

CURRICULUM VITAE
Susan D. Reynolds, PhD

I. PERSONAL DATA:

- A. Name: Susan Noelani Dicken Reynolds
- B. Citizenship: United States of America
- C. Marital Status: Married 1980

II. ACADEMIC HISTORY:

- A. Colleges and Universities Attended
 - 1. University of Virginia, Charlottesville, VA; B.A. Chemistry 09/76 - 05/80.
 - 2. Department of Microbiology and Immunology; University of Rochester, Rochester, NY M.S. Immunology; 09/83 - 12/85.
 - 3. Department of Biology, University of Rochester, Rochester, NY; M.S. Biology; 09/85 - 06/86.
 - 4. Department of Biology, University of Rochester, Rochester, NY; PhD Developmental Biology 06/86 - 06/92.
- B. Board Certification
None

III. PROFESSIONAL POSITIONS (INCLUDING FELLOWSHIPS):

- A. Department of Orthopedics, University of Rochester, Rochester, NY Post-Doctoral Fellowship; Cartilage Development; 06/92 – 04/96.
- B. Department of Environmental Medicine, University of Rochester, Rochester, NY Post-Doctoral Fellowship; Airway Epithelial Repair; 05/96 – 1998.
- C. Department of Environmental Medicine, University of Rochester, Rochester, NY Research Assistant Professor; Airway Epithelial Repair; 05/99 – 2000.
- D. Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA; Assistant Professor; 2001-2007.
- E. Department of Pediatrics, National Jewish Health, Associate Professor; 08/07 – 2014.
- F. Department of Stem Cells, Cell Biology, and Developmental Biology, Associate Professor, University of Colorado-Denver; 2007 – 2014.
- G. Associate Professor, Department of Lung Biology and Critical Care Medicine, Associate Professor, University of Colorado-Denver, 08 – 2014.
- H. Principal Investigator, Nationwide Children’s Hospital, Columbus, Ohio, 2015 – present.

IV. ACADEMIC HONORS:

A. SCHOLARSHIPS AND FELLOWSHIPS

- 1. Genetics Training Grant, University of Rochester. 1986-1989
- 2. Holtfretter Fellowship, Department of Biology, University of Rochester. 1987-1990
- 3. Diabetes, Endocrinology, & Metabolism Training Grant Fellowship, University of Rochester. 1992-1994

B. SPECIAL RECOGNITIONS & INVITED LECTURES

(National Presentations; International Presentations).

1. Stem Cells of the Tracheobronchial Epithelium, U. Southern California, Department of Medicine, March 2004
2. Stem Cells of the Tracheobronchial Epithelium, University of Louisville, Department of Medicine, August, 2004.
3. Stem Cells of the Tracheobronchial Epithelium, University of Pennsylvania, Institute for Environmental Medicine, September 2004. May, 2006
4. Meet the Professor: Methods for Identification and Characterization of Stem Cells, American Thoracic Society 2006, San Diego, CA.
5. β -Catenin Regulation of Bronchiolar Stem and Transit Amplifying Cells, Cornell University, Ithaca, NY. 2006.
6. β -Catenin Regulation of the Bronchiolar Stem Cell Hierarchy, University of Virginia, Charlottesville, VA. 2006.
7. β -catenin Regulation of Airway Stem Cell Hierarchies, National Jewish Medical and Research Center, Denver, CO 2007.
8. Research Initiatives in Airway Regeneration, Repair, and Remodeling, National Jewish Medical and Research Center, Denver, CO, 2007.
9. β -catenin Regulation of Epithelial Stem Cells, British Lung Association-Fall Meeting, Maynooth, Ireland, September 2007
10. Repair of the Tracheobronchial Epithelium, University of California-Davis, Davis, CA, November 2008.
11. The lung epithelial stem cell generates its own niche. University of Pittsburgh, Pittsburgh PA, December 18, 2009.
12. Purification of the lung epithelial stem cell and demonstration that it generates its own niche. University of Toronto, Toronto, Ontario Canada. April 12, 2010.
13. Lung Epithelial Injury and Repair: A Modified Seed and Soil Paradigm. Aspen Lung Conference, Aspen, CO May 2011.
14. Cellular Regulation of Lung Regeneration and Repair. National Cancer Institute, Bethesda, MD November 2011.
15. Clara Cells. Nationwide Children's Hospital. Columbus, OH. December, 2012.
16. Human and Mouse Tissue Stem Cells. University of California-Davis, Davis, CA, November 2013.
17. Cell Based Therapy: Cell Replacement and Niche Modification. International Cystic Fibrosis Basic Science Meeting, Malta, March 2014.
18. The Stem Cell Niche. Cystic Fibrosis Foundation, 2015.
19. Tissue Stem Cells. Cystic Fibrosis Basic Science Meeting, Savannah, GA June 2016.
20. Cell Therapy for Lung Disease. Regenerative Medicine, Berlin, Germany. September, 2016.
21. The Tracheobronchial Brush Cell Lineage. Potsdam, Bermany, September, 2016.
22. Cell Therapy for CF. Paris, France. September, 2016.
23. Cell Therapy for Cystic Fibrosis Lung Disease. North American CF Conference. Orlando, FL October, 2016.

