

ANNUAL REPORT 2016-17



SHARE INDIA
Society for Health Allied Research and Education India



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www.sharefoundations.org

### **SHARE INDIA Office First Floor Renovation**





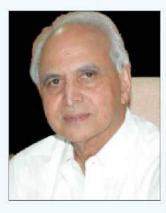




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### Message from the Chairman



SHARE INDIA's principle focus has been to foster research culture in Medical Colleges of India. As the founders of SHARE INDIA and SHARE Medical Care were common, MediCiti Institute of Medical Sciences (MIMS-established by SHARE Medical Care) provided an ideal platform. The collaboration with Johns Hopkins University and Graduate School of Public Health, University of Pittsburgh for over 25 years has been invaluable in developing a critical mass of researchers at MIMS.

Fogarty International Research Training Grant of one million US Dollar for five years obtained by Dr. Clareann H. Bunker in 2011 has been a great boon as it provided the requisite support to train MIMS faculty.

As part of the grant, annually five days residential workshop in Research Methodology including epidemiology and biostatistics was conducted for the faculty of MIMS. This has served not only to maintain their interest in research, but also to incrementally increase the participant's capacity in research. It is heartening to note this year, post the expiry of Fogarty Grant, the MIMS faculty who were trained over the last five years conducted the Research Methodology Workshop without external funding and amply demonstrated their capacity and independent performance. Participation of 50 second year medical students and faculty from two other medical colleges heralds the beginnings of the spread of research culture both vertically and horizontally. However, this fledgling culture can only be sustained and grow with strong commitment, and support of the college

management.

SHARE INDIA also mentors faculty to do innovative and impactful research. In the past, faculty have developed innovative strategies under Rural Effective Affordable Comprehensive Healthcare (REACH) and implemented the program successfully to achieve 100% immunization and total fertility rate of less than two. SHARE INDIA has been conducting Longitudinal Indian Family hEalth (LIFE) study, based on National Children Study of USA. A total of 1227 women have been recruited before becoming pregnant or during the first trimester and followed up through delivery. Children are being continually followed up for their physical and mental development. The design paper was published in the prestigious International Journal of Epidemiology. Mobility and Independent Living in the Elderly Study (MILES) has been on-going for the last four years with 562 enrolees. Technology Enabled community health workers to extend Telemedicine to Rural homes at Affordable costs (TETRA) is another flagship project, which will be the torchbearer for the futuristic medicine based on technological innovations. HEalthy Pregnancy (HELP) study has been investigating early detection of preeclampsia using tools based on personalized and precision medicine.

SHARE INDIA has done its share to sow the seeds of research in one medical college. Its spreading to other medical colleges depends upon the passion of individual medical colleges, particularly their management, to grow research in their institutes.

Dr. P. S. Reddy Chairman

### Message from the Director, SHARE INDIA

### Being SHARE INDIA: being more

It gives me immense pleasure to look back on the impactful journey of SHARE INDIA and to connect again with you after yet another successful project year. This issue of our annual report celebrates the multi-facets of our growth in winning several grants from elite institutions globally, which is a yard stick for measuring and ranking institutions globally. SHARE INDIA witnessed unprecedented achievements by our team in their endeavours.

More than good research, SHARE INDIA's work results in common good, it has been a driving force for us and our members. Everyone has successfully accomplished the milestones set for 2016. SHARE INDIA has always been a stellar performer with reference to national and international benchmarks. SHARE INDIA presented its work in various International and National forums with multiple papers and posters presentations along with numerous publications in international medical journals. These facts speak volumes for the organization. Now,

we need to sustain these achievements going forward, which is our challenge.

In order to best accomplish our objectives, SHARE INDIA will continue to be a learning organization and adopt appropriate changes in its model as it grows, so that it remains relevant to the stakeholders. As it will be evident from the pages of this report, that the organization continues to make headway in research that drives progress.



Today, being SHARE INDIA means being more.

Dr. Vijay V. Yeldandi Director

### **About SHARE INDIA**

Indian-American professionals from various medical and non-medical fields, all of whom earned their education from undivided Andhra Pradesh, started a not for profit society 'Science Health Allied Research Education' (SHARE) in USA in 1981. To support causes in India and for the purpose of giving back to mother country, two, not for profit societies SHARE INDIA (1986) and SHARE Medical Care (1987) were formed with a similar vision — to translate the dreams into action. SHARE INDIA is a research society and recognized as a Scientific and Industrial Research Organisation (SIRO), by Ministry of Science and Technology, Government of India.

SHARE is a brainchild of Dr. P. S. Reddy, Professor of Medicine, at University of Pittsburgh who is also the Chairman of the SHARE INDIA. He devotes half his time in India to translate NRI's dreams into reality.

Along with CDC funded, technical assistance projects to the government, a variety of community welfare projects like REACH, LIFE, MILES, TETRA, HELP, CSSI and more are in effect, completely funded by generous donors. SHARE INDIA brought significant improvements in the areas of pre-natal and post-natal care, TB, pregnancy, birth control, awareness and prevention of HIV, infant care, infant mortality rate and maternal mortality ratio, immunization and so on.

SHARE INDIA relies entirely on voluntary contributions for its funding. Its principal donors are NRI's, private sector and individual philanthropists. Donations are tax-exempt under section 35(1)(ii) of the Income Tax Act.

### Vision

Strive to create healthy population by innovation and increasing, imparting and applying knowledge.

### Mission

- Creating research culture in medical colleges of India and promotingglobal health.
- Adapting health care delivery through information technology; innovating new models of effective health care delivery at low costs; taking health care to doorsteps.
- Developing devices to make them available at affordable costs.
- Sowing seeds for personalized and precision medicine.
- Challenging old concepts and finding contextually relevant evidenced based truths in medicine.
- Collaborating with other institutions and professionals to foster research, innovation and education/training in health sciences.

### Objective

To provide comprehensive, effective, affordable health care to people and build capacity for innovation/research to address health care challenges for today and the future.

### Philosophy of SHARE

Nature has created a divided world of those who have the capacity to give and those who have the need to receive. We are the lucky few who are blessed with the capacity to give rather than receive. Let us thank God for giving the capacity and opportunity to give by giving.

### **Abbreviations**

ANC	Antenatal Care	NIH	National Institutes of Health
ARI	Acute Respiratory Infection	NISCHIT	National Initiative to Strengthen and Coordinate HIV/TB
ATT	Anti Tuberculosis Treatment		response
BIG	Biotechnology Ignition Grant	PA	Pennsylvania
BIRAC	Biotechnology Industry Research Assistance Council	PHFI	Public Health Foundations of India
BITS	Birla Institute of Technology and Science	PIH	Pregnancy Induced Hypertension
CAPH	The Center for Aging and Population Health	PLHIV	People Living with HIV/AIDS
CBIT	Chaitanya Bharathi Institute of Technology	REACH	Rural Effective Affordable Comprehensive Healthcare
CCCC	Centre for Control of Chronic Conditions	RNTCP	Revised National Tuberculosis Control Program
CDC	Centers for Disease Control and Prevention	Rs	Rupees
CSSI	Caesarean Surgical Site Infection	SIRO	Scientific and Industrial Research Organisation
CVD	Cardio-vascular Disease	SNIST	Sree Nidhi Institute of Science and Technology
GBP	British Pound	STAR	Strengthening TB Action and Response
GSPH	Graduate School of Public Health	TAMU	Texas A&M University
HELP	HEaLth Pregnancy	TA	Technical Assistance
HIV	Human Immunodeficiency Virus	TB	Tuberculosis
ICMR	Indian Council of Medical Research	TETRA	Technology Enabled community health workers to extend
LaQSH	Laboratory Quality Systems in HIV		Telemedicine to Rural homes at Affordable costs
LIFE	Longitudinal Indian Family hEalth	UK	United Kingdom
LSHTM	The London School of Hygiene and Tropical Medicine	UOP	University of Pittsburgh
MILES	Mobility and Independent Living in the Elderly Study	US\$	United States Dollar
MIMS	MediCiti Institute of Medical Sciences	USA	United States of America
NACP	National AIDS Control Programme		

National AIDS Control Organization

NACO

### **RESEARCH PROJECTS**

#### LIST OF SHARE INDIA RESEARCH PROJECTS | STUDIES

S. No.	Title of the study	Investigators	Designation / Institution Name	Project cost / Sanctioned / Budget Amount	Funding source	Project status
1	Longitudinal Indian Family hEalth - <i>LIFE</i> Study	Dr. Kusneniwar Govindrao N. Dr. Kalpana Betha Dr. Jammy Guru Rajesh Dr. K. Vijayaraghavan	Professor, Community Medicine, MIMS Professor, Obstetrics & Gynecology, MIMS Research Scientist, SHARE INDIA Director Research, SHARE INDIA	Rs. 33 Lakhs (2017-18)	SHARE INDIA / SHARE USA	On going
2	Mycoplasma genitalium, differentiated Ureaplasma species, and pregnancy outcomes	Dr. Kalpana Betha Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, GSPH, UOP, PA, USA	US \$ 46,318 for two years (2016-17 and 2017-18).	Fogarty International Center - NIH	On going
3	The Role of early pregnancy serum markers of cellular damage, innate immune signalling and angiogenesis in preeclampsia subtypes - <b>LIFE Study</b> Samples	Dr. Kalpana Betha Dr. Brandie N. Taylor Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, TAMU, Texas, USA Associate Professor, GSPH, UOP, PA, USA	US \$ 24,000 (2017-18)	NIH - Through TAMU, Texas	On going
4	Prospective study of preconception and prenatal biomarkers of preterm birth - LIFE Study Extension	Dr. Kalpana Betha Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, GSPH, UOP, PA, USA	US \$ 936,756	NIH - University of Pittsburgh	Grant applied in May, 2017
5	Mobility and Independent Living in Elders Study - MILES	Dr. Pawan Kumar Sharma Dr. Jammy Guru Rajesh Dr. Kusneniwar Govindrao N. Dr. Enakshi Ganguly	Associate Professor, Community Medicine, MIMS Research Scientist, SHARE INDIA Professor, Community Medicine, MIMS Professor, Community Medicine, MIMS	Rs. 14 Lakhs for wave IV (2017-18)	Fogarty International Center - NIH SHARE INDIA / SHARE USA	On going
6	Technology Enabled community health workers to extend Telemedicine to Rural homes at Affordable costs - TETRA study phase - 1	Dr. D. Shailendra Dr. K. Vijayaraghavan	Associate Professor, Pharmacology, MIMS Director Research, SHARE INDIA	Rs. 40.57 Lakhs Interim grant for feasibility study (2014-15)	Hewlett Packard	Completed
	TETRA study phase - 2 PILOT STUDY	Dr. D. Shailendra Dr. K. Vijayaraghavan	Associate Professor, Pharmacology, MIMS Director Research, SHARE INDIA	US \$ 19,733 seed grant for pilot study (2015-16)	Fogarty International center - NIH	Completed
	TETRA study phase - 3 follow-up of six villages	Dr. D. Shailendra Dr. K. Vijayaraghavan	Associate Professor, Pharmacology, MIMS Director Research, SHARE INDIA	Rs. 43 Lakhs for follow-up of 6 villages (2017-18)	SHARE INDIA / SHARE USA	On going and applied to ICMR funding. Application under review

