



Unit 3 Medical Education

Section III Building Medical Vocabulary *Unit 3*



Word Component

+ **Word components**, are the parts that make up a word. Commonly, they can be prefixes, suffixes, or roots. The words neurology, paediatrics, radiology, and stethoscope in this unit are typical examples that can be decomposed into different word components.

+ “**neurology**” means the the scientific study of nerves and their diseases. In this medical term, “neur/o” is the combining form including a word root and a combining vowel. “-logy” is a suffix which means the study of ...

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Word Component

- ✚ When a suffix or another root beginning with a consonant is added to a root, a vowel is inserted between the root and the next word part to aid in pronunciation. This combining vowel is usually an o, as seen in the previous example of neurology, but may occasionally be a, e, or i.
- ✚ Our text book gives roots with their most common combining vowels added after a slash and refers to them simply as word roots, as in “neur/o”.

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Word Component

- ✚ 不明白word root指的是什么 和prefix、suffix是包含关系吗？？？
- ✚ auto-(自己), aero- (空气) 、 bio-(生命, 生物) 、 atmo- (大气, 蒸汽) 等, 有的书把它们列为术语前缀 (prefixes) 或叫词头成分, 但由于这类词本身就是词根, 因此, 有的构词法书中, 把它们列为复合形 (combing forms)。现代科技英语词汇中, 词根用作前缀者颇多。
- ✚ 又如-ectomy (切除术) 、 -ostomy(吻合术) 、 -otomy (切开术) 、 -pathy (病) 、 -pexy (固定术) 、 -rrhaphy(缝合术) 等, 它们具有专业上的独特意义, 经常和其他的词根结合构成医学专业词汇, 因此, 有些构词法书中, 把它们列为复合形, 但因为它们总在词的后部, 有的构词书也把它们看成术语后缀。凡此种种, 类似的未统一的问题不少。

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Word Component

+ 简单后缀：由一个单独的语素构成。

+ 复合后缀：由多个语素组合而成，通常包含词根+后缀或多个后缀组合。

✓ 简单后缀：-ia, condition

---病, ---症

✓ 复合后缀：-emia, -algia, -(o)rrhagia,

-ectasia, -malacia,-odynbia,

-plegia, -uria,-penia



Section III Building Medical Vocabulary Unit 3



Word Component

✓ 简单后缀：-y : condition, act, process

---术, ---法, ---过程, ---症

✓ 复合后缀

+ -metry, -otomy, -ectomy, -graphy, -iatry, -ology, -pexy, -plasty, -(o)rrhaphy, -stomy, -scopy, -megaly (cardiomegaly)



- pre- per- **peri-**

- ✓ prescribe, prewar, premolar 前磨牙
- ✓ perfect percutaneous peroral
- ✓ 完美的 经皮的 经口的
- ✓ perinatal perivascular Periodontal perihepatitis
- ✓ 围产期的 血管周围的 牙周的 肝周炎
- brady- 迟缓, 迟钝
- ✓ bradycardia 心动过缓; 慢脉
- ✓ **tachycardia** 心动过速; 心跳过速

- 困难 **dys-** (Greek) : bad, difficulty

- ✓ dysfunction 功能障碍
- ✓ dysentery 痢疾
- ✓ dyspepsia
- ✓ dyspnea (-pnea: breathing)
消化不良; 呼吸困难
- mal- (Latin)
- ✓ malfunction 功能障碍
- ✓ malnutrition 营养不良 malpractice 医疗事故
- ✓ malignant 恶性的
- ✓ maladministration 管理不善

- pne(o)- 呼吸

- pneuma-, pneumat(o)- 气, 气体, 呼吸

- pneum(o)- 空气, 肺, 呼吸

- pneumon(o)- 肺, 气, 呼吸

- -pnea, -pnœa 呼吸

- **pneumonia** 肺炎

- ✓ apnea(cessation of breathing)

➤ 患儿体温持续高达肛表104.4°F(40.2°C), 气急及呼吸困难加重...

➤ She continued to have elevated temperatures up to 104.4°F rectally, with increasing dyspnea and tachypnea.

- eu- 好, 正常, 优, 真

- ✓ euthanasia 安乐死 (-thanasia: death)

- ✓ euphony eugenic eugenics (gen/o: producing)

- ✓ eupnea

- ✓ 悅耳之音; 呼吸正常; 优生的; 优生学;

- 极端苍白、心动过速、气促、多汗提示腹内大出血(如动脉瘤及输卵管妊娠破裂)。
- Extreme pallor, tachycardia, tachypnea, and sweating suggest major intra-abdominal hemorrhage (e.g., ruptured aortic aneurysm or tubal pregnancy).
- 经10~14天的潜伏期后，出现发热、不适，头痛、便秘、心搏徐缓及肌痛。
- After an incubation period of 10~14 days, there is fever, malaise, headache, constipation, bradycardia and myalgia.

✓ -algia, -algesia pain 痛
Neuralgia; arthralgia; gastralgia; cephalgia
胃疼 关节痛 头疼 神经痛
analgesic 镇痛的；镇痛剂

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Exercises

1. Match the following word components with the corresponding meaning.

Answer Keys:

- +(1) E
- +(2) A
- +(3) B
- +(4) D
- +(5) C



Section III Building Medical Vocabulary *Unit 3*



Exercises

1. Match the medical terms in the left column with the original meanings in the right column.

Answer Keys:

- +(6) B
- +(7) E
- +(8) A
- +(9) D
- +(10) C



Section III Building Medical Vocabulary Unit 3



Exercises

1. Match the medical terms in the left column with the original meanings in the right column.

Answer Keys:

- +(11) B
- +(12) E
- +(13) D
- +(14) A
- +(15) C



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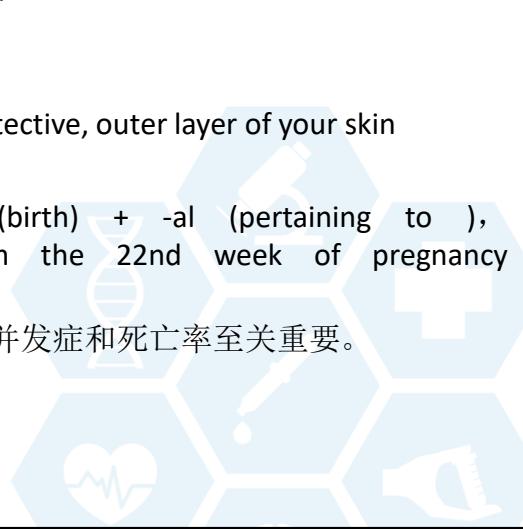


Exercises

2. Analyse the word components of the italicized words, and translate the sentences into Chinese.

Answer Keys:

- +(1) Analysis: epi-(above) + dermis(skin) the thin, protective, outer layer of your skin
Translation: 表皮通过细胞分裂有序地再生。
- +(2) Analysis: peri- (surrounding) + nat/i (birth) + -al (pertaining to),
the period of time around childbirth, from the 22nd week of pregnancy to the first 28 days after birth
Translation: 围产期对于降低与妊娠和分娩的相关并发症和死亡率至关重要。



