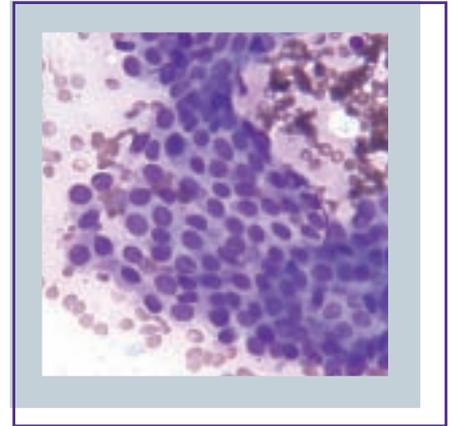
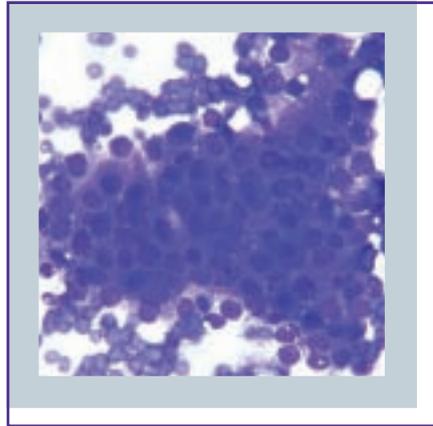
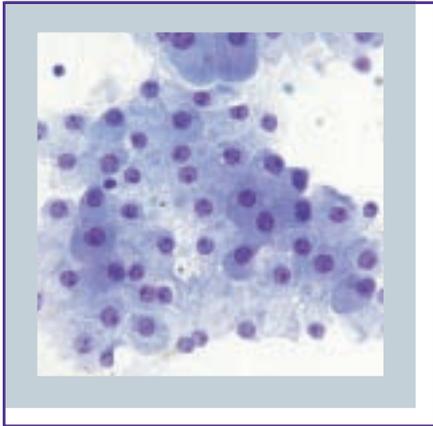




VIEWING PLATFORM



A NEW ONLINE TRAINING TOOL LAUNCHED IN AUSTRALIA IS TAKING THE MYSTERY OUT OF CANCER DIAGNOSES FOR YOUNG PATHOLOGISTS. KIM COTTON REPORTS.

A quiet revolution is currently transforming pathology training in Australia, launching 21st-century technology into one-on-one teaching.

A new online learning tool – InView – is reinventing the way in which young pathologists learn to diagnose cancer.

Not only does it allow anatomical pathology registrars to analytically assess cases and test their skills against experts in their own time, it also has the potential to train them to make better and more reliable diagnoses in cancer pathology.

And it has the scope to provide qualified pathologists with standardised assessments for ongoing professional development.

InView uses a combination of virtual microscopy, diagnostic simulation and automated assessment. At the click of a mouse, users can train, test and compare their diagnostic skills against experts through a series of modules, which at present cover breast and urine cytopathology, and cervical, breast, skin and prostate histopathology.

InView was developed by researchers at Queens University in Belfast and biomedical software company i-Path Diagnostics in collaboration with the Royal College of Pathologists of Australasia (RCPA).

Professor Peter Hamilton, Head of Bioimaging and Informatics at Queens University and Managing Director of i-Path Diagnostics, says the key advantage of InView over traditional training methods is that it allows registrars to practise diagnostic techniques independently using authentic pathology cases.

“InView takes [trainees] through the diagnostic process in cancer pathology, it teaches the steps that are necessary to make a decision, it provides the visual tools that allow [trainees] to interpret the key clues in making a diagnostic decision and it allows them to compare their performance against an expert,” Professor Hamilton says.

“It gives you feedback on where you have gone wrong in the assessment so it helps you to learn by repeating the case and by understanding exactly where you have made mistakes and rehearse that again.”

It also allows teachers and supervisors to easily identify consistent under- or over-estimation of diagnostic clues which their trainees assess.

Passing on the flame

Early in-house research conducted at Queens University suggests InView improves user performance in terms of consistency and reproducibility in diagnoses, Professor Hamilton says.

By using it as a tool to teach medical students how pathological decisions are made, it is also reviving an interest in pathology among undergraduates with the hope they will consider taking up the discipline in the future.

Professor Richard Williams, the RCPA's chief examiner in anatomical pathology and Director of Anatomical Pathology at Melbourne's St Vincent's Hospital, has been instrumental in the development of InView.

