

## **HARRY KARMOUTY-QUINTANA, PhD**

Assistant Professor – Tenure-Track

Department of Biochemistry and Molecular Biology  
The University of Texas Health Science Center Houston (UTHealth) – McGovern Medical School  
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Citizenship: Spain / US Permanent Resident

### **EDUCATION**

2003 BSc Pharmacology with Extramural Year, King's College London, UK  
2006 PhD in Pharmacology and Biophysics, King's College London, UK, Thesis work pursued at Novartis Pharma AG, Basel, Switzerland

### **POST GRADUATE TRAINING**

2007 – 2010 Postdoctoral Fellow at McGill University, Canada  
2010 – 2012 Postdoctoral Fellow at the University of Texas Medical School at Houston

### **ACADEMIC AND ADMINISTRATIVE APPOINTMENTS**

2012 – 2015 Assistant Professor – Non Tenure Rank (NTR) at the University of Texas Health Science Center at Houston (UTHealth)  
2014 – 2015 Associate Member of the Graduate School of Biomedical Sciences of University of Texas Health Science Center at Houston (UTHealth) and MD Anderson Cancer Center  
2015 – Present Full Member of the Graduate School of Biomedical Sciences of University of Texas Health Science Center at Houston (UTHealth) and MD Anderson Cancer Center  
2015 – Present Director, UTHealth Pulmonary Center of Excellence Tissue Bank

2015 – Present      Assistant Professor – Tenure-Track at the University of Texas Health Science Center at Houston (UTHealth)

## **PROFESSIONAL ORGANIZATIONS AND COMMITTEE SERVICE**

### **LOCAL:**

2007 – 2008      McGill University Postdoctoral Affairs Committee (Chair)  
2007 – 2009      Postdoctoral Senator, McGill University Senate  
2008 – 2009      Founder of the Postdoctoral Association of McGill University  
2009              McGill University, Department of Medicine, Director of the Meakins-Christie Laboratories Search Committee

### **NATIONAL:**

2002 – 2003      British Pharmacological Society  
2007 – 2009      European Academy for Allergology and Clinical Immunology  
2010 – Present    American Thoracic Society  
2011 – Present    American Association for the Advancement of Science (AAAS)  
2013 – Present    European Respiratory Society  
2012 – 2016      Member of the Pulmonary Circulation Planning Committee of the American Thoracic Society

## **HONORS AND AWARDS**

2004              Best poster award at the summer meeting of the British Association for Lung Research (BALR)  
2005              Best oral presentation at the Novartis 3R (Reduction, Replacement, Refinement of Experimental Models of Disease) symposium  
2008              Best poster presentation prize for the Junior Member Associate session at the 27th Congress of the European Academy of Allergology and Clinical Immunology (EAACI).  
2008              Best poster presentation on Mechanism of Asthma at the 27th Congress of the European Academy of Allergology and Clinical Immunology (EAACI).  
2009              Recipient of the Scarlet Key Award, recognizing outstanding leadership in the McGill community.  
2011              Best postdoctoral oral presentation at the Biochemistry and Molecular Biology annual retreat  
2011              Young Scientist Sponsorship Travel Award from the European Respiratory Society  
2012              Third place at the at Gulf Coast Consortia – Lung Research Day poster competition  
2012              Travel Award from the Keystones Symposia  
2015              1<sup>st</sup> place “COPD and Epigenetics” leadership competition organized by BioMedX and Boehringer Ingelheim

2016                      Invited to attend the American Heart Association 2016 Research Leaders Academy

## EDITORIAL APPOINTMENTS

### Editorial Board Appointments:

2017-present            Member of the Editorial Board for Pulmonary Pharmacology and Therapeutics  
2017-present            Member of the Editorial Board for the American Journal of Respiratory Cell and Molecular Biology  
2017                      Lead Editor for "Molecular Mechanisms in Pulmonary Hypertension and Right Ventricle Dysfunction" a Research Topic for Frontiers in Physiology

### Ad-hoc Journal Reviewer:

American Journal of Physiology – Lung Cellular and Molecular Physiology  
American Journal of Respiratory Cell and Molecular Biology  
BioFactors  
Canadian Journal of Physiology and Pharmacology  
Cellular and Molecular Life Sciences  
European Journal of Pharmacology  
Frontiers in Immunology  
Frontiers in Physiology  
PLoS One  
Respiratory Research  
The FASEB Journal  
The Journal of Immunology

## SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

### Service on Grant Review Panels including Study Sections

2016                      Asthma UK  
2016                      Netherlands Organisation for Scientific Research (NWO)  
2017                      Initiative d' excellence Aix-Marseille, France  
2017                      Early Career Review (ECR) program of the Centre for Scientific Review of the NIH  
2017- 2020              Regular Member: American Heart Association Vascular Bio & Blood Pressure Committee  
2017 – Current        Ad-hoc member Respiratory Integrative Biology and Translational Research Study Section [RIBT]

### University Committees other than UT Health

2007 – 2008            McGill University Postdoctoral Affairs Committee (Chair)  
2007 – 2009            Postdoctoral Senator, McGill University Senate  
2008 – 2009            Founder of the Postdoctoral Association of McGill University

2009 McGill University, Department of Medicine, Director of the Meakins-Christie Laboratories Search Committee

### **SERVICE TO UT HEALTH AND MCGOVERN MEDICAL SCHOOL COMMITTEES:**

2015 – Present Member of the Executive Committee of the Center of Excellence for Pulmonary Disease at the University of Texas – Medical School at Houston  
2016 – Present Co-Director of the BMB Annual Retreat  
2016 – Present Biochemistry and Molecular Biology Student Travel Award Committee  
2017 – Present Animal Welfare Committee

### **SERVICE TO GRADUATE SCHOOL COMMITTEES:**

2014 – 2016 GSBS Advisory Committee for Alexandria Plumer  
2015 – Present GSBS Advisory Committee for Danielle Little  
2016 – 2016 GSBS Examination Committee for Danielle Little  
2016 – Present GSBS Advisory Committee for Junsuk (Josh) Ko  
2017 – Present Biochemistry and Cell Biology Graduate Program Steering Committee

### **SERVICE TO THE COMMUNITY:**

2010 – 2011 Group Journal Club Coordinator  
2014 – Present Interview candidates for the MD/PhD program for the UTHealth/MDAnderson GSBS  
2017 – Present Interview candidates for the PhD program for the UTHealth/MDAnderson GSBS

### **SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE**

2015 – Present Scott Collum (PhD Student)  
2017 – 2017 Tamara Darwiche (Visiting MSc Student) 6 month in vivo research supervisor  
2017 – 2017 Lauren Headley (Visiting MSc Student) 6 month in vivo research supervisor  
2017 – Present Cory Wilson (MD/PhD Student)  
2017 – Present Mary Fuentes (PhD Student – Rotation)

### **SPONSORSHIP OF CANDIDATES FOR POSTDOCTORAL FELLOWS**

2016 – Present Tinne CJ Mertens (Postdoctoral Fellow)

### **CURRENT TEACHING RESPONSIBILITIES:**

**“Emerging Fields in Biochemistry and Molecular Biology: Translational Science and Molecular Medicine (Yang Xia, MD/PhD Director)”**

Lecture 8: Translational potential in pulmonary diseases, from mice to humans and back again (Karmouty-Quintana)

Lecture 9: Pulmonary fibrosis & potential therapies; why the wait? (Karmouty-Quintana)

**GSBS Elective: “Integrative and Molecular Physiology (Rebecca Berdeaux PhD Director)”**

Block 4. Respiratory system

Lecture 13: Pulmonary ventilation, circulation and edema (Karmouty-Quintana)

Lecture 14: Regulation of gas exchange and respiration; transport in blood and tissue fluids (Karmouty-Quintana)

Lecture 15: Respiratory insufficiency: pathophysiology, fibrosis (Karmouty-Quintana)

**MENTORING ACTIVITIES:**

**McGill University, Canada**

2009	Maria Marti Solano (summer student, currently a PhD student at Pompeu Fabra University, Spain)
2008	Laura Xicota (summer student, currently a PhD student at Pompeu Fabra University, Spain)
2007	Fiona Martin (summer student, currently a Masters student at Dublin City University)

**UTHealth – McGovern Medical School**

2011	Jerry Zhang (summer student)
2012	Isabelle Bunge (summer student)
2012 – 2013	Bao Le (summer student)
2012 – 2015	Mesias Pedroza (PhD Student – Primary mentor: Dr. Michael Blackburn)
2014	Simon deLeve (Visiting PhD Student <i>University of Essen, Germany</i> )
2012 – 2015	Kemly Philip (MD/PhD Student – Primary mentor: Dr. Michael Blackburn)
2015 – Present	Scientific Overview Committee for Jennifer Agrusa, MD
2016 – 2016	Ankit Hanmandlu UT Summer Research Program
2016 – 2016	Heather Sweeney (summer student)
2017 – 2017	Melissa Chavez UT Summer Research Program
2017 – 2017	Brent Gudenkauf Visiting MD Student Trainee
2017 – 2017	Chiara Bellochi MD Visiting Scientist
2017 – 2017	Cory Wilson MD/PhD Student
2017 – 2017	Mary Fuentes Rotating PhD Student

