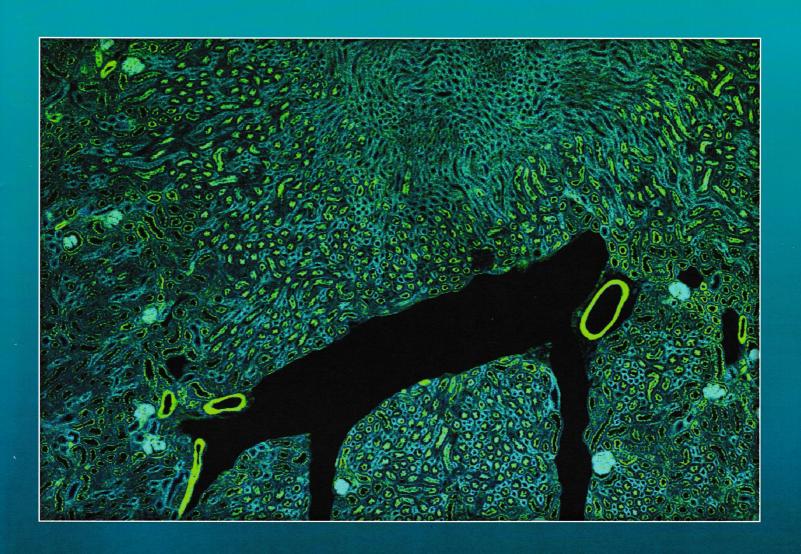


# Texas Journal of Microscopy



Volume 56 Number 1, 2025 ISSN 1554-0820

# Abstracts

## **EDUCATION** Spring 2025

### AN EDUCATION PROGRAM TO ASSIST MID-CAREER PROFESSIONALS TO TRANSFER TO A MICROSCOPY CAREER.

Keith Holcomb, Mark Armitage, DSTRI.org, Sequim, WA, 98382.

Mid to late career professionals (particularly prospective retirees) experience steep challenges when faced with the desire to switch careers entirely and seek a challenging working adventure far removed from their own experience [1, 2, 3, 4]. This can be especially challenging when transferring from a non- academic, non bench-topscience career (aviation for example), into a hard-science opportunity like microscopy. A wide variety of career choices exist within the field of microscopy (a fact not readily apparent to an aviator), however without adequate motivation, proper training and mentorship/education, employment opportunities such as 'light microscopist' are simply unavailable to professionals who might consider it a possibility. There is certainly no substitute for training and education in any science. Often decades of study are undertaken to excel at science. Thankfully regional programs of study are available within travel distance for those who can afford it. But might the prospect of all that daunting training deflate the prospective second career professional? Motivation might seem a trivial matter to consider when navigating the winding trail of starting again at 60. But in the first author's case, motivation was everything and it came from a microscopist who had amazing paleontological specimens and was searching for students. In this presentation we briefly review the implementation of planning, education and execution modalities that have allowed the first author to transition from an advanced status aviation career (40+ years) into a microscopy-based science career (including rewarding microscopy/publication and presentation opportunities). Modalities include acquiring professionalgrade instruments, conducting guided research on fresh paleontological specimens, mastering dissecting and compound microscopy, photomicrography (Figures 1,2), specimen processing and polarised light under guided mentoring. All these can lead one to microscopy that clearly advances science as shown. With involvement in local area microscopy societies, attendance and participation at other microscopy meetings (like M&M), along with volunteering in labs, the first author has been led to begin mentoring young students to do likewise. Now giving back to our youth is an unexpected reward.

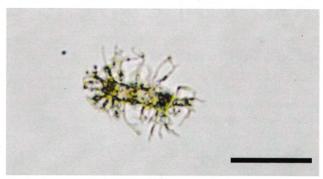


Figure 1 Brightfield (BF) Osteocyte, demineralized surface shard Scale bar =  $18\mu m$ 



Figure 2 Brightfield (BF) Osteocyte matrix, demineralized surface shard. Scale bar =  $25\mu m$ 

### References:

- 1. Nalis I, Kubicek B and Korunka C (2021) From Shock to Shift-A Qualitative Analysis of Accounts in Mid-Career About Changes in the Career Path. Front. Psychol. 12:641248. doi: 10.3389/fpsyg.2021.641248
- 2. Ruiz Castro, M., Van der Heijden, B.I.J.M. & Henderson, E.L. (2020). Catalysts in career transitions: Academic researchers transitioning into sustainable careers in data science. Journal of Vocational Behavior. https://doi.org/10.1016/j. ivb.2020.103479.
- 3. Haasler, S., & Barabasch, A. (2015). The role of learning and career guidance for managing midcareer transitions - comparing Germany and Denmark. British Journal of Guidance & Counselling, 43(3), 306-322. <a href="https://doi.org/10.1080/03069885.20">https://doi.org/10.1080/03069885.20</a> 15.1020758
- 4. Mid-Career Professionals in STEM Transiting to School Teaching: Barriers at the Border. James J Watters and Carmel M Diezmann Queensland University of Technology, Brisbane j.watters@ qut.edu.au 2nd International STEM in Education Conference