



# SHARE

## SHARE INDIA

Society for Health Allied Research and Education India



## ANNUAL REPORT 2019-20





SHARE INDIA Office of Research at MediCiti Institute of Medical Sciences (MIMS) Campus





# **SHARE INDIA**

Society for Health Allied Research and Education India

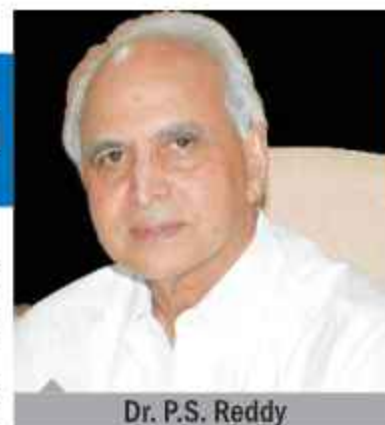
**ANNUAL REPORT  
2019-20**

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## Message from the Chairman



Dr. P.S. Reddy

SHARE INDIA has fostered a culture of excellence in Medical education by nurturing young minds in a creative environment of Research. We have boldly embraced a life-course approach to screen, treat and follow-up all members of households for prevalent diseases, thereby pioneering a model for affordable technology driven community level healthcare. Our endeavours will lay the foundation for personalised medicine by generating FHIR (Fast Healthcare Interoperability Resources) compatible electronic health record of each individual at the community level.

The year was remarkable in terms of securing prestigious grants and funding including from National Biopharma Mission, Government of India for INR 815 lakhs to harness our cohorts at Medchal for epidemiological studies on Dengue and Chikungunya and drive capacities to conduct clinical trials. I'm proud to say that MIMS and SHARE INDIA have been selected by the Indian Council of Medical Research (ICMR), to conduct Phase III Clinical Trial for Tuberculosis (TB) Vaccines at Medchal, Telangana. We bring on board a unique model to engage private healthcare establishments for studies on safety and efficacy of indigenously developed TB vaccines.

IAAHP (Indo-American Artificial Heart Program) moonshot to develop indigenous, low-cost, high quality VAD and ECMO devices made strides by fostering partnership with enmodes GmbH, a Medical Device Manufacturer in Germany. enmodes offered to provide a working pump to jump-start development of pre-clinical testing in animals in India. Dr. Kurt Dasse and Ms. Priscilla Petit, Inspired Therapeutics, USA paved the way to develop Quality Systems while Mr. Shawn Bengston, Director of Quality Management Systems at University of Pittsburgh's McGowan Institute for Regenerative Medicine, USA joined the growing IAAHP team. Mr. Bengston's pro-bono oversight will foster development of Quality Systems required for preclinical testing of our VAD and ECMO devices. This year, we also added Palamur Biosciences, Telangana as a valuable pre-clinical GLP partner for ovine (sheep) implant studies.

We continued to "Multiply Joys" for the impoverished rural inhabitants of Medchal through REACH (Rural Effective Affordable Comprehensive Healthcare) and LIFE (Longitudinal Indian Family hEalth) projects. We are prepared to launch Expanded-TETRA (Technology Enabled Community Health Workers Extending Telemedicine to Rural Homes at Affordable Costs) to address the convergence of endemic TB with the emerging epidemic of diabetes mellitus in underserved populations in rural areas. We are grateful to many donors from USA and India who are making this mission possible.

We are the torch bearers of accountable healthcare and strive hard to achieve our goals as exemplified in our Annual Report 2019-2020.

# 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 recognised 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, TETRA, HELP, CSSI are completely funded by generous donors. SHARE INDIA through its endeavours have 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 rate, immunization and cancer.

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 and Mission

- ▶ To provide quality and advanced medical care at lowest possible cost
- ▶ To develop a working model of Healthcare Delivery System for rural population
- ▶ To promote undergraduate, graduate, post graduate and Continuing Medical Education
- ▶ And above all to promote Research

## Philosophy of SHARE INDIA

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.



#### Governing Council, 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;**  
Educator and Founder of CBIT and MGIT Engineering Colleges, Hyderabad
- ▶ **Dr. Madhu Mohan, Secretary General;**  
Member, Public Health Foundation of India, Member Indian Institute of Public Health, Hyderabad; Executive Medical Director Maryland, USA
- ▶ **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
- ▶ **Mr. C. Ramesh Reddy, Member;**  
Chairman & Managing Director Laxven Systems, Hyderabad
- ▶ **Dr. P. Naveen Chander Reddy, Member,**  
Medical Director, Asian Institute of Gastroenterology, Hyderabad
- ▶ **Dr. M. Dinaker, Member;**  
Chief Physician, GYD Clinics and Diagnostics, Hyderabad
- ▶ **Dr. Vijay V. Yeldandi, Member;**  
Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA

#### Executive Team, SHARE INDIA

- ▶ **Dr. Ganesh Oruganti, Executive Director**
- ▶ **Dr. Jammy Guru Rajesh, Director Research**
- ▶ **Dr. Shikha Dhawan, Director Programs**
- ▶ **Mr. Nitin C. Desai, Administrator Projects**
- ▶ **Mr. N. Lakshminarasimhan, Sr. Manager, Finance & Accounts**
- ▶ **Ms. Revina Suhasini, Sr. Manager, HR & Administration**
- ▶ **Mr. R. Purushotham Reddy, Data Manager**

#### Scientific Research Advisory Members, SHARE INDIA

- ▶ **Dr. B. M. Gandhi, CEO, Neo BioMed Services, New Delhi**
- ▶ **Prof. Seyed E. Hasnain, Vice Chancellor, Jamia Hamdard University, Hamdard Nagar, New Delhi**
- ▶ **Prof. Suman Kapur, Sr. Professor and Dean, International Programs and Collaboration Division, Birla Institute of Technology and Science Pilani, Hyderabad**
- ▶ **Dr. G.V.S. Murthy, Director, Indian Institute of Public Health, Hyderabad**
- ▶ **Dr. Ganesh Oruganti, Executive Director, SHARE INDIA, Ghanpur Village, Medchal Mandal and District, Telangana State**
- ▶ **Prof. Prabhakaran D., Executive Director of Centre of Chronic Disease Control (CCDC) & Vice President, Research & Policy, Public Health Foundation of India (PHFI), New Delhi**
- ▶ **Prof. B. Sashidhar Rao, Fellow of Telangana Academy of Sciences (FTAS) & Former 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. B. Sesikeran, Scientist and Former Director, NIN-ICMR, National Institute of Nutrition, Hyderabad**
- ▶ **Dr. J. Gowri Shankar, Director, Indian Institute of Science Education and Research, Mohali, Punjab**
- ▶ **Dr. D.C. Sharma, Head Technical Operations, MRIDA, Palamuru Biosciences Pvt Ltd., Mahabubnagar, Telangana**
- ▶ **Dr. G. Sundar, Director, Birla Institute of Technology and Science Pilani, Hyderabad**
- ▶ **Dr. S. P. Vasireddi, Chairman and Managing Director, Vimta Labs Life Sciences Facility, Hyderabad**
- ▶ **Dr. K. Vijayaraghavan, Former Director Research SHARE INDIA and Deputy Director, NIN, Hyderabad**
- ▶ **Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA**

# Clinical Studies at SHARE INDIA-MIMS Ghanpur Village, Medchal, Telangana

The year 2020 marked, SHARE INDIA's resfeber into regulatory clinical studies approved by the Central Drugs Standard Control Organisation (CDSCO). CDSCO is the national regulatory body for Indian pharmaceuticals and medical devices, and serves parallel function to the Food and Drug Administration of the United States, the European Medicines Agency of the European Union, the Pharmaceuticals and Medical Devices Agency of Japan and the Medicines and Healthcare Products Regulatory Agency of the United Kingdom.

## A snapshot of clinical work

1. Indian Council of Medical Research (ICMR) the apex body in India for the formulation, coordination and promotion of biomedical research, selected SHARE INDIA and MIMS as site for Tuberculosis (TB) Vaccines Study "A phase III, randomized, double-blind, three arm placebo controlled trial to evaluate the efficacy and safety of two vaccines VPM1002 and Immuvac (Mw) in preventing Tuberculosis (TB) in healthy household contacts of newly diagnosed sputum positive pulmonary TB patients" (July 2020-June 2023). The SHARE INDIA-MIMS site was initiated on 13th July 2020 and is successfully enrolling participants to test for TB vaccines- VPM1002 and Immuvac (Mw) in Telangana, India.
2. ICMR selected Medchal-SHARE INDIA as the site for a Phase III "Assessment of comparative performance (efficacy and safety) of C-Tb with QuantiFERON-TB Gold Plus and 2 T.U. Tuberculin PPD RT23 SSI for detection of TB infection in general and key population". C-Tb is poised as a highly specific skin test for the diagnosis of Latent TB Infection (LTBI). The study will be initiated in September/October 2020.
3. Innovate in India (I3) is a mission of Department of Biotechnology (DBT), Government of India in collaboration with World Bank for accelerating discovery research to early development of Biopharmaceuticals with focus on the development of new vaccines, bio-therapeutics, diagnostics and medical devices to address the rising burden of diseases in the country. National Biopharma Mission (NBM) is the implementing arm under Biotechnology Industry Research Assistance Council (BIRAC), DBT. As part of the clinical trial network set up by NBM, Medchal-SHARE INDIA population-based cohorts are selected for epidemiological studies on Dengue and Chikungunya and drive capacities to conduct clinical trials. The studies will initiate in September 2020.
4. With established presence in the community and strength in driving community centric interventions, NBM selected Medchal-SHARE INDIA to fill knowledge gaps related to the actual burden of SARS CoV-2 disease in the community as well as to improve understanding of the community transmission dynamics by conducting serial sero-epidemiological surveys. The studies will initiate in September 2020.
5. DBT, Government of India is considering SHARE INDIA as one of the sites for conduct of clinical trials for COVID-19 vaccine. Currently, SHARE INDIA-MIMS is building capacity for successful conduct of the clinical trial.



