



# White Paper

## COVID-19 Contributions on a Residency/Fellowship ERAS Application

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## Abstract

In just a few short months, the COVID-19 pandemic has dramatically reshaped health care. While initially impacting direct patient care, its effects have slowly begun to encompass medical research, education, and other academic initiatives. For instance, medical trainees have been unable to complete rotations, sit for licensure examinations, and pursue other career defining activities. These issues are made more difficult by having to find balance with personal commitments, such as childcare or other family assistance. Altogether, these stressors combine to significantly impact student preparedness for the residency application process in summer 2020. Because of all of this, applicants as well as residency program leadership will need to be innovative, creative, and remain open-minded when utilizing the Electronic Residency Application Service (ERAS) application service in this dramatically altered health care environment.

The Advancing Vitae and Novel Contributions for Everyone (ADVANCE) group has previously published White Papers regarding the inclusion of novel and digital scholarship within professional CVs and the ERAS application. More recently, we have created a rubric for capturing scholarly, leadership, and advocacy efforts in response to COVID-19 on the traditional professional *curriculum vitae* (CV). Here, we aim to merge these two themes and provide guidance for residency and fellowship applicants in how to optimally use ERAS to promote their efforts and contributions during COVID-19. Additionally, tools are provided for amplification of these efforts in Personal Statements, interviews, and letters of recommendation. Suggestions are also presented around content to exclude.

## Problem Statement

Capturing and conveying the impact of COVID-19-related contributions such as research, leadership, service, and advocacy has become an important question in medicine and academics. Prior work published by the ADVANCE group aimed to address the question of adding novel information to traditional CVs and the ERAS application. This White Paper aims to: (a) provide guidance specifically for medical students applying for residency and residents applying for fellowship using ERAS, and (b) help guide these individuals for subsequent interviews and creating Personal Statements.

## Disclaimer

Please note that this White Paper is not meant to substitute for the advice of a trusted residency advisor or a faculty who knows your personal situation and the culture of your specialty or the institution you are applying to. If for any reason you have a doubt about how your COVID-19-related efforts would be received, or if you should include it at all, we encourage you to seek the counsel of a faculty advisor who is most familiar with your application packet.

## Source and Expert Panel

This White Paper builds from the foundation of several White Papers released by this work group, which have been paired with episodes of “Explore the Space” (see reference list). A medical student/resident specific White Paper focusing in the ERAS application (Social Media, Podcasts, and Blogs on a Residency/Fellowship ERAS Application) was released in June 2019. The “Covid19 Contributions On A Professional CV” Matrix was released June 2020.

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use of telemedicine-based resources to improve care for socially-vulnerable patients. Additionally, Dr. Wray is an Associate Editor and Deputy Digital Media Editor for the Journal of Hospital Medicine (JHM) where he helped establish the use of Visual Abstracts and the Twitter-based journal club; #JHMChat. Dr. Wray is also the Director of the JHM Editorial Fellowship.

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Dr. Shapiro currently serves as Associate Medical Director for Hospital Services with St. Joseph Health Medical Group-Sonoma County and has 13 years of clinical experience as a Hospitalist in full time non-academic practice. He is also the creator and host of Explore The Space podcast, which looks at the interface of healthcare and society while seeking to close gaps between those providing healthcare and those seeking it. Dr. Shapiro has also been featured on numerous podcasts and articles both for his work in the podcasting space as well as around disaster management for physicians. He previously served as Medical Director for Hospital Medicine at Santa Rosa Memorial Hospital and Chief of Medicine at Sharp Memorial Hospital.

## **Background**

In just a few short months, the COVID-19 pandemic has dramatically reshaped health care—starting with direct patient care and clinician deployment but also encompassing medical research, leadership, and innovation. Now more than ever, advocacy and other forms of service including lay public education are vitally important to protect patients and medical personnel. However, many of these non-traditional efforts may not have identifiable “homes” on the academic Curriculum Vitae (CV) or within the promotion and tenure application process. Medical and scientific communities have already begun to recognize that COVID-19 has disproportionately affected the professional output of specific members of the community. For example, early data has noted that women are submitting fewer publications compared to their male colleagues (Anderson et al; Viglione; Minello). Medical education has also been significantly impacted by COVID-19, with medical students unable to complete rotations, sit for licensure examinations, and pursue other career exploration activities. These stressors combine to significantly impact student preparedness to enter the residency application process in summer 2020. Additionally, the 2020-2021 residency recruitment and interview

