Caduceus

MEDICAL STUDENTS' CENTRE,
SASSOON ROAD,
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EDITORIAL

PROFESSIONAL INTEGRITY

Three months ago we witnessed a group of new doctors leaving the University. Now we are welcoming our new blood. Five years is no long time. Soon these new members of the Faculty well also be witnessed to being qualified during this half decade, but what else?

Aiming at being qualified means painstaking work. Indeed a doctor's life is necessarily an industrious vocation, and a medical student is to prepare himself by studying hard during his undergraduate course. But do we study because qualification is our sole ambition, our final goal? Far from that. It can be certain that qualification is but a means to an end. What, then, is that end? Wealth? Prestige? Or is it some virtue that lies deep in every human heart? The editor's view is that we must study with an ideal, and our ideal should be primarily to serve our fellow men. "Patients' needs, however demanding, must always be compassionately received, because the only reason for our being doctors is that we have the will and the power to serve."* We are here to learn how to offer service, not how to be served. It is important that the new-comers into the Faculty should realize this point, for without this realization, his career can be made purposeless, or even be misled. It is through service that we try to fulfil the second part of the Great Commandment: "Thou shalt love thy neighbour as thyself."

The medical student is unique in that once he steps into the Faculty, he joins a profession that demands high integrity as well as unity. Although these virtues are not respected by many in Hong Kong, they are nevertheless, essential for the maintenance of nobleness of the profession. True enough, students all over the world want to be revolutionary in this new era, but no student can overthrow these virtues and yet become a good doctor. "Today our profession is troubled by a paradox. Increasingly, we dazzle the world by our scientific achievements; but we have an uncomfortable anxiety that we may be losing public esteem."* Why? It is because many do not respect integrity to society or to patients, and many do not preserve unity among colleagues, making the profession divided. Cultivation of virtues best begins with the new medical student who is still fresh and apparently uninvolved. Success, however, lies very much on the individual student. Let us hope soon the profession will be as united as before, and brotherly love exist between all members, even between teachers and students; and let probity continues to prevail as to bear testimony to The Oath of Hippocrates.

*** Sir James Howie, B.M.J. July 12 ,1969.**

CLASS NEWS

1. Graduate News T.E.

House Officer Appointment (from 1st July to 31st December '69)

	number
Queen Mary Hospital	
House Officer — Medicine (University)	8
" " — Medicine (Government)	3
" " — Paediatrics	4
" " — Surgery (University)	8
" " — Surgery (Government)	3
" " — Orthopaedic Surgery	3
" " — Gynaecology (Universiy)	3
total . . .	32
Queen Elizabeth Hospital	
House Officer — Medicine	9
" " — Paediatrics	5
" " — Surgery	9
" " — Orthopaedic Surgery	4
" " — Neurosurgery	1
" " — Gynaecology	2
" " — Obstetrics	4
total . . .	34
Tsan Yuk Hospital	
House Officer — Obstetrics	8
Sai Ying Poon Hospital	
House Officer — Infectious Diseases	1
Netharsole Hospital	
House Officer — Medicine	3
" " — Surgery	3
" " — Gynaecology	1
" " — Obstetrics	1
total . . .	8
Grand total . . .	83

2. Other Class News

Both 2nd and 1st years elected new class committees just before their holidays. Names of the new class committees are as follows:

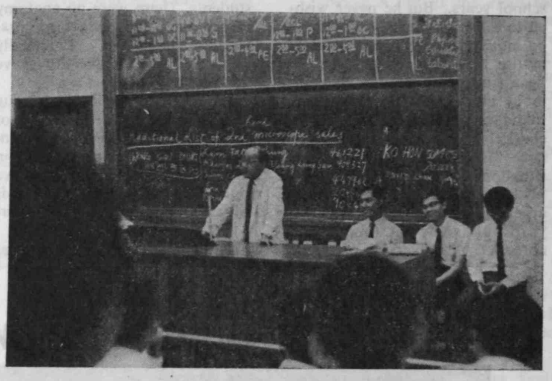
	2nd Yr.	1st Yr.
Class Representative	Mr. William Tam Miss Sylvia Chen	Miss Anne Marie Rodriques
Hon. Secretary	Mr. Siu Yum Keung	Mr. Sham Tak Cheong
Hon. Treasurer	Mr. Au Wing Fai	Mr. Woo Chi Wai
Social Committee	Mr. Ambrose Ng Mr. Wong Chun Chung Mr. Ma Yuet Tai Miss Lily Chen	Mr. Liu Woon Tim Miss Eileen Au
Sports Captains	Mr. Wong Chun Chung Miss Margaret Kwan	Mr. Choi Wai Wan Miss Juliet Lau

MEET THE NEW BLOOD

The Fraternity Committee (session 1969-1970) of the Medical Society was elected on 11th August at the Medical Council Meeting. The new officers are: Administrative Officer; Lam Wah Kit; Education & Information Office: Ng Wing Wan, Gregory; and Development Officer: Ho Chung Yin, Andrew. The Hon. Secretary Incorporated is Siu Yum Keung.

