Research

CURRENT PROJECTS

RSI won the BIRAC-BIG award from the Indian Government for working on the Laptop Cystoscope with SINE-IIT Bombay. Surveys show that even in remote areas, about 5% of outpatients have Urology problems. More than half of them could be managed with just a Cystoscope that is used for diagnosis and for minor first stage procedures. However, at present, less than 2% of the Urology patients can get the necessary treatment in rural areas because non – Urologists are unable to afford the conventional Cystoscope and the accessory equipment like the camera, light source and others that are necessary for Cystoscopy.

The Laptop Cystoscope costs about one twentieth of the conventional Cystoscopy setup as it can be connected to the Laptop to perform diagnostic and other procedures. Controlled trials are going on at Medical Colleges and rural hospitals for validation.

RSI is also involved with promoting Gas Insufflation Less Laparoscopic Surgeries [GILLS] along with IFRS and others. GILLS makes laparoscopic surgery possible in rural areas under the less expensive and easily available spinal anesthesia. RSI is currently working on the hand instruments and low-cost camera for GILLS.

About Us

Rural Surgery Innovations Private Limited (RSI) is a company formed in association with the International Federation of Rural Surgeons (IFRS) and the Association of Rural Surgeons of India (ARSI) to assist in carrying out rural surgery specific research and development of the products of such research.

We also conduct medical camps in underserved rural areas of India and organise training in the usage of the instruments that are being sold, in association with local hospitals and medical training institutions.

Our People

Dr. Gnanaraj Jesudian – Dr. Gnanaraj is a Urologist educated at Christian Medical College, Vellore. He has worked in multiple rural hospitals with organisations such as the Friends Missionary Prayer Band and Emmanuel Hospitals Associations, where he saw the need for innovation in rural surgery to make it more accessible. Based on his experiences, he has collaborated with universities internationally and local Indian medical equipment manufacturers to develop low-cost solutions for surgery in rural areas.

He travels regularly to lead workshops in promoting and teaching surgery using the instruments he has helped develop, as well as to attend conferences where he can meet other professionals that can help develop more tools to make surgery accessible.

https://ifrs.site/members/dr-gnanaraj-jesudian/

Keso Chakhesang

Affiliates

Association of Rural Surgeons of India (ARSI) – ARSI is a group of rural surgeons in India that come together to learn about developments in surgery across India. They hold yearly conferences across India in association with hospitals and medical training institutes.

ARSI pioneered the use of mosquito net instead of the expensive Proline mesh for hernia repair. This was included as one of the six famous, effective, low-cost innovations by the World Health Organization (WHO).

More information about ARSI can be found at <http://www.arsi-india.org/>

International Federation of Rural Surgeons (IFRS) – the IFRS is a body of surgeons, health-allied professionals and researchers across the world that come together to share findings in practices and promote collaboration to make surgery more accessible in rural settings through focused research and development in association with educational institutions and engineering firms.

The IFRS was involved in promoting a gasless laparoscopic lift device by working with the University of Leeds team for Surgical Technology, PGSSC of Harvard University, Maulana Azad Medical College and others in conducting randomized control trials and developing second generation equipment.

More information about the IFRS can be found at <https://ifrs.site/>