ECE Quick Facts

How many ECEs are required?

- ≥ 1 hour at a designated ECE site **once per semester**

Does it matter where I do them?

- It must be a **designated ECE site** (you can set up your own, but Dr. Hendriksz has to help credential your preceptor 4-6 weeks before your scheduled ECE)
- ≥ 1 of your ECEs each **academic year** need to involve **performing or observing OMT**

What are the prerequisites?

- BLS certification
- OSHA certification (component of the **Medical Jurisprudence** course in OD1)
- HIPAA training (component of the **Medical Jurisprudence** course in OD1)
- Required immunizations/titer levels (as required by **TUC Student Health**)
- Up-to-date physical exam (as required by **TUC Student Health**)

How do I get credit?

- You need to complete the **ECE Student Site Evaluation Form** within 72 hours of your ECE
- And your preceptor needs to complete the **ECE Preceptor Form** within 1 week of your ECE
Early Clinical Experiences at Touro University California
College of Osteopathic Medicine

Table of Contents
1. Introduction and ECE Objectives ..............................................................................3
2. List and description of current ECE sites .................................................................4
3. Frequently Asked Questions About ECE Sites .........................................................7
4. Student Expectations & Preceptor Expectations .......................................................8
5. ECE Preceptor Form ..................................................................................................10
6. ECE Student Site Evaluation Form ............................................................................11
7. Sample Osteopathic History and Physical .................................................................12
8. SOAP Note Template ................................................................................................16
9. Teaching Tips and Strategies for Clinical Preceptors ................................................17
10. Identifying Characteristics of a Learner .................................................................18
11. Qualities of an Effective Clinical Educator .............................................................19
12. Clinical Teaching Pearls ..........................................................................................20
   a. Motivating Students ..............................................................................................22
   b. Thinking Out Loud ...............................................................................................23
   c. Experience is the Best Teacher ............................................................................24
   d. Have the Learner Present in Front of the Patient ................................................25
   e. One-Minute Preceptor .........................................................................................26
13. TUCOM ECE Contact Information .........................................................................29
Introduction

Touro University California College of Osteopathic Medicine (TUCOM) has a unique integrative curriculum that allows for students to acquire a sound foundation in the basic sciences while understanding how that foundation relates to patient care. The first two years at TUCOM, known as the preclinical years, are spent on the Vallejo campus primarily learning through lecture, laboratories, small-group discussions, and simulated patient scenarios. The workload during these preclinical years is intense, and without early clinical exposure it may be difficult for the learners to see how their current coursework relates to their long-term careers.

Early Clinical Experiences (ECE) are structured opportunities during the preclinical years for osteopathic medical students to gain exposure to clinical medicine. These formalized activities are completed for credit as an important component of the first and second year Osteopathic Doctoring courses. TUCOM currently offers a variety of opportunities for ECE, each of which has common objectives:

• To increase patient contact time during the preclinical years, thereby enhancing empathy towards the patient experience and increased awareness of doctor-patient relationships
• To increase curiosity, interest, and humanism of the disease processes that are observed and discussed, thereby motivating learners and making the material easier to remember
• Provide authentic examples of how basic science relates to the clinical aspects of medicine
Efforts are continuously being made to increase the number of formal ECE sites, as well as the required number of ECEs per student. Currently, the Early Clinical Experiences program at TUCOM consists of spending at least one hour at a designated ECE site once per semester during the preclinical years (4 times total during the first 2 years of medical school.) One of the students’ ECEs each academic year must be at an osteopathically-focused site (SRFC, SAAO Lunchtime Clinic, Suitcase Clinics, Health Fair providing OMT, etc).

Prior to participating in ECE, the medical students need to have completed their Basic Life Support (BLS) course, the Occupational Safety and Health Administration (OSHA) training, Health Insurance Portability and Accountability Act (HIPAA) training, and have evidence of completion of the required immunizations (and/or titer levels.) In order to receive ECE credit the student must fill out and turn in a site evaluation form, and the supervising healthcare provider must complete the ECE preceptor form (or attendance sheet).

The current sites (each blue title serves as a hyperlink to a website with more information about each site) include:

*The Berkeley Suitcase Clinic (General Clinic or Women’s Clinic) – available to all students

The Suitcase Clinic is a humanitarian student organization and volunteer community offering free health and social services to underserved populations since 1989. You can do H&Ps, practice OMT, and help to provide general healthcare services at these fantastic experiences. Contact the TUCOM OMM Department for more information about how to sign up.

