Padma Shri Professor Mahdi Hasan Award
-for clinical research
-
Recipient (2014) : Prof. Lalit Kumar

Padma Shri Professor Mahdi Hasan
(*March 21, 1936 – January 12, 2013)*

EARLY LIFE AND EDUCATION:

Professor Mahdi Hasan (born in Gadayan village, Akbarpur, then in Faizabad, now Ambedkar Nagar, Uttar Pradesh) was formerly Principal and Chief Medical Superintendent (1983– 87), Dean (1991–93) and Head of the Department of Anatomy, Jawaharlal Nehru Medical College, Aligarh. He was an internationally renowned anatomist, a pioneering brain researcher and a reputed expert of medical education.

Prof. Hasan had many firsts to his credit: he was the first in India to have obtained an M.S. with honours in Anatomy; the first anatomist to be selected by the Government of India for the German Academic Exchange Fellowship (DAAD) in 1965; the only Indian anatomist to be chosen Fellow of Alexander von-Humboldt Foundation (Germany); the first Indian anatomist to be elected Fellow of the Indian National Science Academy (FNA) and to be awarded the Padma Shri.

Professor Hasan's initial education was in Akbarpur (Faizabad). Thereafter he did his Intermediate from Christian College, Lucknow and B.Sc. I year from Lucknow University. In 1953, he was selected for M.B.B.S. at King George's Medical College (KGMC), Lucknow. He latter on obtained his post-graduation in anatomy from the same institution. He obtained Ph.D. and D.Sc. from the Aligarh Muslim University, Aligarh.

ACADEMIC AND RESEARCH CAREER

Prof. Hasan joined the anatomy department, KGMC, Lucknow, as a demonstrator in 1958 and after briefly working as a lecturer, in 1963 he moved to Aligarh as a Reader in Anatomy. Continuing his pursuit of knowledge, he went to Germany in 1965. He not only learnt electron microscopy and worked on ageing with the renowned Professor (Dr) Paul Glees at the University of Gottingen, but also got an opportunity to learn German. Although in 1972 he was offered the citizenship of Germany, he politely declined and came back to India and established India's first Interdisciplinary Brain Research Centre (IBRC) at Aligarh in 1978.

Prof. Hasan's persistent endeavour was to pursue basic medical research, often linked with clinical applications. The main thrust was to study problems of national relevance, such as environmental pollution, pesticide and metal neurotoxicity, hydrocephalus and brain ageing. His research group proposed a new hypothesis for the genesis of lipofuscin (age-pigment) in 1972. He also discovered a new technique for demonstrating zinc in brain sections. His more than 150 original research papers, in reputed indexed journals, have received over 2500 citations in journals of international repute and books, including Gray's Anatomy. He has also published 6 books and contributed chapters in 8 books. His commitment and dedication to acquire and disseminate knowledge can also be judged from the fact that during the last 6 months of his life, when he was very seriously ill, he worked earnestly to complete a book on Treacher Collins Syndrome. Fortunately, the book was published a few days before his death when he was in the intensive care unit.

RECOGNITION

He was a recipient of the prestigious Dr B.C. Roy National Award in the category of "Eminent Medical Teacher" (1991), Hari Om Ashram Alembic Award of Medical Council of India (1979), Dr S.S. Misra Medal of National Academy of Medical Sciences (India), Dr Dharam Narayan Gold Medal of the Anatomical Society of India (1977), Ati Vishisht Chikitsa Medal of College of Chest Physicians of India (1995), Sushruta Award of World Academy of Integrated Medicine (WAIM) 2002, Dr Bachawat Life-Time Achievement Award of Indian Academy of Neurosciences (2004), Dr. Tirumurti Award of Indian National Science Academy (2010) and Life Time Achievement Award of Anatomical Society of India (2013). He has been the President of three national bodies, Anatomical Society of India, Indian Academy of Neurosciences & Association of Gerontology of India.

Seldom does one find a nucleus around which an institution is build, but it goes to the credit of Professor Mahdi Hasan that at least three premier medical institutions of North India will always fondly cherish his memory. KGMC will always remember him as its illustrious student and teacher; Jawaharlal Nehru Medical College, Aligarh will always remember him as an excellent dedicated and devoted teacher; and Era's Lucknow Medical College, Lucknow (a medical institution founded around him) will find it difficult to overlook its founder Director-Principal and Trustee.

PASSING AWAY

He breathed his last at 6 p.m. on 12 January 2013 after fighting a relentless battle against cancer of the prostrate. His wife, **Mrs Abida Mahdi** died soon after on 24 February 2013.

Dr. Lalit Kumar is presently working as Professor and Head of the Department of Medical Oncology at All India Institute of Medical Sciences (New Delhi). He has contributed immensely in the fields of Bone marrow/Stem cell transplantation, treatment of blood-related malignant disorders and treatment of cancer in women.

Prof. Lalit Kumar

- Born on June 30, 1957, Dr. Kumar studied medicine from the S.N. Medical College, Agra and later did D.M. in Medical Oncology from the Cancer Institute (WIA), Chennai in 1988. He undertook a post-doctoral fellowship in 'Bone marrow Transplantation' in 1991-92 at the Leukemia Unit of Hammersmith Hospital (Royal Post-Graduate Medical School), London, U.K.