**GRANT SUPPORT**

**ACTIVE:**

1R01 HL138510-01 (PI: Karmouty-Quintana) 1 Jul 17 – 30 Jun 22 5 years

National Institutes of Health (NIH)

8 Percentile

*3'UTR shortening in Pulmonary Vascular Disease* Direct Funds: \$1,250, 000

14SDG18550039 (PI: Karmouty-Quintana) 1 Jan 14 – 31 Dec 17 4 years

American Heart Association

*The role of hyaluronan in pulmonary hypertension secondary to lung fibrosis*

Total Award: \$370,000

Discovery Award (PI: Karmouty-Quintana) 1 Jan 16 – 31 Dec 19 3 years

UTHealth Pulmonary Center of Excellence

*Cflm25 links alternative polyadenylation with pulmonary hypertension and right ventricle hypertrophy*

Total Award: \$300,000

G-45857 (PI: Karmouty-Quintana) 1 July 16 – 30 June 18 2 years

Genentech

*CGN\_IPF\_2016 - BMP2 in Acute and Chronic Lung Injury.*

Total Award: \$100,000

RG-414673 (PI: Karmouty-Quintana) 1 Aug 16 – 31 July 18 2 years

American Lung Association Biomedical Research Grant

*Alternative Polyadenylation in the pathogenesis of COPD*

Total Award: \$50,000

**COMPLETED:**

2013 (Karmouty-Quintana) 1 July 13 – 30 June 14 1 year

Entelligence MD Actelion Award

*The role of hyaluronan in pulmonary hypertension associated with idiopathic pulmonary fibrosis (IPF)*

Total Award: \$100,000

11POST7580121 (Karmouty-Quintana) 1 July 11 – 30 August 12

American Heart Association

*Adenosinergic Mechanisms in Pulmonary Hypertension*

The project focused on understanding the contribution of adenosine in the development of pulmonary hypertension secondary to chronic lung diseases.

Dossier no. 21657 (Karmouty-Quintana) 1 July 10 – 30 June 11

Fonds de la Recherche en Santé Québec

*Role of Sphingolipids and Adenosinergic mechanisms in the regulation of pulmonary hypertension*

The objective of this study was to investigate the contribution of sphingolipids and adenosine in the pathogenesis of pulmonary hypertension.

Dossier no. 15460 (Karmouty-Quintana)      1 June 08 – 31 May 10      2 years

Fonds de la Recherche en Santé Québec

*Investigating the role of sphingolipid mechanisms in asthmatic airway remodeling*

The goal of this study was to investigate the contribution of sphingolipids in the context of asthmatic airway remodeling.

2007-KAR01 (Karmouty-Quintana)      1 September 07 – 30 August 08      1 years

McGill University Health Centre (MUHC)

*The role of FTY720 in airway remodeling*

This project aimed to investigate the role of FTY720, a sphingosine-1-phosphate analogue in asthmatic airway remodeling.

## PEER REVIEWED PUBLICATIONS (1-42)

Corresponding Author Publications marked with \*\*\*

### As an Undergraduate Student:

1. Tigani B, Gremlich HU, Cannet C, Zurbrugg S, **Quintana HK**, Beckmann N. Near-infrared fluorescence imaging and histology confirm anomalous edematous signal distribution detected in the rat lung by MRI after allergen challenge. *Journal of magnetic resonance imaging : JMRI*. 2004; 20(6):967-74. PubMed [journal] PMID: 15558573
2. **Karmouty Quintana H**, Mazzoni L, Fozard JR. Effects of endotoxin and allergen alone and in combination on the sensitivity of the rat airways to adenosine. *Autonomic & autacoid pharmacology*. 2005; 25(4):167-70. PubMed [journal] PMID:16176448

