CURRICULUM VITAE

**IAN GROSS, MD**

ADDRESS

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ACADEMIC POSITIONS

2015- Present Professor of Pediatrics Emeritus, Yale School of Medicine

1985-2015 Professor of Pediatrics and Obstetrics, Gynecology and Reproductive Medicine

 Yale School of Medicine

 (50% effort: 7/1/2012 to 6/30/2015)

1982-2012 Director, Division of Perinatal Medicine

 Yale School of Medicine and Yale-New Haven Children’s Hospital.

1982-2013 Director, Training Program in Neonatal-Perinatal Medicine

1982-1985 Associate Professor of Pediatrics and Obstetrics and Gynecology (with tenure)

 Yale School of Medicine.

1980-1981 Visitor, Nuffield Institute for Medical Research

 University of Oxford, England.

1978-1982 Associate Professor of Pediatrics and Obstetrics and Gynecology

 Yale School of Medicine.

1974-present Attending Pediatrician, Newborn Special Care Unit

 Yale-New Haven Children’s Hospital.

1974-1978 Assistant Professor of Pediatrics and Obstetrics and Gynecology

 Yale School of Medicine

CERTIFICATION

1977 Sub-Board of Neonatal-Perinatal Medicine, American Board of Pediatrics.

1974 American Board of Pediatrics.

TRAINING POSITIONS

1973-1974 Fellow in Perinatal Medicine, Yale University School of Medicine.

1972-1973 Fellow in Pediatrics (Newborn), Harvard Medical School, Boston.

1971-1972 Assistant Resident, Children's Hospital Medical Center, Boston.

1970-1971 Pediatric Resident, University of the Witwatersrand teaching hospitals, Johannesburg.

1969 Military service.

1968 Medical and Surgical Intern, Johannesburg General Hospital.

EDUCATION

1967 M.B.B.Ch., University of the Witwatersrand Medical School, Johannesburg.

1963 B.Sc., University of the Witwatersrand, Johannesburg.

SCIENTIFIC REVIEW COMMITTEES

Member, Human Embryology and Development Study Section, National Institutes of Health, 1981-1985.

Site visits and special study sections for Division of Lung Diseases, National Heart Lung and Blood Institute and National Institute of Child Health and Human Development.

Child Health Advisory Committee, Hood Foundation, 1988-1994. Committee Chair, 1994.

Ad hoc reviewer, National Science Foundation, Medical Research Council of Canada..

HONORS, EDITORIAL BOARDS AND PROFESSIONAL SOCIETIES

Most distinguished medical graduand, University of the Witwatersrand Medical School, 1967.

James Hudson Brown Memorial Fellow, Yale University School of Medicine, 1973-4.

Member, Advisory Board, Mead Johnson Symposia on Developmental Medicine, 1985-1994.

Associate Editor, Pediatric Research, 1993-1998.

Editor, Seminars in Perinatology, 1996-present

ACGME, Board of Accreditation Appeals for Neonatal-Perinatal Medicine, 1994-present

Co-Director, New England Regional Perinatal Meeting, 1994-2011

Mentor of the Year, Eastern Society for Pediatric Research, 2005

Society for Pediatric Research, American Pediatric Society, American Academy of Pediatrics

America's Top Doctors (2001-present), Top Doctors in New York Metro Area (2001-present), Best Doctors in America 2001-present,

MEDICAL SCHOOL AND HOSPITAL COMMITTEES 2010-2015 (Selected)

Senior Appointments and Promotions Committee, Yale School of Medicine

Chair, Faculty Development Committee, Department of Pediatrics

Member, Clinician-Educator Track Committee, Yale School of Medicine

Children’s Hospital Executive Steering Committee

Search Committee for Section Chief of Maternal-Fetal Medicine

INVITED PARTICIPATION IN NATIONAL OR INTERNATIONAL SYMPOSIA

The role of substrates and nutrition in lung phospholipid synthesis. Presented at Ross Conference on Lung Maturation. Puerto Rico. December 1975.

