**中国科学院英文网站科研进展编辑规范及例文**

**一、栏目定位**

1. Research News：科研进展报道

所内科研团队完成的科研成果报道，所内科研人员参与完成的科研成果报道，研究所与国外合作完成的科研成果报道，综述类科研成果报道。

**二、标题**

标题常被视作“新闻报道的眼睛”, 它以简练的文字浓缩新闻的基本内容，提炼新闻事实精华来吸引读者, 在新闻报道中起着独特的作用。标题生动、炯炯有神，新闻才会引人入胜。新闻标题写作必须做到简洁(brief)、准确(accurate)、抢眼(eye-catching)。

新闻标题写作技巧：

1. 从句法上讲，每个标题都是一个完整的句子，只是在标题中往往只标实意动词而略去虚词。省略最多的虚词是冠词和动词“to be”, 其次是介词、连词、助动词和代词，有时实意词甚至主句也省略掉，但都以不影响理解为前提。
2. 活用标点符号：英语新闻标题常用标点符号有逗号、分号、问号、引号和冒号，句号十分少见。使用标点符号可以使新闻标题缩减长度的同时又达到精炼表意的目的。如逗号用以替代连词“and”：China, Europe to Send a SMILE into Space。有时逗号还用以替代引号，表示前面内容为引语，如：'Interstellar' Should Be Shown In Schools, Scientists Say。新闻标题中冒号显得特别活跃，所起的功能也较多，常见的有以下几种：
3. 用于说意动词之后，介绍引用成分，如：Study: Biopharma Innovation Outpaces Tech Overall；
4. 用冒号替代说意动词，如：BAI Chunli: We Must Recognize the Potential of Young People。
5. 活用形容词短语、分词（v-ing, v-ed）短语，动词不定式短语和介词短语等。
6. 标题写作要求：
7. 标题不宜过长，如标题Two Projects Conducted by IMP Listed in 973 Program for The First Time经过精炼缩减后可以改为：Two IMP Projects First Listed in 973 Program；
8. 实词的第一个字母大写；
9. 尽量避免使用不唯一的缩写，以免引起误解；
10. 尽量采用主谓结构撰写标题，避免使用名词性短语作为新闻标题；
11. 标题应概括出新闻事件本身，避免使用过虚的标题，如科研进展要在标题中点明进展，或其研究意义。以下列出的标题请**尽量避免**：

China-Hungary Bilateral Workshop Successfully Held

New/ Recent/Important Progress/Advancement/ Achievements Made/Achieved by…in…

Dr. \*\*\*’s group of the \*\*\* Institute reported new discoveries in “Cancer Research”

Chinese Researchers Report New Discovery in Treating Cancer with Traditional Chinese Medicine

1. **鼓励使用**多种修辞手法撰写标题，如Anecdote, idiom, 或者问句形式。例如：

Life on Mars? Chinese Scientists Find New Evidence

Hide & Seek: Sterile Neutrinos Remain Elusive

Lunar Rover Is “awake” but Faults Continue

Bacteria That 'eats' Odour Could Bring End to Smelly Toilets in China

1. **尽量避免出现或堆砌生僻字词以及专业词汇**；
2. 标题中的时态要比新闻事件**晚**一个时态，比如，新闻事件是已经发生的过去时的事，标题中要用现在时，以此类推。一般现在时通常被用来表示过去发生的事。动词的将来时更多地直接采用动词不定式来表达。现在分词直接表示正在进行的动作或事件。

**三、正文**

科技新闻的写作与科研论文的写作不同，英语写作尤其如此。两者的读者群体不同，表现形式不同，甚至遣词用语都不同。英语科技新闻写作要在介绍清楚科研成果的基础上，尽量做到深入浅出，能够让更多的读者读懂，了解研究的背景、过程、内容，甚至现实意义。因此，英文稿件的写作，尤其是英文科技类新闻的写作，也应该遵循一定的规范：

1. 新闻基本要素齐全。
2. 新闻基本要素（五个W和一个H）：**W**ho, **W**hat, **W**hen, **W**here, **W**hy, **H**ow。
3. 事件性新闻（会议、国际合作、获奖、人事变动等）要在导语中点明稿件的新闻点，切勿罗列堆砌常规性信息。
4. 科研进展报道重点关注最新进展，切勿大量堆砌研究背景、前期研究成果。
5. 科研进展报道有论文发表的，须附上相关论文及其链接。
6. 内容结构合理。
7. 推荐“倒金字塔”型结构（重要的信息在前，其他内容按照重要性次序依次排列），把最重要的、最突出的、最有趣的内容放在最前面。
8. 科研进展报道注意深入浅出，避免成果总结汇报式的写法，注意科研论文与科研报道的区别，建议强化稿件的可读性和科普性。
9. 注意**段落划分**，一个段落只表达一层意思，尽量做到段落短小精悍，避免开头、正文内容、结论的“三段论”式写法。