## Summary of SHARE INDIA Projects

S. No	Title of the study	Investigators	Designation / Institution Name	Project Exp. 2019-20 / (Unaudited) Project Cost Approved	Funding source	Project status
1	Indo-American Artificial Heart Program	Dr. PS Reddy Premium Institutes from USA and India, Engineering Institutions in India, Pre-Clinical GLP facility and Medical Device Manufacturers	Chairman, SHARE INDIA	Amount spent Rs.0.80 Lakhs (2019-20)	Self-funding by Indian Institutions aided by SHARE INDIA / SHARE USA	Ongoing
2	Longitudinal Indian Family hEalth - LIFE Study	Dr. Guru Rajesh Jammy Dr. Kalpana Betha	Director Research, SHARE INDIA; Professor, Obstetrics & Gynecology, MIMS	Amount spent Rs. 26.39 Lakhs (2019-20)	SHARE INDIA / SHARE USA	Ongoing
3	Mycoplasma genitalium, differentiated Ureaplasma species, and pregnancy outcomes	Dr. Kalpana Betha Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, University of Pittsburgh	Approved budget US \$ 46,318 (2016-21)	Fogarty International Center -NIH	Ongoing - No cost Extension approved
4	The influence of vaginal microbiota on adverse pregnancy outcomes in the LIFE study	Dr. Kalpana Betha Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, University of Pittsburgh	Sub Study of Item No. 2 above	Fogarty International Center -NIH	Ongoing - No cost Extension approved
5	The role of pre pregnancy and prenatal danger associated molecular patterns in pregnancy complications (DAMP) - LIFE Study Samples	Dr. Kalpana Betha Dr. Brandie N. Taylor Dr. Catherine L. Haggerty	Professor, Obstetrics & Gynecology, MIMS Associate Professor, Texas A&M University Associate Professor, University of Pittsburgh	Approved budget US \$ 24,000 (2017-21)	Partial support from TAMU, Texas	Ongoing - No cost Extension approved



S. No	Title of the study	Investigators	Designation / Institution Name	Project Exp. 2019-20 / (Unaudited) Project Cost Approved	Funding source	Project status
6	Technology Enabled community health workers to extend Telemedicine to Rural homes at Affordable costs	Dr. D. Shailendra Dr. Guru Rajesh Jammy	Professor & Head, Dept. of Pharmacology, MIMS Director Research, SHARE INDIA	Amount spent Rs. 9.33 Lakhs (2019-20)	SHARE INDIA / SHARE USA	Follow up of the study without medication is currently ongoing
7	HEaLthy Pregnancy (HELP) study	Dr. Sapna Vyakaranam Dr. Kalpana. B Dr. Aparna Varma Dr. Rashmi Pant Dr. Padma Yalmati	Professor and Head, Department of Biochemistry, MIMS Professor and Head, Dept of Obstetrics & Gynecology, MIMS Professor and Head of the Department of Biochemistry, AIIMS, Bibinagar Chief Bio-statistician and M&E Specialist, SHARE INDIA Consultant Biochemist, CARE Hospitals	Amount spent Rs. 14.80 Lakhs (2019-20)	SHARE INDIA / SHARE USA	Ongoing - study extension planned
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. D Prabhakaran Dr. Oona Campbell Dr. Biraj Karmacharya Dr. Kalpana Betha Dr. P. S. Reddy	Vice President (Research & Policy), PHFI Delhi, Professor, Epidemiology, London School of Hygiene & Medicine, UK Professor, Community Programs, Kathmandu University School of Medical Sciences, Nepal Professor and Head, Dept of Obstetrics & Gynecology, MIMS Chairman, SHARE INDIA	Role of SHARE INDIA is facilitating the work in villages if and when required initially.	Newton Fund	Project approved and commenced in July, 2019
9	Caesarean Surgical Site Infection - CSSI Study.	Dr. Kalpana Betha Dr. K. Lakshmi Sailaja Dr. Catherine L. Haggerty	Professor and Head, Dept. of Obstetrics & Gynecology, MIMS Assistant Professor, Obstetrics & Gynecology, MIMS Associate Professor, University of Pittsburgh	Amount spent Rs. 0.17 Lakhs (2019-20)	SHARE INDIA / SHARE USA	Completed in December, 2018
10	Empowering Indian health researchers with computational modelling tools - HADM Small Grant	Dr. Guru Rajesh Jammy Dr. M. Raheel Sayeed Dr. Lincoln P. Choudhury	Director Research, SHARE INDIA Research Scientist, SHARE INDIA HIV Consultant, Delhi, India	Approved budget US \$ 7,500 (2017 -2021)	NIH - University of Pittsburgh	Ongoing - No cost Extension approved



S. No	Title of the study	Investigators	Designation / Institution Name	Project Exp. 2019-20 / (Unaudited) Project Cost Approved	Funding source	Project status
11	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 Dr. Kaushik Kalyan	Professor, Mechanical Engineering, Birla Institute of Technology and Science, Hyderabad Professor Emeritus, University of Southern California, USA Professor, Orthopedics, MIMS Associate Professor, Orthopedics, MIMS	Amount spent Rs. 4.79 Lakhs (Own funding - Grants applied)	Biotechnology Industry Research Assistance Council (BIRAC), DBT, Government of India	Ongoing, expansion and further development in progress
12	IndEpi: A Platform for systematic Integration of Indian Epidemiology Datasets to enable Health Analytics and Disease Modelling	Dr. Rashmi Pant Dr. Guru Rajesh Jammy	Chief Bio-statistician and M&E Specialist, SHARE INDIA Director Research, SHARE INDIA	Rs.10.28 Lacs (May,2019 to March,20). 03Years Budget Rs.43.89 Lakhs)	Dept of Science & Technology, Ministry of Science & Technology, Govt of India	On going
13	InPoChlam: Innovative Point of Care Chlamydiales. Joint industrial R&D projects between India and EUREKA member countries Belgium, The Netherlands, Spain and United Kingdom	Dr. Guru Rajesh Jammy Dr. Rashmi Pant Dr. Vijay V. Yeldandi Dr. Servaas A. Morre Dr. Pierre Paul Michel Thomas	Director Research, SHARE INDIA Chief Bio-statistician and M&E Specialist, SHARE INDIA Clinical Prof. of Med. & Surg., Univ. of Illinois at Chicago, USA Maastricht University, The Netherlands Institute of Public Health, Genomics, Maastricht University, The Netherlands	Rs. 0.42 Lacs (Feb,20 to March,20) 3 Years Approved Budget Rs.118.196 Lakhs )	DBT, Government of India	Sanctioned and in Planning stage - Implementation delayed due to COVID-19
14	Harnessing a population-based cohort for an epidemiological study on Dengue and Chikungunya and drive capacities to conduct clinical trials	Dr. Guru Rajesh Jammy Dr. Shikha Dhawan Dr. D Shailendra	Director Research, SHARE INDIA Director Programs, SHARE INDIA Professor and HOD, Dept. of Pharmacology, MIMS	Rs. 815 Lakhs (2020-2023)	National Biopharma Mission, Government of India	Technical and Financial Due Diligence Completed. To be initiated



