



Mark Nicolls

Stanford University Professor in Pulmonary and Critical Care Medicine
Medicine - Pulmonary & Critical Care Medicine

 NIH Biosketch available Online

CLINICAL OFFICES

- **Chest Clinic**

300 Pasteur Dr Rm A283

MC 5351

Stanford, CA 94305

Tel (650) 725-7061

Fax (650) 498-6288

Bio

BIO

Dr. Mark Nicolls specializes in the treatment of lung transplant patients. He has practiced pulmonary and critical care medicine for 20 years. Dr. Nicolls has a special interest in how the immune system contributes to vascular disease and has a basic science laboratory which focuses on lung transplantation, pulmonary hypertension, and lymphedema.

CLINICAL FOCUS

- Pulmonary Critical Care
- Lung Transplantation
- Heart-Lung Transplantation
- Transplantation Immunology
- Pulmonary Hypertension
- Pulmonary Disease
- Lymphedema

ACADEMIC APPOINTMENTS

- Professor, Medicine - Pulmonary & Critical Care Medicine
- Member, Cardiovascular Institute
- Member, CVI/Vera Moulton Wall Center
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Member, Institute for Immunity, Transplantation and Infection, (2007- present)
- Joint Appointment, Immunology & Rheumatology, (2007- present)
- Director, Lung Immunology, (2007- present)

- Member, Stanford Cardiovascular Institute, (2007- present)
- Faculty, Vera Moulton Wall Center For Pulmonary Vascular Disease, (2007- present)
- Program Director, Pulmonary and Critical Care Fellowship, (2009-2010)
- Chief, Pulmonary and Critical Care Medicine, (2010- present)
- Chairman of the Board, Palo Alto Veterans Administration Institute for Research, (2015- present)

HONORS AND AWARDS

- Elected Member, The American Society for Clinical Investigation (2014-)
- Endowed Chair, The Stanford Professor of Pulmonary and Critical Care Medicine, Stanford University (2016-)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Executive Committee, Stanford Cardiovascular Institute (2010 - present)
- Steering Committee - Vera Moulton Wall Center for Pulmonary Vascular Disease, Stanford University School of Medicine (2007 - present)

PROFESSIONAL EDUCATION

- Fellowship: University of Colorado School of Medicine (1999) CO
- Board Certification: Pulmonary Disease, American Board of Internal Medicine (1998)
- Residency: Stanford University School of Medicine (1996) CA
- Medical Education: Stanford University School of Medicine (1993) CA
- Board Certification, ABIM , Critical Care Medicine (1999)
- BS, University of Portland , Biology (1987)

PATENTS

- Mark Nicolls, Gregg Semenza, Xinguo Jiang, Gundeep Dhillon, Jayakumar Rajadas, Geoffrey Gurtner, "United States Patent 10,220,009 HIF-1 Modulator Paint Formulation and Uses Thereof", Leland Stanford Junior University, VA, Johns Hopkins, Mar 5, 2019
- Mark Nicolls, Wen Tian, Jayakumar Rajadas. "United States Patent 9861601 Treatment of pulmonary arterial hypertension with leukotriene inhibitors.", Leland Stanford Junior University, VA Palo Alto, Jan 9, 2018
- Mark Nicolls, Xinguo Jiang, Geoffrey Gurtner, Gregg Semenza, Jayakumar Rajadas. "United States Patent 9763899 Iron chelators and use thereof for reducing transplant failure during rejection episodes.", Leland Stanford Junior University, VA, Johns Hopkins, Sep 19, 2017
- Mark Nicolls, Karl Kossen, Alan Cohen. "United States Patent 9682071 Methods for improving microvascular integrity.", Leland Stanford Junior University, Intermune Inc., Jun 20, 2017
- Mark Nicolls, Wen Tian, Jayakumar Rajadas. "United States Patent 9233089 Treatment of pulmonary hypertension with leukotriene inhibitors.", Leland Stanford Junior University, Jan 12, 2016

LINKS

- Nicolls Lab website: <http://nicollslab.stanford.edu/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our lab focuses primarily on the contribution of the immune response to lung disease. We are specifically examining the contribution of inflammation to the development of vascular injury in transplantation, pulmonary hypertension and lymphedema.