### As a PhD Student:

3. **Quintana HK**, Cannet C, Schaeublin E, Zurbrugg S, Sugar R, Mazzoni L, Page CP, Fozard JR, Beckmann N. Identification with MRI of the pleura as a major site of the acute inflammatory effects induced by ovalbumin and endotoxin challenge in the airways of the rat. *American journal of physiology. Lung cellular and molecular physiology*. 2006; 291(4):L651-7. PubMed [journal] PMID: 16728527
4. **Quintana HK**, Cannet C, Zurbrugg S, BiÃ© FX, Fozard JR, Page CP, Beckmann N. Proton MRI as a noninvasive tool to assess elastase-induced lung damage in spontaneously breathing rats. *Magnetic resonance in medicine*. 2006; 56(6):1242-50. PubMed [journal] PMID: 17029230
5. Tigani B, Cannet C, **Karmouty-Quintana H**, Ble FX, Zurbrugg S, Schaeublin E, Fozard JR, Beckmann N. Lung inflammation and vascular remodeling after repeated allergen challenge detected noninvasively by MRI. *American journal of physiology. Lung cellular and molecular physiology*. 2007; 292(3):L644-53. PubMed [journal] PMID: 17085517
6. **Karmouty-Quintana H**, Cannet C, Sugar R, Fozard JR, Page CP, Beckmann N. Capsaicin-induced mucus secretion in rat airways assessed in vivo and non-invasively by magnetic

resonance imaging. *British journal of pharmacology*. 2007; 150(8):1022-30. PubMed [journal] PMID: 17351665, PMCID: PMC2013907

7. Beckmann N, Kneuer R, Gremlich HU, **Karmouty-Quintana H**, Ble FX, Muller M. In vivo mouse imaging and spectroscopy in drug discovery. *NMR in biomedicine*. 2007; 20(3):154-85. PubMed [journal] PMID: 17451175

8. **Karmouty-Quintana H**, Cannet C, Zurbruegg S, Bläsi FX, Fozard JR, Page CP, Beckmann N. Bleomycin-induced lung injury assessed noninvasively and in spontaneously breathing rats by proton MRI. *Journal of magnetic resonance imaging : JMRI*. 2007; 26(4):941-9. PubMed [journal] PMID: 17896392

9. Beckmann N, Cannet C, **Karmouty-Quintana H**, Tigani B, Zurbruegg S, Ble FX, Cremillieux Y, Trifilieff A. Lung MRI for experimental drug research. *European journal of radiology*. 2007; 64(3):381-96. PubMed [journal] PMID: 17931813

10. **Karmouty-Quintana H**, Ble FX, Cannet C, Zurbruegg S, Fozard JR, Page CP, Beckmann N. In vivo pharmacological evaluation of compound 48/80-induced airways oedema by MRI. *British journal of pharmacology*. 2008; 154(5):1063-72. PubMed [journal] PMID: 18469845, PMCID: PMC2451044

11. Ble FX, Cannet C, Zurbruegg S, **Karmouty-Quintana H**, Bergmann R, Frossard N, Trifilieff A, Beckmann N. Allergen-induced lung inflammation in actively sensitized mice assessed with MR imaging. *Radiology*. 2008; 248(3):834-43. PubMed [journal] PMID: 18647843

12. Ble FX, Schmidt P, Cannet C, Kneuer R, **Karmouty-Quintana H**, Bergmann R, Coote K, Danahay H, Zurbruegg S, Gremlich HU, Beckmann N. In vivo assessments of mucus dynamics in the rat lung using a Gd-Cy5.5-bilabeled contrast agent for magnetic resonance and optical imaging. *Magnetic resonance in medicine*. 2009; 62(5):1164-74. PubMed [journal] PMID: 19780168

#### **As a postdoctoral Fellow:**

13. Tuck SA, Ramos-Barbon D, Campbell H, McGovern T, **Karmouty-Quintana H**, Martin JG. Time course of airway remodelling after an acute chlorine gas exposure in mice. *Respiratory research*. 2008; 9:61. PubMed [journal] PMID: 18702818, PMCID:PMC2531104

14. **Karmouty-Quintana H**, Tamimi F, McGovern TK, Grover LM, Martin JG, Barralet JE. Sustained steroid release in pulmonary inflammation model. *Biomaterials*. 2010;31(23):6050-9. PubMed [journal] PMID: 20472285

15. McGovern TK, Powell WS, Day BJ, White CW, Govindaraju K, **Karmouty-Quintana H**, Lavoie N, Tan JJ, Martin JG. Dimethylthiourea protects against chlorine induced changes in airway function in a murine model of irritant induced asthma. *Respiratory research*. 2010; 11:138. PubMed [journal] PMID: 20925946, PMCID: PMC2965137

