SCI论文写作视频课程

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Content

Day 1 & Day 2

Unit 1. 高效写作的原则.

1. 什么是一篇好文章

① 有话想说

② 有逻辑地说

③ 写前拼原则. 写后多修改.

2. 如何成为一个会写作的人.

① 读. 写训练

② 写前讲明白 (组会练好逻辑)

③ 自己拼原则多修改

④ 有人反馈/修改

3. 写作原则:

① 删除无用的部分 : They ~~that~~ agree ~~that~~ it was true.

② 重要的地方用"主动的 动词"
- 肯定的.
- 有趣的
- 动前面的

not important → unimportant

was lined → line.

Example:

1. 去掉 there are / there is

① There are many ways in which we can arrange the pulleys.

⇒ We can arrange the pulleys in many ways.

② There was a long line of bacteria on the plate.

⇒ Bacteria lined the plate.

③ The data confirm that there is an association between vegetables and cancer.

⇒ The data confirm an association between vegetables and cancer.

2. 去掉无用介词

① The meeting happened on Monday

⇒ The melting happened Monday

② They agreed that it was true.

⇒ They agreed It was true.

Example:

1. 去掉无用的

① Anti-inflammatory drugs may ~~be protective for the occurrence of~~ protect against Alzheimer's Disease.

② Clinical seizures ~~have been estimated to~~ occur in 0.5% to 2.3% of ~~the neonatal population~~ newborns.

③ ~~Ultimately p53 guards not only against malignant transformation but~~ Besides preventing cancer, p53 also plays ~~a~~ roles in ~~developmental processes are as diverse as~~ aging, differentiation, and fertility.

④ Injuries to the brain and spinal cord ~~have long been known to be~~ are among the most devastating and expensive ~~of all injuries to treat medically~~

⑤ An IQ test measures an individual's ~~abilities to perform functions that usually fall in the domains of~~ verbal ~~communications~~, reading, ~~and performance on tasks that represent~~ or motor and spatial capabilities.

⑥ ~~As we can see from~~ Figure 2, ~~if the~~ shows that a return kinetic energy ~~is~~ less than 3.2 Up, ~~there will be~~ yields two electron trajectories ~~associated with this kinetic energy.~~

Day 3 -1

Unit 2: Verbs

1. 主动与被动:

主动: 明确的人(agent). 清晰

被动: 无明确的人, 模糊.

2. 原则:1

① 主动生动 ~~多用主动(动词近主语)~~

② 多用主动(动词近主语)

③ 方法部分多用被动(方便突出强调部分).

3. 原则 2.

① 用强动词

② 避免动词转名词.

③ 避免堆砌主动词

eg: One study of 930 adults with multiple sclerosis (MS) receiving ...
found that ...

⇒ One study <u>found</u> that, of 930 adults ...

4. 语法 Tips:

① data 是复数 ⟹ 其单数 datum

the data are

the data show

the data support

② compare to 指出相同

compare with 指出不同(科技写作常用)

③ which 和 that

that: 强限定, that 后的条款不可删

which: which 后的条款可删.

eg: ⚠ The vial that contained her RNA was lost. (one of many)

· The vial, which contained her RNA, was lost (only one).

⚠ Stroke incidence data are obtained from sources ~~which~~ that use the ICD (International Code of Disease) classification systems.

④ 单复意指:

Each student worries about ~~their~~ his/her grade

⇒ All students worry about their grade.

Day 30

Day 30

Module 2.4 Write with verbs.

1. Write with Verbs

① Use strong verbs

② Avoid turning verbs into nouns

③ Don't bury the main verb

2. Use Strong verbs

① Compare:

Loud music came from speakers embedded in the walls, and the entire ~~area~~ arena moved as the ~~hug~~ hungry crowd got to its feet."

with:

Loud music exploded from speakers embedded in the walls, and the entire arena shook as the hungry crowd leaped to its feet.

② Pick the right verb!

The WTO reports that approximately two-thirds of the world's ~~diso~~ diabetics are found in developing countries, and estimates that the number of diabetics in these countries will double in the next 25 years.

↓

The WTO estimates that two-thirds of the world's diabetics are found in developing countries, and projects that the number of diabetics in these countries will double in the next 25 years.