CLINICAL TRIALS

- Rituximab for Treatment of Systemic Sclerosis-Associated Pulmonary Arterial Hypertension (SSc-PAH), Not Recruiting

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Adam Andruska, Andrea Jonas, Nicholas Juul, Yu Kuang Lai, Efthymia Iliana Matthaïou, Matthew McCarra, Nils Nickel

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)

Publications

PUBLICATIONS

- **Inducible expression of immediate early genes is regulated through dynamic chromatin association by NF45/ILF2 and NF90/NF110/ILF3** *PLOS ONE*
Wu, T., Shi, L., Lowe, A. W., Nicolls, M. R., Kao, P. N.
2019; 14 (4)
- **Loss of Endothelium-Derived Wnt5a Is Associated With Reduced Pericyte Recruitment and Small Vessel Loss in Pulmonary Arterial Hypertension** *CIRCULATION*
Yuan, K., Shamskhov, E. A., Orcholski, M. E., Nathan, A., Reddy, S., Honda, H., Mani, V., Zeng, Y., Ozen, M. O., Wang, L., Demirci, U., Tian, W., Nicolls, et al
2019; 139 (14): 1710–24
- **Discovery of Distinct Immune Phenotypes Using Machine Learning in Pulmonary Arterial Hypertension** *CIRCULATION RESEARCH*
Sweatt, A. J., Hedlin, H. K., Balasubramanian, V., Hsi, A., Blum, L. K., Robinson, W. H., Haddad, F., Hickey, P. M., Condliffe, R., Lawrie, A., Nicolls, M. R., Rabinovitch, M., Khatri, et al
2019; 124 (6): 904–19
- **Preservation of microvascular integrity in murine orthotopic tracheal allografts by clopidogrel.** *Transplantation*
Heim, C., Khan, M. A., Silva-Tarouca, B. v., Kuckhahn, A., Stamminger, T., Ramsperger-Gleixner, M., Nicolls, M. R., Weyand, M., Ensminger, S. M.
2019
- **Anti-hyperlipidaemic effects of synthetic analogues of nordihydroguaiaretic acid in dyslipidaemic rats** *BRITISH JOURNAL OF PHARMACOLOGY*
Singh, M., Bittner, S., Li, Y., Bittner, A., Han, L., Cortez, Y., Inayathullah, M., Arif, Z., Parthasarathi, R., Rajadas, J., Shen, W., Nicolls, M. R., Kraemer, et al
2019; 176 (3): 369–85
- **HIF1 alpha-Mediated Lymphangiogenesis Influences Airway Transplant Rejection**
Tu, A. B., Jiang, X., Tian, A., Dahms, P., Zhang, P., Pasupneti, S., Nicolls, M. R.
AMER THORACIC SOC.2019
- **Inducible expression of immediate early genes is regulated through dynamic chromatin association by NF45/ILF2 and NF90/NF110/ILF3.** *PloS one*
Wu, T. H., Shi, L., Lowe, A. W., Nicolls, M. R., Kao, P. N.
2019; 14 (4): e0216042
- **Discovery of Distinct Immune Phenotypes Using Machine Learning in Pulmonary Arterial Hypertension.** *Circulation research*
Sweatt, A. J., Hedlin, H. K., Balasubramanian, V., Hsi, A., Blum, L. K., Robinson, W. H., Haddad, F., Hickey, P. M., Condliffe, R. A., Lawrie, A., Nicolls, M. R., Rabinovitch, M., Khatri, et al
2019
- **The Role of Iron-Induced Macrophage Dysregulation in Aspergillus Fumigatus Invasion in Airway Transplantation**
Matthaïou, E., Manouvakhova, O. M., Sinha, M., Tu, A. B., Clemons, K. V., Stevens, D. A., Nicolls, M. R., Hsu, J. L.
AMER THORACIC SOC.2019
- **Endothelial HIF-2alpha is Required for the Maintenance of Airway Microvasculature.** *Circulation*
Jiang, X., Tian, W., Tu, A. B., Pasupneti, S., Shuffle, E., Dahms, P., Zhang, P., Cai, H., Dinh, T. T., Liu, B., Cain, C., Giaccia, A. J., Butcher, et al
2018
- **Circulating plasmablasts are elevated and produce pathogenic anti-endothelial cell autoantibodies in idiopathic pulmonary arterial hypertension.** *European journal of immunology*

