**Annotated Bibliography Instructions**

**Overview**

An annotated bibliography is a tool to help you remember and organize information from scientific literature. It is comprised of the full citation for each information source and a short summary of the information in that source.

To create an annotated bibliography, first conduct a literature search using the SCOPUS database through the university library. Carefully select search terms and skim through the results. Reach abstracts of any particularly relevant papers. Select the most relevant papers to your topic after reading abstracts from many papers. If we do not hold a subscription to a journal from which you would like to access a paper, submit an interlibrary loan request.

Read each selected paper and take notes as you read. Then add the citation to your annotated bibliography.

Each source should begin with a full citation following style guidelines from the American Journal of Botany. Below the citation include a brief, 100-200 word, summary of the most important points of the article. Your summary must be in your own words. Do not include any direct citations.

**Example entry for an annotated bibliography**

Llewellyn, T., R.W. Nowell. A. Aptroot, M. Temina, T.A.K. Prescott, T.G. Barraclough, and E. Gaya. 2023. Metagenomics Shines Light on the Evolution of “Sunscreen” Pigment Metabolism in the Teloschistales (Lichen-Forming Ascomycota). *Genome Biology and Evolution* **15:** evad002.

Llewellyn et al. (2023) investigate biosynthetic gene clusters in the Teloschistales, a group of lichenized fungi that are known for the production of copious quantities of orange and yellow pigments. They generated 23 genome sequences and used 22 genomes as outgroups, biosynthetic gene clusters (BGCs) were annotated in all genomes using antiSMASH. The found that anthraquinone producing BGCs had a similar four-gene motif and an associated specialized transporter to facilitate secretion of the pigments. BGC content of closely related species was not necessarily similar and it seems that accessory BGCs are able to move in and out of species’ genomes at a relatively rapid rate. They found that genomes of some non-lichenized species in the Pezizomycotina included BGCs that are very similar to those found in lichenized species, suggesting they may have been present in the most recent common ancestor of the group.

**What you need to turn in**

Each group member must complete at least two citations and short summaries (100-200 words). All citations must be of peer-reviewed scientific articles in the AJB citation format. At least half of the citations must be of primary literature sources.

A maximum of 5 of the points will be awarded based on proper citations and formatting. A maximum of 10 of the points will be awarded based on content of the short descriptions. This assignment is worth 20 points.

Turn in one assignment for your whole group. Have one group member upload your annotated bibliography with all group members’ names included.