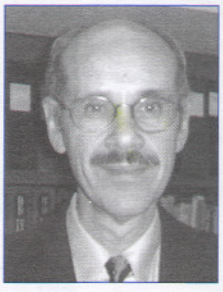
WHO'S WHO IN ATS

Sadis Matalon, Ph. D.

For over 20 years, Sadis Matalon, Ph.D., has practiced and taught the ideal of applying basic science to the mysteries and challenges of medicine. This career focus is easily seen in his research—which has been supported by multiple grants through the years; in his teaching—for which he has received numerous awards; and in his leadership role in the scientific-medical community—which is evidenced by his many invitations to lecture both across the country and around the globe.



"By using examples of exciting new scientific discoveries, I try to convey to my students that what they learn now in science will ultimately help them with medical decisions they will face in the future"

A native of Greece, Dr. Matalon came to the U.S. in 1966 as a Fulbright Scholar to study physics at Macalester College in St. Paul Minnesota. After completing a master's degree in physics at the University of Minnesota, he decided a career in physiology was more suited to his career interests and completed his doctorate in respiratory physiology, also from the University of Minnesota. After a brief period at Children's Hospital at Northwestern University in Chicago, Dr. Matalon moved to the University of New York at Buffalo. At this point in his career Dr. Matalon decided that he could make more significant contributions to science and medicine through the study and application of molecular knowledge. At Buffalo he worked with ATS member and renowned pulmonary physiologist Leon Farhi, M.D., on gas exchange. In 1987, he joined the Research Division of the Department of Anesthesiology at the University of Alabama at Birmingham (UAB) where he remains.

Current Research Interests

Throughout Dr. Matalon's research career, he has maintained his focus of applying knowledge of physiology to patient care challenges and today his research has direct correlations to better understanding and therefore, improving patient care for Acute Lung Injury (ALI), pulmonary hypertension, respiratory syncytial virus (RSV) and ARDS, among other diseases. Dr. Matalon is currently focusing on understanding the interactions between free radicals and the alveolar epithelium, specifically how they assist ions in moving across the lungs. Dr. Matalon has collaborated with Drs. Iasha Sznajder and Philip Factor from the Northwestern University School of Medicine, on research that uses gene therapy to increase the ability of lung cells to transport ions out of the alveolar space, thus limiting the amount of fluid. In addition, he has collaborated with Drs. Michael Matthay, from the University of California at San Francisco and Thomas Martin, the University of Washington to show the presence of higher levels of nitric oxide in the lungs of patients with Acute Lung Injury. Most recently Dr. Matalon has shown that small levels of of nitric oxide may damage critical proteins involved in ion trasnport across the lungs "The challenge is to prevent this negative effect while also preserving the beneficial role of nitric oxide," Dr. Matalon explains.

In a research collaboration with ATS members and husband-wife team Judy Hickman-Davis, D.V.M., Ph.D., and Ian Davis, D.V.M., Ph.D., Dr. Matalon is also conducting research aimed at understanding the host defense properties of the lung. In collaboration with UAB researchers Drs. O'Reilly and Young. Dr. Matalon has recently received a grant from the NIH to investigate why lung transplantation patients are susceptible to acquiring pneumonias.

Dr. Matalon's third area of research focuses on understanding the basic mechanisms of respiratory syncytial virus (RSV), how it damages the ion channels of the lung and how an understanding of the physiology of the damage may be used to create new treatments. This work is done in collaboration with Drs. Ian Davis, a UAB Research Instructor in Anesthesiology and Wayne Sullender from the UAB Department of Pediatrics.

In 2002, the ATS recognized Dr. Matalon for his impressive research by awarding him the Recognition Award for Scientific Accomplishment at ATS 2002•Atlanta.

Sharing His Knowledge

Dr. Matalon's research efforts also support his approach to teaching in that he makes the importance of understanding basic science and its applications a central theme he conveys to medical students. "By using examples of exciting new scientific discoveries, I try to convey to my students that what they learn now in science will ultimately help them with medical decisions they will face in the future," explains Dr. Matalon who serves as the Alice McNeal Professor of Anesthesiology at UAB with secondary appointments as Professor of Physiology and Biophysics, Pediatrics, Genomics and Pathobiology, and Environmental Health Sciences. His students and peers clearly appreciate these extensive efforts as he has received the Argus Society Award for Instructional Excellence (three times), the Joint Health Science Presidential Teaching Award and an award for Excellence in Teaching (four times), in addition to being nominated for Best Basic Science Teacher Award from the UAB School of Medicine. "I enjoy teaching tremendously. It's very satisfying to positively convey a difficult concept and have medical students understand it," he explains.

Dr. Matalon is often invited to share his knowledge through guest lectures and has been invited to speak across the country and internationally, including serving as the keynote speaker at the 24th Annual Panhellenic Medical Symposium in Athens. He and Dr. Sznajder served as the co-directors of the North Atlantic Treaty Organization Advanced Study Institute on Acute Lung Injury in Greece in 1997 and 2000.

ATS Involvement

Currently serving on the ATS Board of Directors as Chair of the Assembly on Respiratory Cell and Molecular Biology, Dr. Matalon has been a member since 1981. Prior to becoming chairman of the Assembly he served on its Long Range Planning Committee and as Chairman of the Program Committee. In addition he has served on the ATS Awards Committee and the Editorial Board of the *American Journal of Respiratory Cell and Molecular Biology.*

On a Personal Note

Dr. Matalon and his wife of 30 years, Nancy, along with their 23-year-old daughter Mary Katherine, enjoy traveling together. Mary Katherine, a Smith graduate, is currently in graduate curatorial studies at Bard College in New York. Dr. Matalon has a number of hobbies including reading spy novels ("John LeCarre is my favorite"), playing tennis and most recently biking. ATS