

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME <b>Augusto C. Ochoa, MD</b>		POSITION TITLE Professor, Department of Pediatrics Director, Stanley S. Scott Cancer Center LSU Health Sciences Center – New Orleans	
eRA COMMONS USER NAME (credential, e.g., agency login) AOCHOA			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Universidad de Antioquia, Colombia, South America	MD	1976 – 1981	Medicine
Hospital Universitario San Vicente de Paul, Colombia, South America	Internship	1981 – 1982	Medicine
University of Minnesota, Minneapolis, MN	Postdoctoral Fellowship	1982 – 1986	Immunology
LSU Health Sciences Center, New Orleans, LA	Residency	1997 – 2000	Pediatrics
LSU Health Sciences Center, New Orleans, LA	Clinical Fellowship	2000 – 2002	Allergy - Immunology

**A. Personal Statement**

As the Director of the LSUHSC Stanley Scott Cancer Center since 2006, I have led the reorganization of multi-disciplinary cancer care teams, the successful renewal of our MB-CCOP in 2008 and the rebuilding of the research enterprise at our cancer center in the years following Hurricane Katrina. I am also the co-director of the Louisiana Cancer Research Center, a consortium between LSU and Tulane University, aimed at establishing cutting edge cancer research and treatment. After Hurricane Katrina, I worked with Dr. Robert Veith to re-establish the oncology practice and the multi-disciplinary cancer care teams at the LSU Health Sciences Center. As Associate Director of the MB-CCOP, I am in charge of the day to day administrative and clinical activities of this grant. Additionally, I have led several multi-institutional grants including a COBRE grant on translational research, the Louisiana Center for Translational (LaCATS) where I lead the pilot projects program, the Center for Minority Health and Health Disparities where I am the director for the scientific programs. The experience of reorganizing the multi-disciplinary cancer care programs at LSUHSC in New Orleans qualifies me to lead this new multi-institutional program, the Gulf South Minority-Based NCI Community Oncology Program (GS-MB-NCORP). For the past 18 months, I have coordinated the process of integration in association with Dr. Glenn Mills from LSUHSC-Shreveport and Mr. Todd Stevens from MBPCC. By unanimity, I was asked to serve as the Principal Investigator; however, knowing my limitations, i.e. not being a practicing medical oncologist or a leader in the field of Cancer Care Delivery Research, we selected leaders and teams of supporting investigators that will undoubtedly make these programs successfully. My primary role will be to coordinate the submission and activities of this multi-disciplinary program, and facilitate the work of the clinical and scientific leaders that we have chosen to lead the Clinical Trials Research Program, the Cancer Care Delivery Research Program and the Health Disparities Program. Additionally, I will have access to the leadership of the LSU system and the hospitals, who have already shown their support by providing matching funds for clinicians and CRA’s and funding the navigators that will participate in the multidisciplinary care of our patients. Furthermore, I have the authority to use Cancer Center funding to provide additional financial support when needed.

**B. Positions and Honors**

**Positions and Employment**

1986 – 1989 Assistant Professor, Immunobiology Research Center, U. of Minnesota, Minneapolis, MN  
 1989 – 1997 Director, Immunotherapy Laboratory, Frederick Cancer Research and Development Center, National Cancer Institute, Frederick, MD

Program Director/Principal Investigator (Last, First, Middle): Ochoa, Augusto C.

1997 – 2004 Associate Professor, Pediatrics, LSUHSC, New Orleans, LA  
1997 – Present Director, Tumor Immunology Program, LSUHSC, New Orleans, LA  
2004 – Present Professor with Tenure, Department of Pediatrics, LSUHSC, New Orleans, LA  
2006 – 2007 Interim Director, Stanley S. Scott Cancer Center, New Orleans, LA  
2007 – Present Director, Stanley S. Scott Cancer Center, LSUHSC, New Orleans, LA  
2009 – Present Special Government Employee, NCI Board of Scientific Counselors, DC

### **Other Experience and Professional Memberships**

Asociacion Medica de Antioquia  
Asociacion Colombiana de Alergia e Inmunologia  
American Association of Immunologists (AAI)  
American Association for Cancer Research (AACR)  
International Society for Biological Therapy (iSBTC)  
American Academy of Pediatrics (AAP)  
Association of American Cancer Institute (AACI)

