A first year perspective:
What makes a great lecture?

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Why we are qualified to give this talk:

- The average MS-1 spends 4 hours a day, 5 days a week, 42 weeks a year in lecture for a grand total of **840 hours of lecture during the first year**!

- That makes us:

  **Professional Lecture Goers (PLGs)**
Learning Objectives

- Knowing your audience
- Organizing your lecture
- How to engage your audience
- Use of Powerpoint
- Aids to learning
Who is your audience?

A diversity of backgrounds:
- Biochemistry
- Engineering
- Philosophy
- Alaskan fisherman

Take home message:
DO NOT MAKE ASSUMPTIONS ABOUT WHAT OUTSIDE KNOWLEDGE STUDENTS BRING TO YOUR LECTURE
Our Goals

- We are training to become physicians
  - Clinical cases are informative:
    - Highly specific research is difficult to digest when learning basic concepts
    - Keep it conceptual

From Africa with Fever

- 24 year-old female
- Headache, malaise, fever (38.9) x 2 days
- Now painful lesion left inner knee
- Took Malarone (atovaquone/proguanil)
- Immunized for hep A, Polio, Td
Place in Curriculum

• Know what lecture came before you and what lecture will follow you

<table>
<thead>
<tr>
<th>AUG</th>
<th>JUNE</th>
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<tbody>
<tr>
<td>Medical Anatomy</td>
<td>Neuroscience</td>
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<tr>
<td>Cell &amp; Tissue Physiology</td>
<td>Intro to Medical Decision Making</td>
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<td>Human Genetics</td>
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<td>Fuel Metabolism</td>
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<td>Immunology in Health &amp; Disease</td>
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<td>Medical Microbiology</td>
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<tr>
<td>Neuroscience</td>
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Take home message
LECTURES AREN’T IN ISOLATION; THEY ARE IN THE CONTEXT OF A COURSE
Organization of Lecture

- Ensure that lecture and syllabus correspond temporally so that students are not frantically flipping
- Use learning objectives at the beginning and the end to frame the talk
- Summary slides to triage the information

Take home message:
ALL OF THE ABOVE
Use of PowerPoint

There is clearly way too much text in this line and it is also extremely small so that makes it very difficult to read and thus difficult to understand as a student. There definitely should never be a line like this in any PowerPoint given to the students at this school because it is at once too small to see from the back of the room and so dense that people’s eyes will glaze over if at all paying attention to what the lecturer is saying.

Actually if you’re reading this line you’re probably not paying attention to what I am saying, huh?

Not too many slides! The less the better

Take home message:
Dense = bad, Pictures = good
Multistage Evolution of Cancer

Mutation #1  Mutation #2

Mutation #3

Malignant Tumor

Take home message: Cancer is a multi-step process involving a series of genetic changes that result in a selective advantage - growth, anti-apoptotic, immuno-evasive.
Engaging your audience

- Any attempt at humor, no matter how feeble or dorky is appreciated!
- Enthusiasm is infectious
- Cartoon slides, movies, songs, pictures
  - Ex. Lecturer talks about architecture, ghostbusters, sauerkraut, etc.

Take home message:
NO MATTER WHAT YOU DO, WE WILL LAUGH. AND IF WE DON’T, WELL THAT’S FUNNY TOO.
Learning Aids

* Audience response system (Turning Point)
  - Used to emphasize concepts, not nuances
  - Keep to a minimum (one or two per lecture)
  - Best used as a gauge

* What goes in the syllabus
  - Detailed notes that not only correspond, but explain the lecture
  - Outside references

* What doesn’t go in the syllabus
  - A copy of your slides

Take home message:
THE SYLLABUS OFTEN SERVES AS OUR TEXTBOOK
Learning Objectives, revisited

- **DO NOT MAKE ASSUMPTIONS ABOUT WHAT OUTSIDE KNOWLEDGE STUDENTS BRING TO YOUR LECTURE**
- **LECTURES AREN’T IN ISOLATION; THEY ARE IN THE CONTEXT OF A COURSE**
- **NO MATTER WHAT YOU DO, WE WILL LAUGH.**
- **How to engage your audience**
  - **DENSE = BAD, PICTURES = GOOD**
  - **Use of Powerpoint**
- **THE SYLLABUS OFTEN SERVES AS OUR TEXTBOOK**
- **Aids to learning**
Great lecturers are remembered
  - Oh, and the material too…

Thanks for listening to a lecture on lectures

We appreciate your effort and time!

“Our eyes aren’t closed, we just put notes on the back of our eyelids”