Curriculum Vitae

Finn Hawkins, M.B. B.Ch
670 Albany St, Room
Center for Regenerative Medicine,
Boston University Medical Center,
Boston, MA, 02118
hawk@bu.edu
https://profiles.bu.edu/Finn.Hawkins

Academic Training:

06/2004	Bachelor of Medicine and Surgery (M.B. B.Ch.), with honors, National University of Ireland, Galway, Ireland

Additional Training:

07/2004-06/2007	Internal Medicine House Officer, University College Hospital, Galway, Ireland
07/2007-06/2009	Internal Medicine Residency, Mayo Clinic, Rochester, MN
07/2009-06/2013	Pulmonary and Critical Care Medicine fellowship. Boston University Medical Center, Boston, MA
07/2010-06/2013	Research post-doctoral fellowship, Prof. Darrell Kotton MD, Boston University, Boston, MA

Academic Appointments:

7/2013	Assistant Professor of Medicine, Boston University

Hospital Appointments or Other Employment:

2013-present	Assistant Professor of Medicine, Boston University
2018-present	Principal Investigator, Hawkins Lab, Center for Regenerative Medicine (CReM)
2020-present	Director of the Interstitial Lung Disease clinic, Boston Medical Center

Honors:

Institutional

2009	Outstanding Achievement Award, Mayo Clinic
2009	Attitude and Commitment to Excellence Award, Mayo Clinic, Rochester
2018	Boston Medical Center Top Faculty, Excellence in Teaching Award
2019	Evan's Junior Faculty Merit Award

Regional

2000	Best New Faculty Member, New England Chapter, Society for Specialty

National

2007	Member of Royal College of Physicians of Ireland, 2007

Licenses and Certification:

2013	Massachusetts Medical License (#254500)
2012	ABIM certified in Critical Care Medicine 2012
2011	ABIM certified in Pulmonary Medicine (renewed 2021)
2007	MRCP (Member of the Royal College of Physicians of Ireland)

Major Administrative Responsibilities:

Boston Medical Center, Boston, MA, USA

2020-present	Director, Interstitial Lung Disease Clinic, Pulmonary Center
2021	Best Practices Working Group for COVID-19 response.
2015-2021	Sub-specialty education coordinator for the Pulmonary Center (Pulmonary and Critical Care Medicine)
2019	BU Pulmonary Conference Improvement Committee
2012	Fellowship Mentoring Committee, Pulmonary Center

Teaching Experience and Responsibilities:

Dates	Course #	Title Course	Role	Contact hours	Enrollment N
2019-	**NA**	Pulmonary Combined Clinical and Research Conference	Coordinate this weekly flagship conference for the Pulmonary Dept including mentoring fellows on presentations	2hrs/week	Approx. 75 attendees per week
2015-2021		Pulmonary/Critical Care Medicine Education for IM residents	Coordinator	1hr/week	Approx. 60
2016-	PriSM Resp	Lung physiology (PriSM Resp)	Lecturer	2	Approx. 150
2015-	DRx2	Lung disease module (DRx2 course)	Lecturer	1	Approx. 150
2015-	MTM710	Stem Cells and Regenerative Medicine Course	Lecturer	2	Approx. 25
2013-	NA	Pulmonary/Critical Care fellowship teaching curriculum	Lecturer	3	Approx. 20
2010-2013	NA	Pulmonary/Critical Care Medicine curriculum for residents internal medicine	Lecturer	10	Approx. 50
2010-2015	NA	Physical Exam skills for medical students	Small group tutor	12-16	Approx. 6
2010-2015	NA	Clinical History taking	Small group tutor	12-16	Approx. 6

Dates	Course #	Title Course	Role	Contact hours	Enrollment N
2006-2007	NA	Clinical tutor of residents/medical students	Honorary Clinical tutor (Ireland)	2hrs/week	Approx. 80

Diversity, Equity, Inclusion, and Belonging Activities:

Pulmonary Combined Clinical and Research Conference we established in 2022 a mechanism for trainees to invite an outside speaker annually with a goal of increasing the diversity of our invited experts.

