REFERENCES

Alrabiah, H., Allwood, J. W., Correa, E., Xu, Y., & Goodacre, R. (2018). PH plays a role in the mode of action of trimethoprim on Escherichia coli. *Plos One,13*(7). doi:10.1371/journal.pone.0200272

Beggs, W. H., & Andrews, F. A. (1976). Role of Ionic Strength in Salt Antagonism of Aminoglycoside Action on Escherichia coli and Pseudomonas aeruginosa. *Journal of Infectious Diseases,134*(5), 500-504. doi:10.1093/infdis/134.5.500

Blount, K. F., & Breaker, R. R. (2006). Riboswitches as antibacterial drug targets.*Nature Biotechnology,24*(12), 1558-1564. doi:10.1038/nbt1268

Blount, K., Puskarz, I., Penchovsky, R., & Breaker, R. (2006). Development and Application of a High-Throughput Assay for glmS Riboswitch Activators.*RNA Biology,3*(2), 77-81. doi:10.4161/rna.3.2.3102

Britton, R. A., Wen, T., Schaefer, L., Pellegrini, O., Uicker, W. C., Mathy, N., . . . Condon, C. (2007). Maturation of the 5 end of Bacillus subtilis 16S rRNA by the essential ribonuclease YkqC/RNase J1. *Molecular Microbiology,63*(1), 127-138. doi:10.1111/j.1365-2958.2006.05499.x

Carey, M. F., Peterson, C. L., & Smale, S. T. (2013). The RNase Protection Assay. Cold Spring Harbor Protocols, 2013(3). doi:10.1101/pdb.prot071910

Chan, H., Ho, J., Liu, X., Zhang, L., Wong, S. H., Chan, M., & Wu, W. K. (2017). Potential and use of bacterial small RNAs to combat drug resistance: A systematic review. Infection and Drug Resistance, Volume 10, 521-532. doi:10.2147/idr.s148444

Collins, J. A., Irnov, I., Baker, S., & Winkler, W. C. (2007). Mechanism of mRNA destabilization by the glmS ribozyme. Genes & Development,21(24), 3356-3368. doi:10.1101/gad.1605307

Datsenko, K. A., & Wanner, B. L. (2000). One-step inactivation of chromosomal genes in Escherichia coli K-12 using PCR products.*Proceedings of the National Academy of Sciences,97*(12), 6640-6645. doi:10.1073/pnas.120163297

Deikus, G., & Bechhofer, D. H. (2011). 5′ End-independent RNase J1 Endonuclease Cleavage ofBacillus subtilisModel RNA. *Journal of Biological Chemistry,286*(40), 34932-34940. doi:10.1074/jbc.m111.287409

Dersch, P., Khan, M. A., Mühlen, S., & Görke, B. (2017). Roles of Regulatory RNAs for Antibiotic Resistance in Bacteria and Their Potential Value as Novel Drug Targets. Frontiers in Microbiology,8. doi:10.3389/fmicb.2017.00803

Deutscher, M. P. (2015). How bacterial cells keep ribonucleases under control. *FEMS Microbiology Reviews,39*(3), 350-361. doi:10.1093/femsre/fuv012

Doherty, E. A., & Doudna, J. A. (2001). Ribozyme Structures and Mechanisms. *Annual Review of Biophysics and Biomolecular Structure,30*(1), 457-475. doi:10.1146/annurev.biophys.30.1.457

Even, S. (2005). Ribonucleases J1 and J2: Two novel endoribonucleases in B.subtilis with functional homology to E.coli RNase E. *Nucleic Acids Research,33*(7), 2141-2152. doi:10.1093/nar/gki505

Fass, R. J., & Barnishan, J. (1979). Effect of Divalent Cation Concentrations on the Antibiotic Susceptibilities of Nonfermenters Other than Pseudomonas aeruginosa. *Antimicrobial Agents and Chemotherapy,16*(4), 434-438. doi:10.1128/aac.16.4.434

Ferré-Damaré, A. R. (2010). The glmS ribozyme: Use of a small molecule coenzyme by a gene-regulatory RNA. *Quarterly Reviews of Biophysics,43(04),* 423-447. doi:10.1017/s0033583510000144

Hartwell, L. H. (2011). *Genetics: From genes to genomes*. 4th edition, Chp. 15.

Hong, W., Zeng, J., & Xie, J. (2014). Antibiotic drugs targeting bacterial RNAs.*Acta Pharmaceutica Sinica B,4*(4), 258-265. doi:10.1016/j.apsb.2014.06.012

Imming, P., Sinning, C., & Meyer, A. (2006). Drugs, their targets and the nature and number of drug targets. *Nature Reviews Drug Discovery,5*(10), 821-834. doi:10.1038/nrd2132

Jimenez, R. M., Polanco, J. A., & Lupták, A. (2015). Chemistry and Biology of Self-Cleaving Ribozymes. *Trends in Biochemical Sciences,40*(11), 648-661. doi:10.1016/j.tibs.2015.09.001

Kahm, M., Hasenbrink, G., Lichtenberg-Frate, H., Ludwig, J., & Kschischo, M. (2010). Grofit: Fitting biological growth curves. Nature Precedings. doi:10.1038/npre.2010.4508.1

Khan, A. U., & Lal, S. K. (2003). Ribozymes: A Modern Tool in Medicine. *Journal of Biomedical Science,10*(5), 457-467. doi:10.1159/000072373

Khlebnikov, A., Keasling, J. D., Wanner, B. L., Skaug, T., & Datsenko, K. A. (2001). Homogeneous expression of the PBAD promoter in Escherichia coli by constitutive expression of the low-affinity high-capacity AraE transporter. *Microbiology,147*(12), 3241-3247. doi:10.1099/00221287-147-12-3241