23. Regulation of Airway Stem Cell Differentiation by Beta-Catenin and Notch. Cedars Sinai, Los Angeles, CA January 2017.
24. Cell Therapy for Cystic Fibrosis Lung Disease. University of Southern California, Los Angeles, CA. January 2017

V. PROFESSIONAL SOCIETIES AND HONORARY SOCIETIES:

- A. American Thoracic Society; 1996-2007
- B. International Society for Stem Cell Research; 2001-2003
- C. International Society for Gene Therapy; 2011-2012

VI. COMMITTEE PARTICIPATION AND OTHER SERVICE ACTIVITIES:

- A. **Institutional**
 - a. **University of Pittsburgh**
 1. Institutional Animal Use and Care Committee (2004-2007)
 2. Institutional Animal Husbandry Committee (2005-2007)
 - b. **National Jewish Health**
 1. Floor Captain (2007 - present)
 2. Distinguished Speakers Committee, Chair (2007- 2011)
 3. Lung Biology Research Forum Committee (2007-2009)
 4. Lung Injury/Repair Research Firm, Co-Chair (2007-2009)
 5. Imaging Core Committee (2007- present)
 6. Biological Research Core Committee (2007-2009)
 7. Medicine Recruiting Committee (2007)
 8. Pediatrics Strategic Planning Committee (2008)
 9. Center for Genes, Environment, and Health Advisory Board (2009-present)
 10. Strategic Planning Committee (2013)
 - c. **Nationwide Children's Hospital**
 1. Institutional Animal Use and Care Committee (2015-present)
- B. **NATIONAL**
 1. National Institutes of Health
 - a. Cell Plasticity Workshop; 2010
- C. **INTERNATIONAL**
 1. American Thoracic Society
 - a. Program Committee: 2001-2003
 - b. Nominating Committee: 2004
 - c. RCMB Working Group on Stem Cell Biology; 2009-present
 - d. RCMB Program Committee: 2015-present
 2. Society for Gene and Cell Therapy
 - a. Respiratory Working Group; 2011-2012
- D. **COMMUNITY ACTIVITIES**
 1. Cheerleader- NJH Cycling Club; 2010-present
 2. Arvada Trails Cleanup Volunteer

VII. PATENTS HELD OR PENDING:

None

VIII. REVIEW ACTIVITIES:

A. Study Section

1. National

a. National Institutes of Health

1. Lung Injury Repair and Remodeling, ad hoc member
4/06, 2/09, 2/10, 10/10
2. Lung Injury Repair and Remodeling, Conflict Study Section
2009, 2010, 2011
3. Cancer Stem Cell RFA, member 7/08
4. RC1 Peer Reviewer- ZRG-Imm-E (58), mail 6/09
5. RC1 Peer Reviewer- ZRG-CVRS-B (58), mail 6/09
6. RC2 Study section-ZCA1-RPRB-O (09), member 8/09
7. K15 Study section, 2011
8. CSR-2RG1 Conflict Study Section, 10/09, 2013
9. CVRS-10B Small Business-Respiratory Sciences, 11/09
10. NIEHS Stem Cell RFA, 2012
11. ZRG1 CB-W (56) R, Program Announcement Review, 2014.
12. Tobacco-Related Disease Research Program (TRDRP).
Environmental Exposure, Toxicology, and Pathogenesis Review
Panel, 2015
13. NIH- LIRR member conflict SEP: ZRG1 CVRS-N 02, 2015.
14. NIH- ZRG1 CVRS-N SEP: 2016

