




David N. Cornfield

Anne T. and Robert M. Bass Professor of Pediatric Pulmonary Medicine and Professor, by courtesy, of Surgery

Pediatrics - Pulmonary Medicine

 NIH Biosketch available Online

 Curriculum Vitae available Online

CLINICAL OFFICES

- **Pediatric Pulmonary and Cystic Fibrosis Clinic**

770 Welch Rd Ste 380

MC 5882

Palo Alto, CA 94304

Tel (650) 724-4788

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

Meena Kakani - Administrative Manager

Email mkakani@stanford.edu

Bio

BIO

A physician scientist, Dr. Cornfield is actively engaged in clinical medicine, teaching and research. In clinical arena, Dr. Cornfield is a Pediatrician with an active practice in both Pediatric Pulmonary Medicine and Pediatric Critical Care Medicine. In the research arena, Dr. Cornfield's lab addresses several large thematic issues. The areas of concentration include: (i) regulation of pulmonary vascular tone; (ii) oxygen sensing in the lung; (iii) biological determinants of preterm labor focusing on myometrial smooth muscle cells; (iv) developmental regulation of barrier function in the lung; and (v) the role of hypoxia-inducible factor-1 in lung development. In addition, there is an active translational research component.

CLINICAL FOCUS

- Pediatric Pulmonary Med
- Pediatric Critical Care Medicine
- Pediatric Pulmonary

ACADEMIC APPOINTMENTS

- Professor, Pediatrics - Pulmonary Medicine
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Medical Director - Respiratory Therapy, Lucile Packard Children's Hospital, (2011- present)
- Faculty Practice Organization, Stanford University, (2007- present)
- Fellowship Director - Pediatric Critical Care Medicine, Stanford, (2007-2014)

- Medical Director - Pediatric Intensive Care Unit, Lucile Packard Children's Hospital, (2007-2012)
- Director - Center for Excellence in Pulmonary Biology, Stanford University, (2006- present)
- Division Director - Pulmonary Medicine, Stanford University, (2006- present)
- Service Chief - Pediatric Critical Care Medicine, Lucile Packard Children's Hospital, (2006-2014)
- Associate Dean for Research, University of Minnesota Medical School, (2004-2005)
- Program Director - Pediatric Sedation and Monitored Anesthesia, Fairview University Medical Center, (2004-2005)
- Interim Chair, Department of Pediatrics University of Minnesota, (2003-2004)
- Program Director - Pediatric Emergency Medicine, University of Minnesota Physicians, Fairview-Ridges Hospital, (2001-2004)
- Executive Board Member, University of Minnesota Physicians, (2000-2003)
- President - Pediatric Clinical Service Unit, University of Minnesota Physicians, (1999-2000)
- Board Member - Pediatric Clinical Service Unit, University of Minnesota Physicians, (1998-2005)
- Medical Director - Pediatric Intensive Care Unit, Fairview University Medical Center, University of Minnesota Medical School, (1998-2005)
- Division Head - Pediatric Pulmonary and Critical Care Medicine, University of Minnesota Medical School, (1997-2005)
- Medical Director - Pediatric Flexible Bronchoscopy Service, Fairview University Medical Center, University of Minnesota Medical School, (1997-2005)
- Medical Director - Pediatric Lung Transplantation Program, Fairview University Medical Center, University of Minnesota Medical School, (1997-2005)
- Medical Director - Transitional Care Unit, Fairview University Medical Center, University of Minnesota Medical School, (1997-2005)
- Interim Division Head - Pediatric Pulmonary and Critical Care Medicine, University of Minnesota Medical School, (1996-1997)
- Fellowship Director - Pediatric Critical Care Medicine, University of Minnesota Medical School, (1994-2005)