S. No	Title of the study	Investigators	Designation / Institution Name	Project Exp. 2019-20 / (Unaudited) Project Cost Approved	Funding source	Project status
15	SERA (Sexual and Reproductive Health Assessment) - A study on sexually transmitted infections (STI) among general and Key populations groups in Hyderabad, India	Dr. Ramesh Reddy Allam Prof. Servaas Morre, Dr. Kuldeep Singh Sachdeva Dr. Asha Hedge Dr. Vijay V. Yeldandi  Dr. M. Dinaker  Dr. Ganesh Oruganti Dr. Kalpana Betha  Dr. Rashmi Pant  Dr. Pierre Paul Michel Thomas	Deputy Project Director, SHARE INDIA Maastricht University, The Netherlands DDG, NACO Consultant, NACO Clinical Prof. of Med. & Surg., Univ. of Illinois at Chicago, USA GYD Diagnostics, member SHARE INDIA Executive Director, SHARE INDIA Professor and Head, Obstetrics & Gynecology, MIMS Chief Bio-statistician and M&E Specialist, SHARE INDIA Institute of Public Health, Genomics, Maastricht University, The Netherlands	Rs. 2.08 Lakhs (2019-20) PILOT STUDY Regular study approval is awaited.	Pilot study is self-Funded by SHARE INDIA	Pilot study completed on own funding and regular study sanction awaited
<b>Technical Assistance Projects</b>						
16	National Initiative to Strengthen & Coordinate HIV/TB response in India - NISCHIT	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Ramesh Reddy Allam Dr. Parthasarathy	Clinical Prof. of Med. & Surg., Univ. of Illinois at Chicago, USA Executive Director, SHARE INDIA Dy. Project Director, SHARE INDIA Associate PD, SHARE INDIA	Amount spent US \$ 2,923,601 (April 2015-September 2019)	Centers for Disease Control and Prevention (CDC), Atlanta, USA	On going
17	Laboratory Quality Systems in HIV- LaQSH	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Ramesh Reddy Allam Dr. Anu George	Clinical Prof. of Med. & Surg., Univ. of Illinois at Chicago, USA Executive Director, SHARE INDIA Dy. Project Director, SHARE INDIA Associate PD, SHARE INDIA	Amount spent US \$ 4,214,081 (April 2015-September 2019)	Centers for Disease Control and Prevention (CDC), Atlanta, USA.	On going
18	Strengthening TB Action and Response - STAR	Dr. Vijay V. Yeldandi Dr. Ganesh Oruganti Dr. Satish Kaipilyawar	Clinical Prof. of Med. & Surg., Univ. of Illinois at Chicago, USA Executive Director, SHARE INDIA Associate PD, SHARE INDIA	Amount spent US \$ 1,497,444 (April 2015-September 2019)	Centers for Disease Control and Prevention (CDC), Atlanta, USA.	On going

# 1

## Indo-American Artificial Heart Program (IAAHP)

### Vision:

Promote bioengineering research in Engineering Institutes of India in collaboration with Medical Institutions, Engineering Industries and Medical device developers to develop medical devices in India

### Objectives:

- ▶ Moon-shot: Develop total artificial heart
- ▶ Immediate: Development of ECMO

### COLLABORATORS

#### SHARE INDIA, Hyderabad, India

- ▶ Dr. P. S. Reddy, Chairman
- ▶ Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA
- ▶ Dr. Shikha Dhawan, Director Programs, SHARE INDIA

- ▶ Dr. B. M. Gandhi, Chief Executive Officer, Neo BioMed Services, New Delhi
- ▶ Dr. A. G. K. Gokhale, Cardiothoracic Surgeon, Apollo Hospitals, Hyderabad

#### Birla Institute of Technology (BITS) PILANI, Hyderabad, India

- ▶ Dr. Suman Kapur, Senior Professor, Department of Biological Sciences

#### Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, India

- ▶ Dr. P. Ravinder Reddy, Professor and Head, Mechanical and Production Engineering
- ▶ Mr. Rugveda Thanneeru, Research Associate

#### Kakatiya Institute of Technology & Science, (KITS) Warangal, India

- ▶ Dr. Venu Madhav Kotturu, Associate Dean (R&D) and Associate Professor of Electronics & Instrumentation Engineering

- ▶ Dr. Ganesh Kumar Gampa, Associate Professor, Dept of Mechanical Engineering
- ▶ Dr. Sumithra G, Assistant Professor, Dept of Mechanical Engineering

#### Asian Institute of Gastroenterology, Hyderabad, India

- ▶ Dr. P. Naveen Chander Reddy, Medical Director
- ▶ Dr. C. Sukesh Kumar Reddy, Sr. Consultant Cardiothoracic Surgeon

#### Laxven Industries, Hyderabad, India

- ▶ Mr. C. Ramesh Reddy, Managing Director; Electromechanical Manufacturing

#### Palamur Biosciences Pvt. Ltd., Mahbubnagar, India

- ▶ Mr. K. Venkata Reddy, Managing Director
- ▶ Mr. T. Vijayaragavan, Chairman
- ▶ Dr. Rammoorthy, Test Facility Management
- ▶ Dr. D. C. Sharma, Med Tech Facility Unit
- ▶ Dr. S. Anoop, Med Tech Facility Unit

#### Shree Pacetronix Ltd., Indore, India

- ▶ Mr. Atul Sethi, Executive Director & Managing Director
- ▶ Mr. Aakash Sethi, Executive Director & Joint Managing Director
- ▶ Mr. Vikas Gokhale, Technical Director – Research

#### University of Pittsburgh, Pittsburgh, USA

- ▶ Prof. Harvey Borovetz, Professor of Bioengineering
- ▶ Mr. Shawn Bengston, Director of Quality Management Systems
- ▶ Dr. William R. Wagner, Director of the McGowan Institute for Regenerative Medicine
- ▶ Dr. Edward Klein, Director of Pathology Services at Division of Laboratory Animal Resources

#### Cornell Engineering, Cornell University, Ithaca, New York, USA

- ▶ Prof. James Antaki, Professor of Heart Assist Technology



**Nazih Zuhdi Transplant Institute – INTEGRIS Baptist Medical Center, Oklahoma**

- ▶ Dr. James Long, Cardiothoracic surgeon, Medical Director

**Inspired Therapeutics, Florida, USA**

- ▶ Dr. Kurt Dasse, Co-Founder, President & CEO
- ▶ Ms. Priscilla Petit, Co-Founder, Director of Quality & Regulatory

**enmodes GmbH, Aschen, Germany**

- ▶ Dr. Tim Kaufmann, Chief Executive Officer
- ▶ Dr. Deepanshu Sodhani, R&D Project Manager

**Key activities:**

The project is developing extracorporeal LVAD and ECMO Blood Pump. IAAHP jump started activities toward the development of a blood pump suitable for bench testing and pre-clinical readiness. Laxven Systems is working on a pump with rotating disk operating under the “maglev” principle which is suspended in its casing via magnetic levitation. Excellent progress was made including solutions for sensor problem which was hindering progress. CBIT and KITS will use the Maglev motor to develop a Centrifugal Levitation Pump with magnetically coupled impellor and pivot bearing. Magnetic coupled blood pump P28 Prototype was 3D printed and tested with human blood at AIG Hospital. The experiment was successfully conducted with human blood according to the ASTM 1830-19 standard for in vitro Evaluation of Hemolysis in Blood Pumps. enmodes GmbH with extensive experience in using computer-aided simulations to innovate for blood pumps with improved hydraulic efficiency, suitability for long term use, hemocompatibility, longer battery life and less mechanical wear was added as a valuable partner this year.

Shree Pacetronix, a leading manufacturer of implantable cardiac pacemakers, pacing leads and pacing system analyzers provided key inputs on regulatory approvals, manufacturing and compliances. The year also marked important activities like selection of Palamur

Biosciences GLP animal testing facility for Pre-clinical cardiac devices testing. The facility is equipped with state of the art CathLab facility, IVUS, 4DECHO, Heart Lung Machine, animal housing facilities and OT.

Dr. Dasse and Ms. Priscilla, Inspired Therapeutics, USA jump started Quality Systems for the project and provided training on Good Laboratory Practices. All stakeholders enthusiastically brainstormed on user requirements, pre-clinical and clinical trial synopsis for the project. Mr. Shawn Bengston, Director of Quality Management Systems for University of Pittsburgh's McGowan Institute for Regenerative Medicine's joined the growing IAAHP team. He provided oversight to development, implementation and management of Quality Systems as required to support preclinical testing efforts of Medical Devices destined for regulatory approval.



Mock loop for in-vitro testing of pump



Hemolysis test setup with blood pump prototype



AIG Hospital team with our Chairman



Hemolysis experiments in progress



## 2 Longitudinal Indian Family hEalth (LIFE) pilot study

### Investigators

- ▶ Dr. Guru Rajesh Jammy, Director Research, SHARE INDIA
- ▶ Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS

#### Objectives:

The LIFE study is being conducted in villages of Medchal Mandal, Medchal District of Telangana, India. This is a long-term cohort study that will examine socio-economic and environmental influences on children's health and development in India.

**Funding Source:** SHARE INDIA and SHARE USA

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

**Methods:** The LIFE Pilot is a prospective cohort study of Indian women followed through conception, pregnancy, and delivery, and the physical and mental health and development of their children. Since 2009, 1227 women aged between 15 and 35 years were recruited before conception or within 14 weeks of gestation. Women were followed through pregnancy, delivery, and postpartum. Follow-up of children is ongoing. Baseline data were collected from husbands of 642 women. Anthropometric measurements, biological samples and detailed questionnaire data were collected during registration, the first and third trimesters, delivery and at 1 month postpartum. Anthropometric measurements and health questionnaire data are obtained for each child, including developmental assessment at periodic intervals.

**Status of Work:** Till 31st March 2020, 1227 women have been recruited from 40 villages in Medchal Mandal; 924 deliveries were done at MediCiti Hospital (MIMS) while 351 deliveries were done outside MIMS. 1139 PNC-1 month follow up are completed. Project specific questionnaires completed by age of the child include 06 months- 990, 12 months-964, 18 months-1020, 24 months-999, 36 months-989, 48 months-939, 60 months-933. Children screened for mental health problems include 1029 in the age group for 3-4 years; 817 in age group 6-7 years. Couples follow up visits for 5-6 years include 977 women and 883 men. The project also completed 96-98 months follow up for 360 children, 108-110 months follow-up visit for 360 children; WISC-IV scale (8-11 years) for 198 children and SMR scale for 198 children.