The first programme arranged is to meet our new blood at the Freshmen Information Service in the Physiology Theatre on 29th August afternoon. Of the 120 freshmen, 105 turned up. The support from the 'old blood' was also considerable. About 50 of them came to help in the whole programme.

Immediately before the day's programme, information sheets and copies of Caduceus were distributed to the freshmen. The information sheets included lists of names of Professors and other staff of the 3 Preclinical Departments, lists of textbooks, lists of names from whom they could get 2nd hand microscopes and skeletons, etc.



Professor Cheng giving a few words of wisdom.

The day's programme began by an introductory speech from the Chairman of the Fraternity Committee. Then a series of speeches were delivered by Professor Cheng, our Hon. Advisor, Mr. Wong Kwok Kee, our Chairman, Mr. Stephen Ng, our Social Secretary, and Mr. Gregory Ng of the Fraternity Committee, respectively. Their talks touched on various aspects of our University life, from serious topics like University teaching, Union and Medical Society structure, to light topics such as social activities. After all these speeches, the freshmen were divided into small groups, each under 2 seniors. Guided tours around the campus followed, and the day's programme ended in group discussion and light refreshment at the Medic Canteen.

The coming programme for the freshmen will be a picnic to Cheung Chau on 19th September. Anyone interested please assemble at the Ferry to Outlying Districts at 8.30 a.m. on that day.

(L.W.K.)

Armsa General Assembly

Owing to inability of the Medical Societies of India and Singapore to organise the 4th General Assembly of the Asian Regional Medical Students Association this year, news of which arrived at the last moment, the Hong Kong University Medical Society has agreed to host the 4th General Assembly in Hong Kong to be held in the Medical Centre, Sassoon Road from 20th to 27th September, 1969.

Since the Society will have little time and limited financial resources to organise the meeting, the General Assembly will be restricted in scale and only one delegate from each of the seven member countries, in addition to the A.R.M.S.A. executives, will be invited. The main emphasis will be to chart the course of A.R.M.S.A. next year.

(L.W.K.)

STOP PRESS

NEW UNION PRESIDENT

The First By-election General Meeting for the by-election of the Union President was held on the 8th September, at 5.30 p.m. in the Loke Yew Hall. After a questioning period of 1 hour, Mr. John Tsui was elected ipso facto as our new Union President.

(Y.C.)

IT ALL HAPPENED ON A FINE EVENING WHEN...

. . . more than one hundred medical students went on a launch picnic to Lamma Island, on 5th September, 1969. Those who were present laughed the hours away with games like 'Duck-Catching'. Bingo, lucky draw . . . It was not until about 10 p.m. that all on board set foot on the soil of Hong Kong Island again.

(C.M.)

SCHOLAR OF SINCERITY AND WISDOM

— Our Prof. Francis Chang

by Tom

Old Chinese teaching leads us to believe that for every good deed there is a good reward. With current sense of value, rewards implicate wealth, fame and power. Paradoxically, such 'rewards' more often follow misdeeds than good ones. Perhaps such rewards are no longer in the hands of the simple, humble and honest people. But in these people there remains the heart of admiration for sincere persons. To them we offer our humble gift: respect and love.

It is great for one to forsake one's wealth in order to live in austerity. But it is equally admirable for one not to pursue after wealth even though one is in the position to. Professor Francis Chang came from a poor family. He had been struggling with poverty all through his school years. But he never wished to sell his knowledge for fame or money. He set his mind early in life to become a scholar. To be a true scholar is not to bluff, lobby and should have no other mundane ambitions. He should check his mannerism and maintain his integrity under every situation. In order to accomplish his hope, he had no hesitation to accept a university life after his years of study at home and abroad. A university offers no fortune but only work. Work for students and work for the interest of mankind — that is the true meaning of academic dedication.

When Professor Chang first came into this University in August 1955, there were only 12 dissection tables and around 60 students. There were no anatomy museum or any teaching material whatsoever. Practically speaking, the University gave him nothing to start with.

In order to facilitate the students' dissection, Professor Chang wrote the dissection mannuals, which speak of anatomy in the simplest English and give students appropriate emphasis which is not easy to grasp otherwise.