season will likely be entirely virtual. Prospective applicants likely have significant concerns about how they will convey and articulate their strengths, professional commitments, personal interests, and core values as an applicant. Applicants as well as residency program leadership will need to apply innovation, creativity, and open-mindedness when utilizing long-standing application structures (namely the ERAS application) to a dramatically altered process. Analogous concerns likely exist for those applying to fellowship through the ERAS system.

This writing group, called the Advancing Vitae and Novel Contributions for Everyone (ADVANCE) has previously published White Papers regarding the inclusion of novel and digital scholarship within traditional professional CVs and the ERAS application. More recently, we have created a rubric for clinicians, medical educators, and researchers to capture and articulate contributions in response to COVID-19 on the traditional professional CV. Domains of contributions include clinical, research, education, service, advocacy, and media/social media engagement. Importantly, the proposed matrix captures not only demonstrable contributions, but also helps the user articulate work or opportunities impacted or lost due to COVID-19, such as a cancelled national conference presentation. It also advocates for documentation of caregiving responsibilities and other personal disruptions that might have impacted pre-existing professional commitments (ex. childcare, schooling from home, personal/partner work commitments or quarantine challenges).

Here, we aim to merge these two themes and provide guidance to applicants to residencies and fellowships for harnessing the ERAS format to promote their efforts and contributions in response to COVID-19. The contribution domains in the professional matrix will be applied to the ERAS template as best as possible. Additionally, tools are provided for amplification of these efforts within Personal Statements, interviews, and letters of recommendation. Suggestions are also presented around content not to include.

The following should be viewed as suggestion and as the personal opinions of this papers' authors based on their experience with social media and roles in physician and resident recruiting. This information has not been vetted with or approved by ERAS or residency program directors.

## Conclusions

### I. COVID-19 Contributions Belong on the ERAS Application

- a. This is the unanimous opinion of the authors.
- b. The ERAS template should be utilized to demonstrate your interests in, and commitment to, your chosen residency specialty, show your output to date and its impact on the world, and how you have differentiated yourself as a student.
- c. If a student's work with regard to the medical/scientific community response to the COVID-19 pandemic relates to their professional pursuits and demonstrates unique strengths and skills as a physician in training, then it should be included in the residency application.
- d. **It is critical to not over-exaggerate any contributions or disruptions. Any contribution can be easily verified and result in immediate de-listing for any further consideration**

## **II. Impact Should be Captured and Shared Using the Standard Format of the ERAS Application**

- a. This will be crucial to convey especially in early non-traditional utilization of the ERAS template, especially when advocacy and/or lay education, including and especially via digital platforms such as social media or mass media publication venues, have historically not had a “space” on the traditional application.
- b. Any data of impact and reach as well as the robust, intentional time and effort that it takes to produce such work should be conveyed

## **III. Contributions to Include (adapted from the professional CV matrix)**

- a. Research
  - i. Status of research during the COVID-19 pandemic
    - 1. COVID-affected
      - a. Halted (study name) due to COVID-19 responses—and would provide explanation of any direct contributions to help ramp down the research
      - b. Modified due to COVID-19 responses—and would provide explanation of any direct contributions to help modify the research
      - c. Planned but unable to initiate due to COVID-19 responses
      - d. Conference presentations that were cancelled or unable to attend due to COVID-19
    - 2. Ongoing and not affected by COVID
      - a. Study name, any funding, and progress
    - 3. New COVID-19-related research
    - 4. New COVID-19-unrelated
  - ii. Research and other scholarship output
    - 1. Peer-reviewed publications
    - 2. Non-peer reviewed publications
    - 3. Non-traditional scholarly contributions (ex. podcasts, blog posts)—*see more under education, advocacy, and social media depending on content themes*
- b. Education--Teaching and preparation for teaching during the COVID-19 pandemic
  - i. Ongoing and not affected by COVID-19
  - ii. Ongoing and affected by COVID-19
    - 1. Ex. unable to deliver due to COVID-19 related travel and/or workflow restrictions
  - iii. New teaching venues
    - 1. Traditional (ex. medical school teaching assistant roles)

