Dr. María Marta Amaral (PhD) is a biologist who conducts her research in the Physiopatogenia Laboratory at the Institute of Physiology and Biophysics "Bernardo Houssay" (IFIBIO-Houssay). Our Institute belongs to the School of Medicine of the University of Buenos Aires, and the National Council for Scientific and Technical Research (CONICET). She also teaches Physiology at the School of Medicine as an Assistant Professor.

Her research interest is focused on the pathogenic mechanisms concerning diarrhea related with STEC/VTEC and its systemic complications known as Hemolytic Uremic Syndrome (HUS).

Dr. Amaral is exploring the effects of Shiga toxin type 2 (Stx2) and Subtilase cytotoxin (SubAB) on endothelial and epithelial renal cells with the objetive of finding strategies to prevent kidney damage.

She has developed primary cultures of human glomerular endothelial cells (HGEC) isolated from fragments of human pediatric renal cortex and described the effects of Stx2 responsible of acute renal failure.

For the first time, she is using drugs described as inhibitors of Gb3 synthesis and apoptosis and recombinant antibodies as strategies to prevent Stx2 effects in *in vitro* and *in vivo* models.

Recently, she has developed the co-culture HGEC/HK-2 as a new model of human renal proximal tubule in order to study the physiological mechanism affected by Stx2 and SubAB.