

## Art under the microscope

Shimin Zhang<sup>1</sup>, Yahong Bai<sup>2</sup>

<sup>1</sup>Peking Union Medical College Hospital, Beijing 100730, China; <sup>2</sup>Baoji City People's Hospital of Shaanxi Province, Baoji 721000, China  
Correspondence to: Shimin Zhang, Peking Union Medical College Hospital, Beijing 100730, China. Email: zhshmin@126.com.

Submitted Feb 06, 2016. Accepted for publication Feb 16, 2016.

doi: 10.21037/cdt.2016.02.02

View this article at: <http://dx.doi.org/10.21037/cdt.2016.02.02>

The microcosm in which bacteria, fungi, and viruses exist is visible only under the (electron-) microscope. The daily work of clinical laboratory physicians is focused on identifying and understanding the threat of these organisms for human health. However, this microscopic world is also full of beauty and artistic patterns (1).

During a recent internship in Peking Union Medical College Hospital, Dr. Yahong Bai from Baoji City People's Hospital of Shaanxi Province, acquired a number of microscopic photos of bacteria. These photos were taken during daily microscopic observation of microbes, including: *F. pedrosoi* from a specimen of crustacea (*Figure 1*); *E. dermatitidis* from a specimen of brain tissue (*Figure 2*); *B. spocofera* from a specimen of cerebrospinal fluid (*Figure 3*); and *Trichosporon ash* from a blood culture (*Figure 4*). All these specimens are dyed with lactophenol cotton blue by pellet method.

When Prof. Shimin Zhang from Peking Union Medical College Hospital reviewed the photos collected by Dr. Yahong Bai, he observed that the style of these photos is similar to Chinese paintings, he made some editions and added frames with Chinese features. Using four of these panels, a Chinese-painting style image was created, which we named "Spring, Summer, Autumn and Winter under the microscope".

We believe that identifying these artistic features under the microscope reflects the analytic training of a



**Figure 1** "Spring"; *F. pedrosoi* from a specimen of crustacea which resembles plum blossom in the Spring.

highly experienced physician and the ability to recognize common and unusual patterns in the examined material.



**Figure 2** “Summer”; *E. dermatitidis* from a specimen of brain tissue which looks like fruits hanging from a tree in Summer.



**Figure 4** “Winter”; *Trichosporon* ash from a blood culture which resembles like the icicles in Winter.



**Figure 3** “Autumn”; *B. spocofera* from a specimen of cerebrospinal fluid which looks like golden leaves in Autumn.

The identification and analytic understanding of novel and unexpected patterns is critical for advances in the field of microbiology, and in medicine in general.

#### Acknowledgements

None.

#### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

#### References

1. Weiner M. Embroidering the microscopic world. *Cardiovasc Diagn Ther* 2013;3:58-9.

Cite this article as: Zhang S, Bai Y. Art under the microscope. *Cardiovasc Diagn Ther* 2016;6(2):191-192. doi: 10.21037/cdt.2016.02.02