Section III Building Medical Vocabulary *Unit 3*



Exercises

2. Analyse the word components of the italicized words, and translate the sentences into Chinese.

Answer Keys:

- 3) Analysis: steth/o(chest) + scope(instrument for visual examination), an instrument that a doctor uses to listen to your heart and breathing
Translation: 体检时，医生用听诊器听我的心跳。
- 4) Analysis: onc/o (tumor) + -logy(study of), the scientific study of and treatment of tumors in the body
Translation: 他专攻肿瘤学，致力于为癌症患者提供最好的治疗。

Section III Building Medical Vocabulary *Unit 3*



Exercises

2. Analyse the word components of the italicized words, and translate the sentences into Chinese.

Answer Keys:

- 5) Analysis: path/o (disease) + -gen(sth that produce...), any disease-producing agent (especially a virus or bacterium or other microorganism)
Translation: 造成此次疫情的病原尚未确定。
- 6) Analysis: gastr/o (stomach) + -itis(inflammation), inflammation of the stomach
Translation: 胃炎最常见的病因是一种叫做幽门螺杆菌(h.p ylori)的细菌。

Section III Building Medical Vocabulary *Unit 3*



Exercises

2. Analyse the word components of the italicized words, and translate the sentences into Chinese.

Answer Keys:

- + 7) Analysis: paed/o(children) + iatr/o(treatment) + -ics(specialty) + -ian(specialist), a medical doctor who specializes in providing care for children
- + Translation: 我姐姐是一名儿科医生，她喜欢她的工作，因为可以帮助孩子们健康快乐地成长。
- + 8) Analysis: cyan/o(blue) + -osis(abnormal condition), a bluish-purple discoloration of skin and mucous membranes usually resulting from a deficiency of oxygen in the blood
- + Translation: 医生注意到患者出现了发绀，立即开了氧疗。

Section III Building Medical Vocabulary *Unit 3*



Exercises

2. Analyse the word components of the italicized words, and translate the sentences into Chinese.

Answer Keys:

- + 9) Analysis: hyper-(excessive) + tension (stress), a medical condition in which a person has very high blood pressure
- + Translation: 他被诊断患有高血压，为了控制病情，他不得不改变生活方式。
- + 10) Functional *dyspepsia* is a kind of chronic indigestion — a stomachache, a feeling of fullness or bloating during and after meals.
- + Analysis: dys-(difficult) + -pepsia(digestion), a condition where digestion is impaired
- + Translation: 功能性消化不良是一种慢性消化不良，指进餐时和用餐后的胃痛、饱胀感或腹胀感

- dyspepsia; dyspnea
- -pepsia 消化
- pept(o)- 消化
- a- 不, 无, 没有
- -ia 情况, 状态, 症状
- brady- 迟缓, 迟钝; tachy- 快
- eu- 好, 正常, 优, 真
- ✓ apergia bradypepsia eupepsia
- ✓ 消化良好 不消化 消化徐缓

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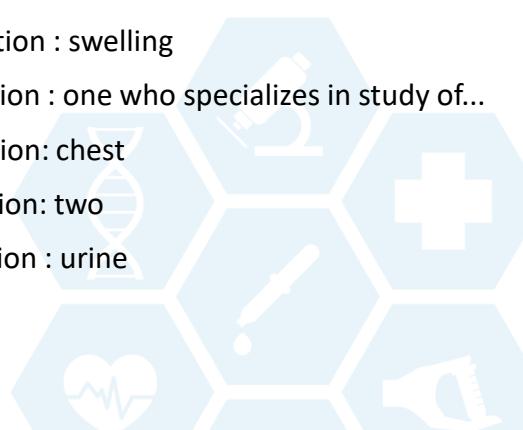


Exercises

3. Find the prefix, suffix, or root for the italicized words in the following sentences and explain the meaning of the word component.

Answer Keys:

- | | |
|--|--|
| ① Word root of lumpectomy : lump/o | Explanation : swelling |
| ② Suffix of neuroradiologist : -logist | Explanation : one who specializes in study of... |
| ③ Word root of thoracic : thorac/o | Explanation: chest |
| ④ Prefix of biceps : bi- | Explanation: two |
| ⑤ Word root of urologist : ur/o | Explanation : urine |



Section III Building Medical Vocabulary *Unit 3*



Exercises

3. Find the prefix, suffix, or root for the italicized words in the following sentences and explain the meaning of the word component.

Answer Keys:

- | | |
|---|------------------------------|
| 6) Prefix of hypophysis : hypo- | Explanation: below |
| 7) Word root of erythrocytes : erythr/o | Explanation: red |
| 8) Suffix of anemia : -emia | Explanation: blood condition |
| 9) Suffix of glomerulonephritis : -itis | Explanation: inflammation |
| 10) Word root of esophagus : phag/o | Explanation : to eat |

Section III Building Medical Vocabulary *Unit 3*



Exercises

3. Find the prefix, suffix, or root for the italicized words in the following sentences and explain the meaning of the word component.

Answer Keys:

- | | |
|-----------------------------------|-------------------------------|
| 11) Suffix of cardiac : -ac | Explanation: pertaining to |
| 12) Suffix of steroid : -oid | Explanation: resembling, like |
| 13) Prefix of monoclonal : mono- | Explanation : one |
| 14) Prefix of antiseptic : anti- | Explanation : against |
| 15) Prefix of percutaneous : per- | Explanation : through |

TABLE 3-2 Prefixes for Colors

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
cyan/o-	blue	cyanosis sī-a-ON-sis	bluish discoloration of the skin due to lack of oxygen
erythr/o-	red	erythrocyte e-RITH-rō-sīt	a red blood cell
leuk/o-	white, colorless	leukoplakia lū-kō-PLĀ-kē-a	white patches in the mouth
melan/o-	black, dark	melanin MEL-ā-nin	the dark pigment that colors the hair and skin
xanth/o-	yellow	xanthoderma zan-thō-DER-ma	yellow coloration of the skin

Passage 1**Word Bank****Unit 3****retractor** 牵引器

- contract, extract; subtract, distract, tractor(拖拉机)

✓ 使分心 減去 提取, 提炼; 取出, 拔出

- extract the herbal essence 提取植物精华。

- A dentist may decide to extract the tooth to prevent recurrent trouble. 牙医可能会决定拔掉那颗牙, 以免反复发作。

- subtract 3 from 13



Passage 1

Word Bank

Unit 3



stethoscope 听诊器

steth/o-: [G., *stethos*, chest]

-scope: [F., any various instruments for viewing]

microscope

内窥镜

endoscope

胸腔镜

arthroscope

关节镜

laparoscope

显微镜

thoracoscope

腹腔镜



Passage 1

Word Bank

Unit 3



stethoscope 听诊器

✓ -scope ? -scopy ?