16. Pedroza M, Schneider DJ, **Karmouty-Quintana H**, Coote J, Shaw S, Corrigan R, Molina JG, Alcorn JL, Galas D, Gelinas R, Blackburn MR. Interleukin-6 contributes to inflammation and remodeling in a model of adenosine mediated lung injury. *PLoS one*. 2011; 6(7):e22667. PubMed [journal] PMID: 21799929, PMCID: PMC3143181



17. Zhou Y, Schneider DJ, Morschl E, Song L, Pedroza M, **Karmouty-Quintana H**, Le T, Sun CX, Blackburn MR. Distinct roles for the A2B adenosine receptor in acute and chronic stages of bleomycin-induced lung injury. *Journal of immunology (Baltimore, Md. : 1950)*. 2011; 186(2):1097-106. NIHMSID: NIHMS453384 PubMed [journal] PMID: 21149612, PMCID: PMC3607290

\*\*\*18. **Karmouty-Quintana H**, Siddiqui S, Hassan M, Tsuchiya K, Risse PA, Xicota-Vila L, Marti-Solano M, Martin JG. Treatment with a sphingosine-1-phosphate analog inhibits airway remodeling following repeated allergen exposure. *American journal of physiology. Lung cellular and molecular physiology*. 2012; 302(8):L736-45. PubMed [journal] PMID: 22287614

19. **Karmouty-Quintana H**, Zhong H, Acero L, Weng T, Melicoff E, West JD, Hemnes A, Grenz A, Eltzschig HK, Blackwell TS, Xia Y, Johnston RA, Zeng D, Belardinelli L, Blackburn MR. The A2B adenosine receptor modulates pulmonary hypertension associated with interstitial lung disease. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*. 2012; 26(6):2546-57. PubMed [journal] PMID: 22415303, PMCID: PMC3650483

20. MacSharry J, O'Mahony C, Shalaby KH, Sheil B, **Karmouty-Quintana H**, Shanahan F, Martin JG. Immunomodulatory effects of feeding with *Bifidobacterium longum* on allergen-induced lung inflammation in the mouse. *Pulmonary pharmacology & therapeutics*. 2012; 25(4):325-34. PubMed [journal] PMID: 22705947

21. **Karmouty-Quintana H**, Xia Y, Blackburn MR. Adenosine signaling during acute and chronic disease states. *Journal of molecular medicine (Berlin, Germany)*. 2013; 91(2):173-81. NIHMSID: NIHMS438583 PubMed [journal] PMID: 23340998, PMCID:PMC3606047

22. Weng T, **Karmouty-Quintana H**, Garcia-Morales LJ, Molina JG, Pedroza M, Bunge RR, Bruckner BA, Loebe M, Seethamraju H, Blackburn MR. Hypoxia-induced deoxycytidine kinase expression contributes to apoptosis in chronic lung disease. *FASEB journal: official publication of the Federation of American Societies for Experimental Biology*. 2013; 27(5):2013-26. PubMed [journal] PMID: 23392349, PMCID: PMC4046114

23. **Karmouty-Quintana H**, Weng T, Garcia-Morales LJ, Chen NY, Pedroza M, Zhong H, Molina JG, Bunge R, Bruckner BA, Xia Y, Johnston RA, Loebe M, Zeng D, Seethamraju H, Belardinelli L, Blackburn MR. Adenosine A2B receptor and hyaluronan modulate pulmonary hypertension associated with chronic obstructive pulmonary disease. *American journal of respiratory cell and molecular biology*. 2013; 49(6):1038-47. PubMed [journal] PMID: 23855769

24. Roy MG, Livraghi-Butrico A, Fletcher AA, McElwee MM, Evans SE, Boerner RM, Alexander SN, Bellinghausen LK, Song AS, Petrova YM, Tuvim MJ, Adachi R, Romo I, Bordt AS, Bowden MG, Sisson JH, Woodruff PG, Thornton DJ, Rousseau K, De la Garza MM, Moghaddam SJ, **Karmouty-Quintana H**, Blackburn MR, Drouin SM, Davis CW, Terrell KA, Grubb BR, O'Neal WK, Flores SC, Cota-Gomez A, Lozupone CA, Donnelly JM, Watson AM, Hennessy CE, Keith RC, Yang IV, Barthel L, Henson PM, Janssen WJ, Schwartz DA, Boucher RC, Dickey BF, Evans CM. Muc5b is required for airway defence. *Nature*. 2014; 505(7483):412-6. NIHMSID: NIHMS571052 PubMed [journal] PMID: 24317696, PMCID: PMC4001806