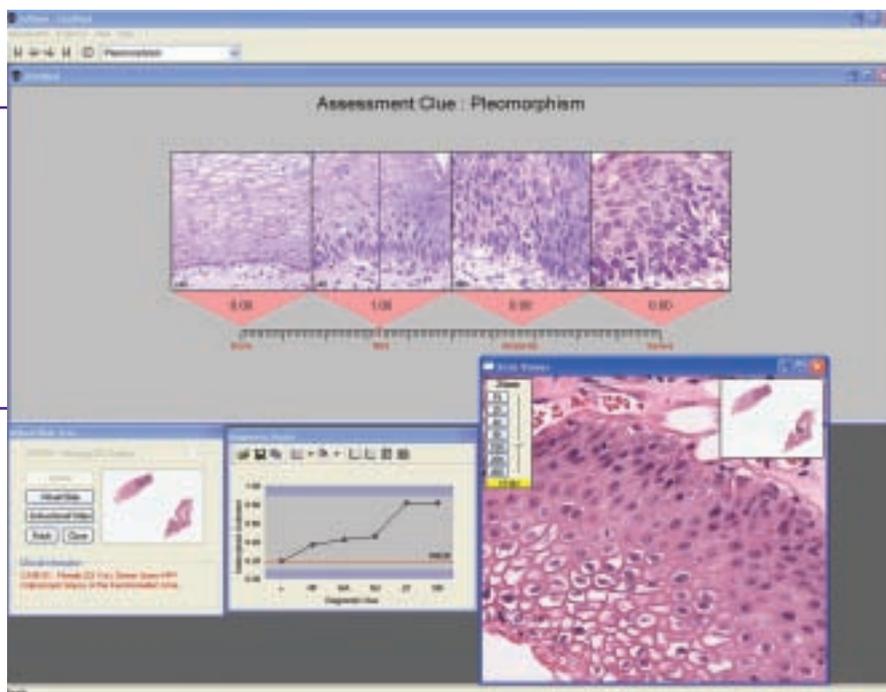
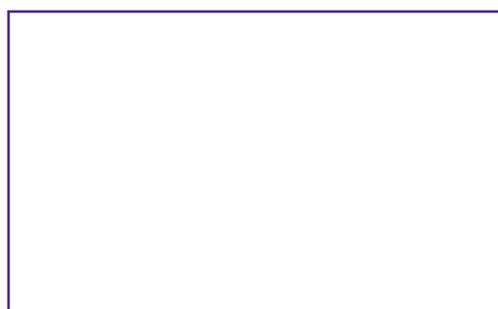
He says the system's value lies in its explicit teaching of the vital steps that lead to good diagnostic practice.

Essentially, it takes the mystery out of how experienced pathologists make a diagnosis.

“I remember when I was a [new] registrar I wondered how the heck people were getting to an answer so quickly. It takes you sitting down with them for a long time to work out how they're really doing that ... whereas InView actually shows you what people do to reach a diagnosis,” Professor Williams says.

“Instead of making an intuitive diagnosis and working backwards and then trying to find a couple of clues that will confirm that diagnosis to you – an approach that is fraught with danger – it actually teaches people to look through things systematically.

“InView provides an objective, standardised approach to assessing diagnostic skills and this can be used effectively for appraisal and efficiency testing” – Professor Peter Hamilton



“They get used to analysing rather than believing that there is some magic in how [experienced pathologists] make a diagnosis.”

InView speeds up the learning process, but it won't necessarily speed up the process of a registrar becoming competent, Professor Williams adds.

“There's a lot of optical mileage needed. You have to keep doing it and doing it and refining what you're thinking. What InView does is set you in a pattern of thinking where you take all the clues and you weigh them and you're much more likely to reach a proper diagnosis. It trains you to analyse a case. It means you're much more likely to get consistency in diagnosis.”

Developments in train

RCPA CEO Dr Debra Graves says InView has been introduced to several major Australian laboratories over the past nine months.

“The college is encouraging more public and private laboratories to make InView accessible to registrars as part of their training,” she says.

“The idea behind it is to be able to provide a resource for trainees to be able to learn in a similar way to how they're trained in the apprentice-type model.”

However, that doesn't negate the role of traditional training methods in the laboratory. Dr Graves says InView provides a flexible way for young anatomical pathologists to develop good diagnostic practices.

“With having such a shortage of pathologists, sometimes these sorts of aids can be very helpful in relation to assisting the trainees.”

While InView is gaining a reputation as a training platform for pathologists, it also has an “enormous” role to play in proficiency testing and competency assessment, Professor Hamilton says.

In the UK, InView was recently registered for continuing professional development by the Royal College of Pathologists. And further plans are underway to design an independent library of cases, which may be used in continuing medical education in Australia.

“One of the real problems in assessing diagnostic proficiency is that there are no

real standards and assessment varies from one individual to another,” Professor Hamilton says.

“InView provides an objective, standardised approach to assessing diagnostic skills and this can be used effectively for appraisal and efficiency testing.”

The popularity of InView since its roll-out is testament to its success. Professor Hamilton says potential authors are now queuing up to contribute to the programs, and within the next 12 to 16 months he anticipates many new modules will be available.

But he believes that ultimately, it is the patients who will have the most to gain from such innovative technology.

“This will have an impact on the quality of health care.” 🔥

To purchase InView please log onto www.rcpa.edu.au