③ Use "to be" verbs purposefully and sparingly.

is. are. was. were. be. been. am.

3. Don't turn verbs into nouns.

① During DNA damage, recognition of H3K4me3 by ING2 results in recruitment of Sin3/HDAC and repression of cell ~~prolif~~ ~~prof~~ proliferation genes.

↓

During DNA damage, H3K4me3 recruits ING2 and Sin3/HDAC, which together repress cell proliferation genes.

Say exactly who does what to whom!

Day 3-7

② obtain estimates of ——→ estimate
has seen an expansion in ——→ has expanded
provides a methodologic emphasis → emphasizes methodology
take an assessment of ——→ assess

provide a review of → review
offer confirmation of ——→ confirm
make a decision ——→ decide
shows a peak ——→ peaks
provide a description of → describe

4. Don't bury the main verb
①. Keep the subject and main verb (predicate) close together at the start of the sentence...
Readers are waiting for the verb!

② The case of the buried predicate ...

One study of 930 adults with multiple sclerosis (MS) receiving care in one of two managed care settings or in a fee-for-service setting found that only two-thirds of those needing to contact a neurologist for an MS-related problem in the prior 6 months had done so. (Vickrey et al (999).

↓

One study found that, of 930 adults with multiple sclerosis (MS) who were receiving care in one of two managed care settings or in a fee-for-service setting, only two-thirds of those needing to contact a neurologist for an MS-related problem in the prior six ~~problems~~ months had done so. (Vickrey et al 1999.)

尽量让动词靠近主语，靠近句首.

Day 400 动词被简最重要

Moudle 2.5 Practice Examples

1. Practice Exercises

① The fear expressed by some teachers that students would not learn statistics well if they were permitted to use canned computer programs has not been realized in our experience. A careful monitoring of achievement levels before and after the introduction of computers in the teaching of our course revealed no appreciable change in students' performance.

→ Many teachers feared that the use of canned computer programs would prevent students from learning statistics. We monitored student achievement levels before and after the introduction of computers in our course and found no ~~deter~~ detriments in performance.

② Review of each center's progress in recruitment is important to ensure that the cost involved in maintaining each center's participation is worthwhile.

→ We should review each center's recruitment progress to make sure its continued participation is cost-effective.

③ It should be emphasized that these proportion generally are not the result of significant increases in moderate and ~~serve~~ severe injuries, but in many instances reflect mildly injured persons not being seen at a hospital.

→ Shifting proportions in injury severity may reflect stricter hospital admission criteria rather than true increases in moderate and severe injuries.

④ Important studies to examine the descriptive epidemiology of autism, including the prevalence and changes in the characteristics of the population over time, have begun.

Identify the problems

-- where's the verb? -- watch fluff world like "important".

-- can change occur without being "over time"?

-- "of the population" is vague.

→ Studies have begun to describe the epidemiology of autism, including recent changes in the disorder's prevalence and characteristics

⑤ There are multiple other mechanisms that are important, but most of them are suspected to only have a small impact on one of the three primary mechanisms.

→ Multiple other mechanisms play only a small role or work by impacting one of the three primary mechanisms.

⑥ After rejecting paths with poor signal-to-noise ratios, we were left with 678 velocity measurements of waves with 7.5 seconds period and 891 measurements of 15 second waves.

→ Rejecting paths with poor signal-to-noise ratios left 678 & velocity measurements of 7.5-second waves and 891 of 15-second waves.

⑦ It is suspected that the importance of temperature has more to do with impacting rates of other reactions than being a mechanism of disinfection itself since ponds are rarely hot enough for temperature alone to cause disinfection.

→ Ponds are rarely hot enough for temperature alone to cause disinfection; thus, the effect of temperature is likly mediated through its impact on the rates of other reactions.

⑧ It was assumed that due to reduced work at the joints of the low limbs and less energy loss in the prosthetic log, running with the dedicated ~~prote~~ prosthese allows for maximum sprinting at lower metabolic costs than in the ~~Library~~ healthy ankle joint complex.

→ The prosthetic leg reduces work and energy loss compared with a healthy ankle joint, which may lead to low metabolic costs during maximum sprinting.

