BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Rebecca C. Stearns	Technical Director

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
Tufts University, Medford, MA	B.S.	1977	Biology
Harvard University, Cambridge, MA	A.L.M.	1997	Biology

PROFESSIONAL EXPERIENCE:

1979-1981 Research Assistant, Electron Microscopy Department, Dana Farber Cancer Institute, Boston

1981-1984 Research Assistant, Electron Microscopy Lab, Physiology Program, Harvard School of Public Health, Boston

1984-1985 Sr. Research Assistant, Electron Microscopy Lab, Physiology Program, Harvard School of Public Health, Boston

1985-1987 Research Assistant II, Electron Microscopy Lab, Physiology Program, Harvard School of Public Health, Boston

1988- Research Specialist, Electron Microscopy Lab, Physiology Program, Harvard School of Public Health, Boston

1999- Technical Director, Electron Microscopy Lab, Physiology Program, Harvard School of Public Health, Boston

ASSOCIATIONS:

1983 Member, Microscopy Society of America

1983 Member, New England Society of Microscopy

1995 President Elect, New England Society of Electron Microscopy

1996 President, New England Society of Electron Microscopy

1997 Past-President, New England Society of Microscopy

1998 Acting President, New England Society of Electron Microscopy

COMMITTEES:

1990-1992 Local Arrangement Committee, 1992 Electron Microscopy Society of America National Meeting,

1995 Program Chairman of Four Scientific Meetings for New England Society of Electron Microscopy

AWARDS:

1992-1993 Electron Microscopy Society of America Ten Best Traveling Posters

REVIEWER FOR: Aerosol, J. Electron Spectroscopy and Related Phenomena, Microscopy Research and Technique

PUBLICATIONS:

Original Reports

1. **Stearns, R.C.**, G.M. Barnas, M. Walski, and J.D. Brain. Deposition and phagocytosis of inhaled particles in the gas exchange region of the duck, *Anas platyrhynchos*. Respir. Physiol., 67:23-36, 1987.
2. **Stearns, R.C.**, M. Katler, and J.J. Godleski. Contribution of osmium tetroxide to the image quality and detectability of iron in cells studied by electron spectorscopic imaging and electron energy loss spectroscopy. Microscopy Research and Technique, 28:155-163, 1994.
3. Crawford, J.M., S. Barnes, **R.C. Stearns**, C.L. Hastings, and J.J. Godleski. Ultrastructural localization of fluorinated bile salt in hepatocytes. Lab. Invest., 71(1):42-51, 1994
4. Mizgerd, J.P., R.M. Molina, **R.C. Stearns**, J.D. Brain, and A.E. Warner. Gadolinium induces macrophage apoptosis. J. Leukocyte Biol., 59:189-195, 1996.
5. **Stearns, R.C.**, J.D. Paulauskis, and J.J. Godleski. Endocytosis of ultrafine particles by A549 cells. Am. J. Respir. Cell Mol. Biol., 24: 108-115, 2001
6. Batalha, J.R.F., Saldiva, P.H.N., Clarke, R.W., Coull, B.A., **Stearns, R.C.** Lawrence, J., Krishna Murthy, G.G., Koutrakis, P., and Godleski, J.J. Concentrated Ambient Air Particles Induce Vasoconstriction of Small Pulmonary Arteries in Rats, *Env .Health Persp*.,110, 1191-1197, 2002.
7. Saldiva, P.H.N., Clarke, R.W., Coull, B.A., **Stearns, R.C**., Lawrence, J., Krishna Murthy, G.G., Diaz, E., Koutrakis, P., Suh, H., Tsuda, A., and Godleski, J.J. Acute Pulmonary Inflammation Induced by Concentrated Ambient Air Particles is Related to Particle Composition, *Amer. J. Respir. Crit. Care Med.*, 165: 1610-1617, 2002.
8. Savage, S.T., Lawrence, J., Katz, T., **Stearns, R.C**., Coull, B.A., and Godleski, J.J. Does the Harvard/U.S. Environmental Protection Agency Ambient Particle Concentrator Change the Toxic Potential of Particles?, *J.Air &Waste Manage. Assoc*, 53:1088-1097, 2003.
9. Yin, L., **Stearns, R.,** González-Flecha, B. Lysosomal and mitochondrial pathways in H_2O_2-induced apoptosis of alveolar type II cells. *J. Cell. Biochem.* 2004, In press.

Selected Abstracts

1. **Stearns, R.C.,** V. Hatch, J.J. Godleski, and P. Koutrakis. Preliminary findings on ambient air particles collected on nucleopore filters using energy filtering electron microscpy and scanning microscoy. Proceedings of the IVth International Congress on Electron Microscopy, pp. 465-467, 1998.
2. **Stearns, R.**; Ruiz, P.; Lawrence, J.; Koutrakis, P.; Godleski, J.J. Tantalum Planchettes as a Substrate to Collect and Analyze Ambient Air Particles. *Proceedings Microscopy and Microanalysis.* 2002, 8(2) 1500 CD.
3. **Stearns, R.C.**; C.R.G. Guttmann; R. Bakshi; U. DeGirolami; B. Due; and J.J. Godleski. Detection of Metals in Multiple Sclerosis Brain Tissue using Scanning Electron Micrscopy (SEM) and Energy Dispersive X-ray (EDX) Analyses. *Proceedings Microscopy and Microanalysis.* 2004, in press.