

## Review

### **PALM and STORM: What hides beyond the Rayleigh limit?**

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#### ABSTRACT

Super-resolution imaging allows the imaging of fluorescently labeled probes at a resolution of just tens of nanometers, surpassing classic light microscopy by at least one order of magnitude. Recent advances such as the development of photo-switchable fluorophores, high-sensitivity microscopes and single particle localization algorithms make super-resolution imaging rapidly accessible to the wider life sciences research community. As we take our first steps in deciphering the roles and behaviors of individual molecules inside their living cellular environment, a new world of research opportunities beckons. Here we discuss some of the latest developments achieved with these techniques and emerging areas where super-resolution will give fundamental new “eye” sight to cell biology.