Engineer to work in the Neurodegenerative Diseases Group of Biocruces-Bizkaia HRI for the project BIO17/ND/010 (EITB Telemaratoia 2017)

- ## We are looking for:

An **Engineer with skills in computer vision, programming and machine learning** to collaborate in the research project entitled: **"Study of the retina and the visual pathway by neuroimaging in genetic and aggressive idiopathic synucleinopathies as a model to identify phenotypes and prognostic biomarkers in idiopathic Parkinson's disease" (Principal Investigator: Iñigo Gabilondo, MD, PhD) leaded by the Neurodegenerative Diseases Group** in the Health Research Institute Biocruces-Bizkaia. For further information about the group, visit the following link: https://biocrucesbizkaia.org/web/biocruces/bc5.01

- ## Required:

- Bachelor of Engineering
- Good academic record (average score higher than 7.0)

- ## Valued:

- Bachelor of Telecommunications Engineering or Biomedical or Health Engineering
- Official master's degree in Biomedical Engineering or Neuroscience completed or in progress
- Demonstrable practical skills in computer vision, programming (Matlab, Python and / or R), machine learning and other artificial intelligence techniques
- Experience with the magnetic resonance imaging analysis packages SPM, FSL and Freesurfer
- Advanced English level (demonstrable with official degree - C1)
- Intention to develop a PhD in Biomedicine

- ## Tasks to be carried out:

- Quantitative computational analysis of retinal optical coherence tomography and brain magnetic resonance imaging in a prospective observational project on genetic forms of Parkinson's disease initiated in 2014 and with more than 100 active participants

- Analyze retinal images with computer vision and machine learning algorithms characterizing aspects such as regional atrophy of the retina and changes in the geometry of the retina and its vessels
- Analyze brain magnetic resonance images with different packages and programs such as Matlab-SPM, FSL and Freesurfer
- Collaborate in the analysis of data, preparation of presentations in international conferences and scientific articles.

• **We offer:**

- **Type of contract:** Work contract
- **Duration:** 12 months (extendable)
- **Full working day** (100%) (1592 annual hours)
- **Estimated annual gross salary:** 23,004 euros per year
- **Workplace:** Health Research Institute Biocruces-Bizkaia
- **Expected start date:** immediately after 15 days of publication on the web
- **Position call Ref:** BIO17 / ND / 010.

The hired candidate must comply with the proper operating rules of the center, in terms of dedication, role to play, schedule and vacation permits

• **Information, how to apply and Employment Website:**

To those interested in the job offer, please send your CV by email to Dr. Iñigo Gabilondo at igabilon@gmail.com

The **formalization** of the application must be made through the **official Employment Website of the Biocruces-Bizkaia HR**I, where the job offer will **be officially published during the second half of September 2018**: https://www.biocrucesbizkaia.org/web/biocruces/employment

Candidates for this call will be included in the Employment Exchange, which may be considered for subsequent requirements of profiles with similar characteristics