DEEP (Diabetes Education and Empowerment Program) – available to all students

DEEP is a community-based diabetes education series led by Touro students and supervised by TUC faculty. This 6-session series of 1.5 hour classes is held in the community. Students are expected to co-coach these sessions after completing the necessary training. Interested students can reach out to Anne Lee, Diabetes Programs Coordinator, at 638-5970, or anne.lee4@tu.edu.
Global Center for Success (aka The Success Center) – available to students in OD1 & OD2
The Global Center for Success is a nonprofit organization benefitting the homeless and underserved community in Vallejo. The mission of the Success Center is to develop and teach life skills for success focusing on personal growth, health and wellness and employment for a global community. During this ECE students are paired up with a Success Center client to take a thorough screening health history with emphasis on the psychosocial aspects of health. Afterwards the students meet in a group with a physician and a social services case manager to discuss their findings, recommendations, and experiences.

MOBEC (Mobile Diabetes Education Center) – available to all students
MOBEC is a moving classroom that seeks to raise awareness about diabetes and pre-diabetes, help provide timely disease screening, lead physical activity session and patient centered education. Students who work on the MOBEC will be trained to perform these activities. While at the clinical site you will be interacting with the public and providing much needed services to those in need. The MOBEC goes out approximately 3 times per week for 3-6 hours. Interested students can reach out to Anne Lee, Diabetes Programs Coordinator, at 638-5970, or anne.lee4@tu.edu.

Piner’s Nursing Home – available to students in OD3 & OD4
Piner’s Nursing Home is one of the premier long term care facilities in Napa, California. They emphasize community and the comforts of home for their residents. At this site the students will have the opportunity to do a complete history and physical on one of the geriatric patients.

*SAAO Lunchtime OMM Clinic – available to all students
Practice your History and Physical Examination, and OMT skills on campus during the TUCOM Student American Academy of Osteopathy Chapter’s lunchtime OMT Clinic. Contact the student leaders of SAAO for more information about how to volunteer.

Solano County Family Health Services Clinics – Pediatrics – available to all students
This is the Solano County Clinic where the clinical faculty practices medicine. At this site you will work with third and fourth year students who are rotating with the pediatric faculty (Drs. Farrell and Hendriksz). This experience will give preclinical students a glimpse into clinical rotations.
**Sutter Solano Cancer Center** – available to students in OD2, OD3, & OD4
The Sutter Solano Cancer Center is recognized as one of the nation’s leading cancer centers and is proud to offer advanced oncology care in a beautifully designed 20,000 square-foot care center that provides nurturing and healing environment. At this site students will have the opportunity to work with oncologists as they see and care for patients with cancer.

* **Touro Student-Run Free Clinic** (SRFC) – available to all students
The Student-Run Free Clinic (SRFC) is a free clinic organized and staffed by students from Touro University California. A licensed clinician provides direct, on-site supervision. The SRFC was developed in order to foster a relationship between the city of Vallejo and Touro University by providing a valuable resource for low-income residents of Vallejo. Many TUCOM students choose to work at the SRFC by taking medical histories, performing physical examinations, and offering osteopathic manipulative treatments. Now students can receive ECE credit for the time that they spend volunteering at this amazing clinic.

**Vallejo City Unified School District (VCUSD) School Based Clinics** – available to all students
Dr. Hendriksz is the medical director for the two pediatric clinics that are located on the campuses of two local elementary schools. Students who choose this site will have the opportunity to work with a pediatrician or a nurse practitioner to see uninsured children from 1 year to 19 years of age. The students may have the opportunity to participate in all aspects of the visits including taking vital signs, obtaining medical histories, performing physical exams, and giving vaccinations. Students who want to partake in this opportunity must clear a specific school district fingerprint screen prior to their ECE.

**The Veterans’ Home of California-Yountville** – available to all students
The Yountville Veterans’ Home is the largest veterans’ home in the United States. It offers residential accommodations, independent living, outpatient clinic care, assisted living, skilled nursing, and transitional housing. There are a number of opportunities for students to shadow and work with the veterans at this amazing facility.
* Osteopathically-focused site

Please note that sites are available on first-come-first-serve basis, and are subject to change. If anyone has information on new potential ECE sites, please contact Dr. Tami Hendriksz, Assistant Dean of Clinical Integration (tami.hendriksz@tu.edu).
Frequently Asked Questions about the ECE sites:

1. Do I have to do my ECE during the formal ECE times that are listed on our class schedules?
   a. No, you can complete your ECE at any time, as long as it does not conflict with scheduled curricular activities.

2. I know a physician who is willing to precept me. Can I set up my own ECE?
   a. Absolutely! But, you need to contact Dr. Hendriksz well in advance so that we can make sure that your preceptor is credentialed with Touro (a fairly simple process), and ensure that the facility allows preclinical students.

3. What else counts towards ECE?
   a. Any experience that you have that involves actively interacting with community members/patients. This includes volunteering at the Student Run Free Clinic, the Women’s Suitcase Clinic, the General Suitcase Clinic, the School Based Clinics, the SAAO Lunchtime Clinic, Health Fairs where you are providing OMT.
   b. How do I get ECE credit for those activities?
      i. By having your clinical preceptor fill out the Preceptor Evaluation Form, and by completing the Student Site Evaluation Form.

