

CURRICULUM VITAE

**Blanca I. Restrepo, Ph.D. in Microbiology**

Associate Professor of Epidemiology (EHGES Division)  
University of Texas Health Science Center at Houston, School of Public Health in Brownsville  
Brownsville Regional Campus  
80 Fort Brown, SPH Bldg  
Brownsville-TX 78520

**I. GENERAL INFORMATION**

**A. PERSONAL DATA**

- Birth place: Medellín, Colombia (South America)
- Telephone 956-279-3841
- E-mails: [Blanca.I.Restrepo@uth.tmc.edu](mailto:Blanca.I.Restrepo@uth.tmc.edu) or [blancares2008@gmail.com](mailto:blancares2008@gmail.com)
- Languages: Spanish and English (100% read, write and speak)

**B. EDUCATION**

- 1983-1986: **B.S. in Medical Technology** Colegio Mayor de Antioquia , Medellín, Colombia
- 1988-1994: **Ph.D. in Microbiology**, Department of Microbiology, University of Texas Health Science Center at San Antonio (UTHSCSA), San Antonio, TX.

**C. EMPLOYMENT AND AFFILIATIONS**

- 1986-1987: **Social Service Year on Research:**
  - Corporación para Investigaciones Biológicas, CIB., Division of Medical Mycology, Medellín, Colombia
  - Audie L. Murphy Veterans Administration Hospital, San Antonio, TX.
- 1994-1997: **Post-doctoral fellow**, Department of Microbiology, Dr. Judy M. Teale's laboratory
- 1997-2001: **Head, Molecular Parasitology Lab**, Corporación para Investigaciones Biológicas, CIB, Medellín, Colombia
- 2002-2003: **Post-doctoral fellow**, University of Texas Health Science Center Houston-School of Public Health (UT-SPH), Brownsville Campus
- 2003-2007: **Assistant Professor of Epidemiology, NTR UT-SPH Brownsville Campus**,
- 2007-2010: **Assistant Professor of Epidemiology, Tenure track UT-SPH Brownsville Campus**
- 2012-2015: **Adjunct Associate Professor of Microbiology**, UT Health Science Center San Antonio, Edinburg RAHC campus
- 2016-present: **Adjoint Associate Professor**, South Texas Diabetes and Obesity Institute, UT Rio Grande Valley, Edinburg campus, TX
- 2010-present: **Associate Professor of Epidemiology, Tenured UT-SPH Brownsville Campus**

**D. NOMINATIONS AND HONORS (last 5 years)**

- 2014 Manuscript "The Impact of Global Immigration on Tuberculosis in Children Younger than 5 Years of Age within the United States. (Pediatrics; February 10, 2014; DOI: 10.1542/peds.2013-2570)"
  - Lead story on <http://pediatrics.aappublications.org/>
  - Featured on Daily Rx on <http://www.dailyrx.com/tuberculosis-cases-children-occurred-more-among-those-born-overseas>
- 2016 Manuscript: "A functional role for antibodies in tuberculosis" (*Cell* 2016 Sep 21. pii: S0092-8674(16)31170-9. doi: 10.1016/j.cell.2016.08.072)
  - Featured in Nature Reviews Immunology: "Marking disease states in tuberculosis" <http://www.nature.com/nri/journal/v16/n11/full/nri.2016.120.html>

**II. RESEARCH**

**A. PUBLISHED PEER-REVIEWED MANUSCRIPTS <sup>1</sup>**

1. **Restrepo BI**, McEwen JG, Salazar ME, Restrepo A. Morphological development of the conidia produced by *Paracoccidioides brasiliensis* mycelial form. *J Med.Vet.Mycol.* 1986 Aug; 24(4):337-9
2. McEwen JG, **Restrepo BI**, Salazar ME, Restrepo A. Nuclear staining of *Paracoccidioides brasiliensis* conidia. *J Med.Vet.Mycol.* 1987 Oct; 25(5):343-5

