

## OBITUARY



# Prof. Sante Tura: Father of modern Italian haematology 20 May, 1929–12 October, 2021

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Prof. Sante Tura, a father of modern Italian haematology and Professor Emeritus at the University of Bologna died in Bologna on 12 October, 2021, age 92.

Prof. Tura was born on 20 May, 1929 in Faenza, a small town in Northern Italy. He studied medicine at *Alma Mater Studiorum*-University of Bologna under the supervision of Prof. Domenico Campanacci, Professor of Medical Pathology, with whom he did his thesis on Surgery and Medicine. Prof. Campanacci realised the need to develop specialised disciplines within internal medicine and encouraged Sante Tura to study haematology. Prof. Tura was entrusted to develop a small laboratory of haematology at the Institute of Medical Pathology. The path was set! Soon after receiving

his postgraduate degree Prof. Tura spent a year as visiting fellow at The University of California, Berkeley where he studied iron kinetics.

Sante returned to Italy in 1959 and in 1976 was appointed Director of the Hematology Unit (subsequently dedicated to the memory of Lorenzo and Ariosto Seràgnoli) at Bologna University Hospital. In 1976 he became Professor of Hematology at Bologna University.

Early on Prof. Tura focused his clinical and scientific interests on chronic myeloid leukaemia (CML), an invariably fatal disease at the time with few therapy options. He founded and chaired the Italian Study Group on CML, now with more than 80 centres, aimed at promoting research and collaboration. The group anticipated the development of cooperative group studies and was expanded on Prof. Tura's close friend and lifelong colleague Prof. Franco Mandelli in the field of acute myeloid leukaemia.

Prof. Tura's early studies evaluated the roles of splenectomy and chemotherapy in preventing CML blast transformation. Subsequently he interrogated the prognostic impact of co-variables such as spleen size and percentage blood myeloid precursor cells on transformation risk. This was followed by many studies several of which were practice-changing and conducted in collaboration with other scientists, especially the late Prof. Michele Baccarani (*Leukemia*. 2022; PMID: 35228697). Prof. Baccarani was the first student to join the School of Haematology in Bologna and for many years he was Prof. Tura's primary coworker. This dynamic duo expanded the Sokal scoring system to identify cohorts with different survivals and suggest which persons might be haematopoietic cell transplant candidates. Another seminal study Italian Study Group on CML proved the superiority of interferon-alfa-2a (IFN) compared with chemotherapy in chronic phase CML The Italian Study Group on CML later merged with the Gruppo Italiano Malattie Ematologiche (GIMEMA) CML Working Party and continued to be chaired by Prof. Tura until his retirement in 1999.

There are many lovely anecdotes from Prof. Tura's long career. RPG recalls a dinner of bollito misto (a typical wish of Bolognese cuisine) at Diana, Prof. Tura's favourite restaurant in Bologna where they discussed how to adapt the famous Italian historical novella *Promessi Sposi* by Alessandro Manzoni to a lecture on CML stem cells. It worked and was given the next day at the University. However, Diana was no match for a dinner at home with the Turas.

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Over time, Prof. Tura's scientific interests expanded to other fields of haematology. He supported the foundation of cooperative study groups devoted to the design and conduct of studies in acute leukaemias, plasma cell myeloma and lymphomas. A man for all seasons Prof. Tura launched a large programme of clinical research and assistance for people with haematologic cancers at the Seràgnoli Institute of Hematology in Bologna which quickly gained national and international prominence.

Prof. Tura was a passionate teacher; he loved teaching haematology to the students of the Faculty of Medicine and Surgery at Bologna University. For almost ten years he was assisted by MC. Each year, at the end of the course, he organised a clinical meeting for the students in a town of his beloved Romagna. After the meeting closed, a lunch was planned and a small orchestra played Italian songs during which Prof. Tura went up on the stage to sing the famous song *Romagna mia* with MC joining the students in the choir. For the shy MC this was the worst day of the academic year.

Over a long distinguished career Prof. Tura mentored a generation of haematologists who carry his memory forward. Many of his scientific collaborators are heads of Haematology Departments in Italy and globally and many are Chairs of Haematology at Italian universities. The haematology specialists who joined, and were trained at, the Seràgnoli Institute of Hematology in Bologna for almost three decades are too many to mention. Most attended a memorial service in his honour in Bologna last year.

Prof. Tura was a superb physician and a giant of haematology; his inspiring lessons survive him. One is to never forget the importance of research as a platform to help our patients and the need to put them and their needs central to our activities.

Sante Tura published more than 700 articles and edited many textbooks which are roadmaps for young colleagues. At scientific meetings he presented lectures and actively participated in discussions, asking critical questions and commenting. He also made contributions to professional organisations, and served as

President of the Italian Society of Hematology and Italian Society of Experimental Hematology. In 2000, soon after retiring, Prof. Tura was appointed president of the Bologna section of the Associazione Italiana Contro le Leucemie, Linfomi e Mieloma (AIL) dedicated to promoting research, improving the quality-of-life of patients and their families and providing patient assistance.

Prof. Tura remained scientifically active until a few months before his death, maintained personal ties with many of his colleagues and continued as an inspiring mentor for scientific collaborators, colleagues and students. His beloved wife Giuliana predeceased him. He is survived by his daughters Elisabetta and Camilla, his sons Francesco and Stefano and eight grandchildren. His impact on modern Italian haematology was and is enormous.

#### **AUTHOR CONTRIBUTIONS**

All authors contributed to this Editorial equally.

#### **COMPETING INTERESTS**

RPG is a consultant to BeiGene Ltd., Fusion Pharma LLC, LaJolla NanoMedical Inc., Mingsight Pharmaceuticals Inc., CStone Pharmaceuticals, NexImmune Inc. and Prolacta Bioscience; advisor to Antengene Biotech LLC, Medical Director, FFF Enterprises Inc.; Partner, AZCA Inc.; Board of Directors, Russian Foundation for Cancer Research Support; and Scientific Advisory Board: StemRad Ltd.

#### **ADDITIONAL INFORMATION**

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