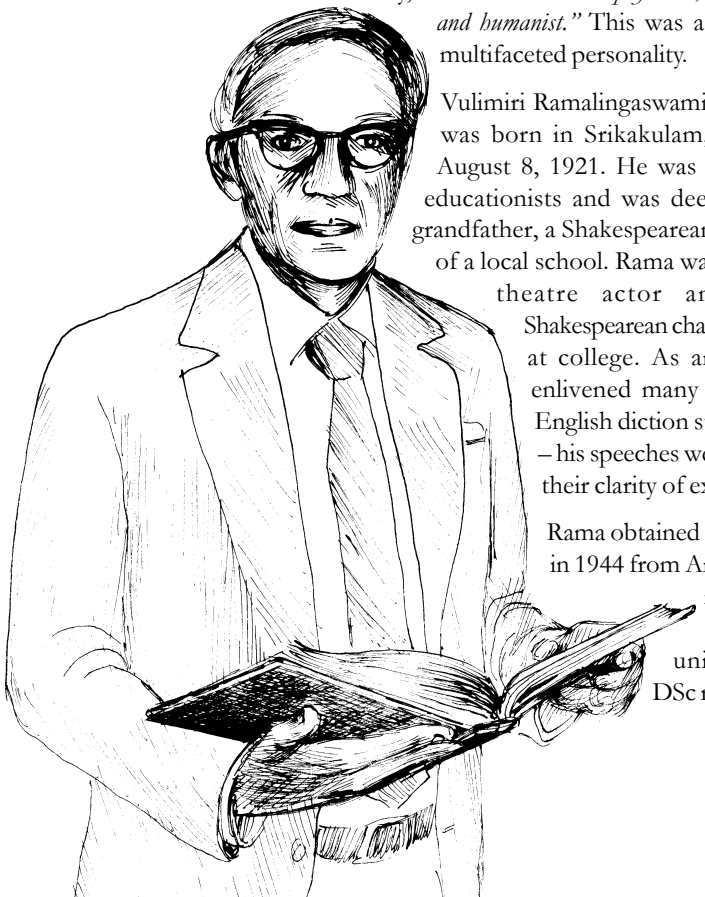
Vulimiri Ramalingaswami
(1921 - 2001)

While honouring Professor Vulimiri Ramalingaswami with the prestigious Leon Bernard Foundation Award, Sir Harold Walter, President of the 1976 World Health Assembly, described him as *"physician, research scientist, teacher, and humanist."* This was a true reflection of his multifaceted personality.



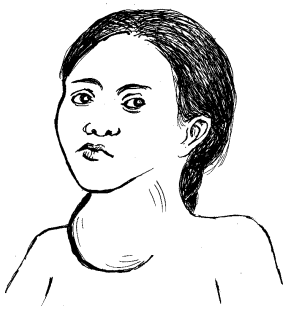
Vulimiri Ramalingaswami – *Rama* to his friends was born in Srikakulam, Andhra Pradesh on August 8, 1921. He was born into a family of educationists and was deeply influenced by his grandfather, a Shakespearean scholar and principal of a local school. Rama was an excellent amateur theatre actor and depicted many Shakespearean characters when he was still at college. As an excellent singer he enlivened many assemblies. His good English diction stood him in good stead – his speeches were truly remarkable for their clarity of expression.

Rama obtained his first medical degree in 1944 from Andhra Pradesh, his MD in internal medicine in 1946 from the same university, a DPhil and DSc respectively in 1951 and

1967 from Oxford, UK. His research career started at the Nutrition Research Laboratory, Coonoor in the Nilgiris (now the National Institute of Nutrition, Hyderabad) in 1947 and extended over the next six decades.

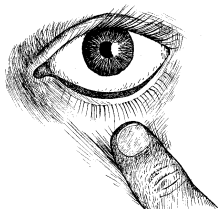
Rama wanted to understand the causes of diseases prevalent in poor countries and use research to better the human condition. His humane approach consisted of a synthesis between laboratory, clinical and community-based medical research. He did original research on protein-energy malnutrition, iodine deficiency disorders, nutritional anaemia, and liver diseases in the tropics. He was interested in primary health care, infectious diseases, and health research for development. His personal commitment and leadership succeeded in providing nutritional protection to millions of refugees during the great Bihar famine of 1967 and the Bangladesh War of 1970-71.

A large incidence of goitre (swelling of the neck due to thyroid problems) led him to conduct a classic experiment in public health. It involved a population of over 100,000 people in the Kangra Hill. Consumption of iodized salt led to a drastic reduction in the disease. This work laid the foundation for the National Iodine Deficiency Control Programme and provided protection to nearly 300 million people!

