

## OME-Zarr: a cloud-optimized bioimaging file format with international community support

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### Abstract

A growing community is constructing a next-generation file format (NGFF) for bioimaging to overcome problems of scalability and heterogeneity. Organized by the Open Microscopy Environment (OME), individuals and institutes across diverse modalities facing these problems have designed a format specification process (OME-NGFF) to address these needs. A wide range of those community members have built a cloud-optimized format – OME-Zarr – along with tools and data resources available today to increase FAIR access and remove barriers in the scientific process. The current momentum offers an opportunity to unify a key component of the bioimaging domain — the file format that underlies so many personal, institutional, and global data management and analysis tasks.

### References

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Josh Moore, Daniela Basurto-Lozada, Sébastien Besson, John Bogovic, Eva M. Brown, Jean-Marie Burel, Gustavo de Medeiros, Erin E. Diel, David Gault, Satrajit S. Ghosh, Ilan Gold, Yaroslav O. Halchenko, Matthew Hartley, Dave Horsfall, Mark S. Keller, Mark Kittisopikul, Gabor Kovacs, Aybüke Küpcü Yoldaş, Albane le Tournoux de la Villegeorges, Tong Li, Prisca Liberali, Melissa Linkert, Dominik Lindner, Joel Lüthi, Jeremy Maitin-Shepard, Trevor Manz, Matthew McCormick, Khaled Mohamed, William Moore, Bugra Özdemir, Constantin Pape, Lucas Pelkmans, Martin Prete, Tobias Pietzsch, Stephan Preibisch, Norman Rzepka, David R. Stirling, Jonathan Striebel, Christian Tischer, Daniel Toloudis, Petr Walczysko, Alan M. Watson, Frances Wong, Kevin A. Yamauchi, Omer Bayraktar, Muzlifah Haniffa, Stephan Saalfeld, Jason R. Swedlow  
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