Twenty questions asked information about the format of the school, course, modality of course delivery, and how cellular physiology was presented and assessed.

Numerical data:

1. The **state** in which I teach most of my course-load is:
    - 32 states
2. The **institution** where I teach my physiology (or A&P) course would best be classified as a:
    - (1) High school
    - (58) Community College (2-year or 4-year institution)
    - Vocational or technical school
    - (9) 4-year college or university (BA or BS highest degree awarded)
    - (28) College or university with a graduate component (MA/MS, PhD highest degree awarded)
    - (2) Other (please describe)
3. The **course** that I teach may be best characterized as:
    - (12) 1 semester (or 1 trimester/quarter) anatomy & physiology course
    - (15) 1 semester (or 1 trimester/quarter) physiology only course
    - (63) Multi-semester (or multi-trimester/quarter) anatomy & physiology course
    - Multi-semester (or multi-trimester/quarter) physiology only course
    - (9) Other (please describe)
4. **Pre-requisites** for my course include:
    - (23) No pre-requisites
    - (14) Reading
    - (17) Math
    - (39) Introductory biology
    - (12) Cellular biology
    - (10) Chemistry
    - (24) Other (please describe)
5. The **lecture/lab composition** of my course would be described as:
    - (17) Lecture and lab are separate courses
    - (59) Lecture and lab are co-registered, but scheduled at different times

- (21) Lecture and lab are co-registered and occur in the same time block
- (2) No lab component to the course

6. The **typical enrollment** (pre-COVID) for all sections of this course per semester/quarter (per section) was:
7. The **enrollment cap** of each section offered (pre-COVID) per semester/quarter was:
8. I have been teaching this course for __ **years** (give a number).
9. My **current teaching position** would be described as:
    - (91) Full-time faculty
    - (8) Part-time faculty
10. Cellular physiology is **presented** to our students through the following activities:
    - (97) Lecture presentation
    - (67) Lab activity
    - (37) Group discussion
    - (44) Take-home assignment
    - (17) Other (please describe)
11. Student mastery of cellular physiology is **assessed** through the following:
    - (98) Lecture exam
    - (45) Lab exam
    - (26) Group assignment
    - (43) Take-home assignment
    - (15) Other (please describe)
12. Briefly describe when I **first describe cell physiology**.
13. Briefly describe how I present cell physiology (structure and function) in the **muscular system.**
14. Briefly describe how I present cell physiology (structure and function) in the **nervous system.**
15. Briefly describe how I present cell physiology (structure and function) in the **endocrine system.**
16. Briefly describe how I present cell physiology (structure and function) in the **urinary system.**
17. The **format** of my course (**pre-COVID**) may be described as:
    - (12) Face to Face (F2F) lecture only, no lab
    - (1) Online lecture only, no lab
    - (99) Hybrid (combination of F2F and online) lecture, no lab
    - (84) F2F lecture, F2F lab
    - (99) F2F lecture, online lab

- (15) Online or hybrid lecture, F2F lab
- (3) Online or hybrid lecture, online lab
- (7) Other (please describe)

18. The **format** of my course (**height of COVID**) may be described as:
    - (99) Face to Face (F2F) lecture only, no lab
    - (8) Online lecture only, no lab
    - (3) Hybrid (combination of F2F and online) lecture, no lab
    - (9) F2F lecture, F2F lab
    - (99) F2F lecture, online lab
    - (23) Online or hybrid lecture, F2F lab
    - (62) Online or hybrid lecture, online lab
    - (13) Other (please describe)
19. describe something that you developed in your course concerning cell physiology that you would **like to keep using** in future semesters.
20. describe something that you developed in your course concerning cell physiology that you have **no desire** to keep using in future semesters.

(Other) answers:

1. The **state** in which I teach most of my course-load is:
2. The **institution** where I teach my physiology (or A&P) course would best be classified as a:
    - 2 yr branch campus of a 4 year R-1 university
    - I teach at both a 4 year college and a community college
3. The **course** that I teach may be best characterized as:
    - Both 1 and 2 semester A&P courses
    - 2 semester anatomy and physiology course
    - A&P and microbiology
    - 1-semester A&P course, 1-semester physiology course, 1-semester anatomy course
    - Gen Bio 1 and Gen Bio 2
    - Introductory biology
    - 1 semester Anatomy followed by 1 semester physiology
    - both multi-semester A&P and single semester Physiology courses
    - MD programme multi-semester integrated foundational sciences curriculum (physiology throughout)
    - I teach anatomy+lab in one semester and physiology; and an independent physiology lab in one semester
4. **Pre-requisites** for my course include:
    - high school biology and chemistry in the last 5 years or college biology and chemistry
    - students must pass a cell biology/chemistry assessment test
    - anatomy
    - Foundation in Life Sciences. Covers basic chemistry, cytology, heredity and aerobic metabolism.
    - biology for allied health (some cell bio and chemistry)
    - Chemistry and Anatomy
    - Minimum placement score on our college's math placement test
    - High school biology C+ or better or college introductory biology
    - Anatomy one semester only. However, starting Fall 2022 we will have Intro Chem or Gen Chem or Gen Biology or Microbiology as prerequisites.
    - HS biology if within 5 years or intro biology with a C or better within 5 years
    - Intro A&P
    - Genetics

