OBITUARY

Dr. Samavedam Srinivasa Sriramacharyulu
1925-2009

Dr. S. Sriramachari, the first Additional Director General of Indian Council of Medical Research and the Founder-Director of Institute of Pathology, passed away on 25th December 2009 in New Delhi.

Dr. Samavedam Srinivasa Sriramacharyulu popularly known as Dr. Chari was born on 25th June 1925 in Visakhapatnam, Andhra Pradesh. He was a highly committed and dedicated medical scientist and research worker. He completed his Undergraduate, Postgraduate studies from Vishakapatnam Medical College and subsequently obtained DSc. in Pathology while working as Assistant Research Officer at Nutritional Research Laboratories, Coonoor. He worked as Tata Lady Memorial Trust Research Fellow under Prof. MD Ananthachari in 1950. In 1954, he was deputed for training in Neuropathology at Armed Forces Institute of Pathology, Washington, DC, USA. In 1959, he joined as Associate Professor of Neuro-pathology in the fore-runner of NIMHANS, Bangalore. In 1962, in the wake of Sino-Indian conflict, Dr. CG Pandit requested for his services as Deputy Director at ICMR. In 1965, he became the Founder Director of the Indian Registry of Pathology, now Institute of Pathology (ICMR). Concurrently he served
as first Addl. Director General (ICMR) during 1982-87. Thereafter he was re-employed as Director, IOP. Since July 1989, he continued his scientific research carrier till death, with Hony. Assignments, such as Pitambar Pant Fellowship of Ministry of Environment and Forests, INSA Senior Scientist; Hony. Advisor, ICMR and INSA Hony. Scientist.

Dr. Sriramachari had an outstanding scientific career spanning nearly for Six Decades. At a time when photography in general and colour photography in particular was highly expensive technology, he made national contributions in the field of production and distribution of low-cost teaching aids by supplying illustrated colour atlases to over 60 Medical Colleges. In the process, he obtained seven patents supplemented by one in 2003. He made original contributions in 1970's on the phenomenon of Fatal Heat Hyperpyrexia of Children in places like Nagpur and developed a primate Experimental Model for the same. He contributed over 150 papers (Clinical and Experimental) original Scientific Contributions in different branches of Pathology, namely Nutritional (12), Hepatic Pathology (40), Neuropathology (42), Osteo-Muscular Pathology (9), Histochemistry & Museum Technology (2), Medical Educational Technology (16 including 8 Patents) Environmental & Toxicological Pathology (25), Scientific History (5). He was conferred two Hony. Doctorate Degrees and elected as Fellow by several Scientific Academies including INSA. Ever since election in 1976, he remained actively engaged in activities of INSA in various capacities as Member, Vice President, Member and Chairman Sectional Committee VIII, Chairman, NC-IUNSc, NC-HSc, Convener, Indo-Portuguese HSTC etc. He was member of several Committees of Scientific agencies, Academies, Research Institutions & Medical colleges. He was President of Neurological Society of India, the Chairman of the Division of Medical Instrumentation of Bureau of Indian Standards and a Member of the Awards Committee of NRDC.

He was an acclaimed neuropathologist. His scientific contributions in the wider areas of scientific enquiry won him for several national awards such as Shakuntala & Basanti Devi Amir Chand Award, B. C. Roy Award, B. C. Guha Oration of Indian Science Congress Association, Jagdish Chandra Bose Award in Life Sciences and Baldev Singh Oration of Neurological Society of India. His role in the Bhopal Gas Disaster (1984) research is acknowledged as national service. Until his death he continued a very active Basic Research Program for understanding the mystery of Chronic Cyanide Toxicity of Bhopal Disaster and in collaboration with DRDE, Gwalior was investigating the role of “Chlorotropism of MIC”, leading to in-vivo Neo-Cyanogenesis. He also participated as Govt. of India observer in the autopsy studies of the Kanishka aircraft disaster. He was conferred the distinguished Padma Shri by Government of India in year 1985 for his Scientific Contributions.

Dr. V. M. Katoch, Secretary, Department of Health and DG, ICMR quoted “Dr. Sriramachari was a rare type of person who, until his last hour, kept on thinking about newer and unexplored scientific research aspects relating to Bhopal Gas Disaster in addition to his keenness for sharing it with us.”