2022-2023 Participate in our diversity equity and inclusion workshops, every two months, as part of our Pulmonary Combined Clinical and Research Conference (led by Dr. Klings).

2021 Helped establish a small library in the Center for Regenerative Medicine to improve education and understanding of racism and disparities within medicine and science.

Selected Mentoring Activities:

Mentee, degree(s)	Dates	Collaborative-manuscript or product produced	Mentee Current Position
Student			
Jake Le Suer (PhD candidate Hawkins Lab)	2019-	Le Suer and Hawkins, ERS Monograph (Book chapter), Induced pluripotent stem cells for generating lung airway stem cells and modelling respiratory disease, 2021 Co-authors on several publications (below)	PhD candidate Hawkins lab
Taylor Matte (PhD candidate Hawkins Lab)	2019-	Co-author on several publications (below)	PhD candidate Hawkins lab
Dylan Thomas (MD)	2019	Berical et al., Nature Communications, 2022	Orthopedics residency, University of Minnesota.
Gabrielle Cherfane	2022-	NA	MS2, BU
Resident			
NA			
Post-Doc/Fellow			
Ruobing Wang (MD)	2019-2022	Wang et al., AJP Lung, 2022 Huang et al., Cell Stem Cell, 2021	Attending/Assistant Professor of Medicine Boston Children's Hospital Pulmonary dept. I co-mentored with Dr. Darrell Kotton. Dr. Wang runs her own lab.

Mentee, degree(s)	Dates	Collaborative-manuscript or product produced	Mentee Current Position
Andrew Berical (MD)	2018-	Berical et al., Nature Communications, 2022 Berical et al., Journal of Visual Experimentation, 2022 Hawkins et al. Cell Stem Cell, 2021 Mithal et al.,Nature Communications, 2020	Assistant Professor of Medicine at Boston University (Pulmonary Center) in the Hawkins Lab. Currently PI of Harry Schwachman Career Development Award from the Cystic Fibrosis Foundation (Hawkins mentor). Physician-scientist track.
Robert Smyth (MD)	2019	Smyth and Hawkins, Respir Case Reports, 2021	Assistant Professor Boston University.
Anat Kohn (MD)	2021-	Manuscript under review (both co-authors)	Pulmonary fellow (3rd year)
Daniel J. Wallman	2021	NA	Pulmonary fellow (3rd year)
Faculty			
Andrew Berical (MD)		As above	As above

Other Professional Activities:

Professional Societies: Memberships, Offices, and Committee Assignments:

Massachusetts Pulmonary Society (previously Section)
2017-2021 Massachusetts Pulmonary Section, Board member
2022- Secretary, Massachusetts Pulmonary Society

American Thoracic Society
2010- Member
2015-2017 American Thoracic Society Stem Cell Working group
2018-2021 Program Committee, Respiratory Cell and Molecular Biology Assembly, American Thoracic Society Annual Meeting

Editorial Boards:

NA

Ad Hoc Reviewing

2020- Elife
2018 Journal of the American Medical Association (JAMA)
2018- American Journal of Respiratory Cell and Molecular Biology
2018- Development
2020 Journal of Clinical Investigation (JCI)
2017 Molecular Therapy
2022 Stem Cell Research
2021 Cell Reports
2021 Nature Biotechnology (2021)
2022 Nature Communications
2022 American Journal of Physiology Lung Cell Molecular Physiology

2023 Journal of Clinical Investigation, American Journal of Physiology Lung Cell Molecular Physiology

Major Committee Assignments:

Federal Government:

2023 NIH NHLBI Workshop on “Reverse-remodeling of the lung”, moderator and presenter.

Foundation:

2019- Cystic Fibrosis Foundation Stem Cell Consortium member

2018-2021 American Thoracic Society, Respiratory Cell and Molecular Biology (RCMB) Program Committee

Industry:

NA

State:

NA

Study Sections:

National Institutes of Health:

NA

Foundation:

2018- Cystic Fibrosis Foundation Grant review committee (Path to a Cure)

Other Support:

Current:

2/2021-2/2024 Cystic Fibrosis Foundation HAWKIN20XX2 PI: Finn Hawkins MBBCh
Title of grant: Regenerating Airway Epithelium with Basal Cells Derived from Human iPSCs
Cost, Total: $672,000
Role: PI

06/18-05/23 NIH R01HL139799 PI: Finn Hawkins MBBCh
Title of grant: iPSC-Derived Airway Basal Cells to Model Human Airway Development and Disease. Hawkins (PI). Total Award Amount (including Indirect Costs):
Cost, Total: $1,660,378.
Role: PI

07/2022-06/2025 Cystic Fibrosis Foundation Harry Schwachman Award PI: Andrew Berical, MD
Title of grant: A multi-omic and genetically-controlled assessment of iPSC-derived airway cells to advance therapies for CF, Berical (PI),
Cost, Total:
Role: Mentor, Berical PI (career development award)

09/21/2016-05/31/2023 5U01HL134766-06 PI: Harold Chapman, MD
Title of grant: Epithelial Stem/Progenitor Cells as Repair Agents in Diffuse Alveolar Damage, (Hawkins is the subaward for 2021-2023),
Cost, Total: $8,051,078
Role: Co-PI

Past:
11/2020- 10/2022 Cystic Fibrosis Foundation PI: Ruobing Wang, MD
De-Novo Generation of Pulmonary ionocytes from Human Pluripotent Stem cells
Cost, Total: $263,152
***Role*: Co-I**

6/19-5/21, NIH 5U01HL148692 RMIP, PI: Darrell Kotton, MD
Generation of functional lung stem cells from iPSCs
Cost, Total: $823,409
Role: Co-I

6/2019-2/2021, Cystic Fibrosis Foundation HAWKIN19XX0, PI: Finn Hawkins, MBBCh
Refining stage-specific patterning to generate basal cells from iPSCs.
Cost, Total: $216,000
Role: PI

10/19-10/21, Evans Junior Faculty Merit Award (2019)
Cost, Total: $100, 000
Role: PI

7/17-12/19, Emily's Entourage Research Award PI: Scott Randell, PhD
Creating the W1282X CFTR Airway Epithelial Toolbox Hawkins (Sub-contract), Total Award Amount (including Indirect Costs:
Cost, Total: $125,000
Role: Co-I, Subcontract

4/17-3/19, Cystic Fibrosis Foundation HAWKIN17I0, PI: Finn Hawkins, MBBCh
Personalized Drug Predictions for CF Using iPSC-derived Bronchospheres
Cost, Total: $125,000
Role: PI

7/17-6/18, Boston University Ignition Award, A High-throughput Screening Tool for Personalized Drug Predictions for Cystic Fibrosis Patients.
Cost, Total: $50,000
Role: PI

7/17-6/18, Boston University Clinical and Translational Science Institute, Integrated Pilot Grant Program: Precision Medicine for Cystic Fibrosis using iPSC.
Cost, Total: $20,000
Role: PI

2016-2017, Cystic Fibrosis Foundation Pilot/Feasibility Award HAWKIN15XX0 PI: Hawkins
"Personalized Assessment of CFTR Function in iPSC-derived Lung Organoids".
Cost, Total: $50,000
Role: PI

2012-2014, American Lung Association Senior Research Training Fellowship, "Reconstituting Lung Epithelium with Gene-Corrected Disease-Specific iPS Cells".

Cost, Total: $50,000
Role: PI (Darrell Kotton mentor)

Invited lectures, conference oral presentations and workshops:

Regional:

May 2013	*Reconstituting Lung Epithelium with Gene-Corrected Disease-Specific iPS Cells*, American Lung Association of New England Annual Meeting
March 2018	*Modeling Human Lung Disease with iPSCs*, Channing Division of Network Medicine, Brigham and Women's Hospital, Boston,
December 2017	*Modeling Human Lung Development and Disease*. Massachusetts General Hospital, Pediatric Pulmonary, Boston, MA.
2017	*Modeling CF with Human iPSCs*". Boston Children's Hospital Pulmonary Dept. Research Conference, Boston, MA.