b. Foundation and University Granting Agencies

1. Washington University at St. Louis, Career Transition Grant, 2008
2. Tobacco Research Disease Research Program (TRDRP-California
Tobacco Settlement), 2011, 2012

2. International Granting Agencies

- a. Medical Research Council (United Kingdom) Career Development Grant,
2008, 2010
- b. Asthma United Kingdom Research Grant, 5/10, 5/11, 5/13
- c. Czech Republic Research Grants, 2011

B. Journals

1. American Journal of Physiology-Lung (2002-present)
2. American Journal Respiratory and Critical Care Medicine (2008-present)
3. Am. Journal of Respiratory Cell and Molecular Biology (2004-present)
4. Cells Tissues Organs (2008)
5. Cell Stem Cell (2013, 2014)
6. European Respiratory Journal (2009, 2013)
7. Experimental Cell Research (2009)
8. Experimental Lung Research (2009)
9. Expert Review of Respiratory Medicine (2010)
10. Gene Expression Patterns (2009)
11. Journal of Applied Physiology (2007)
12. Journal of Clinical Investigation (2003, 2011)
13. Laboratory Investigation (2007, 2014, 2015)
14. Nature Medicine (2015)
15. Pediatric Research (2009)
16. PLOS One (2011-2014, 2016)

17. Proceedings of the National Academy of Sciences (2011, 2014, 2015, 2016)
18. Respiratory Research (2009)
19. Stem Cells (2007, 2011, 2013, 2014)
20. Tissue and Cell (2011)
21. Toxicological Sciences (2001)
22. Wound Repair and Regeneration (2007-2008)
23. Human Molecular Genetics (2016)

IX. TEACHING ACTIVITIES:

A. High School Students:

1. Nationwide Children's Hospital
 - a. Devin Burkhart (2015-2016)
 - b. Omoregie P. Aideyman (2015-2016)
 - c. Mahelet Tadesse (2016-2017)
 - d. Niat Habtemariam (2016-2017)

B. Technicians:

1. University of Pittsburgh
 - a. TT Titchner, MD. Private Practice
2. National Jewish Health
 - a. BB Cole, MD

C. Undergraduate students: (International Students)

1. University of Rochester:
 - a. S. O'Grady
 - b. S. Song
 - c. R. Flint
 - d. A. Giangreco, PhD. Faculty Rayne Institute, London, UK
2. University of Pittsburgh:
 - a. M. St. John, DVM
 - b. L. Humstom, MD
 - c. K. Jenkins, MD

C. Graduate students:

1. University of Rochester
 - a. Department of Pathology
 - 1) P. Romano, DDS. Regulation of HiPER1 gene expression in chicken chondrocytes. Private Practice.
 2. H.-B. Chi, PhD. Characterization of oxidant sensitivity in HiPER 1 wild type and knockout mice. Faculty St. Jude's Hospital
 - b. Department of Microbiology:
 - 1) C. Grimsrud, MD/PhD. Regulation of BMP-7 gene expression in chicken chondrocytes.
 - 2) J. Wang, PhD. Cloning and sequence analysis of chicken BMP-1. Faculty McMaster University, Canada
 - c. Department of Toxicology:
 - 1) G. Mango, PhD. Comparative analysis of mechanisms leading to oxidant-sensitivity if CCSP $-/-$ mice. State Policeman
 - 2) K. Hong, PhD. Molecular characterization of airway stem cells utilizing CcTk transgenic mice. Faculty, University of Louisville.