HONORS AND AWARDS

- Editorial Board Member, Pediatrics (2010-present)
- Faculty Teaching Honor Roll, Stanford Department of Pediatrics (2010-present)
- Pediatric Academic Societies-Steering Committee, PAS (2010-present)
- Study Section Member-RIBT, NIH (2009-present)
- President, Society for Pediatric Research (2009-2010)
- Editorial Board Member, American Journal of Physiology-Lung, Cell and Mol Physiology (2008-present)
- Pediatric Clerkship Faculty Honor Roll for Teaching (recognized annually), Stanford University Medical School (2008-present)
- Top Pediatrician (recognized annually), San Francisco Magazine (2008-present)
- Best Doctors in America (recognized annually), Best Doctors in America (2007-present)
- Best Pediatrician (recognized annually), San Jose Magazine (2007-present)
- Vice-President Elect, Society for Pediatric Research (2007)
- Anne T. and Robert M. Bass Professor of Pulmonary Medicine, Stanford University (2006-present)
- Distinguished Alumni Lectureship, Cotton Club, University of Colorado Medical School, Division of Pediatric Pulmonary Medicine, Breckenridge, CO (2003)
- America's Top Pediatricians (recognized annually), Consumer's Research Council of America, Washington, D.C. (2002-present)
- Award for Excellence (Awarded to a single Medical School faculty member annually), University of Minnesota Medical School (2001)
- Established Investigator, American Heart Association (2000-2004)
- Outstanding Faculty Educator Award - Department of Pediatrics, University of Minnesota Medical School (2000-2001)
- Established Investigator, American Heart Association (2000)
- Master Teacher of the Year Award, University of Minnesota Medical School, University of Minnesota (2000)
- Outstanding Clinical-Scholar Award, Fairview University Medical Center and the University of Minnesota Medical School (2000)

- Outstanding Faculty Educator Award, University of Minnesota Medical School, Department of Pediatrics (1999-2000)
- Outstanding Faculty Educator Award, University of Minnesota Medical School, Department of Pediatrics (1998-1999)
- Member, Society for Pediatric Research (1996)
- Pediatric Scholar Award, National Institutes of Health Child Health Research Center (1996)
- Outstanding Faculty Educator Award, University of Minnesota Pediatric Residency Program (1995)
- Richard D. Rowe Award: Outstanding Young Investigator Award in Perinatal Cardiology, Society for Pediatric Research (1995)
- Grant-in-Aid Recipient, Minnesota Heart Association (1994-1996)
- University Children's Foundation Research Scholar Award, University of Minnesota Department of Pediatrics (1994-1995)
- Faculty Teacher of the Year Award, University of Minnesota Pediatric Residency Program (1994)
- Clinician-Scientist Award, American Heart Association (1993-1998)
- National Research Service Award, National Institutes of Health (1990-1993)
- Clark Seely Award for Excellence in Primary Care - Department of Pediatrics, University of Missouri-Kansas City (1989)
- Daniel C. Darrow Award as the Most Outstanding House Officer, Children's Mercy Hospital (1989)
- Pediatric Chief Resident, Children's Mercy Hospital (1989)
- Clark Seely Award for Excellence in Primary Care - Department of Pediatrics, University of Missouri-Kansas City (1988)
- Richardson Resident Research Award, Renal Perfusion in ECMO (1988)
- Independent Study Program, University of Wisconsin School of Medicine (1983-1984)
- Human Subjects Committee, University of Wisconsin School of Medicine (1982-1985)
- Graduate with Distinction in Major (Philosophy), Highest Honors, University of Wisconsin-Madison (1981)
- BioCore Honors Course Director, Biology, Society, and Human Values (1980-1981)
- Outstanding Senior Honors Thesis - Department of Philosophy, College of Letters and Sciences (1980-1981)
- Senior Senator, University Wisconsin Student Senate (1980-1981)
- Outstanding Junior Honors Thesis, Center for Biomedical Ethics (1979-1980)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Richard D. Rowe Selection Committee, Society for Pediatric Research (2000 - 2001)
- Special Task Force to Develop Position Paper for Inhaled Nitric Oxide, American Thoracic Society (2001 - 2003)
- Council Member, Society for Pediatric Research (2002 - 2005)
- Program Committee, Grover Conference on the Pulmonary Circulation, American Thoracic Society and American Heart Association (2002 - 2005)
- Chairperson - Richard D. Rowe Selection Committee, Society for Pediatric Research (2004 - 2004)
- Chair, Young Investigator Award Committee, Society for Pediatric Research (2004 - 2007)
- Vice-President with ascension to Presidency, Society for Pediatric Research (2007 - 2007)
- Program Committee, Pediatric Academic Societies Annual Meeting (2008 - 2012)
- Steering Committee, Federation of Pediatric Organizations (2009 - 2010)
- Committee on Pediatric Education, American Academy of Pediatrics (2009 - 2013)
- Executive Committee, Pediatric Academic Societies (2010 - 2014)
- Advocacy Committee, Pediatric Academic Societies (2011 - present)
- Pediatrics 2020, Federation of Pediatric Organizations (2012 - present)
- Chair-Nominating Committee, Pulmonary Circulation, American Thoracic Society (2015 - present)
- Member, Executive Committee, Pulmonary Circulation, American Thoracic Society (2015 - present)

