WEEKLY ASSIGNMENTS

NAME: COVID Crew

MONTH april

YEAR: 2020

	MON	TUES	WED T	HURS	FRI
WEEK ONF	Meet via zoom at 9 am to review syllabus, expectations Begin readings on microbiology and epidemiology	Reading and audio/video reviews	Meet via zoom with Dr Bloom and Novak What can we do to mitigate/prevent 9-11	Reading day and small group work on special populations	Meet with Dr Novak and Dr Rasmussen at 8-10 Meet with Dr Dede and Novak at 3
WFEK TWO		Meet via zoom with Dr Novak and Ethics faculty 10 am	Breathe. Or learn to breathe with PPE Review readings and online tutorials		Meet with Dr Dede and Novak

Week 1

MONDAY and Tuesday

https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/540747/all/Coronavirus COVID 19 SARS CoV 2

Review Dr Rasmussen's talk from 3/16/2020

https://mediasite.video.ufl.edu/Mediasite/Play/cc6a037db1c24cabaa34f0df26762b5e1d?catalog=c6c5873f2f 5f455abffd1bb4f2bcf880

https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/world-map.html

https://www.nytimes.com/interactive/2020/world/coronavirus-maps.html

https://covid19.healthdata.org/projections

FOR WEDNESDAY:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1997248/ The effect of public health measures on the 1918 influenza pandemic in U.S. cities

Analysis of the timing and duration of control measures on the spread of the 1918 "Spanish" Flu on the peak and duration of death rates in major U.S. cities

The concept of social distancing and wearing of masks to "flatten the curve" is not new. Retrospective analyses of the spread of the 1918 influenza pandemic in major U.S. cities is presented in the following two articles:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1849868/pdf/zpq7588.pdf

https://www.nationalgeographic.com/history/2020/03/how-cities-flattened-curve-1918-spanish-flu-pandemic-coronavirus/

Points for consideration/discussion:

- 1) What are the main conclusions regarding the optimal start and duration of infection spread control measures used during the 1918 pandemic?
- 2) What are the caveats regarding the data analyses?
- 3) How might these data be applied today in the face of our management of the COVID-19 pandemic?

Can influenza inform us: <u>https://www.cdc.gov/flu/weekly/#S6</u>

Prospects for a vaccine against SARS-CoV-2 to prevent COVID-19

Significant efforts were made to develop vaccines against the highly pathogenic SARS-CoV and MERS-CoV viruses during these past outbreaks. Fortunately these outbreaks did not persist to a large extent for more than a year, so extensive testing of these vaccines in humans was not completed. The review by Enjuanes, et al., 2016 does a very nice job of summarizing pathogenic determinants of these human coronaviruses as well as the pre-clinical analyses of several vaccine candidates. This work sheds light on the feasibility, as well of some of the challenges, in developing a safe and effective vaccine against SARS-CoV-2.



Coronavirus virulence and vaccin

https://www.sciencedirect.com/science/article/pii/S0065352716300422?via%3Dihub

Questions for consideration/discussion:

- 1) Data suggest that virus-neutralizing IgG and IgA are protective against SARS-CoV. If this is the case, why are inactivated or subunit vaccines unlikely to be the best choice for a SARS-CoV-2 vaccine?
- 2) In consideration of use of modified, live-attenuated vaccines against SARS-CoV, what are the specific virulence determinants that it is essential to eliminate?
- 3) In terms if safety, how significant do you think the possibility of a SARS-CoV vaccine inducing antibodydependent enhancement (ADE) of infection might be? What burden might this possibility place on rapid vaccine testing in humans?