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

### Investigators

- ▶ 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

**Aims:** To identify 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). It also examines chorioamnionitis as an associated factor between



*Mycoplasma genitalium* or *Ureaplasma* infection and spontaneous preterm birth.

**Methods:** The project is studying 188 women who delivered preterm, 218 women who experienced spontaneous abortion and 436 control women who delivered at term in the LIFE Study.

**Status of the project:** DNA was isolated from 2000 and odd vaginal scrapings collected from the women at registration, 1<sup>st</sup> Trimester, 3<sup>rd</sup> Trimester, Delivery and 30 days after delivery by QIAamp cadzor Pathogen mini kit (QIAGEN), following manufacturers protocol. Probes and Primers were designed by Dr. Jorgen Skov Jensen (Statens Serum Institute, Denmark) for the following organisms: *Mycoplasma genitalium* (MG): FAM (organism) and HEX (Internal control), *Chlamydia trachomatis* (Ctr): FAM (organism) and Cy5 (Internal Control), *Mycoplasma hominis* (Mh): FAM (organism) and HEX (Internal control), *Trichomonas vaginalis* (Tv): FAM (organism) and HEX (Internal control), *Neisseria gonorrhoeae* (Ng): FAM (organism) and HEX (Internal control), *Ureaplasma urealyticum* (UU), *Ureaplasma parvum* (UP)

All the probes were standardized under specific cycling conditions; reamplified for Mh, Mg, Ng and Tv; As next steps approximately 600 and odd DNA samples should be amplified with the Mh, Mg, Ng and Tv probes provided. 2000 samples should be amplified with remaining Three probes.

4

## The influence of vaginal microbiota on adverse pregnancy outcomes in the LIFE study

### Investigators

- ▶ 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

**Aims & Objectives:** To characterize and compare the pre-pregnancy vaginal microbiota of:

1. pregnant women who subsequently experience a spontaneous abortion
2. women who subsequently deliver preterm, to a control group of women who deliver at term
3. To characterize and compare the vaginal microbiota at labor and delivery among women who deliver preterm and a control group of women who deliver at term.

**Key interventions:** The project is studying 20 cases of women with spontaneous abortion, 20 cases of women who delivered preterm and 20 control women who delivered at term. Archived preconception vaginal samples were analyzed using broad range 16S rRNA gene PCR with sequencing. Women who delivered at term had vaginal microbiota dominated by *Lactobacillus* species.

5

## The role of pre pregnancy and prenatal danger associated molecular patterns in pregnancy complications (DAMP) - LIFE Study Samples

### Investigators

- ▶ Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynaecology, 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

**Funding Source:** Partial Support from Texas A & M University, USA



#### Aims:

1. Determine if circulating pre-pregnancy and first trimester biomarkers of placental dysfunction (EGFL7, PIGF, sFLT-1, PP-13) are associated with SAB
2. Determine if circulating pre-pregnancy and early pregnancy DAMPs (HGBM-1, HSP70) and innate immune signaling biomarkers (Pentraxin-3) are associated with SAB
3. Determine if pre-pregnancy and early pregnancy circulating markers of oxidative stress (MDA, GDH) are associated with SAB

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

**Methods:** The project is studying 50 cases of women who had spontaneous miscarriage and 100 control women who delivered at term. First pregnancies with singleton pregnancies that have stored plasma samples available from preconception and first trimester in the LIFE study were taken.

**Status of the Project:** Eleven markers from different groups of immune response were analyzed with 320 samples from women who are controls, registered preconception and at 1st trimester. Data entry is completed. Statistical analysis to be done.

6

## Technology Enabled health workers to deliver Telemedicine to Rural Homes at Affordable costs (TETRA)

### Investigators

- ▶ Dr. D. Shailendra, Professor & HOD, Department of Pharmacology, MedCiti Institute of Medical Sciences
- ▶ Dr. Guru Rajesh Jammy, Director Research, SHARE INDIA

**Funding Source:** SHARE INDIA and SHARE USA

**Aims:** To demonstrate feasibility, effectiveness and sustainability of a low cost telemedicine strategy for detection, treatment and monitoring of blood pressure and blood sugar in remote and underserved locations

**Methods:** 'TETRA' uses a novel strategy anchored on non-physician health workers (NPHWs) networked in real time with doctors via telemedicine to proactively detect, treat and follow-up individuals with hypertension and diabetes at the convenience of their homes, across six villages in Telangana. The NPHWs equipped with a tablet computer with embedded decision prompt systems (mHealth tool) linked to point-of-care devices for blood pressure and blood sugar measurement and guided remotely by a physician via Skype, screen individuals for hypertension and diabetes, facilitate a telemedicine consult, print a physician ordered e-prescription and distribute medication at the doorsteps of beneficiaries. Further, the NPHWs follow-up individuals with hypertension and diabetes once in three months and provide a continuum of care.

**Status of the project:** Currently, 1600 individuals with hypertension and over 600 individuals with diabetes are being followed up once in a quarter; of them, more than three-fifths with hypertension and about one fourths with diabetes have their blood pressure and blood sugar under control, respectively.

**Next steps/way forward:** An expanded version of TETRA, embracing a life-course approach to screen, treat and follow-up all members of a household for widely prevalent diseases is poised for launch later this year. The overarching goal of the expanded version of TETRA is to develop a model for affordable community level healthcare, and lay the foundation for personalised medicine by generating FHIR compatible electronic health record of each individual at the community level.





### Investigators

- ▶ Dr. Sapna Vyakaranam, Professor and Head, Department of Biochemistry, MIMS
- ▶ Dr. Kalpana Betha, Professor and Head, Department of Obstetrics & Gynecology, MIMS
- ▶ Dr. Aparna Varma, Professor and Head, Department of Biochemistry, AIIMS, Bibinagar
- ▶ Dr. Rashmi Pant, Chief Bio-statistician and M&E Specialist, SHARE INDIA
- ▶ Dr. Padma Yalmati, Consultant Biochemist, CARE Hospitals

**Funding source:** SHARE INDIA and SHARE USA

**Introduction:** Hypertensive disorders of the pregnancy cover a spectrum of conditions including preeclampsia, eclampsia, chronic hypertension and preeclampsia superimposed on chronic hypertension. Preeclampsia is a major cause of maternal and perinatal mortality (number of still births and deaths of newborns in first week of life). Hypertensive disorders of the pregnancy occur in about 10% of all pregnant women around the world. Preeclampsia affects 3-5% of pregnancies. SHARE INDIA earlier conducted and published studies on hypertensive disorders of pregnancy.

**Aim:** 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 out-comes.

**Methods:** HEaLthy Pregnancy (HELP) Study is a cohort study of pregnant women. The study initially enrolled 1000 pregnant women and followed them throughout the pregnancy till delivery, while these women visits the department of Obstetrics and Gynaecology at MIMS.

**Objectives:** Measure blood pressure, serum uric acid, serum creatinine and serum cystatin C (stored at -80 o 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:** Till March 2020, 1274 women were enrolled in the studies.

Details	Nos
Deliveries at MIMS	926
Outside deliveries	218
Abortion at MIMS	17
Abortion outside	14
Live birth at MIMS	885
Live birth outside	190
Still birth at MIMS	4
Still birth outside	0
IUD at MIMS	10
IUD outside MIMS	12
Gestational Hypertension	63
Pre-eclampsia without severe features	34
Pre-eclampsia with severe features	9
Eclampsia	1
Hypothyroidism	137
Hyperthyroidism	10
Subclinical hypothyroidism	61

## 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

### Investigators

- ▶ Dr. D. Prabhakaran, Vice President (Research and Policy), PHFI, 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, Professor of Medicine, University of Pittsburgh and Chairman, SHARE INDIA
- ▶ Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynaecology, MIMS
- ▶ Dr. Sailesh Mohan, Centre for Control of Chronic Conditions (CCCC), PHFI, New Delhi
- ▶ Dr. Poornima Prabhakaran, CCCC, PHFI, New Delhi
- ▶ Dr. Ajay V. CCCC, PHFI, New Delhi
- ▶ Dr. Ambuj Roy, Department of Cardiology, AIIMS, 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 Pere, Associate Professor, Cardiologist and epidemiologist, LSHTM
- ▶ Dr. Clara Calvert, Assistant Professor, LSHTM
- ▶ Dr. John Cairns, Professor of Health Economics, LSHTM
- ▶ Dr. Ishita Rawat, Research Fellow, CCCC, PHFI, New Delhi

Funding source: Newton Fund

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

**Status of the project:** Random selection of 30 facilities as the sample size for the Formative Phase of the project which included PHC's, Subcentres and Tagged Facilities in six districts i.e Rangareddy, Yadadri Bhuvanagiri, Siddipet, Vikarabad, Asifabad and Medak of Telangana State was completed. Pretesting of study stools (health facility survey, ANC observation and clinical vignettes) was conducted in facilities of Rangareddy and Medak districts. Final phase of data collection by administration of study tools, Health Facility Survey, ANC Observations Tool, and Clinical Vignettes and conduction of In-depth interviews (with pregnant women and healthcare providers) in 25 facilities under the selected 5 districts (Rangareddy, Yadadri Bhuvanagiri, Siddipet, Vikarabad and Medak) of Telangana completed. We also designed MS Access Data templates for data entry of Health Facility Survey and ANC Observation tools. A State Advisory Group Committee was constituted for the project. First meeting was held on 25-02-2020 to discuss about the guidelines and algorithms related to Anemia, PIH and GDM (Gestational Diabetes Mellitus).