- 3) T. Watson, PhD. Identification and characterization of genes that are differentially expressed in CCSP wild type and knockout mice. Real Estate salesperson.
2. University of Pittsburgh:
 - a. Molecular Toxicology Program
 - 1) J. Snyder, PhD. Differential responsiveness of CCSP WT and KO mice to LPS *Cell Biology*. Post-doctoral Fellow, Duke University
 - b. Cell Biology Program
 - 1) A. Giangreco, PhD. Identification and characterization of airway stem cell populations. Faculty Rayne Institute, London UK.
 - 2) P. Bernal, PhD. Clonogenic and differentiation potential of tracheal cells.
 - 3) R. Teisanu, Wnt signaling in stem cell maintenance. Post-doc Germany.
 - 4) A. Zemke, MD/PhD. Wnt signaling during lung development. Fellow University of Pittsburgh.
 - c. Environmental and Occupational Health
 - 1) C. Smith, MS. Mechanisms governing regulated secretion in Clara cells. Chief Scientific Officer, Pittsburgh, PA.
 - 2) E. Bower, PhD. β catenin regulation of basal cell differentiation.
3. National Jewish Health/University of Colorado, Denver
 - a. Cell Biology, Stem Cells and Development
 - 1) C. Betts. Rotation Student
 - b. Thesis Advisory Committee
 - 1) Cecil (Jake) Saunders, Neuroscience; 2011-2013, Post-Doctoral Fellow University of Pennsylvania
 - 2) Ashley Nicole Desch, Immunology; 2011-present
 - 3) Eric Wartchow, Clinical Sciences; 2012-present
 - c. Post-Doctoral Fellows:
 - 1) E. Drobenyskina, PhD. Cell migration mechanisms. Post-Doc, CU-Denver.
 - 2) F. Gally, PhD. Airway-alveolar injury. Assistant Professor, National Jewish Health.
 - 3) J. Masterson, PhD. p63 regulated mechanisms. Post-Doc, CU-Denver.
 - 4) M. Ghosh, PhD. Tracheal tissue-specific stem cell. Assistant Professor, National Jewish Health.
 - a) K18 Mentored Award (SD Reynolds, Mentor)
 - b) FAMRI Career Development Grant (SD Reynolds, Mentor)
 - 5) H. Brechbuhl, PhD. Interactions between β -catenin and EGFR. Post-doc, National Jewish Health.
 - a) Easton Foundation Grant (SD Reynolds, Mentor)
 - b) NRSA Post-doctoral Fellowship Award (SD Reynolds, Mentor)
 - 6) MK. Smith, PhD. β -catenin-regulated basal cell differentiation. Chief Operations Officer, Virion.

D. Physician Scientists:

1. University of Rochester

- a. Medical student:
 - 1) E. Riesenfeld, MD.
- b. Orthopaedics Residents:
 - 1) L. Loves, MD.
 - 2) J. Schnell, MD.
 - 3) M. Loebenberg, MD.
 - 4) T. Blaine, MD
2. University of Pittsburgh:
 - a. Neonatology Fellow:
 - 1) E. Everett, MD Private Practice.
 - b. Pediatrics Fellow:
 - 1) M. Landvoight

E. Early Stage Faculty

1. University of Pittsburgh:
 - a. Phouthone Keovhong, PhD. R21 awarded.
 - b. Peter Di, PhD. R01 awarded.
 - c. Thomas Gilbert, PhD. Vice President for Research, ACell, Baltimore, MD.
2. Children's National Medical Center:
 - a. Robert J. Freishtat, MD, MPH. RO1 awarded.
3. Nationwide Children's Hospital, Columbus, OH
 - a. Trent E. Tipple, MD. RO1 awarded.
4. National Jewish Health:
 - a. Moumita Ghosh, PhD. Assistant Professor, National Jewish Health.
 - 1) R01 submitted.
 - 2) DOD cancer grant submitted.
 - 3) Cancer Center Pilot project submitted.
 - b. Shama Ahamd, PhD. Assistant Professor, University of Colorado-Denver, Assistant Professor University of Alabama, Birmingham.
 - 1) K12 Career Development Grant (CCTSI) (SD Reynolds Co-mentor with CW White).
 - 2) R01 pending.
 - c. Max A. Seibold, PhD. Assistant Professor, National Jewish Health.
 - 1) K12 Career Development (CCTSI) Award (SD Reynolds consultant).
 - 2) ATS Pilot Project Award (declined). (SD Reynolds consultant).
 - 3) R01 submitted.
5. Nationwide Children's Hospital
 - a. Shaheen Durrani-Kol, MD

