

## Activity 1A - Primary Literature Review

Students will read the journal article that explains the naming and classification of restriction enzymes:

Primary Reference for naming enzymes: (Smith & Nathans 1973) Hamilton O. Smith, Daniel Nathans, A Suggested nomenclature for bacterial host modification and restriction systems and their enzymes, Journal of Molecular Biology, 1973, 81(3), 419-423. [https://doi.org/10.1016/0022-2836\(73\)90152](https://doi.org/10.1016/0022-2836(73)90152).

Students will answer the following questions following reading of the article.

- 1) What do the authors mean by the R-M system?
- 2) Where do R-M enzymes come from?
- 3) When naming an enzyme what 3 letters are used to signify where the enzymes originated from? Give 2 examples of enzymes that were mentioned on the first 2 pages of the paper.
- 4) What does the 4th letter in some R-M enzyme names mean or stand for? Give an example of one.
- 5) What does the Roman numeral at the end of the R-M naming system mean?