- Member, External Review Committee, Gale and Ira Drukier Prize in Children's Health Research, Cornell University (2016 - present)

PROFESSIONAL EDUCATION

- Fellowship: Children's Hospital Colorado (1993) CO
- Residency: Children's Mercy Hospital Pediatric Residency Program (1989) MO
- Internship: Children's Mercy Hospital Pediatric Residency Program (1987) MO
- Medical Education: University of Wisconsin Madison Office of the Registrar (1986) WI
- Board Certification: Pediatric Critical Care Medicine, American Board of Pediatrics (1996)
- Board Certification: Pediatric Pulmonary, American Board of Pediatrics (1994)
- Board Certification, American Board of Pediatrics , Pediatric Critical Care Medicine (1996)

LINKS

- Cornfield Lab: <http://med.stanford.edu/cornfieldlab-2.html>
- Pediatric Pulmonary, Asthma and Sleep Medicine: <http://med.stanford.edu/pedpulmonary/Homepage.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Currently, the Laboratory is engaged in 4 distinct, but related areas of research.

Molecular regulation of pulmonary vascular tone:

Our lab addresses the regulation of pulmonary vascular tone. We investigate the signal transduction pathway of molecules that play an important role in determining pulmonary vascular tone. We identified a novel role for HIF-1 α in the regulation of tone in lung via effects on myosin light chain phosphorylation in the pulmonary artery smooth muscle cells and in regulating expression of the α_1 subunit of the calcium sensitive potassium channel. We outlined a novel role for endothelin derived from smooth muscle cells in modulating the pulmonary vascular response to hypoxia. Most recently, we have undertaken a line of research using human tissue.

Preterm Labor:

We embarked on an exploratory line of research in preterm labor wherein our expertise in vascular biology, smooth muscle and ion channel physiology might be leveraged to address abnormal uterine contractility. Over the past 5 years, we have focused on uterine contractility. Important discoveries in this area include identification an ion channel, transient receptor potential vanilloid 4, that plays a central and critical role in the control of uterine tone during both quiescence and activation. Our laboratory has created multiple experimental models, established collaborations, and acquired reagents (specifically genetically modified mice) that allow us to rigorously and mechanistically probe the cellular and molecular underpinnings of both physiologic and pathophysiologic labor. We are poised to move the discoveries from bench to bedside.

Chronic Lung Disease of Infancy:

Early contributions were focused upon the regulation of perinatal pulmonary vascular tone. Our Laboratory addressed the subcellular mechanisms that underlie the postnatal adaption of the pulmonary circulation. Key publications demonstrated that pulmonary artery endothelial cells produced endothelial-derived relaxing factor (EDRF), subsequently identified as nitric oxide (NO), in response to ventilation, oxygenation and shear stress. Further work demonstrated that oxygen, one of the key stimuli for perinatal pulmonary vasodilation, as well as NO acts via quantal and localized release of calcium from ryanodine-sensitive stores to prompt activation of the

pulmonary artery smooth muscle cell calcium-sensitive potassium channels. These papers informed the development of several clinical trials wherein the efficacy of inhaled nitric oxide in persistent pulmonary hypertension of the newborn was established.