✓ -scopy 镜检法; scope 镜

✓ colonoscopy

✓ 结肠镜检查（术）; examination of the colon with a colonoscope

✓ endoscopy 内窥镜检查; 内视镜检查法

✓ **bronchoscopy** **gastroscopy** **cystoscopy**
膀胱镜检查 支气管镜检查 胃镜检查



Passage 1

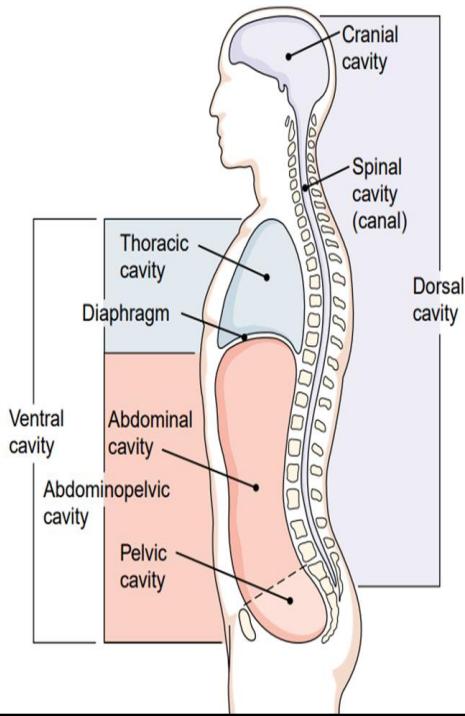
Word Bank



stethoscope 听诊器

steth/o- & thorac/o-

- ✓ the thoracic cavity, is separated from the abdominal cavity by the diaphragm.



Passage 1

Word Bank

Unit 3



stethoscope 听诊器

steth/o- & thorac/o-

1. 词源与核心含义

- ✓ steth/o-: 源自希腊语 *stethos* (胸部)，专指人体外部的胸部区域，尤其强调体表或临床检查的物理接触（如听诊器放置的位置）。
- ✓ thorac/o-: 源自希腊语 *thōrax* (胸腔)，特指胸腔内部解剖结构（如肋骨、胸骨、心肺器官等），多用于描述与胸腔相关的疾病或手术。

Passage 1

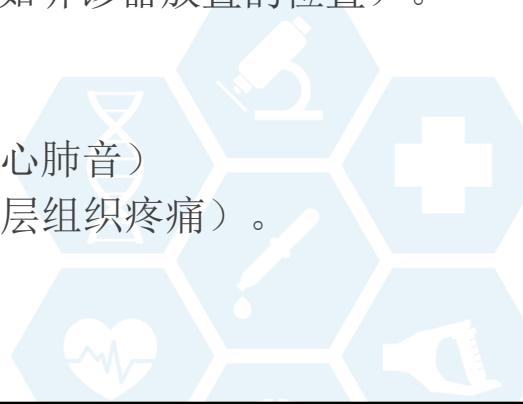
Word Bank

Unit 3

**stethoscope 听诊器****2. 相关术语**

✓ **steth/o-:** 源自希腊语 *stethos* (胸部)，专指人体外部的胸部区域，尤其强调体表或临床检查的物理接触（如听诊器放置的位置）。

- **stethoscopy** (听诊；听诊法)
- **stethometer** (胸围测量仪)。
- **stethoscope** (听诊器，用于体表听诊心肺音)
- **stethalgia** (胸痛，可能涉及体表或浅层组织疼痛)。



Passage 1

Word Bank

Unit 3

**stethoscope 听诊器****2. 相关术语**

✓ **thorac/o-:** 源自希腊语 *thōrāx* (胸腔)，特指胸腔内部解剖结构（如肋骨、胸骨、心肺器官等），多用于描述与胸腔相关的疾病或手术。

- **pneumothorax** 气胸
- **Thoracoscope** 胸腔镜
- **thoracotomy** (开胸手术)
- **thoracic cavity** (胸腔)。
- **thoracodynia** (胸腔疼痛，多与内脏或深层结构相关)



• Suffixes for Medical Specialties

SUFFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
-ian	specialist in a field of study	physician fi-ZISH-un	practitioner of medicine (from root <i>physi/o</i> , meaning "nature")
-iatrics	medical specialty	geriatrics jer-ē-AT-riks	study and treatment of the aged (from root <i>geri/o</i> , meaning "old age")
-iatry	medical specialty	podiatry pō-DI-a-trē	study and treatment of the foot (from root <i>pod/o</i> , meaning "foot")
-ics	medical specialty	orthopedics or-thō-PĒ-diks	study and treatment of the skeleton and joints (from root <i>ped/o</i> , meaning "child," and prefix <i>ortho</i> , meaning "straight")
-ist	specialist in a field of study	cardiologist kar-dē-OL-ō-jist	specialist in the study and treatment of the heart (from root <i>cardi/o</i> , meaning "heart")
-logy	study of	physiology fiz-ē-OL-ō-jē	Study of function in a living organism (from root <i>physi/o</i> , meaning "nature")

Passage 1

Word Bank

Unit 3



Suffixes denoting specialists

- | | |
|------------------|---------|
| paediatrician | -ian |
| psychiatrist | -ist |
| endocrinologist | -logist |
| surgeon | 特殊的存在 |
| neuroradiologist | -logist |



Passage 1

Word Bank

Unit 3

 表示“specialty”的后缀 -ics

✓ forensics

✓ 辩论术；法医学

✓ Paediatrics

✓ 儿科学



Passage 1

Word Bank

Unit 3

 表示“学科”的后缀 -ology

➤ -ology

gastroenterology

gastro-enter-ology

stomach intestine discipline

dermatology

dermato-logy

skin



Passage 1

Word Bank

Unit 3

**genitourinary** 泌尿生殖的

-genic relating to production or generation (致.....的；产生....的)

genito- 生殖

gen(o)- 生成，生殖，性，基因

Pathogenic adj. originating or producing disease 病原的；致病的



Passage 1

Word Bank

Unit 3

**anaesthesiology** 麻醉学

- anesthesia
- ✓ *deadening of sensation* 感觉缺失，麻木，麻醉
- esthesia 感觉
- **anesthetic aesthetic esthetic**
- ✓ 感觉缺失的，麻醉的，麻醉剂；
- ✓ 感觉的，美的，审美的；



Passage 1

Word Bank

Unit 3



implication (行动、事件、决定等的) 可能的影响[后果]

Implication of Hypotension in the Pathogenesis of Cognitive Impairment and Brain Injury in Chronic Liver Disease. (title)

Implication of Spiritual Network Support System in Epigenomic Modulation and Health Trajectory.(title)

The role of PAK4 in the immune system and its potential implication in cancer immunotherapy.(title)

Clinical and Therapeutic Implications of Cancer Stem Cells(Review Title N Engl J Med. 2019 Jun 6)

Poor decision making can have considerable implications for one's professional happiness later in life (para.5).

不当的抉择可能会对个人未来的职业幸福感造成深远影响。



Passage 1

Word Bank

Unit 3



colorectal

结肠直肠的

rectum 直肠

rect=straight, right表示“正，直”

correct 正确的

rectify vt.改正，校正

rectangle n.长方形，矩形

erect v. 竖直a. 直立的

Police had to erect barriers to keep crowds back.