Drawings were made such that lectures are no longer akin to listening to tapes of verbs. They give student excellent visual aids. Student may forget whatever the teacher may have taught, the simple diagrams always leave their impression.

The greatest task undertook by Professor Chang was the establishment of the anatomy museum. It needs tremendous manpower to do all the dissection and lots of thinking to device it. Every specimen is to have a story to tell and tell it intelligibly. No wonder it is one of the museums which is most visited by students. It is recognized to be one of the most successful anatomy museum among South East Asia, although most of them are much larger in size.

Another enterprise engaged in recent years by Professor Chang is to integrate gross anatomy and histology. It is thus arranged that students can have better insight and more orientated in their study. It is a pity that Professor Chang should leave us now that this work will remain in an elementary stage.

As a teacehr, Professor Chang is the most celebrated one among his colleagues. You always wonder how much wisdom and humour can one put into a dull subject that a student can sit back and absorbed imperceptibly.

Professor Chang believes that it is dedication rather than profound knowledge that makes one's teaching successful. Every new year, he has to re-dedicate himself to a new class of students so that his students may learn profitably under him. Unfortunately he has a small staff so that closer supervision, and guidance became almost impossible. Moreover the change rate of his staff is great and coordination among staff becomes difficult, at the expense of students' benefit.

Professor Chang is genuinely fond of students. He will not shrug off his duty when a student should fail his subject, but that senior students and his classmates are also held responsible. If a student has been neglecting his studies, why not advices and good company are offered? If he gets stuck in his work, where on earth he should obtain help? It should be time that teachers and students should work closer together that they might help each other. At this juncture, due recommendation is given to the attempted effort of the students to set up a fraternity organization among themselves. This proves that students are trying to do their part of work. Perhaps it is high time for the teaching staff too to join in actively.

It is a fact that many students need financial help in order to make their life easier during their University years. A good bursary system is eminently necessary. From his own experience, Professor Chang believes that a period of hardship is all very necessary for the formation of a righteous character. He hopes that may any bursary be not able to deprive any student of his spirit of struggle.

Many students leave Hong Kong after their graduation. Professor Chang said that youths of his days would choose to serve their own country without a second thought. But nowadays when one's choice is over-ruled by one's desire to be free from execution and that spells no more choice.

Professor Chang will be leaving Hong Kong in the middle of September for New Zealand. But years of hard work in this university has exhausted much of his energy and ambition, and he wishes to spend the rest of his life in reading and writing.

For a man who has been spending his life in simple goodness and guided by simple truth, we can hardly express our admiration, especially for his dedication to teaching. Now that he is leaving us, we all wish him a **bon voyage** and a happy settlement in New Zealand.

Correspondence

Dear Editor,

Living in an advance society like Hong Kong, people are 'spoiled' by the many new inventions that aim at making life easy for us. Take a very practical example, the motor cars, they have become so common that even an average medical student can afford to buy one.

It facilitates its owner to get to the lecture theatre or QMH in spite of the rush hour of the day. It protects the owner from rain and heat (?). It facilitates its owner to date a girl and above all it gives its owner a sense of superiority. Haven't you heard the 'thundering roar' of new sports cars or what not as they rush up the car drive while you are having your Pharmacology or Physiology lecture? God bless our tympanic membranes!

In return to the fine service, the car of a medical student with a special parking permit is allowed to park in the Sasson

Continued on page 3

A MODEL OF PAVLOV'S DOG

— an attempt to imitate life
— by symbolic logic

by F. W.

Historical Background

In 1940, Pavlov first described his classical experiment on conditional reflex. After exteriorized the parotid duct of his dogs, he attempted to measure the effect of stimulation by collecting the saliva. The dog was first given food and made to water. This kind of stimulus, as it can always evoke a certain response by the animal, even without previous learning is known as unconditional stimulus. The dog was then given a new stimulus (the conditional stimulus) which is shown initially to have little effect upon salivary secretion, e.g. ringing a bell, at first alone, and then together with the unconditional stimulus. Later, when the bell is rung, it alone is sufficient to cause the dog to saliva. Such an reflex is known as the conditional reflex.

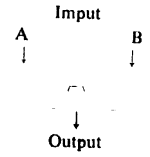
However, if the conditional stimulus is repeatedly presented without the unconditional stimulus, the strength of the conditional reflex progressively decreases until it ultimately disappears. A condition known as experimental extinction. On the other hand, when the conditional and unconditional stimuli are present together either simultaneously or with a short time interval between them at regular time after the establishment of the conditional reflex, it will last for a long time. This procedure is called reinforcement.

Symbolic Logic

The conditional reflex is a simple biological behavior that can easily be imitated by mathematical means.