National:

July 2014	*TALEN Targeting of Human iPSC to Track, Purify and Characterize iPSC-Derived Lung Progenitors*, FASEB, Lung Epithelium in Health and Disease Conference, Saxton's River, Vermont.
July 2015	*TALEN-Targeted Lineage Reporters to Purify and Interrogate Human iPS-Derived Lung Progenitors*. Stem Cells, Cellular Therapies, and Bioengineering in Lung Biology and Lung Diseases Conference, University of Vermont, Burlington, VT.
June 2016	*Advances in Open-Source Custom iPSC*, Cystic Fibrosis Foundation "New Technologies Advancing Toward a One-Time Cure" Conference, Savannah, GA.
April 2017	*Modeling Human Lung Development with Induced Pluripotent Stem Cells*", Hastings Center for Pulmonary Research Seminar, University of Southern California, Los Angeles, CA.
July 2017	*Human iPSCs to Model Development and Disease*, Gordon Research Conference, Colby-Sawyer College, NH
March 2019	*Modeling Human Lung Development and Disease with iPSCs*, University of North Carolina, Chapel Hill, NC.
March 2019	Human Induced Pluripotent Stem Cells and Airway Biology", National Jewish Hospital, Denver, CO.
February 2020	*Derivation of airway stem cells from human induced pluripotent stem cells*. Dept of Genetics, Case Western Reserve, Cleveland, OH.
January 2021	*Derivation of airway stem cells from human induced pluripotent stem cells*. Nationwide Children's Hospital, Ohio.
August 2022	*Regenerative Medicine for PCD*. Primary ciliary dyskinesia (PCD) foundation annual meeting keynote lecture. Virtual.
March 2023	*iPSC-derived Airway Stem Cells to Study and Achieve Lung Regeneration.* NHLBI Progenitor Cell Translational Consortium (PCTC) Meeting, Bethesda, MD.
June 2023	Cellular Engraftment Strategies for the Airways. Cystic Fibrosis Research Meeting, Big Sky, Montana.

International:

May 23rd 2012	*Derivation of Lung Progenitors from Pluripotent Stem Cells*, American Thoracic Society International Conference, San Francisco
April 2017	*Building a Bio-artificial Lung*, Irish Respiratory Specialist Registrar Training Day, Royal College of Physicians, St. Vincent's Hospital, Dublin, Ireland
May 2018	*The Use of Human iPSCs to Determine if Mutations are Pathogenic*, American Thoracic Society International Conference, San Diego, CA
February 2019	*Organoid Cultures to Model Human Lung Development and Disease*, Fusion Conference, Bahamas
May 2021	*Innovations in airway stem cell usage for studying chronic lung diseases*, American Thoracic Society International Conference, Virtual
October 2021	*The progress and challenges in iPSCs technology for studying and treating lung disease*. Understanding Lung Cell Homeostasis and Pathways to Reverse Lung Cell Remodeling Workshop, National Heart, Lung, and Blood Institute

Bibliography: earliest to latest

Use full citations (insert all authors in order), <u>bold</u> your name, *italicize PubMed journal abbreviation, add PubMed ID and PMCID*

ORCID: <u>https://orcid.org/</u>
MyNCBI hotlink
*Shared Authorship
†Corresponding author
<u>Mentees names are underlined</u>

Original, Peer Reviewed (empirical) Articles:

1. Maldonado F, **Hawkins FJ**, Daniels CE, Doerr CH, Decker PA, Ryu JH. Pleural fluid characteristics of chylothorax. *Mayo Clin Proc*. 2009 Feb;84(2):129-33. doi: 10.1016/S0025-6196(11)60820-3. PMID: 19181646; PMCID: PMC2664583.

