

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES**

NAME Guerra, Stefano		POSITION TITLE Research Associate Professor	
eRA COMMONS USER NAME (credential, e.g., agency login) SGUERRA		Dahlberg Chair, Pulmonary Medicine	
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> )			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Medical School, University of Milan, Italy	MD	1996	Medicine
University of Milan, Italy	Residency	1996-2000	Pulmonary Medicine
University of Arizona, Tucson, AZ	MPH	2001	Public Health – Epidemiology
University of Arizona, Tucson, AZ	PhD	2003	Epidemiology / Genetics

### A. Personal Statement

### B. Positions and Honors.

#### Positions and Employment

2003-2008	Assistant Professor, Division of Epidemiology, Mel and Enid Zuckerman College of Public Health, University of Arizona
2004-2010	Assistant Professor, Department of Medicine, College of Medicine, University of Arizona
2006-2007	Interim Director, Concentration Area in Epidemiology, MPH Program, Mel and Enid Zuckerman College of Public Health, University of Arizona
2008-pres	Associate Research Scientist, Arizona Respiratory Center, University of Arizona
2008-pres	Research Associate Professor, CREAL Center, Barcelona, Spain
2010-pres	Research Associate Professor, Department of Medicine, College of Medicine, University of Arizona
2013-pres	Dahlberg Chair, Pulmonary Medicine, College of Medicine, University of Arizona

#### Other Experience and Professional Memberships

2004-pres	Member, American Thoracic Society
2005-pres	Faculty Member, Arizona Cancer Center, University of Arizona, Tucson, AZ.
2005-pres	Member, European Respiratory Society
2006-pres	NIH Infectious Diseases, Reproductive Health, Asthma, Pulmonary Study Section, ad hoc reviewer
2007-pres	Faculty Member, Southwest Environmental Health Sciences Center, University of Arizona

#### Honors

2006	Parker B. Francis Fellowship in Pulmonary Research.
2006	Award for "Outstanding Grant" by the Pacific / Mountain Affiliate of the American Heart Association.
2008	Award for Excellence in Research by the Mel and Enid Zuckerman Arizona College of Public Health.

### C. Selected peer-reviewed publications (from > 65).

#### Most relevant to the current application

1. **Guerra S**, Sherrill DL, Martinez FD, Barbee RA: "Rhinitis as an Independent Risk Factor for Adult-onset Asthma". *Journal of Allergy and Clinical Immunology* 2002; 109: 419-25. PMID: 15373760