<sup>1</sup> \* Denotes UT-SPH student co-author; \*\* Denotes student co-author (non-UT-SPH)

3. **Restrepo** BI, Barbour AG. Cloning of 18S and 25S rDNAs from the pathogenic fungus *Cryptococcus neoformans*. J Bacteriol. 1989 Oct; 171(10):5596-600. PMID or free URL: PMC210402
4. **Restrepo** BI, Ahrens J, Graybill JR. Efficacy of SCH39304 in murine cryptosporidiosis. Antimicrob.Agents Chemother. 1989 Aug; 33(8):1242-6. PMID or free URL: PMC172633
5. Burman N, Bergstrom S, **Restrepo** BI, Barbour AG. The variable antigens Vmp7 and Vmp21 of the relapsing fever bacterium *Borrelia hermsii* are structurally analogous to the VSG proteins of the African trypanosome. Mol.Microbiol. 1990 Oct; 4(10):1715-26
6. **Restrepo** BI, Kitten T, Carter CJ, Infante D, Barbour AG. Subtelomeric expression regions of *Borrelia hermsii* linear plasmids are highly polymorphic. Mol.Microbiol. 1992 Nov; 6(22):3299-311
7. Wilske B, Barbour AG, Bergstrom S, Burman N, **Restrepo** BI, Rosa PA, Schwan T, Soutschek E, Wallich R. Antigenic variation and strain heterogeneity in *Borrelia* spp. Res.Microbiol. 1992 Jul; 143(6):583-96
8. **Restrepo** BI, Barbour AG. Antigen diversity in the bacterium *B. hermsii* through "somatic" mutations in rearranged vmp genes. Cell 1994 Sep 9; 78(5):867-76
9. **Restrepo** BI, Carter CJ, Barbour AG. Activation of a vmp pseudogene in *Borrelia hermsii*: an alternate mechanism of antigenic variation during relapsing fever. Mol.Microbiol. 1994 Jul; 13(2):287-99
10. Hinnebusch BJ, Barbour AG, **Restrepo** BI, Schwan TG. Population structure of the relapsing fever spirochete *Borrelia hermsii* as indicated by polymorphism of two multigene families that encode immunogenic outer surface lipoproteins. Infect.Immun. 1998 Feb; 66(2):432-40. PMID or free URL: PMC107923
11. **Restrepo** BI, Llaguno P, Sandoval MA, Enciso JA, Teale JM. Analysis of immune lesions in neurocysticercosis patients: central nervous system response to helminth appears Th1-like instead of Th2. J Neuroimmunol. 1998 Aug 14; 89(1-2):64-72
12. Cardona AE, **Restrepo** BI, Jaramillo JM, Teale JM. Development of an animal model for neurocysticercosis: immune response in the central nervous system is characterized by a predominance of gamma delta T cells. J Immunol. 1999 Jan 15; 162(2):995-1002
13. Barbour AG, **Restrepo** BI. Antigenic variation in vector-borne pathogens. Emerg.Infect.Dis. 2000 Sep; 6(5):449-57. PMID or free URL: PMC2627965
14. **Restrepo** BI, Obregon-Henao A, Mesa M, Gil DL, Ortiz BL, Mejia JS, Villota GE, Sanzon F, Teale JM. Characterisation of the carbohydrate components of *Taenia solium* metacestode glycoprotein antigens. Int J Parasitol. 2000 May; 30(6):689-96
15. Melby PC, Tabares A, **Restrepo** BI, Cardona AE, McGuff HS, Teale JM. *Leishmania donovani*: evolution and architecture of the splenic cellular immune response related to control of infection. Exp.Parasitol. 2001 Sep; 99(1):17-25
16. Obregon-Henao A, Gil DL, Gomez DI, Sanzon F, Teale JM, **Restrepo** BI. The role of N-linked carbohydrates in the antigenicity of *Taenia solium* metacestode glycoproteins of 12, 16 and 18 kD. Mol.Biochem.Parasitol. 2001 May; 114(2):209-15
17. **Restrepo** BI, Alvarez JI, Castano JA, Arias LF, **Restrepo** M, Trujillo J, Colegio CH, Teale JM. Brain granulomas in neurocysticercosis patients are associated with a Th1 and Th2 profile. Infect.Immun. 2001 Jul; 69(7):4554-60. PMID or free URL: PMC98532
18. **Restrepo** BI, Aguilar MI, Melby PC, Teale JM. Analysis of the peripheral immune response in patients with neurocysticercosis: evidence for T cell reactivity to parasite glycoprotein and vesicular fluid antigens. Am J Trop.Med.Hyg. 2001 Oct; 65(4):366-70
19. Alvarez JI, Colegio CH, Castano CA, Trujillo J, Teale JM, **Restrepo** BI. The human nervous tissue in proximity to granulomatous lesions induced by *Taenia solium* metacestodes displays an active response. J Neuroimmunol. 2002 Jun; 127(1-2):139-44
20. Alvarez JI, Londono DP, Alvarez AL, Trujillo J, Jaramillo MM, **Restrepo** BI. Granuloma formation and parasite disintegration in porcine cysticercosis: comparison with human neurocysticercosis. J Comp Pathol. 2002 Aug; 127(2-3):186-93
21. Londono DP, Alvarez JI, Trujillo J, Jaramillo MM, **Restrepo** BI. The inflammatory cell infiltrates in porcine cysticercosis: immunohistochemical analysis during various stages of infection. Vet.Parasitol. 2002 Nov 11; 109(3-4):249-59
22. Sanzon F, Osorio AM, Morales JP, Isaza R, Cardona E, Moncayo LC, Villota GE, Zapata OT, Palacio CA, Arbelaez MP, et al. Serological screening for cysticercosis in mentally altered individuals. Trop.Med.Int Health 2002 Jun; 7(6):532-8
23. Haslam SM, **Restrepo** BI, Obregon-Henao A, Teale JM, Morris HR, Dell A. Structural characterization of the N-linked glycans from *Taenia solium* metacestodes. Mol.Biochem.Parasitol. 2003 Jan; 126(1):103-7
24. Mirza S, **Restrepo** BI, McCormick JB, Fisher-Hoch SP. Diagnosis of tuberculosis lymphadenitis using a polymerase chain reaction on peripheral blood mononuclear cells. Am J Trop.Med.Hyg. 2003 Nov; 69(5):461-5
25. Obregon-Henao A, Londono DP, Gomez DI, Trujillo J, Teale JM, **Restrepo** BI. In situ detection of antigenic glycoproteins in *Taenia solium* metacestodes. J Parasitol. 2003 Aug; 89(4):726-32