- Blum, L. K., Cao, R. R., Sweatt, A. J., Bill, M., Lahey, L. J., Hsi, A. C., Lee, C. S., Kongpachith, S., Ju, C. H., Mao, R., Wong, H. H., Nicolls, M. R., Zamanian, et al
2018
- **Loss of Endothelial Derived WNT5A is Associated with Reduced Pericyte Recruitment and Small Vessel Loss in Pulmonary Arterial Hypertension.** *Circulation*
Yuan, K., Shamskhov, E. A., Orcholski, M. E., Nathan, A., Reddy, S., Honda, H., Mani, V., Zeng, Y., Ozen, M. O., Wang, L., Demirci, U., Tian, W., Nicolls, et al
2018
 - **Pilot studies demonstrate the potential benefits of antiinflammatory therapy in human lymphedema.** *JCI insight*
Rockson, S. G., Tian, W., Jiang, X., Kuznetsova, T., Haddad, F., Zampell, J., Mehrara, B., Sampson, J. P., Roche, L., Kim, J., Nicolls, M. R.
2018; 3 (20)
 - **Increased Lymphangiogenesis in Animal Models of Pulmonary Arterial Hypertension**
Zhang, P., Tian, A. W., Tu, A. B., Jiang, X., Nicolls, M. R.
AMER THORACIC SOC.2018
 - **Endothelial HIF-2 alpha Maintains Airway Microvasculature Through Angiopoietin-1/TIE2 Signaling**
Tu, A., Jiang, X., Tian, W., Nicolls, M. R.
AMER THORACIC SOC.2018
 - **The Role of Hypoxia Inducible Factors in Maintenance of Airway Epithelial Health**
Pasupneti, S., Tian, A., Jiang, X., Nicolls, M. R.
AMER THORACIC SOC.2018
 - **Pathology and pathobiology of pulmonary hypertension: state of the art and research perspectives.** *The European respiratory journal*
Humbert, M., Guignabert, C., Bonnet, S., Dorfmueller, P., Klinger, J. R., Nicolls, M. R., Olschewski, A. J., Pullamsetti, S. S., Schermuly, R. T., Stenmark, K. R., Rabinovitch, M.
2018
 - **A Pro - Con debate: Current Controversies in PAH Pathogenesis at the American Thoracic Society International Meeting in 2017.** *American journal of physiology. Lung cellular and molecular physiology*
Kuebler, W. M., Nicolls, M. R., Olschewski, A., Abe, K., Rabinovitch, M., Stewart, D. J., Chan, S. Y., Morrell, N. W., Archer, S. L., Spiekerkoetter, E.
2018
 - **Microhemorrhage-associated tissue iron enhances the risk for Aspergillus fumigatus invasion in a mouse model of airway transplantation.** *Science translational medicine*
Hsu, J. L., Manouvakhova, O. V., Clemons, K. V., Inayathullah, M., Tu, A. B., Sobel, R. A., Tian, A., Nazik, H., Pothineni, V. R., Pasupneti, S., Jiang, X., Dhillon, G. S., Bedi, et al
2018; 10 (429)
 - **Nordihydroguaiaretic acid, a lignan from Larrea tridentata (Creosote bush) protects against ALIOS diet-induced metabolic dysfunction in mice.** *The Journal of pharmacology and experimental therapeutics*
Chan, J. K., Bittner, S., Bittner, A., Atwal, S., Shen, W. J., Inayathullah, M., Rajada, J., Nicolls, M. R., Kraemer, F. B., Azhar, S.
2018
 - **A Dominant Role for Regulatory T Cells in Protecting Females Against Pulmonary Hypertension.** *Circulation research*
Tamosiuniene, R., Manouvakhova, O., Mesange, P., Saito, T., Qian, J., Sanyal, M., Lin, Y. C., Nguyen, L. P., Luria, A., Tu, A. B., Sante, J. M., Rabinovitch, M., Fitzgerald, et al
2018
 - **Dynamics of the human antibody repertoire after B cell depletion in systemic sclerosis** *SCIENCE IMMUNOLOGY*
de Bourcy, C. A., Dekker, C. L., Davis, M. M., Nicolls, M. R., Quake, S. R.
2017; 2 (15)
 - **The Roles of Immunity in the Prevention and Evolution of Pulmonary Arterial Hypertension** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Nicolls, M. R., Voelkel, N. F.
2017; 195 (10): 1292-1299
 - **Leukotriene B-4 antagonism ameliorates experimental lymphedema** *SCIENCE TRANSLATIONAL MEDICINE*