Before discussing the actual model, let us first acquire ourself of some terminology used in symbolic logics.

AND gate is represented as:

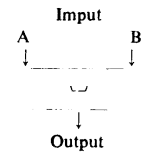


and its truth table is

A	B	A ⌣ B
0	0	0
1	0	0
0	1	0
1	1	1

It will only conduct when both imput are positive.

OR gate is represented as:

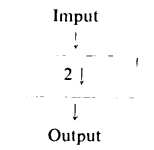


and its truth table is

A	B	A ⌣ B
0	0	0
1	0	1
0	1	1
1	1	1

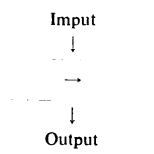
It will conduct when one or both of the imput are positive.

DULPLICATE gate is represented as:



The outputs are the same as the imput both in amplitude and phase but merely the number is increased by two.

DELAY gate is represented by:



The gate will continue to conduct for a fixed period of time whenever a signal is fed to it.

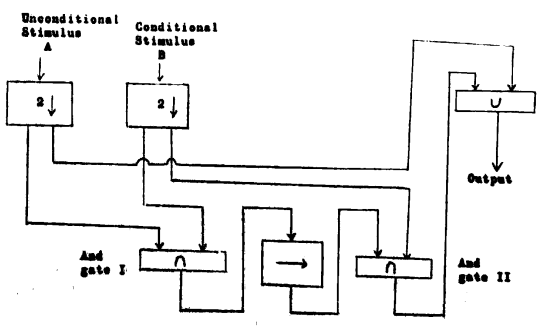
THE MODEL

Using the various gates mentioned above, we can mimic conditional reflex by the following circuit:

(1) When only the unconditional stimulus is given, the output will be positive. This is the same as the ordinary unconditional reflex.

(2) When only the conditional stimulus is given, both the signal reaching the OR gate is negative, and so no output.

(3) However, when the conditional stimulus is given together with the unconditional stimulus, the output from AND gate I will be positive. When this signal is fed to the — DELAY gate, it will make it to conduct for a definite length of time. That is to say, the model has learnt the conditional stimulus.



Now, if only the conditional stimulus is given, AND gate II will also conduct as it receives signal both from the stimulus and from the DELAY gate. A signal will appear at the output. This is the same as the conditional reflex in Pavlov's dog.

(4) After a short time, when the DELAY gate is no longer conducting the result of signal from the AND gate I, the application of conditional stimulus alone will cause no response in the output. A condition similar to extinction.

(5) However, when the conditional and unconditional stimuli are given again before the DELAY gate cease to conduct, the response of the model to conditional stimulus will be lengthened by two, just as the reinforcement in Pavlov's Dog. The above circuit can also be expressed as follow

$$[\,(A \neg B) \neg B\,] \neg A$$

Where the unconditional stimulus is represented by A and the conditional stimulus by B.

At the same time, we can also illustrate the above conditions by truth table as follows:

		Imput					Output
		A	B	$A \neg B$	$(A \rightarrow \neg B)$	$(A \rightarrow \neg B) \neg B$	$[\,(A \rightarrow \neg B) \neg B\,] \neg A$
(1)		1	0	0	0	0	1
(2)		0	1	0	0	0	0
(3)	a.	1	1	1	1	1	1
	b.	0	1	0	1	1	1
(4)		0	1	0	0	0	0

(1) When only unconditional stimulus is given

(2) When only conditional stimulus is given

(3) a. Both conditional and unconditional stimuli are given
b. Some time later, only conditional stimulus is given

(4) After (3) a. but at a time greater than the time constant of the DELAY gate, the conditional stimulus is given

Correspondence

Continued from page 2

Road Medical Students' Centre. Even so, very often than not, its owner is far from being able to protect it from the 'hazards' of parking a car at the road side. Haven't you seen a fine, newly polished car decorated with 'blessings' from above where the sparrows dwell? Above all, haven't you seen a tall lean figure or a short plump character staring hopelessly at his 'exhausted' car whose 'legs' simply refuse to stand up because of the interference of Mr. Unknown? Poor soul, his heart must be burning with anger and anxiety!

There seems to be a 'gang' of 'tyre-deflaters' around. So, be on the look-out then, well-off First-year-Medical-students-to-be, who knows which popular guy will be the next victim.

Yours Truly,
The Car-lover

Ed: Tyre — deflation has become a popular sport among medical students especially when they are having some grievances to voice (in silence). Shared the car-owners pay for the 'game' or let's give the naughty one his due next time?