2. Maldonado F, Cartin-Ceba R, **Hawkins FJ**, Ryu JH. Medical and surgical management of chylothorax and associated outcomes. *Am J Med Sci*. 2010 Apr;339(4):314-8. doi: 10.1097/MAJ.0b013e3181cdcd6c. PMID: 20124878.

3. **Hawkins F**, Ebel N, Sorescu GP, McMahon L, Sprinz P, Klings ES. Keeping it in the family: three relatives with HbSC disease and simultaneous acute pulmonary emboli. *Am J Hematol*. 2012 Jan;87(1):101-4. doi: 10.1002/ajh.22177. Epub 2011 Sep 26. PMID: 21953788.

4. Longmire TA*, Ikonomou L*, **Hawkins F**, Christodoulou C, Cao Y, Jean JC, Kwok LW, Mou H, Rajagopal J, Shen SS, Dowton AA, Serra M, Weiss DJ, Green MD, Snoeck HW, Ramirez MI, Kotton DN. Efficient derivation of purified lung and thyroid progenitors from embryonic stem cells. *Cell Stem Cell*. 2012 Apr 6;10(4):398-411. doi: 10.1016/j.stem.2012.01.019. PMID: 22482505; PMCID: PMC3322392. (*co-first)

5. Crane AM, Kramer P, Bui JH, Chung WJ, Li XS, Gonzalez-Garay ML, **Hawkins F**, Liao W, Mora D, Choi S, Wang J, Sun HC, Paschon DE, Guschin DY, Gregory PD, Kotton DN, Holmes MC, Sorscher EJ, Davis BR. Targeted correction and restored function of the CFTR gene in cystic fibrosis induced pluripotent stem cells. **Stem Cell Reports**. 2015 Apr 14;4(4):569-77. doi: 10.1016/j.stemcr.2015.02.005. Epub 2015 Mar 12. PMID: 25772471; PMCID: PMC4400651.

6. Kurmann AA, Serra M, **Hawkins F**, Rankin SA, Mori M, Astapova I, Ullas S, Lin S, Bilodeau M, Rossant J, Jean JC, Ikonomou L, Deterding RR, Shannon JM, Zorn AM, Hollenberg AN, Kotton DN. Regeneration of Thyroid Function by Transplantation of Differentiated Pluripotent Stem Cells. *Cell Stem Cell*. 2015 Nov 5;17(5):527-42. doi: 10.1016/j.stem.2015.09.004. Epub 2015 Oct 22. PMID: 26593959; PMCID: PMC4666682.

7. McCauley KB, **Hawkins F**, Serra M, Thomas DC, Jacob A, Kotton DN. Efficient Derivation of Functional Human Airway Epithelium from Pluripotent Stem Cells via Temporal Regulation of Wnt Signaling. *Cell Stem Cell*. 2017 Jun 1;20(6):844-857.e6. doi: 10.1016/j.stem.2017.03.001. Epub 2017 Mar 30. PMID: 28366587; PMCID: PMC5457392.

8. **Hawkins F***, Kramer P*, Jacob A, Driver I, Thomas DC, McCauley KB, Skvir N, Crane AM, Kurmann AA, Hollenberg AN, Nguyen S, Wong BG, Khalil AS, Huang SX, Guttentag S, Rock JR, Shannon JM, Davis BR, Kotton DN. Prospective isolation of NKX2-1-expressing human lung progenitors derived from pluripotent stem cells. *J Clin Invest*. 2017 Jun 1;127(6):2277-2294. doi: 10.1172/JCI89950. Epub 2017 May 2. PMID: 28463226; PMCID: PMC5451263.

9. Jacob A, Morley M, **Hawkins F**, McCauley KB, Jean JC, Heins H, Na CL, Weaver TE, Vedaie M, Hurley K, Hinds A, Russo SJ, Kook S, Zacharias W, Ochs M, Traber K, Quinton LJ, Crane A, Davis BR, White FV, Wambach J, Whitsett JA, Cole FS, Morrisey EE, Guttentag SH, Beers MF, Kotton DN. Differentiation of Human Pluripotent Stem Cells into Functional Lung Alveolar Epithelial Cells. *Cell Stem Cell*. 2017 Oct 5;21(4):472-488.e10. doi: 10.1016/j.stem.2017.08.014. Epub 2017 Sep 28. PMID: 28965766; PMCID: PMC5755620.