- Tian, W., Rockson, S. G., Jiang, X., Kim, J., Begaye, A., Shuffle, E. M., Tu, A. B., Cribb, M., Nepiyushchikh, Z., Feroze, A. H., Zamanian, R. T., Dhillon, G. S., Voelkel, et al
2017; 9 (389)
- **Simultaneously Targeting Myofibroblast Contractility and Extracellular Matrix Cross-Linking as a Therapeutic Concept in Airway Fibrosis** *AMERICAN JOURNAL OF TRANSPLANTATION*
Lin, Y., Sung, Y. K., Jiang, X., Peters-Golden, M., Nicolls, M. R.
2017; 17 (5): 1229-1241
 - **Microvascular Integrity Can Be Preserved by Anti-Platelet Therapy and in Combination with mTOR Inhibitor**
Heim, C., Khan, M. A., Motsch, B., Gocht, A., Ramsperger-Gleixner, M., Stamminger, T., Nicolls, M. R., Weyand, M., Ensinger, S. M.
ELSEVIER SCIENCE INC.2017: S376
 - **Donor-Derived Cell-Free DNA Associates with Rejection in Lung Transplantation Using Clinical-Grade Targeted Next-Generation Sequencing**
Khush, K. K., Beausang, J. F., Woodward, R. N., Lew, D., Sninsky, J., De Vlaminck, I., Strehl, C., Luikart, H., Nicolls, M., Weill, D.
ELSEVIER SCIENCE INC.2017: S146
 - **Translating Research into Improved Patient Care in Pulmonary Arterial Hypertension** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Bonnet, S., Provencher, S., Guignabert, C., Perros, F., Boucherat, O., Schermuly, R. T., Hassoun, P. M., Rabinovitch, M., Nicolls, M. R., Humbert, M.
2017; 195 (5): 583-595
 - **Discovery Of Proteomic Immune Signatures In Pulmonary Arterial Hypertension By Unsupervised Consensus Clustering**
Sweatt, A., Hedlin, H., Balasubramanian, V., Hsi, A., Blum, L., Robinson, W., Nicolls, M. R., Rabinovitch, M., Khatri, P., Zamanian, R. T.
AMER THORACIC SOC.2017
 - **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
 - **Dynamics of the human antibody repertoire after B cell depletion in systemic sclerosis** *Dynamics of the human antibody repertoire after B cell depletion in systemic sclerosis*
de Bourcy, C. F., Dekker, C. L., Davis, M. M., Nicolls, M. R., Quake, S. R.
2017; 2 (15)
 - **Upregulation of HERV-K is Linked to Immunity and Inflammation in Pulmonary Arterial Hypertension.** *Circulation*
Saito, T., Miyagawa, K., Chen, S. Y., Tamosiuniene, R., Wang, L., Sharp, O., Samayoa, E., Harada, D., Moonen, J. A., Cao, A., Chen, P. I., Hennigs, J. K., Gu, et al
2017
 - **Lymphatic Dysfunction, Leukotrienes, and Lymphedema.** *Annual review of physiology*
Jiang, X., Nicolls, M. R., Tian, W., Rockson, S. G.
2017
 - **Introduction to the 59th Annual Thomas L. Petty Aspen Lung Conference. Lung Transplantation: Opportunities for Repair and Regeneration.** *Annals of the American Thoracic Society*
Zamora, M. R., Martinu, T., Nicolls, M. R.
2017; 14 (Supplement_3): S209
 - **Dynamics of the human antibody repertoire after B cell depletion in systemic sclerosis.** *Science immunology*
de Bourcy, C. F., Dekker, C. L., Davis, M. M., Nicolls, M. R., Quake, S. R.
2017; 2 (15)
 - **Aspergillus-related pulmonary diseases in lung transplantation** *MEDICAL MYCOLOGY*
Pasupneti, S., Manouvakhova, O., Nicolls, M. R., Hsu, J. L.
2017; 55 (1): 96-102
 - **Models of Lung Transplant Research: a consensus statement from the National Heart, Lung, and Blood Institute workshop.** *JCI insight*
Lama, V. N., Belperio, J. A., Christie, J. D., El-Chemaly, S., Fishbein, M. C., Gelman, A. E., Hancock, W. W., Keshavjee, S., Kreisel, D., Laubach, V. E., Looney, M. R., McDyer, J. F., Mohanakumar, et al
2017; 2 (9)