25. Davies J, **Karmouty-Quintana H**, Le TT, Chen NY, Weng T, Luo F, Molina J, Moorthy B, Blackburn MR. Adenosine promotes vascular barrier function in hyperoxic lung injury. *Physiological reports*. 2014; 2(9). PubMed [journal] PMID: 25263205, PMCID: PMC4270235

26. Dahm PH, Richards JB, **Karmouty-Quintana H**, Cromar KR, Sur S, Price RE, Malik F, Spencer CY, Barreno RX, Hashmi SS, Blackburn MR, Haque IU, Johnston RA. Effect of antigen sensitization and challenge on oscillatory mechanics of the lung and pulmonary inflammation in obese carboxypeptidase E-deficient mice. *American journal of physiology. Regulatory, integrative and comparative physiology*. 2014; 307(6):R621-33. PubMed [journal] PMID: 25009214, PMCID: PMC4166760

**As a NTR Assistant Professor:**

27. Le TT, **Karmouty-Quintana H**, Melicoff E, Le TT, Weng T, Chen NY, Pedroza M, Zhou Y, Davies J, Philip K, Molina J, Luo F, George AT, Garcia-Morales LJ, Bunge RR, Bruckner BA, Loebe M, Seethamraju H, Agarwal SK, Blackburn MR. Blockade of IL-6 Trans signaling attenuates pulmonary fibrosis. *Journal of immunology (Baltimore, Md. : 1950)*. 2014; 193(7):3755-68. NIHMSID: NIHMS619142 PubMed [journal] PMID: 25172494, PMCID: PMC4169999

28. Weng T, Poth JM, **Karmouty-Quintana H**, Garcia-Morales LJ, Melicoff E, Luo F, Chen NY, Evans CM, Bunge RR, Bruckner BA, Loebe M, Volcik KA, Eltzschig HK, Blackburn MR. Hypoxia-induced deoxycytidine kinase contributes to epithelial proliferation in pulmonary fibrosis. *American journal of respiratory and critical care medicine*. 2014; 190(12):1402-12. PubMed [journal] PMID: 25358054, PMCID: PMC4299646

29. **Karmouty-Quintana H**, Philip K, Acero LF, Chen NY, Weng T, Molina JG, Luo F, Davies J, Le NB, Bunge I, Volcik KA, Le TT, Johnston RA, Xia Y, Eltzschig HK, Blackburn MR. Deletion of ADORA2B from myeloid cells dampens lung fibrosis and pulmonary hypertension. *FASEB journal: official publication of the Federation of American Societies for Experimental Biology*. 2015; 29(1):50-60. PubMed [journal] PMID: 25318478, PMCID: PMC4763976

30. Hoegl S, Brodsky KS, Blackburn MR, **Karmouty-Quintana H**, Zwissler B, Eltzschig HK. Alveolar Epithelial A2B Adenosine Receptors in Pulmonary Protection during Acute Lung Injury. *Journal of immunology (Baltimore, Md. : 1950)*. 2015; 195(4):1815-24. NIHMSID: NIHMS702270 PubMed [journal] PMID: 26188061, PMCID: PMC4530072

31. Pedroza M, Le TT, Lewis K, **Karmouty-Quintana H**, To S, George AT, Blackburn MR, Twardy DJ, Agarwal SK. STAT-3 contributes to pulmonary fibrosis through epithelial injury and fibroblast-myofibroblast differentiation. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*. 2016; 30(1):129-40. PubMed [journal] PMID: 26324850, PMCID: PMC4684532

32. Luo F, Le NB, Mills T, Chen NY, **Karmouty-Quintana H**, Molina JG, Davies J, Philip K, Volcik KA, Liu H, Xia Y, Eltzschig HK, Blackburn MR. Extracellular adenosine levels are associated with the progression and exacerbation of pulmonary fibrosis. *FASEB journal: official publication of the Federation of American Societies for Experimental Biology*. 2016; 30(2):874-83. PubMed [journal] PMID: 26527068, PMCID: PMC4714555

**As an Assistant Professor (Tenure Track):**

\*\*\*33. Garcia-Morales LJ, Chen NY, Weng T, Luo F, Davies J, Philip K, Volcik KA, Melicoff E, Amione-Guerra J, Bunge RR, Bruckner BA, Loebe M, Eltzschig HK, Pandit LM, Blackburn MR, **Karmouty-Quintana H**. Altered Hypoxic-Adenosine Axis and Metabolism in Group III Pulmonary Hypertension. *American journal of respiratory cell and molecular biology*. 2016; 54(4):574-83. PubMed [journal] PMID: 26414702, PMCID: PMC4821053