2. Non-traditional teaching venues (ex. podcasts, blog posts, new journal club creation)—*see more under scholarship, advocacy, and social media depending on content themes*
- c. Service & Volunteerism related to COVID-19, ex.:
  - i. PPE donations and distribution
  - ii. Mobilizing community donations (ex. cloth masks)
  - iii. Food /shelter for homeless or others
  - iv. Mobilization of childcare resources for frontline providers
  - v. Medical school/residency committee/response roles and volunteer leadership
  - vi. Novel organizational work (ex. helping a conference modify to a virtual format, create new chapter events to support COVID-19 education/responses)
  - vii. Mentorship of peers/near-peers (ex. junior medical students and pre-medical students), especially if it pertains to COVID-19 related responses
- d. Advocacy or media related to education and outreach about the COVID-19 pandemic or combatting the “infodemic”
  - i. Op-ed writing
  - ii. Letters to the editor
  - iii. Creation and circulation of petitions
  - iv. Letters to government officials
  - v. Advising any advocacy organizations or professional associations
  - vi. Citations/interview in news articles
  - vii. Media appearances on TV, print or radio
- e. Social Media (ex. Twitter, Facebook, Instagram) and digital scholarship
  - i. Mission-driven content which demonstrates values and skills in using these platforms for education, advocacy, and content dissemination
    1. Personal social media accounts
    2. Participation in creating/maintaining organizational social media accounts
    3. Hosting Twitter chats
    4. Podcasts, blog posts--*see more under education, scholarship, and advocacy depending on content themes*

#### **IV. Where to Enter COVID-19 Contributions on ERAS**

- a. Traditional CV entries are bucketed on the ERAS application under types of experience. We recommend utilizing these predefined fields for the above potential types of contributions as follows. ERAS also includes fields for “dates” and “average hours/week”, which will be important to estimate as a measure of duration and extent of meaningful contributions. Utilize the “description” field to describe the nature of the work, your role, and quantitative and qualitative measures of impact and reach:
  - i. Research Experience
    1. Document the status of previously initiated research during the COVID-19 pandemic, ex.:

- a. Halted due to COVID-19
      - b. Able to continue during COVID-19 (and include additional efforts, if any, to ensure sustainability during COVID-19)
      - c. Planned but unable to initiate due to COVID-19
    - 2. Add research initiated during and/or in response to COVID-19
  - ii. Volunteer Experience
    - 1. This will likely be the best category to best capture contributions across multiple domains:
      - a. Teaching (unpaid)
        - i. Include traditional (ex. course/classroom based) and novel (ex. digitally based) teaching
      - b. Service and volunteerism (see examples above)
      - c. Advocacy (particularly longitudinal contributions)
      - d. Social media
        - i. Recommend focusing on account creation/leadership/maintenance roles (ex. podcast creator/producer, organizational social media account contributor, twitter chat moderator)
  - iii. Work Experience
    - 1. Likely less applicable than “volunteer experience”
    - 2. Avoid entering paid endorsements here (see further below)
- b. Publications/scholarship**
- i. Include any traditional publications (peer-reviewed and non-peer-reviewed)
  - ii. Include any scholarly projects designed to collate and dissemination information about COVID-19
    - 1. Ex. Internally disseminated institution specific information, externally disseminated patient-facing information
  - iii. Include invited poster/abstract and oral presentations (ex. at conferences) cancelled due to COVID-19 with a *\*\*cancelled due to COVID-19* notation
    - 1. Include modified presentation opportunities, ex. virtual or e-posters
- c. Hobbies & Interests**
- i. If not included in the narrative of the personal statement, may be an appropriate location to include COVID-19 related contributions not well documented in the aforementioned sections of ERAS
  - ii. Highly appropriate location to share general interest in social media, #MedTwitter, #hscsm (health care social media) even if not routinely contributing
    - 1. Share recurring participation in online/social media-based journal clubs/chats if no “leadership” position, especially for dedicated intentional learning about COVID-19 and networking/mentorship during physical distancing
    - 2. Consider sharing information about your longitudinal arc of advocacy interest/work via social media here (v. under “volunteer experience”)

