Capacity in Developing Countries. Department for Business Innovation & Skills. Government of UK. 2015. Accessible on https://www.gov.uk/government/publications/newton-fund-building-science-and-innovation-capacity-in-developing-countries/newton-fund-building-science-and-innovation-capacity-in-developing-countries

[ii] GH Brundtland. *Public health challenges in a globalizing world*. The European Journal of Public Health. 15(1): 3–5. 2005.

[iii] GoI. *Report of the Steering Committee on Health for the 12th Five-Year Plan*. Health Division. Planning Commission. Government of India. 2012. Accessible on http://planningcommission.nic.in/aboutus/committee/strgrp12/str_health0203.pdf

[iv] R Bisht, E Pitchforth & SF Murray. *Understanding India, globalisation and health care systems: a mapping of research in the social sciences.* Globalization and Health. 8:32. 2012.

[v] RK Sinha. *India's National Innovation System: Roadmap to 2020.* ASCI Journal of Management. 41(1): 65–74. 2011.

[vi] UGC. *Higher Education in India at a glance*. University Grants Commission. 2012.

[vii] GoI. *Science, Technology and Innovation Policy 2013*. Ministry of Science and Technology, Government of India. 2013.

[viii] MA Dutz. *Unleashing India's Innovation: Toward Sustainable and Inclusive Growth*. The International Bank for Reconstruction and Development. The World Bank. 2007.

[ix] S Bute. *Innovation: The New Mantra for Science and Technology Policies in India, Pakistan and China*. 2013. Accessible on Institute for Defence Studies and Analyses. 2013.

[x] GoI. *Science, Technology and Innovation Policy 2013.* Ministry of Science and Technology, Government of India. 2013.

[xi] Science and Development Network. *India's New S&T Policy Banks on the Private Sector*. Asian Scientist Magazine. 7 January 2013. Accessible on http://www.asianscientist.com/2013/01/academia/india-science-technology-innovation-policy-2013/

[xii] NIF India. *About us.* National Innovation Foundation-India. Accessible on http://nif.org.in/aboutnif

[xiii] India Brand Equity Foundation. *Healthcare Industry in India*. 2015. Accessible on http://www.ibef.org/industry/healthcare-india.aspx

[xiv] R Gopal. *Reforming healthcare in India through technology*. Express Healthcare. 11 February 2015. Accessible on http://www.financialexpress.com/article/healthcare/it-healthcare/reforming-healthcare-in-india-through-technology/41537/

[xv] India Brand Equity Foundation. *Indian Pharmaceutical Industry*. 2015. Accessible on http://www.ibef.org/industry/pharmaceutical-india.aspx

[xvi] S Bute. *Innovation: The New Mantra for Science and Technology Policies in India, Pakistan and China*. 2013. Accessible on Institute for Defence Studies and Analyses. 2013.

[xvii] GoI. *Approach to the 12th Plan: Technology and Innovation*. The Planning Commission. Government of India. 2013. Accessible on http://12thplan.gov.in/forum_description.php?f=13

[xviii] GoI. *General Budget 2015-16: Highlights and Summary*. Press Information Bureau. Government of India. 2015. Accessible on http://pib.nic.in/budget2015/budgetdoc/gbEngRelease.pdf

[xix] V Mohan. *1,000 US academics to teach in Indian universities*. Times of India. 3 October 2014. Accessible on http://timesofindia.indiatimes.com/home/education/news/1000-US-academics-to-teach-in-Indian-universities/articleshow/44155773.cms

[xx] GoI. *Make in India*. Department of Industrial Policy and Promotion. Ministry of Commerce and Industry. Government of India. 2014. Accessible on http://www.makeinindia.com/

[xxi] GoI. *Draft: National Health Policy 2015*. Ministry of Health & Family Welfare. Government of India. 2014. Accessible on http://www.mohfw.nic.in/showfile.php?lid=3014

[xxii] GoI. *XII Plan Document (2012-2017).* Department of Health Research. Government of India. 2012. Accessible on http://www.icmr.nic.in/Publications/plan/ICMR%20XIIth%20Plan%20%282012-2017%29.pdf

[xxiii] *Key features of Budget 2015-2016.* 28 February 2015. Accessible on http://indiabudget.nic.in/ub2015-16/bh/bh1.pdf

[xxiv] India Brand Equity Foundation. *Indian Pharmaceutical Industry.* 2015. Accessible on http://www.ibef.org/industry/pharmaceutical-india.aspx

[xxv] India Brand Equity Foundation. *Indian Pharmaceutical Industry*. 2015. Accessible on http://www.ibef.org/industry/pharmaceutical-india.aspx

Other useful links

E&Y and FICCI. Higher Edcuation in India: Vision 2030. 2013.

DFID. *Social Science Research in India - A Mapping Report*. DFID - South Asia Research Hub. 2011.

Government of India. *Report of Steering Committee on Health for the 12th Five Year Plan*. Health Division, Planning Commission of India. 2012.

K. Mathur. *Policy Research Organisations in South Asia.* Centre for the Study of Law and Governance. Jawaharlal Nehru University. 2009.

K. Matzner & S. Rani. *Science and Technology Research Players in India*. European Business and Technology Centre. Fraunhofer IFF. 2014.

K. S. Vora, D. V. Mavalankar, K.V. Ramani, M. Upadhyaya, B. Sharma, S. Iyengar, V. Gupta & K. Iyengar. *Maternal Health Situation in India: A Case Study.* International Centre for Diarrhoeal Disease Research, Bangladesh. Journal of Health, Population and Nutrition. 27 (2). 2007.

R. Srinivisan. Health care in India - Vision 2020: Issues and Prospects.

RCUK Consortium. *Biblometric Analysis to support the Mapping of Research and Innovation in India.* Evidence - a business of Thomson Reuters. 2012.

RCUK India. *Enhancing Collaboration between Research and Industry - Analysis of UK-India Research Partnerships.* 2013.

RCUK. *Water Related Research Landscape in India.* 2013.

UK Science and Innovation Network. *UK Science and Innovation Network Report*. 2013.

Research Councils UK India
British High Commission
Shantipath, Chanakyapuri,
New Delhi - 110021

www.rcuk.ac.uk/india

UK Science
& Innovation
Network

RESEARCH
COUNCILS UK
INDIA