警察只得设立路障来阻截人群。



Passage 1 Lead-in

Unit 3

Q What factors will you consider when you choose your medical specialty?

Choosing a medical specialty is a pivotal decision that involves several key factors. First, personal interest and passion for a particular field are crucial, as they can significantly impact job satisfaction and motivation. Second, the lifestyle associated with the specialty is important; some fields may demand long hours or high-stress environments, while others offer more balanced schedules. Third, the scope of practice and the types of patients treated play a role; specialties that align with one's values and desire to make a difference in specific populations can be appealing. Additionally, considerations around job market demand and future opportunities in the chosen specialty are essential for long-term career stability. Finally, financial implications, including potential earnings and educational costs, are practical factors that can influence the decision-making process.

Passage 1 Lead-in

Unit 3

Q Do you think your personality will influence your choice of medical specialty?

Yes, personality significantly influences the choice of medical specialty. For instance, individuals with strong interpersonal skills may thrive in fields like pediatrics or psychiatry, where patient interaction is crucial. Those who are detail-oriented and analytical might be drawn to specialties like pathology or radiology, which require precision and critical thinking. Additionally, personal preferences for teamwork versus independent work can steer one toward collaborative fields like surgery or emergency medicine versus solo practices like dermatology. Ultimately, aligning a specialty with one's personality traits can enhance job satisfaction and effectiveness in patient care, leading to a more fulfilling career in medicine.

Passage 1

Background Knowledge

Unit 3



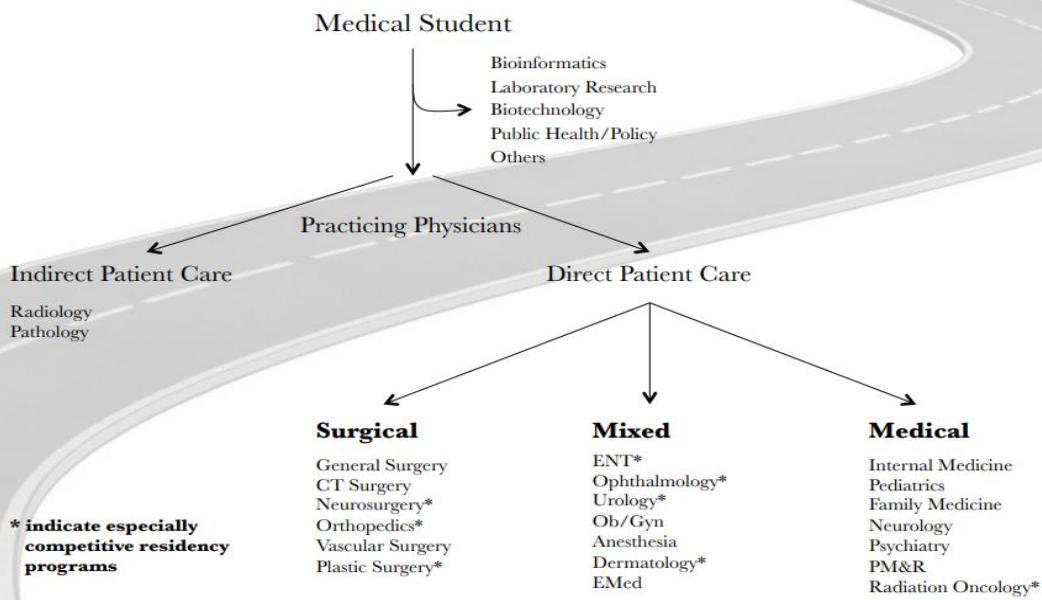
Medical specialty (医学专业)

A medical specialty is a branch of medical practice that is focused on a defined group of patients, diseases, skills, or philosophy. Examples include children (paediatrics), cancer (oncology), laboratory medicine (pathology), or primary care (family medicine). After completing medical school, physicians or surgeons usually further their medical education in a specific specialty of medicine by completing a multiple-year residency to become a specialist. To a certain extent, medical practitioners have long been specialized. According to Galen, specialization was common among Roman physicians. The particular system of modern medical specialties evolved gradually during the 19th century. Informal social recognition of medical specialization evolved before the formal legal system. The particular subdivision of the practice of medicine into various specialties varies from country to country, and is somewhat arbitrary. Medical specialties can be classified along several axes. These are surgical or internal medicine, age range of patients, diagnostic or therapeutic, organ-based or technique-based.

Passage 1

Background Knowledge

Unit 3



Passage 1

Background Knowledge

Unit 3

**• 医疗分级: primary/secondary/tertiary/quaternary care**

Primary care is the first point of contact for patients and focuses on providing essential healthcare services. It includes general practitioners, dentists, opticians and community healthcare providers. Primary care aims to address common health concerns, offer preventative care, and manage chronic conditions.



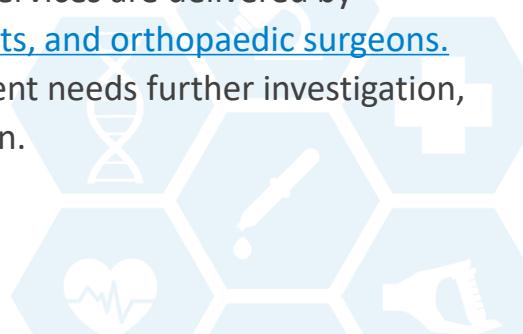
Passage 1

Background Knowledge

Unit 3

**医疗分级: primary/secondary/tertiary/quaternary care**

Secondary care refers to specialised medical services provided by healthcare professionals who are typically the second contact with a patient after a referral from a primary care provider. These services are delivered by specialists such as cardiologists, dermatologists, and orthopaedic surgeons. Secondary care is often required when a patient needs further investigation, diagnosis, or treatment for a specific condition.



Passage 1

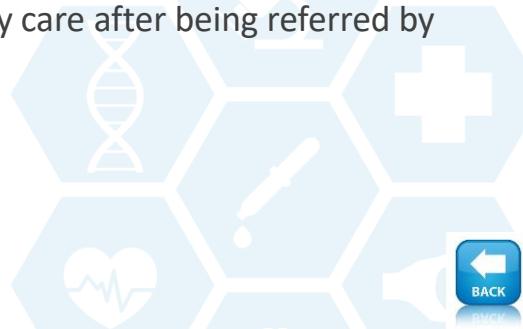
Background Knowledge

Unit 3



- 医疗分级: primary/secondary/tertiary/quaternary care

Tertiary care comprises highly specialised medical care provided to patients with complex, severe, or rare health conditions. This level of care requires advanced knowledge, technology, and facilities. Tertiary care is delivered by experts in particular fields such as [oncology, neurosurgery, or organ transplantation](#). Patients usually access tertiary care after being referred by primary or secondary care providers.