Day 5

1. 用好标点符号

——	:	,	( )	;	.
clash	colon	comma	parenthese	semicolon	period
破折号	冒号	逗号	括号	引号	句号

2. 强度

① 分离强度

, < : < —— < ( ) < ; < .

② 正式程度

—— < ( ) < , < : < ; < .

3. 具体使用

( ): 补充细节 使句子丰富

; : 包括多个可独立条件

: : 列表或解释

—— : 插入内容

4. 并列结构

① and . or. but
② : 后的列表

} 要一致 { n. n. n / doing. doing. doing

Days-1

Module 3.1: Experiment with punctuation

Our friends the dash, colon, semicolon, and parenthesis ...
— : ; ( )

Use them to vary sentence structure! (除了短句之外的长句)

Example:

But what really grabbed me about the film is that it shows how human —— through our ingenuity, our commitment to fact and reason, and ultimately our faith in each other —— can science the heck out of just about any problem.

用破折号插入内容. 作动词

https://www.wired.com/2016/10/president-obama-guest-edits-wired-essay/.

Example:

Original: Many types of cells and tissues develop a kind of directionality. Certain events happen toward one end of the cell or tissue or the other. It's a phenomenon called cell polarity.

Using a colon: Many cells and tissues develop a kind of directionality called cell polarity: certain events happen toward one end of the cell or tissue.

☆ Uncreasing power to separate:

comma → colon → dash → parentheses → semicolon → period
, : — ( ) ; .

☆ Uncreasing formality:

dash → parenthese → the others (comma, Colon, Semicolon, period)
— ( ) , : ; .

Semicolon:

The semicolon connects two independent clauses.
(Note: a clause always contains a subject and predicate; an independent clause can stand alone as a complete sentence.)

Example: Kennedy could be a cold and vain man, and he led a life of priviledge. But he knew something about the world; he also cared about it.

Example: It was the best of times; it was the worst of times.

Days--2

Semicolon.

Semicolon are also used to separate items in lists that contain internal punctuation.

Example: It happened because people organized and voted for better prospects; because leaders enacted smart, forward-looking policies; because people's perspectives opened up, and with them, societies did too.

Parenthese

Parenthesis (parenthetical expression):

Use parentheses to insert an afterthought or explanation (a word, phrase, or sentence) into a passage that is grammatically complete without it.

→ If you remove the material within the parenthese, the main point of the sentence should not change.

→ Parenthese give the reader permission to skip over material.

Parentheses, example

They also have a specialized tail, kind of like a monkey's tail, that allows them to cling to a piece of grass (or a lucky driver's finger).

(Deborah Netburn, Seahorses are some of the strangest fish in the sea. Can their genome tell us why?, LA Times).

Parentheses, example.

This is troubling because, while there are plausible biological stories to connect red meat with cancer and heart disease, it seems unlikely that eating too much read meat could directly cause accidents and injuries. (Unless, as one of my students quipped, red meat eaters are swerving to avoid cows!)

Colon.

Use a colon after an independent clause to introduce a list, quote, explanation, conclusion, or amplification.

"The colon has more effect than the comma, less power to separate than the semicolon, and more formality than the dash." ——

Strunk and White.

Day5-3

Colon (list or explanation)

Ex1: They hydrogen bonds are made as follows: purine position 1 to pyrimidine position 1; purine position 6 to pyrimidine position 6.

From: "A structure for Deoxyribose Nucleic Acid" —— Waston and Crick 1953.

Ex2: That's one reason why I'm so optimistic about the future: the constant churn of scientific progress.

The woman suffers from lack of experience and a chronic Democratic disease: compound sentence.

Colon (quote, list of quotes)

The "Ask not" line follows right after an exhortation modeled on Franklin Roosevelt's "rendezvous with density": "In the long history of the world, only a few generations have been granted the role of defending freedom in its hours of maximum danger. I do not shrink from this responsibility —— I welcome it." The note throughout is one of alarm: "The trumpet summons us again"; "the burden of a long twilight struggle"; "that uncertain balance of terror."

examples:

· Note: The "rule of three's" for lists and examples.

Examples: It happened because people organized and voted for better prospects; because leaders enacted smart, forward looking policies; because people's perspectives opened up, and with them, societies did too.

Colon (to amplify or extend).

Use a colon to join two independent clauses if the second amplifies or extends the first.

