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| ***School/Department:*** | ***Department of Cell Biology, Erasmus MC*** |
| ***Supervisor information:*** | **Prof. Dr. D. Huylebroeck** (head of the Department of Cell Biology, e-mail: [d.huylebroeck@erasmusmc.nl](mailto:d.huylebroeck@erasmusmc.nl))  **Dr. ir. N. Galjart** (scientific director of PhD program in Biomedical Sciences, e-mail: [n.galjart@erasmusmc.nl](mailto:n.galjart@erasmusmc.nl)). |
| ***Project Title:*** | Regulation of gene expression in development and disease |
| ***Abstract:*** | The Department of Cell Biology asks the broad question of how the various cell types in our body are able to express different sets of genes from identical genomic DNA. On the one hand we study essential signalling molecules that first regulate cytoplasmic processes and that subsequently turn on exactly the right set of genes for that given cell type/lineage/stage. On the other hand we study the regulatory processes in our genome, including those connected to its architectural dynamics, with the aim to understand how these precisely control promoter and (distant) regulatory element (e.g. enhancer) controlled gene expression in the right cell type and at the right time.  With respect to signalling molecules our focus is on members of the transforming growth factor beta (TGFb) family, with emphasis on the nuclear interpretation, via Smad proteins and their partner transcription factors, of BMP and Activin/Nodal signalling. Research on this topic is headed by **Prof. Dr. D. Huylebroeck** (head of the Department of Cell Biology). With respect to the cytoplasmic processes we focus on the role of the microtubule cytoskeleton in signal transduction. Research on this topic is headed by **Dr. ir. N. Galjart**. Research on transcription, epigenetics and chromatin remodeling is headed by various PIs in the Department, including **Dr. Poot**, **Prof. dr. Philipsen**, and **Dr. Wendt**.  ***Website for all Cell Biology research projects:*** <http://www.erasmusmc.nl/cellbiology/research/research-groups> |
| ***Requirements of candidate:*** | * We are looking for highly motivated, talented students to join our international team. * Master degree or MD. * A fair scholarship that covers subsistence allowance and international air plane ticket. * Working in the lab requires that the student has good communication skills. * English language requirement:   *English speaking countries & Netherlands:* no requirement  *Other countries:* IELTS 7.0 *(min 6.0 for all subs)*, TOEFL 100 *(min 20 for all subs)* |

**2020 CSC-PhD programme information will be shared and updated online:** [**https://www.eur.nl/en/about-eur/erasmus-university-china-center-0/cscscholarship/prospectivephd-candidates**](https://www.eur.nl/en/about-eur/erasmus-university-china-center-0/cscscholarship/prospectivephd-candidates)

**Application to:** [**EuccChinaOffice@eur.nl**](mailto:EuccChinaOffice@eur.nl) **before March 10, 2020**