## 9 Caesarean Surgical Site Infection (CSSI) study

### Investigators

- ▶ Dr. Kalpana Betha, Professor and Head, Department of Obstetrics and Gynecology, MIMS
- ▶ Dr. P. Lakshmi Sailaja, Assistant Professor, Department of Obstetrics and Gynecology, MIMS
- ▶ Dr. Catherine L. Haggerty, Associate Professor, Department of Epidemiology, GSPH, University of Pittsburgh, PA, USA

**Funding source:** SHARE INDIA and SHARE USA

#### Introduction:

Surgical site infections are one of the most common associated infections in the low middle income countries. As per studies conducted in India, they make up to 14-16% of inpatient infections. Objective of present study was to evaluate the risk factors associated with caesarian surgical site infections and the bacteria causing these infections and the antibiotic sensitivity and resistance pattern of the pathogens isolated.

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

**Status of the project:** A total of 2000 cases of patients who underwent caesarean section were included and all women completed one month follow up post operatively. Among them CSSI was found in 6.5% of cases. In the interim analysis, Overt Diabetes, PROM, duration of labor > 12 hours were associated with surgical site infections (SSI) compared to non SSI.

## 10 Empowering Indian health researchers with computational modelling tools

### Investigators

- ▶ Dr. Guru Rajesh Jammy, Director Research, SHARE INDIA
- ▶ Dr Raheel Syed, Research Scientist, SHARE INDIA
- ▶ Dr. Lincoln P. Choudhury, Consultant

**Funding Source:** University of Pittsburgh

**Introduction:** Agent based modeling, which can take in to account the individual level characters has been used elsewhere for understanding HIV epidemic, but has not yet been used in Indian context for policy making.

**Objectives:** Utilize a validated agent based model to project the HIV incidence in the state of Telangana from the year 2005, till year 2030. To understand the effect of some select interventions on the HIV incidence for achieving the Sustainable Development Goals (SDG).

**Status of the project:** The Agent Based modeling was performed specifically for prevention of parent to child transmission (PPTCT) intervention efficiency in Telangana state population synthetic. The results will be shared with various stakeholders in India and a manuscript is under preparation.

### Investigators

- ▶ 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. D. Sudheer Reddy, Professor, Orthopedics, MIMS
- ▶ Dr. Kaushik Kalyan, Associate Professor, Orthopedics, MIMS
- ▶ P. Nikethan Reddy, M. Tech, Research fellow
- ▶ K. Uday Kiran, M. Tech, Research fellow

**Funding source:** Initial Funding: Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology, Government of India; Currently: SHARE USA

### Introduction:

SHARE INDIA/MIMS and BITS Pilani (HYD) have collaborated in the last 4 years to develop individually tailored, light weight and comfortable sockets for below knee prosthesis. Our product called "Sukhfit" has been used by over 20 patients for over 2 years. We are now in the process of using patient feedback to improve our designs. These improvements include:

1. Increase of strength to make it longer lasting;
2. Increase of comfort level by redesigning the liner and
3. Decrease of the cost of production by reusing waste materials, computer automation and reduced labour.

### Aims:

1. Increase the strength of the prosthesis and make it more effective and longer lasting.
2. Improve our digital Imaging process to remotely collect patient's anatomical data.

3. Provide the prosthesis for as many patients as possible and make it attractive for both prosthetists and patients in the near future.
4. To provide better comfort, and maximum security for all patients at low cost.

**Current status of the project:** We have successfully doubled the strength of the prosthesis by using strategically placed reinforcement ribs around the area where higher stresses and loads are acting. We have given 5 new patients our new model "Sukhfit 2020" with the latest changes and are getting new



Dr. P.N. Shrivastava along with a patient with new model of "Sukhfit 2020"



patient feedback to continue further improvements. We also made modifications to our workbench-3 model to improve quality, stability and reliability of patient's anatomy data taken in the field remotely. We have developed a customized new motor with our required specifications for torque and rpms for the workbench-3 model in collaboration with Laxven Solutions Inc., Cherlapally Telangana with the requirements needed for us. We applied for new formal approval of our patient testing protocol from the MIMS research Committee during this period.

12

## IndEpi: A platform for systematic integration of Indian Epidemiology datasets to enable health analytics and disease modelling

### Investigators

- ▶ Dr. Rashmi Pant, Chief Bio-statistician and M&E Specialist, SHARE INDIA
- ▶ Dr. Guru Rajesh Jammy, Director Research, SHARE INDIA

**Funding Source:** Department of Science and Technology, Government of India

**Aim:** To create a national resource that integrates epidemiological evidence from existing sources on the health and well being of the Indian population and make it available with tools of modelling and analysis to aid evidence-based policy making.

**Methods:** This project will conduct secondary data analysis of the REACH, LIFE, MILES and HELP databases. The data science methods used will include: Growth curve modelling, Social Network analysis and machine learning

**Status of the project:** Year 1 activities completed and dashboard presented at DST partners meet at Pune on February 7, 2020. As next steps we design an app to display results from machine learning methods.

13

## Lab on Wheels: an innovative point-of-care test to diagnose Chlamydiales in an OneHealth setting InPoChlam

### Investigators

- ▶ SHARE INDIA: Dr. Guru Rajesh Jammy, Dr. Vijay V. Yeldandi, Dr. Rashmi Pant
- ▶ Sam Higginbottom, University of Agriculture Technology and Sciences: [SHUATS], Allahabad, Uttar Pradesh: Dr. Jonathan A. Lai, Dr. Rajiv Kant, Dr. Neeraj, Dr. Sarvjeet Herbert, Dr. Bipasha David
- ▶ NTR College of Veterinary Sciences, Vijayawada, Andhra Pradesh: Dr. T. Srinivasa Rao, Dr. D. Narendra Nath, Dr. Ch. Bindu Kiranmayi
- ▶ The Netherlands Microbe: Prof. Dr. Servaas MoVrre, Anne Ammerdorffer, Sander Ouburg, Pierre Thomas; BiosparQ: Dr. Gerold de Valk Belgium; UGent: Dr. Daisy Vanrompay, Dr. Ir. Sven Arnouts

**Funding Source:** Department of Biotechnology, Government of India

**Objectives:** The main objective is the collection of a clinical cohort of human patient samples, chicken broiler samples and poultry worker samples in India. Samples will be used for identification of Chlamydiales in a variety of biological and environmental samples in order to fully validate the Lab on Wheels and show its market potential in India, and possible other less developed countries.

**Methods:** Samples will be collected according to previously established strategies for epidemiological studies on Chlamydiales in both humans, chickens and the environment. If we know that women infected with *C. trachomatis* and additional 'veterinary' Chlamydiales have a higher risk on reproductive health failures than women with *C. trachomatis* only,



treatment of these women can be adjusted accordingly. As next steps work will begin on designing measurement instruments for the surveys and data collection.

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## Harnessing a population-based cohort for an epidemiological study on Dengue and Chikungunya and drive capacities to conduct clinical trials

### Investigators

- ▶ Dr. Guru Rajesh Jammy, Director Research, SHARE INDIA
- ▶ Dr Shikha Dhawan, Director Programs, SHARE INDIA
- ▶ Dr D. Shailendra, Professor and HOD, Dept. of Pharmacology, MIMS

**Funding Source:** National Biopharma Mission, Biotechnology Industrial Research Advisory Council, Department of Biotechnology, Government of India

### Objectives:

1. Preparation towards initiation of longitudinal incidence study
2. To operationalize longitudinal incidence study at the site
3. To establish GCP compliant field site for conduct of vaccine trials

**Methods:** SHARE INDIA will implement the common protocol for study and initiation of sample collection for studying seroprevalence of Dengue and Chikungunya. The participants will be followed for 24 months for acute febrile episodes and tested for incident dengue and chikungunya cases. A total of 1500 participants aged 2-50 years in the Medchal area will be recruited for the study. In the year 3 of the study, SHARE INDIA will work towards developing a clinical trial site and by the end of third year should be ready for clinical trial for any vaccine candidates for the diseases.

### Status of the project:

- ▶ Clinical Development Services Agency (CDSA) visit was conducted on 19th November 2019 wherein facilities, SOPs and other related documents and processes were reviewed
- ▶ Pre-sanction technical and financial due delegation was conducted on 16th January 2020



CDSA visit to SHARE INDIA and MIMS



## SERA (Sexual and Reproductive Health Assessment) A study on sexually transmitted infections (STI) among general population and key Populations group in Hyderabad, India.