**四、写作技巧：**

1. 尽量使用主动语态，减少或避免使用被动语态的表达方式。
2. 文字表述注意节奏，建议长短句穿插写作，每句话尽量不要超过23-25个单词，避免过长的句子，必要时可将过长的句子拆分成若干短句。
3. 文字表意准确，避免使用模糊含义的词语：recently, lately, many, a lot, several, etc., and so on, to some extent, in some way等。
4. 背景介绍性质的资料放到新闻事件后面交待，或穿插在新闻事件中介绍，不能喧宾夺主。
5. 科研进展新闻尤其要注意避免使用艰涩难懂的词及专业词汇，尽量使用简洁易懂的语言。
6. 尽量避免使用没有事实依据或数据支持的形容词、副词，尤其是successful, great, excellent, outstanding等主观色彩较浓的词语。
7. 行文中尽量避免罗列内容，如人物头衔、参会人员、大篇幅的讲话内容等。
8. 巧妙使用直接引语。直接引语一般放在第三段至第四段的位置，也可以根据实际内容情况安排位置。引语的选择以时效性、重要性、突出性、接近性为参考，引语的出处要可靠，并避免与其他陈述性文字内容重复。
9. 对于文中提到的关键事件或科研装置、科研项目、科研计划等要以简明扼要的语句进行背景解释，如863计划，973计划，千人计划等。例如： National Basic Research Program (also called 973 Program)。
10. 人物首次出现时要写清头衔和机构全称，下文可以用姓和缩写代替。人物头衔顺序如下：name, age, position, work-unit，例如YU Min, 89, member of the Chinese Academy of Sciences… YU’s research focuses on….。
11. 文字表述简单、简明扼要，减少煽情、主观性描述：

**No:** Biological sciences professor Karl Johnson passed away Tuesday at the age of 55, following a long, courageous battle with cancer.

**Yes:** Biology professor Karl Johnson died of cancer Tuesday. He was 55.

**五、参考例文：**

科研进展报道类稿件（一）

**Researchers' "Fight or Flight" Discovery May Shed Light on PTSD**

One chapter in Water Margin, one of China’s four great classical novels, describes WU Song’s fight with a tiger. Words such as "immediately turned," "dodged," "evaded," "jumped," "grabbed," etc. capture the character’s psychological changes and physiological responses when facing danger.

In psychology, this is known as the “fight or flight” response and refers to the body’s reaction to a perceived threat or danger – i.e., its preparation either to physically fight the danger or run away from it.

As part of this process, certain hormones, such as adrenalin and cortisol, are released, speeding the heart rate, slowing digestion, shunting blood flow to major muscle groups, and changing various other autonomic nervous functions, giving the body a burst of energy and strength.

When the perceived threat is gone, systems are designed to return to normal function via the relaxation response. As we all know, when in danger, it’s natural to feel afraid. This fear triggers many split-second changes in the body to prepare to defend against the danger or to avoid it. This “fight or flight” response is a healthy reaction meant to protect a person from harm.

However, if people suffer excessively or repeatedly from the fight or flight response, it is bound to damage their health. This condition is defined as post-traumatic stress disorder (PTSD). People who suffer from PTSD may feel stressed or frightened even when they’re no longer in danger.

PTSD was first brought to public attention in relation to war veterans, but it can result from a variety of traumatic incidents, such as mugging, rape, torture, being kidnapped or held captive, child abuse, car accidents, train wrecks, plane crashes, bombings, or natural disasters such as floods or earthquakes.

Nowadays, PTSD has grown to be one of the hot topics in brain science. It is believed that the neural circuits causing the fight or flight response may be the source of PTSD pathogenesis. Yet little is known about the neural circuits specifically processing threat-relevant sensory information in the mammalian brain.

In a new study published on June 26 in Science, a research group led by Professor CAO Peng of the Institute of Biophysics, Chinese Academy of Sciences, has made great progress in understanding the parvalbumin-positive excitatory visual pathway that triggers the fight or flight response in mice.

By making use of an optogenetic approach, the research team found that activation of neurons expressing channelrhodopsin-2 (ChR2) in the superior colliculus in mice caused freezing. This encouraged the researchers’ systematic identification of the key neuronal subtypes underlying that behavior.

The researchers found that parvalbumin-positive (PV+) excitatory projection neurons in the mouse superior colliculus are (SC) a key neuronal subtype for detecting looming objects and triggering the fight or flight response.

These neurons, which are distributed mainly in the superficial superior colliculus (SC), divergently project into different brain areas, including the parabigeminal nucleus (PBG), namely, an intermediate station leading to the amygdala. Activation of the PV+ SC-PBG pathway caused a fight or flight response, induced conditioned aversion and resulted in depression-like behaviors.

Researchers conclude that the SC PV+ neurons form a subcortical visual pathway that transmits threat-related visual information to the amygdala to cause fear responses, suggesting a “retina-SC-PBGN-amygdala hypothalamus” pathway for vision-induced fear responses.