Passage 1

Background Knowledge

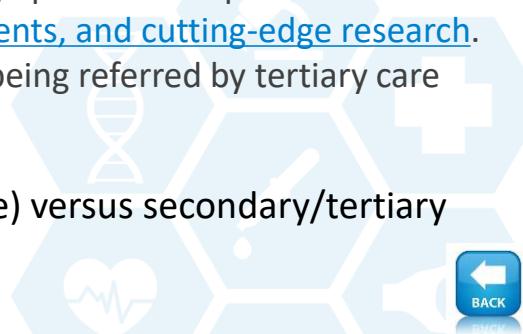
Unit 3



- 医疗分级: primary/secondary/tertiary/quaternary care

Quaternary care is a level of specialised medical care that goes beyond tertiary care. It is provided to patients with extremely complex and rare health conditions that require the most advanced knowledge, technology, and facilities available. Quaternary care is delivered by highly specialised experts in fields such as [genetic medicine, experimental treatments, and cutting-edge research](#). Patients typically access quaternary care after being referred by tertiary care providers.

primary care (long-term comprehensive care) versus secondary/tertiary care (**referral-based care**) (paragraph 3).



Passage 1**Global Reading****Unit 3****Choosing a Specialty: The Most Difficult Decision of Your Career****📍 Propose the topic**

Para. 1-2 It's difficult for medical students to choose a specialty.

📍 Why

① Para. 3 The medical specialties are quite diverse.

② Para. 4-5 Many choose their specialties hastily, which may lead to unhappy professional life.

③ Para. 6-10 Three different types of on-the-job training.

📍 Conclusion

Para. 11 Finding the right area of medicine can help medical students to be better doctors in the future.

Passage 1**Global Reading****Unit 3****Choosing a Specialty: The Most Difficult Decision of Your Career****📍 Propose the topic**

Para. 1-2 It's difficult for medical students to choose a specialty.

- ✓ Like life in general, many important decisions line the road to becoming a doctor.
- ✓ most medical students see eye to eye on what is really the greatest challenge of all — choosing one's medical specialty.

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

📍 Why

- ① Para. 3 The medical specialties are quite diverse.
- ✓ Some are based strictly on **an organ system**, like the brain, the heart, and the male genitourinary system. Others provide comprehensive medical care for **specific population groups**, such as women and children. Another set of specialties share in common the fact that they are **hospital-based services**. Its members include radiology, pathology, anaesthesiology, and emergency medicine. Medical specialties can also generally be divided into two main groups: **primary care** (long-term comprehensive care) versus **secondary/tertiary care** (referral-based care).

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

📍 Why

- ② Para. 4-5 Many choose their specialties hastily, which may lead to unhappy professional life.
- ✓ ...medical school has many rigorous demands: patient care, lectures, rounds, examinations, and call schedules As a result, most students have even less time for the proper self-assessment, research, and exploration required to choose the right specialty.
- ✓ Every medical student agrees that it is the most difficult professional decision that they will have to make. Yet most will probably spend more time researching what kind of car to buy!

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

Why

②Para. 4-5 Many choose their specialties hastily, which may lead to unhappy professional life.

✓Deciding on a field of medicine is often described as matching oneself with the characteristics of a particular specialty, such as lifestyle, intellectual challenge, technological focus, and research potential. Because of these factors, there is much confusion, frustration, and uncertainty involved in this defining moment of a young physician's career.

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

Why

③Para. 6-10 Three different types of on-the-job training.

internship, residency and fellowship:

临床住院医师（第一年住院医师规范化培训阶段）

临床住院医师（住院医师规范化培训阶段）

专科住院医师（专科医师 规范化培训阶段）

✓The first year of training after medical school is called an internship, or more commonly it is called first year of residency.

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

Why

③Para. 6-10 Three different types of on-the-job training.

internship, residency and fellowship:

临床住院医师（第一年住院医师规范化培训阶段）

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专科住院医师（专科医师 规范化培训阶段）

✓ Residency is a three-plus year training programme in a medical specialty.

- Being a resident physician is kind of like working as an indentured servant.
- Through the National Resident Matching Programme, graduating medical students may enter residency training in 20 different specialties. You actually have even more options(...bring the grand total to 34 choices).

Passage 1

Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

Why

③Para. 6-10 Three different types of on-the-job training.

internship, residency and fellowship: 临床住院医师（第一年住院医师规范化培训阶段）；临床住院医师（住院医师规范化培训阶段）；专科住院医师（专科医师 规范化培训阶段）

✓ The training that is done after a residency (in a subspecialty) is usually called a fellowship

- After deciding on a specialty for residency, many physicians later choose to subspecialize further by obtaining a fellowship, which can last any number of years.
- Subspecialties exist for nearly every specialty. ..Because of all the subspecialties, there are over 60 different kinds of doctors out there!

Passage 1

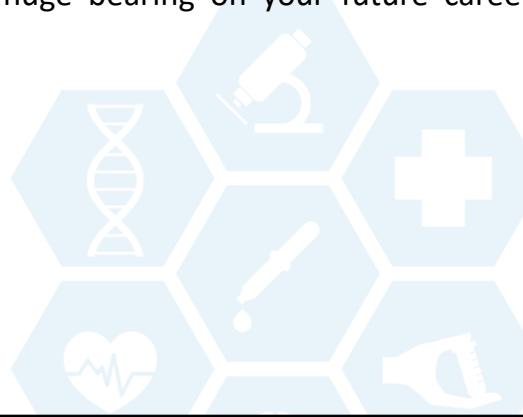
Global Reading

Unit 3

Choosing a Specialty: The Most Difficult Decision of Your Career

Conclusion

Para. 11 Choose your medical specialty thoughtfully and carefully. Finding the right area of medicine for you will have a huge bearing on your future career satisfaction.



Passage 1

Detailed Reading

Unit 1

the hard work and loyalty that someone gives to an activity, etc.

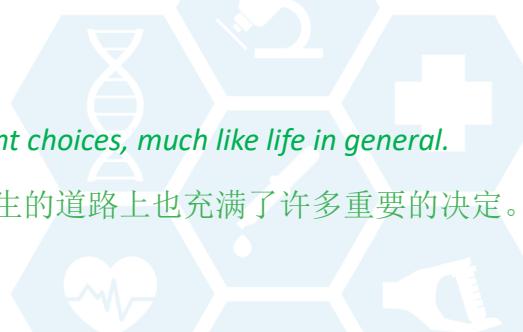
1 Medicine is a profession that requires **overwhelming** sacrifice and **commitment**. It will
very great
very severe or strict

take many years for you to receive **rigorous** education, followed by many long, tough years

training taking place in a normal working situation
of **on-the-job training**. Like life in general, many important decisions line the road to
becoming a doctor.

The path to becoming a doctor is filled with significant choices, much like life in general.

译文：就像人生中的其他事情一样，成为一名医生的道路上也充满了许多重要的决定。



Passage 1

Detailed Reading

Unit 3

2 The medical school experience is more than just memorizing the arteries of the arm, surgical instrument that holds back the edges of a surgical incision 牵引器 holding **retractors** during surgery, and learning how to use a **stethoscope**. Each and every

very difficult and tiring

medical student has to go through four years of **gruelling** examinations, sleepless nights on awaiting orders 临床轮转 on call, and tough **clinical rotations**.

