***Efrat Shema- Publications***

***Selected Publications:***

# [Shema-Yaacoby E](http://www.ncbi.nlm.nih.gov/pubmed?term=Shema-Yaacoby%20E%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Nikolov M](http://www.ncbi.nlm.nih.gov/pubmed?term=Nikolov%20M%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Haj-Yahya M](http://www.ncbi.nlm.nih.gov/pubmed?term=Haj-Yahya%20M%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Siman P](http://www.ncbi.nlm.nih.gov/pubmed?term=Siman%20P%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Allemand E](http://www.ncbi.nlm.nih.gov/pubmed?term=Allemand%20E%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Yamaguchi Y](http://www.ncbi.nlm.nih.gov/pubmed?term=Yamaguchi%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Muchardt C](http://www.ncbi.nlm.nih.gov/pubmed?term=Muchardt%20C%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Urlaub H](http://www.ncbi.nlm.nih.gov/pubmed?term=Urlaub%20H%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Brik A](http://www.ncbi.nlm.nih.gov/pubmed?term=Brik%20A%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Oren M](http://www.ncbi.nlm.nih.gov/pubmed?term=Oren%20M%5BAuthor%5D&cauthor=true&cauthor_uid=23933260), [Fischle W](http://www.ncbi.nlm.nih.gov/pubmed?term=Fischle%20W%5BAuthor%5D&cauthor=true&cauthor_uid=23933260). (2013). Systematic identification of proteins binding to chromatin-embedded ubiquitylated H2B reveals recruitment of SWI/SNF to regulate transcription. Cell Rep. 15;4(3):601-8

**Shema E**, Kim J, Roeder RG and Oren M. (2011). RNF20 inhibits TFIIS-facilitated transcriptional elongation to suppress pro-oncogenic gene expression. Mol. Cell *42*(4), 477-488.

[**Shema E**, Tirosh I, Aylon Y, Huang J, Ye C, Moskovits N, Raver-Shapira N, Minsky N, Pirngruber J, Tarcic G, Hublarova P, Moyal L, Gana-Weisz M, Shiloh Y, Yarden Y, Johnsen SA, Vojtesek B, Berger SL, Oren M.](http://www.ncbi.nlm.nih.gov/pubmed/18832071?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) (2008). The histone H2B-specific ubiquitin ligase RNF20/hBRE1 acts as a putative tumor suppressor through selective regulation of gene expression. Genes Dev. *22*, 2664-2676.

***Additional Publications:***

Haj-Yahya M, Eltarteer N, Ohayon S, **Shema E**, Kotler E, Oren M, Brik A. (2012). [N-methylation of isopeptide bond as a strategy to resist deubiquitinases.](http://www.ncbi.nlm.nih.gov/pubmed/23065695) Angew Chem Int Ed Engl. 51(46):11535-9

Fuchs G, **Shema E**, Vesterman R, Kotler E, Wolchinsky Z, Wilder S, Golomb L, Pribluda A, Zhang F, Haj-Yahya M, Feldmesser E, Brik A, Yu X, Hanna J, Aberdam D, Domany E, Oren M. (2012). [RNF20 and USP44 regulate stem cell differentiation by modulating H2B monoubiquitylation.](http://www.ncbi.nlm.nih.gov/pubmed/22681888) Mol Cell. 46(5):662-73.

[Shiloh Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Shiloh%20Y%22%5BAuthor%5D), [**Shema E**](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Shema%20E%22%5BAuthor%5D)**,** [Moyal L](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Moyal%20L%22%5BAuthor%5D), [Oren M](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Oren%20M%22%5BAuthor%5D). (2011). RNF20-RNF40: A ubiquitin-driven link between gene expression and the DNA damage response. [FEBS Lett.](http://www.ncbi.nlm.nih.gov/pubmed/21827756) *5*.

Dori-Bachash M, **Shema E**, Tirosh I. (2011). Coupled evolution of transcription and mRNA degradation. [PLoS Biol.](http://www.ncbi.nlm.nih.gov/pubmed/21666807) *9*(7):e1001106

**Shema E**, Oren M, Minsky N. (2011). Detection and characterization of ubiquitylated H2B in mammalian cells. Methods *54*, 326-330.

[Zwang Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Zwang%20Y%22%5BAuthor%5D), [Sas-Chen A](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Sas-Chen%20A%22%5BAuthor%5D), [Drier Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Drier%20Y%22%5BAuthor%5D), [Shay T](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Shay%20T%22%5BAuthor%5D), [Avraham R](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Avraham%20R%22%5BAuthor%5D), [Lauriola M](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Lauriola%20M%22%5BAuthor%5D), [**Shema E**](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Shema%20E%22%5BAuthor%5D), [Lidor-Nili E](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Lidor-Nili%20E%22%5BAuthor%5D), [Jacob-Hirsch J](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Jacob-Hirsch%20J%22%5BAuthor%5D), [Amariglio N](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Amariglio%20N%22%5BAuthor%5D), [Lu Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Lu%20Y%22%5BAuthor%5D), [Mills GB](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Mills%20GB%22%5BAuthor%5D), [Rechavi G](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Rechavi%20G%22%5BAuthor%5D), [Oren M](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Oren%20M%22%5BAuthor%5D), [Domany E](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Domany%20E%22%5BAuthor%5D), [Yarden Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Yarden%20Y%22%5BAuthor%5D). (2011). Two Phases of Mitogenic Signaling Unveil Roles for p53 and EGR1 in Elimination of Inconsistent Growth Signals. Mol. Cell *42*(4), 524-535.

Moyal L, Lerenthal Y, Gana-Weisz M, Mass G, So S, Wang SY, Eppink B, Chung YM, Shalev G, **Shema E**, Shkedy D, Smorodinsky NI, van Vliet N, Kuster B, Mann M, Ciechanover A, Dahm-Daphi J, Kanaar R, Hu MC, Chen DJ, Oren M and Shiloh Y. (2011). Requirement of ATM-dependent monoubiquitylation of histone H2B for timely repair of DNA double-strand breaks. Mol. Cell. *41*, 529-542.

Pirngruber J, Shchebet A, Lemm I, Schreiber L, **Shema E**, Minsky N, Chapman RD, Eick D, Lührmann R, Oren M and Johnsen SA. (2009). CDK9 directs H2B monoubiquitination and controls replication-dependent histone mRNA 3’-end processing. [EMBO Rep.](javascript:AL_get(this,%20'jour',%20'EMBO%20Rep.');) *10*, 894-900.

[Minsky N, **Shema E**, Field Y, Schuster M, Segal E, Oren M.](http://www.ncbi.nlm.nih.gov/pubmed/18344985?ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) (2008). Monoubiquitinated H2B is associated with the transcribed region of highly expressed genes in human cells. Nat Cell Biol*.* *10*, 483-488.

[Klutstein M, Shaked H, Sherman A, Avivi-Ragolsky N, **Shema E**, Zenvirth D, Levy AA, Simchen G.](http://www.ncbi.nlm.nih.gov/pubmed/18430956?ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum) (2008). Functional conservation of the yeast and Arabidopsis RAD54-like genes. Genetics. *178,* 2389-2397.