4. I cannot make it to my scheduled ECE time. What should I do?
   a. Notify Dr. Hendriksz and Ms. Grimsley immediately. Find a classmate who can trade times with you. Realize that you may be jeopardizing your opportunity to complete one of our ECE experiences (and you may need to find your own ECE and follow the steps outlined above in Question 2.)

5. What should I bring to my ECE?
   a. Check with your ECE site for specifics, but at minimum plan on dressing professionally, wearing your clean white coat, your name tag, stethoscope, and the ECE preceptor form.

6. What happens if I don’t do an ECE each semester, or if I don’t complete an OMT-based ECE in an academic year?
   a. Then you will receive an Incomplete for your grade in Osteopathic Doctoring. Completing the required missing ECE, and the necessary paperwork, will constitute the remediation process.

7. Can I complete my ECE at the same site each time?
   a. Yes (as long as it is an osteopathically-focused site), although you may benefit from experiencing a variety of different sites.
TUCOM Early Clinical Experiences

Student Expectations

- Complete all prerequisites prior to starting your ECE:
  - BLS certification
  - OSHA certification (component of the Medical Jurisprudence course in OD1)
  - HIPAA training (component of the Medical Jurisprudence course in OD1)
  - Required immunizations/titer levels (as required by TUC Student Health)
  - Up-to-date physical exam (as required by TUC Student Health)
- Show up to your designated ECE site on time (ideally 10 minutes early)
- Bring all necessary paperwork (including the preceptor form, and potentially the student’s immunization/titer records and malpractice insurance information depending on the site’s requirements)
- Dress professionally (with a clean white coat and name tag)
- Notify the ECE site, Dr. Hendriksz, and Ms. Grimsley a minimum of 72 hours in advance if you cannot attend your scheduled ECE session - failure to do so (without an excused absence) will result in a negative Professionalism Report and potential failure of the Osteopathic Doctoring course
- Be enthusiastic with an open mind and willingness to learn from the experience
- Behave in a respectful and professional manner that is representative of yourself, TUCOM, and all osteopathic physicians
- Turn in all required paperwork to Ms. Grimsley within 72 hours of completion of your ECE session
  - Required paperwork:
    - ECE Student Site Evaluation Form (must complete online version)
    - ECE Preceptor Form (completed by your preceptor)
TUCOM Early Clinical Experiences
Preceptor Expectations

- Notify Dr. Hendriksz and Ms. Grimsley a minimum of 72 hours in advance if you are no longer able to precept a scheduled session
- Be ready to orient your assigned ECE student(s) promptly when the ECE session is scheduled to begin
- Complete the Preceptor Form (or sign an attendance sheet) and return to the student to turn in to Ms. Grimsley (encourage your preceptor to complete the online version)
- Teach the students through observation and/or direct experience the important aspects of clinical medicine (including professionalism, doctor-patient relationships, clinical reasoning, and utilizing basic science knowledge to solve clinical problems)
- Ensure that students are given the appropriate supervision and following protocols per hospital/clinic/facility agreement and understanding
Touro University California
College of Osteopathic Medicine
Early Clinical Experiences Preceptor Form

Preceptors: click here to complete the online version

Preceptors are encouraged to complete the online version

Student Name: ______________________________
Student ID Number: _________________________
Date & time of Early Clinical Experience: ________________
Name of ECE Site: ________________________________
Preceptor Name: _________________________________

☐ Check the box if the student performed OMT during this ECE

I verify that the above named student attended and participated in the ECE at the stated date and time.

______________________________________________
Preceptor Signature

Preceptor comments/feedback (optional):
# Early Clinical Experiences Student Site Evaluation Form

**Students: click here to complete the online version**

**Students must complete the online version of this evaluation**

Student Name: ______________________  Student ID Number: __________

Date & time of Early Clinical Experience: __________________

Name of ECE Site: ________________  Preceptor Name: ____________________

Use the following rating scale, circle the number which best describes your evaluation of the ECE session, with 1 standing for the worst/least and 5 standing for the best/most.

Use the back of this form for additional space for you positive or negative comments.

<table>
<thead>
<tr>
<th>1. How do you rate your overall experience at this ECE?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. How engaging was your preceptor?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. How motivated are you to learn more about something that you saw or experienced during this ECE?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. How much did this experience increase your awareness of doctor-patient relationships?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. How much did this experience enhance your empathy towards the patient experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. What was the best part about this ECE? And why?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. What was the worst part about this ECE? And why?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Please note that any feedback for the preceptor and/or the ECE site will be collected and delivered to the preceptor and the site as an aggregate with all identifying student information removed.*
SAMPLE OSTEOPATHIC COMPREHENSIVE HISTORY

**CC:** How can I help you today? What brings you in today?

**HPI:** Please tell me more. What other symptoms are you experiencing?

- **Onset:** When did it start? Has it happened before?
- **Location:** Please point to where your pain is. Does it radiate?
- **Duration:** How long does it last?
- **Character:** Please describe your symptoms (e.g. burning, stabbing, cramping)
- **Aggravating/Associated:** What makes it worse? Are there any other symptoms?
  - **Relieving:** What makes it better? What have you taken or tried to relieve the pain?
- **Temporal:** Please describe the timing of events. Does your pain occur more during a particular time of day or after any particular activities? Is it related to an injury?
- **Severity:** On a scale of 1 to 10, with 10 being the worst pain you can imagine, what number describes your pain?