- **Leukotriene B4 Potentiates Bmpr2 Deficiency And Causes Paec Endmt In Pah**
Tian, A., Jiang, X., Shuffle, E., Tu, A., Jin, Q., Zamanian, R. T., Voelkel, N., Peters-Golden, M., Tuder, R., Rabinovitch, M., Nicolls, M.
AMER THORACIC SOC.2017
- **Delivery Of Il-10 Using A Novel High Molecular Weight Hyaluronan Vehicle Reduces Lung Fibrosis In A Bleomycin Mouse Model Of Lung Injury**
Shamskhou, E., Orcholski, M., Kaber, G., Yuan, K., Danielson, B., Chapman, H., Nicolls, M., Bollyky, P., Perez, V.
AMER THORACIC SOC.2017
- **Clinical Heterogeneity Across Proteomic Immunophenotypes In Pulmonary Arterial Hypertension**
Sweatt, A., Hedlin, H., Balasubramanian, V., Hsi, A., Blum, L., Robinson, W., Nicolls, M., Rabinovitch, M., Khatri, P., Zamanian, R. T.
AMER THORACIC SOC.2017
- **Simultaneously Targeting Myofibroblast Contractility and Extracellular Matrix Cross-Linking as a Therapeutic Concept in Airway Fibrosis.** *American journal of transplantation*
Lin, Y., Sung, Y. K., Jiang, X., Peters-Golden, M., Nicolls, M. R.
2016
- **Enhanced Electrochemical Sensing with Carbon Nanotubes Modified with Bismuth and Magnetic Nanoparticles in a Lab-on-a-Chip** *CHEMNANOMAT*
Jothimuthu, P., Hsu, J. L., Chen, R., Inayathullah, M., Pothineni, V. R., Jan, A., Gurtner, G. C., Rajadas, J., Nicolls, M. R.
2016; 2 (9): 904-910
- **Challenges and opportunities in treating inflammation associated with pulmonary hypertension.** *Expert review of cardiovascular therapy*
Voelkel, N. F., Tamosiuniene, R., Nicolls, M. R.
2016; 14 (8): 939-951
- **Effect of Transplant Center Volume on Cost and Readmissions in Medicare Lung Transplant Recipients.** *Annals of the American Thoracic Society*
Mooney, J. J., Weill, D., Boyd, J. H., Nicolls, M. R., Bhattacharya, J., Dhillon, G. S.
2016; 13 (7): 1034-1041
- **Microvascular injury after lung transplantation** *CURRENT OPINION IN ORGAN TRANSPLANTATION*
Nicolls, M. R., Hsu, J. L., Jiang, X.
2016; 21 (3): 279-284
- **Lung Quality and Utilization in Controlled Donation After Circulatory Determination of Death Within the United States** *AMERICAN JOURNAL OF TRANSPLANTATION*
Mooney, J. J., Hedlin, H., Mohabir, P. K., Vazquez, R., Nguyen, J., Ha, R., Chiu, P., Patel, K., Zamora, M. R., Weill, D., Nicolls, M. R., Dhillon, G. S.
2016; 16 (4): 1207-1215
- **A Critical Role for Airway Microvessels in Lung Transplantation.** *American journal of respiratory and critical care medicine*
Nicolls, M. R., Dhillon, G. S., Daddi, N.
2016; 193 (5): 479-481
- **Limitations Of Pulmonary Vascular Resistance As A Primary Endpoint For Therapeutic Trials Of Systemic Sclerosis Associated Pulmonary Arterial Hypertension**
Zamanian, R. T., Rhee, R., Pinckney, A., Goldmuntz, E., Welch, B., D'Aveta, C., Badesch, D., Nicolls, M., Kawut, S. M., Spychala, M., Autoimmunity Ctr Excellence ASC01
AMER THORACIC SOC.2016
- **Circulating Elastase Confers A High Risk For The Development Of Bronchiolitis Obliterans Syndrome**
Milla, C. E., Zirbes, J. M., Yacob, A., Tian, L., Zamanian, R. T., Bental-Roof, M., Bland, R., Rabinovitch, M., Dhillon, G., Nicolls, M.
AMER THORACIC SOC.2016
- **Lung Quality and Utilization in Controlled Donation After Circulatory Determination of Death Within the United States.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Mooney, J. J., Hedlin, H., Mohabir, P. K., Vazquez, R., Nguyen, J., Ha, R., Chiu, P., Patel, K., Zamora, M. R., Weill, D., Nicolls, M. R., Dhillon, G. S.
2016
- **Enhanced Electrochemical Sensing with Carbon Nanotubes Modified with Bismuth and Magnetic Nanoparticles in a Lab-on-a-Chip.** *ChemNanoMat : chemistry of nanomaterials for energy, biology and more*
Jothimuthu, P., Hsu, J. L., Chen, R., Inayathullah, M., Pothineni, V. R., Jan, A., Gurtner, G. C., Rajadas, J., Nicolls, M. R.

