

Dr. Ana M. Soto is a professor of cell biology at Tufts University School of Medicine in Boston, USA, and a member of the Centre Cavailles for the study of history and philosophy of science at the Ecole Normale Supérieure, Paris, France. Her research interests include the mechanisms of steroid hormone action, control of cell proliferation, breast and prostate neoplasias, and endocrine disruptors. Regarding control of cell proliferation, in collaboration with Dr. Sonnenschein she developed evidence indicating that the default state of metazoan cells is proliferation. Regarding carcinogenesis, in collaboration with Dr. Sonnenschein she proposed the tissue organization field theory, which posits that cancer is a problem of tissue organization. Consequently, she is studying the role of stroma-epithelium interactions in carcinogenesis and in tumor regression. Regarding endocrine disruption, in collaboration with Dr. Sonnenschein she developed assays for detecting estrogenicity and androgenicity (E-SCREEN and A-SCREEN assays) identified novel xenoestrogens, and developed a marker of xenoestrogen exposure which is being used to explore the role of xenoestrogens on breast cancer. She has been a member of national and international panels on Endocrine Disruptors (National Academy of Sciences, EDSTAC). She is currently studying the mechanisms by which fetal exposure to xenoestrogens induce neoplastic development in the mammary gland. Dr. Soto also works on the clarification of epistemological issues arising from the study of complex biological phenomena.