听诊器 后缀-scope

Every medical student has to endure four years of exhausting exams, sleepless nights on call and demanding clinical rotations.

译文：每个医学生都要经历四年折磨人的考试，随叫随到的不眠之夜，还有艰苦的临床轮转。

Passage 1

Detailed Reading

Unit 3

problem, difficulty

to be in agreement

Despite these **hurdles**, most medical students **see eye to eye** on what is really the greatest challenge of all — choosing one's medical specialty. **Figuring out** what type of

doctor to be is, in many ways, more difficult than deciding to become a physician. Once to choose something after thinking about other possible choices settle on a specific **niche** within medicine, they become more than just

future doctors. They start to take on a new identity — that of a paediatrician, forensic psychiatrist, endocrinologist, orthopaedic surgeon, or interventional neuroradiologist.

表示“职业”的后缀

Passage 1

Detailed Reading

Unit 3

3 Medical specialties can also generally be divided into two main groups: primary care
 医疗分级: **primary/secondary/tertiary/quaternary care**

(long-term comprehensive care) versus secondary/tertiary care (referral-based care).

Generalist specialties like family practice, internal medicine, and paediatrics are considered primary care fields. More specialized areas such as **gastroenterology, dermatology, and**
 表示“学科”的后缀
cardiothoracic surgery fall into the latter category

to be included in or classified as

refer sb. to: to send or direct (someone) to a medical specialist 让(病人)转诊

eg. 她被转给临床心理医生进行咨询。

she was referred to a clinical psychologist for counselling.

Passage 1

Detailed Reading

Unit 3

4 Everyone knows that medical school has many rigorous demands: patient
 a tour of inspection typically repeated regularly, in which
 the well-being of those visited is checked 巡诊
 care, lectures, **rounds**, examinations, and call schedules all compete for a

medical student's time, often **crowding out** sleep and a personal life.

eg. 医生正在查病房。

The doctor is just making his rounds in the wards.

Passage 1

Detailed Reading

Unit 3

a possible future effect or result of an action, event, decision, etc.

5 Poor decision making can have considerable **implications** for one's professional happiness later in life.

e.g. The identification of co-occurring movement and behavior disorder has diagnostic and treatment implications.

确认同时发生的运动和行为障碍具有诊断和治疗意义。



Passage 1

Detailed Reading

Unit 3

to begin or to start something

6 There are three different types of on-the-job training that **commence**

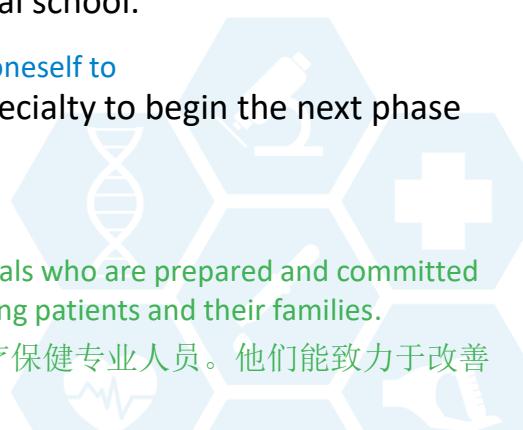
immediately following graduation from medical school.

to obligate or pledge oneself to

7 Medical students have to **commit to** their specialty to begin the next phase in training: residency.

eg. There is an urgent need for health care professionals who are prepared and committed to improving the quality of life for seriously ill and dying patients and their families.

译：目前急需一批具备专业知识和奉献精神的医疗保健专业人员。他们能致力于改善重症和临终患者及其家属的生活质量。



Passage 1

Detailed Reading

Unit 3

8 Three of the specialties — medical genetics, preventive medicine, and a small number of nuclear medicine — offer such a small handful of residency positions (16 total in 2002) that few students really consider them as options. The other 过敏症 *of or relating to the thorax* 胸的 disciplines — **allergy** medicine and **thoracic** and **colorectal** surgery — are *of or relating to the colon and rectum* 结肠直肠的 really considered subspecialties of internal medicine and surgery, respectively.

Passage 1

Detailed Reading

Unit 3

11 Choose your medical specialty thoughtfully and carefully. Finding the right area of to be closely related to medicine for you will have a huge bearing on your future career satisfaction. Moreover, physicians' contentment correlates strongly with patients' satisfaction and their outcomes. It goes without saying, then, that happy doctors end up being better doctors for their patients.

Thus, it should come as no surprise that contented physicians provide better care to their patients.

译：因此，毫无疑问，快乐的医生最终会成为更好的医生。



Passage 1 Detailed Reading

Unit 3



Exercises: Language Focus

1. Complete the following sentences with proper words provided below. Change the form where necessary.

Answer Keys:

- 1) The paediatrician ultimately convinced the parents that the child was developing normally.
- 2) With a stethoscope, a doctor can listen to your chest for the crackling sounds of fluid in the lungs.
- 3) Symptoms commenced 12 hours before admission yesterday.
- 4) Six months later, Mat was on his emergency room rotation when the same patient was rushed into the ER on a stretcher.
- 5) Frequently sufferers of this kind of allergy are also sufferers of asthma.

Passage 1 Detailed Reading

Unit 3



Exercises: Language Focus

1. Complete the following sentences with proper words provided below. Change the form where necessary.

Answer Keys:

- 6) The hypertension should be treated initially before any surgery is contemplated.
- 7) The hospital has a commitment to provide the best possible medical care.
- 8) Impaired metabolism can be seen in the eyes in such complications as glaucoma and retinal detachment.
- 9) Professor Smith is a very well-known thoracic surgeon who has led his hospital in performing over 80 heart transplants in the last two years.
- 10) Cancer can be a cruel, gruelling disease that affects millions of Americans.

Passage 1**Detailed Reading****Unit 3****Exercises: Language Focus**

2. Choose the best explanation for the underlined expression from A, B, C, or D.

Answer Keys:

Ⓐ ACCBA Ⓑ CDCAB

**Passage 1****Detailed Reading****Unit 3****Exercises: Language Focus**

3. Translate the medical expressions with the help of the given Chinese equivalents.

Answer Keys:

- | | |
|----------------|----------------------------|
| Ⓐ 1) 临床轮转 (实习) | clinical rotation |
| Ⓑ 2) 全面医疗护理 | comprehensive medical care |
| Ⓒ 3) 初级医疗 | primary care |
| Ⓓ 4) 二级医疗 | secondary care |
| Ⓔ 5) 医学遗传学 | medical genetics |
| Ⓕ 6) 预防医学 | preventive medicine |
| Ⓖ 7) 核医学 | nuclear medicine |
| Ⓗ 8) 结直肠外科手术 | colorectal surgery |
| Ⓘ 9) 疼痛管理 | pain management |
| Ⓛ 10) 重症监护 | critical care |



Passage 1**Detailed Reading****Unit 3****Exercises: Language Focus**

4. Listen to the passage and fill in the blanks with the exact words or expressions you have heard.

Answer Keys:

- ⌚ Why does choosing the right specialty matter? The medical specialty you choose determines the 1) foundation upon which you will build your entire medical career. Therefore, making the right decision holds immense weight for several reasons.
- ⌚ Firstly, your area of specialty determines the patients you work with, the 2) conditions you treat, and the procedures you 3) perform. Your work brings you fulfilment and satisfaction when you are passionate about your specialty. However, if your specialty does not match your 4) interests, it can lead to professional dissatisfaction. Studies show that professionals who spend at least 20% of their work time in an area that they believe is meaningful experience less 5) burnout, with the most significant benefits up to that ceiling effect of 20%.

