

Curriculum Vitae

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EDUCATION

- December 1999 *Doctor of Philosophy, Microbiology*
Yale University, School of Medicine
- December 1996 *Master of Philosophy, Microbiology*
Yale University, School of Medicine
- March 1992 *Bachelor of Science, Molecular Biology*
University of Buenos Aires, School of Sciences

FELLOWSHIPS AND HONORS

- May 2005 Excellence in Teaching Award SNHS Georgetown University
- Sept. 2002-Sept. 2004 Dimitri V. d'Arbeloff Fellowship in Biological Sciences
- Aug. 1995-Aug. 1996 Klingenstein Foundation Fellowship in Microbiology
- Aug. 1994-Aug. 1995 Yale University Student Fellowship
- March 1992 Honors Diploma University of Buenos Aires
- March 1990-June 1991 Instituto Nacional de Tecnologia Agropecuaria (INTA) Student
Fellowship

MEMBERSHIPS

- American Society for Microbiology
- American Association for the Advancement of Sciences

SERVICE

March 2007-present	Member of the GUMC Research Committee
January 2006-May 2006	Member of the Dean of Graduate School Search Committee
August 2005-present	Member of the SNHS Strategic Planning Committee
August 2005-present	Chair of Georgetown University SNHS Research Council
August 2005-present	Member of the Main Campus Education Abroad Strategic Planning Committee
2005-2006	Member of the SNHS Retreat Planning Committee
August 2004-December 2005	Organizer of the Horizons in Health Science Seminar series
September 2004-May 2005	Member of the SNHS Steering Committee

INVITED TALKS

September 2004	Anti-apoptotic functions of Aven and Reaper David Bodian Symposium on Programmed Cell Death Johns Hopkins University, Baltimore, MD
February 2005	The cystine noose of the attachment glycoprotein of respiratory syncytial virus is a potent inhibitor of the innate immune response elicited by the virus and endotoxin Georgetown Infectious Disease Conference Georgetown University, Washington DC
February 2005	Deadly Molecular Pathways: An expedition into the Suicide Machinery of a Cell American Chemical Society SEP Section Meeting Shippensburg University, Shippensburg, PA
November 2005	Modulation of the innate and adaptive immune response by the respiratory syncytial virus Department of Microbiology and Immunology Georgetown University, Washington DC

RECENT CONFERENCE PRESENTATIONS

Kuhn, H.M. and **Irusta, P.M.** (2007) Identification of a functional nuclear export sequence in the apoptosis-modulating protein Aven. Experimental Biology Meeting. Washington, DC, USA.

Pinheiro, A.A., Morrot, A., Chakravarty, S., Bream, J., **Irusta, P.M.** and Zavala, F. (2006) IL-4 induces a wide spectrum signaling in CD8+ T cells. Woods Hole Immunoparasitology Meeting. Woods Hole, Massachusetts, USA.

Chang, J.W., Yamaza, H., **Irusta, P.M.** and Zou, S. (2005) Characterization of the *Drosophila melanogaster* Ortholog of the Mammalian Anti-apoptotic Protein Aven. NIH Summer Research Program. NIH, Bethesda, Maryland, USA.

Irusta, P.M., Colon-Ramos, D.A., Kornbluth, S. and Hardwick, J.M. (2004) Aven is a BH3-containing protein that inhibits cytochrome c release and caspase activation. Apoptosis in Biochemistry and Structural Biology. Keystone Symposia, Colorado, USA.

Irusta, P.M., Galonek, H.L., Lamos, E., Boersma, M., Vander Maten M.A., Burdeinick-Kerr, R. and Hardwick, J.M. (2004) Delivery of pro-apoptotic fly proteins via recombinant Sindbis virus causes programmed cell death in mosquito cells and high mortality in infected larvae and adult mosquitoes. Second International Malaria Research Conference, Baltimore, USA.