MEDICINE TODAY

The Association of Prolonged Solar Exposure with Basal Cell Carcinoma

It is well known that skin cancer is more frequently found in fair skin people living in sunny climate, and experimentally, ultra-violet light has been shown to be able to induce skin cancer in animals. It is now generally accepted that ultraviolet irradiation is an important etiology factor of skin cancer. The mechanism through which the U-V light act is still far from being known.

It has been noticed that collagen degeneration of the dermis is frequently associated with skin cancer. This association was investigated by controlled studies in a group of 67 patients suffering from basal cell carcinoma. The age, sex, complexion, eye colour, hair colour, sun susceptability, degree of exposure to the sun, site of the carcinoma, degree of dermal collagen degeneration in the covered and exposed parts of the skin were all taken into consideration.

The results were that in the young age group, basal cell carcinoma did not seem to be related to dermal collagen degeneration. The basal cell carcinoma occurred more commonly on exposed parts of skin, yet the dermal collagen degeneration was not greater than that in a control group of similar age. In the middle-aged patients, the carcinoma occured predominantly on exposed parts. There were often associated hyperkeratosis. Dermal collagen degeneration was closely related, there being much more collagen degeneration in the dermis of exposed skin than covered areas, but the degeneration was by no means more severe around the site of the carcinoma than exposed parts else where. Lesions in these patients occasionly occured on covered parts of the skin and in these cases, there were no collagen degeneration. In the elderly patients, findings were similar to that of the middle-aged group.

Though this study did not prove the relationship of solar basal cell carcinoma and dermal collagen degeneration as one of cause and effect, it did firmly establish the intimate relationship between the two.

Medical Complications of opiates

Opiate drugs are often abused as pleasure-giving drugs. Opiate addicts may present the following major medical complications:

Overdose, Hepatitis, Endocarditis, Septic pulmonary embolism, Pneumonia, Abscesses and Cellulitis, Tetanus, Thrombophletbitis and perforation of the nasal septum.

Overdose is the most frequently encountered complication. The patient is characterised by very slow respiratory rate or apnoea and constricted pupils which respond sluggishly to light. Fever and leukocytosis are sometimes found without any bacterial superinfection. Still in some patients, and in most fatal cases, there is acute pulmonary congestion which presents a rapid or normal respiratory rate together with diffuse rales.

Hepatic dysfunction is another very common complication. Liver function test often reveals abnormality and liver biopsy shows lymphocytic infiltration. It is currently thought that the chronic liver dysfunction is due to a rise in transaminase values without concomitant abnormalities in other parameters of hepatic function.

Endocarditis in opiate addicts are mostly due to Staphylococci, Candida, Gram -ve enteric bacteria and enterococci. In most cases it involves previously normal heart. If it involves the right side of the heart, it may give rise to septic pulmonary embolism. This is especially common for staphylococcus aureus.

Septic embolic pneumonia is often very severe and fatal, though it must be borne in mind that not all pneumonia in opiate addicts are embolic. It is found that the opiate addicts are predisposed to bacterial pneumonia acquired through the upper respiratory tract.

Performation of the nasal septum is now rare and may be found in those patients who snuff either heroin or cocaine.

Syphilitic false -ve tests may also be found in opiate addicts.

(AKW)

啟思

香港大學學生會醫學會月刊

第一卷

第九期

一九六九年九月十五日

針灸學

蘇天佑

香港大學醫學會邀請蘇天佑醫師演述針灸學講詞如下：

一 針灸起源

針灸學是中國所發明的，這是無可異議；但發明於何年，却是無從稽考，有人推測是古人在無意中，一點一滴的發現，經過若干千百年，及後人的繼續研究，時至今日，然後成爲有系統有秩序的針灸治療。有書可考的，首推「黃帝內經」，書中叙述黃帝與歧伯的問對而成書。若針灸眞是始於黃帝，則針灸當有五千多年的歷史了。我去年到南韓訪問針灸界，據說他們的針灸是中國傳來的，也已有三千年的歷史了；由此說來，中國針灸有五千年的歷史是可相信的事實。但據中醫老據，「黃帝內經」一書，是出於戰國時代，使人懷疑「內經」非黃帝時代的著作，或爲後人著作，假託黃帝之名云；或是黃帝時代作品，到戰國時方有人出版該秘藏書本，以公諸於世，亦未可料。