Passage 1**Detailed Reading****Unit 3****Exercises: Language Focus**

4. Listen to the passage and fill in the blanks with the exact words or expressions you have heard.

Answer Keys:

- ⌚ Next, your specialty choice determines your 6) workload. For instance, surgical specialties usually require more 7) extended hours and being 8) on call, while non-procedural specialties may offer more predictable schedules. Selecting a specialty that fits your lifestyle can significantly impact your 9) overall health and work-life balance.
- ⌚ Moreover, choosing the right specialty can provide professional advancement and development opportunities. It enables you to specialize in your area of 10) expertise, which may lead to leadership positions, research opportunities, and advancements in clinical care.

Passage 1

Detailed Reading

Unit 3



Exercises: Language Focus

5. Translate the following text into Chinese.

Answer Keys:

真的有完美的医学专业吗？大多数医生可能会反对这个想法。在轮转到各种医学领域后，大多数医学生发现自己被吸引到其中几个领域。在他们的决策过程中，学生通常首先排除那些确定自己对其不感兴趣的学科，不管出于什么原因。虽然考虑中的剩余选项可能都会通向一个有意义的、启迪心智的医学职业，但由于某些专业领域之间的相似之处，几乎总是有多个潜在的选择可能符合你的标准。如果你想成为一个在幕后工作的医生，可以考虑放射学或病理学。如果你想了解医学中的各个方面，可以考虑家庭医学或急诊医学。如果您更喜欢做手术，可以考虑心脏病学、介入放射学或外科学。一项针对超过12,000名医生的最近研究发现，只有40%的医生对他们的职业非常满意，其中相当比例（20%）感到完全不满意。影响医生满意度的最重要因素之一就是他们选择的专业。缺乏信息的决策可能导致终身成为一个不快乐的医生。

Unit 3

Medical Education

Unit 3



译文 Passage 1

专业的选择：职业生涯中最困难的决定

布赖恩·弗里曼

“MD”实际上代表“重大决定”

1. 医学是一项需要巨大牺牲和奉献的职业。你需要接受严格的教育，然后还要经过许多年艰苦的在职培训。生活中需要做出许多重要的决定，成为医生的道路上也是如此。

2. 医学院的经历不仅仅是记住手臂的动脉，手术中握紧牵引器，学习如何使用听诊器等等这一类事情。每个医学生还都必须经历四年艰苦的考试、值班的不眠之夜和严格的临床轮转。尽管有这些障碍，大多数医学生对于真正最大的挑战都达成了共识，那就是选择自己的医学专业。从很多方面来说，弄清楚要成为什么类型的医生比决定成为医生更困难。一旦医学生确定了自己要专攻的具体领域，他们就不再仅仅是未来即将成为一名医生。那一刻起，他们就开始拥有了一个新的身份——儿科医生、法医精神科医生、内分泌学医生、骨科医生或介入性神经放射科医生等。

Unit 3**Medical Education****Unit 3****译文**

3. 这些专业本身非常多样化。即将毕业的医生可以从各种各样的医学领域中自由选择。有些专业严格基于器官系统，如大脑、心脏和男性泌尿生殖系统。还有些为妇女和儿童等特定人群提供综合的医疗服务。另一组专业有一个共同点，即它们提供基于医院的服务，包括放射学、病理学、麻醉学和急诊医学。医学专业通常也可以分为两大类：初级护理（长期综合护理）与二级/三级护理（转诊基础护理）。家庭医学、内科和儿科等全科专业属于初级护理领域。而胃肠病学、皮肤病学和心胸外科等更专业领域属于后者。

4. 众所周知，医学院有很多严格的要求：病人护理、讲座、查房、考试和值班安排都会争夺医学学生的时间，常常挤占他们的睡眠和个人生活。因此，大多数学生甚至没有足够的时间进行适当的自我评估、研究和探索，以选择合适的专业。每个医学生都认为，这是他们必须做出的最困难的职业决定。然而，大多数人可能会花更多时间研究要买什么样的汽车。最后，许多人没有想方设法获取信息去做出明智的决定，而是匆匆选择了终身职业。

5. 决定医学专攻领域通常需要将自己的生活方式、智力水平、技术焦点和研究潜力等与特定专业的特征进行匹配。这些因素的考量使年轻医生的职业选择充满困惑、挫折和不确定性。糟糕的决策可能对将来的职业幸福度产生重大影响。

Unit 3**Medical Education****Unit 3****译文****实习医生、住院医师和进修医师**

6. 医学院只是学习如何成为一名称职的、关心病人的医生的第一步。从医学院毕业后随即会开始三种不同类型的在职培训，将年轻、经验不足的医生变成训练有素的专家，为治疗疾病和挽救生命做好准备。专业的选择决定了医学院毕业后进行何种形式的进一步专业培训。因此，医学生们需要对研究生医学教育的结构有清晰的认识。

7. 医学生必须致力于自己的专业学习，才能更好地接受下一个培训阶段：住院医师。在过去60年中，医学科学的快速发展导致对医学专家的需求增加，住院医师培训项目也相应扩大。根据专业的不同，住院医生需要在医生的监督下接受3到7年额外的正式培训和学习。医学院只提供了广泛的临床基础，住院医师在此基础上又向前迈进了一步，并赋予在特定专业无监督的情况下行医所需的技能、知识和经验。住院医师有点像在当契约劳工，长时间的工作却只换来微薄的薪酬，而且经常夜晚都要睡在医院里。事实上，住院医师这个称呼来源于旧时代，当时医院工作人员实际上作为住院医生住在医院里。

Unit 3

Medical Education

Unit 3

 译文

8. 通过全国住院医师匹配计划，即将毕业的医学生可以选择20个不同的专业进入住院医师培训阶段。实际上，你有更多选择。原因在于美国医学专业委员会（ABMS）认可了24个官方专业委员会。但每年，住院医师匹配的统计数据都显示，几乎所有医学生都进入了20个领域中的一个。那剩下的四个呢？其中医学遗传学、预防医学和核医学这三个专业提供的住院医师岗位非常有限（2002年总共16个），因此很少有学生真正将它们列入选择。其他学科如过敏医学、胸外科和结直肠外科，实际上分别被认为是内科学和外科学的子专科。此外，学生还可以通过联合住院医师培训项目选择多个专业。按这样计算下来，这14个可供选择的领域总共带来了34种选择。