Nutritional and hormonal influences on lung phospholipid metabolism. Presented at American Physiological Society Symposium on Non respiratory Aspects of Lung Physiology. Chicago, IL. April 1977.

Visiting Lecturer, Department of Pediatrics, University of Cape Town S. Africa. January 1979.

Faculty member, National Heart Lung and Blood Institute course on Lung Cell and Organ Culture. Cell Science Center, Lake Placid, New York. September 1979.

Presentations at research conferences at the Nuffield Institute for Medical Research, Oxford, England and at research seminars at Oxford University. 1981.

Theophylline enhances dexamethasone induced stimulation of fetal rat lung phospholipid synthesis. Presented at The Neonatal Society, London, England. February 1981.

Visiting Professor, Department of Veterinary Science, University of Utrecht. Utrecht, Holland. April 1981.

Chairperson, Neonatology sessions, Society for Pediatric Research. Washington, D.C. May 1982.

Fetal lung maturation. Initiation and modulation. Presented at Juselius Symposium on Respiratory Distress Syndrome. Helsinki, Finland. August 1982.

The regulation of fetal lung development. Presented at U.S. Environmental Protection Agency Symposium: Abnormal Functional Development. Asheville, N.C. May 1983.

Moderator, New England Conference on Perinatal Research. Chatham, MA. October 1983.

The induction of fetal lung maturation. Presented at Second International Symposium on Applied Physiology in Critical Care. Aruba, N.A. November 1983.

Endogenous stimulation of fetal lung maturation. Presented at Gordon Conference on Pulmonary Biology. Plymouth, NH. August 1984.

Visiting Professor, Catholic University of Chile, Santiago and Chilean, Chile. October 1984.

Combined hormonal treatment for the prevention of RDS. Presented at N.I.H. workshop on Prevention of RDS. Bethesda, MD. September 1985.

Visiting Professor, Seoul Children's Hospital, Seoul, Korea.

Keynote speaker, Taiwan Pediatrics Society, Taipei, Taiwan.

Visiting Professor, Institute for Maternal and Child Health, Osaka, Japan. December 1986.

The cell biology of glucocorticoid action on the lung. Presented at Society for Pediatric Pulmonology. Dusseldorf, Germany. April 1988.

Chairperson, Poster Symposium on Lung Development, Society for Pediatric Research. Washington, D.C. May 1988.

The induction of surfactant synthesis. Receptor-response relationships. Presented at Fernstrom Symposium on Surfactant and the Respiratory Tract. Lund, Sweden. June 1988.

Faculty member, Israeli-American Neonatology Symposium. Jerusalem, Israel. July 1989.

Moderator, New England Perinatal Society, Manchester, VT. February 1990.

Guest Speaker, Ninth Conference on Priorities in Perinatal Care in South Africa.

Visiting Professor: University of Natal, Durban

 University of the Witwatersrand, Johannesburg. March 1990.

The limits of human viability. Testimony to U.S. Senate, Labor and Human Resources Committee, Hearing on S. 1912, The Freedom of Choice Act. Washington, D.C. May 1990.

N.I.H. Workshop on Diffusion of Extracorporeal Membrane Oxygenation Technology. Bethesda, MD. June 1990.

Keynote Speaker, Annual Meeting of the Israel Neonatal Society. Tel Aviv, Israel. November 1990.

Regulation of rat surfactant protein gene expression by butyrate and hormones. Presented at American Thoracic Society Symposium: Regulatory and Functional Aspects of Pulmonary Surfactant Proteins. Anaheim, CA. May 1991.

Visiting Professor, Department of Paediatrics, University of Cape Town. February-March 1992.

Guest Speaker, Department of Paediatrics Conference, February 1992.

Guest Speaker, Symposium on Perinatal Medicine, Department of Obstetrics, University of Cape Town. March 1992.