3. Highly appropriate location to share general interest in reading medical blogs and/or listening to podcasts even if not routinely contributing, especially for dedicated intentional learning about COVID-19
- d. **Other Awards/Accomplishments**
  - i. Considering entering recognition, even if not formal awards, for COVID-19-related contributions (**acknowledging it as an accomplishment**)

## **V. Additional Opportunities to Capture COVID-19 Contributions During the Application Process**

- a. Modifications to clinical rotations
  - i. While the professional CV matrix includes space to document new clinical roles/responsibilities, we recommend that modifications to required rotations and patient care opportunities be best communicated in the application package via official materials provided by your medical school/residency program (ex. Dean's Letter)
- b. Personal Statement
  - i. Consider referencing how your contributions to the COVID-19 pandemic have solidified your choice of medical specialty and reflect your strengths as an applicant
  - ii. Discuss whether if modeling and mentoring achieved through such contributions has provided formative experiences driving your choice of specialty
  - iii. Reference leadership roles or sustained contributions to the above platforms, especially as they relate to professional development and choice of specialty
  - iv. Be mindful that many personal statements might reference COVID-19, and do not forget that the arc of your professional development extends far beyond the last few months
- c. Letters of recommendation
  - i. Given potential limitations on soliciting letters from clinical experiences, consider prioritizing letters from faculty who are also in a position to comment positively on your COVID-19 related contributions. Be proactive with asking them to include such information in your letters.
- d. Interviews
  - i. Interviews are another opportunity to expand on one's novel contributions. We agree with the adage, "if it's on your ERAS, it can be asked about in an interview". Frequently, we advise students to put items on their ERAS that they hope to be asked about. Highlighting novel contributions potentially invites further conversation.

## **VI. Further Areas for Consideration**

- a. Modifications to the following commitments might provide substantive information and broader context regarding application packages. However, the optimal location to enter in the application (ERAS, Dean's

letter, letters of recommendation, personal statement), if at all, might vary by specialty. We recommend seeking the advice of school and specialty specific advisors/mentors:

- i. Caregiving responsibilities and other personal disruptions that might have impacted pre-existing professional commitments (ex. childcare, schooling from home, personal/partner work commitments or quarantine challenges) if not well captured in other sections of the application
- ii. Other financial disruptions (ex. having to move out of medical school housing, loss of partner job due to COVID-19)
- iii. Cancelled rotations/observerships that had been in the process of being arranged. This might not naturally make it onto the Dean's letter, and might be most applicable to DO applicants or International Medical Graduates (IMGs)

## **VII. Content to Avoid**

- a. Paid endorsements
- b. Links to social media accounts used only/solely for personal reasons
- c. Material with potential conflict of interest or separate from your intended goal
- d. Any content that reflects poorly on the individual

## **Final Thoughts**

Medical students and residents have been instrumental in the medical community's response to the COVID-19 pandemic. Residents and fellows have important opportunities to demonstrate their contributions to our professional communities and patients through the ERAS application, personal statement, and interviews. We find it crucial for trainees to be able to convey and capture the impact of their work in direct response to COVID-19 on this application. Additionally, such inclusion provides application reviewers and interviewers important information about candidates they would benefit from knowing and understanding.

We also recognize that the COVID-19 pandemic has added new emphasis on discussions regarding how we reconcile and communicate the reality of the "mommy tax" or "minority tax"—unique stressors and demands on bandwidth affecting women and underrepresented minorities (URM) (Campbell et al; Rodriguez et al). While the focus with this White Paper is COVID-19 contributions, the ADVANCE authors recognize and respect that the May 2020 murder of George Floyd and ongoing Black Lives Matter activism efforts compound racial inequities seen within the COVID-19 pandemic, which include additional demands, stressors, and expectations on URM applicants.

The above framework represents an approach based on our opinions derived from our professional work. We cannot predict how such content will be assessed by residency programs or incorporated into applicants' global assessments. This work was also created without input from ERAS itself. Please feel free to reach out to the authors via email or Twitter with questions or feedback.

## Acknowledgements

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