#### LIST OF SHARE INDIA RESEARCH PROJECTS | STUDIES

S. No.	Title of the study	Investigators	Designation / Institution Name	Project cost / Sanctioned / Budget Amount	Funding source	Project status
7	HEalthy Pregnancy (HELP) study	Dr. Padma Yalamati Dr. Kalpana Betha	Professor, Biochemistry, MIMS Professor, Obstetrics & Gynecology, MIMS	Contract the contract to the c	SHARE INDIA / SHARE USA	On going
8	Improving Antenatal Care (ANC) to enhance adherence to National ANC guidelines, including the screening, detection, referral and management of gestational diabetes and pregnancy induced hypertension (PIH), using electronic decision support system enabled Frontline Health Workers, in primary healthcare settings of India and Nepal: a cluster-randomized trial	Dr. Biraj Karmacharya Dr. Kalpana Betha Dr. P. S. Reddy	Vice President (Research & Policy), PHFI, Delhi Professor, Epidemiology, LSHTM, UK Professor Programs, Kathmandu University of Medical Sciences, Nepal Professor, Obstetrics & Gynecology, MIMS Chairman, SHARE INDIA	GBP 1,500,000	Newton Fund	Concept proposal submitted and shortlisted
9		Dr. Padma Valamati Dr. Kalpana Betha Dr. Aparna Varma	Professor, Biochemistry, MIMS Professor, Obstetrics & Gynecology, MIMS Professor, Biochemistry, MIMS	Rs. 18.13 Lakhs	ICMR, New Delhi	Pilot study completed. ICMR approved the study funds not released - Hence cancelled
10	Cesarian Surgical Site Infection - CSSI Study.	Dr. Kalpana Betha Dr. P. Lakshmi Sailaja	Professor, Obstetrics & Gynecology, MIMS Associate Professor, Obstetrics & Gynecology, MIMS	Rs. 2 Lakhs for two years Rs.1 Lakh (2016-17) and Rs.1 Lakh (2017-18)	SHARE INDIA / SHARE USA	On going
11		Dr. Donald S. Burke Dr. P.S. Reddy Dr. Clareann H. Bunker Dr. Saumadipta Pyne Dr. Supriya Kumar Prof. Ramanan Laxminarayan	Dean, GSPH, UOP, PA, USA Chairman, SHARE INDIA Associate Professor Emeritus, GSPH,UOP,PA,USA Professor, IIPH Hyderabad Epidemiologist, GSPH, UOP, PA, USA Professor, PHFI	US \$ 62,140 for three years (2015 to 2018). US \$ 41,427 (2015-17)	NIH - University of Pittsburgh	On going
12		Dr. Jammy Guru Rajesh Dr. M. Raheel Sayeed Dr. Lincoln P. Choudhury Dr. P. S. Reddy Dr. Supriya Kumar	Research Scientist, SHARE INDIA Research Scientist, SHARE INDIA HIV Consultant, Guwhati, India Chairman, SHARE INDIA Epidemiologist, GSPH, UOP, PA, USA	US \$ 27,372 (2016-17)	NIH - University of Pittsburgh	On going

#### LIST OF SHARE INDIA RESEARCH PROJECTS | STUDIES

5. No.	Title of the study	Investigators	Designation / Institution Name	Project cost / Sanctioned / Budget Amount	Funding source	Project status
13	Comprehensive Intelligent Acute Respiratory Infection (ARI) monitor for early detection of pneumonia	Dr. Enakshi Ganguly Prof. M. B. Srinivas Dr. Uma Ramchandran Dr. Pawan Kumar Sharma	Professor, Community Medicine MIMS Professor, BITS, Hyderabad Professor, Paediatrics, MIMS Associate Professor, Community Medicine, MIMS	Rs. 40 Lakhs for three years (2015 to 2018). Rs. 16 Lakhs (2017-18)	ICMR, New Delhi	On going
	Develop and test 3D printing technology to produce innovative limbs at affordable cost for the disabled in India	Dr. Srinivasa Prakash Regalla Dr. Prakash N. Shrivastava Dr. D. Sudheer Reddy	Professor, Department of Mechanical Engineering, BITS, Hyderabad Director, SHARE INDIA Professor, Orthopedics, MIMS	years (2015 to June 2017)	Biotechnology Industry Research Assistance Council (BIRAC), DBT, Government of India	On going
	DNG 09 - Prospective, multi-center, community- based incidence study of symptomatic dengue in India	Dr. Ganesh Oruganti Dr. Enakshi Ganguly Dr. Jammy Guru Rajesh	Director, Public Health & Research Administration, SHARE INDIA Professor, Community Medicine, MIMS Research Scientist, SHARE INDIA	Euro 160,613	Sanofi Pasteur, France	On hold
16	Association of brain metabolites, brain white matter hyperintensities and non-invasive retinal markers with cognotion in type 2 diabetes in India - <b>BRAIN STUDY</b>	Dr. Rajani Santhakumari Dr. Shailendra Dandge Dr. Madhavi Chevuturu Dr. G. V. S Murthy Dr. G. Suresh Dr. Robert M. Boudreau Dr. Caternia Rosano	Associate Professor, Physiology, MIMS Professor, Pharmacology, MIMS Professor, Ophthalmology, MIMS Director, IIPH Hyderabad Neuroradiologist, Yashodha Hospital, Hyderabad Professor, CAPH, UOP, USA Professor, Epidemiologist, GSPH, UOP, USA	US \$ 257,484 (For two years). Annually US \$128,742	NIH	Grant applied for in February 2017. To be resubmitted with modification
17	IndEpi: A Platform for systematic integration of Indian Epidemiology Datasets to enable Health Analytics and Disease Modelling (R & D Proposal under the ICPS Programme of DST.)	Dr. Rashmi Pant Dr. Saumadipta Pyne Dr. M. Raheel Sayeed	Bio Statiscian, SHARE INDIA Professor, PHFI, Hyderabad Research Scientist, SHARE INDIA	Rs. 77.29 Lakhs	Department of Science & Technology, Ministry of Science & Technology, Government of India	Grant applied in March 2017
18	National Initiative to Strengthen & Coordinate HIV/TB response in India - <b>NISCHIT</b>	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Ramesh Allam	Professor, University of Illionis at Chicago, USA Director, Public Health & Research Administration, SHARE INDIA Deputy Project Director, SHARE INDIA		Centers for Disease Control and Prevention (CDC), Atlanta, USA	On going
19	Laboratory Quality Systems in HIV – <b>LaQSH</b>	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Ramesh Allam	Professor, University of Illionis at Chicago, USA Director, Public Health & Research Administration, SHARE INDIA Deputy Project Director, SHARE INDIA	US \$ 2,500,000 (2016-17), US \$ 1,000,000 (2017-18)		On going
20	Strengthening TB Action and Response - <b>STAR</b>	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Satish Kaipilyawar	Professor, University of Illionis at Chicago, USA Director, Public Health & Research Administration, SHARE INDIA Associate Project Director, SHARE INDIA	US \$ 2,500,000 (2016-17), US \$ 700,000 (2017-18)	Centers for Disease Control and Prevention (CDC), Atlanta, USA.	On going

### 21. Indo-American artificial heart program

Objectives:-

Moon-shot: Develop total artificial heart.

Immediate:

Promote bioengineering research in Engineering Institutes of India in collaboration with Medical Institutions, Engineering Industries and Medical device

developers.

Advisers:

Dr. P. S. Reddy, Chairman, SHARE INDIA.

Dr. A. G. K. Gokhale, Cardiothoracic Surgeon, Apollo

Hospitals, Hyderabad.

Dr. B. M. Gandhi, Chief Executive Officer, Neo

Biomedical Services, New Delhi.

Project coordinator:

Dr. A. Subhanada Rao, Director, Advancement and Research, Sree Nidhi Institute of Science and

Technology.

Jumpstart facilitated by:

**United States of America** 

University of Pittsburgh, Pittsburgh, PA, USA:

Dr. Robert L. Kormos, Professor of Cardiac Surgery; Dr. Harvey Borovetz, Professor of Bioengineering;

Mr. Salim Olia, Doctoral student.

Carnegie Mellon University, Pittsburgh, PA, USA:

Dr. James Antaki, Professor of Bioengineering.

### INTEGRIS Nazih Zuhdi Transplant Institute, INTEGRIS Baptist Medical Center Oklahoma City, OK, USA:

Dr. James Long, Director.

India

### Birla Institute of Technology and Science - BITS Pilani, Hyderabad:

Dr. Suman Kapur, Senior Professor, Department of Biological Sciences;

Dr. M. B. Srinivas, Professor, Electronics and Electrical Engineering Department and Dean, Administration;

Dr. Srinivas Prakash Regalla, Professor and Head,

Department of Mechanical Engineering;

Dr. Sanket Goel, Associate Professor, Department of Electronics and Electrical Engineering.

### Chaitanya Bharathi Institute of Technology (CBIT):

Dr. B. Chennakesava Rao, Principal;

Dr. P. Ravinder Reddy, Professor and Head, Mechanical and Production Engineering;

Dr. N. V. Koteshwar Rao, Professor and Head, Department of Electronics and Communication Engineering:

Dr. G. Suresh Babu, Professor, Department of Electronics and Electrical Engineering;

Dr. C. Obula Reddy, Assistant Professor, Department of Biotechnology;

Dr. V. Aruna, Assistant Professor, Department of Biotechnology.

### Sree Nidhi Institute of Science and Technology (SNIST):

Dr. K. S. R. Siva Sai, Professor and Head, Department of Biotechnology;

Dr. Anil Kumar Puppala, Associate Professor, Department of Electrical Engineering;

Dr. A. Purushotham, Professor, Department of Mechanical Engineering;

Dr. C. Bhargava, Associate Professor, Department of Electrical Engineering.

#### SHARE INDIA:

Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois and Director, SHARE INDIA.

#### Laxven Systems, Hyderabad:

Mr. Ramesh Reddy, Chairman and Managing Director.

### Shree Pacetronix Ltd., Indore:

Mr. Atul Sethi, Chairman and Managing Director; Mr. Vikas Gokhale, Technical Director.

### Shrishti Resins, Hyderabad

Mr. K. P. Reddy, Chairman and Managing Director.

#### Sri Koteswara Cam Systems Pvt Ltd., Hyderabad:

Mr. Koteshwara Rao, Managing Director.

### Path Care Labs Pvt. Ltd., Hyderabad:

Dr. G. V. Prasad, Chairman and Managing Director; Ms. Nandini Prasad, Director.

### First Opinion Online Solutions Pvt. Ltd., New Delhi:

Mr. K. Vijay Saradhi, Managing Director and Chief Executive Officer.

#### Funding source:

SHARE INDIA (Individuals and Institutions) and SHARE USA.

Current status of the project: Working teams had been formed to develop Extracorporeal Pump, Hemodynamic Testing Circuit, In-Vitro Blood Trauma Circuit, Anti-Infection Percutaneous Lead, Wireless Power Transmission and Animal Models.

