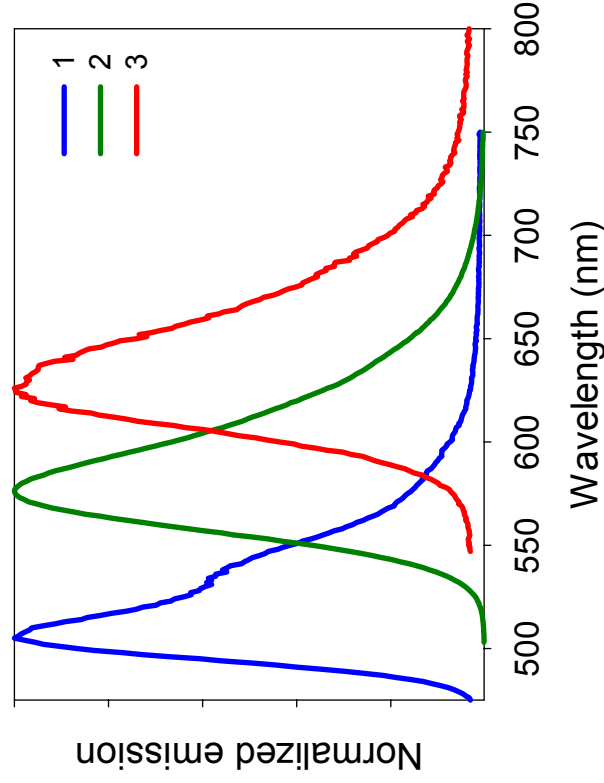
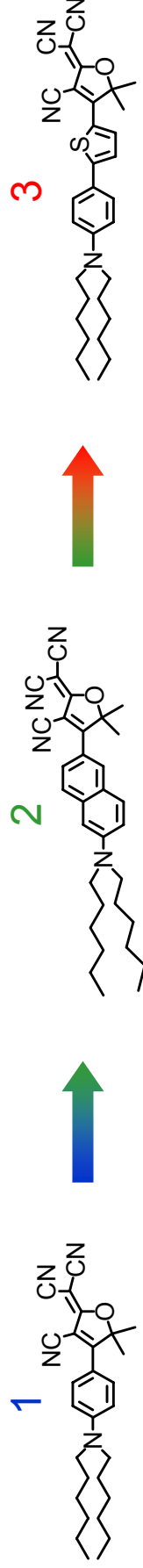


Improving DCDHF photophysics for single-molecule cellular imaging

Newer DCDHF derivatives (**2**, **3**) are designed with red-shifted absorption and emission relative to the original DCDHF molecules (i.e. **1**), higher fluorescence quantum yields (Φ_F), and improved contrast in Φ_F between nonpolar and polar environments (e.g. toluene vs. methanol).



	Φ_F (toluene)	$\frac{\Phi_F(\text{toluene})}{\Phi_F(\text{MeOH})}$
1	10%	20
2	65%	186
3	61%	76