May the departed soul rest in peace in heavenly abode and his spirit be a source of inspiration for successive generations of biomedical scientists of India.

Director and IOP Staff
Institute of Pathology, New Delhi
MEMORABLE MOMENTS
1970-2009
Lifestyle Diseases

Dr. A. K. Bagga

Lifestyle diseases are diseases of civilization, found mostly in countries which are technologically
developed and where the lifespan of the population increases. Long periods of inappropriate relationship of
people with their environment brings about these lifestyle diseases which take years to develop, and once
encountered do not lend themselves easily to cure.

Why I should be aware of this?

What and how we eat directly affects health, well-being, vitality and our immune system. According to
research,(Ref. 1,2) human bodies, on an average, are made up of 63% water, 22% protein, 13% fat and 2%
vitamins and minerals. It is reflected in what we eat and drink.

Ideally our diet should include about 65% carbohydrate, 15% protein and 20% fat. However over the last 50
years our diet pattern has changed considerably to include lots of processed foods, foods with saturated
fat, food with high sugar content and less and less fruit and vegetables.

This has resulted in a typical diet consisting of 28% carbohydrates, 12% protein, 40% fat and 20% sugar.
The slow build up of fat and sugar in the body has resulted in a whole range of new lifestyle diseases that
were not known over 100 years ago.

Lifestyle diseases are a result of an inappropriate relationship of people with their environment. The onset
of these lifestyle diseases is insidious, they take years to develop, and once encountered do not lend
themselves easily to cure.

Lifestyle diseases and Health:

From the 1940's to the late 1960's heart diseases, Cancer and degeneration diseases (diabetes,
cirrhosis, kidney failure, chronic obstructive pulmonary diseases and others) accounted for the
maximum number of deaths, degenerative diseases, which are on the list of lifestyle diseases,
accounted for 60% of all deaths since the late 1990s. (1) Death statistics for the United States can be
used to determine how lifestyle diseases have been affecting people. (2) In 1900, pneumonia/influenza,
tuberculosis, and diarrhea/enteritis were the top three causes of death in the U.S., with 60% of all
deaths attributed to infectious diseases. Heart disease was the 4th leading cause of death, cancer was
way down in eight position.

All about lifestyle diseases:

Some of the common diseases include Alzheimer's, artherosclerosis, Cancer, Chronic liver disease or
cirrhosis, chronic obstructive pulmonary disease, type 2 diabetes, heart diseases, nephritis or chronic
renal failure, osteoporosis, acne, stroke, depression and obesity. According to experts, blood pressure as well as coronary heart disease is increasing amongst youngsters due to overwhelming work demands, which includes late nights and longer hours at work.

**According to Sir Walter C. Willett from the Department of Epidemiology and Nutrition, Harvard School of Public Health, 665, Huntington Avenue, Boston, MA 02115, USA;**

Genetic and environmental factors, including diet and life-style, both contribute to cardiovascular disease, cancers, and other major causes of mortality, but various lines of evidence indicate that environmental factors are most important. Overly enthusiastic expectations regarding the benefits of genetic research for disease prevention have the potential to distort research priorities and spending for health. However, integration of new genetic information into epidemiologic studies can help clarify causal relations between both life-style and genetic factors and risks of disease. Thus, a balanced approach should provide the best data to make informed choices about the most effective means to prevent disease. (Ref.3)

**Some not so common diseases:**

**Carpal Tunnel Syndrome:**

A painful progressive condition caused by the compression of a key nerve in the wrist, this syndrome is the result of working on the computer endlessly. The median nerve, which runs from the forearm into the hand, becomes pressed or squeezed at the wrist. The carpal tunnel, a narrow, rigid passageway of ligaments and bones at the base of the hand, houses the median nerve and tendons. Symptoms usually start gradually with frequent burning, tingling or an itching numbness in the palm of the hand and the fingers, especially the thumb, index and middle fingers.

Some Carpal tunnel sufferers say that their fingers feel useless and swollen, even though little or no swelling is visible. The symptoms fist appear in one hand or both hands during the night, since many people sleep with flexed wrists.

As symptoms worsen, people might experience a tingling sensation during the day. Decreased grip strength may make it difficult to form a fist, grasp small objects or perform small tasks. In chronic or untreated cases, the muscles at the base of the thumb may waste away. Some people are unable to differentiate between hot and cold by touch.