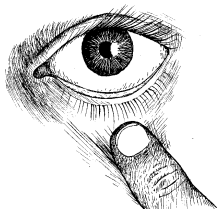


Ramalingaswami successfully introduced 'iron' supplements in the diet of pregnant mothers. This single measure led to a significant improvement in the health of women and children worldwide.

His other major contribution was the discovery of a new syndrome of liver disease known as Indian Childhood Cirrhosis (ICC).



Normally, the insides of our lower eyelids are red, and our fingernails are pink - due to healthy red blood inside.



If we have insufficient iron in our blood, we are anaemic. This causes the insides of our lower eyelids to be pale, and our fingernails to be white.

Although it was well known that deficiency of vitamin A caused night blindness, he was the first to demonstrate the actual damage of the rods and cones of the retina of new born monkeys, following maternal deficiency of vitamin A.

When the All India Institute of Medical Sciences (AIIMS) was being founded there was a search for good faculty. Ramalingaswami was the obvious choice for the position of Professor of Pathology at AIIMS. Soon, he became the departmental head. This gave him a rare opportunity to develop an excellent school of pathology. He inspired an array of brilliant students who spread his name and fame throughout the world.

During this period at AIIMS, Ramalingaswami made a major contribution by fostering scientific interaction between Indian and eminent pathologists of the West. The list is a veritable who's-who of the world's most eminent pathologists - Drs Benjamin Castleman of Harvard, Walter Putschar of Harvard, Hans Popper of Montefiore Hospital, Dame Sheela Sherlok of the Royal Free Hospital, London, and others delivered advanced lectures on different aspects of pathology. Later Prof Ramalingaswami became the Director of the AIIMS, a post he executed with great finesse and which won him accolades both from the faculty and the Government.

He played a key role in laying the foundation of the Indian Council of Medical Research (ICMR) and was appointed its Director General in 1979. During his 7 year tenure at the ICMR he enlarged its activities in many directions. Apart from setting up new institutions, he developed the concept of Regional Medical Research Centres for tackling local health problems in specific and far-flung areas. He greatly contributed to the reorganization of ICMR especially through introduction of a rigorous peer review system for all research programmes. The mechanisms that he laid down were of an enduring nature and are still being practiced.

With his clinical moorings, he envisaged the need for epidemiological studies in the country. He initiated the idea of an Indian Registry of Diseases with an integral statistics division. Later, these concepts fructified in the form of the Statistical Unit at ICMR.

He always responded creatively to a national crisis or an emergency. A notable example was the manner in which he mobilized and organized resources and human power

for conducting scientific studies in the wake of the Bhopal Gas disaster. He also actively helped during the outbreak of plague in Surat.

Ramalingaswami investigated the extent and cause of toxicity in the world's worst industrial disaster, in which the negligence of Union Carbide (now Dow Chemical Co.) killed and injured thousands of people in Bhopal.

Even after retirement Prof. Ramalingaswami's skills were keenly sought by International agencies. He was invited as a Fogarty Fellow and later as a Special Professor of Toxicology at Harvard. Subsequently, he assisted UNICEF for a period of 5 years. He was actively associated with national bodies like the Rajiv Gandhi Foundation, Cancer Research Institute, Centre for Science and Environment and the Ranbaxy Foundation. Till the very end of his life – May 8, 2001, he worked as a National Professor at the AIIMS, New Delhi.

Prof. Ramalingaswami was amongst the most honoured Indian medical scientists. He received both the Bhatnagar and the Padma Bhushan awards. He was a Fellow of the Royal Society, Fellow of all the three National Academies of Sciences in India (President of the INSA – 1979-80), Fellow of the National Academy of Medical Sciences, Foreign Associate of the US and Russian Science Academies and Fellow of the Royal Colleges of Physicians and Pathologists. He was awarded a DSc by the Karolinska Institute, Sweden. He was also Chairman of the Global Advisory Committee on Medical Research to the World Health Organisation.

Prof Ramalingaswami was also blessed with a happy family. His wife Surya Prabha retired as a Professor in the Centre for Social Medicine and Community Health from the Jawahar Lal Nehru University, New Delhi. His son Dr. V. Jagadish is currently Chairman of the voluntary agency *South Asia against AIDS* based in Bethesda, Maryland and daughter, Dr. Lakshmi works at the Mount Sinai Hospital, New York.