Companies use Marsh for the same reason that home sellers use real-~~es~~ estate agents: The agent's knowledge and experience is supposed to help the client get the right deal at the right price.

Day 5-4

Colon misuse

Example, what not to do!

Two aspects of alcohol use are related to brain injuries: as a factor associated with risk of an injury such as a montor vehicle crash, and as a factor in TBI diagnosis, recovery, or survival after injury.

→ Two aspects of alcohol use are related to brain injuries: its association with risk of injury, such as motor vehicle crash, and its post-injury influences on TBI diagnosis, recovery or survival after injury.

逗号后再解释.

Example, what not to do!

In one project we have a nutritionlist, a psychologist, statisticians, a computor ~~specil~~ specialist, and dietitians: a whole range of specialists.

在最后:分

→ In one project we have a whole range of specialties: a nutritionlist, a psychologist, statisticians, a computor specialist, and dietitians.

Dash

Use dash to add emphasis or to insert an abrupt definition or description almost anywhere in the sentence. Just don't overuse it, or it loses its impact.

"A dash is a mark of separation stronger than a comma, less formal than a colon, and more relaxed than parentheses." —— Strunk and White.

"Use a dash only when a more common mark of punctuation seems inadequate." —— Strunk and White. ie. Reserve this tool for the really tough jobs!

Day 5-5

Dash, example.

But my fellow Americans, whatever mix of motivates led us to create an Electoral College majority for Donald Trump to become President — and over-look his lack of preparation, his record of indepent personal behavior, his madcap midnight tweeting, his casual lying about issues like "millions" of voters casting illegal votes in this election, the purveying of fake news by his national security advisor, his willingness to appoint climate change deniers without even getting a single briefing from the world's greatest climate scientists in the government he'll soon lead, and his cavalier dismissal of the C.I.A's conclusions about Russian hacking of our election — have no doubt about one thing: We as a country have just done something incredibly reckless.

(Thomas Friedman, New York Times).

Days 5--6

Module 3.2: Practice, colon and dash

Colon: Practice

Evidence-based medicine teaches clinicians the practical application of clinical epidemiology, as needed to address specific problems of specific patients. It guides clinicians on how to find the best evidence relevant to a specific problem, how to assess the quality of that evidence, and perhaps most difficult, how to decide if the evidence applies to a specific patient.

Colon: Join and condense

=> Evidence-based medicine teachers clincians the practical application of clinical epidemiology: how to find the best evidence relevant to a specific problem, how to access the quality of that evidence, and how to decide if the evidence applies to a specific patient.

=> Evidence-based medicine teaches clinicians how to find the best evidence relevant to a specific problem, how to assess the quality of that evidence, and how to decide if the evidence applies to a specific patient.

Dash: Practice

Finally, the lessons of clinical epidemiology are not meant to be limited to academic physician-epidemiologists, (who sometimes have more interest in analyzing data than caring for patients) Clinical epidemiology (holds the promise of providing clinicians with the tools necessary to improve the out comes of their patients.

A long descriptive clause that could be set off by a dash.

No transition.

Dash: Join and condense

Finally, clinical epidemiology is not limited to academic ~~physician~~ physician-epidemiologists —— who are sometimes more interested in analysis data than caring for patients —— but provides clinicians with the tools to improve their patients' outcomes.

Day 5-7

Module 3.3 Parallelism

Pairs of ideas joined by "and", "or", or "but" should be written in parallel form.

ex1: The velocity decreased by 50% but the pressure decreased by only 10%.

ex2: We aimed to increase the resolution and to improve picture quality.

ex3: Infinitive phrase and Infinitive phrase.

List of ideas should be written in parallel form.

Unparallel:

Locusts denuded fields in Utah, rural Iowa was washed away by torrents, and in Arizona the cotton was shriveled by the placing heat.

Parallel:

Locusts denuded fields in Utah, torrents washed away rural Iowa, and blazing heat shriveled Arizona's cotton.

Make a choice and stick to it!

Parallel example: NASA's ~~ate~~ intrepid Mars rover, Curiosity, has been through a ~~lt~~ lot in the past year. It flew 354 million miles, blasted through the Mars atmosphere, unfurled a giant sky crane, and touched down gently on the surface of Mars.