**PMH:** Have you been treated previously or are you currently being tested for any health problems (like diabetes, heart disease, high cholesterol, asthma, cancer or thyroid dz)? Have you ever been hospitalized overnight? If yes, what was the date (approximately)?

**Trauma Hx:** Have you ever been in any major accidents? Have you had any significant trauma, or falls? Have you been abused emotionally or physically in the past or present?

**PSH:** Have you ever had any surgeries, either inpatient or outpatient? If yes, what was the date of surgery? Were there any complications?

**MEDS:** Are you currently taking any prescription medication, over-the-counter medications, vitamins, supplements, or herbal remedies?

**All:** Do you have any allergies to medications? Food allergies? Latex allergy? If yes, what was the resulting reaction?

**FH:** Are there any significant medical problems involving your parents, siblings, grandparents or children? Are your parents alive? How old are they? Any family history of cancer?

**SH:** Where do you live and who else lives there? Do you feel safe at home? What kind of work do you do? Are there any potential hazardous exposures? Do you have any pets? How would you describe your diet? Do you or have you ever smoked? Alcohol? Recreational Drugs? Do you drink any caffeine? Is there a set of spiritual beliefs that you want me to know about in regards to your healthcare? Are you currently in a relationship? Do you have sex with men, women, or both? Do you practice safer sex (define “safer sex”)? What do you use for birth control?
**ROS** (the following is not a comprehensive list of questions) - *remember to avoid compound questions (ask one item at a time), use layman terminology (that the patient will understand), and ask follow-up questions if the patient responds in the affirmative.*

**General:** Have you experienced fever, chills, night sweats, unexplained weight loss or generalized weakness?

**HEENT:** Have you had any headaches, or changes in vision, hearing, or sense of taste or smell? Do you have nasal congestion or rhinorrhea?

**RESPIRATORY:** Have you noticed any cough, shortness of breath, wheezing or hemoptysis? Do you get respiratory infections more frequently than expected?

**CARDIOVASCULAR:** Have you had any chest pain, palpitations, leg swelling, or changes in exercise ability? Orthopnea? Claudication? Paroxysmal nocturnal dyspnea?

**GASTROINTESTINAL:** Have you noticed any changes in appetite, heartburn, swallowing problems, abdominal pain, diarrhea, constipation, or red/black stools?

**GENITOURINARY:** Have you noticed any changes in frequency or ease of urination; pain or bleeding with urination? Have you experienced problem or pain with sexual activity?

- **MALE:** Have you experienced any impotence, genital lesions, penile discharge, scrotal masses, or testicular pain?
- **FEMALE:** Have you noticed any genital lesions, changes in vaginal odor, vaginal discharge or itching?

**MENSTRUAL HISTORY:** How old were you when you started having periods? How long do your periods last? Would you describe your flow as light, medium, or heavy? Are your periods regular? What is the interval between periods? Do you have any bleeding between periods, or menstrual pain? When was the first day of your last menstrual period? When was your last pap smear? Have you ever had an abnormal pap smear?

**OBSTETRIC HISTORY:** Have you ever been pregnant? How many children do you have? Were any of them premature? Have you ever had a miscarriage or abortion? Were your deliveries vaginal or C-section? Any complications with pregnancy, delivery, or postpartum?

**MENOPAUSAL HISTORY:** At what age did you go through menopause? Do you experience hot flashes, mood or memory changes, or any bleeding since menopause?

**BREASTS:** Do you perform monthly self-breast exams? Have you ever noticed lumps, pain, skin change, tenderness or discharge? When was your last mammogram? Any abnormal mammogram?

**MUSCULOSKELETAL:** Do you have any pain in your joints, back, arms, legs, or muscle stiffness?

**NEUROLOGIC:** Have you ever had blackouts, seizures, loss of memory, numbness, paralysis, tingling, or unsteadiness when you are walking?

**ENDOCRINE:** Have there been any recent changes in your weight, eating habits, thirst, urination, heat or cold intolerance?

**DERM:** Have you noticed any changes in moles, hair, skin or nails? Do you have any rashes? Have you noticed any bruising or bleeding?