F. Lecture Courses

1. University of Rochester:
 - a. Tutor - Molecules to Cells 2000, 2001
2. University of Pittsburgh:
 - a. Director – Lung Journal Club, 2000-2001; Tutor - Tissue Structure and Function, 2002
 - b. Lecturer- Model Systems, 2003-2007
 - c. Lecturer-Bench Research, 2003-2007
 - d. Lecturer- Molecular Fundamentals, 2004-2007
 - e. Lecturer- Stem Cells, 2004

- f. Director-Stem Cell Journal Club, 2004-2007; Lecturer- Molecular Medicine, 2006
- g. Lecturer- Molecular Toxicology, 2006
- h. Lecturer and mentor- SURP, 2007
- 3. University of Colorado-Denver
 - a. Lecturer- Lung Research Methods: 2011;
 - b. Lecturer- IDPT7646 Tissue Biology and Disease Mechanism, The Respiratory System: 2010-1012
 - c. Lecturer- CSDV 7605, Cilia and Cell Signaling: 2011-2012
 - Lecturer- CSDV 7605, Niche Concept: 2011-2012

G. Thesis Advisory Committee

- 1. University of Rochester
 - a. Eric Howard, Department of Biology, 1998-2000
- 2. University of Pittsburgh
 - a. Antonia A. Nemece, Department of Environmental and Occupational Health, 2007
- 3. University of Colorado-Denver
 - a. Cecil (Jake) Saunders, Neuroscience, PhD 2013
 - b. Ashley Nicole Desch, Immunology, PhD 2014
 - c. Eric Wartchow, Clinical Sciences

X. RESEARCH GRANTS AND CONTRACTS:

A. PAST FUNDING

- 1. National Institute of Environmental Health Sciences RO1 ES08964
 - a. Role: Co-Investigator (PI: B. Stripp)
 - b. Title: Clara Cell Secretion and Oxidant Lung Pollutants
 - c. Award Dates: September 1997 to August 2009
 - d. Focus: The long-term objective of this project is to define roles for Clara cells and their secretions in protection from oxidant injury. Aims will investigate the mechanism of oxidant sensitivity associated with CCSP deficiency in CCSP knock-out mice. Transgenic complementation will be used to define the contribution of CCSP deficiency versus functional changes to Clara cells in elevated ozone susceptibility.
- 2. National Heart Lung and Blood Institute RO1 HL64888
 - a. Role: Co-Investigator (PI: B. Stripp)
 - b. Title: Stem Cells in Airway Repair
 - c. Award Dates: April 2000-March 2009
 - d. Focus: The long-term objectives of this project is to test the hypothesis that injury of Clara cells, an abundant airway progenitor cell population, is a stimulus for recruitment of neuroepithelial body (NEB)-associated stem cells for epithelial renewal. Aims will use lineage-tagging and conditional cell ablation approaches to define the contribution of NEB-associated regenerative cells to epithelial renewal.
- 3. National Institute of Environmental Health Sciences RO1 ES011956
 - a. Role: Co-Investigator (PI: J. Fabisiak)
 - b. Title: Particulate Matter/Mycoplasma Stress Interactions
 - c. Award Dates: June 2005 to March 2009