### **C. Selected Peer-reviewed Publications** (Selected from 86 peer-reviewed publications)

1. Di Costanzo L, Sabio G, Mora A, Rodriguez PC, **Ochoa AC**, Centeno F, Christiansen DW. Crystal structure of human arginase I at 1.29-A resolution and exploration of inhibition in the immune response. **Proc Natl Acad Sci U S A**. 2005 Sep 13;102(37):13058-63.
2. Zea AH, Culotta KS, Ali J, Mason C, Par H-J, Zabaleta J, Garcia LF and **Ochoa AC** Decreased expression of CD3z and nuclear transcription factor kB in patients with pulmonary tuberculosis: Potential mechanisms and reversibility with treatment. **Journal of Infectious Disease**, 192:1385-1393, 2006.
3. PC Rodriguez, DG Quiceno, J Wiegand, **AC. Ochoa**. L-Arginine availability regulates T lymphocytes cell cycle. **Blood**, 2007 Feb 15;109(4):1568-73.
4. **Ochoa AC**, Zea AH, Hernandez C, Rodriguez PC. Arginase, prostaglandins, and myeloid-derived suppressor cells in renal cell carcinoma. **Clin Cancer Res**. 2007 Jan 15;13(2 Pt 2):721s-726s.
5. Zabaleta J., Lin H.Y., Sierra R.A., Hall M.C., Clark P.E., Sartor O.A., Hu J.J., **Ochoa A.C.** Interactions of Cytokine Gene Polymorphisms in Prostate Cancer Risk. **Carcinogenesis**. 2008 Jan 3.
6. Rodriguez PC, **Ochoa AC**. Arginine regulation by myeloid derived suppressor cells and tolerance in cancer: Mechanisms and therapeutic perspectives. **Immunol. Rev**, 2008 April 22:180-191.
7. Rodriguez PC, Ernstoff MS, Hernandez C, Atkins M, Zabaleta J, Sierra R, **Ochoa AC**. Arginase I-producing myeloid-derived suppressor cells in renal cell carcinoma are a subpopulation of activated granulocytes. **Cancer Res**. 2009 Feb 15; 69(4):1553-60. 2009 Feb 5. PMC2900845.
8. Zabaleta, J., L. J. Su, H. Y. Lin, R. A. Sierra, M. C. Hall, A. O. Sartor, P. E. Clark, J. J. Hu, and **A. C. Ochoa**. Cytokine genetic polymorphisms and prostate cancer aggressiveness. **Carcinogenesis** 2009; 30:1358-62. PMC2718072.
9. Norian LA, Rodriguez PC, O'Mara LA, Zabaleta J, **Ochoa AC**, Cella M, Allen PM. Tumor-Infiltrating regulatory dendritic cells inhibit CD8+ T cell function via L-Arginine metabolism. **Cancer Res** 2009;69:3086-94. PMC2848068.
10. Rodriguez PC, Hernandez CP, Morrow K, Sierra R, Zabaleta J, Wyczechowska DD, **Ochoa AC**. L-arginine deprivation regulates cyclin D3 mRNA stability in human T cells by controlling HuR expression. **J Immunol** 2010;185:5198-204. PMC3108892.
11. Highfill SL, Rodriguez PC, Zhou Q, Goetz CA, Koehn BH, Veenstra R, Taylor PA, Panoskaltsis-Mortari A, Serody JS, Munn DH, Tolar J, **Ochoa AC**, Blazar BR. Bone marrow myeloid-derived suppressor cells (MDSCs) inhibit graft-versus-host disease (GVHD) via an arginase-1-dependent mechanism that is up-regulated by interleukin-13. **Blood** 2010;116:5738-47. PMC3031417.

Program Director/Principal Investigator (Last, First, Middle): Ochoa, Augusto C.

12. Zabaleta J, Camargo MC, Ritchie MD, Piazuolo MB, Sierra RA, Turner SD, Delgado A, Fonham ETH, Schneider BG, Correa P, **Ochoa AC**. Association of haplotypes of inflammation-related genes with gastric preneoplastic lesions in African Americans and Caucasians. **Int J Cancer** 2011;128:668-75. PMC2964400.
13. Rodriguez PC, Hernandez CP, Morrow K, Sierra R, Zabaleta J, Wyczechowska DD, **Ochoa AC**. L-arginine deprivation regulates cyclin D3 mRNA stability in human T cells by controlling HuR expression. **J Immunol**. 2010 Nov 1;185(9):5198-204. PMCID: PMC3108892.
14. Raber P, **Ochoa AC**, Rodriguez PC. Metabolism of L-arginine by myeloid-derived suppressor cells in cancer: mechanisms of T cell suppression and therapeutic perspectives. **Immunol Invest**. 2012;41(6-7):614-34. PMCID: PMC3519282.
15. Raber PL, Thevenot P, Sierra R, Wyczechowska D, Halle D, Ramirez ME, **Ochoa A**, Fletcher M, Velasco C, Wilk A, Reiss K, Rodriguez PC. Subpopulations of Myeloid-Derived Suppressor Cells (MDSC) impair T cell responses through independent nitric oxide-related pathways. **Int J Cancer**. 2013 Nov 20. PMCID: In process.