Listen to: <u>https://www.nejm.org/doi/full/10.1056/NEJMe2005759</u> Taiwan's attempt to decrease infection: https://www.pbs.org/video/a-different-approach-1585775995/

Thursday:

Health disparities: Review and in a small group prepare a 15 minute presentation on one of the following groups and effect of COVID-19: Homeless Incarcerated Minority Illegal Immigrants Resource poor countries

https://slate.com/news-and-politics/2020/03/how-racial-health-disparities-will-play-out-in-the-coronavirus-pandemic.html

https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/other-at-risk-populations.html

OR

This is evolving daily, review and find what your identified specialty has in the literature. You may work in small groups. Be prepared to discuss. Below is a sampling—all will watch the Seattle Children's video and listen to the following: <u>https://edhub.ama-assn.org/jn-learning/video-player/18315311</u>

Pediatrics:

https://www.seattlechildrens.org/healthcare-professionals/education/grand-rounds/online/covid-19-the-seattle-childrens-experience/

Elderly:

https://www.statnews.com/2020/03/30/what-explains-coronavirus-lethality-for-elderly/

Neonate:

https://onlinelibrary.wiley.com/doi/epdf/10.1002/jmv.25740



jama_dong_2020_ld _200024.pdf

FRIDAY:

• Define roles of other health care workers during the pandemic <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6443984/</u>

• Understand the role of the government, the press, health care systems, the general public in adapting to the pandemic

https://www.nejm.org/doi/full/10.1056/NEJMe2006742 https://www.osha.gov/SLTC/covid-19/ https://www.osha.gov/Publications/OSHA3990.pdf http://www.flhealthsource.gov/covid19 https://edhub.ama-assn.org/jn-learning/video-player/18315311

Wellness in a sick world

Eventually, we will come to embrace our new normal. Meanwhile, it will be imperative for us to develop new or modified self-care activities for this shelter-in-place, social distancing climate where gyms, theaters and places of worship are closed.

1. What struck you about the narratives you read describing the experiences of medical professionals?

2. If asked, what coping strategies and resources would you develop for current medical professionals? How would you implement them?

3. What are you currently doing to remain healthy?

4. What stories, quotes, etc., have you found inspiring?

5. In a post-COVID-19 world, how do you envision preserving the soul of medicine?

https://www.nytimes.com/2020/03/24/us/coronavirus-doctor-poetry-boston.html https://www.nytimes.com/2020/03/27/style/modern-love-coronavirus-seattle-kirkland.html https://www.nytimes.com/2020/03/26/opinion/doctors-coronavirus-safety.html

https://www.statnews.com/2020/03/28/coronavirus-isolation-loneliness-health/

https://urldefense.proofpoint.com/v2/url?u=https-3A__www.washingtonpost.com_national_health-2Dscience_for-2Dcoronavirus-2Danxiety-2Dtake-2Ddeep-2Dbreaths-2Dand-2Dcall-2Dme-2Din-2Dthe-2Dmorning_2020_03_26_07c73756-2D6d36-2D11ea-2Da3ec-2D70d7479d83f0-5Fstory.html&d=DwIFAg&c=sJ6xIWYxzLMB3EPkvcnVg&r=o52zp4LfzytAO5Yo_dOhCWGj3mvqY1PGbrglC2ryKZg&m=wdUwrrczp2YvWvOfZ4qqXFX cyEy8kHKH8SoVIGtjtPQ&s=JPKIheifpIgrc8pdkacUIGeBty4rKmaPJ7gGpat0AXg&e



WEEK 2 Monday: presentations Tuesday: Ethics

nejmp2005689.pdf

Ethics Case Analysis

https://edhub.ama-assn.org/jn-learning/audio-player/18373941 https://www.nytimes.com/2020/03/24/upshot/coronavirus-rationing-decisions-ethicists.html

https://www.thehastingscenter.org/ethics-resources-on-the-coronavirus/ https://www.nytimes.com/2020/03/30/magazine/coronavirus-medical-ethics.html

Wednesday PPE Thursday—read/multimedia/reflect/synthsize Friday—meet with Drs Novak and Dede And BLUEBERRIES: <u>blueberrydowns.com</u> or call 352-216-9107 for times and days. I brought my own bucket and bag. \$4/pound. I hear Aunt Zelma's is open too