With improved obstetrical and neonatal care, more, smaller and less developmentally mature infants are surviving even extreme prematurity. Our Laboratory is interested in two fundamental questions surrounding chronic lung disease of infancy. First, whether and how might exposure of oxygen levels in excess of the normally low intrauterine oxygen tension state of the intrauterine environment might compromise lung development. Second, as pulmonary hypertension complicates chronic lung disease of infancy in ~30% of cases, our Laboratory is focusing on the molecular mechanisms that underlie the increase in pulmonary artery blood pressure and identification of novel therapeutic tools to control blood pressure and promote lung development.

Pulmonary Artery Endothelial Cell Barrier Function

Among the most difficult clinical issues to manage is acute respiratory distress syndrome (ARDS). Mortality rates are high. Children with ARDS are more likely to survive than adults with similar severity of illness. Why and how barrier function is more well-preserved in children compared to adults is unknown. However, we recently demonstrated that focal adhesion kinase expression increases more rapidly in response to either an inflammatory stimulus or hypoxia, in neonates, compared to adults.

CLINICAL TRIALS

- Rare Genetic Disorders of the Breathing Airways, Recruiting

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Daiana Fornes, Jean Lee, Lori Lee

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cardiovascular Medicine (Fellowship Program)
- Molecular and Cellular Physiology (Phd Program)

Publications

PUBLICATIONS

- **SM22# cell specific HIF stabilization mitigates hyperoxia-induced neonatal lung injury.** *American journal of physiology. Lung cellular and molecular physiology*
Ito, R., Barnes, E. A., Che, X., Alvira, C. M., Cornfield, D. N.
2022
- **Interstitial Lung Disease Caused by STING-Associated Vasculopathy with Onset in Infancy**
Lee, L., Cornfield, D. N.
AMER THORACIC SOC.2022
- **Pharmacologic Inhibition of Wnt Signaling in a Murine Model of Pulmonary Hypertension Halts Neointimal Growth and Causes Neointimal Lesion Regression in Pulmonary Arteries**
Steffes, L. C., Cornfield, D. N., Kumar, M. E.
AMER THORACIC SOC.2022
- **A low-cost, highly functional, emergency use ventilator for the COVID-19 crisis.** *PloS one*
Raymond, S. J., Baker, S., Liu, Y., Bustamante, M. J., Ley, B., Horzewski, M. J., Camarillo, D. B., Cornfield, D. N.