2016; 2 (9): 904–10

- **Bmpr2 Deficiency Potentiates The Ltb4 Mediated Paec Transformation In Pah**
Tian, W., Jiang, X., Qian, J., Tu, A., Shuffle, E., Mesange, P., Nicolls, M.
AMER THORACIC SOC.2016
- **Inhibition Of Connective Tissue Growth Factor Promotes Healthy Revascularization And Ameliorates Fibrosis In Orthotopic Tracheal Transplantation**
Lin, Y., Jiang, X., Nicolls, M.
AMER THORACIC SOC.2016
- **Acute Microvascular Rejection Increases Graft Iron, Promoting Aspergillus Fumigatus Allograft Invasion**
Hsu, J. L., Inayathulla, M., Tu, A. B., Clemons, K. V., Rajadas, J., Stevens, D. A., Nicolls, M.
AMER THORACIC SOC.2016
- **Endothelial Hif-2a Deficiency Disrupts Airway Microvascular Structure And Impairs The Repair Of Vessels Of Transplanted Airways**
Jiang, X., Tian, W., Tu, A., Nicolls, M.
AMER THORACIC SOC.2016
- **Leukotriene B-4 Activates Pulmonary Artery Adventitial Fibroblasts in Pulmonary Hypertension** *HYPERTENSION*
Qian, J., Tian, W., Jiang, X., Tamosiuniene, R., Sung, Y. K., Shuffle, E. M., Tu, A. B., Valenzuela, A., Jiang, S., Zamanian, R. T., Fiorentino, D. F., Voelkel, N. F., Peters-Golden, et al
2015; 66 (6): 1227-1239
- **Noninvasive monitoring of infection and rejection after lung transplantation.** *Proceedings of the National Academy of Sciences of the United States of America*
De Vlaminck, I., Martin, L., Kertesz, M., Patel, K., Kowarsky, M., Strehl, C., Cohen, G., Luikart, H., Neff, N. F., Okamoto, J., Nicolls, M. R., Cornfield, D., Weill, et al
2015; 112 (43): 13336-13341
- **Cyclosporine Does Not Prevent Microvascular Loss in Transplantation but Can Synergize With a Neutrophil Elastase Inhibitor, Elafin, to Maintain Graft Perfusion During Acute Rejection** *AMERICAN JOURNAL OF TRANSPLANTATION*
Jiang, X., Nguyen, T. T., Tian, W., Sung, Y. K., Yuan, K., Qian, J., Rajadas, J., Sallenave, J., Nickel, N. P., Perez, V. d., RABINOVITCH, M., Nicolls, M. R.
2015; 15 (7): 1768-1781
- **Elafin Reverses Pulmonary Hypertension via Caveolin-1-Dependent Bone Morphogenetic Protein Signaling** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Nickel, N. P., Spiekerkoetter, E., Gu, M., Li, C. G., Li, H., Kaschwich, M., Diebold, I., Hennigs, J. K., Kim, K., Miyagawa, K., Wang, L., Cao, A., Sa, et al
2015; 191 (11): 1273-1286
- **Non-Invasive Monitoring of Infection and Rejection After Lung Transplantation**
Vlaminck, I. D., Martin, L., Kertesz, M., Patel, K. N., Kowarsky, M., Strehl, C., Cohen, G., Luikart, H., Neff, N., Okamoto, J., Nicolls, M. N., Cornfield, D. N., Weill, et al
