The #Path2Path Virtual Landscape During the COVID-19 Pandemic: Preparing for the 2020 Pathology Residency Recruitment Season

Hannah Cutshall, BS¹, Reagan Hattaway, BS¹, Nikhi P. Singh, BS¹, Soroush Rais-Bahrami, MD², and Brandi McCleskey, MD³

Abstract
On May 11, 2020, the Association of American Medical Colleges released recommendations discouraging in-person activities for away rotations and mandating virtual-only residency recruitment interviews. This paper focuses on how residency programs have attempted to adjust to this vastly different application cycle by using social media to reach their applicants. A total of 138 programs were identified through the Electronic Residency Application Services. The presence of Departmental/Residency program Twitter, Instagram, and Facebook as well as web pages offering virtual opportunities was recorded for each program on October 30, 2020. A total of 132 social media accounts were found; the majority of which were on Twitter, while fewer were on Instagram and Facebook. All 138 pathology residency programs had websites. Sixteen (11.5%) of those advertised virtual open houses and 2 (1.4%) advertised virtual subinternships; social media were more often used for advertisement of these virtual experiences. A total of 58 open house opportunities were advertised on Twitter, 21 on Instagram, and 20 on Facebook. Innovative virtual subinternships ranging from 2 to 4 weeks were developed, but only represented 6% of the usual 126 away rotations available. Pathology programs across the country utilized websites and social media as a method of communication to interact with applicants as part of the #Path2Path in 2020 and to provide virtual opportunities in preparation for a drastically different recruitment cycle.

Keywords
COVID-19, education, pathology, #path2path, residency recruitment, social media

Introduction
On May 11, 2020, the AAMC released the following recommendations regarding away rotations and interviews: Residency interviews should only be conducted virtually, and away rotations should be discouraged unless there is no clinical access to that specialty at the students’ home institution or if the away rotation is a requirement of graduation.¹ While an away rotation is not required to apply to a Pathology residency, these suggestions limited exposure to the field, especially for students who need to rotate outside of their home institution to see different pathology subspecialties. These changes also limited in-person experiences crucial for exposure to hospital

¹ School of Medicine, University of Alabama, Birmingham, AL, USA
² Department of Urology, University of Alabama, Birmingham, AL, USA
³ Department of Pathology, University of Alabama, Birmingham, AL, USA

Corresponding Author:
Hannah Cutshall, University of Alabama at Birmingham School of Medicine, 1720 University Blvd, Birmingham, AL 35294, USA.
Email: hpcutsha@uab.edu
facilities and the environment to which they would be applying as well as forming interpersonal relationships with residents and faculty through direct communication and side-by-side work.

This paper focuses on how residency programs have attempted to adjust to this vastly different, constantly changing, application cycle through the use of social media, mirroring and expanding the #Path2Path approach. #Path2Path was an approach created by “Team Pathology” in 2018 for social media usage to better advertise Pathology as a medical field and dismiss negative myths and stereotypes of the field. Since 2018, many pathology-specific hashtags have been developed and are increasing in use and popularity. Specifically, this paper analyzes the use of Twitter, Instagram, and Facebook in reaching out to applicants, establishing connections, advertising program content via an available website, offering virtual open houses and virtual subinternships. The number of these opportunities was recorded. The posts analyzed were current in October 2020. Both past and future opportunities were recorded. The date of Twitter and Facebook account development was available on the account page. The date of Instagram account development was recorded as the first post on the page. These accounts were then categorized as created before or after March 1, 2020. March 1, 2020 was set as the transition point based on the timeline of the first cases of COVID-19 in America and the start of travel restrictions. The Visiting Student Application Service (VSAS) was reviewed for all pathology virtual and traditional subinternships. The length of the virtual subinternship and number of virtual subinternship per program was recorded. Programs were divided into these regions depending to geographical location categories as determined by the US Census: South, West, Northeast, Midwest, and Islands. The total number of programs using Twitter, Instagram, and Facebook accounts was recorded for each region.

### Methods

An official list of accredited pathology residency training programs participating in the 2020 to 2021 application cycle was obtained from the Electronic Residency Application Service. A total of 138 total programs were identified. All programs were included in this observational study and widely available resources were reviewed for the presence of departmental and/or residency program Twitter, Instagram, and/or Facebook accounts. Google search engine was used to search for accounts. These data were collected and deemed current as of October 30, 2020. This collected work was part of a larger consortium covering a total of 24 specialties analyzing social media use by residency programs as part of the COVID-19 pandemic impact on this application cycle. Social media platforms were reviewed for posts regarding virtual open houses and virtual subinternships. The number of these opportunities was recorded. The posts analyzed were current in October 2020. Both past and future opportunities were recorded. The date of Twitter and Facebook account development was available on the account page. The date of Instagram account development was recorded as the first post on the page. These accounts were then categorized as created before or after March 1, 2020. March 1, 2020 was set as the transition point based on the timeline of the first cases of COVID-19 in America and the start of travel restrictions. The Visiting Student Application Service (VSAS) was reviewed for all pathology virtual and traditional subinternships. The length of the virtual subinternship and number of virtual subinternship per program was recorded. Programs were divided into these regions depending to geographical location categories as determined by the US Census: South, West, Northeast, Midwest, and Islands. The total number of programs using Twitter, Instagram, and Facebook accounts was recorded for each region.