**PSYCH:** Do you have problems with anxiety, depression, mood or memory changes? Have you had any changes in your sleep patterns? Have you ever attempted suicide?
SAMPLE OSTEOPATHIC COMPREHENSIVE PHYSICAL EXAMINATION

**Vital Signs:** Temp, pulse, respirations, blood pressure, pain scale (location), height, weight & BMI

**General:** Well developed, well-nourished, pleasant, cooperative and alert. Appears stated age. Appears healthy and in no apparent distress.


**Neck:** supple, no anterior/posterior cervical nor supraclavicular lymphadenopathy. No neck masses. No thyromegaly or nodules.

**Resp:** Clear to auscultation bilaterally, chest movement symmetric. No crackles, wheezes, or rhonchi. No supraclavicular or substernal retractions. Normal AP diameter. No clubbing of extremities.

**CV:** Regular rate and rhythm. Normal S1 & S2. No S3 or S4. No murmurs, rubs or goblins. No heaves. No jugular venous distension. PMI 2 cm lateral to midclavicular line at the 5th intercostal space, 2 cm in diameter. 2+ radial, femoral, dorsalis pedis, and medial malleolar pulses bilaterally. No carotid, abdominal, or femoral bruits. No bruising, cyanosis or edema.

**Abdomen:** Non-distended. Normal active bowel sounds. No tenderness with light or deep palpation of all four quadrants. No masses or hepatosplenomegaly.

**GU:** Uncircumcised penis, without lesions or discharge. Testes symmetric, no hernias.

**Rectal:** Normal sphincter tone, prostate enlarged, left lobe larger than right.

**Musculoskeletal:** Normal gait. Upper and lower extremities 5/5 strength, symmetric. Full range of motion of extremities. Muscle tone normal.

**Neuro:** Sensation to light touch intact. Cranial nerves II-XII grossly intact. DTRs 2+/4, symmetric upper and lower extremities. Normal cerebellar function (finger to nose, rapid alternating movements, heel to shin, gait, Romberg). No abnormal movements or tremor.

**Skin:** No evidence of cutaneous lesions or rash, temperature or color changes noted. Warm & dry to palpation.

### Osteopathic Structural Findings

<table>
<thead>
<tr>
<th>Region Evaluated</th>
<th>Severity (0,1,2,3)</th>
<th>Somatic Dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Cervical</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Thoracic</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Lumbar</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Sacrum</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Innominate/Pelvis</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Lower Extremities</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Upper Extremities</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Ribs/Diaphragm</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
<tr>
<td>Abdomen/Other</td>
<td>0</td>
<td>No tissue texture changes, asymmetry, restriction, or tenderness noted</td>
</tr>
</tbody>
</table>
LAB: (date)

X-RAY/Studies: (date)

1. Assessment #1: Working Dx and DDx
   **PLAN:**
   
   Meds:
   
   Labs:
   
   X-ray / imaging studies:
   
   OMM:
   
   Pt Education:
   
   Follow-up/referral:

2. Assessment #2/Plan

3. Assessment #3/Plan
Although not a requirement for ECE, all students are encouraged to practice their SOAP Note writing skills with every clinical encounter. Dr. Hendrikz will be happy to review your SOAP Notes and provide feedback. Practice a timed 9-minute SOAP Note here: [https://www.nbome.org/eSoap-Demo.asp](https://www.nbome.org/eSoap-Demo.asp)

**(NBOME) SOAP Note Template**

<table>
<thead>
<tr>
<th>Student Name:</th>
<th>Date of Encounter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Name:</td>
<td>DOB:</td>
</tr>
</tbody>
</table>

**S:**

**O:**

**Assessment:**

**Plan:**
The following pages may be more relevant when working with third and fourth year medical students on their clinical rotations, but some of the information may be useful for preceptors of preclinical students during their Early Clinical Experiences.

**Teaching Tips and Strategies for Clinical Preceptors**

**Why Teach Medical Students?**
- Obligation to return some of the teaching you received in medical school
- Personal fulfillment as a good educator
- Being able to interact with medical students, the bright young minds of tomorrow
- Refining your own skills as a clinician and as a teacher
- Keeping abreast of the latest medical knowledge
- Recognition by colleagues and patients as an educator
- Academic acknowledgment

**What Medical Students are Looking For:**
- Adequate number and wide variety of patients
- Supervision by an enthusiastic preceptor who gives prompt feedback
- Preceptors who are willing to discuss their reasoning processes
- Preceptors who are willing to delegate responsibilities
- Having quality teaching rounds and conferences

**Five Attributes of an Effective Preceptor:**
1. Demonstrates professional expertise
2. Actively engages students in learning
3. Creates a positive environment for teaching and learning
4. Demonstrates collegiality and professionalism
5. Discusses career-related topics and concerns