Not parallel:

If you want to be a good doctor, you must study hard, critically think about the medical literature, and you should be a good listener.

Parallel:

If you want to be a good doctor, you must be study hard, listen well, and think critically about the medical literature.

(imperative, imperative, imperative.)

Parallel:

If you want to be a good doctor, you must be a good student, a good listener, and a critical thinker about the medical literature.

(noun, noun. noun).

Day 5-8

Not parallel:

This research follows four distinct phases: (1) establishing measurement instruments (2) pattern measurement (3) developing interventions and (4) the dissemination of successful interventions to other settings and institutions.

Parallel:

This research follows four distinct phases: (1) establishing measurem instruments (2) measuring patterns (3) developing interventions and (4) disseminating successful interventions to other settings and institutions.

Practice example:

Bates describes the five principles for the success of decision support systems in clinical setting: speed, real-time delivery, integration into workflow, simplicity and to avoid data entry.

⇒ Bates describes the five principles for the success of decision support systems in clinical setting: speed, real-time delivery, integration into workflow, simplicity and the avoidance of data entry

Day 6.

Unit 3.4~Unit 3.7 段落

1. 一段：
- 1个主题
- 一般由3-5个短句组成，关注好第一句和最后一句
- 需尽早引读者入主题
- 段落间要有逻辑、思维上的联系，而不是"点"面"的碎渡词 ⇒ 使人眼花不清主题

2. 顺序
- 时间
- 一般到特殊
- 逻辑

eg: This kind of progress hasn't happened on its own. It happened because people organised and voted for better prospects; because leaders enacted smart, forward-looking policies; because people's perspectives opened up, and with them, ~~scienced the heck out of our challenges~~. Societies did too. 都没主题

But this progress also happened because we scienced the heck out of our challenges. Science is how we were able to combat acid rain and the AIDS epidemic. Technology is what allowed us to communicate across oceans and empathize with one another when a wall came down in Berlin or a TV personality came out. Without Norman Borlaug's wheat, we could not feed the world's hungry. Without Grace Hopper's code, we might still be analyzing data with pencil and paper.

3. 段落写作等. 可列提纲.

1. Were the perfume concentrations in the experiment appropriate? (Main idea of this paragraph)
   - A. If the concentration is too high, the smell may be too overpowering and this may affect quality ratings.
     - i. This is not a problem here because we standardize intensity.
   - B. The concentrations are appropriate if they produce sufficient variability in quality ratings.
     - i. This appeared true for most scents. with two exceptions.

4. 写作注意点：
① 不要老换词；多次重复一个词说明他是重要的
② 不要因为词常出现，就滥用缩写（miR instead of microRNA）
需要是大同行都认可的缩写才用.

Day 7. 写作步骤.

时间安排

(70%) ① 写作前

1. 收集. 阅读文章 ⟹ 想法和东西放一个文件里

2. 远离电脑. 头脑风暴出 road-map.

: 边走边做. 找关键信息(写下来).

组织文章(放一起, 不要太多反转)

arguments (all)

counter-arguments (all)

rebuttals (all)

(10%) ② 写初稿

Fact + Idea. 有组织地写下来

注意: 1. 关键信息和高层次的东西.

2. 不要太关注句子层次的修改. 不要边写边修

(20%) ③ 修改

- 大声读 (找问题)
- 删无用 (要狠心)
- 查动词 (写好句)
- 他人反馈 (知问题)

Day. 8

Unit 4. 修改与检查 (Revision and Check)

1. 修改

① 大声读出来，以发现问题

② 换动词：- 找动词：句子的主要动词下划线

- 问自己：动词多吗？

被动词多吗？

动词靠前吗？

换什么动词更丰满？

③ 无情地删！

- 注意变量词单词和短语

- 小心空话 (important ...)