A Parkets	Task	Team Members		
Extracor poreal Pump	Develop blood pump motor and impeller, and controller based off pre-existing design	Adviser: Jim Antaki (James Long) Team Lead: P. Ravinder Reddy (Materials design) A. Puppala (Precision man., Motor control) C. Bhargava (Motor control and reliability) S. P. Regalla (3D printing) A. Purushotham (Prototyping) N. V. Koteswara Rao (Controller) M. B. Srinivas (Circuits/Power) K. P. Reddy and G. Suresh Babu (Developing Algorithm Vedic Maths) Ramesh Reddy and K. Koteswara Rao (Industry)		
Hemodynamic Testing Circuit	Design Phases  1. Flow meter/pressure sensors Pump housing fixture Shaft driven impeller  2. Flow visualization fixture  3. Optical imaging modalities  4. Flow optimization on impeller using Computational fluid dynamics  5. Pulse Duplicator	Advisor: Salim Olia (Jim Antaki) Team Lead: S. P. Regalla (Design, prototyping) P. Ravinder Reddy (Computational fluid dynamics) A. Purushotham (Design, fluid testing) Sanket Goel		
In-Vitro Blood Trauma Circuit	Test Parameters 1. Hemolysis a. Plasma free Hemoglobin b. Lactate dehydrogenase 2. Coagulopathy a. vWF degradation b. Leukocytes (WBCs) c. Platelet functionality d. Thrombogenicity	Advisor: James Long (Salim Olia)  Team Lead: Suman Kapur (vWF, coag tests)  K. S. R. Sivasai (Inflammation)  Sanket Goel  V. Aruna		

Anti-Infection Percutaneous Lead	Design Considerations 1. Exit site 2. Promote tissue ingrowth (wound healing) 3. Biomaterials	Advisor: Jim Antaki (James Long, Salim Olia) Team Lead: K. S. R. Sivasai (Inflammation) Ravinder Reddy (Materials design) Suman Kapur (Inflammation)
		Aruna (Antimicrobial, nano- materials) KP Reddy (Shrishti Resins) Vikas Gokhale
Wireless Power Transmission	Design Considerations  1. Coil size  2. Misalignment tolerance  3. Working distance	Advisor: Jim Antaki (Salim Olia) Team Lead: Anil Kumar Puppala (FEA, power) C. Bhargava (Battery charging system) N. V. Koteswara Rao (Sensors) M. B. Srinivas (Circuits/power) Vikas Gokhale
Animal Models	Inventorying capabilities     Assessing resources     Coordinating infrastructure     for biomarkers measurement     at outside laboratories	Advisor: James Long Team Lead: B.M. Gandhi A. G. K. Gokhale Suman Kapur (vW F, coag tests) K. S. R. Sivasai (Inflammation) Nandini Prasad







Dr. Kusneniwar Govindrao N., Professor and Head, Department of Community Medicine, MIMS.



Dr. K. Vijayaraghavan, Director Research, SHARE INDIA.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.







### 1. Longitudinal Indian Family hEalth (LIFE) pilot study

#### Principal Investigator:

Dr. Kusneniwar Govindrao N., Professor and Head, Department of Community Medicine, MIMS.

### Co-Investigator:

Dr. K. Vijayaraghavan, Director Research, SHAREINDIA.

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

**Funding source:** SHARE INDIA (Individuals and Institutions) and SHARE USA.

Amount: Rs. 33 Lakhs (2017-18).

**Aims:** Understand the links between the environmental conditions in which Indian women conceive, are pregnant, give birth, and the physical and mental health along with development of their children.

**Objectives:** Identify factors which contribute to the causation of low birth weight, maternal, fetal, neonatal, infant, childhood mortality, childhood disorders and diseases. Identify antecedents of cardiovascular disease from pre-pregnancy through pregnancy and young adulthood in women.

**Current status of the project:** Among 1227 women enrolled there were 1512 conceptions. Among them, the live births were 1230 as on March 2017. Child's visits are scheduled every six months up to 24 months and thereafter every 12 months upto 60 months. Children born to the enrolee, who are in the age group of 6-7 years are being followed-up to assess their health status along with their mother.

Publications: G.N. Kusneniwar, R.Margaret Whelan, Kalpana Betha, Jamie M Robertson, Purushotham Reddy Ramidi, K Balasubramanian, Vijayaraghavan Kamasamudram, Catherine L Haggerty, Clareann H Bunker, PS Reddy; Cohort Profile: The Longitudinal Indian Family hEalth (LIFE) Pilot Study, Telangana State, India. Int J Epidemiol 2016 dyw174.doi: 10.1093/ije/dyw174



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MTMS.



Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

### Mycoplasma genitalium, differentiated Ureaplasma species, and pregnancy outcomes

### Principal Investigator:

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Funding source: Fogarty International Center - NIH.

Amount: US \$46,318 for two years (2016-17 and 2017-18).

**Aims:** To reduce the burden of poor pregnancy outcomes due to reproductive tract infections in India.

**Objectives:** Determine the role of pre-pregnancy and prenatal vaginal infections with mollicutes including fastidious Mycoplasma genitalium and the newly differentiated Ureaplasma spp. termed U. urealyticum (UU) and U. parvum (UP) in Pre-Term Birth (PTB) and Spontaneous abortion (SAB). The study also aims to determine the relationships between vaginal infection with Mycoplasma genitalium, Ureaplasma

urealyticum, Ureaplasma parvum, and adverse pregnancy outcomes, including spontaneous abortion and pre-term birth. It also examines chorioamnionitis as a mediating factor between Mycoplasma genitalium or Ureaplasma infection and spontaneous pre-term birth.

**Current status of the project:** The project is currently studying 188 women who delivered pre-term, 218 women who experienced spontaneous abortion, and 436 control women who delivered at term, nested within the on-going SHARE INDIA projects.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. Brandie N. Taylor, Associate Professor, School of Public Health, The Texas A&M University System, Texas, USA.



Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

The role of early pregnancy serum markers of cellular damage, innate immune signalling and angiogenesis in preeclampsia subtypes - LIFE study samples

### Principal Investigator:

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

### Co-Investigator:

Dr. Brandie N. Taylor, Associate Professor, School of Public Health, The Texas A&M University System, Texas, USA.

Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Funding source: NIH - Through TAMU, Texas.

Amount: US\$24,000(2017-18).

**Aims:** To identify biomarkers for early predication or to identify women with severe subtypes who require different clinical management.

**Objectives:** Examine the relationship between early pregnancy serum markers of cellular damage, innate immune signalling, angiogenesis and preeclampsia subtypes.

Current status of the project: The reagents are procured to perform necessary tests of 150 biological specimens from women with spontaneous abortion, preeclampsia and healthy normotensive controls who participated in the LIFE study.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

# 4. Prospective study of preconception and prenatal biomarkers of pre-term birth - LIFE study extension

### Principal Investigator:

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

### Co-Investigator:

Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Funding source: NIH through University of Pittsburgh.

Amount: US\$936,756.

Aims: To examine a broad range of preconception and prenatal serum biomarkers in the Cardiovascular Disease (CVD) pathways in relation to the risk of Pre-Term Birth (PTB).

**Objectives:** Determine if preconception biomarkers: lipid, inflammatory/immune, glucose, blood pressure and vitamin D predict PTB. Examine longitudinal changes in the above biomarkers across

pregnancy (preconception, first and third trimester and delivery) in relation to PTB. Examine shared pathways leading to pregnancy loss and PTB.

Current status of the project: Grant applied, approval is awaited.



Dr. Pawan Kumar Sharma,
Associate Professor,
Department of Community Medicine,
MIMS.



Dr. K. Vijayaraghavan, Director Research, SHARE INDIA.



Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.



Dr. Kusneniwar Govindrao N.,
Professor and Head,
Department of Community Medicine,
MIMS.



Dr. Enakshi Ganguly,
Professor,
Department of Community Medicine,
MIMS.



Dr. Anne Newman,
Professor and Chair,
Department of Epidemiology,
GSPH, University of Pittsburgh,
PA, USA.



Dr. Jane Cauley,
Distinguished Professor,
Department of Epidemiology and
Associate Dean, Research,
GSPH, University of Pittsburgh,
PA, USA.

### 5. Mobility and Independent Living in Elders Study - MILES

#### Principal Investigator:

Dr. Pawan Kumar Sharma, Associate Professor, Department of Community Medicine, MIMS.

#### Co-Investigator:

Dr. K. Vijayaraghavan, Director Research, SHARE INDIA.

#### Investigator:

Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

Dr. Kusneniwar Govindrao N., Professor and Head, Department of Community Medicine, MIMS.

Dr. Enakshi Ganguly, Professor, Department of Community Medicine, MIMS.

Dr. T. Kamaraju, Tutor, Department of Community Medicine, MIMS.

#### Consultants from USA:

Dr. Anne Newman, Professor and Chair, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Dr. Jane Cauley, Distinguished Professor, Department of Epidemiology and Associate Dean, Research, GSPH, University of Pittsburgh, PA, USA.

Dr. Clareann H. Bunker, Associate Professor Emeritus, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Dr. Joseph M. Zmuda, Associate Professor, Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Dr. Tushar Singh, Geriatrics, Clinical Trials, Epidemiology, CDC, Atlanta, USA.

#### Consultant from INDIA:

Dr. B. S. Garg, Director and Professor of Community Medicine, Mahatma Gandhi Institute of Medical Sciences, Sevagram.

**Funding source:** SHARE INDIA (Individuals and Institutions) and SHARE USA.

Amount: Rs. 14 Lakhs for wave IV (2017-18).

Aims: To define the prevalence, incidence and risk factors for disability and age-related chronic diseases through a period of five years, in the population of older adults (60+) in the Telangana region.

Objectives: Determine the prevalence of age-related chronic diseases in older adults. Determine the prevalence of socioeconomic, psychosocial, behavioral, dietary and environmental risk factors for age-related chronic diseases and disability using examinations and non-invasive testing. Determine which conditions are most strongly associated with the mobility disability, both cross-sectionally and longitudinally.



Dr. Clareann H. Bunker, Associate Professor Emeritus, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.



**Dr. Joseph M Zmuda,**Associate Professor,
Epidemiology, GSPH,
University of Pittsburgh, PA, USA.



**Dr. Tushar Singh,** Geriatrics, Clinical Trials, Epidemiology, CDC, Atlanta, USA.



Dr. B. S. Garg,
Director and Professor of
Community Medicine,
Mahatma Gandhi Institute of
Medical Sciences, Sevagram.







Current status of the project: Fourth wave follow-up visits have commenced in the month of February 2017 with 452 eligible participants among the 562 recruited during 2012-13, leaving out the 110 participants who died. In-depth interview and study related medical test has been commenced.

Publications: Singh, T., Sharma, P. K., Jammy, G. R., Cauley, J. A., Bunker, C. H., Reddy, P. S., and Newman, A. B. (2017) Design of the Mobility and Independent Living in Elders Study: An older adult cohort in rural India. Geriatr Gerontollnt, 17: 31–40. doi:10.1111/ggi.12668.



**Dr. K. Vijayaraghavan,** Director Research, SHARE INDIA.



Dr. D. Shailendra, Associate Professor, Department of Pharmacology, MIMS.







## 6. Technology Enabled community health workers to extend Telemedicine to Rural homes at Affordable costs - TETRA

#### Principal Investigator:

Dr. K. Vijayaraghavan, Director Research, SHAREINDIA.

### Co-Investigator:

Dr. D. Shailendra, Associate Professor, Department of Pharmacology, MIMS.

**Funding source:** SHARE INDIA (Individuals and Institutions) and SHARE USA. Application under review at ICMR.

Amount: Rs. 43 Lakhs for follow-up of 6 villages (2017-18).

Aims: To increase access to high-quality medical care to rural India.

**Objectives:** Assess the feasibility, effectiveness and costs of the technology enabled community health workers extending telemedicine torural homes to control hypertension and diabetes.

Current status of the project: Eleven community health workers were trained to use point-of-care devices for measuring blood sugar and

blood pressure. They were also trained to use Tablet devices for data entry and to network with the physicians at the MediCiti Hospital via live video connection. Scaling-up to a larger rural population has been approved by the Department of Health Research and the full proposal is under review for the funding at ICMR. In the meantime, study participants are being followed up every month and medicines are being distributed free of cost.





Dr. Padma Yalamati, Professor, Department of Biochemistry, MIMS.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. Aparna Varma, Professor and Head, Department of Biochemistry, MIMS.



Dr. Rashmi Pant, Biostatistician, SHARE INDIA.







### 7. HEalthy Pregnancy (HELP) Study

#### Principal Investigator:

Dr. Padma Yalamati, Professor, Department of Biochemistry, MIMS.

#### Co-Investigators:

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

Dr. Aparna Varma, Professor and Head, Department of Biochemistry, MIMS.

Dr. Rashmi Pant, Biostatistician, SHARE INDIA.

**Funding source:** SHARE INDIA (Individuals and Institutions) and SHARE USA.

Amount: Rs. 11 Lakhs (2017-18).