Irusta, P.M., Colon-Ramos, D.A., Kornbluth, S. and Hardwick, J.M. (2003) The anti-death protein Aven exhibits both pre- and post-cytochrome c release anti-apoptotic activities that are mediated by BH3 and CARD domains. Beatson International Cancer Conference, Glasgow, Scotland

Irusta, P.M., Colon-Ramos, D.A., Kornbluth, S. and Hardwick, J.M. (2003) The Bcl-XL-binding protein Aven has pre- and post-cytochrome c release antiapoptotic activities. Programmed cell death. Cold Spring Harbor Laboratory, New York, USA.

Colon-Ramos, D.A., **Irusta, P.M.**, Gan, E., Olson E., Song, J., Morimoto, R.I., Lombard, M., Hollingsworth, R., Hardwick, J.M., Smith, G. and Kornbluth, S. (2003) Inhibition of translation and induction of apoptosis by bunyaviral non-structural proteins bearing sequence similarity with Reaper. Programmed cell death. Cold Spring Harbor Laboratory, New York, USA.

Irusta, P.M., Colon-Ramos, D.A., Kornbluth, S. and Hardwick, J.M. (2003) The anti-death protein Aven exhibits both pre- and post-cytochrome c release anti-apoptotic activities that are mediated by BH3 and CARD domains. Molecular Mechanisms of Apoptosis. Keystone Symposia, Banff, Alberta, Canada.

Colon-Ramos, D.A., **Irusta, P.M.**, Gan, E., Olson E., Song, J., Morimoto, R.I., Lombard, M., Hollingsworth, R., Hardwick, J.M., Smith, G. and Kornbluth, S. (2003) Bunyavirus non-structural proteins with homology to Reaper modulate protein translation, induce apoptosis and bind to Scythe. Molecular Mechanisms of Apoptosis. Keystone Symposia, Banff, Alberta, Canada.

Colon-Ramos, D.A., **Irusta, P.M.**, Gan, E., Olson E., Song, J., Morimoto, R.I., Elliott, R., Lombard, M., Hollingsworth, R., Hardwick, J.M., Smith, G. and Kornbluth, S. (2002) Translational inhibition and apoptotic induction by Bunyaviral small non-structural proteins bearing sequence similarity to Reaper. Gordon Research Conference on Cell Death, Waterville, Maine, USA.

Irusta, P.M., Chau, N., Zou, S. and Hardwick, J.M. (2001) The anti-apoptotic protein Aven can function as a transcriptional regulator. Programmed cell death. Cold Spring Harbor Laboratory, New York, USA.

BOOK CHAPTERS

Irusta, P.M. and Hardwick, M. (2004) Neuronal apoptosis pathways in Sindbis virus encephalitis. In: *Viruses and Apoptosis* 79-93. C. Alonso (Ed): *Progress in Molecular and Subcellular Biology*, Springer-Verlag Berlin Heidelberg.

Ivanovska, I. and **Irusta, P.M.** (2007) Programmed cell death in unicellular organisms. In: *New Cell Apoptosis Research*. F. Columbus (Ed), Nova Science Publishers, New York. *In preparation*.

PUBLICATIONS

Kuhn, H.M., Chang, J.W. and **Irusta, P.M.** (2007) Identification of a functional nuclear export sequence in the apoptosis-modulating protein Aven. *Manuscript in preparation*.

Irusta, P.M., Colon-Ramos, D.A., Shiosaki, E., Shi, Y., Kornbluth, S. and Hardwick, M. (2007) Aven is a BH3-containing protein that inhibits cytochrome c release and caspase activation. *Manuscript in preparation*.

Klein, M. I., Bergel E., Coviello S., Bauer G., Benitez A., Serra M.E., Delgado M.F., Melendi, G.A., Aspres, N., **Irusta, P.M.**, Rodríguez, S., Kleeberger S.R. and Polack, F.P. (2007) Differential gender response to respiratory infections and to the protective effect of breast milk in premature infants. *Submitted*.

Pinheiro, A.A., Morrot, A., Chakravarty, S., Bream, J., **Irusta, P.M.** and Zavala, F. (2007) IL-4 induces a wide spectrum signaling in CD8+ T cells. *Journal of Leukocyte Biology*, 81, 902-911.