- 不必要的出内行话

- 无用的副词

④ 组织、回顾：句子层次、段落整合

外部的反馈：{ 文章的主要发现是什么？
有用的信息有啥？
难读的句子，挑出来？

2. 检查

① 数字上的一致性 (文中不能矛盾)

② ~~ref~~ 参考文献、代词指引用问题

Day 9

Unit 5. 原始手稿

☆目标：小目标、可实现、正反馈

eg: 一天400字/2段. 后面还改，只是写出来

☆顺序：
- 图表 Tables and Figures
- 结果 Results
- 方法 Methods
- 介绍 Introduction
- 讨论 Discussion
- 摘要 Abstract

Unit 5.1 图表 (Tables and Figures)

☆1. 图表要能 ① 加强主存在：定义缩写词、实验细节.
② 明确目的：从一个故事 → 下一个故事

☆2. 图：
- 简单/快速的视觉故事
- 趋势
- 强调某特定结果

3. 表：
- 表名 简明扼要
- footnote: 缩写；下标符号；显著性差异等
- 细节：三条水平线、对齐小数点、变量给单位、列太多会混淆重点.

4. 图
- primary evidence (直接证据)：目见为实.
- Graphs 统计图:
  - line graph：变化趋势
  - scatter plots：两变量之间关系、可知所有信息.(叠加线是否误导?)
  - bar graphs：对比同时刻的不同组值.
  - individual-value bar graphs.
  - histograms
  - box plots
  - survival curves:
- 展示图 (Diagrams or Drawings)
  - 工作流程
  - 模型.

5. 图名 (Figure Legend)
- ① 简短的题目
- ② 重要的实验细节
- ③ 符号定义
- ④ 小图解释
- ⑤ 统计细节.

Day10-1

Unit 5.2 Results

1. Results ≠ Raw Data

细: Results
- ①补充说明图表
  - 精确值: 趋势图里提供准确的值.
  - 简单关系: 2组平均值 → 给出其百分比差异.
- ②强调重要部分(避免简单重复数字).

总: Results:
- ①更高一级的总结
- ②这张表的关键信息是什么.
- ③希望读者注意什么.

Tips:
- ① 将Results打成 subsections with headings
- ② 不好的结果也要讨论.
- ③ 方法: 模型的基本原理; 结果 (you found; not you did)
- ④ 保留"significant" for statistically significant.

2. 时态:

①过去: 已完成的实验.

②现在: 图表说明的结果, 后面仍为真的.

3. 语态: 多用主动, 可多用其他研究对象作主语
- Study participants
- The experimental output

4. Example:

ex1: Over the course of treatment, topiramate was significantly more effective than placebo at improving drinking outcomes on drinks per day, drinks per drinking day, percentage of heavy drinking days, percentage of days abstinent, and long plasma-glutamy transferage ratio (Table 3).

ex2: The total suicide rate for Australian men and women did not change between 1991 and 2000 because marked decreases in older man and women (Table 1) were offset by increase in younger adults, especially younger man.

Day 10-2

Unit 5.4 Methods

1. Method

方法的整体预览 (overview)

足够的信息以复现论文

轻松阅读 { 小标题/分标题
引用章节 图引 用文字更清晰
表格、流程图更好地展现.

2. Who / what / when / where / how / why.

3. Example.

3. Method
   3.1 Performance-Driven MCMC Sampling for Discrete Structure Learning
   3.2 Hybrid Message Passing
   3.3 Hybrid Message Passing with Performance-Driven Structures.
   3.4 Loss Function

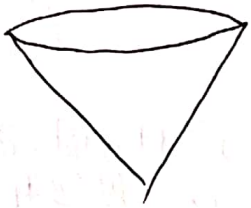
4. Experiments
   4.1 Setting
      Datasets: BP4D. DISFA
      Evaluation Metrics:
      Implementation Details.
   4.2 Compared with State-of-the-art Methods
   4.3 Ablation Study
      Multiple Sampled Graph Structures
      Dynamic Weights for Multiple Graph Structures
      Dynamic Weights for Different Message:
      Hybrid Message.
   4.4 Influence of Message Dimension
   4.5 Complexity analysis
   4.6 Visualization Analysis

5. Conclusion

Day 11

Unit 5.5 Introduction

1. Introduction = { 从步到细聚焦
3-5 段. p1. p2 可重复



① 背景. 已知信息 (what's known)
eg: 之前关于乳腺癌和吸烟之间的联系, 我们知道什么.

② 知识 gap. 仍未知的 (whats unknown)
eg: 1. 之前关于吸烟和乳腺癌的研究差异和各自的局限性.
2. 缺陷中使我们仍不确定乳腺癌由吸烟导致的东西.