Chairperson, Poster Symposium on Regulation of Fetal Lung Morphogenesis and Differentiation. Society for Pediatric Research. Baltimore, MD. May 1992.

Faculty member, Newborn Medicine Update. Phase V Communications. Los Angeles, CA. October 1993.

Faculty member, Steglitz Symposium on Perinatal Medicine, Free University of Berlin. Berlin, Germany. October 1994.

Guest Speaker, 32nd Annual Meeting of the Latin American Society for Pediatric Research. Pucon, Chile. Visiting Professor, University of Chile, Department of Experimental Medicine. Santiago, Chile, November 1994.

Visiting Professor, School of Paediatrics, University of New South Wales. Sydney, Australia. Jan-April 1995.

Visiting Professor, Neonatal Unit, Monash University, Melbourne, Australia. March 1995.

Chairperson, Session on Genes involved in Lung Development. Pediatric Societies Annual Meeting. Washington, DC. May 1996.

Visiting Professor: Department of Pediatrics, Soroka Medical Center, Beersheva.

 Department of Pediatrics, Rambam Hospital, Haifa.

 Department of Pediatrics, Shaare Zedek Medical Center, Jerusalem.

 Israel. June 1996.

Guest Speaker, Annual Meeting of the Israel Neonatal Society. Tel Aviv, Israel. June 1996.

Guest Speaker, Mead Johnson Asia Pacific Meetings.

Singapore. March 6-8, 1997

Sydney, Australia. March 9-11, 1997.

Chair, New England Regional Perinatal Meeting, Chatham, MA. October 1997.

Visiting Professor, University of Cape Town, Department of Paediatrics. May 1-19, 1998.

Guest Speaker, Department of Paediatrics Conference, May 1998.

Guest Speaker and Session Chair, 4th International Congress, "The Young Women at the Rise of the 21st Century". Athens, Greece. November 18-21, 1998.

Chairperson, Poster Symposium on Developmental Biology. Pediatric Societies Annual Meeting. Boston, MA. May 2000.

Chair, New England Regional Perinatal Meeting, Chatham, MA. October 2-4, 2000.

Guest Speaker, March of Dimes and Texas Tech University Health Sciences Center Symposium, Lubbock, TX. February 16, 2001.

Guest faculty, University of Manila, UMED State-of-the-Art Conference, Manila, Philippines July 16-18, 2002.

Chair, New England Regional Perinatal Meeting, Chatham, MA October 1-3, 2003.

NICHD-AAP Workshop on Research in Neonatology. Washington, DC January 15-16, 2004.

Keynote speaker: Israel Neonatal Society. Tel Aviv, Israel, February 2, 2004.

Visiting Professor: Department of Neonatology, Bikur Cholim Hospital, Jerusalem

 Department of Neonatology, Meir Hospital, Kfar Saba, Israel.

Guest Speaker, Pan-American Neonatal Conference. Cartagena, Colombia. October 21-23, 2004.

Plenary Speaker, Eastern Society for Pediatric Research, Greenwich, CT. March 4, 2005.

Faculty, VII Course on Neonatology, Costa Rican Association of Neonatology. San Jose, Costa Rica. August 10-12, 2005.

Chair, New England Regional Perinatal Meeting, Chatham, MA. September 28-30, 2005.

Faculty, New York Regional Perinatal Conference - Issues in Neonatology 2006, Garden City, NY. March 23, 2006.

Chair, New England Regional Perinatal Meeting, Chatham, MA. October 5-7, 2008.

Chair, American Academy of Pediatrics New England Regional Perinatal Meeting, Chatham, MA. October 2-4, 2011.