9. 在决定了住院医师的专业后，许多医生后来会选择通过进修进一步细分专业，进修时间可以是任意年限。几乎每个专业都有亚专科。例如风湿病学或传染病学（内科）、血管外科（普通外科）、疼痛管理（麻醉学）和视网膜外科（眼科）。由于有这么多亚专科，医生的种类也超过了60种。你可以成为青少年医学专家、重症监护医师或介入性放射科医师。选择似乎是无穷无尽的。重要的是要记住，这些领域都是潜在的职业道路。在思考和探索这20个基本专业时，不要轻易把它们排除在外。但有这么多额外的选择会意味着决定变得更加困难。

Unit 3

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 译文

10. 实习在这整个过程中扮演什么角色？在过去（1970年之前），所有毕业的医学生在进入住院医师培训之前都要完成一年的轮岗实习。现在一般认为实习是住院医师的第一年（PGY-1）。在大多数医院，刚从医学院毕业的新医生通常被称为第一年住院医师，而不是实习生。旧的实习仍以一种变相的形式存在，即过渡年住院医师培训。

11. 慎重仔细地选择你的医学专业。找到适合你的医学领域将对你未来的职业满意度产生重大影响。此外，医生的满意度与患者的满意度及其治疗结果密切相关。因此，可以说，快乐的医生最终会成为对患者更好的医生。

Unit 3

Medical Education

Unit 3



译文 Passage 2

传统中医教育

中医药行业正在处在快速转型的时期。中医教育改革的目的是实现向国内和国际扩展这一更远大的政策目标。中国教育部最近颁布了《面向 21 世纪高等教育教学内容和课程体系改革规定》，其中 15 项规定涉及中医教育。在此基础上，中医课程进行了一系列改革。课程开发不仅限于中医临床研究，还开设了跨学科课程，实行国家成绩等级制。与此同时，现在大学里使用多种版本的中医教科书。这些政策旨在建立连贯和综合的中医教育体系。

中医教育

总体而言，中国的医学教育结构主要沿袭英国的体系。在医疗培训方面，高中毕业生可选择 3 年制技校课程、5 年制本科课程、7 年制研究生课程或 8 年制专科院校的临床专业医生课程。毕业后，毕业生有资格在监督下在医院工作。经过至少一年的实习后，毕业生可获准参加国家医师资格考试（NMLE），以获得医师资格。2016 年，中国医疗界已在全国范围内展开住院医师培训。此外，自 2016 年起，医学教育体系开始改革，其中包括鼓励优秀学生晋升的 4+4 年制学位课程。

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中医药教育

接受中医药教育的学生超过 70 万人，其中包括 5510 名留学生。中医药教育大致分为两类：

- 中医学：包括中医基础课程、中医基础理论、中医学、中医方剂学、中医诊断学以及中医学经典。
- 针灸推拿学：包括《针灸理论》、《经络腧穴》、《针灸经典选读》、《针灸学》、《各家学说》、《针灸技法》、《针灸治疗学》、《医疗气功》等。

中医药大学的课程也包括西医科目。中国的大学教育大致分为三个层次：本科、硕士和博士。经过全国招生考试后，被录取的本科生要经过 5 年 5000 学时的培训，之后可继续攻读三年硕士研究生课程和三年博士研究生课程。其中，中医本科专业可分为以下专业：

- 中医（包括中草药治疗临床医师培训）
- 针灸手工疗法
- 中药治疗

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获得硕士学位后，通过国家博士入学考试的学生可进入医科大学或研究所攻读博士学位。医学博士学位（DM）是一种研究型学位，需要经过三年的学习（包括六个月的课程学习和两年半的医学研究）才能获得；临床医学博士学位（DCM）则是一种专业学位。其中，后者是在成功完成为期三年的学习（包括六个月的课程学习、一年半的医院临床培训和一年的医学研究）后授予的。根据国家卫生和计划生育委员会（NHFPC）《2014 年中国住院医师正规培训发展报告》，所有五年制医学毕业生都必须按照“5+3”标准接受 3 年住院医师培训，以达到执业医师的最低要求。这一由国家主导的扩大临床培训的努力，与医学院将多专科临床教育引入生物医学培训早期阶段的改革不谋而合。因此，医学博士的学习时间通常为 8 至 14 年。除了五年制医学本科课程外，一些医科大学还开设七年制临床医学课程，毕业直接授予临床医学硕士学位（MCM）。有 40 多所学校同时开设五年制和七年制课程。为了培养更多人才，教育部授权排名前 12 位的顶尖医学院开设专门的 8 年制课程，毕业后可获得 DCM 学位。这些学校每年的招生人数仅限 1300 人。

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中医药教育的显著特点

中医药教育是现代医学教育课程的一部分： 中医药教育是中国主流医学教育的必修课程。中国卫生部规定，医疗教育机构必须开设全国统一的中医课程。

中医药融合了人文、社会和自然科学： 中医药大学并不局限于教授中医药知识，而是包含了人文社会科学基础课、外语、体育、信息科学、中医基础课、中医临床基础课、西医基础课、中医临床课、西医临床课等必修课程。而管理、贸易、会计和治理课程旨在培养专业人才，以满足中医药所有相关行业的需求。同时，专业课程的设置也考虑到中医不同于现代医学。例如，在西医医院，诊断、手术等高度依赖医疗设备，固定成本尤其是医疗设备的核算就变得非常重要。而在中医医院，传统上，医生的医疗经验比设备更重要，核算应集中在人力成本上。此外，现代药品和中药（中草药）的收入成本比例不同，因为后者能入药的部分更多。许多中医药大学，如成都中医药大学，除了中医医学知识外，还能提供全面的非医学学科教育，其中包括企业管理、经济、贸易、语言、工程等。这种模式的独特之处在于将中医教育列入必修课并纳入选定的学期里，其好处是培养中医药行业管理的人才，包括商业、贸易、营销、生产等环节。

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中医药国际教育：中医药高等教育已经步入了国际化进程。超过3000名外国学生注册了中医课程，这占了交流生的大部分。而对于之前没有学过中文的学生，我们会提供英文版的教材，且由经过专门培训的双语教师来教授独立课程；如有必要，也可咨询译员。这些学生中的大多数专攻针灸和按摩疗法。大多数在中国学习中医课程的国际学生都来自亚洲，其次是非洲。

与国外大学建立合作：许多中医药大学都已经建立了中医药跨国项目。例如，佛罗里达州的大西洋东方医学研究所就制定了一个计划，根据该计划，针灸专业的学生可以在上海中医药大学再学习一年。而中国的大学也在国外建了校区，专门用于进行中医药教育。例如，成都中医药大学与埃武拉大学合作，在葡萄牙建立了中医药海外校区。

结论

中国的中医药教育并未脱离普通医学教育。所有医学教育都会让学生同时接触中医药和现代医学，这可以让学生了解另一种医学体系。大型中医药大学会提供医学和非医学课程，这些课程包括贸易、管理、人文、社会科学等，有利于促进中医药相关行业的创业和发展。