③ 明确地说 { 假设
问题
叙述目的.

④ Ours = { 略说方法 (宏大的角度)
our 方法的 不同&创新&价值.
Ours 如何解决之前的局限性.

2. Introduction 特点/要求

p1~p2 ①. { 讲意义. 大同行者. 少过细的点.
一步步写 (known → unknown → Question / Hypothesis)
短小精悍

p1~p2 ② 对文献高度总结 (high level)
eg: 9篇文章中. 有2篇发现了关联. 7篇没有.

p3 ③ 明确阐述问题/目的/假设; 非回答问题.

p3. ④ 引出同文章作用. (弥补空白/gap 等).

一、Example 1:

1. 背景(known): ① 垃圾电邮成了学术生活的一部分，这使同事们都觉得不适.
② 我们有2个人审查了同事的邮件，邮件包括邀请收信人做会议展示等.

2. 未知(unknown) & gaps: ① 之前少有这方面研究文献.

3. 我们的(Ours): ① 我们对学术垃圾邮件展开了研究。
② 我们调查了内容、数量(...) (宏大铺垫).

二、Example 2:

1. known: ① 我们知道如果你超重，你更可能死于各种原因，包括心脏病等.
② 我们也知道超重/肥胖对癌症作用大，但仍有诸多空白.

2. unknown: ① 我们不知道他们的关系有多重要；和哪些癌症有关.

3. known: ① 之前的研究表明肥胖与某些癌症风险有联系，如女性子宫内膜等.

4. unknown: ① 但其在血液癌、卵巢癌等方面数据缺乏或不一致.
(文献高度总结，一句话，不讲细节).

5. 局限: 缺乏证的原因在于研究的前瞻性不够 (总结、概括、引文献).

6. Ours: ① 一句话概括研究假设、目的、略说作法(宏大)
eg: 研究目的是探究癌症的死亡风险，用BMI，而不是"肥胖".
② Ours ~~的~~ ~~大概~~ 意义: 如何解决局限性，意义重大.

三、Example 3: 外源性雌性激素对年轻女性骨密度的影响研究.

1. known: 在女性绝经后，将外源性雌激素补充给女性，会增大其骨密度.

2. unknown: 尚不明确的是，以口服避孕药的形式提供，会不会影响骨密度.

3. lit review: (高度总结) 几项成果表明: 绝经前几年口服避孕药效果更好，能够提高骨密度. 但其他研究显示没有效果.

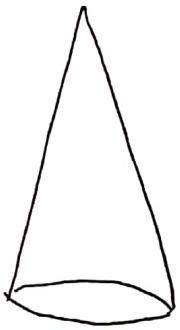
4. 局限: 过去关于OC使用和骨密度关系的研究有局限性.
① 过去使用粗略的计量方式，这无法知剂量.
② 文献没有解释生活方式等造成的影响.
③ 没有太多关于种族的研究(白人以外种族的女性).

5. 我们的研究 ~~(方法、步骤)~~.
① ~~研~~ 研究内容: 避孕药与脊柱、骨盆关节、全身骨密度的关系.
针对绝经前的黑人与白人女性.
② 假设: 累积暴露于口服避孕药来源的雌激素与骨密度之间有联系
③ 用累…作解释有意义、克局限.

Day12 -1.

Unit 5.7 Discussion

1. 结构



① 回答introduction中提出的问题.

Key finding { "We found that ..." (发现的现象)
Explain what the data mean (解释原因)

key secondary finding

② 支持自己的结论(解释自己)

{ 机制讨论/原理讨论. Give possible mechanism or pathways
对比结果 Compare your results with other people's res
印证别人的结果 discuss how your findings support or challenge the paradigm.

③ 守卫自己的结论.(局限性讨论-做5xxus免局限):

{ 长处和局限 —— 如何解决以科学.
未来工作

④ 启示.推测/推荐.意义上升

{ 结果的含义
人们为什么要关心这次研究 (非科学领域可看)

⑤ 总结 (Conclusion)

{ 重申发现
可知的结论/结果/信息 (Give a final take-home message

2. Tips.

① 主动语态.讲好故事;数据解读不要过度引申.

② 按顺序写.(现象概况 → 解释自己 → 局限性讨论 → 启示.推测意义)
We found that

③ 局限性讨论使文章更可信.是好文章的标志.