### Investigators

- ▶ Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA
- ▶ Prof. Servaas Morre, Maastricht University, The Netherland
- ▶ Dr. Kuldeep Singh Sachdeva, DDG, Basic Services Division, NACO
- ▶ Dr. Asha Hegde, National consultant PPTCT and STI, NACO
- ▶ Dr. Vijay V Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA.
- ▶ Dr. M. Dinaker, GYD Clinics and Diagnostics, Member, SHARE INDIA
- ▶ Dr. Ganesh Oruganti, Executive Director, SHARE INDIA
- ▶ Dr. Kalpana Betha, Prof and Head, Department of OBGY, MIMS.
- ▶ Dr. Rashmi Pant, Chief Bio-statistician and M&E Specialist, SHARE INDIA
- ▶ Dr. Pierre Paul Michel Thomas, Institute of Public Health Genomics, Maastricht University, The Netherlands

**Funding Source:** Testing Kits funded by Maastricht University, The Netherlands.

**Aims:** To determine the utility and feasibility of NAAT-based screening for sexually transmitted infections in India.

#### Objectives:

- (i) To estimate the prevalence of common STIs in the general and key population of Hyderabad using NAAT (Nucleic Acid Amplification testing)
- (ii) To estimate the IgG sero-prevalence of *C. trachomatis* in the general and key population in Hyderabad

(iii) To determine factors associated with the prevalence of common STIs

**Key Activities:** The project staff completed the data collection from MSM (150) group and from Pregnant women 100 Asymptomatic & 50 Symptomatic. PCR amplification was carried out using samples from MSM (143), Asymptomatic Pregnant woman (102), Symptomatic Pregnant woman (20), Total positive: 17; Kit Used: Presto plus Combined real time CT/NG/TV assay (Goffin Molecular Technologies); Results obtained include:

Name of the Target	Positive
<i>Chlamydia trachomatis</i> (CT)	9 (8 MSM sample, 1 asymptomatic pregnant woman)
<i>Trichomonas vaginalis</i> (TV)	8 (7 asymptomatic pregnant women, 1 symptomatic pregnant woman)
<i>Neisseria gonorrhoea</i> (NG)	0

IgG ELISA done for *Chlamydia trachomatis* gave the following results:

Study population	Sample tested	Positive
MSM	143	39
Asymptomatic pregnant women	26	0
Symptomatic pregnant women	5	0

# Technical Assistance to Government of India – “CDC funded Projects”

SHARE INDIA has gained substantial experience in providing TA to promote health systems strengthening by establishing a model of Private Public Partnerships for HIV prevention and treatment, Strategic Information and human capacity development through capacity building, supportive supervision and mentoring, and provided training on operations research. Currently, CDC cooperative agreements such as National Initiative to Strengthen and Coordinate HIV/TB Response (NISCHIT), Laboratory Quality Systems in HIV (LaQSH) and Strengthening TB Action and Response (STAR) are being handled by SHARE INDIA.

16

## National Initiative to Strengthen and Coordinate HIV/TB Response in India - NISCHIT

### Investigators

- ▶ Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA
- ▶ Dr. Ganesh Oruganti, Executive Director, SHARE INDIA
- ▶ Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA
- ▶ Dr. Parthasarathy, Associate Project Director, SHARE INDIA

**Funding Source:** Centers for Disease Control and Prevention (CDC), Atlanta.

**Introduction:** NISCHIT aims to build institutional capacity of health care system in India for improving the quality of ART services and HIV-TB care and treatment services for people living with HIV (PLHIV). This project supports the National AIDS Control Program (NACP) implemented by National AIDS Control Organization (NACO) of Government of India. The Technical Assistance (TA) is focused to support NACO, State AIDS Control Societies (SACS), Antiretroviral Treatment (ART) centres, and other HIV Testing and Counseling (HTC) sites, and District level units of HIV/AIDS.

**Key Activities:** In state of Andhra Pradesh, to ensure access to quality ART treatment, along with package of services for enhanced ART coverage and

improved retention and viral suppression, several differentiated care models like Multi-Month Scripting (MMS), Multi Month dispensation at peripheral health centers (LAC /LAC plus centers) are scaled up. In addition to the differential care models being implemented in the state, mainstreaming of HIV/AIDS services in tribal hospitals and prisons, ART dispensation at testing sites project has been successfully initiated. ART dispensation through the community based Organisation (CBO)-Nari Saksham Rajahmundry, East Godavari established a link ART center that caters to the female sex workers (FSW). To ensure access for ART service delivery in the hard to reach areas, with technical assistance of SHARE INDIA -APSACS has supported Integrated Tribal Development Agency (ITDA), East Godavari by establishing link ART centres in two hospitals at Community Health Center, Chitoor and Area Hospital, Kunavaram for the care continuum of tribal PLHIV. To initiate ART dispensation services to prison inmates, APSACS has established Link ART centers at four central prisons i.e. Rajahmundry, Nellore, Kadapa and Vishakhapatnam (with ~4400 inmates) between July – August 2019 with technical assistance



Observation of World AIDS Day 2019



e-NISCHIT session at NITRD



from NISCHIT project. Technology enabled Adherence Monitoring tool (TeAM), a mobile app supporting monitoring adherence to ART treatment among PLHIV was piloted. Sustained efforts of the project team and support from SACS and NTEP resulted in improved IPT coverage in the ART centers prioritized for IPT saturation in Andhra Pradesh and Maharashtra. Two sessions are conducted monthly on HIV-TB management for the ART center staff for the states of Andhra Pradesh, Tamil Nadu, Delhi and Uttar Pradesh through National Initiative to Strengthen & Collaboration between HIV-TB through e Learning (e-NISCHIT).

## 17 Strengthening TB Action and Response – STAR

### Investigators

- ▶ Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA
- ▶ Dr. Ganesh Oruganti, Executive Director, SHARE INDIA
- ▶ Dr. Satish Kaipilyawar, Associate Project Director, SHARE INDIA

**Funding Source:** Centers for Disease Control and Prevention (CDC), Atlanta.

**Key activities:** The AIC unit conducted baseline assessments and provided recommendations to 143 health institutes in 10 wards of Mumbai in the last 3 years. The institutes showed an overall improved compliance from 46% to 61% from baseline to fourth follow up. The AIC support was also extended to Chennai. For End TB Dharavi Project, the team performed transect walk through the Dharavi area to understand the boundaries of the area, the type of houses, workplaces and community and developed an area map. As part of HAaLT TB in Nagpur (Household contacts active and latent TB intervention), the project prepared ASHA Margadarshika to guide ASHA workers for implementation of project activities. In addition, informed consent form, Information Education and Communication materials, project area map, data flow algorithm and pre and post-test

questionnaire for all cadres of NTEP staff training is under preparation. The team conducted a webinar session on the e-NISCHIT platform across India on Airborne Infection Control in ART settings at the HIV-TB ECHO clinic for the ARTCs of Andhra Pradesh, Tamil Nadu, Delhi and Uttar Pradesh on 4th April and 16th May 2019. "Sensitization for all MCGM engineers and architects of the Health Infrastructure Cell (HIC)" were conducted by SHARE INDIA, MCGM-AIC unit. The project under Engaging local experts in validating and analysing TB-data to End TB (ELEVATE) provided training on data analysis and to capacitate the local NTEP staff to analyse and utilize TB programmatic data for program implementation and management.



AIC Team Felicitation



Facility level AIC sensitization



ELEVATE data use workshop



## 18 Laboratory Quality Systems in HIV – LaQSH

### Investigators

- ▶ Dr. Vijay V. Yeldandi, Clinical Professor of Medicine and Surgery, University of Illinois at Chicago, USA
- ▶ Dr. Ganesh Oruganti, Executive Director, SHARE INDIA
- ▶ Dr. Ramesh Reddy Allam, Deputy Project Director, SHARE INDIA
- ▶ Dr. Anu George, Associate Project Director, SHARE INDIA

**Funding Source:** Centers for Disease Control and Prevention (CDC), Atlanta; 2015-2020

**Introduction:** SHARE INDIA is providing Technical Assistance (TA) for implementing the Quality Management Systems (QMS) in India's National AIDS Control Program (NACP) laboratories, strengthening its laboratory testing network for HIV and related diseases under the President's Emergency Plan for AIDS Relief (PEPFAR). To have an accelerated and impact driven HIV response to reverse the epidemic, the project is focused in the three high prevalent clusters (Andhra Pradesh, Maharashtra and North Eastern states in India) and the efforts focus on achieving the third 90 of UNAIDS fast track goals.