2022; 17 (3): e0266173

- **Micro-RNA 203 Regulates Myometrial Smooth Muscle Cell Expression of the Transient Receptor Vanilloid 4 Channel and Contractility.**
Ying, L., Alvira, C. M., Cornfield, D. N.
SPRINGER HEIDELBERG.2021: 122A
- **Coronavirus disease 2019 respiratory disease in children: clinical presentation and pathophysiology.** *Current opinion in pediatrics*
Steffes, L. C., Cornfield, D. N.
2021; 33 (3): 302–10
- **Editorial: Covid-19 and respiratory illness in children: seeking knowledge, discerning truth.** *Current opinion in pediatrics*
Cornfield, D. N.
2021; 33 (3): 292–93
- **The Effect of Combining Business Training, Microfinance, and Support Group Participation on Economic Status and Intimate Partner Violence in an Unplanned Settlement of Nairobi, Kenya** *JOURNAL OF INTERPERSONAL VIOLENCE*
Sarnquist, C. C., Ouma, L., Lang'at, N., Lubanga, C., Sinclair, J., Baiocchi, M. T., Cornfield, D. N.
2021; 36 (7-8): 3903–21
- **Mentor-Mentee interactions: a 2-way street. The APS-SPR virtual chat series.** *Pediatric research*
Cornfield, D. N., October, T. W., Libby, A. M., Abman, S. H.
2021
- **Bronchopulmonary Dysplasia: Then, Now, and Next.** *Pediatric allergy, immunology, and pulmonology*
Tracy, M. C., Cornfield, D. N.
2020; 33 (3): 99-109
- **Diverse homeostatic and immunomodulatory roles of immune cells in the developing mouse lung at single cell resolution.** *eLife*
Domingo-Gonzalez, R., Zanini, F., Che, X., Liu, M., Jones, R. C., Swift, M. A., Quake, S. R., Cornfield, D. N., Alvira, C. M.
2020; 9
- **Editorial: Pediatric Pulmonology 2020, replacing fear with hope!** *Current opinion in pediatrics*
Cornfield, D. N.
2020; 32 (3): 376–77
- **Pulmonary Artery Smooth Muscle Cell Bone Morphogenetic Protein 2 Promotes Pulmonary Endothelial Cell Migration and Angiogenesis**
Barnes, E., Cornfield, D.
WILEY.2020
- **Dynamic MicroRNA 203 Expression Regulates Myometrial Smooth Muscle Cell Transient Receptor Vanilloid 4 Channel Expression During Pregnancy.**
Ying, L., Ingles, J. A., Alvira, C. M., Cornfield, D. N.
SPRINGER HEIDELBERG.2020: 68A
- **Extracellular Calcium Entry via the TRPV4 Channel Potentiates NF kappa B Activation in the Myometrium.**
Ingles, J. A., Rodriguez, S., Ying, L., Cornfield, D. N., Alvira, C. M.
SPRINGER HEIDELBERG.2020: 109A
- **Mucus plugging, air trapping, and bronchiectasis are important outcome measures in assessing progressive childhood cystic fibrosis lung disease.** *Pediatric pulmonology*
Robinson, T. E., Goris, M. L., Moss, R. B., Tian, L., Kan, P., Yilma, M., McCoy, K. S., Newman, B., de Jong, P. A., Long, F. R., Brody, A. S., Behrje, R., Yates, et al
2020
- **Defining Neointimal Heterogeneity and the Signals Driving Vasculopathy in Pulmonary Hypertension**
Steffes, L. C., Cornfield, D. N., Kumar, M.
AMER THORACIC SOC.2020
- **Vitamin D: Feel it in More Than Just Your Bones!** *American journal of respiratory cell and molecular biology*
Cornfield, D. N.
2020

