

E-Visibility Causes



Breast Cancer

Have you wondered why your city has turned pink this month? October is Breast cancer awareness month. This disease is the most common malignancy in women around the world. Only in Spain more than 25,000 new cases are diagnosed, more than 250,000 in US. Breast cancer in men is rare, but it can happen, and the lack of awareness of its occurrence in men may lead to diagnoses at later age and more advanced stage than in females. Education for early detection and treatment and plans for the control and prevention of this cancer must be a high priority for health policy makers. On occasion of Breast Cancer Day, on the 19th of October, we spoke with one of our members in ECUSA, Dr. Ana Ruiz-Saenz, that works to better understand this disease.



Dr. Ruiz-Saenz (born in La Rioja, Spain) works at the University of California in San Francisco, on HER2 positive breast cancers. There are many different types of breast cancer and this one accounts for 25% of all diagnosed cases of breast cancer. It tends to be an aggressive type of

cancer and its cells over-express HER2 protein (human epidermal growth factor receptor 2). In her team they are studying the molecular mechanisms of HER2 and HER3 (human epidermal growth factor receptor 3) to promote proliferation of cancer cells. One of **Ana's** projects is specifically focused on studying HER3 and inhibiting its activity by selectively eliminating its production on the cells. They are testing a new molecule that in combination with other commonly used treatments has given good results so far, eliminating the tumor cells in *in vitro* studies.

Ana came to US in 2013, after several stays as a predoctoral student at the Erasmus Medical Center of Rotterdam (Netherlands). She was interested in translational research and that is why she decided to work with new possible therapies for breast cancer. She believes on a personalized approach to treat cancer getting more efficacy and less toxicity to the patients. She knows that we still have a lot to do to cure this disease but we are on the right path, with interdisciplinary groups that can study this complex disease by studying not only its cells but also the environment, the immune system, etc.

“Breast cancer is a complex disease that goes beyond the tumor cells”

Dr. Ana Ruiz-Saenz

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