Blanca I. Restrepo, Ph.D.

26. Villota GE, Gomez DI, Volcy M, Franco AF, Cardona EA, Isaza R, Sanzon F, Teale JM, **Restrepo** BI. Similar diagnostic performance for neurocysticercosis of three glycoprotein preparations from *Taenia solium* metacestodes. Am J Trop.Med.Hyg. 2003 Mar; 68(3):276-80
27. **Restrepo** BI. [New tools for detection of latent tuberculosis]. Biomedica. 2004 Jun; 24 Supp 1:202-11
28. Barbour AG, Dai Q, **Restrepo** BI, Stoenner HG, Frank SA. Pathogen escape from host immunity by a genome program for antigenic variation. Proc.Natl.Acad.Sci.U.S.A 2006 Nov 28; 103(48):18290-5. PMID or free URL: PMID: PMC1635980
29. Dai Q, **Restrepo** BI, Porcella SF, Raffel SJ, Schwan TG, Barbour AG. Antigenic variation by *Borrelia hermsii* occurs through recombination between extragenic repetitive elements on linear plasmids. Mol.Microbiol. 2006 Jun; 60(6):1329-43 PMID: 16796672
30. Perez A, Brown HS, III, **Restrepo** BI. Association between tuberculosis and diabetes in the Mexican border and non-border regions of Texas. Am J Trop.Med.Hyg. 2006 Apr; 74(4):604-11. PMID or free URL: PMC1464139
31. **Restrepo** BI, Gomez DI, Shipley GL, McCormick JB, Fisher-Hoch SP. Selective enrichment and detection of mycobacterial DNA in paucibacillary specimens. J Microbiol.Methods 2006 Nov; 67(2):220-9 PMID: PMC2909876
32. **Restrepo** BI. Convergence of the tuberculosis and diabetes epidemics: renewal of old acquaintances. Clin.Infect.Dis. 2007 Aug 15; 45(4):436-8 PMID: PMC2900315
33. **Restrepo** BI, Fisher-Hoch SP, Crespo JG, Whitney E\*\*, Perez A, Smith B, McCormick JB, Nuevo Santander TT. Type 2 diabetes and tuberculosis in a dynamic bi-national border population. Epidemiol.Infect. 2007 Apr; 135(3):483-91 PMID: PMC2870584
34. Fisher-Hoch SP, Whitney E\*\*, McCormick JB, Crespo G, Smith B, Rahbar MH, **Restrepo** BI. Type 2 diabetes and multidrug-resistant tuberculosis. Scand.J Infect.Dis. 2008; 40(11-12):888-93; PMID: PMC2887603; <http://www.ajtmh.org/cgi/content/full/79/4/541>
35. **Restrepo** BI, Pino PA, Volcy M, Franco AF, Kanaujia GV, Robledo J. Interpretation of mycobacterial antibodies in the cerebrospinal fluid of adults with tuberculous meningitis. Trop.Med.Int Health 2008 May; 13(5):653-8 PMID: 18419584; <http://www3.interscience.wiley.com/journal/119417441/abstract?CRETRY=1&SRETRY=0>
36. **Restrepo** BI, Fisher-Hoch SP, Smith B, Jeon S, Rahbar MH, McCormick JB, Nuevo Santander TT. Mycobacterial clearance from sputum is delayed during the first phase of treatment in patients with diabetes. Am J Trop.Med.Hyg. 2008 Oct; 79(4):541-4 PMID: 18840741
