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# Corticosteroid receptor dynamics

analysis by advanced fluorescence microscopy

Femke Lokke Groeneweg

Corticosteroid receptor dynamics, analysis by advanced fluorescence microscopy

Femke Lokke Groeneweg

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# Corticosteroid receptor dynamics

## analysis by advanced fluorescence microscopy

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The studies described in this thesis have been performed at the department of Medical Pharmacology of the Leiden/Amsterdam Center for Drug Research (LACDR) and Leiden University Medical Center (LUMC), The Netherlands. Parts of this research were performed in collaborations with the department of Molecular Cell Biology of the Institute of Biology at Leiden University, the department of Physics of Life Processes of the Institute of Physics at Leiden University, the department of Neuroscience and Pharmacology at the University Medical Center (UMC) Utrecht and the department of Pathology at the Erasmus Medical Center, all in The Netherlands. This research was financially supported by the Royal Dutch Academy of Sciences (KNAW).

# List of Abbreviations

| | |
|---|---|
| **AF-1/-2** | Activating Function domain (1 and 2) |
| **AR** | Androgen Receptor |
| **BLA** | Basolateral Amygdala |
| **DBD** | DNA Binding Domain |
| **ER** | Estrogen Receptor |
| **FRAP** | Fluorescence Recovery After Photobleaching |
| **FCS** | Fluorescence Correlation Spectroscopy |
| **GFP** | Green Fluorescent Protein |
| **GR** | Glucocorticoid Receptor |
| **GRE** | Glucocorticoid Response Element |
| **HPA** | Hypothalamic-Pituitary-Adrenal |
| **LBD** | Ligand Binding Domain |
| **LBP** | Ligand Binding Pocket |
| **MR** | Mineralocorticoid Receptor |
| **PFC** | Prefrontal Cortex |
| **PICS** | Particle Image Correlation spectroscopy |
| **PR** | Progesteron Receptor |
| **PVN** | Paraventricular Nucleus |
| **SMM** | Single-Molecule Microscopy |
| **TIRF** | Total Internal Reflection Fluorescence |
| **YFP** | Yellow Fluorescent Protein |

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