

Publications 2017:

[*Mitotic progression following DNA damage enables pattern recognition within micronuclei.](#)

Harding SM, Benci JL, Irianto J, Discher DE, Minn AJ, **Greenberg RA.**

Nature. 2017 Aug 24;548(7668):466-470. doi: 10.1038/nature23470. Epub 2017 Jul 31.

PMID:28759889

[*Elastic-Fluid Model for DNA Damage and Mutation from Nuclear Fluid Segregation Due to Cell Migration.](#)

Bennett RR, Pfeifer CR, Irianto J, Xia Y, Discher DE, **Liu AJ.**

Biophys J. 2017 Jun 6;112(11):2271-2279. doi: 10.1016/j.bpj.2017.04.037.

PMID:28591600

[*Optogenetic control of kinetochore function.](#)

Zhang H¹, Aonbangkhen C², Tarasovets EV¹, Ballister ER¹, Chenoweth DM², **Lampson MA¹.**

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[*PAK signaling drives acquired drug resistance to MAPK inhibitors in BRAF-mutant melanomas.](#)

Lu, H., Liu, S., Zhang, G., Wu, B., Zhu, Y., Frederick, D., Hu, Y., Zhong, W., Randell, S., Sadek, N., Zhang, W., Chen, G., Cheng, C., Zeng, J., Wu, L., Zhang, J., Liu, X., Xu, W., Clemens Krepler, C., Sproesser, K., Xiao, M., Miao, B., Liu, J., Song, C., Liu, J., Karakousis, G., Schuchter, L., Yiling Lu, Y., Mills, G., Cong, Y., Chernoff, J., Guo, J., Boland, G., Sullivan, R., Wei, Z., Field, J., Amaravadi, R., Flaherty, K., Herlyn, M., Xu, X., **Guo, W.**

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[*Mechanosensing of matrix by stem cells: From matrix heterogeneity, contractility, and the nucleus in pore-migration to cardiogenesis and muscle stem cells in vivo.](#)

Smith L, Cho S, **Discher DE.**

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[*Cross-linked matrix rigidity and soluble retinoids synergize in nuclear lamina regulation of stem cell differentiation.](#)

Ivanovska IL, Swift J, Spinler K, Dingal D, Cho S, **Discher DE**.

Mol Biol Cell. 2017 Jul 7;28(14):2010-2022. doi: 10.1091/mbc.E17-01-0010. Epub 2017 May 31.

PMID:28566555

[*SIRPA-Inhibited, Marrow-Derived Macrophages Engorge, Accumulate, and Differentiate in Antibody-Targeted Regression of Solid Tumors.](#)

Alvey CM, Spinler KR, Irianto J, Pfeifer CR, Hayes B, Xia Y, Cho S, Dingal PCPD, Hsu J, Smith L, Tewari M, **Discher DE**.

Curr Biol. 2017 Jul 24;27(14):2065-2077.e6. doi: 10.1016/j.cub.2017.06.005. Epub 2017 Jun 29.

PMID:28669759

[*Matrix Mechanosensing: From Scaling Concepts in 'Omics Data to Mechanisms in the Nucleus, Regeneration, and Cancer.](#)

Discher DE, Smith L, Cho S, Colasurdo M, García AJ, Safran S.

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PMID: 28532215

[*Engineering macrophages to eat cancer: from "marker of self" CD47 and phagocytosis to differentiation.](#)

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PMID:29082336

[*As a Nucleus Enters a Small Pore, Chromatin Stretches and Maintains Integrity, Even with DNA Breaks.](#)

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Biophys J. 2017 Feb 7;112(3):446-449. doi: 10.1016/j.bpj.2016.09.047. Epub 2016 Oct 27.

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[*Mechanosensing by the nucleus: From pathways to scaling relationships.](#)

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J Cell Biol. 2017 Feb;216(2):305-315. doi: 10.1083/jcb.201610042. Epub 2017 Jan 2. Review.

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[*DNA Damage Follows Repair Factor Depletion and Portends Genome Variation in Cancer Cells after Pore Migration.](#)

Irianto J, Xia Y, Pfeifer CR, Athirasala A, Ji J, Alvey C, Tewari M, Bennett RR, Harding SM, Liu AJ, Greenberg RA, **Discher DE**.

Curr Biol. 2017 Jan 23;27(2):210-223. doi: 10.1016/j.cub.2016.11.049. Epub 2016 Dec 15. PMID:27989676