Title: What it Takes to Become a Doctor  
Author: Drs. Michael Goldman, Sandhya Brachio, Liz Seashore, and Chelsey Mitchell  
Date of Presentation: February 10, 2016  

To the Presenter: Please read through the lesson plan and make any notes prior to the session. Arrive 15 minutes before session begins to write out Lesson Objectives and Do Now Activity (see below) on whiteboard, and to lay out and organize all supplies.

***Please refer to the Teaching 101 Lesson on the Community Pediatrics Website prior to giving your lesson***

Objectives: (have these written on board before the lesson begins)

LSWBAT #1 – Lang Scholar Will be Able to – Review the time course and educational expectations to becoming a doctor – (10 mins)
LSWBAT #2 – Understand the basic terminology and educational hierarchy of a hospital with the emphasis on lifelong learning and teamwork - (10 mins)
LSWBAT #3 – Revisit the main points of asthma for the group to keep in mind in preparation for our hospital tour based on a mock case of GG the asthmatic - (10 mins).

LSWBAT perform the following DOCTORING SKILL (45 mins) – Join and observe current pediatric residents for an inside look on “a day in the life of a resident.”

Supplies:
PowerPoint presentation
AV hookup with Internet
Copies of this lesson plan

Do Now: (display on power point for students to complete as they walk in)
Slide 2 – put these medical titles in chronological order, then estimate how long each stage takes.
   HS, College, Med School, Intern, Resident, Fellow, Attending
   Minimum 18 years before becoming an Attending!

Intro:
1) Always start lessons reviewing Lang Classroom Rules – (2 min)

Slide #3 - Key Lang Rules to emphasize for this lesson are:
(Feel free to ask scholars to share these rules to you!)
   a. **Excellence:** We are not satisfied with mediocrity. We strive for exceptional quality in our academics, professionalism, and service. We are hard workers who aim to go above and beyond what is expected of us.
   b. **Innovation:** We are creative problem-solvers who think critically and devise out-of-the-box solutions.
c. **Teamwork:** We listen, help, share, participate, and communicate. Each of us contributes to a positive peer-support network that strives to help every member to reach common goals and aspirations.

d. *(SLIDE #4)* **Respect:** Remember who you represent and that you will be a visitor of people who are very busy and you may see families that are going through a hard time.

2) Review your objectives for the lesson – *(1 min)*
3) Specifically state that the goal for the lesson, like all DIT lessons, is to learn a doctoring skill, point our your Doctoring skill *(1 min)*

**Solicit prior knowledge**

i. Review “Do Now” *(2 min)* – SLIDE #5&6 = **OBJECTIVE #1** - Review time course and educational expectations of becoming an MD

a. Emphasize that while the road is a long one, it does not have to be a straight path and it is not 18 years of terrible times! Focus on the positives and all the learning you get to be a part of and urge the kids that it is really doable.

b. Feel free to share your individual paths with the scholars to emphasize the variability of paths towards residency and beyond

c. Please note that all along the way, from college through attending, there are loan programs and scholarships that help with the costs.

d. Please emphasize that good study habits are formed at a young age and thus even the work they do in Jr. High School is important as it sets them up for better Senior High Schools and therefore better colleges, and so on...

**Communicating the new Knowledge...**

1. **Objective #2 (10 mins)** – Defining roles in the hospital and emphasizing teamwork.

   To the presenter – consider putting up the terms on the white board and bulleting the major responsibilities of each title and number of years for each stage

   a. **Medical Student** – Not an MD yet but will spend years learning the sciences behind medicine and surgery and will then be integrated into the care team of patients once they are upperclassmen.

   b. **Intern** – Is an MD in their first year taking care of patients. They write medical orders, do procedures and can prescribe medicines, but their work is always overseen by residents and attending MD’s. This is always a one year, mandatory program and it sets one up for their desired residency in a medical or surgical specialty.

   c. **Resident** – Is an MD, has completed an internship and is now charged with the task of both taking care of patients and teaching interns and
medical students medicine and surgery. Their work is more independent than that of an intern, but they are still overseen by an attending MD. Residency can be anywhere from 2 – 8 years depending on the specialty.

i. E.g. Pediatrics and medicine = 2 years; Gen surgery is 4 years and neurosurgery is 8 years!

d. **Fellow** – Is an MD who has completed med school, internship and residency and now wants to become a specialist in their desired medical or surgical field. The emphasis on a fellowship is both to become an expert in a limited set of diseases and carry out research to advance a particular field of interest. Fellowships are typically 3 years but there is some variation.

i. E.g. Pediatric Cardiologist, Adult Endocrinologist, Plastic Surgeon, Cardiothoracic Surgeon

ii. Emphasize that people who do fellowships do a general residency first and then specialize – so they have two titles – Pediatric (means they completed pediatric residency) Cardiologist (are now specializing in heart diseases of children).

e. **Attending** – After residency or after fellowship (depending on your career path), you need to pass a certification test (9 hrs!!!) and then you are able to practice medicine independently. In the hospital, these positions are highly coveted as they practice medicine, teach trainees and conduct groundbreaking research! Others will practice medicine in the community and focus solely on patient care.

f. **Other KEY Players!** – We will have an opportunity for the Lang Scholars to meet SW’s, RN’s, NPs, PA’s, Techs in an upcoming session so please do not feel the pressure to highlight the career paths for all of the below. Rather, please emphasize the importance of teamwork and the unifying goal of providing excellent patient (and family) care.

i. RN’s, SW, NP, PA, Techs, Radiologists, House Docs, etc...