Persons with diabetes or other metabolic disorders that directly affect the body's nerves and make them more susceptible to compression are also at high risk. It usually occurs in adults though.

**Hormone Replacement Therapy (HRT)**

Though not technically a disease, HRT is a lifestyle fad, which leads to many health complications. Hormone replacement Therapy, as a term, first came up in the 1960's in the book called Forever Feminine by Dr. Robert Wilson (Ref.1). The book had the theory that menopause was a disease that could be treated by simply replacing the estrogen their bodies had stopped producing, in order to hold back the aging process. But in the last four decades, women have been prescribed HRT for all sorts of reasons not just to stop menopausal hot flushes and night sweats but to improve sex life, their hair and
skin and even the morale. The crucial difference between HRT and other hormonal treatment is that HRT is prescribed to counteract the natural reduction of estrogen in the body but studies have now shown that it is actually the opposite. A study in the UK called Million Women (Ref.1) has shown that HRT has caused 1000 deaths from ovarian cancer in the last decade and a half. It has been linked with invasive breast cancer, womb cancer, stroke, blood clot and coronary heart diseases.

In a bid to look young, women are using HRT as a preventive measure but legally and worldwide, work on Hormone Replacement Therapy has been discontinued since the mid 90’s.

**Multiple Sclerosis**

Multiple Sclerosis (MS) is said to be a degenerative disease of the nervous system. It affects the brain and spinal cord, destroys the myelin sheath, the material that surrounds and protects the nerve cells. This damages, slows down and blocks messages between the brain and the body leading to the symptoms of MS. These include visual disturbances, muscle weakness, trouble with co-ordination and balance, sensations such as numbness and severe memory problems. While no one knows what causes MS, It is said to be an auto immune disease, which happens when the body attacks itself. It affects more women than men and starts between the ages of 20 and 24. It is rising because of the change in habits, lifestyle and bad food habits in people.

These diseases remain indicators of the changing times and the overwhelming problems that we need to deal with on a daily basis, however as sinister as they might seem to be, doctors and scientists are at work, looking for curative measures for most of them.

**What can I do ?**

- Maintain health through a healthy diet
- To prevent loss of muscle strength and vitamin deficiency
- To prevent diseases such as heart attacks, strokes, obesity, arthritis and certain cancers
- To help control and/or treat diseases such as Blood pressure, diabetes and other related diseases

**What foods ?**

- Low energy dense foods, such as vegetables and fruits that contain fewer calories per unit volume of food so that one can eat a large volume of it.
- Consume whole grains, and fat-free or low-fat milk and milk products
- Have lean meats, poultry, fish, beans, eggs, and nuts
- Avoid processed foods with saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.
- Maintain health through physical activity and exercise
- Choose activities that you enjoy and can do regularly.
- Even a brisk 10 minute walk to the market or office or around office does the trick.
Join an exercise class. Keep it interesting by trying something different on alternate days. What's important is to be active most days of the week and make it part of daily routine.

Recruit a partner for support and encouragement.

Clean the house or wash the car.

Do gardening for health – it gives multiple benefits

At work, replace a coffee break with a brisk 10-minute walk. Ask a friend or colleague to join you.

Most important – have fun while being active.

Alternative Therapies

In many ways, alternative therapies go a long way in helping alleviate the symptoms of lifestyle diseases. These can include Naturopathy, Acupressure, Polarity Therapy, Aromatherapy, and many others depending on the kind of disease.

References:


2. “Leading Causes of Death” (data are for the U.S.) Source: Deaths: Final data for 2006, table B.

3. BALANCING LIFESTYLE AND GENOMICS RESEARCH FOR DISEASE PREVENTION' in article - : Lifestyle diseases bigger threat than AIDS” Published in The Hindustan Times, July 6 2008 by Nivedita Khandekar.

