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Paper Title:	Modular Custom-made whole slide imaging via contrast-autofocusing
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#### Abstract

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This research presents the design and implementation of a custom-made whole slide imaging system utilizing contrast-based autofocusing. The system is modeled after a traditional light microscope but incorporates 3D-printed components to enhance modularity. The autofocusing mechanism adjusts based on the contrast value of the captured images, ensuring precise focus. The system is controlled via a Python application, offering flexibility and allowing for extensive software customization. ImageJ software is employed to acquire and analyze data, providing researchers with robust and adaptable tools for various applications. The implications of this research are significant, offering a low-cost, highly flexible alternative to conventional whole-slide imaging systems, thereby enabling researchers to conduct a wide range of investigations with increased precision and ease.

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