2. **Objective #3 (10 mins)** – Preparing for our hospital tour with a case!

a. We are about to travel all over the Children’s Hospital and give you a taste of what a day is like for us residents.

b. To make it seem more realistic, we want to re-visit the asthma lesson and make sure we remember some important terms. (SLIDES #6-12)

i. Respiratory Distress – Breathing fast, having trouble breathing, may hear wheezing, may not get enough oxygen into the lungs

ii. Asthma – a disease that can cause respiratory distress by...

1. Inflammation
2. Bronchospasm
c. Remember all you learned about asthma because at each stop along our tour we are going to relate it to a patient with asthma, which is such an important pediatric illness.

d. Please re-emphasize our expectations that Scholars will act in a manner that proudly represents themselves and the Lang Program as we travel through the hospital.

**Slide #13 - Our case for tonight – Patient GG is a 5 year old Male with known asthma who has been breathing faster than usual for the last couple of hours. Mom Calls 911 because she sees retractions and thinks she also hears wheezing. The albuterol she was giving at home is not helping enough.**

4. **DOCTORING SKILL (45 mins)** – As a doctor-in-training, it is important to have an understanding of what lies ahead for your career. What better way than to visit some of the most important parts of the hospital so you can learn first hand what your day will look and feel like when you become part of the health care team!

*To the presenters: As best as you can and depending on how many adults are available, please break up the group into as small of a group as possible. It is OK to navigate the case all together at quiet spots on the tour (e.g. energy court, P and S amphitheatre, etc), but please keep very close eye on scholars when going through the ED and the inpatient floors. Please remind them to take off their coats and display their ID cards appropriately.*

a. **The ER** – Be sure to highlight the asthma room and in VERY small and quiet groups, escort scholars through the acute side and the trauma bays
   - Tie to the case – Oxygen, sat monitors, nebulizers are all the first steps in treating the patient in respiratory distress
   - Also point out the resident role in the ER – show how they grab a chart, see the patient and then present to the attending what they are planning on doing
   - If time allows, pull up an x-ray or show them the dirty utility room where we run strep tests and urine tests on the spot.

b. **The ICU** – Be sure to remind group again about staying close and in small groups! Also as their guide, please take a peak into the unit before going in, we do not want to get in the way or violate privacy of any acute situation / code, etc
   - Tie to the case – If GG does not improve enough in the ER, they may be sent to the ICU for further respiratory support. If possible you can show the monitors / tele in the Charge nurse station in central and you can explain the terms intubation and ventilator support in a quiet place where no families are around.
• Point out the resident role – serve as the face to face with the patients and families. Work as a team with the ICU RNs. Communicate with the fellows and attending when clinical statuses change or other issues need to be addressed.

c. **4 Tower** – Key places to point out on 4T will be –
  • **The 4 t team room** - emphasize sign-out and teamwork and how communication from day to night team is of the utmost importance.
    i. Tie to the Case – GG just got admitted and is requiring albuterol treatments every 2 hours. He needs to be closely watched because if he needs more attention than that, he will have to go to the ICU. If he is doing well, hopefully he can be “spaced” overnight and sent home in the next day or two.
    ii. Resident Role – Carry out and always reassess the treatment plan from the prior team. Communicate effectively with RNs and other caregivers. Be able to update the families and the attending at all times.
  • **Call room** – Sometimes residents work for 24 hours at a time, sometimes it is 12 hours at a time, either way, here is where they get to take a quick nap if the patients are stable.
  • **An empty patient room** – Ideally, if there is an empty room, grab a few supplies from the clean utility room and show the group how they work.
    i. Tie to the case – Show how you would give an albuterol neb to GG by hooking up a nebulizer to the oxygen delivery port. Point out an ambu bag and describe what it is used for. Also point out that each child’s hospital room is equipped with both a patient and parent sleeping space.

d. **P and S Conference Room** – This is the last stop on your tour and a chance to stress the educational side of residency and answer any questions any of the scholars may have. Do make a point to state that as residents you are still students in a way and then even when we are attending MD’s, it is our responsibility as doctors to continue to push ourselves to learn the latest and newest – to stay up to date!
  • Define grand Rounds and Chief of Service as weekly conferences to help us all stay up to date. Some conferences are based on someone’s latest research while others are a review of a topic that is important to pediatrics
  • Emphasize that all specialties have these educational conferences
  • Make note of the orientation of the seating in this auditorium as back in the day, this provided views of anatomy lessons and the earliest surgeries
- **Tie to the Case** – GG’s asthma is not responding to traditional treatments. Pretend that this week’s grand rounds were about new groundbreaking technologies in the treatment of asthma.
- **Resident Role** - Share with the group that each resident will be required to teach their peers in this setting at least once with their chief of service during their third year. Each resident is also required to attend these lectures in order to further advance their training.
- **If time allows** – Feel free to walk the group through a typical Friday.
  1. Sign-out, see sick patients, grand rounds, attending rounds, work time, lunch conferences, work time, educational conference, sign-out.
  2. Keep it general and emphasize the need to be excellent communicators, lifelong learners and be able to function on minimal sleep!

5. Always leave time for student questions: (5mins) – the P and S auditorium is a great place to wrap up the session. Set a fixed amount of time, urge scholars to stay relevant and to listen to each other’s questions and answers.

*To the presenter – At the end of the tour, please escort group back out to the street. Figure out who needs to go back to the library while others will want to leave right from P and S. Please make sure everyone knows where they are going before leaving so as not to have scholars wondering the hospital at night.*