



A postdoctoral position in quantitative and structural biology is available in the lab of Stefanie Redemann in the Department of Molecular Physiology and Biological Physics at the University of Virginia (<https://med.virginia.edu/redemann-lab/>).

The position is available from march 1<sup>st</sup> or later and is initially limited to 1 year, with a possible extension.

Our Lab is interested in uncovering and understanding the underlying principles of spindle assembly, the structure function relation and the basics of the huge variability of spindle size, architecture and mechanics between different tissues as well as different species. In particular we are very interested in the adaptation of spindle architecture and function during cell differentiation.

We are using a combination of large-scale 3D reconstruction of spindles by electron tomography and state-of-the-art light microscopy in our lab. Ultimately the dynamic and ultra structural data is used to develop and test models of spindle formation and mechanics. For this we are working in close collaboration with physicists, mathematicians and computer scientist at Harvard, NYU and UNC. The project requires the combination of techniques from molecular biology, light- and electron microscopy, data analysis and interpretation and has a strong focus on interdisciplinary thinking (biology, physics and computer science).

Qualified candidates must have a Ph.D. degree and at least one original first author publication in a related field. We are looking for a highly motivated individual with a solid background in light microscopy, image and data analysis (MatLab). In addition either experience with electron tomography and/ or cell culture (stem cells, organoids) is desired. The candidate joining the laboratory should be able to work both independently as well as a part of a team.

For more information visit [jobs.virginia.edu/applicants/Central?quickFind=82945](https://jobs.virginia.edu/applicants/Central?quickFind=82945) or contact [sz5j@virginia.edu](mailto:sz5j@virginia.edu)