

Buscamos: recent **M.Sc. graduate** in **applied optics, applied physics, biophysics, biomedical engineering** or a related discipline.

PHILIPS Research, Netherlands and the **Centre for Hair and Skin Sciences**, United Kingdom, got a **European Marie Curie Grant** to work on the project “**CLaSSiC**”. Within the project “**CLaSSiC**” **3 PhD students** will conduct a pioneering scientific research on the impact of **light** on non-embryonic **stem cells** with a purpose to develop a device for regenerative therapy.

Desired profile of a candidate

- **Knowledge** of optical techniques, biomedical optics, light propagation in turbid media, optical Imaging techniques, Monte Carlo methods of light propagation in tissue
- **Hands-on** experience with experiments
- **Attitude** towards scientific research of biological phenomena
- **An appreciation** of photochemistry, photo-biomodulation, molecular and/or cell biology
- **Ambition** to create a breakthrough in understanding of light impact on skin stem cells

Key research objectives

- **Identify** optical parameters to affect stem cell behavior, based on biomedical optics
- **Validate** computational optical model of light interaction with skin- and hair, including variability of tissue optical properties
- **Create** a lab-based set up with varying parameters to illuminate stem cell cultures. Design the experiment based on statistical design for large parameter studies
- **Test** the identified optical parameters on cell cultures
- **Predict** parameter set/s for influence of light on the target stem cells for application in hair disorders and wound healing
- **Design** and **construct** device prototypes
- **Identify** commercially viable opportunity for designed device prototypes

Enquiries

Prior to an official application, please **send an inquiry** to **Dr. ir. Natallia Eduarda Uzunbajakava** (Natallia.uzunbajakava@philips.com), Senior Scientist and a Project Leader at PHILIPS Research, the Netherlands or Dr. Natalia Botchkareva (n.botchkareva@bradford.ac.uk), Reader in Cutaneous Biology, Centre for Skin Science, United Kingdom.

More information

<http://www.jobs.ac.uk/job/AHS351/marie-curie-early-stage-researchers/>
<http://jobs.bradford.ac.uk/Vacancy.aspx?ref=RLS2648>
<http://jobs.bradford.ac.uk/Upload/vacancies/files/302/RLS2647.pdf>

<http://pww.philips.com/>

Kind regards
Natallia Eduarda

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