- d. Focus: We hypothesize that the presence of microorganisms like mycoplasma will potentiate the inflammatory/immune-modulating potential of chemical stress and, thus, act as co-factors in the genesis or exacerbation of lung disease following exposure to atmospheric particulate matter (PM).
4. National Heart Lung and Blood Institute RO1 HL70575
 - a. Role: Co-Investigator (PI: B. Stripp)
 - b. Title: Clara Cells and their Secretions in Lung Immunoregulation
 - c. Award Dates: September 2001- July 2005
 - d. Focus: This project will investigate immunoregulatory properties of Clara cells and their secretions. Aims will define specific cell types impacted by CCSP deficiency and associated changes in Clara cell function, coupled with transgenic complementation with CCSP mutants to define structure-function relationships.
5. Cystic Fibrosis Foundation, Pilot Project
 - a. Role: PI
 - b. Award Dates: October 2003-2005
 - c. Title: Human Bronchial Side Population Cells: Clonogenic and Differentiation Potential
 - d. Focus: This project will determine the functional properties of human bronchiolar epithelial cells with the property of rapid Hoechst 33342 efflux. Aims will investigate the clonogenic and differentiation potential of cells within the Side Population and will use lentiviral transduction to follow these cells over multiple passages in vitro and ex vivo.
6. RO1 - HL075585: National Heart Lung and Blood Institute
 - a. Role: PI
 - b. Award Dates: July 2006 to June 2011, no cost extension
 - c. Title: Wnt Regulation of Tracheobronchial Regeneration
 - d. Focus: Cell fate specification within the tracheobronchial stem cell hierarchy.
7. RO1 - HL075585 Supplement: National Heart Lung and Blood Institute
 - a. Role: PI
 - b. Award Dates: September 2009 to August 2011, no cost extension
 - c. Title: Wnt Regulation of Tracheobronchial Regeneration
 - d. Focus: Keratin 14 regulation of cell fate determination in tracheal basal cells.
8. RC1 - HL099461-01: National Heart Lung and Blood Institute
 - a. Role: PI (contact) with Carl W. White, MD (co-PI)
 - b. Award dates: September 30, 2009 to August 31, 2011, no cost extension
 - c. Title: Cell Based Therapy for Lung Disease
 - d. Focus: Roles for facultative progenitors in treatment of chronic lung disease.
9. R21 – HL113961: National Heart Lung and Blood Institute
 - a. Role: PI
 - b. Award Dates: June 2012-July 2014
 - c. Title: Identification of progenitor-specific genes from basal cell containing tissues

- d. Focus: Identification of tissue stem cell-specific promoter(s) and generation of a lineage tracing allele.
- 10. Competitive Bridging Award, National Jewish Health
 - a. Role: PI
 - b. Award Dates: February 2013- December 2014
 - c. Title: Tracheobronchial Stem Cells
 - d. Focus: Purification and functional testing of human and mouse tracheobronchial stem cells.

B. CURRENT FUNDING

- 1. Cystic Fibrosis Foundation Research Grant
 - a. Role: PI
 - b. Award Dates: January 1, 2016- December 31, 2018
 - c. Title: Tissue stem cells as autologous cell therapy for cystic fibrosis.
 - d. Focus: Functional analysis of mouse and human airway tissue specific stem cells

C. PENDING FUNDING

- 1. RO1 Grant Application
 - a. Role: PI
 - b. Title: Regulation of ciliated cell differentiation by Notch, beta-Catenin, and Hif2-alpha dependent ciliated cell differentiation.
 - c. Focus: We hypothesize that ciliated cell differentiation is regulated by interactions among the Notch pathway, beta-Catenin, and Hif2-alpha pathways. We will determine if beta-Catenin activates Notch signaling resulting in inhibition on ciliated cell differentiation. Conversely, we will determine if Hif2-alpha antagonizes Notch signaling and permits ciliated cell differentiation. These data will allow us to develop novel therapies that will promote ciliated cell differentiation.
- 2. RO1 Grant Application
 - a. Role: PI
 - b. Title: Beating Squamous Metaplasia with a STK
 - c. Focus: Basal cells are the most common progenitor cell type in the human airway epithelium and the sum of their progenitor activity can be represented as the reparative capacity. Reparative capacity decreases as a function of age and injury and contributes to age-related decreases in lung function. Our long-term goal is to develop an intervention that preserves the ability of basal cell progenitors to repair the airway epithelium.
- 2. RO1 Grant Application
 - a. Role: PI
 - b. Title: Demystifying brush cell lineage and function.
 - c. Focus: We recently reported that the tracheobronchial brush cell exhibits the molecular phenotype of chemosensory cells located found in the nasal epithelium and that the nasal cell type (termed a solitary chemosensory cell) initiates the neurogenic inflammatory response to bitter irritants. In the present project, we will investigate the brush cell lineage and determine if

this cell initiates neurogenic inflammation of the tracheobronchial epithelial-mesenchymal trophic unit.

