

## Curriculum Vitae of Robert Ertsey, B.A., M.Sc.

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**CURRENT POSITION:** Research Associate  
Cardiopulmonary Research Center  
Stanford University

### EDUCATION AND CERTIFICATION

1976-80: B.A., Biochemistry, University of California, Berkeley, 1980.  
1980-83: M.S., Genetics, University of California, Santa Barbara, 1983.  
1986: Certificate in Radiation Safety, UCSF  
2002: Certificate in Laboratory Safety for Researchers, UCSF  
2004: Certificate in Animal Care Basic Regulatory and Ethical Requirements, UCSF

### HONORS AND AWARDS

1976 UCB Alumni Award for Scholastic Achievement, UC Berkeley  
2000 Outstanding Performance Award of the Cardiovascular Research Institute, UCSF  
2004 Service Award of the Cardiovascular Research Institute, UCSF

### EXPERIENCE

1979-80: Laboratory Assistant, Department of Zoology, University of California, Berkeley, Wake lab  
1981-82: Research Assistant, Department of Biochemistry and Molecular Biology, University of California, Santa Barbara, Englesberg lab  
1982-83: Teaching Assistant, Department of Biochemistry and Molecular Biology, University of California, Santa Barbara  
1983-92: Research Associate, Cardiovascular Research Institute, UCSF, Ballard lab  
1992-01: Research Associate, Cardiovascular Research Institute, UCSF, Scavo/Kitterman lab  
2001-04: Associate Specialist, Cardiovascular Research Institute, UCSF, Kitterman lab  
2004- : Research Associate, Cardiopulmonary Research Center, Stanford

University

## RESEARCH FELLOWS TRAINED

- 1983-92: Drs. D. Froh, H. Liley, M. Odom, D. Ianuzzi, V. Venkatesh and A. Sharma  
 1992-99: Drs. C. Chen, V. Newman and N. Porta  
 1999- : Drs. J. Yoshizawa, A. Hara and R. Syderak

## PUBLICATIONS

### ARTICLES

1. Moffett, J., S. Curriden, R. Ertsey, E. Mendiaz and E. Englesberg (1983) Alanine resistant mutants of Chinese Hamster Ovary cells, CHO-K1, producing increases in velocity of proline transport through the A, ASC and P systems. Som Cell Gen 9: 189-213
2. Ertsey, R. and E. Englesberg (1984) Recessive 2-(Methylamino)-Isobutyrate (MeAIB) resistant mutant of CHO Cells (CHO-K1) with increased transport through the ASC system. Som Cell Gen 10: 171-182
3. Gonzales, L.W., P.L. Ballard, R. Ertsey and M.C. Williams (1986) Glucocorticoids and thyroid hormones stimulate biochemical and morphological differentiation of human fetal lung in organ culture. J Clin Endocrinol Metab 62: 678-691
4. Ballard, P.L., R. Ertsey, L.W. Gonzales, H.G. Liley and M.C. Williams (1986) Isolation and characterization of differentiated alveolar type II cells from fetal human lung. Biochim Biophys Acta 883: 335-344
5. Liley, H.G., R. Ertsey, L.W. Gonzales, M.W. Odom, S. Hawgood, L.G. Dobbs and P.L. Ballard (1988) Synthesis of surfactant components by cultured type II cells from human lung. Biochim Biophys Acta 961: 86-92
6. Odom, M.W., R. Ertsey and P.L. Ballard (1990) Hormonally regulated proteins in cultured human fetal lung: analysis by 2-D gel electrophoresis. Am J Physiol 259: 283-293
7. Gonzales, L.W., R. Ertsey, D. Froh, J. Gonzales and P.L. Ballard (1990) Glucocorticoid stimulation of fatty acid synthesis in explants of human fetal lung. Biochim Biophys Acta 1042: 1-12