10. Serra M, Alysandratos KD, **Hawkins F**, McCauley KB, Jacob A, Choi J, Caballero IS, Vedaie M, Kurmann AA, Ikonomou L, Hollenberg AN, Shannon JM, Kotton DN. Pluripotent stem cell differentiation reveals distinct developmental pathways regulating lung- versus thyroid-lineage specification. *Development*. 2017 Nov 1;144(21):3879-3893. doi: 10.1242/dev.150193. Epub 2017 Sep 25. PMID: 28947536; PMCID: PMC5702071.

11. McCauley KB, **Hawkins F**, Kotton DN. Derivation of Epithelial-Only Airway Organoids from Human Pluripotent Stem Cells. *Curr Protoc Stem Cell Biol*. 2018 May;45(1):e51. doi: 10.1002/cpsc.51. Epub 2018 May 4. PMID: 30040246; PMCID: PMC6060639.

12. McCauley KB, Alysandratos KD, Jacob A, **Hawkins F**, Caballero IS, Vedaie M, Yang W, Slovik KJ, Morley M, Carraro G, Kook S, Guttentag SH, Stripp BR, Morrisey EE, Kotton DN. Single-Cell Transcriptomic Profiling of Pluripotent Stem Cell-Derived SCGB3A2+ Airway Epithelium. *Stem Cell Reports*. 2018 May 8;10(5):1579-1595. doi: 10.1016/j.stemcr.2018.03.013. Epub 2018 Apr 12. PMID: 29657097; PMCID: PMC5995784.

13. Ryan AL, Ikonomou L, Atarod S, Bölükbas DA, Collins J, Freishtat R, **Hawkins F**, Gilpin SE, Uhl FE, Uriarte JJ, Weiss DJ, Wagner DE. Stem Cells, Cell Therapies, and Bioengineering in Lung Biology and Diseases 2017. An Official American Thoracic Society Workshop Report. *Am J Respir Cell Mol Biol*. 2019 Oct;61(4):429-439. doi: 10.1165/rcmb.2019-0286ST. PMID: 31573338; PMCID: PMC6775946.

14. Jacob A, Vedaie M, Roberts DA, Thomas DC, Villacorta-Martin C, Alysandratos KD, **Hawkins F**, Kotton DN. Derivation of self-renewing lung alveolar epithelial type II cells from human pluripotent stem cells. *Nat Protoc*. 2019 Dec;14(12):3303-3332. doi: 10.1038/s41596-019-0220-0. Epub 2019 Nov 15. PMID: 31732721; PMCID: PMC7275645.

15. Wang R, McCauley KB, Kotton DN, **Hawkins F**†. Differentiation of human airway- organoids from induced pluripotent stem cells (iPSCs). *Methods Cell Biol*. 2020;159:95-114. doi: 10.1016/bs.mcb.2020.03.008. Epub 2020 Apr 25. PMID: 32586451.

16. Mithal A, Capilla A, Heinze D, Berical A, Villacorta-Martin C, Vedaie M, Jacob A, Abo K, Szymaniak A, Peasley M, Stuffer A, Mahoney J, Kotton DN, **Hawkins F**, Mostoslavsky G. Generation of mesenchyme free intestinal organoids from human induced pluripotent stem cells. *Nat Commun*. 2020 Jan 10;11(1):215. doi: 10.1038/s41467-019-13916-6. PMID: 31924806; PMCID: PMC6954238.