XI. BIBLIOGRAPHY:

A. PUBLICATIONS IN REFEREED JOURNALS

***Selected peer-reviewed publications within the lung injury and repair field.
(From a total of 75 publications.)***

1. University of Rochester

Reynolds, S.D., Giangreco, A., Power, J.H.T., and Stripp, B.R., Neuroepithelial bodies of pulmonary airways serve as a reservoir of progenitor cells capable of epithelial regeneration. (2000) Am. J. Pathol. 156:269.

Reynolds, S.D., Hong, K.U., Giangreco, A., Mango, G.W., Guron, C., Morimoto, Y., and Stripp, B.R. Conditional Clara cell ablation reveals a self-renewing progenitor function of pulmonary neuroendocrine cells. (2000) Am. J. Physiol. 278:L1256.

Giangreco A. Reynolds SD. Stripp BR. Terminal bronchioles harbor a unique airway stem cell population that localizes to the bronchoalveolar duct junction. American Journal of Pathology. 161(1):173-82, 2002

Hong KU, Reynolds SD, Watkins S, Fuchs E, Stripp BR: In vivo differentiation potential of tracheal basal cells: Evidence for multipotent and unipotent subpopulations. Am J Physiol Lung Cell Mol Physiol 2003.

2. University of Pittsburgh

Giangreco A, Shen H, Reynolds SD, Stripp BR: Molecular Phenotype of Airway Side Population Cells. Am J Physiol Lung Cell Mol Physiol 2003

Hong KU, Reynolds SD, Watkins S, Fuchs E, Stripp BR: Basal cells are a multipotent progenitor capable of renewing the bronchial epithelium. Am J Pathol 2004, 164:577-588

Reynolds SD, Giangreco A, Hong KU, McGrath KE, Ortiz LA, Stripp BR, Airway injury in the pathophysiology of lung disease: Selective depletion of airway stem and progenitor cells potentates inflammation and alveolar dysfunction. Am J Physiol - Lung Cell Mol Physiol. 2004, 286:L1256

Reynolds, SD*, Shen, H, Reynolds, PR, Betsuyaku, T, Pilewski, JM, Gambelli, F, DeGuseppe, M, Ortiz, LA, Stripp, BR. Molecular and Functional Properties of Lung Side Population cells. *Corresponding author Am J Physiol Lung Cell Mol Physiol. 2007 Jan 12; [Epub ahead of print] PMID: 17142352

*corresponding author

Reynolds SD, Zemke AC, Giangreco A, Brockway, BL, Teisanu RM, Mariani TJ, Di YP, Taketo, MM, Stripp BR. Conditional stabilization of β -catenin expands the pool of lung stem cells. Stem Cells 2008 26(5):1337-46 PMID: 18356571

Gilbert, TW, Gilbert, S, Madden, M, Reynolds, SD, Badylak, SF. Morphologic assessment of extracellular scaffolds for patch tracheoplasty in a canine model. Ann Thorac Surg. 2008 Sep;86(3):967-74; discussion 967-74. PMID: 18721593

Zemke AC, Teisanu RM, Giangreco A, Drake JA, Brockway BL, Reynolds SD, Stripp BR. β -Catenin is not Necessary for Maintenance or Repair of the

Bronchiolar Epithelium. *Am J Respir Cell Mol Biol*. 2009 Feb 12. [Epub ahead of print] PMID: 19213872

Snyder JC, Reynolds SD, Hollingsworth JW, Li Z, Kaminski N, Stripp BR. Clara cells attenuate the inflammatory response through regulation of macrophage behavior. *Am J Respir Cell Mol Biol*. 2010 Feb;42(2):161-71. Epub 2009 May 7. PMID: 19423773

