

## **Acupuncture Clinical Elective Curriculum**

*Partnership with Shanghai Jiao Tong School of Medicine*

*Ruijin Hospital, Shanghai, China*

By Amy Li and Monica Michelotti

### **INTRODUCTION**

Ruijin Hospital is a large and modern teaching hospital in Shanghai, China that has a strong relationship with a prominent medical school in Shanghai (Shanghai Jiao Tong University). The University of Michigan has a formal agreement with Shanghai Jiao Tong University and has recently started to offer students the opportunity to study traditional Chinese medicine in a clinical setting at Ruijin Hospital. As the University of Michigan continues the exchange program and develops a curriculum for Traditional Chinese Medicine, the relationship with Ruijin hospital will continue to develop and improve.

The current University of Michigan Medical School curriculum includes exposure to alternative medicine during the M1 and M2 year, primarily during Family Centered Experience (FCE) and Clinical Foundations of Medicine (CFM) activities. In this time, the prevalence of traditional Chinese medicine was explored, and students have the opportunities to observe one or more alternative medicine techniques. Students learn that some patients choose to use acupuncture, cupping, or moxibustion in addition to western therapy, while others sometimes resort to Chinese medicine after years of standard therapy have proved ineffective. A good understanding these different treatment options will allow all medical students to be more culturally sensitive and to provide more thorough care. After CFM and FCE, we receive very little additional exposure to alternative medicine in our clinical rotations. A clinical experience with traditional Chinese medicine, especially after developing our ability to critically appraise evidence based medicine (EBM) and after honing our clinical skills, greatly improves our understanding of these practices.

The clinical rotation is based at Ruijin Hospital, a Chinese teaching hospital where Western and Eastern medicines are already part of the day-to-day practice of many physicians. Having an elective in this setting provides the additional benefit of

experiencing the culture that successfully intertwines both styles of medicine. The majority of the rotation is spent with one, very good, English-speaking physician. A typical week runs from Monday through Friday 8:00AM- 5:00PM with a set 1hr to 1.5hr lunch however the duration of lunch varies depending on the doctor running clinic. The acupuncture clinic is located on the 10th floor of Ruijin Hospital; the clinic provides lockers for personal items. The locker room is next to the primary clinic room.

Approximately 30 patients are seen daily, and many patients return two to five times per week for treatment. Common ailments include arthritis, back pain, stroke, menorrhagia, obesity, headaches, insomnia, PCOS, depression, GI distress, allergies, and prevention of disease. This physician teaches the basics of Traditional Chinese Medicine and demonstrates the clinical applications of this theory during daily clinic.

## **PROPOSED CURRICULUM**

### **OBJECTIVES:**

**1. To understand the basic theories behind Acupuncture and Traditional Chinese Medicine. By the end of the rotation, a student should have at least a working knowledge of the following core principles:**

- Yin Yang and the five elements
- Meridians and collaterals (“the net”)
- Five zang organs
- Six fu organs
- The extraordinary organs
- Qi and the relationship between Qi, blood, and body fluids

**2. To understand the medical uses and basic techniques of acupuncture and acupressure.**

- Indications for acupuncture: What common ailments is acupuncture used for?
- Contraindications: Note what information the TRADITIONAL CHINESE MEDICINE physician will elicit during an intake interview.
- Selection of acupuncture points (understanding objective 1 is key to this), needle placement technique

- What is the frequency of acupuncture treatment for what ailments? How do the needle sites vary from treatment to treatment?
- Learn about the “therapeutic method”: Reinforcing, reducing, warming, clearing, ascending, descending.
- Intradermal needle therapy. What is this and when is it used?
- The plum-blossom needle or cutaneous needle. What is this and when is it used?
- Ear beads for acupressure. Organic and magnetic. What is the advantage and disadvantage to each? How does this compliment acupuncture therapy?
- Interested students are encouraged to experience an acupuncture treatment and may perform the removal of needles during clinic.
- Note: Practicing needle insertion through a piece of soap or an apple is an effective way of working on technique before attempting it on an actual person.