ELSEVIER SCIENCE INC.2015: S137
- **Increased Resource Use in Lung Transplant Admissions in the Lung Allocation Score Era** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Maxwell, B. G., Mooney, J. J., Lee, P. H., Levitt, J. E., Chhatwani, L., Nicolls, M. R., Zamora, M. R., Valentine, V., Weill, D., Dhillon, G. S.
2015; 191 (3): 302-308
- **Activation of the Wnt/Planar Cell Polarity Pathway Is Required for Pericyte Recruitment during Pulmonary Angiogenesis.** *American journal of pathology*
Yuan, K., Orcholski, M. E., Panaroni, C., Shuffle, E. M., Huang, N. F., Jiang, X., Tian, W., Vladar, E. K., Wang, L., Nicolls, M. R., Wu, J. Y., de Jesus Perez, V. A.
2015; 185 (1): 69-84
- **Activation of the Wnt/Planar Cell Polarity Pathway Is Required for Pericyte Recruitment during Pulmonary Angiogenesis** *AMERICAN JOURNAL OF PATHOLOGY*
Yuan, K., Orcholski, M. E., Panaroni, C., Shuffle, E. M., Huang, N. F., Jiang, X., Tian, W., Vladar, E. K., Wang, L., Nicolls, M. R., Wu, J. Y., Perez, V. A.
2015; 185 (1): 69-84
- **Hypoxia Inducible Factor-1 alpha Increases Bone Morphogenetic Protein Signaling In Pulmonary Artery Endothelial Cells**
Kuang, J., Tian, X., Tian, A., Semenza, G., Nicolls, M. R., Spiekerkoetter, E.
AMER THORACIC SOC.2015

- **Unique predictors of mortality in patients with pulmonary arterial hypertension associated with systemic sclerosis in the REVEAL registry.** *Chest*
Chung, L., Farber, H. W., Benza, R., Miller, D. P., Parsons, L., Hassoun, P. M., McGoon, M., Nicolls, M. R., Zamanian, R. T.
2014; 146 (6): 1494-1504
- **Impact of the lung allocation score on survival beyond 1 year.** *American journal of transplantation*
Maxwell, B. G., Levitt, J. E., Goldstein, B. A., Mooney, J. J., Nicolls, M. R., Zamora, M., Valentine, V., Weill, D., Dhillon, G. S.
2014; 14 (10): 2288-2294
- **Impact of the Lung Allocation Score on Survival Beyond 1 Year** *AMERICAN JOURNAL OF TRANSPLANTATION*
Maxwell, B. G., Levitt, J. E., Goldstein, B. A., Mooney, J. J., Nicolls, M. R., Zamora, M., Valentine, V., Weill, D., Dhillon, G. S.
2014; 14 (10): 2288-2294
- **CLOPIDOGREL PRESERVES MICROVASCULAR VASCULAR INTEGRITY IN ORTHOTOPIC TRACHEAL TRANSPLANTS AFFECTED BY OBLITERATIVE BRONCHIOLITIS**
Heim, C., Khan, M. A., Motsch, B., Mueller, S., Stamminger, T., Nicolls, M. R., Weyand, M., Ensminger, S.
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