Frequently Observed English Language and Style Issues	
Please choose <u>two to three</u> issues from this list that you have noticed in this project. None of the most common English language errors were found in this manuscript.	
Frequently Observed Issue	**Example**
<u>Comma splice/Run-on sentence</u> A comma splice, or a run-on sentence, occurs when two or more independent clauses are joined by a comma. Independent clauses contain both a subject and verb and stand alone as a complete sentence. An example of a comma splice is, "The RNA levels stayed the same, the protein levels increased." In this case, "The RNA levels stayed the same," is a complete sentence. "The protein levels increased," is also a complete sentence. There are three ways to fix this comma splice.1) Add a semi-colon between the clauses. For example, "The RNA levels stayed the same; the protein levels increased." 2) Add a conjunction (e.g., **but**) immediately after the comma. Common conjunctions include words like **but**, **and**, **for**, **or**, or **so**. The sentence then becomes, "The RNA levels stayed the same, but the protein levels increased." 3) Separate the two clauses into two sentences. The text then becomes, "The RNA levels stayed the same. The protein levels increased."	
<u>Verb tenses</u> There are three major verb tenses in English: past, present, and future. Most scientific papers use all three tenses. Typically, the past tense is used when giving background information in the Abstract and Introduction, when describing methods used, and when presenting and discussing results. The future tense may be used in the Discussion when proposing future work. However, when referring to data in figures and tables, use the present tense. For example, when referring to a graph, write, "Figure 1 shows how the signal increases with time." In addition, the present tense should always be used when describing known facts or hypotheses.	
<u>Disagreements: subject-verb and noun-pronoun</u> **Subjects and verbs must agree in number**, i.e., a singular subject must have a singular verb, and a plural subject must have a plural verb. For example, "Five drops were added to the flask," is correct, but "Five drops was added to the flask," is not. If there is more than one subject joined by the word "and," then the verb will usually be plural. For example, "The brain and heart were removed and weighed," is correct, but "The brain and heart was removed and weighed," is not. **Nouns and pronouns must agree in number**, i.e., for a single noun, the pronoun used must also be single; for a plural noun, the pronoun must be plural. For example, "Thin-layer chromatography of the products indicated that they were the molecules expected," is correct, but "Thin-layer chromatography of the products indicated that it was the molecules expected," is not.	
<u>Articles</u> There are only two articles in the English language: indefinite ("a" and "an") and definite ("the") articles. "A" is an indefinite article because it defines a noun as being nonspecific. For example, "a microscope," "a laser," and "a bacterium" describe any type of microscope, any type of laser,	

and any type of bacterium, respectively. However, if a word begins with a vowel (a, e, i, o, or u), it takes the form "an." For example, write "an agarose gel" or "an operator." Please note that abbreviations also follow these rules. For example, you would say "a URL" or "a DNA sequence" but "an RNA sequence" or "an NMR." "The" is a definite article because it refers to a specific noun. For example, if you were referring to a specific item, you would write, "I need the P20 pipet," or "Could you turn on the X-ray source?"	
Issues with numbers Always include a space between a number and a unit. There are only two exceptions: 1) when "°" is used to describe an angle and in the temperature unit degrees Celsius (for example, 90° and 37°C, respectively, should be used) and 2) when expressing percentages; for example, it should be 5% not 5 %. Sentences should not begin with numerals. For example, "We added 50 mL of saline solution to the flask." If a sentence must begin with a numeral, it should be written out. If a sentence begins with a measurement, the units should also be written out. For example, write, "Fifty milliliters of saline solution was added to the flask," not "50 mL of saline solution was added to the flask," or "Fifty mL of saline solution was added to the flask." Typically, numbers less than 10 are written as words, and numbers over ten are written as numerals, but journal guidelines differ.	
That vs. which Here is a simple trick for remembering when to use "that" and "which." If removing the words that follow "that" or "which" would change the meaning of the sentence, use "that." For example, "The experiments that were done at 20°C were successful." If you removed "that were done at 20°C," the sentence would read, "The experiments were successful." This sentence is now saying that all of the experiments were successful not just the ones carried out at 20°C. If the sentence was, "The experiments, which were done at 20°C, were successful," this would mean that all of the experiments were successful. Please remember to add a comma before "which" but not before "that."	
Inconsistent word usage and issues with abbreviations Please ensure that terms are written in the same way throughout the manuscript. For example, the abbreviation for quantitative PCR should be written as either RT-qPCR or qPCR or qRT-PCR. Do not switch between these different formats. Uncommon or field-specific initialisms (e.g., RT for reverse transcription) and acronyms (e.g., PEG for polyethylene glycol) should be defined the first time they are used, once in the Abstract and again in the main body of the manuscript. Please always check the journal guidelines for how abbreviations should be handled	
Hyphens and dashes Hyphens and dashes should not be used interchangeably. Use a hyphen in compound adjectives that come before the noun. For example, "The PCR-amplified DNA was run on a gel." Hyphens are also used when compound modifiers are separated by another word. For example, "A five- or 10-minute incubation was carried out." Use the en dash for ranges of values; for example, "Data from the 2012–2016 growing seasons was collected." The em dash can be used to indicate a pause in a sentence; it is stronger than the comma but weaker than the semi-colon or period. For example, "The laser used to excite the	

atoms—borrowed from the Yu lab—was manufactured by Xenon Technologies." ***Hyphens, one or two words?*** Whether or not two words need a hyphen often depends on what they are doing. When two words are working as a noun and an adjective, don't use a hyphen (because they're doing two different jobs). When they are working together as an adjective to modify a noun, use a hyphen because they are doing one job. "The system can operate in real time." "The results were more pronounced in experimental rats than in wild type." (The rats are wild; "wild" modifies the noun "type.") "The system can perform real-time detection." "We also examined wild-type mice." (The mice are wild-type. "Wild-type" modifies "mice.")	
Incorrectly used phrase, "on the other hand" Please use "however" or "in contrast" instead of "on the other hand." "On the other hand" usually requires the phrase "On the one hand" at the beginning of the preceding sentence. In addition, "On the one hand...on the other hand" does not just mean "however." It is used to introduce opposing ideas, as if you had one apple in each hand and were trying to figure out which was heavier. In any case, it is best to use the simplest wording possible.	
Equations Equations may require punctuation, but it depends on the journal. Typically, a comma comes after the equation but before "where," and if the equation is at the end of a sentence, a period is added. For example, "x+y=z Where x is 1 and y is 2," is not correct. Instead, this should be "x+y=z, where x is 1 and y is 2."	
Etc. It's best to avoid "etc." in regular text. There are many ways to establish that a list is non-exhaustive (i.e., not complete). "Including" means "these items are definitely on the list, but this is not necessarily the whole list." "Such as" means "like these but not necessarily exactly these."	
Improper use of "respectively" "Respectively" means "each item on the first list goes with the corresponding item on the second list and ONLY with that item." For example, Samples A, B, and C had concentrations of 10, 15, and 20 µg/mL, respectively. Also, "respectively" ONLY applies to two lists with the same number of items. "Solution was added to flasks A, B, and C" does not need a "respectively" at the end.	
Consistency (capitalization) Either use **title case** for every header of the same type (capitalize the first word and all nouns, verbs, adjectives, and adverbs) or use **sentence case** for every header of the same type (capitalize just the first word and any proper nouns). Do not switch back and forth. This is especially important to check when different authors have composed different parts of the first draft. Be sure to check with your target journal first to be sure that the formatting complies with their requirements.	