Aims: To identify whether the early rise in blood pressure or serum creatinine or serum uric acid or serum cystatin C or urine protein creatinine ratio compared to the 1st trimester (baseline) value predicts the later onset of hypertensive disorders. It also aims to study the association between these markers and maternal and fetal outcomes.

**Objectives:** Measure blood pressure, serum uric acid, serum creatinine and serum cystatin C (stored at -80° C) and urine protein creatinine ratio every month during the course of pregnancy and examine the tracking of these markers to identify which marker, individually or in combination helps in the prediction of hypertensive disorders at the earliest.

Current status of the project: A total of 472 pregnant women have been screened as on March 2017, out of which 455 pregnant women were included and 17 pregnant women were excluded on the basis of pre-set criteria. They are being followed-up regularly through reminder calls two days before their due date for the next visit. During the visit they are monitored for the development of blood pressure.



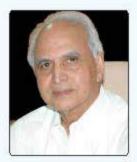
Dr. D. Prabhakaran, Vice President (Research and Policy), PHFI, New Delhi.



Dr. Oona Campbell, Professor, Epidemiology, The London School of Hygiene and Tropical Medicine, UK.



Dr. Bíraj Karmacharya, Professor programs, Kathmandu University of Medical Sciences, Nepal.



Dr. P. S. Reddy Chairman, SHARE INDIA.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIM5.



Dr. Sailesh Mohan, Centre for Control of Chronic Conditions, PHFI, New Delhi.



Dr. Poornima Prabhakaran, Centre for Control of Chronic Conditions, PHFI, New Delhi.



Dr. Ambuj Roy, Department of Cardiology, AIIM5, New Delhi.



Dr. Sandosh Padmanabhan, Department of Medicine, University of Glasgow, UK.



Dr. Sonía Anand, Professor, Department of Medicine, McMaster University, Canada.



Dr. Abha Shrestha, Department of Obstetrics and Gynaecology, Kathmandu University of Medical Sciences, Nepal.



Dr. Pablo Perel
Associate Professor, Cardiology
and Epidemiologist,
The London School of
Hygiene and Tropical Medicine, UK.



Dr. Clara Calvert,
Assistant Professor,
The London School of
Hygiene and Tropical Medicine, UK.



Dr. John Cairns,
Professor of Health Economics,
The London School of
Hygiene and Tropica (Medicine, UK.



Dr. Ajay V. S., CCCC, PHFI, New Delhi.

8. Improving Antenatal Care (ANC) to enhance adherence to National ANC guidelines, including the screening, detection, referral and management of gestational diabetes and pregnancy induced hypertension (PIH), using electronic decision support system enabled frontline health workers, in primary healthcare settings of India and Nepal: a cluster-randomized trial

### Principal Investigator:

Dr. D. Prabhakaran, Vice President (Research and Policy), PHFI, New Delhi.

Dr. Oona Campbell, Professor, Epidemiology, The London School of Hygiene and Tropical Medicine (LSHTM), UK.

Dr. Biraj Karmacharya, Professor programs, Kathmandu University of Medical Sciences, Nepal.

Dr. P. S. Reddy, Chairman, SHARE INDIA.

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

### Co-Investigators:

Dr. Sailesh Mohan, Centre for Control of Chronic Conditions (CCCC), PHFI, New Delhi.

Dr. Poornima Prabhakaran, CCCC, PHFI, New Delhi.

Dr. Ajay V. S, CCCC, PHFI, New Delhi.

Dr. Ambuj Roy, Department of Cardiology, AHMS, New Delhi.

Dr. Sandosh Padmanabhan, Department of Medicine, University of Glasgow, UK.

Dr. Sonia Anand, Professor, Department of Medicine, McMaster University, Canada.

Dr. Abha Shrestha, Department of Obstetrics and Gynaecology, Kathmandu University of Medical Sciences, Nepal.

Dr. Pablo Perel, Associate Professor, Department of Cardiology and Epidemiology, LSHTM.

Dr. Clara Calvert, Assistant Professor, LSHTM.

Dr. John Cairns, Professor of Health Economics, LSHTM.

Dr. Ishita Rawal, Research Fellow, CCCC, PHFI, New Delhi.

Funding source: Newton Fund.

Amount: GBP 1,500,000.

**Objectives:** Develop and evaluate an electronic decision support system for non-physician front line health workers that incorporates ANC services with the screening, detection and referral of high risk pregnancies to the existing health system for appropriate clinical management.

**Current status of the project:** Concept proposal submitted and short-listed.



Dr. Padma Yalamati, Professor, Department of Biochemistry, MIMS.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. Aparna Varma, Professor and Head, Department of Biochemistry, MIMS.

### 9. Serum cystatin C as an early biomarker of pre-eclampsia

### Principal Investigator:

Dr. Padma Yalamati, Professor, Department of Biochemistry, MIMS.

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

Dr. Aparna Varma, Professor and Head, Department of Biochemistry, MIMS.

Funding source: ICMR.

Amount: Rs. 18.13 Lakhs.

Aims: Verify if serum cystatin C increases during early pregnancy and can act as an early biomarker for identifying women at high risk of developing preeclampsia. Assess whether high levels of cystatin C correlate with the severity of preeclampsia and its association with maternal and fetal outcomes which were not established in previous studies.

**Objectives:** Identify serum cystatin C as an early biomarker for preeclampsia. Assess serum cystatin C as a better marker for preeclampsia than serum creatinine or serum uric acid. Study the maternal and fetal outcomes with respect to serum cystatin C levels.

**Current status of the project:** Pilot study has been completed and ICMR approved the study. However funds were not released therefore the further study was cancelled.



Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.



Dr. P. Lakshmi Sailaja, Assistant Professor, Department of Obstetrics and Gynecology, MIMS.





### 10. Caesarean Surgical Site Infection (CSSI) study

### Principal Investigator:

Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS.

### Co-Investigator:

Dr. P. Lakshmi Sailaja, Assistant Professor, Department of Obstetrics and Gynecology, MIMS.

Funding source: SHARE INDIA (Individuals and Institutions) and SHARE USA.

**Amount:** Rs. 2 Lakhs for two years Rs.1 Lakh (2016-17) and Rs.1 Lakh (2017-18).

Aims: To reduce incidence of surgical site infections following caesarean sections.

**Objectives:** Estimate the incidence of caesarean surgical site infections following caesarean sections at MediCiti Hospital. Identify risk factors associated with SSI following caesarean and to determine the bacteriological profile of SSI linked with caesarean section.

Current status of the project: A total of 370 cases of caesarean sections were included in the study, of them, 288 women completed one month follow-up post-operatively. Among them CSSI was found in 7.5% of cases. Sixty-five women are currently being followed up post caesarean sections as on March, 2017.





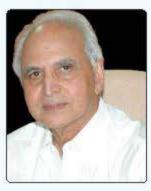
Dr. Donald S. Burke,
Dean, GSPH and Associate Vice
Chancellor for Global Health, Health
Sciences, University of Pittsburgh, USA.



Dr. Clare ann H. Bunker, Associate Professor Emeritus, Department of Epidemiology, GSPH, University of Pittsburgh, USA.



Dr. Saumadipta Pyne, Professor, PHFI, Hyderabad.



Dr. P. S. Reddy, Chairman, SHARE INDIA.



Dr. Supriya Kumar, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.



Prof. Ramanan Laxminarayan,
Vice President Research and Policy,
Public Health foundation of India,
Hyderabad.



Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.



Dr. Mohammed Raheel Sayeed, Research Scientist, SHARE INDIA.



# 11. Empowering Indian health researchers with computational modelling tools

### Principal Investigators:

Dr. Donald S. Burke, Dean, GSPH and Associate Vice Chancellor for Global Health, Health Sciences, University of Pittsburgh, PA, USA.

Dr. Clareann H. Bunker, Associate Professor Emeritus, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Dr. Saumadipta Pyne, Professor, PHFI, Hyderabad.

### Co-Investigators:

Dr. P. S. Reddy, Chairman, SHARE INDIA.

Dr. Supriya Kumar, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Prof. Ramanan Laxminarayan, Vice President Research and Policy, Public Health foundation of India, Hyderabad.

Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

Dr. Mohammed Raheel Sayeed, Research Scientist, SHARE INDIA.

Funding source: Fogarty International Center-NIH.

**Amount:** US \$ 62,140 for three years (2015 to 2018). US \$ 41,427 (2015-17) US \$ 20,713 (2017-18).

**Aims:** Capacity building of public health professionals and researchers in India.

**Objectives:** To enhance evidence based, data driven decision making through innovations in information communication technology.

Current status of the project: Part of the grant "International symposium on Health Analytics and Disease Modelling" (HADM 2016) at Hyderabad was conducted on February 29 and March 1, 2016, partnering with IIPH, Hyderabad and GSPH, University of Pittsburgh, USA. The symposium was attended by 30 participants from Institutes all over India. Out of these six participants were selected and further trained at the Public Health Dynamics Laboratory, University of Pittsburgh, from December 5 to 9, 2016 with the 2nd year grant.



Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.



Dr. Mohammed Raheel Sayeed, Research Scientist, SHARE INDIA.



Dr. Mark S. Roberts,
Professor and Chair,
Health Policy and Management,
Director, Public Health Dynamics Lab,
University of Pittsburgh, PA, USA.



Dr. John Grefenstette,
Professor, Health Policy and
Management,
Senior Scientist, Public Health Dynamics
Lab, University of Pittsburgh, PA, USA.

# 12. HIV modelling capacity development among Indian researchers (Supplement grant of Empowering Indian health researchers with computational modelling tools)

### Principal Investigator:

Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

### Investigator:

Dr. Mohammed Raheel Sayeed, Research Scientist, SHARE INDIA.

### Consultant:

Dr. Lincoln Choudhury, Consultant.

#### Mentors:

Dr. Mark S. Roberts, Professor and Chair, Health Policy and Management, Director, Public Health Dynamics Lab, University of Pittsburgh, PA, USA.

Dr. John Grefenstette, Professor, Health Policy and Management, Senior Scientist, Public Health Dynamics Lab, University of Pittsburgh, PA, USA.

Funding source: Fogarty International Center - NIH.

Amount: US\$ 27,372. (2016-17).

Aims: To develop synthetic representative population.

### Current status of the project:

This NIH supplemental funding was added to support an extension of the disease modelling efforts to include modelling of HIV. To support these efforts, a synthetic representative population has been created for Telangana State to use in the modelling studies. This will allow detailed modelling of HIV and other diseases to yield information useful for public health policy decision making.



Dr. Enakshi Ganguly,
Professor,
Department of Community Medicine,
MIMS.



Dr. M. B. Srinivas,
Professor,
Electronics and Electrical Engineering
Department and Dean,
Administration, BITS, Hyderabad.



Dr. Pawan Kumar Sharma, Associate Professor, Department of Community Medicine, MIMS.







# 13. Comprehensive intelligent acute respiratory infection (ARI) monitor for early detection of pneumonia

### Principal Investigator:

Dr. Enakshi Ganguly, Professor, Department of Community Medicine, MIMS.

### Co- Principal Investigator:

Dr. M. B. Srinivas, Professor, Electronics and Electrical Engineering Department and Dean, Administration, BITS, Hyderabad.

### Investigator:

Dr. Uma Ramchandran, Professor, Department of Paediatrics, MIMS.

Dr. Pawan Kumar Sharma, Associate Professor, Department of Community Medicine, MIMS.

Funding source: ICMR.

**Amount:** Rs. 40 Lakhs for three years (2015 to 2018). Rs. 16 Lakhs (2015-16).

**Aims:** To develop comprehensive intelligent acute respiratory infection monitor.

### Objectives:

Test the validity of a comprehensive intelligent ARI monitor to correctly record selected vital parameters among infants and under five year old children suffering with respiratory symptoms attending paediatric outpatient department or admitted to the paediatric ward of MIMS. Test the reliability of the cut off alarms of the comprehensive intelligent ARI monitor.

