

STUDENT OR STUDENTS NEEDED TO CREATE A WEBSITE
TO SUPPORT PHYSICIANS AND OTHER MEDICAL PERSONNEL KEEPING UP TO DATE
WITH THE LATEST LITERATURE, BEST PRACTICES, AND GUIDELINES AS THEY WORK TO COMBAT
THE CORONAVIRUS

This will be a joint project of the GW School of Medicine and the GW School of Engineering and Applied Science.

No compensation (at least in the short run); this is a public service, though you may be able to use your work for credit in an independent research course (or for senior design or another course if approved by the instructor). Engineering students will be working with medical students on this timely project of critical importance.

Winning student or team gets, in addition, a \$250 Amazon gift card upon completion of the project and its successful operation for a week.

It is meant to serve these users:

- EMS personnel
- Emergency room medical personnel
- Intensive care medical personnel
- Other Specialties (Psychiatry, Surgery, Etc)

An early example design with only placeholders and little if any information beyond that is at <https://disasterconsult.com/home.html>

Examples of similar websites:

Wiki EM: www.wikiem.org

Life in the Fast Lane: <https://litfl.com/accelerated-idioventricular-rhythm-aivr/>

EMCrit: <https://emcrit.org/>

But this is different, and fulfills another need, namely it is specific to disasters as well as meant to be very operationally focused. Specifically **we want a strong User Interface focus** (our end users are overly stressed and have minimal time to sit down and read).

Unlike other websites and databases that we are aware of, it will

- provide a Centralized Hub for Just in Time clinically relevant data that is regularly updated with the best evidence to date
- Provide easy to digest information:
 - Utilizing quick bullets/summaries
 - Checklists

- High yield graphics
- Links to original articles

Navigation should be extremely user friendly and based mainly on the immediate clinical question. Examples (we will provide the questions and answers for now, though Incorporating a search engine might be a later part of the project.

- An Emergency Medical Technician should be able to pick a question such as “How long are COVID positive patients infectious?” and get an immediate answer.
- An ER doctor should be able to pick a question such as “What is the mortality rate for a 62-year old male with diabetes presenting with COVID?” and get an immediate answer.
- An intensive care unit nurse should be able to pick a question such as “What are the best ventilator settings for an intubated patient with COVID?” and get an immediate answer.

Links from these answers will include a Current Best Practices Section, Suggestions and Template Hospital Protocols, example policies, and training videos and photographs as appropriate.

It will be capable of being updated in real time by authorized personnel.

If interested and you have the time available, send a letter describing why you (or your team) is right for this project including resume(s), appropriate coursework, experience, etc. and an example of the kind of website you can create. Your experience in website building and user interfaces is especially important. Priority consideration will be given to applicants who create an example website using the information above and these links below and others, and deliver to us an example of your work by Tuesday, March 24 at 8:00 p.m. using dummy questions and answers for illustrative purposes.

Links to Main Databases:

BEST RESOURCES FOR GUIDELINES:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>

<https://www.acep.org/corona/COVID-19/>

<https://disasterinfo.nlm.nih.gov/latest>

https://www-nejm-org.proxygw.wrlc.org/coronavirus?query=main_nav_lg

LATEST NUMBERS (continuously updated)

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Questions should be directed to Dr. Jordan Selzer, (jselzer@mfa.gwu.edu) or Prof. Lance Hoffman, (lanceh@gwu.edu), who request but do not require that you notify them as soon as you decide that you will be submitting an application by the deadline.