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ACTA PHYSIOLOGICA

OBITUARY

Mats Wolgast (1935–2024)—Obituary

It is with great sadness that we announce to the renal community the passing of Professor emeritus in Physiology Mats Wolgast, Uppsala, Sweden. The closest mourners are the children Charlotta from his marriage to the late Inger Söder Wolgast, and Björn and Åsa from his previous marriage. He died after a period of illness at the age of 89.

Mats grew up in Bräkne-Hoby, a small town in the county of Blekinge, graduated in Helsingborg and studied medicine in Uppsala. He was instantly hooked on the subject of physiology and remained at the Department of Physiology in Uppsala after his medical studies where he graduated as a PhD in 1968.

Mats was a genius with the ability to see context and consequences long before the rest of us. The kidney became his main interest and the thesis in 1968 concerned the distribution of blood within the kidney with focus on the medulla with the essence being published in Nature[1] and Acta Physiologica Scandinavica.[2] A special room was built at the Biomedical Center for his research with radioactive red blood cells and tailored semiconductor detectors. When the work received a lot of international attention, he became a leading figure in the successful Kidney Research Group whose PhD students were welcomed at many research centers worldwide. He also studied permeability characteristics of charged biological membranes and the interstitial space using complicated mathematical models to explain the gel concept[3] which probably interfered with the ability to sleep of several referees and journal editors. Some even say he invented his own mathematics. He was also well known for his studies in revealing the dynamics of glomerular filtration.[4]

Doctors in internal medicine, surgery, radiology, and nephrology approached Mats not only for help but also for collaboration. The need and existence of a sharp theoretical and practical physiologist became the foundation for a large number of clinical dissertations in a variety of fields such as ischemia–reperfusion injury, transplantation, acute kidney injury, and oxidative stress. His last publication at the age of 82 concerned renal autoregulation during hypothermia.[5]

Gray-haired doctors of today especially remember Mats Wolgast from the Physiology course, perhaps because he always had highly appreciated lectures—educational, instructive, and, to say the least, colorful. Many of his jokes and pranks during lectures are still remembered with great joy, but some of them would probably not survive todays strict woke dogma in the educational system.

He was also an environmental pioneer, built two environmental houses, and became an acclaimed national celebrity. Soon, busloads of journalists and other stakeholders made the pilgrimage to the family's home in the suburb Sunnersta mainly during weekends and Mats not always having informed the family prior to the invasion. "The super-insulated house" became a book about the houses whose interior temperatures could be kept up by a few invited guests who contributed with their body heat.

Another hobby was toilets! Mats realized early on that—for the sake of the environment—urine and feces should be separated already in the toilet seat. He patented such a toilet chair which was sold on the market and also developed low volume-flush toilets. His research in physiology of international class continued in the meantime as usual.

Mats was an important person and his deed has made the world a little better. We are grateful to have been able to share time and space with Mats, who was a fine colleague

and a true friend. He is probably out there somewhere on a final sailing trip singing his trademark anthem: Gullefjun.

For former and present colleagues in physiology, Uppsala University.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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