Lukinskiene L, Liu Y, Reynolds SD, Steele C, Stripp BR, Leikauf GD, Kolls JK, Di YP. Antimicrobial activity of PLUNC protects against *Pseudomonas aeruginosa* infection. *J Immunol*. 2011 Jul 1;187(1):382-90. Epub 2011 Jun 1. PMID: 21632717

3. National Jewish Health

Vandivier RW, Richens TR, Horstmann SA, deCathelineau AM, Ghosh M, Reynolds SD, Xiao YQ, Riches DW, Plumb J, Vachon E, Downey GP, Henson PM. Dysfunctional cystic fibrosis transmembrane conductance regulator inhibits phagocytosis of apoptotic cells with proinflammatory consequences. *Am J Physiol Lung Cell Mol Physiol*. 2009 Oct;297(4):L677-86. Epub 2009 Jul 24. PMID: 19633071

Cole, BB, Jenkins, KM, Titchner, T, Reynolds, PR, Reynolds, SD. Tracheal Basal Cells, A Facultative Progenitor. *Am J Pathol*. 2010 Jul; 177(1):362-76. Epub 2010 Jun 3. Erratum in: *Am J Pathol*. 2010 Oct; 177(4):2145. PMID: 20522644

Ghosh, M, Brechbuhl, BM, Smith, RW, Li, B, Hicks, DA, Titchner, T, Runkle, CM, Reynolds, SD. Context-Dependent Differentiation of Multipotential Mouse Tracheal Basal Cells. *Am J Respir Cell Mol Biol*. 2011 Aug; 45(2):403-10. Epub 2010 Dec 3. PMID: 21131447

Ghosh, M, Helm, KL, Smith, RW, Giordanengo, MS, Shen, H, Reynolds, SD. A Single Cell Functions as A Tissue-Specific Stem Cell and the Niche-Forming Cell. *Am J Respir Cell Mol Biol*. 2011 Sep; 45(3):459-69. Epub 2010 Dec 3. PMID: 21131442

Brechbuhl, HM, Ghosh, M, Smith, MK, Smith, RW, Li, B, Hicks, DA, Reynolds, SD. β -Catenin Regulates Basal to Clara Cell Differentiation. *Am J Pathol*. 2011 Jul; 179(1):367-79. Epub 2011 May 5. PMID: 21703416

Smith, RW, Hicks, DA, Reynolds, SD. Roles for beta-Catenin and Doxycycline in Regulation of Respiratory Epithelial Cell Frequency and Function. *Am J Respir Cell Mol Biol*. 2011 Aug 18. [Epub ahead of print] PMID: 21852686

Berry KA, Li B, Reynolds SD, Barkley RM, Gijón MA, Hankin JA, Henson PM, Murphy RC. MALDI imaging MS of phospholipids in the mouse lung. *J Lipid Res*. 2011 Aug;52(8):1551-60. Epub 2011 Apr 20. PMID: 21508254.

Zemans RL, Briones N, Campbell M, McClendon J, Young SK, Suzuki T, Yang IV, De Langhe S, Reynolds SD, Mason RJ, Kahn M, Henson PM, Colgan SP, Downey GP. Neutrophil transmigration triggers repair of the lung epithelium via beta-catenin signaling. *Proc Natl Acad Sci U S A*. 2011 Sep 20;108(38):15990-5. Epub 2011 Aug 31. PMID: 21880956

Smith MK, Koch PJ, Reynolds SD. Direct and Indirect Roles for b-Catenin in Facultative Basal Progenitor Cell Differentiation. *Am J Physiol Lung Cell Mol Physiol*. 2012 Jan 6. [Epub ahead of print] PMID: 22227204

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C. OTHER PUBLICATIONS (Reviews and Editorials)

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D. ABSTRACTS

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E. PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS

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4. *Nationwide Children's Hospital and The Ohio State University*

Reynolds, SD. The Lung Stem Cell Niche. Cystic Fibrosis Foundation, March 2015.

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XII. INTERACTIONS WITH PHARMACEUTICAL INDUSTRY:

None