### Results

All 138 pathology residency training programs had available webpages, usually as a part of an overall departmental front-facing web content. Sixteen (11.5%) websites advertised virtual open houses and 2 (1.4%) websites advertised virtual subinternships. A total of 132 social media accounts were created for pathology departments and residency programs. Sixty-nine (52.3%) Twitter, 29 (21.9%) Instagram, and 34 (25.7%) departmental and/or residency training program Facebook accounts were developed. The majority of Twitter (84%), Instagram (68.9%), and Facebook (61.7%) accounts created were departmental accounts. Sixty-seven percent of departmental Twitter accounts were created before March 2020, while 54% of residency Twitter accounts were developed after March 2020. This trend was also seen with departmental and residency Instagram accounts. Fifty-seven percent of departmental Instagram accounts were created before March 1, 2020, compared to the 88% of residency Instagram accounts that were developed after March 1, 2020. In contrast, the majority of both departmental and residency Facebook accounts were created before March 1, 2020. The dates of development of social media accounts are illustrated in Tables 1 and 2. Social media usage also differed among programs in different regions

### Table 1. Number of Social Media Pages by Type Created Before and After March 1, 2020.

| Social Media Type | Departmental | Residency |
|-------------------|--------------|-----------|
| Twitter           | 39 (67.2%)   | 5 (45.5%) |
| Instagram         | 11 (55)      | 1 (11.1%) |
| Facebook          | 19 (90.5%)   | 11 (84.6%)|

### Table 2. Number of Social Media Pages by Type Created After March 1, 2020.

| Social Media Type | Number created (%) |
|-------------------|--------------------|
| Twitter           | 19 (32.7%)         |
| Instagram         | 6 (54.5%)          |
| Facebook          | 9 (88.9%)          |
| Departmental Twitter | 2 (41.3%)     |
| Departmental Instagram | 2 (17.4%)  |
| Residency Twitter | 6 (13.1%)          |
| Residency Instagram | 9 (19.6%)     |
| Residency Facebook | 8 (45.5%)       |
| Departmental Facebook | 2 (4.2%)  |
| Residency Facebook | 2 (4.2%)          |
Discussion

Pathology programs across the country utilized websites and social media (including various hashtags such as #Path2Path as a method to communicate with applicants prior to the virtual recruitment cycle and to provide virtual opportunities in this drastically different application cycle. All 138 programs throughout the US had a website page, with many programs displaying video tours of the hospital and video interviews with residents. This helped fill a gap for the lack of in-person travel to the facilities and integration into the resident group which is vital to resident applicants when deciding on their final rank order list.

There has been a steady growth in the number of program social media accounts since 2010, with a steep increase in social media usage in 2020 in this new virtual era (Figure 1). Twitter was the social media outlet most utilized by residency programs and pathology departments across all 4 regions of the country. Instagram was utilized second most in the Northeast, while Facebook was second most in the South. Facebook and Instagram were about equally utilized in the West and Midwest (Table 3). Departmental Twitter accounts were the predominant account type created after March 2020 (41.3%), while Instagram had the most residency program accounts (17.4% of total) created after March 2020 (Tables 1 and 2). Each of these social media outlets were utilized to offer virtual open houses; however, more open houses were advertised on Twitter, compared to Facebook and Instagram (Table 4). There were very few opportunities for virtual subinternships across all social media outlets with 2 on Twitter and 1 on Facebook and Instagram from the same program. On VSAS, there were a total of 7 programs that offered virtual away electives for a total of 8 away electives with an average of 3 weeks’ duration. In the past, there were traditionally 126 away electives offered on VSAS. The difference in the number of past traditional away electives compared to virtual electives offered this year shows the limitation of exposure to different programs. While Pathology does not require away electives, in a survey of the graduating class of 2019 that matched into Pathology, 43.4% reported having completed 1 or more away electives. Analysis following this application cycle will show the importance of away electives in the ranking and match percentage.

Study Limitations and Future Directions

Limitations to this study could include inability to find social media outlets for some of the programs due to use of acronyms,
different naming, and account privacy settings. Also, these data are based on a collection period ending in October 2020, thus new accounts could have been created by various programs after the data collection ended. Future directions following this study could include post-match interviews with applicants on their usage of social media outlets, virtual open houses, and virtual away electives completed as well as a survey of interviewers on the number of applicants who attended virtual open houses and any improvement or limitations these communications had in the application cycle.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The article processing fee for this article was funded by an Open Access Award given by the Society of ’67, which supports the mission of the Association of Pathology Chairs to produce the next generation of outstanding investigators and educational scholars in the field of pathology. This award helps to promote the publication of high-quality original scholarship in Academic Pathology by authors at an early stage of academic development.

ORCID iD
Nikki P. Singh, BS https://orcid.org/0000-0002-9112-4222

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Figure 1. Number of pathology program social media accounts created by year from 2010 to 2020.