CRISPR 2024 articles for M2 students (groups of 2 students) :

1. Naturally Occurring Off-Switches for CRISPR-Cas9. April Pawluk, Nadia Amrani, Yan Zhang, ..., Erik J. Sontheimer, Karen L. Maxwell, Alan R. Davidson. Cell 2016 167, 1829–1838.
*Review articles: Pawluk A, Davidson AR, Maxwell KL. **Anti-CRISPR**: discovery, mechanism and function. Nat Rev Microbiol. 2018 Jan;16(1):12-17.*
*Maxwell KL. The **Anti-CRISPR** Story: A Battle for Survival. Mol Cell. 2017 Oct 5;68(1):8-14.*
Doudna JA, Charpentier E. Genome editing. The new frontier of genome engineering with CRISPR-Cas9. Science. 2014 Nov 28;346(6213):1258096.

3. Quorum Sensing Controls Adaptive Immunity through the Regulation of Multiple CRISPR-Cas Systems. Patterson et al., 2016, Molecular Cell 64, 1102–1108
Preview article : Come Together: CRISPR-Cas Immunity Senses the Quorum. Ekaterina Semenova and Konstantin Severinov. 2016. Molecular Cell 64, 1013-1015.

5. Programmed DNA destruction by miniature CRISPR-Cas14 enzymes
Lucas B. Harrington, David Burstein, Janice S. Chen, David Paez-Espino, Enbo Ma, Isaac P. Witte, Joshua C. Cofsky, Nikos C. Kyrpides, Jillian F. Banfield and Jennifer A. Doudna. *Science* 362 (6416), 839-842 (2018).
Review article: Koonin EV, Makarova KS, Zhang F. Diversity, classification and evolution of CRISPR-Cas systems. Curr Opin Microbiol. 2017 Jun;37:67-78.
Makarova KS, Wolf YI, Koonin EV. Classification and Nomenclature of CRISPR-Cas Systems: Where from Here? CRISPR J. 2018 Oct;1(5):325-336.
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6. Discovery of widespread type I and type V CRISPR-Cas inhibitors
Nicole D. Marino, Jenny Y. Zhang, Adair L. Borges, Alexander A. Sousa, Lina M. Leon, Benjamin J. Rauch, Russell T. Walton, Joel D. Berry, J. Keith Joung, Benjamin P. Kleinstiver and Joseph Bondy-Denomy. *Science* 362 (6411), 240-242 (2018).
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7. A bacteriophage nucleus-like compartment shields DNA from CRISPR nucleases
Senén D. Mendoza, Eliza S. Nieweglowska, Sutharsan Govindarajan, Lina M. Leon, Joel D. Berry, Anika Tiwari, Vorrapon Chaikeeratisak, Joe Pogliano, David A. Agard & Joseph Bondy-Denomy. *Nature* **577**, 244–248 (2020)
*Preview article : Phages build anti-defence barriers. Eugene V. Koonin and Mart Krupovic. **Nature Microbiology** | VOL 5 | 2020 | 8–9*

9. Anti-CRISPR-Associated Proteins Are Crucial Repressors of Anti-CRISPR Transcription. Sabrina Y. Stanley, Adair L. Borges, Kuei-Ho Chen, Danielle L. Swaney, Nevan J. Krogan, Joseph Bondy-Denomy, Alan R. Davidson. 2019, Cell 178, 1–13
*Review articles: Pawluk A, Davidson AR, Maxwell KL. **Anti-CRISPR**: discovery, mechanism and function. Nat Rev Microbiol. 2018 Jan;16(1):12-17.*
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14. CRISPR RNA-Dependent Binding and Cleavage of Endogenous RNAs by the *Campylobacter jejuni* Cas9. Dugar G, Leenay RT, Eisenbart SK, Bischler T, Aul BU, Beisel CL, Sharma CM. Mol Cell. 2018 Mar 1;69(5):893-905.e7.
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