



How microbes and hosts interact?

Ongoing Research Projects

1- The microbiome of animals and humans:

Changes associated with lifestyles (humans, animals)
 Host response to GI microbes
 Demogeography of *H. pylori*

2- Antibiotic resistance in isolated animals and humans



Personnel



PI: María Gloria Domínguez Bello, Ph.D.

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People currently working in the lab (left to right): Kassandra de Jesus (undergrad. student), Angela Alicea (Undergraduate student), Ida Pantoja (Ph.D. student), Filipa Godoy-Vitorino (visiting Postdoc) and Miguel Rivera (Undergraduate student)

Recent Publications

Pacheco MA *et al* Stomach lysozymes of the three-toed sloth (*Bradypus variegatus*), an arboreal folivore from the Neotropics. *Comparative Biochemistry and Physiology, Part A* 147: 808–819, 2007

Marini E, *et al* *Helicobacter pylori* and intestinal parasites are not detrimental to the nutritional status of Amerindians. *American Journal of Tropical Medicine and Hygiene* 76: 534–540, 2007

Contreras M *et al* *H. pylori* seroprevalence in Amerindians from isolated locations. *American Journal of Tropical Medicine and Hygiene*; 78 (4):574-6, 2008

Domínguez-Bello MG, Blaser MJ. Do you have a probiotics in your future? *Microbes and Infection* 10, 1072, 2008

Godoy-Vitorino F, *et al* The crop bacterial community of the hoatzin, a neotropical folivorous flying bird. *Applied and Environmental Microbiology* 74: 5905-12, 2008

Domínguez-Bello MG, *et al* Amerindian *Helicobacter pylori* strains go extinct, as European strains expand their host range. *PLoS ONE* 3(10): e3307. doi:10.1371/journal.pone.00033072008, 2008

Collaborators

Microbiomes

Ruth Ley, Cornell University, USA
 Martin Blaser, New York University, USA
 Jeffrey Gordon, Washington University School of Medicine, USA
 Phil Hugenholtz, DOE, Berkeley, USA
 Fabian Michelangeli, Maria Alexandra Garcia, Monica Contreras, Magda Magris and Glida Hidalgo, Venezuela

Genetics and Bioinformatics

Rob Knight, University of Colorado, Boulder, USA
 Josep Bassagania, Virginia Bioinformatics Institute, Virginia Tech., USA
 Humberto Ortiz-Zuazaga, High Performance Computing Facility (HPCF) UPR

Mathematics and Statistics

Luis Pericchi, Dept Mathematics, University of Puerto Rico, USA
 Maria E Perez, Dept of Mathematics, University of Puerto Rico, USA

Anthropology

Elisabetta Marini, University of Cagliari, Italy
 Francisco Salzano, UFRGS, Brasil
 Maria Catira Bortolini, UFRGS, Brasil

Students trained: Jan 2004–Oct 2009

Undergraduate students= 20 (currently 3)

Graduate students= 2 (currently 1 with thesis)

PhD theses finalized since 2004: 2