34. Wirsdorfer F, de Leve S, Cappuccini F, Eldh T, Meyer AV, Gau E, Thompson LF, Chen NY, **Karmouty-Quintana H**, Fischer U, Kasper M, Klein D, Ritchey JW, Blackburn MR, Westendorf AM, Stuschke M, Jendrossek V. Extracellular Adenosine Production by ecto-5'-Nucleotidase (CD73) Enhances Radiation-Induced Lung Fibrosis. *Cancer research*. 2016; 76(10):3045-56. NIHMSID: NIHMS778378 PubMed [journal] PMID: 26921334, PMCID: PMC4960984
35. Hu X, Adebisi MG, Luo J, Sun K, Le TT, Zhang Y, Wu H, Zhao S, **Karmouty-Quintana H**, Liu H, Huang A, Wen YE, Zaika OL, Mamenko M, Pochynyuk OM, Kellems RE, Eltzhig HK, Blackburn MR, Walters ET, Huang D, Hu H, Xia Y. Sustained Elevated Adenosine via ADORA2B Promotes Chronic Pain through Neuro-immune Interaction. *Cell reports*. 2016; 16(1):106-19. PubMed [journal] PMID: 27320922
- \*\*\*36. Chen NY, D Collum S, Luo F, Weng T, Le TT, M Hernandez A, Philip K, Molina JG, Garcia-Morales LJ, Cao Y, Ko TC, Amione-Guerra J, Al-Jabbari O, Bunge RR, Youker K, Bruckner BA, Hamid R, Davies J, Sinha N, **Karmouty-Quintana H**. Macrophage bone morphogenic protein receptor 2 depletion in idiopathic pulmonary fibrosis and Group III pulmonary hypertension. *American journal of physiology. Lung cellular and molecular physiology*. 2016; 311(2):L238-54. PubMed [journal] PMID: 27317687
37. Liu H, Zhang Y, Wu H, D'Alessandro A, Yegutkin GG, Song A, Sun K, Li J, Cheng NY, Huang A, Edward Wen Y, Weng TT, Luo F, Nemkov T, Sun H, Kellems RE, **Karmouty-Quintana H**, Hansen KC, Zhao B, Subudhi AW, Jameson-Van Houten S, Julian CG, Lovering AT, Eltzhig HK, Blackburn MR, Roach RC, Xia Y. Beneficial Role of Erythrocyte Adenosine A2B Receptor-Mediated AMP-Activated Protein Kinase Activation in High-Altitude Hypoxia. *Circulation*. 2016; 134(5):405-21. PubMed [journal] PMID: 27482003
- \*\*\*38. Collum SD, Amione-Guerra J, Cruz-Solbes AS, DiFrancesco A, Hernandez AM, Hanmandlu A, Youker K, Guha A, **Karmouty-Quintana H**. Pulmonary Hypertension Associated with Idiopathic Pulmonary Fibrosis: Current and Future Perspectives. *Canadian respiratory journal*. 2017; 2017:1430350. PubMed [journal] PMID: 28286407, PMCID: PMC5327768
39. Song A, Zhang Y, Han L, Yegutkin GG, Liu H, Sun K, D'Alessandro A, Li J, **Karmouty-Quintana H**, Iriyama T, Weng T, Zhao S, Wang W, Wu H, Nemkov T, Subudhi AW, Jameson-Van Houten S, Julian CG, Lovering AT, Hansen KC, Zhang H, Bogdanov M, Dowhan W, Jin J, Kellems RE, Eltzhig HK, Blackburn M, Roach RC, Xia Y. Erythrocytes retain hypoxic adenosine response for faster acclimatization upon re-ascent. *Nature communications*. 2017; 8:14108. PubMed [journal] PMID: 28169986, PMCID: PMC5309698
40. Muller T, Fay S, Vieira RP, **Karmouty-Quintana H**, Cicko S, Ayata K, Zissel G, Goldmann T, Lungarella G, Ferrari D, Di Virgilio F, Robaye B, Boeynaems JM, Blackburn MR, Idzko M. The purinergic receptor subtype P2Y2 mediates chemotaxis of neutrophils and fibroblasts in fibrotic lung disease. *Oncotarget*. 2017; PubMed [journal] PMID: 28415591
41. Mertens TCJ, **Karmouty-Quintana H**, Taube C, Hiemstra PS. Use of airway epithelial cell culture to unravel the pathogenesis and study treatment in obstructive airway diseases. *Pulmonary pharmacology & therapeutics*. 2017; PubMed [journal] PMID: 28502841
42. Segura-Ibarra V, Amione-Guerra J, Cruz-Solbes AS, Cara FE, Iruegas-Nunez DA, Wu S, Youker KA, Bhimaraj A, Torre-Amione G, Ferrari M, **Karmouty-Quintana H**, Guha A, Blanco E. Rapamycin nanoparticles localize in diseased lung vasculature and prevent pulmonary arterial

hypertension. *International journal of pharmaceutics*. 2017; 524(1-2):257-267. PubMed [journal] PMID: 28359821