### Current status of the project:

A working device has been developed to record four critical parameters of respiratory illness in a sick child, which can be connected to a smartphone to transmit the information to a remote area (Tertiary care hospital). An algorithm based on the Integrated Management of Neonatal and Childhood Illnesses guidelines has been developed to feed data into the monitor for decision making. One hundred healthy children aged 0-5 years have been tested in MediCiti Hospital using the existing ARI monitor device. ICMR approval for second year is awaited.



Dr. Srinivasa Prakash Regalla, Professor and Head, Department of Mechanical Engineering, BITS Pilani, Hyderabad.



Dr. Prakash N. Shrivastava,
Professor Emeritus,
University of Southern California,
USA. Member, SHARE INDIA.



Dr. Kalyan Kaushik Bharam
Asstistant Professor,
Department of Orthopaedics,
MIMS.







# 14. Develop and test 3D printing technology to produce innovative limbs at affordable cost for the disabled in India

### Principal Investigator:

Dr. Srinivasa Prakash Regalla, Professor and Head, Department of Mechanical Engineering, BITS Pilani, Hyderabad.

### Co-Investigator:

Dr. Prakash N. Shrivastava, Professor Emeritus, University of Southern California, USA. Member, SHARE INDIA.

Dr. Kalyan Kaushik Bharam, Assistant Professor, Department of Orthopaedics, MIMS.

**Funding source:** Biotechnology Industry Research Assistance Council (BIRAC), Department of Bio Technology, Government of India.

Amount: Rs. 47.65 Lakhsfor 2-1/2 years (2015 to June 2017).

**Aims:** Create innovative limbs at affordable cost to meet the needs of people, acknowledging their economic and health status.

**Objectives:** Develop and test 3D printing technology to produce innovative limbs at affordable cost for the disabled in India.

**Current status of the project:** The investigators manufactured 15 robust and versatile prosthetics with the support of PSPR 3D tech company at the Technology Business Incubator. Ten patients were tested on these prosthetics and, further research trials are in progress.



Dr. Ganesh Oruganti,
Director,
Public Health and Research Administration,
SHARE INDIA.



Dr. Enakshi Ganguly,
Professor,
Department of Community Medicine,
MIMS.



Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

# 15. DNG 09 - Prospective, multi-center, community-based incidence study of symptomatic dengue in India

### Principal Investigators:

Dr. Ganesh Oruganti, Director, Public Health and Research Administration, SHARE INDIA.

Dr. Enakshi Ganguly, Professor, Department of Community Medicine, MIMS.

Dr. Jammy Guru Rajesh, Research Scientist, SHARE INDIA.

Funding source: San of Pasteur, France.

Amount: Euro 160,613.

**Objectives:** Estimate the population-based incidence of symptomatic laboratory-confirmed dengue infection in the catchment population of each study site.

**Current status of the project:** ICMR health screening committee approved the study. Project related training is planned in the first and second quarter of 2017 and the project will commence thereafter.



Dr. Rajani Santhakumari, Associate Professor, Department of Physiology, MIMS.



Dr. D. Shailendra, Associate Professor, Department of Pharmacology, MIMS.



Dr. Madhavi Chevuturu,
Professor,
Department of Ophth almology,
MIMS.



**Dr. Suresh G.**Neuroradiologist,
Yashodha Hospital, Hyderabad.



Dr. G. V. S. Murthy, Director, IIPH, Hyderabad.



**Dr. Caterina Rosano,**Professor, Department of Epidemiology,
GSPH, University of Pittsburgh, PA, USA.



Dr. Robert M. Boudreau, The Center for Aging and Population Health (CAPH), University of Pittsburgh, PA, USA.

# 16. Association of brain metabolites, brain white matter hyper-intensities and non-invasive retinal markers with cognition in type 2 diabetes in India - BRAIN STUDY

### Principal Investigator:

Dr. Rajani Santhakumari, Associate Professor, Department of Physiology, MIMS.

### Co-Investigator:

Dr. D. Shailendra, Associate Professor, Department of Pharmacology, MIMS.

Dr. Madhavi Chevuturu, Professor, Department of Ophthalmology, MIMS.

### Consultants from India:

Dr. Suresh G., Neuroradiologist, Yashodha Hospital, Hyderabad. Dr. G. V. S. Murthy, Director, IIPH, Hyderabad.

### Consultants from USA:

Dr. Caterina Rosano, Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA.

Dr. Robert M. Boudreau, The Center for Aging and Population Health (CAPH), University of Pittsburgh, PA, USA.

Funding source: Fogarty International Center - NIH.

Amount: US \$ 257,484 (For two years). Annually US \$128,742.

Aims: To increase understanding of the factors associated with cognitive impairment in Type 2 diabetes (T2D), and ultimately lead to measures to prevent or reduce this risk. The study will determine whether brain white matter hyper-intensities and brain metabolites (using MRI), retinal vascular injury markers, and cognitive function differ between Asian Indians with and without T2D.

**Objectives:** Determine whether biomarkers of cognitive impairment differ between persons with and without T2D recruited from a population-based sample of middle-aged, rural South Indians. Measure the association between biomarkers and cognitive function (continuous) in persons with, and in persons without, T2D. Explore the interrelationships among these markers to identify the strongest predictor of cognitive function adjusting for other predictors and covariates.

**Current status of the project:** Grant applied and to be resubmitted with modifications.



Dr. Rashmi Pant, Biostatistician, SHARE INDIA



**Dr. Saumadipta Pyne,** Professor, PHFI, Hyderabad.

17. IndEpi: A platform for systematic integration of Indian Epidemiology datasets to enable health analytics and disease modelling (R and D proposal under the ICPS program of DST)

### Principal Investigator:

Dr. Rashmi Pant, Biostatistician, SHARE INDIA.

### Co-Investigator:

Dr. Saumadipta Pyne, Professor, PHFI, Hyderabad.

**Funding source:** Department of Science and Technology, Ministry of Science and Technology, Government of India.

Amount: Rs. 77.29 Lakhs.

**Aims:** Integrate, organize and make available to the scientists and policy makers an easily usable interface, tentatively called IndEpi 1.0.

### Objectives:

### Data Synthesis and Integrative Modelling

- Develop a common platform integrating public health databases (IndEpi V.1.0).
- Conduct epidemiological investigations.

### Big data analytics and visualizations

- Create population level simulations and predictions based on parameters assimilated from IndEpi 1.0.
- Generate easily interpretable, visually accessible and policy relevant evidence that may provide inputs to all stakeholders.

### Pilot testing

 Perform case studies on synthesis of IndEpi 1.0 with select independent epidemiological studies.

**Current status of the project:** Grant applied in March 2017 approval awaited.



Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.



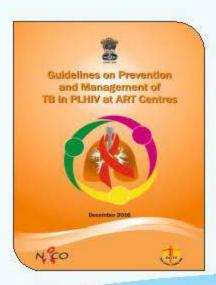
Dr. Ganesh Oruganti, Director, Public Health and Research Administration, SHARE INDIA.



Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA.







### Technical assistance to Government of India

# 18. National Initiative to Strengthen and Coordinate HIV/TB Response (NISCHIT)

### Principal Investigator:

Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.

### Co Investigators:

Dr. Ganesh Oruganti, Director, Public Health and Research Administration, SHARE INDIA.

Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA.

**Funding source:** US Centers for Disease Control and Prevention (CDC).

**Amount:** US \$ 1,000,000 (2016-17),US \$ 1,200,000 (2017-18).

**Objectives:** Enhance coverage and retention of People Living with HIV/AIDS (PLHIV) on treatment at ART centers. Operationalize and strengthen delivery of daily Anti-Tuberculosis Treatment (ATT) services with emphasis on retention of HIV-TB co-infected PLHIV on ATT and ART. Strengthen collaboration between National AIDS Control Programme (NACP) and Revised National Tuberculosis Control Program

(RNTCP) for HIV-TB case detection, treatment, care services and referrals. Institutionalize "3 Is" — Isoniazid Preventive Therapy (IPT), Intensified Case Finding (ICF) for TB and Airborne Infection Control measures at ART centres, ICTC and TI.

Current status of the project: NISCHIT in 2016 organised National Training on Daily ATT and 3Is for 510 ART Centres covering 956 staff including 429 Nodal Officers, Senior / Medical Officers and 527 Staff Nurses and Counsellors through 21 batches across the country to ensure that all the ART centres are well acquainted with the functional aspects of the new guidelines. Furthermore, NISCHIT in Andhra Pradesh (East Godavari, Krishna and Guntur) and Maharashtra (Mumbai, Pune and Thane) provided supportive supervision to 54 ART centers in the area of Institutionalizing "3 Is" — Isoniazid Prophylaxis Therapy (IPT), ICF AIC and daily ATT. Project NISCHIT organized and conducted NACO's Induction Training Programme in HIV Care for 30 ART Medical Officers of Andhra Pradesh and Telangana, Secunderabad from December 5 to 17, 2016. In addition, Operational Guidelines on TB management at ART centres was developed in collaboration with CDC.



Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.



Dr. Ganesh Oruganti,
Director,
Public Health and Research
Administration, SHARE INDIA.



Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA.







### 19. Laboratory Quality Systems in HIV (LaQSH)

### Principal Investigator:

Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.

### Co Investigators:

Dr. Ganesh Oruganti, Director, Public Health and Research Administration, SHARE INDIA.

Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA.

Funding source: US Centers for Disease Control and Prevention (CDC).

Amount: US \$2,500,000 (2016-17), US \$1,000,000 (2017-18).

**Aims:** To support implementation of sustainable, evidence based quality improvement activities for laboratory services under NACP to strengthen HIV and HIV related diagnosis.

**Objective:** Provides Technical Assistance to NACO for implementing the quality management systems in India's National AIDS Control Programme laboratories and strengthening its laboratory testing network for HIV and related diseases.

Current status of the project: During 2016, on-site mentoring for implementation of Quality Management System (QMS) was provided. This has resulted in the accreditation of 66 referral labs by the National Accreditation Board for Testing and Calibrating Laboratories (NABL) by March 2016. Furthermore, the CDC partnership has resulted in strengthening institutional capacities at national, state, district and facility levels to sustain the QMS program for NACP laboratories.

TA in 2016-17 focused on strengthening QMS of unaccredited HIV testing reference labs (National Reference Laboratories and State Reference Laboratories), HIV testing and counselling sites - the ICTCs and other HIV related laboratories under NACP including the Early Infant Diagnosis (EID) testing laboratories, Sexually Transmitted Disease (STI)/ Reproductive Tract Infection (RTI) laboratories, Viral Load (VL) laboratories and CD4 testing laboratories. These areas of priority are high burden districts in the states of Andhra Pradesh (Guntur, Krishna and East Godavari), Maharashtra (Pune, Mumbai and Thane), Manipur, Mizoram and Nagaland.



Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.



Dr. Ganesh Oruganti, Director, Public Health and Research Administration, SHARE INDIA.



Dr. Satish Kaipilyawar, Associate Project Director, SHARE INDIA.





### 20. Strengthening TB Action and Response (STAR)

### Principal Investigator:

Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.

### Co Investigators:

Dr. Ganesh Oruganti, Director Public Health and Research Administration, SHARE INDIA.

Dr. Satish Kaipilyawar, Associate Project Director, SHARE INDIA.

Funding source: CDC Atlanta under the Global Health Security Agenda (GHSA).

Amount: US\$2,500,000 (2016-17), US\$700,000 (2017-18).

**Aims:** To build institutional capacity to improve TB laboratory quality, airborne infection control, health care worker surveillance, drug-resistant TB treatment and adherence.