- **REDUCING OFF-LABEL DORNASE ALFA UTILIZATION THROUGH COMPUTERIZED ORDER ENTRY OPTIMIZATION**
Moss, J., Gaskari, S., Cornfield, D., Hammer, G.
LIPPINCOTT WILLIAMS & WILKINS.2020
- **A proposal for the addressing the needs of the pediatric pulmonary work force.** *Pediatric pulmonology*
Gaston, B. n., Laguna, T. A., Noah, T. L., Hagood, J. n., Voynow, J. n., Ferkol, T. n., Hershenson, M. n., Boyne, K. n., Delecaris, A. n., Ross, K. n., Gozal, D. n., Celedón, J. C., Abman, et al
2020
- **Bronchopulmonary Dysplasia: Then, Now, and Next** *Pediatric Allergy, Immunology, and Pulmonology*
Tracy, M. C., Cornfield, D. N.
2020; 33 (3): 99-109
- **Three Infants with Pathogenic Variants in the ABCA3 Gene: Presentation, Treatment and Clinical Course.** *The Journal of pediatrics*
Si, n. n., X, n. n., Steffes, n. n., L C, n. n., Schymick, n. n., J C, n. n., Hazard, n. n., F K, n. n., Tracy, n. n., M C, n. n., Cornfield, n. n., D N, n. n.
2020
- **Novel Prescriptions From Medical Schools for Physician-Scientist Training and Engagement in the Twenty-First Century.** *Academic medicine : journal of the Association of American Medical Colleges*
Simpson, R. L., Cornfield, D. N., Burris, J. E.
2020; Publish Ahead of Print
- **Pediatric pulmonology, ever changing, but happily in the same, old boat.** *Current opinion in pediatrics*
Cornfield, D. N.
2019
- **Loss of TPRV4 Attenuates NF kappa B Activation and Inflammation Thereby Decreasing Murine Susceptibility to LPS-Induced Preterm Labor.**
Ingles, J. A., Rodriguez, Z., Ying, L., Cornfield, D. N., Alvira, C. M.
SAGE PUBLICATIONS INC.2019: 110A
- **Usability of a Novel Digital Asthma Management Program**
Harris, B. U., Carchia, M., Huffaker, M. F., Cornfield, D. N.
MOSBY-ELSEVIER.2019: AB170
- **Editorial: Pediatric pulmonology, ever changing, but happily in the same, old boat.** *Current opinion in pediatrics*
Cornfield, D. N.
2019; 31 (3): 328–29
- **More than BPD? Diagnosis, Prognosis and Treatment of ABCA3 Deficiency in an Extremely Premature Infant**
Steffes, L. C., Tracy, M., Cornfield, D. N.
AMER THORACIC SOC.2019
- **Overexpression of Hypoxia Inducible Factors in Pulmonary Artery Smooth Muscle Cells Mitigates Hypoxia-Induced Pulmonary Hypertension**
Barnes, E. A., Che, X., Ito, R., Reddy, S., Cornfield, D. N.
AMER THORACIC SOC.2019
- **Pulmonary artery smooth muscle cell HIF-1alpha regulates endothelin expression via microRNA-543.** *American journal of physiology. Lung cellular and molecular physiology*
Wang, C., Ying, L., Barnes, E. A., Adams, E. S., Kim, F. Y., Engel, K. W., Alvira, C. M., Cornfield, D. N.
2018; 315 (3): L422–L431
- **Pulmonary artery smooth muscle cell HIF-1 alpha regulates endothelin expression via microRNA-543** *AMERICAN JOURNAL OF PHYSIOLOGY-LUNG CELLULAR AND MOLECULAR PHYSIOLOGY*
Wang, C., Ying, L., Barnes, E. A., Adams, E. S., Kim, F. Y., Engel, K. W., Alvira, C. M., Cornfield, D. N.
2018; 315 (3): L422–L431
- **Settling the Score in Pulmonary Hypertension?** *Pediatric critical care medicine : a journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*
Hopper, R. K., Cornfield, D. N.
2018; 19 (8): 782–83