二 針灸學的組織

A叫做「經」，B叫做「穴」，C針法，D灸法，以上四項爲組成針灸學的因素。什麼叫做「經」？「經」就是神經的路徑。在身共有十四條經；每一個內臟器官都有一條經，如心肺肝脾腎爲五臟，加上一個心包路，便成六臟，各佔一條經，又加上五腑便是胆、胃、大腸、小腸、膀胱，又加上一個三焦腑，便成六腑，各佔一條經（中醫解釋三焦是臟腑間的神經組織，包括淋巴系統在內云）。此外體前正中線爲「任脉」，體後正中線爲「督脉」，共稱爲十四經。這十四經並不是空無實物的，乃是有神經的路徑的，這些神經路徑是否與西醫解剖學的神經系統相同，這有待列位醫界學者去研究了。

什麼叫做「穴」呢？「穴」—按照古人說法是施針用灸的所在，而「穴」字的解釋，就是凡有針灸點的地方，都是陷下去的，如骨縫，肌肉縫，甚至骨上的穴位，也有小陷凹點，或小陷溝的，神經就藏在陷溝中。這就是古人「穴」的意思。按今日的說法，穴就是神經的反應點，每條經的穴位，多少也有分別，但每經中的穴位，都有反應的本能，每一經的穴位，多能治該本經臟器的病，但亦兼治其他經有關的病。每一經的穴位不是全部都有治療的高級力量，也有只有次等力量的。所以治病選穴，須有高深經驗，然後能收速愈的功效。

十四經中的穴共有三百六十五個正穴，此外只有後人發明的穴，不列在十四經裏面的，名叫「經外奇穴」，這些穴位都有奇效的能力，只治一兩種疾病的，這種經外奇穴也有幾十個，但普通常用的，只有十多二十個。正穴中的三百六十五個，較常用的，不超過二百個左右。

針是金屬製品，但與縫衣針和注射針不同。古代最早是用石針，所謂石針是用玉石製成的，但仍嫌它粗，後有人用竹造針，所謂竹針，乃是用老竹頭，削成幼針，可免折斷之弊，後來發明鐵器，然後用鐵製造。今日物質進步，戰前採用普通鋼線，戰後採用不銹鋼線，既幼小，堅韌，有力而不易折斷，普通所用的粗度由式拾捌號到叁拾式號線；長度由五分到四寸。若針鋒銳利，粗幼皆不刺痛，長短的使用，是視乎穴位的深淺，患者的肥瘦而定。但有一個原則，就是任何穴位不能觸及體內任何部份。以上是毫針用法，另有一種名叫三稜針，作用是放血。

灸：是用艾絨放在穴位上，用火燃着，使熱力直達神經而傳達組織以治療疾病的方法。古時灸法，只有直接灸一種；直接灸的好處是功效大，但短處是比較痛楚，而且事後會留下一個小疤痕。近代針灸界想出許多間接灸的方法，如隔薑上灸，將艾放在薑片上，待熱，將薑片下方放在穴上灸之。又有針上灸，針刺入穴後，在針柄上放艾燒之。此外還有溫灸器，用器盛艾隔布燻穴。各種間接灸，可按適應症而應用之，但效能總不如直接灸的好處。直接灸有臟器的功能，有起死回生的力量。

由于以上四項的組合，就成爲針灸學。

三、針灸治病的原理

針術屬於器械刺激，灸術屬於熱力刺激，統被稱爲「物理治療」；因針灸療法是不用藥物的。最近有位針灸家被記者訪問時，他發表以下的一段談話：『人體是一個電子機構，體內神經是電線，大腦是發電總機，電波從神經線到達各臟腑，分配調和，循環不息，人體健康便良好，反之，任何一個臟腑電流失調，那部份的神經便受影響，不是衰弱，便是因而過度敏感或不靈，疾病因此而生。』這也是有道理的。針灸治病的道理是刺激神經，身體不論任何部份發生疾病，該部神經就失去正常的作用，用針刺激該部神經，該部神經就能恢復正常作用，疾病就消除了。在我三十年臨牀經驗中，神經有一種本性，如下：假如神經痙攣，用針刺治好了，以後再針幾次，不會變爲癱軟無力，也和正常一樣。假如神經痲痺，用針治好了，繼續再刺幾次，也不會變爲痙攣，也是和正常一樣而已。這是最奇妙一點。有些人會想到「用針刺中神經，是否會傷害神經」這問題，由於針刺術的臨牀證明，不但不會傷害神經，反而令神經恢復正常，這可以是說神經的本性。又每一個穴位，被外國針灸家稱爲反應點，用針刺這反應點，就是發出一種電波反射到該臟器，該臟器就會自動調整，使機能恢復正常，疾病因而治癒。

四、針灸的生理作用

刺針對於生理作用有三種：

A 興奮作用　對於身體各部機能已衰弱或痲痺的，使它興奮。例如知覺或運動神經痲痺，用針刺它；就可以恢復原有的知覺或運動的常態。又如對於內臟機能衰弱的，就刺激交感神經，使內臟恢復它的機能。