### **3. To understand the uses and the basic technique of moxibustion**

- What is the function of moxa? Ex. to warm meridians, expel cold, induce the smooth flow of qi and blox, to strength yang and to prevent disease
- Indications. When is it used alone and when is it used in conjunction with acupuncture.
- What are the components of moxa? (artemisia vulagaris moxa or mugwort)
- What are the different ways to administer Moxa and why: Moxa cones, moxa sticks, scarring moxibustion, and ginger, garlic, salt, or monkshood cake insulation
- Students may practice forming moxa cones and experience moxa if they are interested. Be sure to wear clothes you can easily wash on this day (it gets smoky!).

### **4. To acquire an understanding of cupping and the basic technique of cupping.**

- What is the cupping method? Types/sizes of jars and indications.
- Differentiate between Sliding vs. Non-sliding vs. Cup+Release cupping. When is each method used?
- What is the function of cupping? Ex. to warm and promote the free flow of qi and

- blood in the meridians, dispel cold and dampness, and diminish swelling/pain
- When can cupping be used alone and when is it used in conjunction with acupuncture? Alone ex. pain, cold prevention, etc.
  - Interested students may practice cupping on peers and on patients. Experiencing cupping is also relatively painless and easily done.

**5. To understand the common herbs and injections used in Traditional Chinese Medicine.**

- What are the common herbs that are used? Ex. DanSheng
- When is each used? How often? What are the indications and common side effects?
  - Injectable herbs
  - Patch formulations
  - Oral formulations
- Are there any herbs that have western medicine correlates? Any interactions with common western medications?

**6. To appreciate the therapeutic effects of acupuncture, but also critically appraise the efficacy of acupuncture using evidenced based medicine.**

- In what ailments is the evidence for acupuncture and Traditional Chinese Medicine treatment stronger?
- How does the efficacy of acupuncture treatment compare to placebo? See references section for some basic examples (most research is in chronic low-back pain, headache, and osteoarthritis of the knee)
- What is the mechanism of acupuncture? See specifically FMRI research during acupuncture treatment.
- What is the neurological correlate to a meridian and acupuncture point?

**7. Cultural understanding of acupuncture and traditional medicines.**

- What do Traditional Chinese Medicine physicians think of the evidence behind their field?

- Shanghai Jiao Tong University SOM teaches primarily western medicine with an EBM model: what do physicians and medical students at SJTU think of Traditional Chinese Medicine?

**8. To understand how these treatments compare to Western ideas of therapy.**

- Do patients choose to use both? In what circumstances? Some of the patients speak English, and these are great learning opportunities to learn from first hand experience.

**9. To experience Chinese culture and witness its impact on health, illness, and healthcare utilization.**

**10. To understand the benefits and drawbacks to the Chinese healthcare system.**

**Observe the relationship between patients and their physician.**

- Specifically, note differences in their payment practices, patient scheduling, sterilization of instruments used, electronic records/paper records, etc.
- What are indications for admission to the inpatient ward? How is this rationed?
- How do the doctors interact with the patients? Some physicians have noted to us that Western doctors treat their patients with more “Ke Qi”, or politeness. Is this the case? How do patients treat physicians?
- Observe the culture of gift giving.

**ACTIVITIES AND EXPERIENCES:**

**Day-to-Day:**

Monday through Friday is spent in clinic (on the 11<sup>th</sup> floor of the hospital), shadowing Dr. Xiang, who speaks excellent English. Dr. Xiang translates most of her patient conversations because a majority of her patients do not speak English. After clinic hours end, Dr. Xiang will review patient cases and give small informal talks on acupuncture, moxibustion, and cupping. Students will have the opportunity to practice cupping, remove acupuncture needles, and receive acupuncture and Electrical-stimulation treatment in the “down time” if interested.