2. **Guerra S**, Lohman IC, Halonen M, Martinez FD, Wright AL: "Reduced IFN $\gamma$  production and sCD14 levels in early life predict recurrent wheezing by 1 year of age". *American Journal of Respiratory and Critical Care Medicine* 2004, 169: 70-6. PMID: 14525803
3. **Guerra S**, Wright AL, Morgan WJ, Sherrill DL, Holberg CJ, Martinez FD: "Remission and persistence of asthma during adolescence: role of obesity and age at onset of puberty". *American Journal of Respiratory and Critical Care Medicine* 2004, 170: 78-85. PMID: 15028559
4. Stern DA, Morgan WJ, Wright AL, **Guerra S**, Martinez FD: "Poor airway function in early infancy and lung function by age 22 years: a non-selective longitudinal cohort study". *Lancet* 2007, 370: 758-64. PMID:17765525
5. **Guerra S** & Martinez FD: "Asthma genetics: from linear to multifactorial approaches". [review] *Annual Review of Medicine* 2008, 59: 199-213. PMID: 17845134
6. Tebow G, Sherrill DL, Lohman IC, Stern DA, Wright AL, Martinez FD, Halonen M, **Guerra S**: "Effects of Environmental Tobacco Smoke on Interferon- $\gamma$  Production in Children". *Pediatrics* 2008, 121: e1563-1569. PMID: 18519461
7. **Guerra S**, Sherrill DL, Kurzius-Spencer M, Venker C, Halonen M, Quan SF, Martinez FD: "The Course of Persistent Airflow Limitation in Subjects with and without Asthma". *Respiratory Medicine* 2008, 102: 1473-1482. PMID: 15373760
8. **Guerra S**: "Asthma and chronic obstructive pulmonary disease". [review] *Current Opinion in Allergy and Clinical Immunology* 2009, 9: 409-416. PMID: 19638929
9. **Guerra S**, Sherrill DL, Venker C, Ceccato CM, Halonen M, Martinez FD: "Chronic bronchitis before age 50 years predicts incident airflow limitation and all-cause mortality". *Thorax* 2009, 64: 894-900. PMID: 19581277
10. **Guerra S** & Martinez FD: "Epidemiology of the origins of airflow limitation in asthma". *Proceedings of the American Thoracic Society* 2009, 6: 707-711. PMID: 20008881
11. **Guerra S**, Sherrill DL, Venker C, Ceccato CM, Halonen M, Martinez FD: "Morbidity and mortality associated with the restrictive spirometric pattern: a longitudinal study". *Thorax* 2010, 65: 499-504. PMID: 20522846
12. Rava M, Tares L, Lavi I, Barreiro E, Zock JP, Ferrer A, Muniozguren N, Nadif R, Cazzoletti L, Kauffmann F, Anto JM, **Guerra S**: "Serum levels of Clara cell secretory protein, asthma and lung function in the adult general population". *Journal of Allergy and Clinical Immunology* 2013, 132: 230-2. PMID: 23473837.
13. **Guerra S**, Stern DA, Zhou M, Sherrill DL, Wright AL, Morgan WJ, Martinez FD: "Combined effects of parental and active smoking on early lung function deficits: a prospective study from birth to age 26 years". *Thorax*, in press. PMID: 23847259.
14. **S Guerra**, M Halonen, DL Sherrill, C Venker, A Spangenberg, AE Carsin, L Tarès, I Lavi, E Barreiro, J Martinez, I Urrutia, J Sunyer, JM Antó, FD Martinez: "The relation of circulating YKL-40 to levels and decline of lung function in adult life". *Respiratory Medicine*, in press. PMID: 23920328.
15. **Guerra S**, Vasquez MM, Spangenberg A, Halonen M, Martinez FD. Serum levels of club (Clara) cell secretory protein predict cancer mortality in adults. *The Lancet Resp Med*, in press.

## D. Research Support

### Ongoing Research Support

R01 HL095021-01 Guerra (PI)

02/01/09 – 01/31/14

NIH/NHLBI

*Serum Biomarkers of COPD: a Population-based Prospective Study*

The major goal of this project is to use a multi-analyte approach to identify a panel of biomarkers that predict development / progression of COPD phenotypes and COPD-related mortality risk in the TESAOD cohort.

Role: PI

R01 HL56177 Guerra, Martinez, Wright (co-PIs)

04/01/12 – 03/31/16

NIH/NHLBI

*Childhood Predictors of Airway Structure, Function, and Disease in Adult Life*

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This project will utilize the Tucson Children's Respiratory Study (CRS), the first large birth cohort of non-selected children followed into adult life, to investigate directly the childhood origins of adult airway disease. The specific aims are to: 1. Identify the early molecular, phenotypic and environmental predictors of respiratory symptoms and asthma into the fourth decade of life. 2. Identify the early molecular, phenotypic and environmental predictors of lung function deficits into the fourth decade of life, and 3. Utilize noninvasive imaging techniques to detect the structural alterations that characterize distinct patterns of airway dysfunction.

Role: Co-PI

### **Completed Research Support (last three years)**

P50 HL107188 Guerra (PI)

06/01/11 – 05/31/13

NIH/NHLBI

*Validation of serum biomarker signatures predictive of incident COPD*

The main goal of this project is to validate serum biomarker signatures that were identified in TESAOD as predictive of incidence of COPD in the independent cohort of the Swiss Study on Air Pollution and Lung Disease in Adults (SAPALDIA).

Role: PI

PS09/01354 Guerra (PI)

01/01/10 - 12/31/12

Instituto de Salud Carlos III, Spain

*Molecular Epidemiology of Lung Function: an Integrated Approach*

The major goal of this project is to identify systemic biomarkers of decline of lung function in young adult life using the Spanish branch of the prospective population-based European Community Respiratory Health Survey.

Role: PI

R01 AG027373-01A2 Chen (PI)

10/01/07 – 09/30/12

NIH/NIA

*Biomarkers and Genetic Factors Related to Sarcopenia in Women*

A prospective study to investigate the association between selected biomarkers and muscle loss, and to assess the effect of gene-environment interactions on skeletal muscle mass in postmenopausal women.

Role: Co-Investigator