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New open-access website offers a treasure trove of digital slides HL7 collaborates with Google Health Catalyst and Regenstrief to advance text analytics technology Corista teams with Elsevier to augment digital platform Seacoast enhances system for document management

New open-access website offers a treasure trove of digital slides

If Rajendra Singh, MD, ever tires of pathology, he might well consider a career in e-learning or Web design.

On Jan. 1, Dr. Singh launched PathPresenter.com, an open-access website housing thousands of high-quality, deidentified whole slide images. In addition to offering a library of approximately 10,000 digital slides, PathPresenter can be used to integrate such slides into PowerPoint presentations. Users can view and annotate the slides before uploading them into their presentations. PathPresenter also contains a host of learning and self-teaching tools, including videos and side-by-side slide comparisons.

Dr. Singh, associate professor and director of immunodermatology, departments of pathology and dermatology, Icahn School of Medicine at Mount Sinai, New York City, has been collecting and archiving case slides for more than 15 years. He created PathPresenter to help pathologists increase their comfort level with digital pathology while easing the burden of searching for optimal case slides to present to residents or tumor boards or at conferences.

"For the common diagnoses, we have a lot of cases in the department, but when it comes to the cases you don't see day in and day out, it's tougher to find those cases to teach to the residents," Dr. Singh says. He notes that it would be rare for a U.S.-based pathologist to come across a case of leprosy, for example, or for a pathologist to have access to all variants of how melanoma will present.

PathPresenter's slide library is stored in the cloud, and no special software is needed to search for slides in the 16 subspecialties, including bone, breast, endocrine, gastrointestinal, liver, pediatric, and skin. Once users register on the site, they can view images, integrate them into folders, and use the folders for educational purposes at any time and via any computer or handheld device.

PathPresenter's presentation tool allows pathologists to enhance their PowerPoint presentations with slides that appear as if they are under a microscope rather than as a static image. Users can pan, zoom in and out on a slide, highlight slide features, and make annotations. "Your computer becomes your microscope," Dr. Singh says.

One of the most innovative site features is the high-yield section, which contained nearly 350 dermatology cases and 170 pathology cases as of CAP TODAY press time. Dr. Singh created this section in response to requests to include features on the slides. That request was not feasible for thousands of slides, "so we picked up very good cases that a resident should know and we annotated those cases, highlighting the features," he explains. Dr. Singh incorporated self-guided study tools in this section as well, including links to information needed to make a diagnosis, histological and clinical images, and links to WIYDx.com, another image-sharing site he operates.

Dr. Singh has received encouraging feedback since the PathPresenter launch, which he accomplished using only email and social media feeds. Helping him reach this point were Matthew Hanna, MD, of the University of Pittsburgh Medical Center, and Brandon Veremis, DDS, of Mount Sinai Hospital, both of whom serve on

PathPresenter's medical advisory board and advised Dr. Singh in developing the platform.

"PathPresenter is a very good option for sharing whole slide images," says Eric F. Glassy, MD, president of the Digital Pathology Association and medical director of Affiliated Pathologists Medical Group, San Pedro, Calif. "We just don't have a lot of sites that allow free uploads of whole slide images that you can then share with your colleagues. This one is unique in that it not only allows you to share the digital image but also to construct a PowerPoint presentation that is hosted and driven on the website."

Dr. Glassy praised the quality of PathPresenter's images, adding that "the navigation is smooth and reminiscent of the CAP DigitalScope viewer. In addition, it's easy to rotate the whole slide image." He noted, however, that there were a few small technical glitches, such as "occasionally missing images when performing a PowerPoint import." But he is quick to add that "this is an impressive first release, and, undoubtedly, the feature set will expand."

To further enhance PathPresenter, Dr. Singh encourages laboratorians to contribute slides to the site's image library. "If someone has a very good collection of cases and they're willing to share it with us," he says, "we take the glass slide from them, digitize it at our own cost, and then give them back a digital slide as well as the glass slide. They have a copy, and we have the ability to use the same slide in our program. It's win-win for them and for us." Everyone who contributes slides to the PathPresenter library is given credit with the phrase, "'This slide was shared by so-and-so,' when somebody else uses the slide," he adds.

