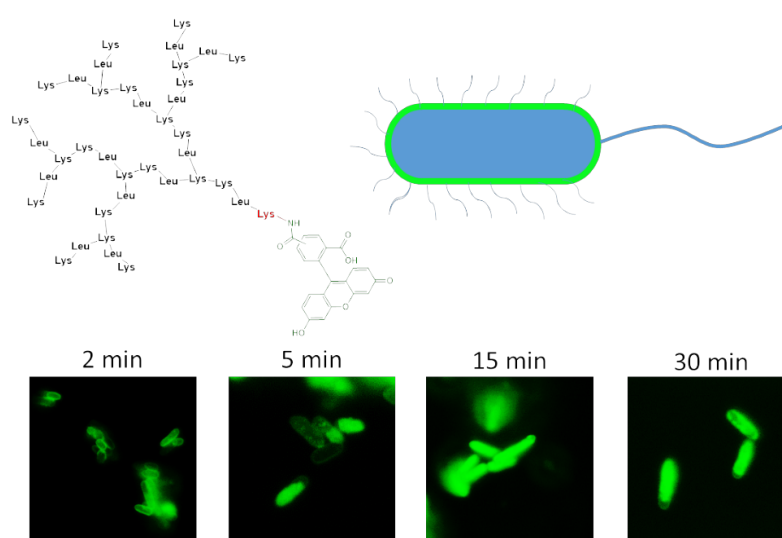


## Fluorescent Labeling of the Antimicrobial Peptide Dendrimer **G3KL** to Probe Its Entry into *Pseudomonas aeruginosa*

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We recently showed that peptide dendrimer **G3KL**, with amino acid sequence (KL)<sub>8</sub>(KKL)<sub>4</sub>(KKL)<sub>2</sub>KKL, exerts strong antimicrobial activity against multidrug resistant clinical isolates of the Gram negative bacteria *A. Baumannii* and *P. aeruginosa*<sup>1,2</sup>. **G3KL** was further shown to have positive impact in burn wound-healing processes and pro-angiogenic effect<sup>3</sup>. Inspired by imaging studies with fluorescent analogs of the cyclic antimicrobial peptide polymyxin B,<sup>4</sup> we have modified **G3KL** at its C-terminus and obtained fluorescent analogs that retain the antimicrobial activity of **G3KL**, and used super resolution STED nanoscopy imaging to investigate how these fluorescent **G3KL** analogs penetrate *P. aeruginosa* cells.



**Figure 1:** Structure of the fluorescein labeled peptide dendrimer **G3KL** and nanoscopy STED imaging of *Pseudomonas aeruginosa*.

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