37. **Restrepo** BI, Fisher-Hoch SP, Pino PA, Salinas A\*, Rahbar MH, Mora F, Cortes-Penfield N\*, McCormick JB. Tuberculosis in poorly controlled type 2 diabetes: altered cytokine expression in peripheral white blood cells. Clin.Infect.Dis. 2008 Sep 1; 47(5):634-41 PMID: PMC2900313
38. Gomez DI\*\*, Fisher-Hoch SP, Bordt AS\*\*, Quitugua TN, Robledo J, Alvarez N, Correa N, McCormick JB, **Restrepo** BI. Systematic interpretation of molecular beacon polymerase chain reaction for identifying rpoB mutations in Mycobacterium tuberculosis isolates with mixed resistant and susceptible bacteria. Diagn.Microbiol.Infect.Dis. 2010 Mar 11; PMID: PMC2854294
39. S.P. Fisher-Hoch, A Rentfro, J Salinas, H.S. Brown, B. Reininger, B.I. **Restrepo**, J. Wilson, M. Hossain, M.H. Rahbar, C. Hanis, J.B. McCormick. (2010) Effects of socioeconomic status in Mexican Americans with severe health disparities: the Cameron County Hispanic Cohort. Preventing Chronic Disease Prev Chronic Dis. 7. [http://www.cdc.gov/pcd/issues/2010/May/09\\_0170.htm](http://www.cdc.gov/pcd/issues/2010/May/09_0170.htm) PMID: PMC2879985
40. Mary C. Walsh\*\*, Aulasa Camerlin\*\*, Reyna Miles\*\*, Francisco Mora, J. Gonzalo Crespo, Joseph B. McCormick, Susan P. Fisher-Hoch, Blanca I. **Restrepo**. (2011) Sensitivity of Interferon- $\gamma$  release assays is not compromised in tuberculosis patients with diabetes. Int J Tub Lung Dis. 15(2):179-184 PMID- NIHMSID: 290702
41. Blanca I. **Restrepo**, Aulasa J. Camerlin\*\*, Mohammad H. Rahbar, Weiwei Wang, Mary A. Restrepo, Izelda Zarate, Richard Wing, Francisco Mora-Guzman, J. Gonzalo Crespo-Solis, Jessica Briggs\*, Joseph B. McCormick, Susan P. Fisher-Hoch. (2011) Cross-sectional assessment reveals high diabetes prevalence among newly-diagnosed tuberculosis cases. Bull World Health Organ 89;352-359 PMID- PMC3089389.
42. D.I. Gomez\*\*, C.S. Mullin, F. Mora, J. Gonzalo Crespo, S. P. Fisher-Hoch, J.B. McCormick, B.I. **Restrepo**. (2011) Rapid DNA extraction for specific detection and quantitation of Mycobacterium tuberculosis DNA in sputum specimens using taqman assays. Tuberculosis. 91: S43-S48 PMID: PMC3248966
43. Shu-Hua Wang, Samuel Stew, Joshua Cyktor, Bridget Carruthers, Joanne Turner, and Blanca I. **Restrepo**. (2012) Validation of increased blood storage times with the T-SPOT.TB assay with T-Cell Xtend reagent in individuals with different tuberculosis risk factors. J Clin Microbiol. 50:2469-2471 PMID: PMC3405595
44. Diana I. Gomez, Marcel Twahirwa, Larry S. Schlesinger, Blanca I. **Restrepo**. (2013) Reduced *Mycobacterium tuberculosis* association with monocytes from diabetes patients that have poor glucose control. Tuberculosis. Mar;93(2):192-7. doi: 10.1016/j.tube.2012.10.003. Epub 2012 Nov 3. PMID: PMC3580120 [Available on 2014/3/1]