B 制止作用　神經興奮，血管擴張以致血液旺盛（發火）等，針刺可予以鎭靜緩解收縮作用，而使疾病消除。例如知覺官能旺盛而過敏疼痛，運動神經機能亢進而痙攣搐搦等，針灸可使它緩解。消化器官的異狀亢進的嘔吐下痢，可以使它鎭靜下來。

C 誘導作用　遠離病灶，從其它部份刺針，刺激末梢神經，引導血液下行的方法，例如對於腦充血，就刺激末梢神經，擴張末梢部毛細血管，同時使腦血管收縮。又深部充血或發炎的時候，就刺針在淺的部份，以引導血液，使它疎散。以上三種作用，是刺激神經，對生理發生的變化，因而治癒疾病。

五 救治對生理的作用

救的原料是艾絨，這種原料是從野生植物屬菊科的艾草的葉中取得，葉底有一叢白毛，晒乾後便成爲艾絨，按中國醫物考說『它是味苦無窮：：灸百病，能通十二經血氣，能回垂絕之元陽：：』還有一種好處，可以稱爲「無毒的燃料」。放在肌肉上燒的時候，當然有痛，但火熄後，皮膚馬上沒有痛感，縱然後來有微菌侵入，署會化膿，但也不會發炎或擴大。這就是無毒的證明。至於艾的熱力，日本醫學家曾試用鷄蛋般大的艾絨，放置在水銀槽下燃燒，它的熱度竟達攝氏表三百六十度以上。當時曾用家兎試驗，灸的結果是能增加血球，尤以白血球爲甚；血管擴張，血壓增高，體溫增加，血液及淋巴循環旺盛，滲出物的吸收等，又能直接制止神經痛。艾灸的刺激作用，也有三種。1、爲誘導刺激，此即古之所謂「上病下取」，例如頭部及胸部有病，可灸手足。而直接刺激法，在有病的部份，施直接救法，能治痛症發炎，浮腫痲痺等症。3、反射刺激，內臟有病，艾灸背部交感神經，反射入內臟，疾病因以治癒。

艾灸法有多種，正式的古法，是「直接灸」，其他間接灸法，功效較輕，但若要救回生命、治急症，頑病，非直接灸不爲功了。

艾灸除了能治病之外，還有一種殺菌作用。此種作用，並非直接入體內殺菌，乃是增加體溫，增加血球，興奮神經，這樣便增加了身體上的自然療能和抵抗力，身體內既有不適合細菌生存的條件和環境，細菌自然消滅，中醫療法多注重增強身體的抵抗力以消滅細菌。但假如細菌在表皮創口或肌肉，可以直接灸在創口；也可以直接殺菌的。

六 針灸能治什麼病

普通人對針灸的認識以爲針灸只能治些頭痛、胃痛、風濕等症，這樣，對針灸的認識太膚淺而估價太低了。其實針灸能治人身百病，百份之八十以上，尤其那些藥物不能治的病，針灸多能治癒，否則在這醫學昌明的時代，早已被淘汰了。

風濕是很普通的疾病，用藥治療，很難根治，但在針灸治療，不論是神經性，肌肉性，均能很容易地治療痊癒。其次是神經性痛症，不論在身體任何部份，一律很簡單及容易治療。茲將一部份藥物所難治的頑症一提。頭腦病如神經錯亂，癇症、血壓高、腦出血的半身不遂，失眠、偏頭痛等。顏面病如三叉神經痛，顏面神經痲痺或痙攣。眼科如慢性淚囊炎，眼瞼下垂，夜盲症等。淋巴系統病如甲狀腺腫，瘰癧。呼吸器官如常患傷風、感冒症或冷氣病、肺結核、哮喘。心病如神經性心跳，神經性狹心症。肋部的肋間神經痛。消化器官如胃腸神經痛、胃下垂、盲腸炎、便秘等。泌尿器病如糖尿病、膀胱痲痺、小兒遺尿、萎縮腎、慢性腎臟炎的水腫。婦科病如月經困難、子宮痙攣、子宮下垂、產後四肢痲痺、性冷感。兒科病如夜驚症，慢性消化不良（疳積），初生兒破傷風，小兒驚厥（急驚風），嬰兒吐瀉症（慢驚風），急性脊髓前角炎（小兒痲痺）等。手足疾患如關節痛，三角肌痲痺，坐骨神經痛，槳液性膝關節炎（鶴膝），缺乏維他命症如脚氣。傳染病如肺癆，霍亂，流行性感冒，還有瘧疾及脾腫大等。以上諸症，都有特效。但其中也有難治的，那就是發病太久及身體過份衰弱，或病情已到無可挽救的地步，人力就不能回天了。此外針灸對急性大量出血及梅毒等病，皆是無能爲力。

