

# The myth about talking to the baby through the mother's belly is a thing of the past

- Institut Marquès has presented its research on foetal hearing and the effect of music on early life at Karolinska Institut, at University of Stockholm and at the main universities of Denmark.
- Studies have shown that, during pregnancy, the foetus hears only the sounds that come directly from the vagina and barely hears the noises from the outside.
- The research of this international centre of Gynaecology and Assisted Reproduction has generated a great expectation in the European Ig Nobel tour.

## Barcelona, 17th April 2018

For years, <u>Institut Marquès</u> has been carrying out cutting-edge research into the effects of music on the beginning of life. Its <u>research on music during embryonic and foetal development</u> has led to numerous international awards for this centre of Gynaecology and Assisted Reproduction based in Barcelona (Spain).

In this regard, last September its Director, Dr. Marisa López-Teijón, received the Ig Nobel Prize for Medicine in the field of Obstetrics at Harvard University (USA) for the discovery of foetal hearing. The objective of the Ig Nobel is for prestigious scientists from all over the world to present their research to the public in a fun and entertaining way. The organization has chosen the researchers from Institut Marquès to present their work at the Ig Nobel Tour that is currently visiting European universities.

Creating great expectation among lovers of scientific popularisation, Dr. López-Teijón and Dr. Álex García Faura, Scientific Director of Institut Marquès, presented their work at universities in Sweden and Denmark, refuting one of the most widely accepted myths among pregnant women: "Thanks to the creation of a vaginal loudspeaker, Babypod, we have shown that foetuses can hear from the 16<sup>th</sup> week onwards when they measure 11 centimetres only if the sound reaches them directly from the vagina", explained Dr. Marisa López-Teijón. "Foetuses can barely hear the noise from outside. So we can say that the myth of talking to babies through pregnant women's bellies is a thing of the past".



Chief researcher of the study, Dr. López-Teijón explained: "with our scientific research we have improved in vitro fertilisation by applying musical vibrations in the incubators of our assisted reproduction clinics". For this reason, the Ig Nobel Prize is also a recognition of the research, development and innovation work of Institut Marquès to improve its treatments.

# Thousands of people attended the speeches on foetal hearing

One of the most popular events in the Ig Nobel Tour this year took place in Denmark. Nearly 800 people attended the presentations of Dr. López-Teijón and Dr. García Faura at the Aarhus University (the main university in Denmark). Other hundreds of people followed it in streaming from one of the 50 points enabled for the connection.

Communication with the foetus is one of the aspects that aroused most interest: "By inserting a loudspeaker into the vagina of thousands of patients, for the first time we have managed to communicate with the foetus. This small device, Babypod, connects to the mobile phone and has allowed us to discover that the foetus responds in the same way as a baby, with speech and movement. The baby is learning to communicate. Thousands of women are already using it to communicate with their babies during pregnancy", said the Scientific Director of the Institut Marquès in his speech.

According to research by the Institut Marquès, we can now communicate with the foetus and stimulate it neurologically. Any kind of sensory stimulation is good, and the earlier it takes place, the better.

Music activates language learning. And, as has been demonstrated, this learning can begin in the womb.

#### **About Institut Marquès**

Institut Marquès is a Barcelona based centre of international standing in Gynaecology, Obstetrics and Assisted Reproduction with branches in Barcelona, London, Ireland (Dublin and Clane), Italy (Rome and Milan) and Kuwait.

The centre, with a wealth of experience in particularly difficult cases, helps people in more than 50 countries achieve their dream of parenthood. Institut Marquès offers the highest pregnancy success rates, with 89% per cycle in IVF with egg donation.

Leader in innovation, it conducts an important line of research on the benefits of music in the early stages of life and foetal stimulation.



#### **About Babypod**

The investigation of the different reactions of foetuses to different acoustic stimuli was carried out with the help of a ground-breaking sound reproducer in its class. This is Babypod®, the only device that emits music and voice into the vagina. It is placed as if it were a tampon and connected to the mobile phone, making it totally safe for the mother and baby. It emits music and voice at a maximum of 54 decibels, which is the level of a normal conversation. In addition to making communication with the foetus possible, this device has very important medical applications: it makes it possible to rule out foetal deafness and simplifies ultrasound examinations because, by inducing a response in the baby, it improves the vision of the foetal structures during the scan.

Approved by the FDA, this device is available online worldwide for pregnant women to use at home and also take to ultrasounds to see the reaction of the foetus. It provides parents with a first contact with their child by not only allowing them to play music for foetal stimulation, but also by means of its free app, it allows them to record their messages so that the baby can hear the voice of its parents, even before birth.

## **Information:**

Babypod:

https://babypod.net/en/

Music and fertilisation:

Music enhances In Vitro Fertilisation

IVF to the Beat of the Music. We Have Made our Embryos Dance

Music and foetal stimulation:

The story of a discovery (1)

The Story of a Discovery (2) - The first tests continue

The Story of a Discovery (3) – The scientific research starts

The Story of a Discovery (4) The results of the first study

The Story of a Discovery (5) – What do we think can be heard inside the uterus?

#### Scientific studies:

Scientific area

Discovery in the area of fetal stimulation through intravaginal music

Fetal facial expression in response to intravaginal music emission

### Concerts for embryos and foetuses:

Christmas Concert by Soraya for future babies through Babypod®

Soraya Arnelas communicates with her baby through Babypod

Concert for embryos of Antonio Orozco

#### Embryomobile:

http://www.fertility-experiences.com/embryomobile/

More information: <u>www.institutomarques.com/en</u> - <u>www.institutmarques.ie</u>



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