## Pushed Across the Digital Divide: COVID19 accelerated pathology training onto the digital learning curve Medicine

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Introduction: Incorporation of digital teaching materials into residency training programs has followed a slow adoption curve expected for many new technologies over the past two decades. The COVID19 pandemic dramatically shifted the paradigm for many resident teaching modalities as teaching institutions instituted social distancing measures to prevent spread of the novel coronavirus. The impact of this shift on pathology trainee education has not been well studied.

**Methods:** We conducted an online survey of pathology trainees, program directors, and pathology faculty to assess pre- and post-COVID19 use of, and response to, various digital pathology modalities. Responses were solicited through both social media and directed appeals.

## Trainee respondents by year

PGY1	PGY2	PGY3	PGY4	PGY5+
15%	20%	23%	20%	24%



Program directors "I feel the quality and effectiveness of teaching(I) and learning(r) has been adversely impacted post-pandemic."



**Conclusions**: The global COVID19 pandemic created a unique opportunity and challenge for pathology training programs. Digital pathology resources were accordingly readily adopted to continue supporting educational activities. The learning curve and utilization of this technology was perceived to impair the quality and effectiveness of teaching and learning. Since the use of digital tools appears poised to continue to grow post-COVID19, challenges due to impaired quality and effectiveness for teaching and learning pathology will need to be addressed.

**Results**: 261 respondents (112 faculty, 52 program directors and 97 trainees) reported a dramatic and significant increase in the use of digital pathology-related education tools. A significant majority of faculty and program directors agreed that this shift had adversely affected the quality (59% and 62%, respectively) and effectiveness (66%) of their teaching. This perception was similar among learners relative to the impact on quality (59%) and effectiveness (64%) of learning. A majority of respondents (70-92%) anticipate that their use of digital pathology education tools will increase further or remain the same post-COVID19.

Faculty projected future use of digital teaching tools post-pandemic



Digital whole slides
Streaming video microscopy
Vinual Conferences with digital slides & interactive capability (e.g. Zoom
Recordel lectures, slide sessions or teaching videos





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