- Dr. Kumar and his team have developed a highly cost effective stem cell transplant program at the AIIMS for the treatment of malignant and non-malignant diseases. His team has already performed more than 600 allogeneic and autologous stem cell transplants with results comparable to International standards. His group has contributed immensely on the use of chemotherapy for the treatment of advanced cancer of cervix and ovary. His 'Manual of Gynecologic Oncology' is followed widely at cancer centers in India and neighboring countries.

- Dr. Kumar has published more than 325 research papers in reputed International and National medical journals. In addition, he has edited two books, three residents' manuals. He has been a guide to a number of PhD, DM and MD students.

- Dr. Kumar is the recipient of numerous awards and honors namely Dr. B.C. Roy National Award in Medicine, Ranbaxy Research Award for Clinical Research, I.C.M.R. award for research in Cancer, Fulbright Nehru Visiting Lecturer ship and Commonwealth scholarship. For his contributions, he was elected as a Fellow of the Academy of Sciences (F.A.Sc.) and National Academy of Medical Sciences (F.A.M.S.).

Last year the President of India has conferred upon him **Padma Shri**.

Professor Sohail Ahmad Award
-for basic research
-Recipient (2014): Prof. D.N. Rao

Professor Sohail Ahmad

(January 3, 1932 – March 2, 2008)

EARLY LIFE AND EDUCATION

Professor Sohail Ahmad was born in Budaun, UP, India, on January 3, 1932. He studied at S.T. High School, Aligarh, and then went on to acquire higher degrees, viz.: (i) a Bachelor of Science degree in 1952; (ii) a Master of Science degree in Zoology (Parasitology) from Aligarh Muslim University in 1955; (iii) a Master of Science degree in Bacteriology from the Carnegie Institute of Technology (now Carnegie Mellon University), Pittsburgh, USA, in 1964; and (iv) a PhD degree in Microbiology in 1976.

ACADEMIC AND RESEARCH CAREER

Professor Ahmad started his academic career with a teaching position at Delhi College (now Zakir Husain Delhi College –in 1958, before winning a graduate scholarship in 1962 for pursuing his second masters in bacteriology at the Carnegie Institute of Technology.

During his graduate studies at the Carnegie Institute of Technology (1962-1964), Professor Ahmad worked with Professor Neils K. Jerne, who was a pioneer in the development of immune network theory, and who won a Nobel Prize for this work in 1984. Professor Ahmad's experience in working with Professor Jerne helped him to gain vital insights into antigens, antibodies and the immune system.

In 1968, he joined the Department of Microbiology, Jawaharlal Nehru Medical College (JNMC), AMU, as a Lecturer, and was appointed Professor in 1983. He also served as Chairman of the Department.

During his 26-year career at AMU, Professor Ahmad brought laurels to the University through his achievements in academics, and through his pioneering research on antigen-antibody interactions. Of particular note was his research on the diagnosis and prevention of parasitic diseases, whereby he and his team made a significant contribution to the body of work geared towards the development of vaccines for malaria (P. falciparum) and amoebiasis.

Professor Ahmad's early research won him a WHO travel Fellowship to UK, USA, and Canada in the mid 1970s. This enabled him to receive cutting-edge training at the London School of Tropical Medicine, Welcome Research Laboratories (Beckenham, Kent), National Institutes of Health (NIH, Bethesda, Maryland), Centers for Disease Control and Prevention (Atlanta, Georgia), and the Department of Microbiology and Immunology at McGill University (Montreal, Quebec).

On his return to AMU, Professor Ahmad dedicated himself to teaching and research, and single-handedly established state-of-the-art parasitology and malaria laboratories, within the Department of Microbiology.

In addition to being an outstanding teacher, loved and respected by his students and colleagues, Professor Ahmad was known internationally for his important contributions to research in parasitology and microbiology. He and his research scholars published over 200 articles in national and international journals of repute. He was invited to present his seminal research at numerous national and international conferences, workshops, and seminars. He successfully supervised around 50 PhD, MPhil, and MD students.

RECOGNITION AND RETIREMENT

In 1987, Professor Ahmad received the prestigious Watumull Foundation Award (USA) and a gold medal for "research in the development of a vaccine for the immunologic control of Amoebiasis." Until his retirement from AMU in 1994, he remained actively involved in both teaching and research. Today, his students hold prestigious positions – ranging from research scientists and professors to clinicians and surgeons – in India and abroad.

PASSING AWAY

Professor Ahmad passed away peacefully in his sleep at his home in Aligarh on March 2, 2008.

– By Dr. Saif Ahmad (Son)

Dr. D.N. Rao, born in the year 1951, obtained his M.Sc. in 1972 and Ph.D. in 1978. After his doctoral degree, he joined as a Research Officer at All India Institute of Medical Sciences, New Delhi and subsequently became a Lecturer and is presently working as Professor & Head, Department of Biochemistry, AIIMS, New Delhi. He has worked as General Secretary & Treasurer of Indian Immunology Society and Vice President of FIMSA and has recently been elected President of Indian Immunology Society.