七、中國十二時辰

應十二臟腑法也很奇妙，十二時辰爲子、丑、寅、卯、辰、巳、午、未、申、酉、戌、亥。由半夜十一時至一時爲子時開始，每兩小時爲一個時辰，類推便可知道十二時的時間。十二時的臟腑所屬是：子時胆，丑時肝，寅時肺，卯時大腸，辰時胃，巳時脾，午時心，未時小腸，申時膀胱，酉時腎，戌時心包絡，亥時三焦。凡患病到某一時特別辛苦的，可以想到是某臟腑有病或是有關的。也許有人認爲這是沒有充份的道理，也沒有理由可以解釋的，但中醫是實驗醫學，根據上法，也會治好很多疾病。

八、關于換臟器的問題

中國醫學上說，心、肝、脾、肺、腎是五臟，五臟有彼此相連的關係。古說是相生相尅。所謂「生」是「供給」的意思，所謂「尅」是「控制」的意思。那就是說每一個臟器都受其他兩個臟器所管制。其中一個是控制它，另外一個是供給它。這臟器受兩個臟器平衡管制之下，就正常的運用。假如供給的一方減少了力量，那臟器便會衰弱下來；假如控制方面失去了力量，那臟器便會興奮而至於發炎，或發生其他病變了。就以換心來說，人被換心以後，爲何多數死於肺發炎呢？根據五臟相關學說，肺是由心控制的，心既換了，肺和新心却失了聯系，肺便沒有了控制，而脾是供給肺的機構，仍然不斷的供給力量，因而使肺過於興奮而發炎，雖注射抗生素也沒有功效。患者死於肺炎，死後所換的心仍然良好。患者死於別的器官生病。可見中國古人所發明的五臟相關的學說，是值得研究的。它們怎樣相關，相助和相控制，可以從內分泌方面去想，它們之間的關係，一定是內分泌作用。我不是西醫，也沒有解剖人體的臨床經驗，請恕我冒昧講話，我的目的是在貢獻一點意見。在換器官手術的時候，要注意按回一切和該臟器有關的東西。南非牙醫布萊柏所以成功，或是與心有關的東西，沒有完全割清，而其他的小關連的東西，可能自動的接回了，因此得以生存。以上是我的猜度，希望諸位不要見笑。我很希望換器官可以成功，則人類的壽命和幸福，都是崇當今醫學界所賜了。

話又說回來，針灸對於換器官有沒有幫助呢？回答是：不必換。在某器官沒有壞透以前，用艾直灸與該器官有關的背後交感神經穴位，該器官就會恢復原有機能而痊癒。我曾治癒多窄症，久瘧脾腫大症，胃下垂症等。

以上這一段話，並非誇大，其實中醫有許多有價值的療法，但可惜不爲西方醫學家所重視，亦隔於語言文字，和抽象的名詞所限，不爲西方醫學界所能瞭解而已。

一九六九年，一月十七日

本刊第一卷第六期刊有微生物小詩試譯一首獻給黃啓鐸教授及讀微生物的同學。編者頃收到詠微生物大作四篇，首兩篇是以五言排律將原文另譯，此兩篇韻文諸諷兼備，可稱佳作，茲一併刊出供諸同好。

微生物

第一首

作者　高飆賜

渺小微生物　爾難發現之
衆雖心裏想　獨向鏡中窺
結舌偏居下　叢牙百列奇
班分七束尾　點染兩般脂
四十紋成帶　尋常綠作眉
俱非平日覩　但教哲人知
應識其如是　原來彼亦斯
吾儕當不惑　奧妙復奚疑

× × × ×

第二首

作者　佚名

細微生物非難覩，電子窺微力倍高，
科學日新工日利，細胞將見巨如桃。
天生萬物俱堪用，細菌論功亦可褒。
免疫抗苗防疾厲，頻從生化建新勞。
自然科學天工輔，壽世匡時責莫逃。
寄語諸君勤作業，開來繼往賴賢豪。

× × × ×

第三首

作者　老黄

細微生物不難覩，電子鏡下現纖毫。
構造組織分層次，莫道微菌肚裏空。
生物創造奪天工，形形式式千百種。
宇宙萬物皆堪用，微如細菌盡其勞。
疫菌爲厲死人多，天地造化各殊途。
來自塵土歸塵土，氮化作用演神通。
新的發明連年有，都是前人鑽研功。
奉勸諸君勤作業，開來繼往賴爾曹。