In this next module, I'm going to go through another example, and use it to illustrate some of the principles of effective writing that I'm going to be talking about this week, as well as next week.

Here's an example that I pulled out of Cell, which is a top biology journal with a high impact factor, something around 30. Again, this example is typical, of the scientific literature. It reads dysregulation of physiologic micro-RNA. miR activity has been shown to play an important role in tumor initiation and progression, including glioma genesis. Therefore, molecular species that can regulate miR activity on their target RNAS without affecting the expression of relevant mature miRs may play equally relevant roles in cancer. I find this passage hard to read. I have to struggle to figure out exactly what it is the authors were intending to say. I'm going to point out some specific features that make this example difficult to read.

First of all, as in some earlier examples we saw, there's the use of nouns rather than verbs. The authors use dysregulation, initiation, progression and expression. Those are all nouns that could have been verbs. Dysregulate, initiate, progress and express. Verbs move sentences along. Whereas nouns slow the reader d own.

The others also use some vague words. The problem with vague words is that the reader cannot get a concrete picture in their head of what the author is talking about. So these vague words don't add anything. For example the word physiologic here, physiology is something that's really broad, so I'm not exactly sure what the authors mean by physiologic. It doesn't add anything for me. And then we get two molecular species. Molecular species could be a lot of things. It doesn't give me a concrete picture of what the authors are talking about.

Also, note the use of unnecessary jargon and acronyms. In this passage. We get the term glioma genesis, which is a fancy way to say the formation of glioma, so there's an easier and more direct way to say that. We also get an interesting acronym or initialism in this example. The acronym is actually the reason that I picked this particular example. I find it amusing. The authors abbreviated the term micro-RNA as miR. It's amusing because RNA is already itself an acronym, so the authors have made an acronym of an acronym. This just illustrates how ridiculous and widespread acronyms and initialisms are in the scientific literature. Authors love acronyms. They throw them in all over the place. The problem with acronyms is that unless their standard terms that everybody is familiar with, most readers aren't going to know your acronym. This means that every time they get to your acronym in the paper, they're gonna have to stop and go and look that acronym up. It's like they have to translate a foreign word. This is really annoying to readers, and it also greatly slows their reading down. So we don't want to do that. Obviously. You can see, in this case, there's no benefit to using the acronym. You're only saving a few letters here by using M-I-R rather than micro-RNA, but it completely slows the reader. So I am going to encourage you, or advise you, to avoid the use of acronyms other than those that are completely standard that most people will know.

Another thing I want to point out is in this 1st sentence, the authors use the passive voice. We get the passive verb. Here has been shown. Now, if you're not familiar with the difference between the active and the passive voice, don't worry. We're going to go into this in great detail next week in our unit on verbs, but for now, I'll just point out that this verb construction is awkward. The passive voice is hard to read because it's not the way we talk. To give a simple example, take the sentence she throws the ball that's in the active voice. To turn that into the passive voice, you would say the ball is thrown by her, and you can hear how awkward that sounds. Again. Who go into much more detail about this next week.

Now, the 2nd sentence is actually in the active voice, but it has a different problem with the verb. The subject of that sentence is molecular species. The main verb, the predicate of that sentence is may Place. So notice we don't get to the main verb for a long time. We have molecular species, and then this long descriptive claws, and then we finally get to the main verb at may play. The problem is that the reader is waiting for the verb. Until you give the reader the verb, the reader doesn't know where you're going with the sentence. So putting too much distance between the subject of the sentence and the main verb is a problem. That's another thing that will talk about in great detail next week in our Youted Adverbs.

So I took that passage and I reread it to try to fix some of these, issues. I did not have the authors sitting right next to me while I was doing this at it, so I'm not 100% sure that this is what they were trying to say, but I think I got the gist of it. The rewrite says changes in micro-RNA expression play a role in cancer, including glioma. Therefore, events that disrupt micro RNAs from binding to their target RNAs may also promote cancer. Notice how much shorter and easier to understand this is compared with the original passage, but it still conveys the same ideas.

So this leads me to an overview of the specifics of effective writing that we're going to be talking about this week and next week. The first principal I want you to learn is to cut your words. Cut unnecessary words and phrases. Get rid of the clutter. We're going to spend the rest of this week talking about cutting clutter. Next week will talk in great detail about the use of the active voice, rather than the passive voice. And we'll also talk about writing with verbs, using strong verbs, avoiding turning verbs into nouns, and not burying the meander. But for the rest of this week we are tackle cutting clutter.

