Erratum to: Dissecting chromatin interactions in living cells from protein mobility maps

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In preparing Table 1 for the above mentioned article, a wrong reference for 1D-FCS was used and we have cited the values given for the 2D-FCS by reference “Capoulade et al. 2010” overseeing that these values are not contained in the published abstract. Therefore, this reference should be deleted and the text should be revised accordingly as outlined in the corrected Table 1 shown below.

In addition, the values in the last row of Table 2 have been confused unintentionally. They had been determined for free EGFP with RICS in different cellular

areas as shown elsewhere (Gröner et al. 2010). Therefore Table 2 should read as given below.

The footnote *d* in the caption of Table 2 has to be changed accordingly to read “The 1D-FCS data were acquired with the STFM (Fig. 4b) (Heuvelman et al. 2009; Baum, Erdel, Müller-Ott, Wachsmuth and Rippe, unpublished)”. Also the referring statement in the text on page 111 “For HP1 a comparison between FRAP, RICS, pFCS, 1D-FCS, and 2D-FCS is made in Table 2 and Fig. 4” should read “For HP1 a comparison between FRAP, RICS, pFCS, and 1D-FCS is made in Table 2 and Fig. 4”.

On page 106, in the section “FCS with plane excitation and detection”, the statement “This setup is referred to here as 2D-FCS. It was recently introduced to conduct first mobility measurements of fluorescent beads with ms time resolution (Wohland et al., 2010) and fluorescent proteins with μ s time resolution inside living cells or tissues (Capoulade et al. 2010).” should read “This setup was recently introduced to conduct mobility measurements of fluorescent beads with ms time resolution inside living cells or tissues (Wohland et al., 2010).”

In the caption of Fig. 4, the statement: “For HP1 the spatial/temporal resolution associated with RICS is not sufficient. This issue can be addressed by using a 2D-FCS setup in which light sheet illumination is

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Table 1 Experimental parameters of fluorescence fluctuation methods

Method	Spatial resolution	Temporal resolution	D ($\mu\text{m}^2 \text{s}^{-1}$)	Concentration	References
1D-FCS	200×380×700 nm	15 μs	>0.1	nM– μM	Heuvelman et al. 2009
2D-FCS	300×300×100 nm	1 ms	>0.1	nM– μM	Kannan et al. 2007
	400×400×1400 nm	2–6 ms	>0.1	nM– μM	Wohland et al. 2010

Table 2 Fluctuation microscopy measurements of HP1

Technique	D_{app} ($\mu\text{m}^2 \text{s}^{-1}$)		
	Cytoplasm	Euchromatin	Heterochromatin
FRAP ^a	ND	0.003–0.43	0.0006–0.49
RICS ^b	7±3	0.2–0.4	0.2–0.4
pFCS	23–26	7.7±0.8 ^c	3.9±0.9 ^c
1D-FCS ^d	ND	7.9±0.8 ^c	3.4±0.4 ^c

combined with detection of intensity fluctuations on an EMCCD (Capoulade et al. 2010; Wohland et al. 2010).“ should be removed since no 2D-FCS data for HP1 were available.

The reference “Capoulade et al. 2010” is no longer cited in the text and should therefore be removed from the reference list.

The authors regret any confusion these errors may have caused.