* The views expressed are purely those of the author.
INSTITUTIONAL ACTIVITIES

CONFERENCES/PROCEEDINGS/SEMINARS/TRAINING COURSES
ORGANISED/ATTENDED

- **Mrs. Karuna**, Technical Assistant attended WHO in Country Fellowship programme on Cytopathology at ICPO, NOIDA from 1st Jan to 30th March 2009.
- **Dr. Sunita Saxena**, Director attended Sub Committee Meeting of Technical Committee at ICMR on 29th Jan 2009.
- **Dr. Bernard P. Aruranandam**, USA delivered a talk at IOP Auditorium on 10th Feb. 2009.
- Dr. Anindya Dutta delivered guest lecture at IOP Auditorium on 13th Feb. 2009.
- **Dr. R.N. Saha**, BITS Pilani delivered a guest Lecture at IOP Auditorium on 30th March 2009.
- **Dr. Sunita Saxena**, Director attended P.R.C. Meeting to consider proposals under Cellular and Molecular Biology held at ICMR H.Q. on 22nd April 2009.
- **Dr. Sunita Saxena**, Director attended Selection Committee Meeting for the selection for the post of SRF at Dept. of Microbiology, S.J. Hospital, New Delhi on 24th April 2009.
- **Mrs. Krishna**, Technical Assistant attended WHO in Country Fellowship programme on “Concept in structural and / Mol.Biology.” at ALMPG Institute, Chennai from 1-26th June 2009.
- **Mr. SatyaPal Singh**, Technician ‘C’ attended WHO in Country Workshop on Common Lab. E at Univ. of Madras, Chennai from 8-27th June 2009.
- **Mr. Kuldeep Sharma**, Technician attended WHO in Country Fellowship programme at NIN, Hyderabad from 15th June to 31st July 2009.
- **Mr. Madan Lal**, Technician ‘B’ attended WHO in Country Fellowship programme at S.J. Hospital, New Delhi from 29th June to 11th July 2009.
- **Mr. V.S. Rawat**, Assistant deputed as Section Officer in Consortium for Educational Communication, New Delhi from 1/4/09 to 30/10/09.
- **Dr. Sunita Saxena**, Director was invited to attend the first DSMB meeting on “Curcumin Clinical Trial in Ca CX Cancer” on 4th May at NII, New Delhi.
- **Dr. Sunita Saxena**, Director attended selection committee meeting, Walk in Interview for the project at Dept. of Microbiology, S.J. Hospital, New Delhi on 5th May 2009.
- **Dr. Sunita Saxena**, Director attended Ethical Committee Meeting on 5.5.09 at HOD, Urology.
- **Dr. Sunita Saxena**, Director attended Task Force Project Meeting at ICMR H.Q. on 18th June 2009.
- **Dr. Purnima Malhotra**, Scientist ‘C’ and **Mrs. Sangeeta Batra**, Jr. Librarian attended one day training course on “Optimum Utilization of ERMED E-resources” held at National Medical Library, Ansari Nagar, New Delhi on 6th July 09.
Mr. Dashrath, Assistant and Ms. Sonia, UDC attended two months course on “Cash and Accounts” at ISTM from 3rd Aug. 2009 to Oct 1st 2009.

DNB six monthly appraisals held in Institute of Pathology, New Delhi, August 2009.


Dr. Sunita Saxena, Director chaired the session on “Renal Pathology” talk given by Dr. Vinita Batra at Delhi Chapter of IAPM held at Maulana Azad Medical College, New Delhi on 1st Aug. 2009.

Dr. Sunita Saxena, Director nominated to visit as an expert, Cell Biology Division, The Gujrat Cancer and Research Institute, MP Shah Cancer Hospital, NCH Campus, Asarwa, Ahmedabad, by NCD-ICMR on 10th Aug. 2009.

On the eve of 15th August 2009, flag hoisting was done at the terrace of IOP. The function was organized and compered by Dr. A.K. Bagga, Scientist 'D'.

Mr. Subash Babu, Assistant attended three days training programme on “Noting and Drafting” at ISTM on Sept, 2009.

Mrs. Sharmila Kamra, UDC attended Fifteen days course on “Office Automation and MS Office 2000” at Centre for Information Technology, Connaught Place from 26th Oct. 2009.

Scientific Advisory Committee Meeting was held at IOP on 13th Oct. 2009.

Mr. Mangey Ram, Assistant, Mrs. Sonia Khattar, UDC and Ms. Rekha Rani, P.A. attended Ten days course on “MS Office 2000” at Centre for Information Technology, Connaught Place from 3rd Nov. to 16th Nov. 2009.