- **Passive Nocturnal Physiologic Monitoring Enables Early Detection of Exacerbations in Children with Asthma A Proof-of-Concept Study** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Huffaker, M. F., Carchia, M., Harris, B. U., Kethman, W. C., Murphy, T. E., Sakarovitch, C. D., Qin, F., Cornfield, D. N.
2018; 198 (3): 320–28
- **Settling the Score in Pulmonary Hypertension?** *PEDIATRIC CRITICAL CARE MEDICINE*
Hopper, R. K., Cornfield, D. N.
2018; 19 (8): 782–83
- **beta 1-Subunit of the calcium-sensitive potassium channel modulates the pulmonary vascular smooth muscle cell response to hypoxia** *AMERICAN JOURNAL OF PHYSIOLOGY-LUNG CELLULAR AND MOLECULAR PHYSIOLOGY*
Barnes, E. A., Lee, L., Barnes, S. L., Brenner, R., Alvira, C. M., Cornfield, D. N.
2018; 315 (2): L265–L275
- **An amyloidogenic hexapeptide derived from amylin attenuates inflammation and acute lung injury in murine sepsis** *PLOS ONE*
Mahapatra, S., Ying, L., Ho, P., Kurnellas, M., Rothbard, J., Steinman, L., Cornfield, D. N.
2018; 13 (7): e0199206
- **Developmental differences in focal adhesion kinase expression modulate pulmonary endothelial barrier function in response to inflammation** *AMERICAN JOURNAL OF PHYSIOLOGY-LUNG CELLULAR AND MOLECULAR PHYSIOLOGY*
Ying, L., Alvira, C. M., Cornfield, D. N.
2018; 315 (1): L66–L77
- **Pediatric pulmonary medicine: at the nexus of care and discovery** *CURRENT OPINION IN PEDIATRICS*
Cornfield, D. N.
2018; 30 (3): 364–65
- **The Effect of Combining Business Training, Microfinance, and Support Group Participation on Economic Status and Intimate Partner Violence in an Unplanned Settlement of Nairobi, Kenya.** *Journal of interpersonal violence*
Sarnquist, C. C., Ouma, L., Lang'at, N., Lubanga, C., Sinclair, J., Baiocchi, M. T., Cornfield, D. N.
2018: 886260518779067
- **An Amyloidogenic Hexapeptide Derived from Amylin Attenuates Inflammation and Acute Lung Injury in Murine Sepsis**
Mahapatra, S., Ying, L., Steinman, L., Cornfield, D.
AMER ACAD PEDIATRICS.2018
- **Passive Nocturnal Physiologic Monitoring Enables Early Detection of Exacerbations in Asthmatic Children: A Proof of Concept Study.** *American journal of respiratory and critical care medicine*
Huffaker, M. F., Carchia, M., Harris, B. U., Kethman, W. C., Murphy, T. E., Sakarovitch, C. C., Qin, F., Cornfield, D. N.
2018
- **beta1 Subunit of the Calcium-Sensitive Potassium Channel Modulates the Pulmonary Vascular Smooth Muscle Cell Response to Hypoxia.** *American journal of physiology. Lung cellular and molecular physiology*
Barnes, E. A., Lee, L., Barnes, S. L., Brenner, R., Alvira, C. M., Cornfield, D. N.
2018
- **Developmental Differences in Focal Adhesion Kinase Expression Modulate Pulmonary Endothelial Barrier Function in Response to Inflammation.** *American journal of physiology. Lung cellular and molecular physiology*
Ying, L., Alvira, C. M., Cornfield, D. N.
2018
- **TRPV4 Promotes Myometrial Inflammation and Contractility in Preterm Mice Exposed to Low Dose Lipopolysaccharide.**
Rodriguez, Z., Ying, L., Cornfield, D. N., Alvira, C. M.
SAGE PUBLICATIONS INC.2018: 190A
- **In Status Asthmaticus, Changes in Heart and Respiratory Rates Have Important Prognostic Implications**
Okorie, C., Balasubramanian, V., Sakarovitch, C., Hedlin, H., Harris, B., Kethman, W. C., Huffaker, M., Cornfield, D. N.
AMER THORACIC SOC.2018
- **The evolution of disease: chronic lung disease of infancy and pulmonary hypertension** *CURRENT OPINION IN PEDIATRICS*
Tracy, M. C., Cornfield, D. N.

