

PUBLICATIONS

First author:

Busan S, Weidmann CA, Sengupta A, Weeks KM. Guidelines for SHAPE reagent choice and detection strategy for RNA structure probing studies. *Biochemistry* (2019). [pdf](#)

Busan S, Weeks KM. Accurate detection of chemical modifications in RNA by mutational profiling (MaP) with ShapeMapper 2. *RNA* (2018). [pdf](#)

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Siegfried NA*, **Busan S***, Rice GM*, Nelson JA, Weeks KM. RNA motif discovery by SHAPE and mutational profiling (SHAPE-MaP). *Nat Methods* (2014). (*)co-first-authors. [pdf](#)

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Second author:

Stephenson W, **Busan S**, Weeks KM, Smibert P. nanoSHAPE: direct RNA structure probing using nanopore sequencing. *in preparation*

Giannetti CA, **Busan S**, Weidmann CA, Weeks KM. SHAPE probing reveals human rRNAs are largely unfolded in solution. *Biochemistry* (2019). [link](#)

Mustoe AM, **Busan S**, Rice GM, Hajdin CE, Peterson BK, Ruda VM, Kubica N, Nutiu R, Baryza JL, Weeks KM. Pervasive Regulatory Functions of mRNA Structure Revealed by High-Resolution SHAPE Probing. *Cell* (2018). [pdf](#)

Rice GM, **Busan S**, Karabiber F, Favorov OV, Weeks KM. SHAPE analysis of small RNAs and riboswitches. *Methods Enzymol* (2014). [pdf](#)

Other:

Liu Y, Chen J, Nikolaitchik OA, Desimmie BA, **Busan S**, Pathak VK, Weeks KM, Hu WS. The roles of five conserved lentiviral RNA structures in HIV-1 replication. *Virology* (2018). [link](#)

Smola MJ, Rice GM, **Busan S**, Siegfried NA, Weeks KM. Selective 2'-hydroxyl acylation analyzed by primer extension and mutational profiling (SHAPE-MaP) for direct, versatile and accurate RNA structure analysis. *Nat Protoc* (2015). [pdf](#)

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Li C, Pleil KE, Stamatakis AM, **Busan S**, Vong L, Lowell BB, Stuber GD, Kash TL. Presynaptic inhibition of gamma-aminobutyric acid release in the bed nucleus of the stria terminalis by kappa opioid receptor signaling. *Biol Psychiatry* (2012). [link](#)