**Objective:** Improve quality assured diagnostics for early detection, treatment, and control of Drug Resistant (DR) TB and Multi DR TB through strengthening the capacities of health care workers to detect and investigate outbreaks of DR-TB to provide targeted control measures and better understand transmission patterns.

Current status of the project: STAR is providing TA to building institutional capacity for the Ministry of Health and Family Welfare of Maharashtra and Municipal Corporation of Greater Mumbai in collaboration with Central TB Division to strengthen Airborne Infection Control(AIC) and improve drug resistant TB treatment adherence. The project activities are intended to increase coverage and quality of diagnosis, treatment and care for TB services with particular focus on DR-TB.

On the AIC, background information on 148 health facilities in seven western suburbs was collected and the team has compiled a checklists and tools for leading the AIC assessments based on monitoring and performance indicators. The project also collaborates with Tata Institute of Social Sciences for providing counselling services for Drug Resistant TB patients. Furthermore, STAR is piloting CBNAAT/GeneXpert EQA implementation in Maharashtra to improve TB laboratory quality in partnerships with CTD, NTI and FIND. Part of the project, two microbiologists from Government of India were trained at CDC Atlanta to prepare and conduct panel testing for CBNAAT in India.

# Seminars, Conferences, Workshops and Training conducted

#### Visit of Dr. Donald S. Burke to SHARE INDIA - MIMS



Dr. Donald S. Burke, Dean, GSPH and Associate Vice Chancellor for Global Health, Health Sciences, University of Pittsburgh, PA, USA visited SHARE INDIA – MIMS on the February 28, 2016 at Hyderabad. He interacted with the researchers of the organization, reviewed research studies and provided feedback, comments and suggestions.

### Telangana Medical Colleges' Forum for promotion of research

Part of the Fogarty grant's agenda, Telangana Medical Colleges' Forum for promotion of research was held from February 12 to 14, 2016 at Hyderabad, with the aim of spreading awareness for promoting research in medical colleges of Telangana. The meeting drew participation from all the medical colleges in the State of Telangana with 64 representatives from the Government and private medical colleges. The forum was inaugurated by Dr.Karunakar Reddy, Vice Chancellor of Kaloji Health University, Government of Telangana.



### Fifth Fogarty training program



Fifth Fogarty International course in Research Methods in Chronic Non Communicable Disease Research was held from 9-13, March, 2016 at Hyderabad. The training focused on overview of medical research, sample size, case control studies, manuscripts preparation and critical review. Twenty seven participants attended the training.

### Annual Research Methodology Workshop

To continue the spirit of igniting research in the students and faculty, Annual Research Methodology Workshop was conducted between January 16 to 19, 2017 at Hyderabad. It aimed to demystify research and research methods for aspirant students to become researchers in India. This workshop was formerly supported by Fogarty International Center-NIH, SHARE INDIA - MediCitii Institute of Medical Science (MIMS) faculty, who have been trained over the last five years, conducted this research methodology workshop. The workshop drew participation from 50 undergraduate and post graduate students, who were pursuing medical education at MIMS, Kakatiya Medical College and MNJ Institute of Oncology, Regional centre for Cancer.



### Research Advisory Committee meeting



SHARE INDIA's 12th Scientific Research Advisory Committee (RAC) meeting was held on March 17, 2017, under the Chairmanship of Dr. P. S. Reddy, Chairman, SHARE INDIA at the registered office of the society, Ghanpur, Medchal mandal and District, Telangana State. Dr. Prabhakaran, Dr. K. Vijayaraghavan, Prof. Suman Kapur, Dr. Vasireddi S. P., Dr. Sesikeran B., Dr. B. M. Gandhi and Prof. B. Sashidhar Rao participated in the meeting. The meeting also had special invitees like Dr. B. Kalpana, Dr. Rajani Santhakumari, Dr. Enakshi Ganguly, Dr. Aparna Varma,

Dr. D. Shailendra, Dr. Padma Yalamati, Dr. Pawan Kumar Sharma, Dr. Lakshmi Jyothi and Dr. Mohammad Raheel Sayeed. Invitees presented the various research studies/works undertaken by the organization and RAC members provided valuable in-puts to further the impact and acceptability of the studies.



### Global health / International exchange program

The SHARE INDIA exchange program aimed to promote cultural understanding and cooperation among medical students and other health professionals, and increase awareness of the discrepancies between health systems around the globe. SHARE INDIA undertakes exchange program to enhance opportunities for global education and training for current and future medical workforce in India. During current year, SHARE INDIA invited various distinguished international faculty members to review, consult and provide new dimensions to its current and future research programs.

### MIMS students visits to universities abroadin 2016-17

S. No.	Name of the Student	University Visited
1	Ms. Priyatha Garlapati	University of Pittsburgh, USA
2	Ms. Pallavi Vishwanadh	University of Pittsburgh, USA
3	Ms. Divya Kalluru	University of Pittsburgh, USA
4	Mr. Gadella Vaishnavi	University of Kentucky, USA.
5	Ms. Nida Farokh Ladiwala	University of Pittsburgh, USA
6	Ms. Habeeba Mohammed Sabir Ali	University of Pittsburgh, USA
7	Ms. Kaza Tejaswi	University of Kentucky, USA.
8	Ms. Jangam Pragna	University of Kentucky, USA.
9	Ms. Sanjana Reddy	University of Kentucky, USA.

### International faculty visits to SHARE INDIA- MIMS in 2016-2017

S. No.	Name of the	Designation /	Name of the Institute /
	Faculty	Purpose of visit	University
1	Dr. Donald S. Burke	Dean/ Review of all the SHARE INDIA research studies	GSPH and Associate Vice Chancellor for Global Health, Health Sciences, University of Pittsburgh, Pittsburgh, PA, USA
2	Prof. Clareann H. Bunker	Associate Professor Emeritus, Department of Epidemiology / Imparting (Fogarty) Training, Telangana and HIV-NCD Meeting.	GSPH, University of Pittsburgh, Pittsburgh, PA, USA
3	Dr. Prakash N.	Professor Emeritus/ Review of	University of Southern California,
	Shrivastava	Prosthetics Project.	Los Angeles, California.
4	Prof. Mark S. Roberts	Director, Public Health Dynamics Laboratory / To understand TETRA activities in the field.	GSPH, University of Pittsburgh, Pittsburgh, PA, USA
5	Ms. Joanne	Assistant Professor/ For	GSPH, University of Pittsburgh,
	Russell	prospective collaboration.	Pittsburgh, PA, USA.

### Students visited SHARE INDIA - MIMS

S. No.	Name of the Student	Purpose of Visit	Parent Educational Institute
1	Dr. Aditi Nayak	Rotation in Cardiology - Management of Heart Failure in India.	UPMC, University of Pittsburgh, Pittsburgh, PA, USA
2	Ms. Tamala Gondwe	Research Project.	GSPH, University of Pittsburgh, Pittsburgh, PA, USA
3	Dr. Nishi Dedania	CPR Training Project in Medchal mandal villages.	Internal Medicine and Pediatrics Resident, University of Illinois, Chicago, USA
4	Dr. Brent Martinez	CPR Training Project in Medchal mandal villages.	Resident Physician, University of Illinois, Chicago, USA
5	Dr. Radhika Chimata	CPR Training Project in Medchal mandal villages.	Rush University Medical Center, Chicago, Illinois, USA

### **Governing Council Members of SHARE INDIA**

**Dr. P. S. Reddy,** Chairman Professor of Medicine, University of Pittsburgh, PA, USA.

Mr. M. K. Agarwal, Vice Chairman and Treasurer Founder and CEO, GATI Ltd., Hyderabad.

**Dr. V. Malakonda Reddy,** Secretary Educationalist and Founder of CBIT and MGIT Engineering Colleges, Hyderabad.

**Dr. Madhu Mohan,** Secretary General Endocrinologist, Maryland, USA.

**Dr. Vijay V. Yeldandi,** Member Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.

Mr. Y. S. Chowdary, Member Founder, Sujana Group of Companies, Hyderabad.

**Dr. A. Gopal Kishen,** Member Nephrologist and former Medical Superintendent, Osmania Hospital, Hyderabad.

**Dr. Prakash N. Shrivastava,** Member Professor Emeritus, University of Southern California, USA.

### **Scientific Research Advisory Committee**

**Dr. B. M. Gandhi**, CEO, Neo Biomedical Services, New Delhi. and Former Advisor to DBT, Delhi.

**Prof. Hasnain E. Seyed**, Professor, Kusuma School of Biological Sciences, Indian Institute of Technology, New Delhi.

**Dr. Murthy G. V. S.**, Director, Indian Institute of Public Health (Hyderabad).

**Dr. Ganesh Oruganti**, Director, Public Health and Research Administration, SHARE INDIA, Ghanpur, Medchal District.

**Prof. Prabhakaran D.**, Executive Member, Centre of Chronic Disease Control (CCDC), New Delhi.

**Prof. Rao Allam Appa**, Director, C. R. Rao Advanced Institute of Mathematics, Statistics and Computer Sciences (AIMSCS), Hyderabad.

**Prof. Rao B. Sashidhar**, Professor and Head, Department of Biochemistry, Osmania University, Hyderabad.

**Dr. P. S. Reddy**, Chairman, SHARE INDIA and Professor of Medicine, University of Pittsburgh, PA, USA.

**Dr. Sundar G.**, Director, Birla Institute of Technology and Science Pilani, Hyderabad

**Prof. Suman Kapur**, Dean, International Programs and Collaboration Division, Birla Institute of Technology and Science Pilani, Hyderabad.

**Dr. Sesikeran B.**, Former Director -NIN-ICMR, National Institute of Nutrition, Hyderabad

**Dr. Vasireddi S. P.**, Chairman and Managing Director, Vimta Labs Life Sciences Facility, Hyderabad.

Dr. Vijayaraghvan K., Director Research, SHARE INDIA, Ghanpur, Medchal District.

### **SHARE INDIA Publications**

On several occasions, SHARE INDIA's technical assistance to the government and research programs were able to have an impact beyond its activities. It reached populations or pioneered technologically advanced health programme practices in ways that have far-reaching and lasting consequences like REACH. Over the years SHARE INDIA has increased the percentage of its paper submissions and acceptance rate overall. Medical papers published in international and national accredited journals of repute which are peer reviewed and acclaimed academically in the year 2016-17 are listed below.

### Posters presented

- Dr. Kalpana Betha, An estimation of optimal gestational weight gain in a rural population in Southern India. Presented at National Institute of Health, Washington DC on May 13, 2015.
- 2. Dr. G. R. Jammy, **Metabolic Syndrome among People Living with HIV (PLHIV) in India.** 17th International Congress on Infectious Disease (ICID), eases, March 2 to 5, 2016, Hyderabad, India.
- Dr. G. R. Jammy, Dengue Seroprevalence and Serotype Distribution among Children near Hyderabad. 17th International Conference on Infectious Disease (ICID), Hyderabad, India. March 2 to 5, 2016.

- 4. Dr. G. R. Jammy, Comparison of Volumetric Bone Mineral Density and Macro-architecture among Indian, United States Caucasians and Afro-Caribbean Older Men. Presented at American society of bone mineral research (ASBMR) annual meeting 2016, September 16-19, 2016 at Atlanta, Georgia, USA.
- Ramesh Reddy Allam, Pre-exposure Prophylaxis (PrEP): Attitudes, Preferences and Risk Compensation Behaviour among Men who have Sex with other Men in India. 17th International Conference on Infectious Disease (ICID), Hyderabad, India. March 2 to 5, 2016.
- 6. Dr. Ramesh Reddy Allam, Program Evaluation of the largest Private Public Partnership consortium for HIV/AIDS care and treatment in India-2014. 17th International Conference on Infectious Disease (ICID) Hyderabad, India. March 2 to 5, 2016.
- 7. Dr. Ramesh Reddy Allam, Stigma free HIV service delivery in the largest Private Public Partnership consortium in India. 17th International Conference on Infectious Disease (ICID), Hyderabad, India. March 2 to 5, 2016.
- 8. Dr. Ramesh Reddy Allam, Incidence and Risk Factors of Post-ART TB in adults and adolescents enrolled in India's National AIDS Control Program, 2009-2014. 8th Southeast Asia and Western Pacific Bi-regional TEPHINET Scientific Conference, Siem Reap, Cambodia. November 28 to December 2, 2016.

