Optically excited (hot) electrons play a crucial role for many fundamental chemical and physical phenomena occurring at surfaces, interfaces, and in bulk materials. Recent technological breakthroughs in the development of ultrashort pulsed light sources and electron spectrometers have paved the way for a completely new generation of real-time photoemission experiments. I will demonstrate the potential of time-resolved momentum microscopy to directly trace relaxation pathways of excited electrons in momentum space.