- histology (although we have a version that includes histology but that requires the remedial reading and math)
- Anatomy is pre-requisite for Physiology. No prerequisite for Anatomy
- Physiology course has Biol & Chem pre-requisites; A&P has gen Bio prereq
- Strong recommendation for students to have already passed either a basic biology or intro A&P course
- 8 hrs of Anatomy and Physiology
- Cell bio and histology for 201; 201 for 202
- Honors Bachelors Degree, MCAT
- It depends on the program. All students must first take Anatomy, but only nursing students need to take Chemistry. PTA and RTMI students do not need chemistry. There is no biology requirement.
- 1 semester physics
- Sophomore status
- Chemistry OR Anatomy/A&P one semester OR General Biology

5. The **lecture/lab composition** of my course would be described as:
6. The **typical enrollment** (pre-COVID) for all sections of this course per semester/quarter (per section) was:
7. The **enrollment cap** of each section offered (pre-COVID) per semester/quarter was:
8. I have been teaching this course for __ **years** (give a number).
9. My **current teaching position** would be described as:
10. Cellular physiology is **presented** to our students through the following activities:

- self-test, group activities (not discussions)
- Pearson's Mastering Homework and PhysioX
- Distance
- self-developed active learning exercises in lecture
- practice activities
- preclass self-study
- short videos
- Case study
- precovid group team based learning
- Case study, worksheets completed in teams
- Lecture only for A&P; lecture and lab for Physiology
- On-line learning modules

- Assignments to complete online
- A case/problem
- I do not teach that as an independent course
- online quizzes and via Visible Body videos

11. Student mastery of cellular physiology is **assessed** through the following:
    - Pearson's DSMs and Homework assignments.
    - In class quizzes and tests
    - Lab report on lab activity
    - Lab report
    - Daily Quiz
    - Lab and Canvas quizzes
    - Class discussion in online format
    - Essay
    - Quiz
    - Online assignments
    - Lab Assignment
    - Tickets to class and collaborative quizzes
    - I do not teach that as an independent course
    - lab reports
    - online quizzes
12. Briefly describe when I **first describe cell physiology**.
13. Briefly describe how I present cell physiology (structure and function) in the **muscular system.**
14. Briefly describe how I present cell physiology (structure and function) in the **nervous system.**
15. Briefly describe how I present cell physiology (structure and function) in the **endocrine system.**
16. Briefly describe how I present cell physiology (structure and function) in the **urinary system.**
17. The **format** of my course (**pre-COVID**) may be described as:
    - Also had started teaching one fully online A&P section where studnets did labs on Connect and VB
    - I teach the same course either F2F or online. In both cases, lecture and lab are seperate.
    - I just teach the lecture class. Our college hires adjunct instructors to teach the labs, unfortunately.

- Students take A&P 1 lecture in semester 1. They take A&P 2 lecture and one "comprehensive A&P: lab in semester 2. They get all systems in this single lab.
- Online only for the summer session.
- We meet F2F but had flipped lectures on Tuesdays.
- I have both F2F lecture and lab sections and online section

18. The **format** of my course (**height of COVID**) may be described as:
    - online/hybrid lecture, some F2F labs, some online labs (synch zoom meetings)
    - virtual lecture (scheduled meeting time online) hybrid with most anatomy learning through Visible Body (although I go over all of it briefly)
    - Initial 1 term 2020 was remote lecture and online lab. 2022/21 was remote lecture and remote lab where I mate packets for labs and students worked with me via zoom for lecture and lab
    - For the F2F lab, only one student out of four was allowed in the lab each week. That student was videotaped as they collected data for the group.
    - spring 2020 we moved to all online (lab and lecture), school year 2020-2021 was all in person, except we moved lab online for 2 weeks in october 2020. 2021 fall was completely in person lecture and lab
    - Hybrid lecture, hybrid lab
    - Spring & summer 2020 - online lecture and online lab. Fall 2020 & Spring 2021, hybrid lecture and hybrid lab. Summer 2021 online lecture, F2F lab. Fall 2021 F2F lecture or online lecture; F2F lab
    - did not teach the Physiology course during height of COVID
    - Flipped classroom (lecture & lab practice); virtual classroom for practice; anatomy with images of models
    - Online pre-recorded lectures combined with synchronous office hours (via Zoom) in which we do practice questions together using a virtual polling system to ensure understanding of more challenging concepts.
    - Online lecture, hybrid lab (F2F and online options)
    - Lecture/lab combined
    - hybrid lab and lecture
    -
19. describe something that you developed in your course concerning cell physiology that you would **like to keep using** in future semesters.
20. describe something that you developed in your course concerning cell physiology that you have **no desire** to keep using in future semesters.