### **Paper Publications**

- 1. Singh, T., Sharma, P. K., Jammy, G. R., Cauley, J. A., Bunker, C. H., Reddy, P. S., and Newman, A. B. (2017) **Design of the Mobility and Independent Living in Elders Study: An older adult cohort in rural India.** Geriatr Gerontol Int, 17: 31–40. doi: 10.1111/ggi.12668.
- Rajani Santhakumari Nagothu, Yogananda Reddy Indla, Archana R, Rajesh .P, Role of yoga on cardiac autonomic function tests and cognition in type 2 diabetes. Int.J.Res. Ayurveda Pharm 2015: 6(6) 764-766.
- Vyakaranam, S., Bhongir, A.V., Patlolla, D. and Chintapally, C. -Maternal serum ischemia modified albumin as a marker for hypertensive disorders of pregnancy: a pilot study - International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 2015, ;4(3):611-616.
- 4. Vyakaranam, S., Bhongir, A.V., Patlolla, D. and Chintapally, C-**Study of serum uric acid and creatinine in hypertensive disorders of pregnancy** International Journal of Medical Science and Public Health/2015/Vol.4 (10).
- Yalamati, P., Bhongir, A.V., Betha, K., Verma, R. and Dandge, D. Relationship of serum uric acid, serum creatinine and serum cystatin C with maternal and fetal outcomes in rural Indian pregnant women - International Journal of Reproduction, Contraception, Obstetrics and Gynecology 2015; 4(5):1505-1510.

- Bhongir, A.V., Varma, A., Yakama, V., Saha, S., Radia, S.B. and Pabbati, J. - The Urinary Uric Acid/Creatinine Ratio Is An Adjuvant Marker For Perinatal Asphyxia. European Journal of Pharmaceutical and Medical Research. 2015, 2(5), 520-528.
- Uthappa, C.K., Allam, R.R., Gunti, D., Chava N., Udaragudi, P.R., Tadi, G.P. and Murhekar. M.V. Chikungunya outbreak in Atmakur village, Medak district, Telangana State, India. Indian J Med Res. 2015 142 (Suppl 1): S108–S110.
- Reddy, I.Y., Rajani Santhakumari and Reddy B,R. Is There Any Specialization in Auditory Pathway by Brainstem Auditory Evoked Potentials-An Electro Physiological Approach? Journal of Dental and Medical Sciences. 2015: 10 (4) 63-64.
- Ganguly E, Sharma PK, Bunker CH. Prevalence and risk factors of diarrhea morbidity among under five children in India: A systematic review and meta-analysis. Indian J Child Health. 2015; 2(4):152-160.
- Allam, R. R., Uthappa, C.K., Chava N., Udaragudi P.R., Tadi, G.P.andMurhekar M. V - An Outbreak of Cholera due to Contaminated Water, Medak District, Andhra Pradesh, India, 2013 - Indian Journal of Community Medicine, 40 (4), 283-285.
- 11. Uthappa, C.K., Allam, R.R., Chava, N., Gunti, D., Udaragudi, P.R. Tadi. G.P. and Murhekar, M.V. An outbreak of cholera in Medipally village, Andhra Pradesh, India, 2013 Journal of Health, Population and Nutrition. J Health PopulNutr (2015) 33: 7. doi:10.1186/s41043-015-0021-1.

- 12. Yalamati, P., Bhongir, A.V., Karra, M. and Beedu, S.R. Comparative Analysis of Urinary Total Proteins By Bicinchoninic Acid and Pyrogallol Red Molybdate Methods Journal of Clinical and Diagnostic Research, 2015, 9(8):BC01-BC04 DOI: 10.7860/JCDR/2015/13543.6313.
- Nagothu, R.S., Indla, Y.R., Rajagopalan, A. and, Varma, R. Right Dorsolateral Frontal Lobe N-Acetyl Aspartate and Myoinositol Concentration Estimation in Type 2 Diabetes with Magnetic Resonance Spectroscopy - Journal of Clinical and Diagnostic Research. 2015, 9(7): CC16-CC19 DOI: 10.7860/JCDR / 2015 / 14153.6234.
- 14. Sapna Vyakaranam1 [Associate Professor], Swati Vanaparthy2 [7thSemester Student], Srinivas Nori3 [Consultant Pathologist], Satyanarayana Palarapu4 [Professor], and Aparna Varma Bhongir5 [Professor and HOD]- "Study of Insulin Resistance in Subclinical Hypothyroidism" -NIH Public Access Author Manuscript Int J Health Sci Res. Author manuscript; available in PMC 2015 January 07.
- 15. Gudadappa S. Kasabi1,\* Thilakavathi Subramanian2, Ramesh Reddy Allam2,3, Chitra A. Grace2 Shivanna Reddy1 and Manoj V. Murhekar2- "Prescription practices and use of essential medicines in the primary health care system, Shimoga district, Karnataka, India" Indian J Med Res 142, August 2015, pp 216-219 DOI:10.4103/0971-5916.164261.

- 16. T. Jaya Chandra1\*, R.Selvaraj2, Ramesh Reddy Allam3 and YV Sharma4—"Same day sputum smear microscopy for the diagnosis of pulmonary tuberculosis: modified ZN staining versus LED FM", Int. J. Curr. Microbiol. App. Sci (2015) 4(4): 75-81 ISSN: 2319-7706 Volume 4 Number 4 (2015) pp. 75-81.
- 17. Kusneniwar; G.N., Whelan; M.R., Betha; K., Robertson; J. M., Ramidi; P.R., Balasubramanian; K., Kamasamudram; V., Haggerty; C.L., Bunker; C.H. and Reddy, P.S. Cohort Profile: The Longitudinal Indian Family hEalth (LIFE) Pilot Study, Telangana State, India. International Journal of Epidemiology 2016; doi: 10.1093/ije/dyw174.
- 18. Paluru, R., Indla, Y. R., Ramasamy, C., and Nagothu, R.S.. Otoacoustic emissions in type 2 diabetes: a systematic review, Int. J. Res. Ayurveda Pharm. 2016, 7(Suppl) 2 250–251.
- Nagothu, R.S.., Indla, Y.R., Archana R, and Rajesh.P. Role of Yoga in Alienating the Memory Decline and Frontal Lobe Metabolite Changes in Type 2 Diabetes Int.J.Res. Ayurveda Pharm. 2016, 7(1) 1-4. PMCID: PMC4933304.
- 20. Jammy GR, Ganguly E, Oruganti G, Garg S, Bhavsar A, Nealon J. Dengue sero- prevalence and serotype distribution among children near Hyderabad, India. International Journal of Infectious Diseases 2016; 45 (Supplement 1): 176–177. DOI: http://dx.doi.org/10.1016/j.ijid.2016.02.415.

- 21. Ganguly E, Sharma PK, Bunker CH. Burden of acute infections (except respiratory and diarrheal) and its risk factors among under-five children in India: A systematic review and meta-analysis. Indian J Child Health. 2016; 3(1):1-7.
- Vijayasree, L., Dr. Kusneniwar GN, Vaz, LS., and. Rao B.S.. A Study on Menstrual Practices And Hygiene Among Adolescent girls In A Government High School. Indian Journal of Medical Research and Pharmaceutical Sciences. 2016;3(6):55-60.
- 23. Betha, K., .Robertson, J.M Tang, G. and Haggerty, C.L. Prevalence of Chlamydia trachomatis among Childbearing Age Women in India: A Systematic Review Hindawi Publishing Corporation Infectious Diseases in Obstetrics and Gynecology 2016, Volume 2016 (2016), Article ID 8561645, 6 pages (http://dx.doi.org/10.1155/2016/8561645 Article ID 8561645, 6 pages).
- Nagothu, R.S., Rajagopalan, A., Indla, Y.R. and Rajesh P. Beneficial Effects of Yogasanas and Pranayama in limiting the Cognitive decline in Type 2 Diabetes. National Journal of Physiology, Pharmacy and Pharmacology, 2016, 7(2)1-4.
- RajaniSanthakumariNagothu, Yogananda Reddy Indla, Rajesh.P. Effective physiology teaching methods: from the perspective of first year MBBS students. Indian journal of clinical anatomy and physiology. 3 (3): 340-342. 2016 PMCID: PMC5014394.

- Paluru, R., Indla, Y. R., Ramaswamy, C., and RajaniSanthakumari, -Functional analysis of auditory pathway in type 2 diabetes by brainstem auditory evoked response-a pilot study. Biomedical Research., 2016, 27 (4): 2–5.
- Paluru, R., Indla, Y., Chellam, R., and Nagothu, R.S. Assessment of functional status of outer hair cells in Type 2 diabetes by using distortion product otoacoustic emissions. National Journal of Physiology, Pharmacyand Pharmacology., 2016 6(5), 4–7.
- Yalamati, P., Karra, M.L. and Bhongir, A.V. Comparison of Urinary Total Proteins by Four Different Methods. Indian J ClinBiochem 2016 DOI 10.1007/s12291-016-0551-3. (in press), PubMed indexed).
- Allam RR, Uthappa CK, Rebecca D, Evan S, Prasada RU, Shankar K, Dworkin, M.S.. A Case-Control Study of Diphtheria in the High Incidence City of Hyderabad, India. The Pediatric Infectious Disease Journal. 2016, 35 (3), ISSN:0891-3668/16/3503-0253-0256.

### SHARF INDIA Statement of Accounts



Websierkone Wember of a Singhi e.J. Affiliates

5-4-187/3eL4, 2nd Floor, Soham Mansion, M. G. Road, Ramouni, Secundenshad - 500 003. 2 : 2754 2635 2754 1015 Par : 040-2754 1015 E-mail : luharukaca@mail.com

#### AUDITOR'S REPORT

To the Members. SHARE INDIA

We have sudited the attached Balance Sheet of AA/S, SHARE INDIA as at 91st March, 2016 and the income and Expenditure Account for the year ended 91st March, 2016 on that data annexed thereto which are in agreement with the Books of Accounts maintained by the Society. These Financial Statements are the responsibility of the management of the Society. Our responsibility is to expression opinion on the Financial Statements based on our Audit.

We conducted our audit in accordance with Auditing Standards generally accepted in india. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Financial Statements are free of material misstatements. An audit includes committing on a test basis, evidence supporting the amounts and disclosures in the Financial Statements. An audit also includes assessing the Accounting principles, used and significant estimates made by Management as well as evaluating the reasonable back for our pointion and moont that.

We have obtained all information and explanations which to the best of our knowledge and belief were necessary for the purpose of the audit.

in our opinion proper books of Accounts have been kept by the society so far as appears from our examination of the books.

In our opinion and to the best of our information and according to explanation given to us the said accounts read with notes gives a true and fair view.

I) In the case of Balance Sheet of the State of Affairs of the above named society as let 31-

II) In the case of the income and Expenditure Account of the EXCESS OF EXPENDITURE OVER INCOME for the year ended 51st March, 2016.