NATIONAL RESEARCH SUPPORT

# NATIONAL INSTITUTES OF HEALTH

**R01 HL 19752. Phospholipid synthesis by fetal lung in culture.**

**PI: I Gross.**

1976-1979

R01 HL 19752

1979-1982

R01 HL 19752

1982-1985

R01 HL 19752

1987-1990

**P50 HL 46488 (Special Center of Research, SCOR). Response of the developing lung to injury .**

**Director: JB Warshaw, Assoc. Director: I Gross.**

1991-1996

**Subproject. The influence of butyric acid on surfactant protein gene transcription.**

**PI: I Gross.**

**T32 HD 07094 (Institutional Training Grant). Research in Perinatal Medicine .**

**Director: I Gross.**

1982-1983

T32 HD 07094

1983-1986

T32 HD 07094

1986-1991

T32 HD 07094

1991-1996

T32 HD 07094

1996-2001

T32 HD 07094

2001-2006

T32 HD 07094

2006-2011 (PI: P. Gallagher)

**R01 NS 32624. Developing circadian rhythmicity**

**PI: S Rivkees. Co-investigator: I Gross**

1999-2004

**R01 HL-31175. Control of lung surfactant secretion in the newborn.**

**PI: SA Rooney. Co-investigator: I Gross**

1984-1992.

**M01 RR00125. General Clinical Research Center.**

Subproject. Combined hormonal treatment for prevention of Respiratory Distress Syndrome.

PI: I Gross.

1988-1993

Subproject. Treatment of persistent pulmonary hypertension of the newborn with inhaled nitric oxide.

Co-PI: I Gross.

1993-1998

Subproject. The influence of nitric oxide on pulmonary mechanics in infants with severe respiratory disease

PI: I Gross.

1998-2005

Subproject: The role of stem cells in the response of developing lung to injury.

PI: I Gross

2005-2010

AMERICAN HEART ASSOCIATION

**Grant-In-Aid. Influence of nutrition on lung phospholipid synthesis.**

**PI: I Gross**.

1975-1977.

**Grant-in-Aid 900601. Regulation of transcription of surfactant proteins A and B.**

**PI: I Gross.**

1990-1993.

**Grant-in-Aid 9850042T. Regulation of lung maturation by butyric acid.**

**PI: I Gross.**

1998-2000.

**Grant-in-Aid 0050938T. Regulation of surfactant protein A by retinoic acid.**

**PI: I Gross**.

2000-2003.

**BIBLIOGRAPHY**

**PAPERS, REVIEWS, BOOK CHAPTERS**

**Gross, I.** and Warshaw, J.B. Enzyme activities related to fatty acid synthesis in developing mammalian lung. Pediatr. Res. 8, 193-199 (1974).

Loo, S.W.H., **Gross, I.** and Warshaw, J.B. Improved method of naso-jejunal feeding in low-birth- weight infants. J. Pediatr. 85, 104-106 (1974).

**Gross, I.** and Warshaw, J.B. Fatty acid synthesis in developing brain. Acetyl-CoA carboxylase activity. Biol. Neonate 25, 365-375 (1974).

**Gross, I.** and Warshaw, J.B. The influence of dietary deprivation on the enzymes of fatty acid synthesis in rat brain. J. Neurochem. 25, 191-192 (1975).

**Gross, I.**, Rooney, S.A. and Warshaw, J.B. The inhibition of enzymes related to pulmonary fatty acid and phospholipid synthesis by dietary deprivation in the rat. Biochem. Biophys. Res. Commun. 63, 59-63 (1975).

**Gross, I.**, Rooney, S.A. and Warshaw, J.B. The influence of cortisol on the enzymes of fatty acid synthesis in fetal rabbit lung and brain. Pediatr. Res. 9,752-755 (1975).

Rooney, S.A., **Gross, I.**, Gassenheimer, L. and Motoyama, E.K. The stimulation by cortisol of glycerolphosphate phosphatidyltransferase activity in fetal rabbit lung. Biochim. Biophys. Acta 398, 433-441 (1975).

Ablow, R., Driscoll, S., Effman, E., **Gross, I.**, Jolles, C., Uauy, R. and Warshaw, J.B. Comparison of Group B Streptococcal neonatal infection and the respiratory distress syndrome of the newborn. New Engl. J. Med., 294, 65-70 (1976).