Blanca I. Restrepo, Ph.D.

45. Nira R. Pollock, Lilia Macovei, Kelly Kanunfre, Rakesh Dhiman, Blanca I. **Restrepo**, Izelda Zarate, Paula A. Pino, Francisco Mora-Guzman, Gerd Michel, Suely S. Kashino, Antonio Campos-Neto. (2013) Validation of *Mycobacterium tuberculosis* Rv1681 protein as a diagnostic marker of active pulmonary tuberculosis. J Clin Microbiol. 51(5); 1367-1373 (2013 Feb 6. [Epub ahead of print]); PMID: PMC3647908
46. Blanca I. **Restrepo**, Paula A. Pino, Izelda Zarate, Francisco Mora-Guzman. Dipstick urinalysis for diabetes screening in tuberculosis patients. (2013) International Health. 5:157-159 PMID:PMC3679672
47. Samuel S. Stew, Perla J. Martinez, Francisco Mora-Guzmán, Larry S. Schlesinger, Blanca I. **Restrepo**. Differential expression of of monocyte surface markers among tuberculosis patients with diabetes co-morbidity. (2013) Tuberculosis; 93 S1:S78-S82 PMID: PMC4028445
48. Blanca I. **Restrepo** and Larry S. Schlesinger. Review: Host-pathogen interactions in tuberculosis patients with type 2 diabetes mellitus. (2013) Tuberculosis; 93 S1:S10-S14 PMID: PMC4019931
49. Jenny Pang, Larry D Teeter, Dolly Katz, Amy L Davidow, Wilson Miranda, Kirsten Wall, Smita Ghosh, Trudy Stein-Hart, Blanca I **Restrepo**, Randall Reves, Edward A Graviss, on behalf of the Tuberculosis Epidemiology Studies Consortium. The Impact of Global Immigration on Tuberculosis in Children Younger than 5 Years of Age within the United States. Pediatrics (February 10, 2014; DOI: 10.1542/peds.2013-2570) PMID:24515517
50. Blanca I. **Restrepo**, Marcel Twahirwa, Mohammad H. Rahbar, Larry S. Schlesinger. Phagocytosis via complement or Fc-gamma receptors is compromised in monocytes from type 2 diabetes patients with chronic hyperglycemia. (2014) PlosONE 9(3): e92977. doi:10.1371/journal.pone.0092977 PMID: PMC3966862
51. Medrano B, Salinas G, Sanchez C, Miramontes R, **Restrepo** BI, Haddad MB, Lambert LA. (2014) A Missed case of tuberculosis resulting in hospital transmission. Infection Control and Hospital Epidemiology 35(5); 534-537 PMID: 24709722
52. Blanca I. **Restrepo** and Larry S. Schlesinger. Invited review: Impact of diabetes on the natural history of tuberculosis. (2014) Diabetes Research and Clinical Practice; Nov;106(2):191-9. doi: 10.1016/j.diabres.2014.06.011. Epub 2014 Jul 14. PMID: 25082309
53. Lenette L. Lu, Amy W. Chung, Tracy Rosebrock, Musie Ghebremichael, Wen Han Yu, Matthew K. Schoen, Fikadu Tafesse, Constance Martin, Vivian Leung, Alison E. Mahan, Magdalena Sips, Jacquelynne Tedesco, Hannah Robinson, Elizabeth Tkachenko, Katherine J. Freedberg, Hendrik Streeck, Todd J. Suscovich, Monia Draghi, Douglas Lauffenburger, Blanca I. **Restrepo**, Cheryl Day, Sarah Fortune, Galit Alter (2016) A functional role for antibodies in tuberculosis. Cell (2016 Sep 21. pii: S0092-8674(16)31170-9. doi: 10.1016/j.cell.2016.08.072. [Epub ahead of print])