> For LUHARLIKA & ASSOCIATES CHARTERED ACCOUNTANTS (FRN:- 18825)

Place: Secunderabad

Date: 03-09-2016

(RAMESH CHAND JAIN) REARTNER) (M NO. 023019)

### SHARE INDIA BALANCE SHEET AS AT 91st MARCH 2016

	SCH.NO		31.03.16		91.03.15
Source of Funde Capital Fund	1		Amount (Rs) 17555079		Amount (Ne) 23228585
Total			17555079		29220595
Application of Funds Fixed Assets Gross Block Lass: Depredation Not Block Capital work in progress Current Assets:	2	22826866 15104261	7722406 411294	20891480 7688778	13007567
Cash and Bank Balances	3	27047247		16910366	
Louns and Adminess	4 5	1611892		623025	
Other Current essets	5	323471		59749	
Laure		28962610		17594041	
Current Liabilities and Provisions Not Current Asset		19561239	9421971	7373133	10220908
Total			17555079		29229505

FOR LUMARUKA & ASSOCIATES **CHARTERED ACCOUNTANTS** 

FRM 018829

*(RAMESHOHAND JAIN)* PARTNER M No. 023019

Place: Hyderabad Date:03.09.2016

FOR SHARE INDIA

(Dr.V.Matakonda Rado Secretary

SHARE INDIA
Income And Expenditure Account for the year ended 31st March 2016

	SCH.NO	31.03.16	31.03.15
INCOME:		Amount (Rs)	Amount (Rs)
Donations		7598085	9265582
Grants		100366616	81611747
Other Income	7	1094176	969048
Total		109058877	91846377
EXPENDITURE:			
Operating Expenses	8	325032	19997
Personnel Expenses	9	33201311	14972785
Power & fuel	10	305966	579739
Program expenses	11	67601609	59889181
Other Expenses	12	5877993	5784370
Total		107311911	81246072
Excess of Income over Expenditure before Depreciation Less: Depreciation		1746966 3152498	10600305 785474
Excess of Expenditure over Income Transferred to Capital Account		1405532	-9814831
MOTES TO ASSOCIATE	4.2		

NOTES TO ACCOUNTS

13

As Per our report of even date attached

For LUHARUKA & ASSOCIATES

For SHARE INDIA

**CHARTERED ACCOUNTANTS** 

FRN 01882S

Sd/-

Sd/-

(RAMESHCHAND JAIN)

Dr.V.Malakonda Reddy

PARTNER

Secretary

M No. 023019

Place: Hyderabad Date:03.09.2016

												Schedule No. 2
					SHARE	INDIA						
			Fixed Ass	ets schedule	forming part	of Balance Si	neet for the	year ended 31:	st March 2	2016		
		AS AT	GROSS	BLOCK			DEPRECIA	TION			NET BLO	CK
S. MPLINARO				Written off/Deleti					to Company			
S.no	PARTICULARS	01.04.15	ADDITION	on	AS AT	UPTO	FOR THE	Prior	WITH	UPTO	AS AT	AS AT
		Original			31.03.16	31.03.15	YEAR	YEAR TFR to Capital Fund	DRAWL	31.03.16	31.03.16	31.03.15
		Cost										
1	LAND	481849			481849						481849	481849
2	BOREWELL	26600			26600	13990	1410			15400	11200	12611
3	VEHICLES	2578675			2578675	897705	247495	146809		1292009	1286666	1680970
4	OFFICE EQUIPMENT	8346217	1639609		9985826	2631447	2177655	3235067		8044168	1941658	5714770
5	FURNITURE & FIXTURES	2406328	36000		2442328	747085	274176	234951		1256212	1186116	1659243
6	BUILDING-RHC	1585690	402100		1987790	665652	117827			783479	1204311	920038
7	BUILDING(Research Center)	3406594			3406594	1750096	185771			1935867	1470727	1656498
8	MEDICAL EQUIPMENT	1859507	57500		1917007	977799	148163	651164		1777126	139881	881708
	TOTAL	20691460	2135209	0	22826669	7683773	3152497	4267991	0	15104261	7722408	13007687

### SHARE INDIA Schedules forming part of Balance sheet as at 31 st March, 2016

	As at 31.03.16	As at 31.03.15
	(Rs)	(Rs)
SCHEDULE: 1		1
CAPITAL FUND:		
Balance as Per Last Balance sheet	23228595	13413764
Less : Prior Year depreciation(where useful life is over)	4267990	1.110.110.110.110.110.110.110.110.110.1
Less : Excess of expenditure over Income for the year	1405532	- <del>9</del> 814831
TOTAL	17555073	23228595
	(n.)	(0.)
SCHEDULE 3:	(Rs)	(Rs)
CASH & BANK BALANCES:		
Cash on Hand	48446	18071
Cash at Bank	12486880	613149
FDR with Bank	9012207	2666009
Cash at Bank in FC Account	5451731	7516874
Cash at Bank (Currrent Account)	47982	6096262
TOTAL	27047247	16910366
	(Rs)	(Rs)
SCHEDULE 4:	1.07	1
LOANS, ADVANCES AND DEPOSITS:		
(Unsecured & Considered Goods)		
Advances	978849	43544
TDS Receivable	227043	174382
Deposits	406000	406000
TOTAL	1611892	623926
	(Rs)	(Rs)
SCHEDULE 5:	1	
OTHER CURRENT ASSETS :		
Interest Accrued on FDR	323471	59749
TOTAL	323471	59749

5295 2000 3983 9961 0	(Rs)  228442 115329 0 7013297 16065
2000 3983 9961 0	115329 0 7013297 16065
2000 3983 9961 0	115329 0 7013297 16065
2000 3983 9961 0	115329 0 7013297 16065
3983 9961 0	0 7013297 16065
9961 0	16065
0	16065
2000	
1239	
	7373133
	(Rs)
	(to)
0857	237617
8819	326406
And the same	17659
4500	387366
4176	969048
- 8	(Rs)
NE.	
5032	19997
5032	19997
	0857 8819 4500 4176

Other personnel expenses

PF Employer contribution

TOTAL

Staff Gratuity

617671

2434500

275536

33201311

65233

206390 14972785

	As at 31.03.16	As at 31.03.15	
	(Rs)	(Rs)	
SCHEDULE 10:			
Power and Fuel:			
Electricity & Fuel expenses	305966	579739	
TOTAL	305966	579739	

	(Rs)	(Rs)
SCHEDULE 11:		5
Program Expenes		
Programmer charges	6546423	23390076
Programme expenses	45105352	28109415
Clinic expenses	o	47410
Conveyance & Travelling expenses	15949834	8342280
TOTAL	67601609	59889181

	(Rs)	(Rs)
SCHEDULE 12:		
Other Expenses:		
Bank Charges	64978	38091
Audit Fees	165600	129826
Conveyance and Travelling	0	271452
Rates and Taxes		2500
Rent	2707419	1043838
Postage & Telephone	961204	887973
Printing & Stationary	228934	285015
Staff Welfare	847671	636589
Vehicle maintainance	308136	339766
Assets written off		303606
General Expenses	594051	1845714
TOTAL	5877993	5784370

### Schedule No. 13

### SHARE INDIA

#### NOTES TO ACCOUNTS

 Depreciation has been provided on Straight Line Method taking the useful life of assets as mentioned below:

Name of the block Useful life (in Years)

Building	30
Electrical fittings	10
Furniture & Fixtures	10
Vehicle	08
Medical Equipment	05
Office Equipment	05
Computers and Printers	03

- Previous year's figures have been regrouped wherever necessary.
- Un Secured Loans & Advances and Sundry Creditors, Sundry Debtors balances are subject to Confirmation.
- 4. In projects when grant received, income has been accounted to the extent of expenditure and depreciation. Any excess grant received is shown as advance grant received under "Current liabilities and provisions"

#### SIGNIFICANT ACCOUNTING POLICIES:

GENERAL:

The accounts are prepared on Historical Cost Convention and in accordance with normal accepted standards.

RESEARCH AND DEVELOPMENT EXPENDITURE:

Revenue expenditure is charged to income and expenditure account and capital Expenditure is added to the cost of Fixed Assets in the year in which it is incurred.

FIXED ASSETS:

All Fixed assets are stated at cost less depreciation.

. The accounts are prepared on the basis of accrual system of accounting.

For LUHARUKA & ASSOCIATES CHARTERED ACCOUNTANTS FRN 018825 For SHARE INDIA

Sd/-

(RAMESHCHAND JAIN)
PARTNER

(Dr. V. Malakonda Reddy) Secretary

M No. 023019

Place: Hyderabad Date: 03.09.2016

### Indo-American artificial heart program workshop participants



L-R seated: Mr. Salim Olia, Doctoral student: Mr. Mahendra Agarwal; Promoter, Founder & CEO, Gati Ltd.: Dr. P. S. Reddy, Chairman, SHARE INDIA: Mr. Y S Chowdary, Hon'ble Minister of State for Ministry of Science & Technology and Ministry of Earth Sciences: Dr. James Long, Director, INTEGRIS Nazih Zuhdi Transplant Institute, INTEGRIS Baptist Medical Center, Oklahoma City, OK, USA: Dr. James Antaki, Professor of Bioengineering, Carnegie Mellon University, Pittsburgh, PA, USA.

L-R standing: Dr. Subeer S. Majumdar. Director, National Institute of Animal Biotechnology: Mr. K. P. Reddy, Chairman and Managing Director, Shrishti Resins, Hyderabad: Dr. M. B. Srinivas, Professor, Electronics and Electrical Engineering Department and Dean, Administration; BITS PILANI, Hyderabad: Mr. Nitin Desai, Administrator, SHARE INDIA: Dr. Srinivas Prakash Regalla, Professor and Head, Department of Mechanical Engineering; BITS PILANI, Hyderabad: Dr. Suman Kapur, Senior Professor, Department of Biological Sciences; BITS PILANI, Hyderabad: Mr. K. Vijay Saradhi, Managing Director and Chief Executive Officer, First Opinion Online Solutions Pvt. Ltd., New Delhi: Dr. G. Sekhar Reddy, Pediatrician, Hyderabad: Dr. B. M. Gandhi, Chief Executive Officer, Neo BioMed Services Ltd, New Delhi: Mr. Atul Sethi, Chairman and Managing Director; Shree Pacetronix Ltd., Indore: Mr. Vikas Gokhale, Technical Director, Shree Pacetronix Ltd., Indore: Mr. B. Chennakeshava Rao, Principal, CBIT: Mr. Sanjay Prasad, President & CEO at Mission of Mercy Hospital & Research Centre, Kolkata: Dr. Purushotham, Department of Mechanical Engineering, SNIST: Dr. Sanket Goel, Associate Professor, Department of Electronics and Electrical Engineering, BITS PILANI, Hyderabad: Dr. G. Suresh Babu, Professor, Department of Electronics and Electrical Engineering, CBIT: Mr. P.V. Shyam, Research Manager, BTS Pilani Hyderabad: Dr. K.S.R. Siva Sai, Professor and Head, Department of Biotechnology, SNIST: Dr. C. Obula Reddy, Assistant Professor, Department of Biotechnology, CBIT: Dr. P. Ravinder Reddy, Professor and Head, Mechanical and Production Engineering: Dr. Anil Kumar Puppala, Associate Professor, Department of Electrical Engineering, SNIST: Dr. C. Bhargava, Associate Professor, Department of Electrical Engineering, SNIST: Dr. C. Bhargava, Associate Professor, Department of Electrical Engineering, SNIST: Dr. C. Bhargava, Associate Professor, Department of Electrical Engineering, SNIST: Dr. C. Bhargava, Associate Professor, Department of Electrical En

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# SHARE INDIA

Society for Health Allied Research and Education India

MediCiti Institute of Medical Sciences (MIMS) Campus Ghanpur Village, Medchal Mandal & District, Telangana State - 501 401

Telefax: 08418-256201-209

Telefax: 08418-256237

Website: www.sharefoundations.org