2017; 29 (3): 320-325

- **Pediatric pulmonary medicine, then and next** *CURRENT OPINION IN PEDIATRICS*
Cornfield, D. N.
2017; 29 (3): 303-4
- **the Only Question.** *Hospital pediatrics*
Tracy, M. C., Cornfield, D. N.
2017; 7 (5): 297-299
- **Disrupted BKCa Channel beta 1 Subunit Gene Contributes to Vascular Dysfunction in Pulmonary Hypertension**
Barnes, E. A., Chen, C., Lee, L., Barnes, S. L., Cornfield, D. N.
FEDERATION AMER SOC EXP BIOL.2017
- **Micro-RNA 203 Regulates Myometrial Smooth Muscle Cell Expression of the Transient Receptor Vanilloid 4 Channel**
Ying, L., Barnes, E. A., Rodriguez, S., Alvira, C. M., Cornfield, D. N.
FEDERATION AMER SOC EXP BIOL.2017
- **Loss of smooth muscle cell hypoxia inducible factor-1 alpha underlies increased vascular contractility in pulmonary hypertension** *FASEB JOURNAL*
Barnes, E. A., Chen, C., Sedan, O., Cornfield, D. N.
2017; 31 (2): 650-662
- **Hypoxia Inducible Factor-1 alpha Increases Bone Morphogenetic Protein Receptor 2 Signaling In Pulmonary Artery Endothelial Cells (paecs)**
Kuang, J., Tian, X., Prosseda, S., Tian, A., Cornfield, D., Nicolls, M. R., Spiekerkoetter, E. F.
AMER THORACIC SOC.2017
- **Unique aspects of the developing lung circulation: structural development and regulation of vasomotor tone** *PULMONARY CIRCULATION*
Gao, Y., Cornfield, D. N., Stenmark, K. R., Thebaud, B., Abman, S. H., Raj, J. U.
2016; 6 (4): 407-425
- **Loss of smooth muscle cell hypoxia inducible factor-1a underlies increased vascular contractility in pulmonary hypertension.** *FASEB journal*
Barnes, E. A., Chen, C., Sedan, O., Cornfield, D. N.
2016
- **There Is No "I" in Team: New Challenges for Career Development in the Era of Team Science** *JOURNAL OF PEDIATRICS*
Libby, A. M., Cornfield, D. N., Abman, S. H.
2016; 177: 4-5
- **Hypoxia-inducible factor-1 plays a role in phosphate-induced vascular smooth muscle cell calcification** *KIDNEY INTERNATIONAL*
Mokas, S., Lariviere, R., Lamalice, L., Gobeil, S., Cornfield, D. N., Agharazii, M., Richard, D. E.
2016; 90 (3): 598-609
- **Pulmonary hypertension in the premature infant: a challenging comorbidity in a vulnerable population** *CURRENT OPINION IN PEDIATRICS*
O'Connor, M. G., Cornfield, D. N., Austin, E. D.
2016; 28 (3): 324-330
- **Pediatric pulmonology: with thin phenotyping and deep genotyping, knowledge is power** *CURRENT OPINION IN PEDIATRICS*
Cornfield, D. N.
2016; 28 (3): 310-11
- **KCNMB1(-/-) Mice as a Model of Pulmonary Arterial Hypertension**
Barnes, E., Chen, C., Barnes, S., Kim, F., Lee, L., Alvira, C., Cornfield, D.
FEDERATION AMER SOC EXP BIOL.2016
- **A Role for the Transient Receptor Potential Vanilloid 4 Channel in Modulating Uterine Tone During Pregnancy**
Ying, L., Alvira, C. M., Cornfield, D. N.
FEDERATION AMER SOC EXP BIOL.2016
- **KCNMB1(-/-) Mice as a Model of Pulmonary Arterial Hypertension**
Barnes, E., Chen, C., Barnes, S., Kim, F., Lee, L., Alvira, C., Cornfield, D.

FEDERATION AMER SOC EXP BIOL.2016

- **Diagnostic Dilemma in the Treatment of a Fatal Case of Bloody Diarrhea.** *Journal of investigative medicine high impact case reports*
Mahapatra, S., Michie, S. A., Sylvester, K., Cornfield, D.
2016; 4 (1): 2324709616638698-?
- **Longitudinal Automated Airway And Air-Trapping Analysis On CT In School Age Children With Mild Cystic Fibrosis Lung Disease**
Wielpuetz, M. O., Robinson, T. E., Konietzke, P., Heussel, C., Kauczor, H., Galban, C., Cornfield, D. N., Savage, D., Newman, B., Weinheimer, O.
AMER THORACIC SOC.2016
- **In Patients With Pulmonary Arterial Hypertension, Pulmonary Artery Smooth Muscle Cell Hypoxia Inducible Factor-1 alpha Expression And Activity Is Decreased**
Barnes, E. A., Chen, C., Sedan, O., Cornfield, D. N.
AMER THORACIC SOC.2016
- **Respiratory Microbiology In Primary Ciliary Dyskinesia: Comparisons To A Pediatric Cystic Fibrosis Cohort**
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