17. De Santi C, Fernández Fernández E, Gaul R, Vencken S, Glasgow A, Oglesby IK, Hurley K, **Hawkins F**, Mitash N, Mu F, Raoof R, Henshall DC, Cutrona MB, Simpson JC, Harvey BJ, Linnane B, McNally P, Cryan SA, MacLoughlin R, Swiatecka-Urban A, Greene CM. Precise Targeting of miRNA Sites Restores CFTR Activity in CF Bronchial Epithelial Cells. *Mol Ther*. 2020 Apr 8;28(4):1190-1199. doi: 10.1016/j.ymthe.2020.02.001. Epub 2020 Feb 6. PMID: 32059764; PMCID: PMC7132615.

18. Huang J, Hume AJ, Abo KM, Werder RB, Villacorta-Martin C, Alysandratos KD, Beermann ML, Simone-Roach C, Lindstrom-Vautrin J, Olejnik J, Suder EL, Bullitt E, Hinds A, Sharma A, Bosmann M, Wang R, **Hawkins F**, Burks EJ, Saeed M, Wilson AA, Mühlberger E, Kotton DN. SARS-CoV-2 Infection of Pluripotent Stem Cell- Derived Human Lung Alveolar Type 2 Cells Elicits a Rapid Epithelial-Intrinsic Inflammatory Response. *Cell Stem Cell*. 2020 Dec 3;27(6):962-973.e7. doi: 10.1016/j.stem.2020.09.013. Epub 2020 Sep 18. PMID: 32979316; PMCID: PMC7500949.

19. **Hawkins FJ***, Suzuki S*, Beermann ML, Barillà C, Wang R, Villacorta-Martin C, Berical A, Jean JC, Le Suer J, Matte T, Simone-Roach C, Tang Y, Schlaeger TM, Crane AM, Matthias N, Huang SXL, Randell SH, Wu J, Spence JR, Carraro G, Stripp BR, Rab A, Sorsher EJ, Horani A, Brody SL, Davis BR, Kotton DN. Derivation of Airway Basal Stem Cells from Human Pluripotent Stem Cells. *Cell Stem Cell*. 2021 Jan 7;28(1):79-95.e8. doi: 10.1016/j.stem.2020.09.017. Epub 2020 Oct 23. PMID: 33098807; PMCID: PMC7796997.

20. Suzuki S, **Hawkins FJ**, Barillà C, Beermann ML, Kotton DN, Davis BR. Differentiation of human pluripotent stem cells into functional airway basal stem cells. *STAR Protoc*. 2021 Jul 20;2(3):100683. doi: 10.1016/j.xpro.2021.100683. PMID: 34355203; PMCID: PMC8322461.

21. Wang R, Hume AJ, Beermann ML, Simone-Roach C, Lindstrom-Vautrin J, Le Suer J, Huang J, Olejnik J, Villacorta-Martin C, Bullitt E, Hinds A, Ghaedi M, Rollins S, Werder RB, Abo KM, Wilson AA, Mühlberger E, Kotton DN, **Hawkins FJ**†. Human airway lineages derived from pluripotent stem cells reveal the epithelial responses to SARS-CoV-2 infection. *Am J Physiol Lung Cell Mol Physiol*. 2022 Mar 1;322(3):L462-L478. doi:10.1152/ajplung.00397.2021. Epub 2022 Jan 12. PMID: 35020534; PMCID: PMC8917936.

22. Ng WH, Johnston EK, Tan JJ, Bliley JM, Feinberg AW, Stolz DB, Sun M, Wijesekara P, **Hawkins F**, Kotton DN, Ren X. Recapitulating human cardio-pulmonary co-development using

simultaneous multilineage differentiation of pluripotent stem cells. *Elife*. 2022 Jan 12;11:e67872. doi: 10.7554/eLife.67872. PMID: 35018887; PMCID: PMC8846595.

23. Berical A, Lee RE, Lu J, Beermann ML, Le Suer JA, Mithal A, Thomas D, Ranallo N, Peasley M, Stuffer A, Bukis K, Seymour R, Harrington J, Coote K, Valley H, Hurley K, McNally P, Mostoslavsky G, Mahoney J, Randell SH, **Hawkins FJ**†. A multimodal iPSC platform for cystic fibrosis drug testing. *Nat Commun*. 2022 Jul 29;13(1):4270. doi: 10.1038/s41467-022-31854-8. PMID: 35906215; PMCID: PMC9338271.