Melendi, G.A., Hoffman, S.J., Karron, R.A., **Irusta, P.M.**, Laham, F.R., Humbles, A., Schofield, B., Pan, C-H., Rabold, R., Thumar, B., Thumar, A., Gerard, N.P., Mitzner, W., Barnum, S.R., Gerard, C., Kleeberger, S.R. and Polack, F.P. (2007) C5 modulates airways hyperreactivity and pulmonary eosinophilia during enhanced respiratory syncytial virus disease by decreasing C3a receptor expression. *Journal of Virology* 81, 991-999.

Ivanovska, I., Muhoro C.N. and **Irusta, P.M.** (2006) Anti-tumor therapeutic molecules that target the programmed-cell death machinery. *Mini Reviews in Medicinal Chemistry* 6: 1033-1042.

Polack, F.P, **Irusta, P.M.**, Hoffman, S.J., Schiatti, M.P., Melendi, G.A., Delgado, M.F., Laham, F.R., Thumar, B., Hendry, M.R., Karron, R.A., Collins, P.L., Kleeberger, S.R. (2005) The cystine noose of the attachment glycoprotein of respiratory syncytial virus is a potent inhibitor of the innate immune response elicited by the virus and endotoxin. *Proceedings of the National Academy of Sciences* 102: 8996-9001.

Irusta, P.M., Lamos, E., Galonek, H.L., Vander Maten, M.A., Boersma, M.C.H., Chen Y-B. and Hardwick, M. (2004) Regulation of apoptosis by viruses that infect insects. *Archives of Virology* 18: 171-178.

Irusta, P.M., Chen Y-B. and Hardwick, M. (2003) Viral modulators of cell death provide new links to old pathways. *Current Opinion in Cell Biology* 15: 700-705.

Colon-Ramos, D.A., **Irusta, P.M.**, Gan, E., Olson E., Song, J., Morimoto, R.I., Elliott, R., Lombard, M., Hollingsworth, R., Hardwick, J.M., Smith, G. and Kornbluth, S. (2003) Translational inhibition and apoptotic induction by Bunyaviral small non-structural proteins bearing sequence similarity to Reaper. *Molecular Biology of the Cell* 14, 4162-4172.

Irusta, P.M., Luo, Y., Bakht, O., Lai, C-C., Smith, S.O. and DiMaio, D. (2002) Definition of an inhibitory juxtamembrane WW domain in the PDGF β receptor. *Journal of Biological Chemistry* 277, 38627-38634.

Irusta, P.M. and DiMaio, D. (1998) A single amino acid substitution in a WW-like domain of diverse members of the PDGF receptor subfamily of tyrosine kinases causes constitutive receptor activation. *EMBO Journal* 17, 6912-6923.

Petti, L.M., **Irusta, P.M.** and DiMaio D. (1998) Oncogenic activation of the PDGF β receptor by the transmembrane domain of p185neu*. *Oncogene* 16, 843-851.

Irusta, P.M., Borca, M.V., Kutish, G., Lu, Z., Caler, E.V., Carrillo, C. and Rock, D.L. (1996) Amino acid tandem repeats within a late viral gene define the central variable region of African swine fever virus. *Virology* 220, 20-27.

Borca, M.V., **Irusta, P.M.**, Carrillo, C., Afonso, C.L., Burrage, T., Neilan J. and Rock, D.L. (1996) A structural DNA binding protein of African swine fever virus with similarity to bacterial histone-like proteins. *Archives of Virology* 141, 301-313.

Borca, M.V., **Irusta, P.M.**, Carrillo, C., Afonso, C.L. and Rock, D.L. (1994) African swine fever virus structural protein P72 contains a conformational neutralizing epitope. *Virology* 201, 413-418.

Borca, M.V., Kutish, G., Afonso, C.L., **Irusta, P.M.**, Carrillo, C., Brun, A., Sussman, M. and Rock, D.L. (1994) An African swine fever virus gene with similarity to the T-lymphocyte surface antigen CD2 mediates hemadsorption. *Virology* 199, 463-468.

Onisk, D.V., Borca, M.V., Kutish, G., Kramer, E., **Irusta, P.M.** and Rock, D.L. (1994) Passively transferred African swine fever virus antibodies protect swine against lethal infection. *Virology* 189, 350-355.