**Patient Population:**

**Sample case logs (NP – needle placement, CP – cup placement)**

<u>Patient</u>	<u>Procedures observed/performed</u>
57 year old woman with 1 year history of axillary pain from herpes zoster	NP, CP/Cup removal
85 year old man with a history of stroke, and residual left sided weakness	NP, CP/Needle removal
48 year old woman with a twelve week history of low back pain	NP/Needle removal/Cup placement
32 year old women desiring additional weight loss	NP, CP/Needle removal
66 year old woman with osteoarthritis of the knee and type 2 diabetes mellitus	NP/Cup placement
78 year old woman with a history of stroke and recent onset of depression	NP, Observation of Moxibustion, Observation of DanShen injection
57 year man with a history of meningitis	NP, CP, Observation of B-12 injection/Needle removal
32 year old woman with psoriasis and history of abdominal cramping	NP/ Needle removal, CP & removal
21 year old woman with insomnia	NP, CP/Needle removal, Cup removal
71 year old man with urinary and fecal incontinence after stroke	NP, CP/Needle removal, Cup removal

**Recommended Case Logs/Procedures:**

Needle placement: 1

Needle removal: 20

Cup placement: 10

Cup removal: 20

Ailments: make sure you see at least 5 patients encounters of the following common ailments:

- Back pain
- Weight loss
- Insomnia
- Arthritis
- Pain (Other)
- Stroke

Make note of the less “common” ailments, ie. Intractable hiccups.

**Formal lectures and class room activities:**

There are a limited number of formal lecture or classroom activities in this elective, however there was ample time at the end of clinic to review the basics of acupuncture, moxibustion, and cupping as well as to answer any questions from the day.

**Areas of study/preparation to be completed before the rotation:**

- Review a basic medical textbook to understand the basics of acupuncture and traditional Chinese medicine before beginning the course (see reading below, often obtaining a good acupuncture book is difficult)
- Visit an acupuncture clinic in the US before departing to China. The outpatient clinic at Briarwood offers several integrative medical clinics, some of which include acupuncture.
- Arrive in Shanghai a few days before starting the rotation to have the opportunity to get settled and oriented to the city.

**Recommended readings and review material**

Note: Finding a good acupuncture book is difficult. Translations are not always the best. SJTU has a few good books on hand that they may be able to loan you:

- Essentials of Chinese Acupuncture, 1993, People's Medical Publishing House
- Chinese Acupuncture and Moxibustion, 1987. Foreign Language Press. Beijing.
- Basic orientation to Acupuncture (several online encyclopedias have good introductions to acupuncture, and then citations provide more comprehensive material)
- Charts of Chinese Standard Location of Acupoints (Google this for one of your preference)
- Lonely Planet Chinese Phrasebook

See references section for more information.

**CONTACT INFO**

Faculty:

*Xiang, Qiong Yao* ([xiangqiongyao@hotmail.com](mailto:xiangqiongyao@hotmail.com)), 021 6437 0045 x668101)

Xiang (surname) Yi sheng (means doctor in Chinese) is one of the most effective mentors and teachers that we worked with. She has been practicing acupuncture at Ruijin Hospital for 18 years and has an extensive group of patients. Her practice is a general acupuncture practice where she sees patients with pain, arthritis, intractable hiccups, etc. Her specialty is weight loss and she sees quite a few medical professionals. Her training was completed at the Traditional Chinese Medicine medical school in Shanghai (one of the three major medical schools). Her English is superb and she'll always explain things with a cheerful demeanor. She knows her patients very well and thus she is able to recount each of their histories in a few seconds.

**Wu, Ping** (rjmc@163.com)

We did not interact with her on a clinical basis. But Wu YiSheng is a student coordinator, and she was able to arrange our rotation and logistical things for us (ex. loaning us books, coordinating with SJTU students, etc.). She also had great English.

### **USER'S GUIDE (Also: see photographic appendix)**

#### **What else to expect:**

##### Transportation

Transportation by bus, subway, and taxi are available in the area around the hospital. The 24 and 106 bus goes from the Jin An Temple area to the hospital. The Metro (subway) is new and easy to use and has several lines that pass close to the hospital. See the hospital website for more details. [www.exploreshanghai.com](http://www.exploreshanghai.com) is an encyclopedia of all of the subways in Shanghai. It includes timing of trains and cost for different routes. Obtain a long-term subway card at a service center in any subway station, which costs 20 yuan in addition to the fee that you pay to travel. Also, a taxi cab can be an inexpensive option (\$2 from the Jin An Temple area).