**Gross, I.** The role of substrates and nutrition in lung phospholipid synthesis. In: Report of the 70th Ross Conference on Pediatric Research (Moore, T.D. ed.). Ross Laboratories, Columbus, Ohio, p. 34-37 (1976).

**Gross, I.**, Ilic, J., Wilson, C.M. and Rooney, S.A. The influence of postnatal dietary deprivation on the phospholipid content of developing rat lung. Biochim. Biophys. Acta 441, 412-422 (1976).

Rooney, S.A., Gobran, L., **Gross, I.**, Wai-Lee, T.S., Nardone, L.L. and Motoyama, E.K. Studies on pulmonary surfactant. Effects of cortisol administration of fetal rabbits on lung phospholipid content composition and biosynthesis. Biochim. Biophys. Acta 450, 121-130 (1976).

Ablow, R.A., **Gross, I.**, Effman, E.L., Uauy, R. and Driscoll, S.G. The radiographic features of early onset Group B Streptococcal neonatal sepsis. Radiology 124, 771-777 (1977).

**Gross, I.** and Rooney, S.A. Aminophylline stimulates the incorporation of choline into phospholipid in explants of fetal rat lung in organ culture. Biochim. Biophys. Acta 488, 263-269 (1977).

**Gross, I.** Nutritional and hormonal influences on lung phospholipid metabolism. Fed. Proc. 36, 2665-2669 (1977).

**Gross, I.**, Wilson, C.M. and Rooney, S.A. Phosphatidylcholine synthesis in newborn rabbit lung. Developmental pattern and influence of nutrition. Biochim. Biophys. Acta 528, 190-198 (1978).

**Gross, I.**, Smith, G.J.W., Maniscalco, W.M., Czajka, M.R., Wilson, C.M. and Rooney, S.A. An organ culture model for the study of the biochemical development of fetal rat lung. J. Appl. Physiol. 45, 355-362 (1978).

Maniscalco, W.M., Wilson, C.M., **Gross, I.**, Rooney, S.A. and Warshaw, J.B. Development of carbohydrate

and phospholipid metabolism in perinatal rat lung. Biochim. Biophys. Acta 530, 333-346 (1978).

Rooney, S.A., Gobran, L.I., Marino, P.A., Maniscalco, W.M. and **Gross, I.** Effects of betamethasone on the phospholipid content composition and biosynthesis in fetal rabbit lung. Biochim. Biophys. Acta 572, 64-67 (1979).

Rooney, S.A., Marino, P.A., Gobran, L.I., **Gross, I.** and Warshaw, J.B. Thyrotropin-releasing hormone increases the amount of surfactant in lung lavage from fetal rabbits. Pediatr. Res. 13, 623-625 (1979).

**Gross, I.** Respiratory Distress Syndrome. In: 1979 Yearbook of Science and Technology. McGraw Hill, New York pp 331-333.

**Gross, I.** The hormonal regulation of fetal lung maturation. Clinics in Perinatology 6, 377-395 (1979).

Maniscalco, W.M., Wilson, C.M. and **Gross, I.** The influence of aminophylline and cyclic AMP on glycogen metabolism in fetal rat lung in organ culture. Pediatr. Res. 13, 1319-1322 (1979).

**Gross, I.**, Wilson, C.M., Ingleson, L.D., Brehier, A. and Rooney, S.A. The influence of hormones on the biochemical development of fetal rat lung in organ culture. I. Estrogen. Biochim. Biophys. Acta 575, 375-383 (1979).

**Gross, I.**, Smith, G.J.W., Wilson, C.M., Maniscalco, W.M., Ingleson, L.D., Brehier, A. and Rooney, S.A. The influence of hormones on the biochemical development of fetal rat lung in organ culture. II. Insulin. Pediatr. Res. 14, 834-838 (1980).