**How Students Differ From Residents:**
- Preceptor interaction is most important for students
- Residents most value issues pertaining to patient logistics
- Learning resources are less valued in early and late training
- Teaching and case review is less valued as learners advance in training
- Students desire more structure, more explanation, and more supervision. This desire decreases as level of experience increases.
### STAGES OF LEARNING:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Learner’s behavior</th>
<th>Teacher’s behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconscious incompetence</td>
<td>Lacks knowledge of even what it is that cannot be done</td>
<td>Orient learner to skill; explains rationale for learning skill, objective, and performance outcome; demonstrates skill (“see one”); gives motivational feedback</td>
</tr>
<tr>
<td>Conscious incompetence</td>
<td>Cannot perform the skill but knows what it is that cannot be done</td>
<td>Guides initial attempts of learner to perform the skills; observes learner practice (“do one”) and gives frequent and ongoing informational feedback</td>
</tr>
<tr>
<td>Conscious competence</td>
<td>Can perform the skill but has to work (hard) to get through the skill (because of demands of “cognitive processing”)</td>
<td>Allows more independent practice (“do many more”) and decreases learner’s reliance on teacher feedback</td>
</tr>
<tr>
<td>Unconscious competence</td>
<td>Performs skill automatically and confidently (on “auto pilot”)</td>
<td>Provides greater distance from the learner and interferes less</td>
</tr>
</tbody>
</table>

### EXPERT VERSUS NOVICE PROBLEM SOLVING SKILLS:

<table>
<thead>
<tr>
<th>Novice</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tends to get mired in details and treats every detail as equally important</td>
<td>Easily discerns important features and patterns (“pattern recognition”)</td>
</tr>
<tr>
<td>Fact laden, but retrieves relevant facts slowly</td>
<td>Demonstrates content expertise that is organized in ways that reflect deep understanding</td>
</tr>
<tr>
<td>Has no context for application</td>
<td>Has conditional knowledge that demonstrates multiple contexts of application</td>
</tr>
<tr>
<td>Exerts efforts to retrieve details</td>
<td>Effortlessly retrieves detailed knowledge</td>
</tr>
<tr>
<td>Focuses on surface features of problem</td>
<td>Focuses on source of problem</td>
</tr>
<tr>
<td>Jumps to conclusions &amp; demonstrates flawed thinking by faulty synthesis &amp; ignoring key data</td>
<td>Avoids snap judgments and is willing to change mind; pays attention to clinically significant details</td>
</tr>
</tbody>
</table>
Qualities of an Effective Clinical Educator

Personal
- Teach with enthusiasm
- Teaching is its own reward
- Treating students with respect
- Providing a role model
  - Clinical Competence
  - Professional Behavior
- Most common transgressions
  - Derogatory language toward other services
  - Derogatory language toward patients
  - Disrespectful treatment of staff and patients

Teaching Philosophy
- Intrinsic motivation is better than extrinsic motivation (test, grade)
- Aim for a higher level of cognition than accumulation of facts
  - Information learned should be filtered into a structured and organized format for use in future clinical scenarios
- Learning complex concepts and then utilizing them takes time

Teaching Behavior
- Inspiring confidence in medical skills
- Explaining the decision making process
- Actively involve students in the learning process
- Promote learner autonomy
- Communicate expectations for performance
- Focus on what they really need to know as practicing physicians

Barriers to effective clinical teaching
- Hectic and unpredictable schedule of patients
- Patient privacy and confidentiality concerns
- Complex cases
- Administrative responsibilities
- Balancing the time available for teaching and patient care
- Inexperience with bedside teaching
- Lack of self confidence
- Lack of effective teaching skills
Techniques to Prevent Students from being overwhelmed or overwhelming you

Orientation
- Clear goals and objectives of the rotation
- Administrative details of the rotation
  - Patient flow
  - Computers / Charts / Paperwork
- Patient Selection
- Preceptor directed
- Autonomy based on abilities

Reassurance
- Not alone in patient care
- Keep pace reasonable
- Priority is on learning
- Responsibility is to primary patients

Structure the experience
- Patient Selection
- Presentation Format
- Evaluation / Feedback Format

Clinical Teaching

Administrative Aspects
- Guide the student in their selection of patient to meet their level of ability
- Allow student time to complete directed H& P
- Allow time to review records and develop presentation

Student Presentation
- The case presentation is the PRIME FOCUS of the preceptor-student interaction
- Inform the student what you expect from the presentation
- Allow student to finish without interruption
- Expect student to develop a differential diagnosis list and an evaluation and treatment plan
  - Gives insight into their thought process
  - Identifies their level of knowledge on subject
Feedback is a crucial tool in effective teaching
- Identify areas of strengths and weaknesses
- Offer suggestions to aid improvement

Generalize the learning
- Give Rules of Thumb or Clinical pearls not available by reading
- “Do this” turns into “do this every time” unless accompanied by an explanation.

