

# Information sheet on the project 'Creativity during pregnancy'/ Phase III

Dear mother-to-be,

Thanks for your interest in the project: "Creativity during pregnancy"! We have summarised the most important information for your better understanding.

# Aim of the project

Studies have shown that beautiful experiences during pregnancy help mothers alleviating possible worries, strengthen their resilience and thus have a positive influence on the health and development of the child. In our first projects 2021-2023, we were able to develop creative programs for pregnant women with a team of competent obstetricians, scientists and artists and show, that these had a positive impact on reducing stress in mothers.

In this 3rd cycle of the project, we would like to know whether these effects also exist when the music expositions are communicated via digital media to make them accessible to a larger group. For you, this means that if you agree to participate, you must assume that a lottery will decide whether you will be assigned to a LIVE group taking part in all activities at the concert hall of the Berliner Philharmonics or to a DIGITAL GROUP, where you are allowed to participate in a guiet retreat from home.

Specifically, the Berliner Philharmonic Foundation provides us with rooms and creative expertise for this project. From the beginning of the pregnancy, concerts are usually offered on Saturday mornings every four weeks in the exhibition foyer of the Chamber Music Hall or other rooms of the Philharmonic Berlin, tailored to pregnant women and their children (LIVE GROUP). Alternatively, the interventions are offered digitally for a further group (DIGITAL GROUP).

Your child feels the mother's relaxation right from the start and can already hear the music from around 20 weeks of life in the womb. Creative workshops will be organized every 4 weeks, including movement to music, singing and gentle dancing - all for you and your child. The program begins with the first concert on **25 January 2025** for the LIVE group in Herbert-von-Karajan-Str. 1 in the exhibition foyer of the Chamber Music Hall and later for the DIGITAL group.

The concerts were selected by musicians from the Berliner Philharmonics coordinated by Raimar Orlovsky (violin). The courses include:

- a) Singing: This strengthens your bond with your unborn child, as the baby recognizes your voice early on in pregnancy. At the same time, you practice deep abdominal breathing and gain awareness of the pelvic floor. We also hope to awaken your love of singing, as this is positively correlated with your child's speech development. During the courses, you will be guided and accompanied by professional trainers.
- b) **Dancing:** We imagine that it will be fun for you and make you even more aware of your bond with your child if you experience an intimate community with your partner and child during quiet dance steps at home. Exercise during pregnancy promotes the cognitive development of children, which has already been proven for the period of 4

weeks after birth. During the courses you will be guided and accompanied by professional trainers.



It would also be possible to observe how your child reacts to familiar music once or twice in an ultrasound scan outside the Philharmonic building

If you are interested in taking part in the study, please register via our website <a href="https://creativity.parents-to-be.info">https://creativity.parents-to-be.info</a> as early as possible. Please understand that we are unable to accept pregnant women after the 20th week of pregnancy.

The Philharmonic Berlin has a professional hygiene concept that will also be applied in 2025, depending on the situation.

During the whole program, we shall provide you with medical support. Short questionnaires will be used to determine how you are feeling, your heart rate may be recorded in the LIVE GROUP, your stress resistance will be measured (both only using a measuring device on which your hand rests) and a saliva mouth swab will be taken in both groups before and after the music. We also analyze the accumulation of stress parameters in hair samples from you or your child, participation is voluntary.

We also ask for your consent in advance to record your birth data from your maternity clinic and, if necessary, to determine after delivery biological markers from umbilical cord blood or the placenta, which represent markers of past stress or future health after the birth. You are also expected to complete some additional questionnaires we send you online at home. We would also be happy to send you a questionnaire on your child's development at 6 months and 2 years after the birth.

After delivery, we offer you non-invasive and completely harmless examinations of your child's speech development. These include sound tests and a 5-minute electroencephalography (EEG) examination. For this, your child would be fitted with non-invasive electrodes and a contact gel (similar to ultrasound gel) would be used to record the activity that our brain produces during approximately 5 minutes.

The Berliner Philharmoniker Foundation intends to document the project with image, sound and video recordings. Please inform us when registering if you do not wish this to happen.

# Organization

Integrating art projects into pregnancy and describing the positive effects is a goal of the Clara Angela Foundation, to ensure data is analysis. After all, it could be important for all pregnant women to find out what positive effects music interventions can have on the well-being of expectant parents and their children. An experienced clinical team will accompany you on-site and during the further evaluation.

# **Conditions of participation**

Participation in this study is voluntary and you can terminate your participation at any time without giving reasons and without any disadvantages for you or your child.

There are no costs for your participation. The concerts and courses in the standard program take place in the Philharmonic Berlin.

The digital courses are also transmitted from there with a time delay.

# Will my personal data be treated confidentially?

Your personal data (first name, surname and date of birth) will be treated confidentially and stored pseudonymised in accordance with the General Data Protection Regulation (GDPR).

You have the right to access all available personal data at any time. The data manager Uwe Wiards and Prof Arabin are responsible. The analyses are "sponsored" by the Clara Angela Foundation (https://clara-angela.info). You also have the right to have incorrect personal data



corrected. Furthermore, you have the right to revoke your consent to data processing at any time; in such an event, you may request the deletion of your data and please contact us via <a href="mailto:kreativ@clara-angela.info">kreativ@clara-angela.info</a>.

In case you consider data processing unlawful, you have the option of complaining with the competent supervisory authority in addition to seeking legal assistance

Berlin Commissioner for Data Protection and Freedom of Information (Friedrichstraße 219.

10969 Berlin, Tel.: 030/13889-0 or e-mail: mailbox@datenschutz-berlin.de).

For further information or if you have any questions, please send us an email  $\underline{kreativ@clara-angela.info}$ . If you wish, we can also call you back, provided you give us your telephone number.

# Our team

This consists of clinical scientists, artists and IT specialists:

Prof. Dr. Dr. h.c. mult. Birgit Arabin, Project leader, Clara Angela Foundation Dr. Elisabeth Schalinski, Clara Angela Foundation, Communication with patients

Prof Dr. Sonja Entringer, Clara Angela Foundation/ Charité University Medicine, Medical Psychology

Prof Dr. Thorsten Braun, Clara Angela Foundation/ Charité Universitätsmedizin, Obstetrics

Prof Dr. Lars Hellmeyer, Clara Angela Foundation and Vivantes Friedrichshain, Obstetrics

Prof Dr. Claudia Männel, Charité University Medicine, Department of Audiology and Phoniatry

Prof Gerlinde Metz, Clara Angela Foundation/ Lethbridge University, Experim. Lab

Prof Dr Christoph Bührer, Clara Angela Foundation/ Charité Universitätsmedizin, Neonatology

Katja Frei, Berliner Philharmoniker Foundation, Head of Education & Outreach Raimar Orlovsky, Berliner Philharmoniker Foundation, coordination of orchestra members A workshop group of professional trainers

Uwe Wiards Clara Angela Foundation, Data Management Dr. Peter Wohlmuth, statistical advice and data analysis