**Gross, I.**, Wilson, C.M., Ingleson, L.D., Brehier, A. and Rooney, S.A. Fetal lung in organ culture. III. Comparison of dexamethasone thyroxine and methylxanthines. J. Appl. Physiol. 68, 872-877 (1980).

Rooney, S.A., Ingleson, L.D., Wilson, C.M. and **Gross, I.** Insulin antagonism of dexamethasone-induced stimulation of cholinephosphate cytidylyltransferase in fetal rat lung in organ culture. Lung 158, 151-155 (1980).

**Gross, I.**, Freedman, R.M., Wilson, C.M. and Lindsey, S. Organotypic culture of fetal rat lung: Evaluation and comparison to organ culture. Amer. Rev. Resp. Dis. 123, 313-319 (1981).

Freedman, R.M., Ingram, D.L., **Gross, I.**, Ehrenkranz, R.A., Warshaw, J.B. and Baltimore, R.S. A half-century of neonatal sepsis at Yale. Amer. J. Dis. Child. 135, 140-144 (1981).

**Gross, I.** and Wilson, C.M. Fetal lung in organ culture IV. Supra-additive hormone interactions. J. Appl. Physiol. 52, 1420-1425 (1982).

**Gross, I.** and Matthews, T.G. Diagnosis and Management of Respiratory Distress in the Newborn. In: Principles and Practice of Perinatal Medicine (Warshaw, J.B., and Hobbins, J., eds.). Addison-Wesley, California, p. 294-308 (1982)

**Gross, I.**, Ballard, P.L., Ballard, R.A., Jones, C.T. and Wilson, C.M. Corticosteroid stimulation of phosphatidylcholine synthesis in cultured fetal rabbit lung. Evidence for de novo protein synthesis mediated by glucocorticoid receptors. Endocrinology 112, 829-837 (1983).

Rooney, S.A., Chu, A.J., **Gross, I.**, Marino, P.A., Schwartz, R., Seghal, P., Singer, D.B., Susa, J.B., Warshaw, J.B. and Wilson, C.M. Lung surfactant in hyperinsulinemic fetal monkey. Lung 161, 313-317 (1983).

**Gross, I.** and Wilson, C.M. Fetal rat lung maturation. Initiation and modulation. J. Appl. Physiol. 55, 1725-1732 (1983).

**Gross, I.** The regulation of fetal lung development. Prog. Clin. Biol. Res. 140, 93-102 (1983).

**Gross, I.** Fetal lung maturation. Initiation and Modulation. In: Respiratory Distress Syndrome (Raivio, K. ed.). Academic Press, New York p 51-64 (1984).

**Gross, I.**, Dynia, D.W., Wilson, C.M., Ingleson, L.D., Gewolb, I.H. and Rooney, S.A. Glucocorticoid - thyroid hormone interactions in fetal rat lung. Pediatr. Res. 18, 191-196 (1984).

Ballard, P.L., Ballard, R.A., Gonzales, L.K., Huemmelink, R., Wilson, C.M. and **Gross, I.** Corticosteroid binding by fetal rat and rabbit lung in organ culture. J. Steroid Biochem. 21, 117-126 (1984).

**Gross, I.** The induction of fetal lung maturation. In: Critical Care of the Child. (Prakash, O., ed.). Martinus Nijhoff, The Hague. p 29-38 (1984).

Duncan, C.C., Ment, L.R., Ehrenkranz, R.A., **Gross, I.**, Hobbins, J.C. and McClure, M. Management of spina bifida in the newborn infant. Conn. Med. 48, 349-352 (1984).

Gewolb, I.H., Rooney, S.A., Barrett, C., Ingleson, L.D., Light, D., Wilson, C.M., Smith, G.J.W., **Gross, I.** and Warshaw, J.B. Delayed pulmonary maturation in the fetus of the streptozotocin-diabetic rat. Exptl. Lung Res. 8, 141-152 (1985).