<http://www.rjh.com.cn/chpage/c1352/>

##### Housing

*ErYi hotel*

Addr: 227 South Chongqing Road, Luwan District, Shanghai 200025, China

This is the one arranged by Shanghai Jiao Tong University. Very clean and nice, \$40 for a double room, but laundry in the area is quite expensive (\$1 for some items). Also the reception staff may not speak perfect English. 10 min walk from the hospital.

*Shanghai Blue Mountain Youth Hostel*

Addr: No1,1072 Nong,QuXi Road, Shanghai, China 200023

Tel:86-21-63043938 [expo@bmhostel.com](mailto:expo@bmhostel.com)

<http://www.bmhostel.com/en/gyls.html>

Simple, clean, with cheap laundry, common room, and good English at reception. \$15 a day per person. Many good small eateries in the area and this hostel is located less than 30 meters from the #4 Metro line. 30 min walk from the hospital.

*Sublet*

Difficult to find a short term sublet, but it is possible through agencies geared towards expats.

Food:

Local food is inexpensive by American standards. A traditional Chinese breakfast of Da Bing (sweet or salty rolls) and Yo Tiao (churros without sugar) with soymilk will cost less than \$1. Lunch near the hospital can also be quite cheap if you go with small local chains or fast food joints. A bowl of wonton soup that will satisfy you until dinner can cost \$1.50. If you are interested in more western options, such as Starbucks or Pizza Hut, this is available, but will cost western prices. Budget appropriately.

Currency:

The exchange rate (03/2011) is 6.5 yuan to the dollar. This can be exchanged at any large bank. Several credit cards charge low foreign transaction fees (including Capital One), and many debit cards such as Fidelity reimburse fees on foreign ATMS (this is a good option because the exchange rate is often quite good). Check the latest information, but a Capital One credit card (1% transaction fees) and Fidelity Investments debit card were good options in 2011.

Insurance:

HTH insurance is the provider that University of Michigan uses. This insurance cost \$1.25 per day and \$5.00 for an administrative fee. The insurance covers most health urgent and emergent care including evacuation service. It does not cover natural disasters, terrorist attacks, or accidents that occur while under the influence of alcohol, drugs, or on a motor bike. It is advisable to look closely at the plan and note if you need any supplemental coverage as the plan may change.

Some Chinese Survival tips:

- Toilet paper and hand washing soap are not ubiquitous, even in the hospital, so always carry some toilet paper and bring plenty of hand sanitizer from the US.
- Acupuncture, though it uses small needles, involves some drops of blood. In these situations you may be more comfortable using protective gloves (which the Chinese physicians do not use). Bring a box of protective gloves if you find you would like that extra protection.
- If you do not speak Chinese, a laser pointer is helpful for ordering food when the menu is behind a counter.

Language:

Some useful phrases to use when on the wards (spelled phonetically)

Good morning <i>Tsao she-ang hao</i>	I'm done <i>tswa wan lur</i>	Needles are out <i>Tsun su may yo lur</i>
How are you? <i>Nee hao ma?</i>	Does this hurt? <i>Tongue bew tongue?</i>	Thank you <i>Shee-yeah Shee-yeah</i>

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**Suggested improvements on offered activities:**

- Meet with the Chinese medical students from Shanghai Jiao Tong University who rotated at the University of Michigan the year earlier. We spent 2.5 hours with the students and split up into groups of 4-5 Chinese students per medical student. In our small groups there was no formal discussion topics but we discussed Chinese

and American culture and medicine, their opinions on and training in Traditional Chinese medicine, and their recommendations for food and activities in Shanghai. They were able to provide helpful advice about activities during our time in Shanghai, but this was done with only a few days left in our rotation. It would be great to meet with them twice during the rotation - once to get suggestions about what to do in Shanghai and their experience in America and the other to discuss our experiences. We exchanged emails at the end of the gathering.

- Offer the chance to visit the private pay clinic or other parts of the hospital. As most rotating students are 4<sup>th</sup> years, seeing their field of practice in a Chinese hospital can be really interesting!