8. Venkatesh, V., D.M. Iannuzzi, R. Ertsey and P.L. Ballard (1993) Differential glucocorticoid regulation of the hydrophobic surfactant proteins B and C. *Am J Resp Cell Mol Biol* 8: 222-228
9. Iannuzzi, D.M., R. Ertsey and P.L. Ballard (1993) Biphasic glucocorticoid regulation of SP-A: the inhibitory phase. *Am J Physiol* 264L: 236-244
10. Ballard, P.L., R. Ertsey, L. W. Gonzales and J. Gonzales (1996) Transcriptional regulation of human pulmonary surfactant proteins B and C by glucocorticoids. *Am J Resp Cell Mol Biol* 14: 599-607
15. Scavo, L.M., R. Ertsey, C.J. Chapin., L. Allen and J. Kitterman (1998) Apoptosis in the development of human and rat fetal lung. *Am J Resp Cell Mol Biol* 18: 21-31
12. R. Ertsey and L.M. Scavo (1998) Cover slip mounted- immersion cycled (COSMIC) In Situ RT-PCR for the localization of mRNA in tissue sections. *Biotechniques* 24: 92-100
13. Scavo, L.M., R. Ertsey and B.Q. Gao (1998) Human lung surfactant proteins A1 and A2 are differentially regulated during development and by soluble factors. *Am J Physiol*:L653-669
14. Gutierrez,J., R. Ertsey, L.M. Scavo, E. Collins and L.G. Dobbs (1999) Mechanical distension modulates alveolar epithelial cell phenotypic expression by transcriptional regulation. *Am J Resp Cell Mol Biol* 21: 223-229
15. Kitterman JA, Chapin CJ, Vanderbilt JN, Porta NF, Scavo LM, Dobbs LG, Ertsey R, Goerke J. (2002) Effects of oligohydramnios on lung growth and maturation in the fetal rat. *Am J Physiol Lung Cell Mol Physiol.* 282(3):L431-9.
16. Scavo, L.M., Newman, V., Ertsey, R., Chapin, C.J. and Kitterman, J.A. (2003) Maternally Administered Dexamethasone Transiently Increases Apoptosis in Lung of Fetal Rats. *Exp Lung Res* 29:211-26.
17. Yoshizawa J, Chapin CJ, Sbragia L, Ertsey R, Gutierrez JA, Albanese CT, Kitterman JA. Tracheal occlusion stimulates cell cycle progression and type I cell differentiation in lungs of fetal rats. *Am J Physiol Lung Cell Mol Physiol.* 2003 Aug;285(2):L344-53.
18. Ertsey, R., C. Chapin, J.A. Kitterman and L.M. Scavo (2004) The ontogeny of Poly(ADP-ribose) polymerase in lung and developmental implications. *Am J Resp Cell Mol Biol*, in press. Epub 2004 Jan 30.

## BOOK CHAPTERS

19. Ertsey, R. and L.M. Scavo: COSMIC in situ RT-PCR for the localization of mRNA in tissue sections. *In* , A. Pardee and M. McClelland, eds.: Expression Genetics: Differential Display, Eaton Publishing, Natick, MA, 1999.

#### **OTHER PUBLICATIONS**

20. Ertsey, R. (1983) Characterization of an amino acid transport mutant of Chinese Hamster Ovary (CHO) cells resistant to 2-(methylamino)-isobutyric acid. Master's Thesis, UC Santa Barbara
21. Ertsey, R. and L.M. Scavo (1996) High performance in situ RT-PCR and RT-PCR Methodology. Record of Invention Disclosure, Office of Technology Transfer, UC San Francisco.

#### **MANUSCRIPTS IN PREPARATION**

Hara A., C. J. Chapin, R. Ertsey and J. A. Kitterman. (2004) Changes in fetal lung distension alter the expression of VEGF-a and its isoforms in developing rat lung (to be submitted to AM J Physiol Lung in March 2004)

Chapin C.J., R. Ertsey, J. Yoshizawa, A. Hara, J. J. Greer and J. A. Kitterman (2004) Congenital diaphragmatic hernia reduces and tracheal occlusion increases lung growth and type I cell differentiation in fetal rat lung (to be submitted to Am J Physiol in April 2004)

Hara, A, R. Ertsey, C. J. Chapin and J. A. Kitterman. (2004) Effect of changes in fetal lung distension on the expression of endothelins in developing rat lung (to be submitted to Pediatric Research)

R. Ertsey, J. Yoshizawa, A. Hara, Chapin C.J. and J. A. Kitterman (2004) Differential effects of tracheal occlusion on alveolar epithelial gene expression (to be submitted to Am J Physiol in June 2004)

#### **ABSTRACTS (most recent)**

Folkesson, H.G., C.J. Chapin, R. Ertsey, M.A. Matthay and J.A. Kitterman. Congenital diaphragmatic hernia prevents clearance of distal airspace fluid in late gestation fat fetuses. *Pediatr Res*, in press, 2004

Chapin, C.J., A. Hara, R. Ertsey and J.A. Kitterman. Nitrofen exposure, in the absence of congenital diaphragmatic hernia, differentially effects expression of epithelial and vascular development markers in fetal rat lung. *Pediatr Res*, in press, 2004

Ertsey, R. C.J. Chapin and J.A. Kitterman. Tracheal occlusion increases expression of the epithelial sodium channel, alpha-ENaC, in lungs of fetal rats. *Pediatr Res*, in press, 2004

Gonzalez, R.F., R. Ertsey, L.G. Dobbs. Expression of VEGF isoforms in rat alveolar type I and type II cells. *Mol Biol Cell* 2003

Hara, A., C.J. Chapin, R. Ertsey and J.A. Kitterman. Effects of congenital diaphragmatic hernia (CDH) and tracheal occlusion (TO) on VEGF-A isoforms in fetal rat lungs. *Pediatr Res* 2003)