Liu, J., Cao, Z., & Lu, Y. (2009). Functional Nucleic Acid Sensors. *Chemical Reviews,109*(5), 1948-1998. doi:10.1021/cr030183i

Macejak, D. G., Jensen, K. L., Pavco, P. A., Phipps, K. M., Heinz, B. A., Colacino, J. M., & Blatt, L. M. (2001). Enhanced antiviral effect in cell culture of type 1 interferon and ribozymes targeting HCV RNA. *Journal of Viral Hepatitis,8*(6), 400-405. doi:10.1046/j.1365-2893.2001.00321.x

Mayer, G., & Famulok, M. (2006). High-Throughput-Compatible Assay for glmS Riboswitch Metabolite Dependence.*ChemBioChem,7*(4), 602-604. doi:10.1002/cbic.200500490

Meyer, A. J., Segall-Shapiro, T. H., Glassey, E., Zhang, J., & Voigt, C. A. (2018). Escherichia coli "Marionette" strains with 12 highly optimized small-molecule sensors. *Nature Chemical Biology,15*(2), 196-204. doi:10.1038/s41589-018-0168-3

Müller, S., Appel, B., Balke, D., Hieronymus, R., & Nübel, C. (2016). Thirty-five years of research into ribozymes and nucleic acid catalysis: Where do we stand today? *F1000Research,5*, 1511. doi:10.12688/f1000research.8601.1

Nordstrom, E. K. (2005). Enhanced immunogenicity using an alphavirus replicon DNA vaccine against human immunodeficiency virus type 1. *Journal of General Virology,86*(2), 349-354. doi:10.1099/vir.0.80481-0

Reyrat J.-M., Pelicic V., Gicquel B., Rappuoli R. (1998). Counterselectable markers: untapped tools for bacterial genetics and pathogenesis. *Infect. Immun.* 66 4011–4017

Rossi, J. J., Castanotto, D., & Bertrand, E. (1996). [19]Ribozymes as therapeutic agents and tools for gene analysis. *Human Molecular Genetics Methods in Molecular Genetics,*348-361. doi:10.1016/s1067-2389(96)80052-5

Sabri, S., Steen, J. A., Bongers, M., Nielsen, L. K., & Vickers, C. E. (2013). Knock-in/Knock-out (KIKO) vectors for rapid integration of large DNA sequences, including whole metabolic pathways, onto the Escherichia coli chromosome at well-characterised loci.*Microbial Cell Factories,12*(1), 60. doi:10.1186/1475-2859-12-60

Sawitzke, J. A., Thomason, L. C., Costantino, N., Bubunenko, M., Datta, S., & Court, D. L. (2007). Recombineering: In Vivo Genetic Engineering in E. coli, S. enterica, and Beyond. *Methods in Enzymology Advanced Bacterial Genetics: Use of Transposons and Phage for Genomic Engineering,*171-199. doi:10.1016/s0076-6879(06)21015-2

Schleif, R. (2010). AraC protein, regulation of the l-arabinose operon inEscherichia coli, and the light switch mechanism of AraC action. *FEMS Microbiology Reviews,34*(5), 779-796. doi:10.1111/j.1574-6976.2010.00226.x

Siegele, D. A., & Hu, J. C. (1997). Gene expression from plasmids containing the araBAD promoter at subsaturating inducer concentrations represents mixed populations. *Proceedings of the National Academy of Sciences,94*(15), 8168-8172. doi:10.1073/pnas.94.15.8168

Singer, M., & Berg, P. (1991). Genes and genomes: A changing perspective. Mill Valley, CA: University Science Books.

Sudarsan, N., Cohen-Chalamish, S., Nakamura, S., Emilsson, G. M., & Breaker, R. R. (2005). Thiamine Pyrophosphate Riboswitches Are Targets for the Antimicrobial Compound Pyrithiamine. Chemistry & Biology, 12(12), 1325-1335. doi:10.1016/j.chembiol.2005.10.007.

Tamura, M., Kageyama, D., Honda, N., Fujimoto, H., & Kato, A. (2017). Enzymatic activity necessary to restore the lethality due to Escherichia coli RNase E deficiency is distributed among bacteria lacking RNase E homologues. *Plos One,12*(5). doi:10.1371/journal.pone.0177915

Vinkenborg, J. L., Karnowski, N., & Famulok, M. (2011). Aptamers for allosteric regulation. *Nature Chemical Biology,7*(8), 519-527. doi:10.1038/nchembio.609

Weinberg, Z., Kim, P. B., Chen, T. H., Li, S., Harris, K. A., Lünse, C. E., & Breaker, R. R. (2015). New classes of self-cleaving ribozymes revealed by comparative genomics analysis. *Nature Chemical Biology,11*(8), 606-610. doi:10.1038/nchembio.1846

Wilson, T. J., Liu, Y., & Lilley, D. M. (2016). Ribozymes and the mechanisms that underlie RNA catalysis. *Frontiers of Chemical Science and Engineering,10*(2), 178-185. doi:10.1007/s11705-016-1558-2

Winkler, W. C., Nahvi, A., Roth, A., Collins, J. A., & Breaker, R. R. (2004). Control of gene expression by a natural metabolite-responsive ribozyme.*Nature,428*(6980), 281-286. doi:10.1038/nature02362

Zhang, S., Stancek, M., & Isaksson, L. A. (1997). The efficiency of a cis-cleaving ribozyme in an mRNA coding region is influenced by the translating ribosome in vivo. Nucleic Acids Research,25(21), 4301-4306. doi:10.1093/nar/25.21.4301