Promote reflection
- Encourage students to self-evaluate
  - Knowledge
  - Skills
  - Experiences

Observation of Students
- Can limit it to a portion of the history or physical
- Planned observation of specific portion
- “Incidental” observation
  - Professionalism
  - H&P skills

Interesting Patients / Findings
- Allows student to view a wide variety of disease without specific patient care responsibilities
- Increases chance of seeing patients with less common disorders
- Can be presented as “mystery” diagnosis
- Quick, directed teaching points
- Non-human encounters
  - ECGs
  - Radiographs
  - Old case presentations
The following excerpt comes directly from the Teaching Tips of the Association of Professors of Gynecology and Obstetrics. [https://www.apgo.org/binary/TT-Engaging%20Your%20Learner.pdf](https://www.apgo.org/binary/TT-Engaging%20Your%20Learner.pdf)

**Motivating Students: Going Beyond Grades**

While many students are naturally motivated, others are driven by grades and still others expect their teachers to inspire and stimulate them. Of course, there are no magic bullets, but here are some simple guides to help you keep students focused and motivated.

1. Help students feel they are active participants in the learning community, not just recipients of your information. Treat them with respect.
2. Capitalize on students' existing needs. They will want to learn so they can accomplish a task, improve skills, meet challenges. Help them find personal meaning and value.
3. Hold students to a high standard. This tells the students you believe they can accomplish much and also gives them a feeling of success when they meet those standards.
4. Rely on logic whenever possible. Tell students when something is a fact that must be memorized and when the material or process is based on logic. Don't forget to lead them through the "logic pathway."
5. Use visual aids, since many of today's students are visual learners.
6. Emphasize the most critical points continuously through exams, classroom activities, clinical opportunities and other learning contexts.
7. Help students create a link to earlier learned information when teaching new concepts. Remember these links can be to clerkships other than ob-gyn and to specific clinical activities.
8. As a teacher, be enthusiastic, organized and involved.
10. Provide feedback as soon as possible.

**Reference**
Honolulu Community College. Faculty development teaching techniques: Core abilities-Motivating students. Barbara Gross Davis. Motivating students; Lana Becker and Kent N. Schneider, Motivating students: 8 simple rules for teachers. [http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/teachtip.htm](http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/teachtip.htm)
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**Thinking Out Loud**

What is a proven way of helping learners develop good reasoning habits for making the differential diagnosis or identifying treatment strategies? You can model these reasoning skills by thinking out loud; that is, verbalizing your thoughts when you are seeing patients together.

Start with a cue that tells the learner you are thinking aloud, like "let's see now...she has right, lower quadrant pain that suddenly started six hours ago and has gotten worse. She's nauseous, but has no vomiting or fever. Her last menstrual period was six weeks ago. At this point, I'm most concerned about ectopic pregnancy or appendicitis, as these are potentially life threatening. I'm going to need more information to make the diagnosis. My next step will be the physical examination."

Thinking out loud teaches reasoning steps, gives rationale to the plan, demystifies the process, fosters open communication and sets the stage for asking questions of the learner; e.g., "What should I be looking for in the physical examination of this patient?".

**Source**

The following excerpt comes directly from the Teaching Tips of the Association of Professors of Gynecology and Obstetrics. [https://www.apgo.org/binary/TT-Engaging%20Your%20Learner.pdf](https://www.apgo.org/binary/TT-Engaging%20Your%20Learner.pdf)

**Experience is the best teacher...**

You are listening to a physician and you hear these words: "Let me tell you about a case that happened to me." Suddenly your ears perk up and you are fully engaged. Chances are you will remember this case better than the content of the talk, particularly if the physician uses an example that is personal and has an emotional element, such as an unexpected outcome ("She nearly bled out and we had to transfuse her repeatedly to keep her alive.").

The often overlooked, but obvious, truth is that physicians, like everyone else, enjoy hearing real-life stories. Physicians want to hear about other physicians' experiences, particularly the near misses. They use their clinical reasoning skills to see if the patient's patterns fit with what they know (scripts) or if they need to adjust their thinking.

When you ask medical learners to problem-solve on your case, you can learn a lot about their clinical reasoning skills. A study of distinguished clinical teachers found that they use scripts on teaching rounds to quickly diagnose the patient's problems and, simultaneously, to diagnose the learner's level of understanding.¹

Use your real-life case experiences to help others develop their clinical reasoning skills and to potentially prevent a mishap. Real experiences are inherently attention-getting and can be used in any number of ways to teach learners how to problem solve.²

**Sources**


Have the Learner Present in Front of the Patient

If you want to save time and enhance the educational experience in the clinic or at the bedside, have the learner present his or her findings to you in front of the patient, rather than in the hallway. Although this may be a little intimidating to the learner at first, patients prefer this method, as they can hear what is being said about them, they can add to or correct the information and they value the time spent with the physician.

Learners also tend to make more concise presentations in front of the patient. It also gives you an opportunity to role model the skills you want the learner to acquire as you involve patients in the decision-making process. It teaches the learner the usefulness of a skillfully taken history and focused physical exam.

Of course, this approach may not be appropriate for sensitive issues, or in cases where you are assessing the learner's diagnostic skills. In most cases, however, this approach validates the patient's issues and strengthens the learner's data collection and presentation skills.

