

- Theme Music: Rolling Stones *Start Me Up*
- Cartoon: Lynn Johnston
For Better or for Worse



If you don't live in Holmes Hall and want access to the physics help room (5th floor of East Holmes), I'm passing around an access sheet to put your Student ID information on!

If you don't sign up for help room access you're going to have a rough time.



Introductions!

- Prof. Vashti Sawtelle - lectures, exams, LON-CAPA, Q's about why we teach this way

BRACE YOURSELF

**SHE'S IN HER THIRD
TRIMESTER**

Introductions!

- Prof. Vashti Sawtelle & Prof. Leanne Doughty - lectures, exams, LON-CAPA, Q's about why we teach this way
- Prof. Walt Benenson - hands-on session stuff
- Alanna Pawlak (Graduate TA): grading, hands-on sessions, help room, Q's about why we teach this way
- 7 undergraduate learning assistants: hands-on sessions, help room, some lecture stuff. (**Melissa Bucheli** and **Alex Croff** are your in-lecture LAs)

Let's learn a
bit about
you!



Where did you grow up?

- A. In the lower part of Michigan
- B. In the Upper Penninsula
- C. In the Midwest outside of Michigan
- D. Somewhere in the U.S. outside Michigan
- E. Outside of the United States!



What year of college are you in as of this week?

- A. First year
- B. Second year
- C. Third year
- D. Fourth year
- E. Fifth year or more

Note: I'm curious about time in college – not credit hours!



What is your major?



- A. Biological science (animal science, biology, biochemistry/molecular bio, genomics, microbiology, etc)
- B. Environmental science (include fisheries & wildlife)
- C. Physical sciences (incl. earth science, astrophysics, chemical physics, chemistry, geological science, physics)
- D. Mathematical and Computational science (incl. statistics)
- E. Undecided/Not on this list

What do you plan to do after getting your degree?



- A. Get a job!
- B. Medical/Veterinary/Dental/Optomety school
- C. Graduate school in life science-related field
- D. Graduate school in non life science-related field
- E. Other/I don't know yet/Stop asking me hard questions!

How many college science classes have you completed?

- A. 0-2
- B. 3-5
- C. 6-8
- D. 9-10
- E. 10+



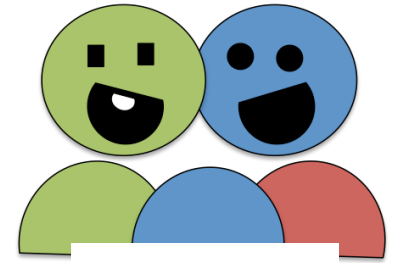
Mathematical equations:

What do you feel **you** can you use them for **now**?

1. For carrying out calculations.
 2. For solving for unknowns.
 3. For understanding concepts
 4. For understanding relationships
 5. For making models of real world systems
- A. One or more from {1,2}
 - B. One or more from {3,4,5}
 - C. A and B
 - D. Something else
 - E. Not much



What can Physics contribute to Biology and Medicine?



Discuss It!

- Whiteboards
- Groups of 3 – discuss topics
 - Teaching Assistant and Learning Assistant will be in Lecture hall to participate in these discussions
- Pick one to talk about