## D. Research Support

### Ongoing Research Support

**R01AI112402** (NIH-OD/NIAID) Ochoa (PI) 09/25/2013 - 8/31/2018

Metabolic approaches to treat severe viral and inflammatory diseases

The long term goal is to find a treatment that can inhibit the growth of the virus and control inflammation while allowing for the development of protective and long lasting immunity; simple and achievable metabolic changes can provide both effects and promote healing of the tissues.

Role: Principal Investigator

**P20 GM103501** (NIH NIGMS) Ochoa (PI) 07/01/2010 – 06/30/2015

Mentoring Translational Researchers in Louisiana - Center of Biomedical Research Excellence (COBRE)

The goal of this program develops junior researchers pursuing translational immunology-related research.

Role: Principal Investigator

**R01 CA107974** (NIH NCI) Ochoa (PI) 02/01/2011 – 01/31/2016

Arginase Production in Cancer: Evading Immune Response

The goal of this program is to definitively identify the mechanisms by which MDSC induce T cell tolerance and determine how human tumors activate MDSC.

Role: Principal Investigator

**U10CA063845** (NIH NCI) Veith (PI) 06/01/2009 – 05/31/2014

LSUHSC Minority-Based Community Clinical Oncology Program

The goal of this project is to increase minority participation in state-of-the-art, NCI clinical trials in the Greater New Orleans area and surrounding regions.

Role: Associate PI

**U54GM104940** Cefalu (PI) 08/15/2012–06/30/2017

NIH/NIGMS

Louisiana Clinical and Translational Science Center

The overarching objective of our center is to transform the clinical and translational research efforts of our region away from the status quo, where institutions operate in isolation to pursue their institutional missions, and toward a cohesive, mutually supportive enterprise for clinical and translational research.

Role: Pilot Research Project Core Director

Program Director/Principal Investigator (Last, First, Middle): Ochoa, Augusto C.

**P20MD004817** (NIH NCHMD) Estrada/Dennis (PI's) 04/15/2010 – 04/14/2015  
Dillard-LSUHSC Minority Health and Health Disparities Research Center  
The goal of this project will be to train clinical research associates and minority researchers to participate in clinical, basic, and translational research on health disparities.  
Role: Co-Leader, Research Core

### **Completed Research Support**

**R01 CA082689** (NIH NCI) Ochoa (PI) 08/01/2008 – 11/30/2013  
Arginine, Modulated by MDSC, Regulates T Cell Function in Cancer  
The goal of this program is to understand the molecular mechanisms that regulate the expression of these proteins in T lymphocytes.  
Role: PI

**U10CA063845-11S1** (NIH NCI) Veith (PI) 09/30/2009 – 09/29/2013  
ARRA APRC Supplement to LSUHSC Minority-Based Community Clinical Oncology Program (MB-CCOP)  
The goal of the overall program to increase minority participation in state-of-the-art, NCI clinical trials in the Greater New Orleans area and surrounding regions.  
Role: Associate PI

**P20RR021970-05S1** (NIH NCRR) Ochoa (PI) 09/17/2009 – 09/16/2012  
ARRA supplement to subproject 5 “Antitumor effects on TLF5 ligand producing T cells”  
Mentoring Translational Researchers in Louisiana - Center of Biomedical Research Excellence (COBRE)  
The long-term goal of this project is to generate convincing preclinical data and new insights into the therapeutic efficacy of cancer-specific T cells engineered to secrete a TLR agonist at the tumor site or express the TLR so as to facilitate translation to the patient population.

**Susan G. Komen for the Cure** Ochoa (PI) 04/01/2010 – 03/31/2011  
Breast Cancer Education and Screening Services at the River Region Cancer Screening Clinic in Sorrento, LA  
The major goal of this project is to promote health with emphasis on breast, prostate, cervical, and colorectal cancer screening.  
Role: PI

**P20 RR021970** (NIH NCRR) Ochoa (PI) 09/30/2005 – 06/30/2010  
Mentoring Translational Researchers in Louisiana - Center of Biomedical Research Excellence (COBRE)  
The goal of this program develops junior researchers pursuing translational immunology-related research.  
Role: PI

**BR-07-26757** (Susan G. Komen for the Cure, BR) Ochoa (PI) 04/01/2009 – 03/31/2010  
Breast Cancer Education & Screening Services at the River Regions Cancer Screening Clinic in Sorrento, La  
The major goal of this project is to promote health with emphasis on breast, prostate, cervical, and colorectal cancer screening.  
Role: PI

**R01 CA107974** (NIH NCI) Ochoa (PI) 09/30/2004 – 08/31/2010  
Arginase Production in Cancer: Evading Immune Response  
The major goal of this project is to understand how arginase I is regulated in cancer.  
Role: PI