Dr. Avninder Singh, Scientist 'C 'Presented a paper in 5th International CME in Dermatopathology at India Habitat Centre from 6-8 Nov. 2009.

Dr. Sunita Saxena, Director delivered a lecture on “Molecular Biology of Cancer by Genome Wide Approach.” At CME in Pathology at Maulana Azad Medical College on 18th Nov., 2009.

On 19th Nov. 2009 an Oath was taken by all the staff of IOP for anti-Corruption week. The function was organized and compered by Dr. A.K. Bagga, Scientist 'D'.

There are four things that you cannot recover in life

(1) The Stone............after it's thrown,
(2) The Word...............after it's said,
(3) The Occasion......after it's missed, and
(4) The Time..........after it's gone
IOP Library is renovated with Computer Cabins for Students, LAN/Internet, Wi-Fi facility, CCTV for Security, Photocopying Facility

Compactors for Old Journals/Books Collection
IOP Library conducted Workshop and Training Programme on JCCC@ICMR ERMED Consortia through Informatics India on 4th Sept. 2009

Hands on Training Session
Tanvi Agrawal gave an oral presentation titled 'Role of Toll like receptors on human cervical monocytes in providing a protective immune response to chlamydial infection' at the 11th International Union against Sexually transmitted Infections World Congress, held at Cape Town, South Africa, 9th - 12th November 2009. She was also awarded full scholarship to attend the conference.

Journal Club

- Dr. Harsh Hora: 5-5-09 : Approaches to patients with bleeding disorder.
- Dr. Bineeta Sinha : 29-05-09 : Ciliopathies-An Emerging class of Human Genetic Disorder.
- Ms. Tanvi Agrawal: 21-7-09 : Role of antigen Presenting Cells and Toll like receptors in providing a Protective Immune Response during Chlamydia trachomatis Infection.
- Dr Shweta Agarwal: 1-9-09 : Automation in cytology and Telecytology.
- Dr. Ila Jain : 1-12-09 : Pure Red Cell Aplasia.

Forthcoming Events

- Second Course on Complete Blood Count - Bench to Clinic 2010, January 11-15, 2010. Hematopathology Laboratory, Department of Pathology. Tata Memorial Hospital, Mumbai.

Tel: 040-66262926. Email: Katragaddaln@yahoo.com. Website : http://www.posi.in/posi2010.html
IAPM Delhi Chapter meet was hosted by zone VIII-IOP-SJH on 5th Dec 2009

Dr. Avninder P.Singh, Scientist'C' IOP, presented a talk on “Tissue Microarray as tool in Validation and Discovery of Tumor Biomarkers.”

Dr. Deepti Nair, Asstn. Prof. (Sr. Specialist) Dept. of Microbiology, VMMC & S.J. Hospital presented a talk on “Newer diagnostic modalities for tuberculosis”.

स्वास्थ्य और प्रकृति

'पुस्तकालय से'

मनुष्य के शरीर की तुलना एक बड़ी पेशीदार मशीन से की जाती है। जिस प्रकार मशीन बहुत से कल और पुर्जों से मिल कर बनती है, उनको एकत्र करने से पूरी मशीन काम करने लग जाती है। उसी प्रकार हमारा शरीर भिन्न-भिन्न अंगों के समूह से बना है, यदि कोई अंग किसी प्रकार खराब हो जाये, अथवा अपना काम करना छोड़ दे तो हमारे शरीर की सारी मशीनरी बिगड़ जाती है। जिस प्रकार मशीन को ठीक रखने के लिए रखरखाव की आवश्यकता होती है, उसी प्रकार शरीर रूपी मशीन को सुगमता से चलाने के लिए प्रकृति ने कुछ नियमों का निर्धारण किया है जिसका पालन करके हम अधिक समय तक स्वास्थ्य रह सकते हैं।