\*\*\*43. Collum SD, Chen N-Y, Hernandez AM, Hanmandlu A, Sweeney H, Mertens TCJ, Weng T, Luo F, Molina JG, Davies J, Horan IP, Morrell NW, Amione-Guerra J, Al-Jabbari O, Youker KA, Sun W, Rajadas J, Bollycky PL, Bindu AH, Jyothula SS, Sinha N, Guha A, **Karmouty-Quintana H**, Inhibition of Hyaluronan Synthesis Attenuates Pulmonary Hypertension Associated with Lung Fibrosis 2017; *Br J Pharmacol*. 2017 Oct;174(19):3284-3301. doi: 10.1111/bph.13947. Epub 2017 Aug 17. PubMed PMID:28688167.

### **Book Chapters**

1. Beckmann N, Crémillieux Y, Tigani B, **Karmouty Quintana H**, Blé F-X, and Fozard JR. Lung MRI in Small Rodents as a Tool for the Evaluation of Drugs in Models of Airways Diseases In: "In Vivo MR Techniques in Drug Discovery and Development" (Editor: N. Beckmann). Francis & Taylor, Boca Raton, New York, USA, 2006; pp 351-372

### **INVITED SEMINARS**

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|------|--|
| 2007 | Meakins-Christie Laboratories, McGill University, Canada                                       |
| 2007 | Respiratory Health Network of Quebec, Montreal, Canada.  |
| 2008 | Division of Pharmaceutical Sciences, King's College London, UK                                 |
| 2009 | Department of Pulmonary Medicine, MD Anderson Cancer Center, USA                               |
| 2009 | Department of Biochemistry and Molecular Biology, University of Texas – Medical School, USA    |
| 2009 | Respiratory Health Network of Quebec, Montreal, Canada.  |
| 2011 | IMIM-Hospital del Mar, Barcelona, Spain  |
| 2011 | Respiratory Center for Respiratory Research, University College London, UK                     |
| 2011 | Sackler Institute for Pulmonary Pharmacology, King's College London, UK                        |
| 2011 | INSERM 999 Pulmonary Hypertension Unit, Centre Chirurgical Marie Lannelongue, Paris, France    |
| 2013 | Department of Biochemistry and Molecular Biology. UT Health Medical School, Houston, Texas, US |
| 2013 | Department of Rheumatology. UT Health Medical School, Houston, Texas, US                       |
| 2013 | UT Physicians, Houston, Texas, US  |
| 2014 | GSBS Topic Series, UT Health Medical School, Houston, Texas, US                                |

- 2014 Department of Pulmonology, UT Health Medical School, Houston, Texas, US
- 2014 Department of Pediatric Transplantation, Texas Children's Hospital, Houston, Texas, US.
- 2015 "COPD and Epigenetics" Heidelberg, Germany
- 2017 "Adenosinergic mechanisms in the skin and the lung" at Scleroderma Unit, Referral Center for Systemic Autoimmune Diseases, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico di Milano, Milano, Italy. September 13<sup>th</sup>, 2017

**INVITED SEMINARS (SCHEDULED)**

- 2017 "GAGs in Group I and Group III Pulmonary Hypertension" James T. Willerson Seminar at the Texas Heart Institute, Houston, Texas. September 28<sup>th</sup>, 2017
- 2017 "Disease Mechanisms in Group III Pulmonary Hypertension" Pulmonary Grand Rounds at University of Birmingham at Alabama, Birmingham Alabama. December 7<sup>th</sup>, 2017
- 2017 "TBA" Division of Pulmonary, Allergy, Critical Care and Sleep Medicine Seminar Series at The Department of Medicine, Emory University, Atlanta, Georgia. December 13<sup>th</sup>, 2017
- 2018 "TBA" Meakins-Christie Laboratories, McGill University, Montreal, Canada. February 5<sup>th</sup>, 2018