3. 时态:

① 过去时:已经完成的.研究细节.结果分析.背景研究

eg: 1. We found that.
2. Subjects may have experienced...
3. Muller et al. found...

② 现在时:解释数据的含义.

eg: 1. The greater weight loss suggests...
2. The explanation for this difference is not clear...
3. Potential explanations includes...

Example: discussion

P1: ~~answer~~ Q-A 的回答

P2: Q-B的回答

P4: 如何处理局限性之处 1

P6: - - - 2.

P7: <综上所述做总结>
重述Q-A. Q-B; 总结.
延大的意义展望.

P7 demo:

Taken together, our findings demonstrate that severely obese subjects with a high prevalence of diabetes and the metabolic syndrome lost more weight during six months on a carbohydrate-restricted diet than on a calorie- and fat-restricted diet. The carbohydrate-restricted diet led to greater improvements in insulin sensitivity that were independent of weight loss and a greater reduction in triglyceride levels in subjects who lost more than 5 percent of their base-line weight. [conclusion; restate answers to a and b] These findings must be interperted with caution, however, since the magnitude of the overall weight loss relative to our subjects' severe obesity was small, and it is unclear whether these benefits of a carbohydrate-restricted diet extend beyond six months. Furthmore, the high dropout rate and the small overall weight loss demonstrate that dietary adherence was relatively low in both diet groups. [big picture] This study proves a principle and does not provide clinical guidance; given the known benefits of fat restriction, future studies evaluating long-term cardiovascular outcomes are needed before a carbohydrate-restricted diet can be endorsed. [take-home message].

Day 12-2

Unit 5.8 Abstract

Abstract
- "ab" = out ; "tra here" = pull ⇒ to pull out
- 写完论文再"抽出"摘要 —— 指出要点

Abstract
- 是文章的整体浏览
- 是各部分强调的集合
- 应能独立存在
- 短且非常凝奇

Abstract
- 背景（抽出1.2句）
- 问题 / 目的 / 假设
- 实验的快速总结：关键材料和关键方法
- 结果：回答问题的答案
- 启示 推测 推荐 （为什么要关注此文章的原因）

Day 13

6.1 Plagiarism

1. 材料看原处，句子自己写：材料上 from memory
   话句上 不能模仿 只小心他人.

2. 用其他人/其他文章原话要 " ".

3. 其期刊是总结：不能用用以前期刊的数据 但或果写新文章.
   会议可扩期刊：会议是阶段性成果的分享&讨论.

6.2 Authorship.

1. 早期列作者. 成果认记不被重视.
2. 合著者要熟悉全文，负责任；有贡献但不愿负责任的应被致谢
3. 一作：收集数据 &写初稿者.
   最后/通讯：负责人.
4. Ghost authors (幽灵作者) /公司的小职员
   Guest authors (客座作者) 学术界的大佬.

6.3 The Submission Process

1. 过程.
   ① 投哪个期刊?
   ② 看 Guideline Instruction
   ③ 提交 manuscript 手稿)
   ④ 预期结果: accepted
   accepted pending minor revisions
   (应期待) rejected but re-submission possible
   no resubmission possible
   ⑤ 回应和重投：针对问的点，一条条地回.
   ⑥ 接受后 proof (格式等)

注: ① Reject but resubmission possible ⟹ 是积极信号，说明编辑有兴趣
拒绝但接受重投 应看重学习机会.
② Response 回应 = cover letter + detailed, 例子见后.
③ 重新提交时一般要附修改后的稿子(红标修改处)
④ 写作重要，据统计意见中60%写作. 40%科学问题.

2. Resubmission Cover Letter / Response to Reviewers

Dear Dr. Editor,

We appreciate your helpful comments and those of the reviewers. We feel that the manuscript is now greatly improved.

We have made revisions based on the comments / suggestions of Reviewers I and II. The comments of each reviewers are numbered below, with our response (clarifications and changes) following.

3. Detailed Response to reviewers,

Reviewer I:

1. There is little discussion of xxx.

We agree with Reviewers I and II that the section on xxx was too abbreviated. Therefore, we have added a pragraph that highlights xxx (paragraph 33).

2. Could you comment on xx.