Supplemental Material to:

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Specifying peripheral heterochromatin during nuclear lamina reassembly

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Supplementary Materials

The 3D rendering snapshots and movies were created using Imaris 7.5.0 software (Bitplane USA, South Windsor, CT). Original Z-plane images were acquired using a Leica SP8 confocal microscope.

Supplementary Movie S1.

A 3D rendering of an interphase cell showing Lamin A/C (red), PRR14-GFP (green), and DAPI staining (blue). The movie illustrates colocalization of Lamin A/C, PRR14 and dense heterochromatin at the nuclear periphery and nuclear channels. This interphase cell was selected to highlight the nuclear channels.

Supplementary Movie S2.

A 3D rendering of a mitotic cell in prophase showing Lamin A/C (red), PRR14-GFP (green), and DAPI staining (blue). The movie illustrates relocalization of PRR14 from the lamina structure, as well as dissociation from condensing chromatin.

Supplementary Movie S3.

A 3D rendering of a mitotic cell in prometaphase showing Lamin A/C (red), PRR14-GFP (green), and DAPI staining (blue). The movie illustrates prometaphase stage, where both PRR14 and Lamin A/C remain dispersed throughout mitotic cytoplasm.

Supplementary Movie S4.

A 3D rendering of a mitotic cell in anaphase showing Lamin A/C (red), PRR14-GFP (green), and DAPI staining (blue). The movie illustrates localization of PRR14 on anaphase chromatin, while Lamin A/C remains dispersed. The movie segment showing PRR14 with transparent DAPI signal, illustrates deep penetration of PRR14 into anaphase chromatin.

Supplementary Movie S5.

A 3D rendering of a mitotic cell in telophase showing Lamin A/C (red), PRR14-GFP (green), and DAPI staining (blue). The movie illustrates relocalization of PRR14 to the re-formed lamina structure.