

**BIOGRAPHICAL SKETCH**

Give the following information for the key personnel and consultants and collaborators. Begin with the principal investigator/program director. Photocopy this page for each person.

NAME **Sadis Matalon, Ph.D.**POSITION TITLE **Professor**

EDUCATION (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Macalester College, St. Paul, MN	B.A.	1970	Physics
Univ. of Minnesota, Minneapolis, MN	M.S.	1973	Physics
Univ. of Minnesota, Minneapolis, MN	Ph.D.	1975	Physiology

**RESEARCH AND PROFESSIONAL EXPERIENCE:** Concluding with present position, list, in chronological order, previous employment, experience, and honors. Key personnel include the principal investigator and any other individuals who participate in the scientific development or execution of the project. Key personnel typically will include all individuals with doctoral or other professional degrees, but in some projects will include individuals at the masters or baccalaureate level provided they contribute in a substantive way to the scientific development or execution of the project. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES.

**Employment**

1973-75	Systems Analyst, Department of Surgery and Patient Monitoring, University of Minnesota
1975-76	Associate Department of Pediatrics and Physiology, Northwestern University and Children's Memorial Hospital, Chicago, Illinois
1976-77	Research Assistant Professor of Physiology, State University of New York at Buffalo
1977-82	Assistant Professor of Physiology, State University of New York at Buffalo
1982-87	Associate Professor of Physiology, State University of New York at Buffalo
1987-Present	Professor of Anesthesiology, University of Alabama at Birmingham
1987-Present	Professor of Physiology & Biophysics, University of Alabama at Birmingham
1989-Present	Professor of Pediatrics, University of Alabama at Birmingham

**Selected Publications**

**Matalon S.** Mechanisms and regulation of ion transport in adult mammalian alveolar type II pneumocytes. *Am. J. Physiol.* 261 (*Cell Physiol.* 30):C727-C738, 1991.

**Holm BA, Keicher L, Hudak BB, Cavanaugh C, Baker RR, and Matalon S.** Mechanisms of H<sub>2</sub>O<sub>2</sub>-mediated injury to type II pneumocyte surfactant metabolism and protection with PEG-catalase. *Am. J. Physiol.* 261 (*Cell Physiol.* 30):C751-C757, 1991.

**Royall JA, Matalon S.** Pulmonary edema in ARDS. Furmen BT, Zimmerman JJ, eds. *Pediatric Critical Care*, St. Louis, MO, C.V. Mosby (In press), 1991.

**Matalon S, Bridges RJ, and Benos DJ.** Na<sup>+</sup> uptake into alveolar type II membrane vesicles occurs through amiloride-inhibitable Na<sup>+</sup> channels. *Am. J. Physiol. (Lung Cell. Mol. Physiol.* 4):L90-L96, 1991.

**Engstrom PC, Baker RR, Burkhalter A, and Matalon S.** Mechanisms of hydrogen peroxide scavenging by alveolar type II pneumocytes *in vitro*. *J. Appl. Physiol.* 69(6):2078-2084, 1990.

**Baker RR, Panus PC, Holm BA, Engstrom PC, Freeman BA, and Matalon S.** Endogenous xanthine oxidase-derived O<sub>2</sub> metabolites inhibit surfactant metabolism. *Am. J. Physiol.* 259 (*Lung Cell. Mol. Physiol.* 3):L328-L334, 1990.

**Matalon S, Holm BA, Baker RR, Whitfield K, and Freeman BA.** Characterization of antioxidant activities of pulmonary surfactant mixtures. *Biochim. Biophys. Acta* 1035:121-127, 1990.

**Nickerson PA, and Matalon S.** Quantitative ultrastructural study of the rabbit lung: Exposure to 60% oxygen for 21 days. *Undersea Biomedical Research* 17(4):323-331, 1990.