54. **Restrepo**, BI. (2016) Metformin: Candidate host-directed therapy for tuberculosis in diabetes and non-diabetes patients. Tuberculosis (available online: 28-SEP-2016. DOI information: 10.1016/j.tube.2016.09.008)
55. Bassent E. Abdelbary, Moncerrato Garcia-Viveros, Horacio Ramirez-Oropesa, Mohammed H. Rahbar, Blanca I. **Restrepo** (2016) Tuberculosis-diabetes epidemiology in the border and non-border regions of Tamaulipas, Mexico Tuberculosis (available online: 28-SEP-2016 DOI information: 10.1016/j.tube.2016.09.024)
56. Agarwal Saroochi, Nguyen Duc T., Lew Justin, Teeter Larry D., Yamal Jose-Miguel, **Restrepo** Blanca, Brown Eric, Dorman Susan, Graviss Edward A. "Comparing TSPOT Assay Results between an Elispot Reader and Manual Counts." Tuberculosis (available online: 28-SEP-2016 DOI information: 10.1016/j.tube.2016.09.024).
57. Agarwal Saroochi, Nguyen Duc T., Lew Justin, Teeter Larry D., Yamal Jose-Miguel, **Restrepo** Blanca, Brown Eric, Dorman Susan, Graviss Edward A. "Differential Positive TSPOT Assay Responses to ESAT-6 and CFP-10 in Health Care Workers." Tuberculosis (available online: 28-SEP-2016 DOI information: 10.1016/j.tube.2016.09.024)
58. Lucia Monserrat Perez-Navarro, **Blanca I. Restrepo**, Francisco Javier Fuentes-Dominguez, Ravinandrah Duggirala, Jaime Morales-Romero, Juan Carlos Lopez--Alvarenga, Iñaki Comas Espadas, Roberto Zenteno-Cuevas. (2017) The effect size of type 2 diabetes mellitus on tuberculosis drug resistance and adverse treatment outcomes. Tuberculosis. 2017; 103; 83-91
59. Katharina Ronacher, Reinout van Crevel, Julia Critchley, Andrew Bremer, Larry Schlesinger, Anil Kapur, Randall Basaraba, Hardy Kornfeld, **Blanca I. Restrepo**. (2017) Defining a research agenda to address the converging epidemics of tuberculosis and diabetes. Part 2: Underlying biological mechanisms. Chest 152:174-180. PMID: 28434937 (**Note:** Meeting summary on TB, DM and HIV held at NIH on 5/2016)
60. Julia Critchley, Katharina Ronacher, **Blanca I. Restrepo**, Anil Kapur, Andrew Bremer, Larry Schlesinger, Randall Basaraba, Hardy Kornfeld, Reinout van Crevel. (2017) Defining a research agenda to address the converging epidemics of tuberculosis and diabetes. Part 1: Epidemiology and clinical management. Chest 152(1):165-173. PMID: 28434936 (**Note:** Meeting summary on TB, DM and HIV held at NIH on 5/2016)
61. Bassent E. Abdelbary, Moncerrato Garcia-Viveros, Horacio Ramirez-Oropesa, Mohammed H. Rahbar, Blanca I. **Restrepo**. (2017) Predicting treatment failure, death and drug resistance using a pre-calculated risk score among newly-diagnosed TB patients in Tamaulipas, Mexico. Epidemiol Infect. doi: 10.1017/S0950268817001911. [Epub ahead of print] PMID: 28903800

