



## Supplementary Materials Biological Aging Modulates Cell Migration via Lamin A/C-Dependent Nuclear Motion

Jung-Won Park, Seong-Beom Han, Jungwon Hah, Geonhui Lee, Jeong-Ki Kim, Soo Hyun Kim and Dong-Hwee Kim

Supplemental Figure S1: Age dependent changes of cell morphology.



**Figure S1.** Old cells (age 85, 92) are larger than young cells (age 2, 3). These data are raw data for the Figure 1D, 1E, and 1F. X-axis depicts age of donors. > 290 cells were analyzed for each condition. (age 2: 310, age 3: 310, age 85: 311, age 92: 297) Error bars indicate SEM, and 1-way ANOVA using Tukey's test was applied (NS: not significant; \*\*\*: p<0.001).



Supplemental Figure S2: Age dependent changes of cell motility.

**Figure S2.** Old cells (age 85, 92) are less motile than young cells (age 2, 3). Cell dynamics are monitored for 8 h. These data are raw data for the Figure 1J–L. X-axis depicts age of donors. In each conditions, we analyzed more than 60 cells. (age 2: 16, age 3: 24, age 85: 6, age 92: 13) Error bars indicate SEM, and 1-way ANOVA using Tukey's test was applied (NS: not significant; \*: p<0.01; \*\*: p<0.005; \*\*\*: p < 0.001).



Supplemental Figure S3: Age dependent changes of nucleus morphology.

**Figure S3.** Nuclei of old cells (age 85, 92) are larger than young cells (age 2, 3). These data are raw data for the Figure 2D–G. X-axis depicts age of donors. > 290 cells were analyzed for each condition. (age 2: 310, age 3: 310, age 85: 311, age 92: 297) Error bars indicate SEM, and 1-way ANOVA using Tukey's test was applied (NS: not significant; \*\*\*: p<0.001).



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