Moya, F.R. and **Gross, I.** Effect of theophylline on fetal rat lung phosphatidylcholine synthesis in vivo. Devel. Pharmacol. Ther. 8, 9-16 (1985).

**Gross, I.** The biochemical development of fetal lung. In: Respiratory Control and Lung Development in the Fetus and Newborn (Johnson, B., and Gluckman, P. eds.) Perinatology Press, Ithaca, N.Y. p. 87-105 (1986).

**Gross, I.** Dynia, D.W., Rooney, S.A., Smart, D.A., Warshaw, J.B., Sissom, J.F. and Hoath, S.B. Influence of epidermal growth factor on fetal rat lung development in vitro. Pediatr. Res. 20, 473-477 (1986).

Moya, F., Mena, P., Heusser, F., Foradori, A., Paiva, E., Yazigi, R., Michaud, P. and **Gross, I.** Response of the maternal, fetal and neonatal pituitary-thyroid axis to thyrotropin releasing hormone. Pediatr. Res. 20, 982-986 (1986).

Rooney, S.A., Chu, A.J., Dynia, D.W., Ingleson, L.D., Smart, D.A., Wilson, C.M. and **Gross, I.** Glucocorticoid stimulation of choline-phosphate cytidylyltransferase activity in fetal rat lung. Receptor-response relationships. Biochim. Biophys. Acta 888, 208-216 (1986).

Kresch, M.J., Dynia, D.W. and **Gross, I.** Culture of differentiated and undifferentiated alveolar type II cells from fetal rat lung. Biochim. Biophys. Acta 930, 19-32 (1987).

Kresch, M.J. and **Gross, I.** The biochemistry of fetal lung development. Clinics in Perinatology 14, 481-507 (1987).

Moya, F.R. and **Gross, I.** Diabetes and fetal lung development. In: Diabetes in Pregnancy: Principles and Practice. (Reece, E.A., Coustan, D., and Hobbins, J.C., eds.). Churchill, Livingstone, New York, (1988).

Kresch, M.J., Smart, D.A., Wilson, C.M., **Gross, I.** and Rooney, S.A. Activities of enzymes of phospholipid and fatty acid synthesis in fetal and adult rat type II pneumocytes. Biochim. Biophys. Acta 962, 173-177 (1988).

Moya, F.R. and **Gross, I.** Prevention of respiratory distress syndrome. Sem. Perinatol. 12, 348-358 (1988).

**Gross, I.** Surfactant phospholipid and protein synthesis: Role of glucocorticoid receptors. In: Surfactant and the Respiratory Tract. (Ekelund, L., Jonson, B., Malm, L., eds.). Elsevier, Amsterdam. p 117- 125 (1989).

Markowitz, R.I., Mercurio, M.R., Vahjen, G.A., **Gross, I.** and Touloukian, R.J. Congenital lobar emphysema. The roles of CT and V/Q scan. Clin. Pediatr. 28, 19-23 (1989).

**Gross, I.**, Wilson, C.M., Dynia, D.W. and Floros, J. Initiation of fetal rat lung phospholipid and surfactant associated protein A mRNA synthesis. Pediatr. Res. 25, 239-244 (1989).

**Gross, I.** Respiratory System. In: Principles and Practice of Pediatrics (Oski, F., DeAngelis, C., Feigin, R., and Warshaw, J.B., eds.). J.B. Lippincott, Philadelphia. pp 329-344 (1989).

Dworetz, A.R., Moya, F.R., Sabo, B., Gladstone, I.M. and **Gross, I.** Survival of infants with persistent pulmonary hypertension without extracorporeal membrane oxygenation. Pediatrics 84, 1-6 (1989).

**Gross, I.** Prevention of RDS: Synergistic therapies. In: The Tiny Baby, Mead Johnson Symposium on Perinatal and Developmental Medicine No. 33. Perinatology Press, Ithaca, New York. p37-41 (1990).