#	Question	Answers	Value of Analysis
1	The **state** in which I teach most of my course-load is:	•	•
2	The **institution** where I teach my physiology (or A&P) course would best be classified as a:	• High school • Community College (2-year or 4-year institution) • Vocational or technical school • 4-year college or university (BA or BS highest degree awarded) • College or university with a graduate component (MA/MS, PhD highest degree awarded) • Other (please describe)	•
3	The **course** that I teach may be best characterized as:	• 1 semester (or 1 trimester/quarter) anatomy & physiology course • 1 semester (or 1 trimester/quarter) physiology only course • Multi-semester (or multi-trimester/quarter) anatomy & physiology course • Multi-semester (or multi-trimester/quarter) physiology only course • Other (please describe)	•
4	**Pre-requisites** for my course include (choose all that apply):	• No pre-requisites • Remedial reading • Remedial math • Introductory biology • Cellular biology • Other (please describe)	•

5	The **lecture/lab composition** of my course would be described as:	• Lecture and lab are separate courses • Lecture and lab are co-registered, but scheduled at different times • Lecture and lab are co-registered and occur in the same time block • No lab component to the course	•
6	The **typical enrollment** (pre-COVID) for all sections of this course per semester/quarter (per section) was:		•
7	The **enrollment cap** of each section offered (pre-COVID) per semester/quarter was:		•
8	I have been teaching this course for __ **years** (give a number).		•
9	My **current teaching position** would be described as:	• Full-time faculty • Part-time faculty	•
10	Cellular physiology is **presented** to our students through the following activities (choose all that apply):	• Lecture presentation • Lab activity • Group discussion • Take-home assignment • Other (please describe)	•
11	Student mastery of cellular physiology is **assessed** through the following (choose all that apply):	• Lecture exam • Lab exam • Group assignment • Take-home assignment • Other (please describe)	•
12	Briefly describe when I **first describe cell physiology** (such as membrane transport) in my		•

	course (how many weeks into the course, how much time is allotted, what type of presentation or lab activity is involved).		
13	Briefly describe how I present cell physiology (structure and function) in the **muscular system** (what type of lab activities, how much time allotted). Reply "this system not covered" if the muscular system is not covered in this course.		•
14	Briefly describe how I present cell physiology (structure and function) in the **nervous system** (what type of lab activities, how much time allotted). Reply "this system not covered" if the nervous system is not covered in this course.		•
15	Briefly describe how I present cell physiology (structure and function) in the **endocrine system** (what type of lab activities, how much time allotted). Reply "this system not covered" if the endocrine system is not covered in this course.		•
16	Briefly describe how I present cell physiology (structure and		•

	function) in the **urinary system** (what type of lab activities, how much time allotted). Reply "this system not covered" if the urinary system is not covered in this course.		
17	The **format** of my course (**pre-COVID**) may be described as:	• Face to Face (F2F) lecture only, no lab • Online lecture only, no lab • Hybrid (combination of F2F and online) lecture, no lab • F2F lecture, F2F lab • F2F lecture, online lab • Online or hybrid lecture, F2F lab • Online or hybrid lecture, online lab • Other (please describe)	•
18	The **format** of my course (**height of COVID**) may be described as:	• Face to Face (F2F) lecture only, no lab • Online lecture only, no lab • Hybrid (combination of F2F and online) lecture, no lab • F2F lecture, F2F lab • F2F lecture, online lab • Online or hybrid lecture, F2F lab • Online or hybrid lecture, online lab • Other (please describe)	•
19	Due to a possible change in modality during the height of COVID impact on our classes, describe something that you developed in your course concerning cell physiology that		•

	you would **like to keep using** in future semesters.		
20	During the height of COVID impact on our classes, describe something that you developed in your course concerning cell physiology that you have **no desire** to keep using in future semesters (remember, we learn from our mistakes).		•