**Suggestions for additional activities/experiences for future rotations:**

- It would be helpful to visit an acupuncture clinic in the US before departing China to provide a comparison between the two settings. Additionally, try to spend a day shadowing a family medicine practitioner in an integrative medicine clinic with Chinese patients. (Some students were able to work with Dr. Gary Yen at Brighton Family Practice as part of their family medicine rotation, and perhaps students could ask him to shadow before going to China. There also might be a Chinese Clinic at Dominos Farms but no one on the trip had worked there) Some patients will be coming from the inpatient ward or massage clinic. Take a chance to visit your patient here and see how their treatments compliment each other.
- Several patients come to the clinic on alternating days (two days a week, three days a week, or every day if inpatient). Since you will see them several times, choose two patients with different ailments early on and see how their treatment varies from day to day. Pay close attention to where the needles/cups are placed and the reasoning behind the placement. It is possible to take photos of the placement during clinic (with the patients consent), and then it is possible to go over the placement of each needle with the Dr. after clinic. Based on our experience 1-5% of the patients speak very good English, if your Chinese isn't fluent, perhaps these would be good patients to choose, as you discuss their

treatment in more detail and learn what Western medicine they use.

**Creative things for developing curricula:**

- It would be great to visit with students of Shanghai Jiao Tong School of Medicine and perhaps visit their school or classroom. Comparing their lecture notes to the material we have at home was very interesting..
- If feasible, a home visit to meet a Chinese family would be very helpful. Much like the FCE experience, it would be a way to see how the patient's illness, and subsequent treatment with Traditional Chinese Medicine has affected the patient's family. Traditional Chinese Medicine patients require frequent visits and they must obtain their own injectible drugs for the physician to inject. It would be interesting to have conversations with patients to understand how this health care planning impacts their work and home lives. Have UMMS students who speak Chinese give 1-2 sessions on Chinese to help interact with the patients and to help with transportations issues, etc. The dialect of Chinese spoken in Shanghai is somewhat different from the Lonely Planet Chinese Phrasebook.
- We recommend that a student pair this elective with a vacation month and spend the other month traveling around China and Asia.

**Conclusion:**

International clinical electives are enlightening experiences. They provide not only clinical knowledge, but also a better understanding of foreign cultures. The program at Shanghai Jiao Tong University's Ruijin Hospital is fantastic because of the quality of teaching, the availability of medical students as resources, and the unique backdrop that only a cosmopolitan city like Shanghai can provide.

Hospital Address:

Rui Jin Hospital  
Shanghai Jiao Tong University School of Medicine  
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Zip Code:200025  
Telephone:(86-21)64370045  
Email:ruijin @rjh.com.cn

### Sample References and Good Websites

- <http://www.nlm.nih.gov/medlineplus/acupuncture.html> Good overview and recent news on acupuncture. Links to interactive videos and general information. Also, good information on research.
- <http://nccam.nih.gov/health/acupuncture/introduction.htm> Basic introduction from National Center for Complementary and Alternative Medicine.
- <http://www.nlm.nih.gov/archive/20040823/pubs/cbm/acupuncture.html> bibliography used at (NIH) Consensus Development Conference on Acupuncture 1997
- <http://consensus.nih.gov/1997/1997acupuncture107html.htm> 1997 NIH Consensus Statement on Acupuncture.
- Weitzel MS et al. *Courses Involving Complementary and Alternative Medicine at US Medical Schools*. *JAMA*. 1998;280(9):784-787. *Teaching Acupuncture and TCM in American medical schools* “There is tremendous heterogeneity ... at US medical schools.”
- Kaptchuk, TJ. *Acupuncture: theory, efficacy, and practice*. *Annals of Internal Medicine*. 2002;136(5):374–383. Review of RCTs and 25 systematic reviews and meta-analyses. Also gives info physiologic effects of acupuncture (opioid mechanisms, fMRI data, gene expression of neuropeptides, etc).
- Commercial training program info. <http://www.acupuncturechina.org/elective.html>