在这一讲中，我会讲另一个例子用它来说明有效写作的原则这些原则在这一周和下一周中我都会讲到这个例句是我从《细胞》这本生物学刊物上摘出的这本刊物的影响因子很高，大约30再说一遍，这个例子在科学文献中是很典型的。生理机能失调的微RNA，和miR，活性已被证明在肿瘤的启动和进展中起重要作用，包括胶质瘤的形成。因此，分子种类可以调节靶RNA上miR得活性不影响相关成熟的表达miR可能在癌症方面扮演同样重要的角色。我觉得这段文字很难读懂。我必须努力弄清楚到底是什么作者打算说。我要指出一些具体的特点这使得这个例子难以阅读。首先，正如我们以前看到的一些例子，使用名词而不是动词。作者使用失调，起始，进展和表达。这些都是名词，其实可以使用动词。失调，开始，进步和表达。因为动词驱动句子，而名词减慢读者的速度。另一方便，还用了一些含糊不清的词。含糊的词的问题是读者不能在他们的头脑中得到一个具体的图片，作者在谈论什么。所以这些含糊不清的词没有起到任何作用。例如，这里的生理学这个词生理学非常宽泛，所以我不太确定作者的生理意义是什么。它没有为我添加任何东西，然后我们得到分子种类。分子物种可能是很多东西，它没有给我一个具体的图片，作者在谈论什么。还注意到在这篇文章中使用不必要的术语和缩写。我们看到术语胶质瘤的形成，这是一个奇特的方式来表达胶质瘤的形成。有更简单和更直接的方式来说。在这个例子里我们也看到一个有趣的缩写或首字母缩略词。缩略词实际上是我选择这个特殊例子的原因，我觉得很好笑。作者将microRNA术语缩写为miR。这很有趣，因为RNA本身已经是一个缩写，所以作者给一个缩写词创造了首字母缩写词。这只是说明了有多么荒谬和广泛的使用缩略语和缩写在科学文献中。作者喜欢缩略语。他们把缩写用在了所有的地方。缩写的问题是，除非它们是标准术语，所有人都熟悉，不然大部份苏浙看不懂你的缩写。这意味着每次他们在报纸上找到你的缩写时，他们得停下来查缩写的意思。就像他们必须翻译一个外文。这对读者来说很烦人，也大大减慢了阅读速度。因此，我们明显不想这样做。在这种情况下，您可以看到，使用缩写词没有好处。用miR而不是microRNA你只是节省了几个字母但这完全减慢了读者的速度。所以我要鼓励你，或者建议你避免使用缩略语，除了那些完全标准，大多数人都知道的。我想指出的另一件事是，在第一句中，作者使用了被动语态。我们看到这个被动动词“已经显示”。现在，如果你不熟悉的区别主动和被动语态，别担心。下周我们将在动词的单元中详细讨论这个问题。但现在，我只想指出，这个动词构造是很奇怪的。被动语态很难读，因为这不是我们说话的方式。举一个简单的例子，看这个句子，她扔球。这是主动语态要把它变成被动语态可以这么说，球是由她抛出的。你可以感觉到这听起来有多奇怪。我们将在下周详细讨论这个。第二句实际上是在主动时态，但它的动词有另一个问题。这个句子的主题是分子物种。这个句子的主动词或谓语是“可能发挥作用”。然而，请注意，我们很长一段时间都没有看到这个主动词。我们先读到“分子物种”，接下来是很长的一段描述性内容，然后，我们终于看到了主动词，可能发挥作用。问题是读者在等待动词。直到你给读者的动词之前，读者不知道你要用这个句子表达什么。所以放太多内容在句子的主题和主动词之间是一个问题。这是另一件事，我们会在下周很详细的讨论在我们的动词的单位。所以我把那篇文章重写了一遍，试图修复这些问题。当我修改的时候，没有作者坐在我旁边，所以我不是100%确定这是他们想说的话，但我想我得到了它的要点。重写如下，microRNA表达的变化在癌症中起到了一定作用，包括胶质瘤。因此，破坏microRNAs与其靶RNA结合的行为也可能影响到癌症。注意多短和更容易理解，在这和原始段落的比较中。但它仍然传达着同样的想法。因此，这引出我对有效写作的具体原则的概述我们将要在这个星期和下周讨论的。我要你学的第一个原则是减少你的字数，去掉不必要的单词和词组，摆脱杂乱。我们将在本周余下的时间里讨论如何减少混乱。下周，我们将非常详细谈论使用主动语态，而不是被动语态我们还将讨论用动词来书写，使用强动词，避免把动词变成名词且不把主动词藏起来。但在本周余下的时间里，我们将解决减少混乱的问题。