**Gross, I.** The extracorporeal membrane oxygenation debate. Letter to the editor. Pediatrics 85, 383-384 (1990).

Nichols, K.V., Dynia, D.W., Floros, J., Veletza, S.V., Wilson, C.M. and **Gross, I.** Influence of hormones and butyrate on fetal lung surfactant protein A mRNA. Am. J. Physiol. (Lung Cell Mol. Physiol.) 259, L488-L495 (1990).

**Gross, I.** Regulation of fetal lung maturation. Am. J. Physiol. (Lung Cell Mol. Physiol.) 259, L337-L344 (1990).

Floros, J., **Gross, I.**, Nichols, K., Veletza, S., Dynia, D.W., Lu, H., Wilson, C.M. and Peterec, S.M. Hormonal effects on surfactant protein B mRNA in cultured fetal rat lung. Am. J. Respir. Cell Mol. Biol. 4, 449-454 (1991).

Liechty, E. A., Donovan, E., Purohit, D., Gilhooly, J., Feldman, B., Noguchi, A., Denson, S., Taeusch, W., **Gross, I.**, Stevens, D., Ikegami, M., Zachman, R. D., Carrier, S.T., Gunkel, J.H. and Gold, A.J. Reduction of neonatal mortality after multiple doses of bovine surfactant in low birthweight infants with respiratory distress syndrome. Pediatrics 88, 19-28 (1991).

Kresch, M.J., Lwebuga-Mukasa, J., Wilson, C.M. and **Gross, I.** Comparison of the Maclura pomifera lectin binding glycoprotein in late fetal and adult rat lung. Lung 169, 139-151 (1991).

**Gross, I.** Hormonal Therapy for Prevention of Respiratory Distress Syndrome. In: Fetal and Neonatal Physiology (Polin, R.A., Fox W.W., eds.) Saunders, Philadelphia. p. 1002-1006 (1992).

Ballard, R.A., Ballard, P.L., Creasy, R.K., Padbury, J.F., Polk, D.H., Bracken, M., Moya, F.R., **Gross, I.** and participants in the TRH collaborative trial. Respiratory distress in premature infants after prenatal treatment with thyrotropin-releasing hormone and glucocorticoid. Lancet 339, 510-515 (1992).

Nichols, K.V. and **Gross, I.** Fetal Lung Development and Amniotic Fluid Phospholipid Analysis. In: Medicine of the Fetus and Mother (Reece, E.A., Hobbins, J.C., Mahoney, M.J., and Petrie, R., eds.) J.B. Lippincott, Philadelphia. p117-124 (1992).

Veletza, S.V., Nichols, K.V., **Gross, I.**, Lu, H., Dynia, D.W. and Floros, J. Surfactant protein C: Hormonal control of SP-C mRNA levels in vitro. Am. J. Physiol. (Lung Cell Mol. Physiol.) 262, L684-L687 (1992).

Ballard, P.L., Ballard, R.A. Creasy, R.K., Padbury, J.F., Polk, D.H., Bracken, M., Moya, F.R., and **Gross, I.** Plasma thyroid hormones and prolactin in premature infants and their mothers after prenatal treatment with thyrotropin-releasing hormone. Pediatr. Res. 32, 673-678 (1992).

Nichols, K.V. and **Gross, I.** Fetal Lung Development and Amniotic Fluid Analysis. In: Review for Medicine of the Fetus and Mother (Reece, E.A., Hobbins, J.C., Mahoney, M.J., and Petrie, R., eds.) J.B. Lippincott, Philadelphia. p17-18 (1992).

Moya, F.R. and **Gross, I.** Combined hormonal therapy for the prevention of RDS and its consequences. Sem. Perinatol. 17, 267-274 (1993).

**Gross, I.** Respiratory System. In: Principles and Practice of Pediatrics (Oski, F., DeAngelis, C., Feigin, R., and Warshaw, J.B., eds.). J.B. Lippincott, Philadelphia. 2nd edition, pp 365-379 (1994)

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