Sources

One-Minute Preceptor

The One-Minute Preceptor emphasizes these learning and teaching concepts.(6) The model demonstrates how to teach effectively in short periods of time. By utilizing the One-Minute Preceptor, the preceptor will be able to quickly evaluate the case then take the most appropriate course of action for the patient and learner.(7)

Albert Schweitzer once said, "Example is not the main thing in influencing others. It is the only thing."(8) Learning from experience/example involves a cycle of having a concrete experience (e.g., an encounter with a patient), reflecting on that experience as it unfolds, formulating conceptualizations and generalizations from the experience, and testing them in new situations. That is the basic idea of the One-Minute Preceptor.(9) Five microskills form the basis of the One-Minute Preceptor.(6) These skills enable the preceptor to analyze the case and the learner then take appropriate action to teach the learner. The microskills are:

1. Get a commitment.
2. Probe for supporting evidence.
3. Teach general rules.
4. Reinforce what was done.
5. Correct mistakes.

Get a commitment: "What do you think is going on?"

When the learner presents the case, he/she may either wait for a response or ask for guidance on how to proceed. At this time, ask the learner to state what he/she thinks about the case. "What do you think is going on with this patient?" "What do you want to do?"

Asking the learners how they interpret the data is the first step in diagnosing the learner's needs. Without adequate information on the learner's knowledge, teaching might be misdirected and not beneficial.(10)

Probe for supporting evidence: "What led you to that conclusion?"

Once the learner has committed to a conclusion, he/she may ask for your confirmation or suggestion to an alternative. Before offering your opinion, ask the learner for evidence that supports their conclusion. "What were the major findings that led to your diagnosis?" "What else did you consider?" By asking the learner to reveal their thought processes, both the preceptor and learner can find out what the learner knows then determine the gaps in the learner's knowledge.(10) The preceptor should ask basic, obvious questions, and allow the learner to answer, learn to wait. Ask only one question at a time, and ask open ended questions.
Teach general rules: "When this happens, do this."

Provide general rules, concepts or considerations, and target them to the learner's level of understanding. Instruction is both more memorable and transferable if it is offered as a general rule. For example, "The key features of this illness are..." "The natural progression of this disease is..." "Patients with cystitis usually experience pain with urination, increased frequency, and urgency. The urinalysis should show bacteria, white cells, and may also have some red cells."

Reinforce what was done: "Specifically, you did an excellent job of..."

Tell them what they did right. Take the first chance to comment on the specific good work and the effect it had. Positive feedback helps build the learner's self-confidence. Both praise and criticism need to be as specific as possible. With positive feedback, questions arise that allow the student to seek answers. This self-directed learning is the most lasting of all experiences. For example, "Your choice of medication was excellent. That antibiotic covers most of the organisms that we are concerned about."

Correct mistakes: "Next time this happens, try this."

As soon after the mistake as possible, find an appropriate time and place to discuss what was done wrong, and how to avoid or correct the error in the future. Correcting mistakes was placed last because many people put this microskill first. Correcting mistakes is very important, but it is only one part of the teaching encounter, and it requires tact to be effective. Unattended mistakes have a good chance of being repeated. We learn best from our mistakes. For example, "You could be right that the patient's symptoms are due to an URI, but without looking at the ears you could easily overlook an otitis media."

Teaching general rules, reinforcing what was done correctly, and correcting mistakes can be done in any order as long as correcting mistakes is done without embarrassing the learner (e.g., in front of the patient). Asking the learner to self-critique may decrease the tension in correcting mistakes.
Discussion

In order for the One-Minute Preceptor to work effectively, the preceptor must probe for a commitment and supporting evidence. The preceptor must also reinforce what was done correctly and teach according to the learner's needs following their presentation. The preceptor should try not to lecture. He/she should give adequate feedback and most importantly, ascertain what the learner knows about the case. We cannot do any form of teaching without determining the learner's needs. The first two microskills are the most effective tools in the preceptor's teaching experience. These microskills help determine the learner's deficiencies and offer direction on how teaching should proceed.

Conclusion

As community-based teaching becomes a greater proportion of the undergraduate experience, there has been a need for the development of newer teaching methods. Innovations such as the One-Minute Preceptor model have provided new challenges for both the teacher and the learner in promoting active learning and effective educational experience.(11) Employing this model in the ambulatory care setting will allow preceptors to satisfy those objectives. Students that participate in office based experiences value learning the process of patient care as much as, or possibly more than, mastering core content.(12)

Excellent one-on-one teaching in a clinical setting requires two major items. First, medical educators must understand the special communication skills that create effective teaching. Second, medical administrators must support the faculty development programs needed to foster excellent teaching. Fortunately for the medical faculty here at UCLA, we have had full support of the medical administration. William Osler and Albert Schweitzer would be proud.

REFERENCES

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