Dr. Singh's ambitious plans for long-term sustainability of PathPresenter focus on "every clinician in the world" using the site, he says. As the site's audience grows, Dr. Singh anticipates that advertising revenue from companies that sell scanners and other medical equipment will allow the site to pay for itself. To date, he alone has funded PathPresenter's software development and site storage.

In its first 10 weeks, PathPresenter received more than 25,000 page views from 123 countries, according to the site analytics. Dr. Singh plans to add new features, such as the ability for pathologists to create tests and quizzes for residents, as part of his continued effort to increase the appeal of the site while maintaining it as a free resource.

"The goal," he says, "is to never charge any pathologist or any medical student or any clinician to use the platform."—Amy Aquino

HL7 collaborates with Google

The standards development organization Health Level Seven International recently reported that Google is supporting its Fast Healthcare Interoperability Resources standard and the FHIR community via the Google Cloud Platform.

Google Cloud will work with the HL7 FHIR Foundation to advance the health data interoperability efforts of both organizations by providing the underlying cloud technology for the HL7 FHIR developer community.

"Our support of the HL7 FHIR Foundation will help pave the way for data interoperability in the health care ecosystem based on open standards, which we value at Google," said Greg Moore, MD, PhD, vice president of health care at Google Cloud, in a statement.

In a separate announcement, Health Level Seven International reported that it has published the Argonaut FHIR Data Query Implementation Guide to simplify and standardize the exchange of basic clinical data.

"The culmination of months of open and collaborative deliberation by vendors and providers, this important work is already sparking faster adoption of the HL7 FHIR standard as a number of organizations are planning to implement the Argonaut FHIR specifications," according to a press release from Health Level Seven International.

The Argonaut Project is an industrywide collaboration of vendors and providers seeking to accelerate the development and adoption of HL7's Fast Healthcare Interoperability Resources.

Health Catalyst and Regenstrief to advance text analytics technology

Health Catalyst and the Regenstrief Institute announced that they have forged an agreement to commercialize Regenstrief's artificial intelligence-powered text analytics technology.

As a commercialization partner, Health Catalyst will incorporate Regenstrief's nDepth technology into the Health Catalyst data analytics platform used by health systems serving 85 million patients in the United States, Health Catalyst reports.

The nDepth technology is intended to accelerate improvements in patient care by unlocking the unstructured data in electronic health records.

"The solution uses natural language processing—a combination of linguistics, pattern recognition, and machine learning—to derive meaning from text," according to a press release from Health Catalyst. "NDepth enhances these foundational technologies with clinical domain expertise and rich phenotype libraries built and curated by clinicians."

Health Catalyst, 855-309-6800

Corista teams with Elsevierto augment digital platform

Corista has partnered with Elsevier to provide access to Elsevier's ExpertPath and ImmunoQuery diagnostic decision-support tools from within the dashboard of Corista's DP3 digital pathology workflow suite.

ExpertPath is a searchable library of more than 50,000 annotated images from every body site. It also includes images from intraoperative, endoscopic, and radiologic sources for clinical correlation. Differential lists, ancillary tests, and specimen-handling protocols are provided for all areas of clinical and anatomic pathology.

Elsevier's ImmunoQuery immunohistochemistry tool draws on results from more than one million cases presented in peer-reviewed literature to provide expert guidance on evaluating antibodies, building diagnoses panels, and analyzing results.

"Users of Corista's integrated pathology solutions can now access and apply the complete ExpertPath and ImmunoQuery libraries within their digital pathology workflows," said Liz Wingard, CEO of Corista, in a statement. Corista, 978-287-6188

Seacoast enhances system for document management

Seacoast Laboratory Data Systems has expanded its SLScan document-management system for requisition scanning to include scanning of laboratory reports and patient insurance and identification cards.

The product, which is integrated with Seacoast's SurroundLab Plus lab information system and SurroundLab AR revenue cycle management software, has also received enhancements for the processing of missing information requests within SurroundLab AR.

SLScan, which uses barcode recognition, allows clinical laboratory professionals to rapidly scan, index, electronically store, and view paper documents.

Seacoast Laboratory Data Systems, 603-431-4114

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