**Key Activities:** The project provided TA and operationalized VL laboratories across the country, from 10 to 41. The "Training on Laboratory-Clinical Interface for HIV-1 Viral Load Testing" were organized in New Delhi, Mumbai and Hyderabad in May & September 2019 which oriented and equipped the 240 laboratory technologists and clinical staff to support increased VL testing coverage and result utilisation in the public sector VL laboratories. With support from the Apex VL laboratory at NARI Pune, PT panels were dispatched to the 41 VL Labs. The e-Learning sessions were organized by the project from April to September, 2019 to train the HIV-1 VL laboratories on molecular biology of HIV VL testing. Till March 2020, 44767 / 72183 (62%) VL samples have been tested with 34888 / 44767 (78%) Viral Suppression. KEM, Mumbai VL laboratory was selected as the Pilot site for implementation of Integrated Management Systems (IMS). Fast-tracking of Key Population (KP) in 3 Cluster states of North East continued to increase VL coverage through PPP model. NACO approved the Routine Viral Load testing in Mizoram through PPP model and through project efforts, the annual VL coverage increased from 14% in September to 55% in March 2020. Increasing frequency of VL sample collection under PPP model & innovative methods to increase VL coverage through camps in Noklak, Nagaland and LAC plus were also prominent decisions made by NACO. The VL laboratory at RIMS, Manipur applied for NABL





accreditation in September 2019 and approved for accreditation in February 2020. The project provided TA to NACO and developed various formats and tools to mentor, review VL test coverage and utilisation on a real time basis. The project trained the outreach team on results utilization to ensure VL suppression. Under NACO Prayogshala, online QMS Data Management tool was developed by the project in collaboration with ICMR-NARI and NACO. The Nacopravogshala tool was inaugurated by Dr Samiran Panda, Director ICMR-NARI, Pune and Dr. Sunil Gupta, ADG Laboratory Services, NACO on 6th February 2020. This supports the "External Quality Assessment Scheme (EQAS)" for HIV serology that includes Proficiency testing (PT), Re-checking and monitoring. The projects also propelled National scale-up and transition of continuous quality improvement (CQI) model at HIV Counselling and Testing Services (HCTS) laboratories. The project has also designed a road map for the National level plan for CQI implementation across 5000 HCTS in the country. The project provided TA to prepare the user-specific requirements for integrated information management for Laboratory services which were developed for HCTS, VL and CD4 testing.



Technical Resource Group Meeting at Delhi

Launch of NACOPRAYOGSHALA at NARI, Pune





SHARE INDIA hosted an all partners meeting-Indo American Artificial Heart Program (IAAHP) from 25-28 January 2020, Hyderabad, India.

#### The participants

- ▶ SHARE INDIA: Prof. PS Reddy, Prof. Prakash N. Shrivastava, Prof. Vijay V. Yeldandi, Dr. Subhananda Rao, Dr. Shikha Dhawan, Mr. Nitin C. Desai
- ▶ INTEGRIS: James Long, M.D.
- ▶ University of Pittsburgh: Prof. Harvey Borovetz
- ▶ Cornell Engineering: Prof. James Antaki (joined through Skype)
- ▶ Advisor: Dr. B. M. Gandhi
- ▶ enmodes: Dr. Deepanshu Sodhani
- ▶ CBIT: Dr. Ravinder Reddy, Mr. Rugveda
- ▶ KITS: Dr. Venu Madhav, Dr. Ganesh Kumar Gampa, Dr. Sumithra G, Dr. Rajesh P
- ▶ BITS: Dr. Suman Kapur (joined through Skype)
- ▶ AIG: Dr. Nageshwar Reddy, Dr. P Naveen Chander Reddy, Dr. Suresh Kumar Reddy, Dr. Satyanarayana, Dr. Soma Raju B
- ▶ Laxven Systems: Mr. Ramesh Reddy
- ▶ Shree Pacetronix Ltd.: Mr. Atul Sethi, Mr. Aakash Sethi, Mr. Vikas Gokhale
- ▶ Palamur Biosciences: Mr. T. Vijayaragavan, Dr. Rammoorthy, Dr. D. C. Sharma, Dr Anoop Puthoochirayil
- ▶ Vasantha Tools Crafts Pvt. Ltd.: Mr. Dayananda Reddy
- ▶ Kaarthik Molds & Dies: Mr. Nagendra Chowdary, Mr. Kaarthik

#### The agenda

Day 1: Saturday 25th January, 2020 – Visit to AIG Hospital, Hyderabad

Day 2: Sunday 26th January, 2020 – Visit to Laxven, Hyderabad

Day 3: Monday 27th January, 2020 – Visit to Palamur Biosciences and Sipra Labs, Hyderabad

Day 4: Tuesday 28th January, 2020 – Visit to Vasantha Labs and Karthik Moulds, Hyderabad

For four days, the team brainstormed on different project activities complemented by site visits to collaborators and pre-clinical study sites near Hyderabad. During the meeting it was discussed that AIG Hospital at Hyderabad under the eminent leadership of Dr. Nageshwar Reddy is ideal for nurturing the Artificial Heart Program with key engagements with Dr. P. Naveen Chander Reddy and Dr. Suresh Kumar Reddy. Enmodes was added as a valuable partner this year. They are working on complex three dimensional computational fluid simulations for blood pumps with improved hydraulic efficiency, suitability for long term use, hemocompatibility, longer battery life and less mechanical wear. At Laxven, Mr. Ramesh Reddy demonstrated the functioning of Maglev motor. The team also visited pre-clinical facilities at Palamur Biosciences and Sipra Labs.



Visit to Laxven



Visit to AIG Hospital

At Laxven, Mr. Ramesh Reddy demonstrated the functioning of Maglev motor. The team also visited pre-clinical facilities at Palamur Biosciences and Sipra Labs. Palamur Biosciences GLP animal testing facility was selected for Pre-clinical cardiac devices testing based on its excellent Cath Lab and infrastructure to support chronic implant studies.



## 20 Health Camps

SHARE INDIA conducted health camps in many villages. During the health camps, Anthropometry measurements were taken while blood pressure was measured and random blood sugar was tested. Free medicines were prescribed while complicated cases were referred to the local area government health centers and MediCiti Hospital.

S. No.	Villages of Medchal Mandal	Beneficiaries
1	Dablipur	95
2	Nuthankal	115
3	Gowdavelly	130
4	Railapur	110
5	Muneerabad	160
6	Pudur	135
7	Somaram	90
8	Ravalkole	75
9	Rajabollaram	70
10	Aliyabad	85



Health Camp in progress



Team engaged in Health Camps

## 21 Global health / International exchange program

The SHARE INDIA exchange program aims 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.

### List of students who attended the clerkship in the University of Pittsburgh (UOP)

S. No.	Name of the Student	University visited	Year of visit
1	Ms. Akhila Reddy	University of Pittsburgh, PA, USA	2020
2	Mr. Sanketh	University of Pittsburgh, PA, USA	2020
3	Ms. Bhavana Reddy P.	University of Pittsburgh, PA, USA	2020

### Students visited SHARE INDIA- MIMS

S. No.	Name of the Student	Purpose of Visit	Parent Educational Institute
1	Ms. Elizabeth Piccoli	Rotation, Global Health Program	University of Pittsburgh, Pittsburgh, PA, USA
2	Dr. Samuel Fox	Rotation, Global Health Program	Rush University Medical Center, Chicago, IL, USA
3	Ms. Meghana Nagam	Global Health Program	University of Illinois at Chicago, USA

### International faculty visited SHARE INDIA – MIMS in 2019-2020

S. No.	Name of the Faculty	Designation and Purpose of Visit	Name of the Institute / University
1	Dr. Harvey Borovetz	Professor of Bioengineering, Meeting, Indo American Artificial Heart Program	University of Pittsburgh, USA
2	Dr. James Long	Cardio Thoracic Surgeon, Meeting, Indo American Artificial Heart Program	INTEGRIS Nazih Zuhdi Transplant Institute, Integris Baptist Medical Center, USA
3	Dr. Prakash N. Shrivastava	Professor Emeritus, BKP Project	University of Southern California, USA
4	Dr. Deepanshu Sodhani	R&D Project Manager, Meeting, Indo American Artificial Heart Program	enmodes, Germany

**Our past publications are available at:**  
[http://sharefoundations.org/about\\_SI.html](http://sharefoundations.org/about_SI.html)