Forces in Living Systems

Example: The role of forces in Cancer

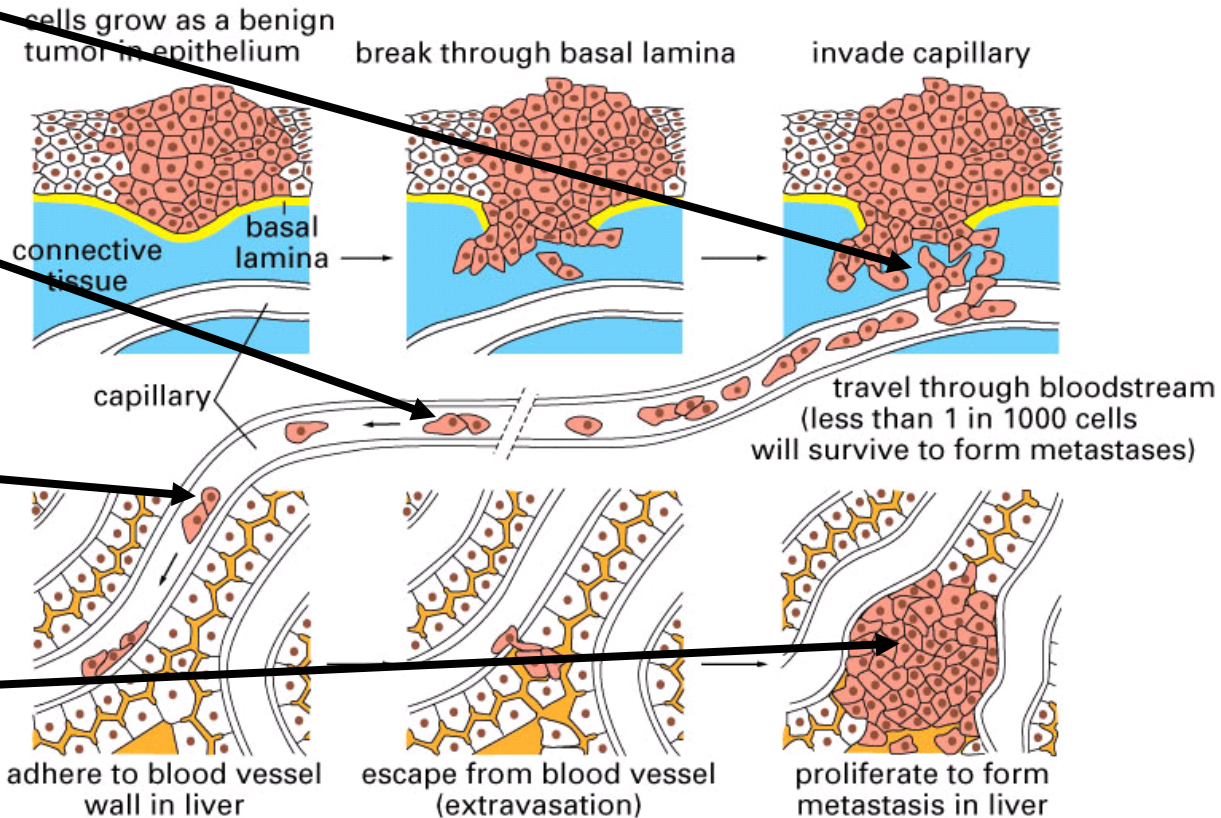
Work from W. Losert, University of Maryland

Cells generate forces to migrate

Cells are deformed by fluid forces

Cells adhere to new tissue

Cells grow in tissue with different stiffness



How we do it - Lectures

- Class MWF at 11:30am
- Before class: **READ** the chapter and **ANSWER** reading questions on LON-CAPA (deadlines on course calendar)
- When you come in: grab a whiteboard, eraser/ marker bag for every 3 people
- We will use iClickers every day! Make sure to bring yours and **register it on LON-CAPA!**

First Hands-On Session!

(Today and next week in E-26A Holmes)

- Meet your LA and other students!
- Concept inventories/pre-tests!
- Monday hands-on sessions: go to your **session today!** All others: **go next week.**

Announcements/Deadlines

- **TOMORROW: Thursday, 11:59 p.m.:** Do Chapter 1.1 – 1.4 reading and answer questions in “Reading Questions” folder on LON-CAPA page (<http://msu.lon-capa.org>).
- **Friday, 11:59 p.m.:** Syllabus quiz / clicker registration due - find it in “Homework” folder on LON-CAPA page.
- Make sure to register your clickers in LON-CAPA! <http://msu.lon-capa.org>