Prof. D.N. Rao

- He has been the Editor in Chief of "Indian Journal of Clinical Biochemistry" (IJCB) for about five years and has received a large number of Awards/orations for his contributions in Biochemistry and Immunology. He is the recipient of Prof. B.K. Aikat Oration Award of ICMR; Prof. V.M. Thakor Award by Institute of Medical Technology, Udhna (Surat); Dr. K.C. Kandhari memorial Oration by AIIMS; Seth GS Medical College & KEM Hospital Oration by ACBI; Chaturvedin Ghanshyam Das Jaigopal Award for Immunology by ICMR; Hari Om Ashram Alembic Research Award by MCI; Professor C.R. Krishna Murthi Lecture Award by SBC; Dr. & Mrs. G.P. Talwar Oration Award by ACBI; ICMR award for contribution in Biomedical Research; Dr. Pran Nath Chhuttani Oration award by National Academy of Medical Sciences; He has been the 1st recipient of AIIMS Excellence award (awarded by Dr. Robert Huber, Noble Laureat).
- He has organized many national and international scientific meets including the 9th APCCB in 2002, the 33rd Indian Immunology Society Conference in 2007 and the SFRR Satellite Meeting in 2008 and the 5th FIMSA conference in 2012.
- Dr. D.N. Rao's research interest includes Biochemistry and Immunology of infectious diseases. His has been involved in developing peptide based immunogens for vaccine design and immuno-diagnostics for diseases like Malaria, HIV and Plague. He has guided a large number of students for Ph.D., M.D. and M.Sc. degrees. He has generated extramural research grants from DST, DBT, ICMR, DAE, DRDO, CSIR and Ministry of Health and Family Welfare. He has published more than 130 research articles in International and National Journals.

Smt. Kusum Sharma Award
-for young woman scientist
-Recipient (2014) : Dr. Sarika Gupta

Smt. Kusum Sharma
(August 1, 1930 – May 15, 2013)

Born in an illustrious Rawat family of Agra, during British Raj, Kusum Sharma was the eldest daughter of Shri Brij Mohan and Smt. Madhobeni Rawat and grew up with her younger sister and brother. Hailing from family with reputation of academic excellence, her Grand-father, Rai Bahadur Dr. Ganga Prasad Rawat studied medicine in Lahore (now in Pakistan) and was eventually appointed Civil Surgeon during the Raj. He taught at the Agra Medical College (now known as S.N. Medical College) and was instrumental in establishing the Department of Gynecology at the Institution. Her father was a prominent lawyer who was appointed honorary magistrate by the U.P. government.

At the age of 6, Kusum contracted polio, which lead to a permanent physical disability. It was during this difficult period, that her tremendous strength and determination became apparent as she refused to be held down by the disease and insisted on leading not just a normal, but also a fully active life. After completing her schooling she decided to pursue the university degree and obtained bachelor degree in 1952 from Agra College. In 1954, she got married to Dr. Prem Narain Sharma, a renowned Physical Chemist and reputed lecturer at the Agra College. Dr. Sharma obtained his MS from University of Minnesota, USA and PhD from Agra University and served in various capacities for almost 40 years at the Agra College. As a founding member of Indian Council of Chemists, Dr. Sharma achieved the life time award and maintains a highest degree of respect among his peers and students. They have three daughters who carried on the family tradition of academic excellence by obtaining PhDs in different subjects and are well settled in life.

Smt. Kusum Sharma passed away peacefully on 15 July, 2013.

Dr. Sarika Gupta obtained her M.Sc. in 2000 and Ph.D. in 2004 from the Banaras Hindu University, Varanasi. Currently she is working as a Scientist at the National Institute of Immunology, New Delhi.

Dr. Sarika Gupta

- **Dr. Sarika Gupta** has developed a novel insulin assembly. Her studies have shown that administration of a single dose of the insulin assembly, to diabetic animals, released the hormone capable of maintaining physiologic glucose levels for >80 days, without fasting hypoglycemia and that it also reduced the extent of secondary diabetic complications.
- **Dr. Sarika Gupta** has also shown that methionine, a nutritionally essential amino acid, has biphasic effect on bone remodeling. She has shown that administration of methionine to osteoporotic rats prevented bone resorption by inhibiting trans-differentiation of blood mononuclear cells to functional osteoclasts via down-regulating TLR-4/MyD88/NF-κB cascade. However, at higher doses, methionine turned from a pharmacological agent to a hyperhomocysteinemia agent that leads to osteopenia/osteoporosis. Her studies have demonstrated that the metabolites of the same pharmacological agent can have diverse effects at different doses.

Awards/Honors:

- DST-SERB Women Excellence Award- (2013)
- NASI- Platinum Jubilee Young Scientist Award – (2011).
- Visiting Scientist to University of Miami, Miami, U.S.A.- 2010.
- Best poster award in "International Conference and Humboldt-Kolleg on Structure and Characterization of Physical, Chemical, Bio- and Geo- Materials".

Presentations/Publications/Patents filed or awarded:

- Presentations- 6, Publications – 17, Patent (filed) - 14, Patent (granted) - 3