\* Denotes student co-author; \*\* Denotes UT-SPH student co-author

## B. BOOK CHAPTERS

1. Botero O, Soto B, **Restrepo**, BI. Neurocysticercosis in: Neurocirugía para Médicos Generales. Ed. Carlos E. Navarro. Editorial Universidad de Antioquia. Medellín, 2006
2. **Restrepo**, BI. Diabetes and Tuberculosis, in: Tuberculosis and Nontuberculous Mycobacterial Infections. 7<sup>th</sup> Edition. Ed. D. Schlossberg. ASM press, USA (*in press*)
  1. **Note:** *Invited; new book chapter for 7<sup>th</sup> Edition. Comments from the Editor upon its first review* "The chapter is magnificent: authoritative, up-to-date and beautifully written. It promises to be a highlight of the text.")
3. Garcia-Oropesa EM, Huerta Y, Rodriguez E, **Restrepo** BI. Tuberculosis y diabetes con enfoque en estudios en México. In: Tuberculosis en México. Ed UABC (*in press*)

## C. GRANT SUPPORT

### Ongoing Research Support

P01 AG044298 Turner (PI) 03/15/2016- 02/28/21

Exploring the impact of inflammation on immune function during M.tb infection

The goal of this P01 is to define the impact of inflammation on control of M.tb infection across the continuum of age.

Role: Project 4 MPI (Restrepo and Turner) 10/1/2017-02/28/2018

The goal of project 4 is to define T cell and monocyte function in active and latent TB patients, and to perform a comparative analysis of lung and blood monocyte and T cell function in healthy study subjects.

Gates Foundation Pinter (PI) Oct 2017-2018

Exploring the human humoral response for ultrasensitive antibodies lipoarabinomannan of *Mycobacterium tuberculosis*

The goal of this project is to characterize the TB specific antibody response in people infected or exposed to *Mycobacterium tuberculosis* (Mtb). Achieving this aim will involve: i) measurements of TB specific antibodies present in the plasma and sera of these subjects, ii) the generation of stable B cell lines from these people and iii) the isolation and molecular cloning of antibodies from these cells that are specific for selected TB antigens.

Role: Co-investigator

R01 US-South Africa 1R01AI116039 Restrepo (co-PI) Feb 2015-2020

Altered immune-endocrine axis in type 2 diabetes and tuberculosis risk

The goal is to evaluate the impact of type 2 diabetes on alterations to the hypothalamus-Pituitary-Adrenal axis (HPA axis) that in turn compromise immunity to *Mycobacterium tuberculosis*

Role: Co-PI with Dr. Katharina Ronacher (South African PI)