In addition, the SC PV+ neurons in the superficial gray layer are predominantly glutamatergic projection neurons with spiking patterns distinct from those of their counterparts in cortical regions.

This finding broadens the concept of PV+ neurons and adds another perspective to understanding their function.

Last but not least, the SC PV+ neurons may belong to the type-ρ looming detector category, supporting the notion that mathematically defined computational units correspond to specific neuronal subtypes. These outcomes lay a solid theoretical foundation for further study of PTSD pathogenesis.



Fig. A) PV+ neurons detect soccer ball-like looming stimulus in the visual field. B) The morphological and physiological properties of PV+ neurons in SC. C) The downstream pathways formed by PV+ neurons in SC (Image by CAO Peng)

科研进展报道类稿件（二）

**Nature报道胰高血糖素受体结构研究取得突破性进展**

7月18日（北京时间）国际权威学术期刊《自然》在线发表了由美国Scripps研究所和国家新药筛选中心/中国科学院上海药物研究所等单位的科研人员合作解析的人胰高血糖素受体（Glucagon receptor）七次跨膜区域的三维结构，从而改变了长期以来在B型G蛋白偶联受体（G-protein coupled receptor, GPCR）结构研究方面所遭遇的困境。

胰高血糖素（Glucagon）是由胰岛α细胞分泌的一种激素，于1953年被分离沉淀而取得结晶。人类胰高血糖素是以N-末端组氨酸为起点，C-末端苏氨酸为终点的29个氨基酸组成的一条单链肽，分子量为3485。胰高血糖素通过与肝肾等靶细胞表面的B型G蛋白偶联受体进行特异性结合，激活下游信号转导通路，发挥生理效应。与胰岛素的作用相反，胰高血糖素是一种促进分解代谢的激素，具有很强的促进糖原分解和糖异生作用，使血糖明显升高。影响胰高血糖素分泌的因素很多，血糖浓度是重要的因素。血糖降低时，胰高血糖素胰分泌增加；血糖升高时，则胰高血糖素分泌减少。胰岛素可通过降低血糖间接刺激胰高血糖素的分泌，它们二者是一对作用相反的激素，与血糖水平构成负反馈调节环路，其受体是公认的抗2型糖尿病药物作用靶点。

G蛋白偶联受体与多种疾病相关，许多现代药物都是以这类受体为靶点的。G蛋白偶联受体分为A、B、C、D、E和F六种类型，但迄今已获解析的三维结构均属于A型，B型受体的分子面目一直未被揭开。

来自中国、美国、荷兰及丹麦等国的科学家紧密合作，选择小分子配体稳定受体结构并促进晶体生长，首次获得了分辨率为3.4埃的人胰高血糖素受体七次跨膜区域的蛋白晶体，通过对晶体结构和128个突变受体亲和力分析，构建了该受体与胰高血糖素进行分子识别的结构模型。研究表明，胰高血糖素受体与A型G蛋白偶联受体相比，其与配体的结合“口袋”更大，第一跨膜螺旋向细胞膜外延伸出3个α螺旋，形成“茎”样结构，用以“捕捉”胰高血糖素，使其氨基端插入跨膜区而与受体结合。

领衔这项研究的Raymond Stevens教授和王明伟研究员均为国家“千人计划”专家，分别得到美国国立卫生研究院和“重大新药创制”国家科技重大专项等的经费资助。同期《自然》还发表了由英国科学家解析另一个的B型G蛋白偶联受体—人促肾上腺皮质激素释放因子受体1（Corticotropin-releasing factor receptor 1）的立体结构，并刊载新闻评述，认为这两个受体七次跨膜区域结构的成功解析是G蛋白偶联受体研究领域的一个重大突破。

**Discovery may Lead to New Drugs for Diabetes**

Shanghai researchers have teamed up with US and European scientists to successfully decode the structure of a protein that offers a new biomarker for possible drugs to treat type II diabetes.

Current therapy for type II diabetes mainly targets insulin, which lowers a patient's glucose level. However, the protein glucagon receptor can increase a patient's glucose level when needed.

"With the discovery, the pharmaceutical industry can develop drugs stopping the glucagon receptor from raising blood sugar levels, which will help control diabetes," said WANG Mingwei, a chief researcher from the Shanghai Institute of Materia Medica under the Chinese Academy of Sciences.

Cell signaling, the communication between human cells, is the key to how the body functions. Signaling begins at the cell surface, while the family of protein receptors, called "G protein coupled receptors" or GPCR, is involved in 80 percent of cell surface activities in the human body.

The receptors control functions such as growth, reproduction, the nervous system and brain activity and are the target of 40 percent of modern medicines. The G protein coupled receptors are classed from A to F.

WANG and the international team succeeded in decoding Class B receptors, which have hormones relating to metabolism, calcium and glucose. Class B also includes the glucagon receptor.

Previously only Class A, the simplest, was decoded.

China has more than 90 million people diagnosed with type II diabetes.