24. Wang R, Simone-Roach C, Lindstrom-Vautrin J, Wang F, Rollins S, Bawa PS, Lu J, Tang Y, Beermann ML, Schlaeger T, Mahoney J, Rowe SM, **Hawkins FJ**, Kotton DN. De Novo Generation of Pulmonary Ionocytes from Normal and Cystic Fibrosis Human Induced Pluripotent Stem Cells. Am J Respir Crit Care Med. 2023 Mar 1. doi: 10.1164/rccm.202205-1010LE. Epub ahead of print. PMID: 36857488.

Guidelines/Professional Organization Scientific Statements

Peer-reviewed Review Articles:

1. **Hawkins F**, Kotton DN. Embryonic and induced pluripotent stem cells for lung regeneration. *Ann Am Thorac Soc*. 2015 Mar;12 Suppl 1:S50-3. doi: 10.1513/AnnalsATS.201410-457MG. PMID: 25830836.
2. Berical A, Lee RE, Randell SH, **Hawkins F**. Challenges Facing Airway Epithelial Cell-Based Therapy for Cystic Fibrosis. *Front Pharmacol*. 2019 Feb 8;10:74. doi: 10.3389/fphar.2019.00074. PMID: 30800069; PMCID: PMC6376457.
3. King NE, Suzuki S, Barillà C**, Hawkins FJ**, Randell SH, Reynolds SD, Stripp BR, Davis BR. Correction of Airway Stem Cells: Genome Editing Approaches for the Treatment of Cystic Fibrosis. *Hum Gene Ther*. 2020 Sep;31(17-18):956-972. doi: 10.1089/hum.2020.160. Epub 2020 Sep 8. PMID: 32741223; PMCID: PMC7495916.

Peer reviewed Web Publications and Videos:

Berical A, Beermann ML, Suzuki S, LeSuer J, Matte T, Davis B, Kotton D, Hawkins F. Generation of Airway Epithelial Cell Air-Liquid Interface Cultures from Human Pluripotent Stem Cells. J Vis Exp. 2022 Jun 14;(184). doi: 10.3791/63882. PMID: 35781291.

Editorials

1. **Hawkins F**, Murphy JG, Dunn WF. "Is my doctor impaired, or just sleep deprived?" *Chest*. 2009 Nov;136(5):1194-1197. doi: 10.1378/chest.09-1213. PMID: 19892668.
2. **Hawkins FJ**, Kotton DN. Pulmonary Ionocytes Challenge the Paradigm in Cystic Fibrosis. *Trends Pharmacol Sci*. 2018 Oct;39(10):852-854. doi: 10.1016/j.tips.2018.08.005. Epub 2018 Sep 10. PMID: 30213439.

Case Reports, Critical Reviews, and Chapters:

1. **Hawkins FJ,** Rankin S, Kotton D, Zorn A. “The genetic programs regulation embryonic lung development and induced pluripotent stem cell differentiation”. Fetal and Neonatal Lung

development. Edited by Alan Jobe, Jeffrey Whitsett, Steven Abman, Cambridge University Press, 2016.

2. Le Suer J, Sease R, Ryan A and **Hawkins F.** Induced pluripotent stem cells for generating airway stem cells and modelling respiratory diseases. Lung Stem Cells in Development, Health, and Disease, ERS Monograph, 2021.

3. Smyth R, Sloan JM, Burks E, **Hawkins F**†. Primary pulmonary marginal zone lymphoma: an unusual cause of pulmonary infiltrates. *Respirol Case Rep*. 2021 Jun 29;9(8):e00806. doi: 10.1002/rcr2.806. PMID: 34221408; PMCID: PMC8239556.

Selected Media:

May 2017 ScienceDaily: Scientists turn human induced pluripotent stem cells into lung cells

https://www.sciencedaily.com/releases/2017/05/170503131922.htm

10.3.2021