## 2019

1. Dr. Vandana Dabla and Dr. Ramesh Allam Reddy. **Vitamin-D and HIV Infection: The Correlation & Need For Evaluation.** International Journal of Research - Granthaalayah, Vol.7(Iss.4), 68-81 April, 2019.  
<https://doi.org/10.5281/zenodo.2653114>.
2. Manoj V Murhekar, P Kamaraj, Muthusamy Santhosh Kumar, Siraj Ahmed Khan, Ramesh Reddy Allam, Pradip Barde, Bhagirathi Dwibedi, Suman Kanungo, Uday Mohan, Suman Sundar Mohanty, Subarna Roy, Vivek Sagar, Deepali Savargaonkar, Babasaheb V Tandale, Roshan Kamal Topno, Gajanan Sapkal, C P Girish Kumar, R Sabarinathan, Velusamy Saravana Kumar, Sailaja Bitragunta, Gagandeep Singh Grover, P V M Lakshmi, Chandra Mauli Mishra, Provash Sadhukhan, Prakash Kumar Sahoo, S K Singh, Chander Prakash Yadav, Asha Bhagat, Rashi Srivastava, E Ramya Dinesh, T Karunakaran, C Govindhasamy, T Daniel Rajasekar, A Jeyakumar, A Suresh, D Augustine, P Ashok Kumar, Rajesh Kumar, Shanta Dutta, G S Toteja, Nivedita Gupta, Sanjay M Mehendale. **Burden of dengue infection in India, 2017: A cross-sectional population based serosurvey.** *www.thelancet.com/lancetgh* Published online June 11, 2019  
[http://dx.doi.org/10.1016/S2214-109X\(19\)30250-5](http://dx.doi.org/10.1016/S2214-109X(19)30250-5).
3. Amit Bhavsar, Clarence C. Tam, Suneela Garg, Guru Rajesh Jammy, Anne-Frieda Taurel Sher-Ney Chong and Joshua Nealon - **Estimated dengue force of infection and burden of primary infections among Indian children** - BMC Public Health (2019) 19:1116  
<https://doi.org/10.1186/s12889-019-7432-7>.
4. Tamala Gondwe, Kalpana Betha, G.N. Kusneniwar, Clareann H. Bunker, Gong Tang, Hyagriv Simhan, P.S. Reddy, Catherine L. Haggerty. **Maternal Factors Associated with Mode of Delivery in a Population with a High Cesarean Section Rate.** *Journal of Epidemiology and Global Health* Vol. 9(4); December (2019) 252–258.
5. Tamala Gondwe, Kalpana Betha, G. N. Kusneniwar, Clareann H. Bunker, Gong Tang, Hyagriv Simhan and Catherine L. Haggerty. **Adverse infant outcomes associated with caesarean section delivery in India.** *International Health* 2019; 00: 1–6 doi:10.1093/inthealth/ihz111
6. Guda Vaishnavi, A V Gurava Reddy, Dinaker Manjunath, Ganesh Oruganti, Ramesh Reddy Allam-Targeted infection control practices lower the incidence of surgical site infections following total hip and knee arthroplasty in an Indian tertiary hospital. *Journal of Patient Safety & Infection Control*, Volume 7, Issue 1, January-April 2019.
7. Reddy IY, Nagothu RS. **Academic performance depends on Chronotype: Myth or reality?** *Indian J Clin Anat Physiol* 6 (4): 2394-2118. PMID : PMC7089615 2019.
8. Rajani Santhakumari Nagothu, Yogananda Reddy Indla. **Students Perception on Teaching Learning and Evaluation Methodologies applied in Physiology.** *International journal of physiology* 7(3)164-168. PMID: PMC7120906 2019.
9. Vandana Dabla. **Hitting the bull's eye of ending tuberculosis goal: The Challenge of addressing tuberculosis in human immunodeficiency virus positive population in India.** *World Journal of Virology*, 2019 December 31; 8(1); 1-3 on line. ISSN 2230-3249.
10. Ezell J, Pasquale D, Poudyal S, et al. **Are skin color and body mass index associated with social network structure? Findings from a male sex market study.** *Ethnicity & Health*. Published online March 14, 2019:1-16.  
[doi:10.1080/13557858.2019.1590537](https://doi.org/10.1080/13557858.2019.1590537)



11. Ramesh Reddy Allam, Rashmi Pant, Chengappa K Uthappa, Manjunath Dinaker, Ganesh Oruganti and Vijay V Yeldandi. **Prevalence of Vitamin D Deficiency, Metabolic Syndrome and Association Between the Two in a South Asian Population.** J Nutr Disorders Ther 8: 229. doi:10.4172/2161-0509.1000229

## 2020

12. Joseph K. David, Rashmi Pant, Ramesh Reddy Allam, V. M. Padma Priya, Santhakumar Aridoss, Elangovan Arumugam. **The Relationship between Educational Attainment and HIV Prevalence among Pregnant Women Attending Antenatal Clinics in Six States of India: Sentinel Surveillance from 2010 to 2017.** Indian J Public Health 64515-587964\_161956.
13. Oruganti,R., Paidipati, S., Dandge, S., Jammy, G.R. and Teja, R. **Development And Psychometric Evaluation Of The Hypertension Knowledge Test For Indian Hypertensive Patients (HKT-I).** International Journal of Recent Scientific Research Research Vol. 11, Issue, 02 (C), pp. 37350-37364, February, 2020.
14. Rashmi Pant, Lincoln Priyadarshi Choudhry, Jammy Guru Rajesh, Vijay V Yeldandi. **COVID-19 Epidemic Dynamics and Population Projections from Early Days of Case Reporting in a 40 million population from Southern India.** medRxiv 2020.04.17.20070292; doi: <https://doi.org/10.1101/2020.04.17.20070292>

## Abstract/Oral Presentation:

1. **Design and implementation of in-service trainings on TB prevention and management among PLHIV in INDIA: PERT.** Ramesh Reddy Allam, The 50th Union World Conference on Lung Health. Feb 2020
2. **Parametric Studies on Centrifugal Heart Pump for Total Artificial Heart (TAH) using Genetic Algorithms.** Dr. G. Ganesh Kumar, Dr. K. Eswaraiah, Dr. K. Venu Madhav, 65th Annual Conference on "American Society of Artificial Internal Organs (ASAIO-19)", Chicago, USA

# SHARE INDIA

Ghanpur Village, Medchal Mandal, Medchal Malkajgiri District-501401. TS

BALANCE SHEET AS AT 31 st March, 2019				
	SCH. NO		As At 31.03.19	As At 31.03.18
Source of Funds			Amount (Rs)	Amount (Rs)
Capital Fund	1		15816069	12908843
<b>Total</b>			<b>15816069</b>	<b>12908843</b>
Application of Funds				
Fixed Assets	2			
Gross Block		34245082		32291000
Less: Depreciation		22819928		19591698
Net Block			11425154	12699302
<b>Current Assets:</b>				
Cash and Bank	3	33926273		23522665
Balances	4	3550166		2739910
Loans and Advances	5	824245		710283
Other Current assets		38300684		26972858
Less:				
Current Liabilities and Provisions	6	33909769		26763318
Net Current Asset			4390915	209540
<b>Total</b>			<b>15816069</b>	<b>12908843</b>

INCOME AND EXPENDITURE ACCOUNT AS AT 31 st March, 2019			
	SCH. NO	31.03.19	31.03.18
INCOME:		Amount (Rs)	Amount (Rs)
Donations		11084308	8283169
Grants		133497835	163569167
Other Income	7	2378056	1677185
<b>Total</b>		<b>146960199</b>	<b>173529521</b>
EXPENDITURE:			
Personnel Expenses	8	70528245	59232308
Power & fuel	9	757813	723391
Program expenses	10	57691158	98040528
Other Expenses	11	11847527	11524798
<b>Total</b>		<b>140824743</b>	<b>169521025</b>
Excess of Income over Expenditure before Depreciation		6135456	4008496
Less: Depreciation		3228230	3718978
<b>Excess of Income over expenditure Transferred to Capital Account</b>		<b>2907226</b>	<b>289518</b>
<b>NOTES TO ACCOUNTS</b>	12		
As Per our report of even date attached			

For LUHARUKA & ASSOCIATES  
CHARTERED ACCOUNTANTS  
FRN 01882S



(RAMESHCHAND JAIN)  
PARTNER  
M No. 023019

Place: Hyderabad  
Date:29.06.2019



For SHARE INDIA  
(Dr.V.MALAKONDA REDDY)  
SECRETARY



# Abbreviations

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



## Participant Stories



Amrutha

Amrutha is a participant in the HELP study. She is grateful to doctors at MediCiti especially her treating gynaecologist - Dr. Kalpana who provided the much-needed medical succor. She had thyroid issues and came to the hospital during the seventh month of her first pregnancy with high blood pressure and fits. She had a miscarriage in her second pregnancy. While she was carrying her third child, she regularly attended the antenatal clinics at MediCiti. In her words, "I delivered a healthy baby girl. The project staff of HELP took special care of me and showed a lot of concern. Every time I visited, they counselled me about healthy diet, safe pregnancy, thyroid and blood pressure management."

Mamatha had one abortion and an intrauterine death (IUD) and was very disheartened. During her third pregnancy, she enrolled in HELP study. According to Mamatha, "Dr. Kalpana took special care of me as she was aware of my health issues. Today I am a proud mother of a healthy baby boy. The HELP team regularly recorded my blood pressure, body weight investigations and collected urine samples for testing. My reports were made ready by my next visit. They also called me twice a month to inquire about my health and provided suggestions for a healthy diet."



Mamatha



Anusha

During her first pregnancy, Anusha enrolled in the HELP study. She says "Dr. Kalpana attended to me from my first antenatal checkup till my delivery. The team was regularly in touch with me about healthy eating habits and safe pregnancy. They even called me to remind me for the next antenatal checkup. HELP study provided medicine every month". She developed high blood pressure in the eight month and had to be hospitalized. " Dr. Kalpana and HELP team took care of me and was discharged as my BP was under control. Again, in ninth month, I was under observation for twenty days as my blood pressure was not stabilizing. Due to their dedicated efforts, I delivered a healthy female baby with birth weight of 2.5 kg"





## SHARE INDIA

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[www.sharefoundations.org](http://www.sharefoundations.org) | [www.theshareindia.org](http://www.theshareindia.org) | [www.facebook.com/SHARE-INDIA-108578097443744](https://www.facebook.com/SHARE-INDIA-108578097443744)