प्रकृति की ओर से हमारे स्वास्थ्य को स्थिर रखने के लिए बहुत से प्रबंध किये गये हैं। यदि हम उनसे पूरा-पूरा लाभ उठाते रहे तो स्वास्थ्य में वृद्धि होती है इसलिए प्राकृतिक उपायों के गृह रहस्यो का हमें पूरा ज्ञान होना चाहिए। यदि हमें प्राकृतिक उपायो जाने जा न सके। धर्म, अर्थ, काम और मोक्ष का सबसे प्रथान और महत्वपूर्ण मूल, उत्तम स्वास्थ्य है। रोग इस स्वास्थ्य तथा जीवन और कल्याण के भी नाशक है। अतः सदा शरीर को स्वास्थ्य रखना हमारा प्रमुख उद्देश्य होना चाहिए।

1 प्राण जीवन है, तो प्राणायाम करो। श्वास मुख से नहीं नाक से लो, आयु बढ़ती।
2 क्रोध, शोक आदि मानसिक व्याकुलता से शरीर का पतन होता है। इन बातों को अपने पास न फटकने दें।
3 सर्दी में प्रातः की धूप तथा गरमी में प्रातः की वातु का सेवन करने से आयु बढ़ती है।
4 अधिक मात्रा में खाना रोगों को निमंत्रण देता है।
5 अंत गरम और ठंडे पदर्थ शरीर में अनेक रोग उत्पन्न कर देते हैं।
6 अपनी शक्ति से अधिक काम करना स्वयं का नाश करना है।
7 दिन में सिर्फ दो बार भोजन करने वालों की आयु बढ़ती है और वे कभी बीमार नहीं पड़ते।
8 सोने से पूर्व खाने को गरम पानी से धोकर साफ करने से नींद अच्छी आती है।
9 सोने से पूर्व और खाने के बाद लंबी सैर करना स्वास्थ्य के लिए शेष औपचारिक है।
10 सप्ताह में एक दिन उपवास करने से पेट की बीमारियां नहीं होती।
11 रात को दुःख पी कर सोने से नींद अच्छी तरह आती है और प्रातः पेट साफ होता है।
12 अधिक सोने से आयु घटती है।
13 अँकों की ज्योति के लिए प्रातः हरी धार पर नंगे पांव चलना चाहिए।
14 भोजन शीघ्र हजम हो, इसके लिए बारीं करवट सोंये।
15 खाना खाकर तुरन्त सोना स्वास्थ्य के लिये हानिकारक है।
16 सुंदर स्वास्थ्य के लिये नित्य योग का अभ्यास करें।
17 शरीर के विकास के लिये तंग कपड़े नहीं पहनने चाहिए।

शरीर और मन का चोली दामन का साथ है। इस सच्चाई को आधुनिक वैज्ञानिकों ने ही नहीं, प्राचीन मनीषियो ने भी अनुभव किया था। शारीरिक रोग से मानसिक रोग उत्पन्न हो जाता है और मानसिक रोग से शारीरिक रोग।

जब मन शांत होता है, तब मनुष्य के समस्त अंग अपना कार्य सुचारू रूप से करते हैं तथा मनुष्य अच्छे स्वास्थ्य का आनन्द भोगता हैं, परन्तु कोई के उपरजते ही मन में ही नहीं, तन में भी हलचल मच जाती हैं, भरणमस्तक विभिन्न अंगों की समान्य स्वास्थ्य किया समाप्त हो जाता है और उनमें परिवर्तन उत्पन्न हो जाते हैं। स्मरण रहे, शरीर के विभिन्न अंग संयोग पृथक-पृथक नहीं हैं परस्पर सम्बंध हैं।

सूक्ष्म विचार करने से शरीर का सारा रहस्य हमें और अधिक मात्रुम होगा और प्रकृति की सर्वज्ञता ज्ञात होगी। ज्यों-ज्यों प्रकृति की कला पर हम गम्भीरतापूर्वक विचार करेंगे, त्यों-त्यों शरीर स्वास्थ्य और दीर्घ जीवी होता जायेगा।

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श्रेयान्वितमा विपुलः पर धर्मत्सः नुसितात।
स्वधर्ममा निधनम् श्रेयः परधर्ममा भयावहः।।

“अच्छी प्रकार आचरण में लाए हुए दूसरे के धर्म से अपना शुगारहित धर्म भी अटि उत्तम है। अपने धर्म से तो मरना भी कल्याण कारक हैं ओर दूसरे का धर्म भय को देने वाला है।”

शन्तद्वा -ध्रुवम्बश्चर्वत भीता
अध्याय ।। 3 ।।