Supporting Information for

Hydrophobic Barriers for Directing *Physarum polycephalum* Propulsion and Navigation

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Table of Contents

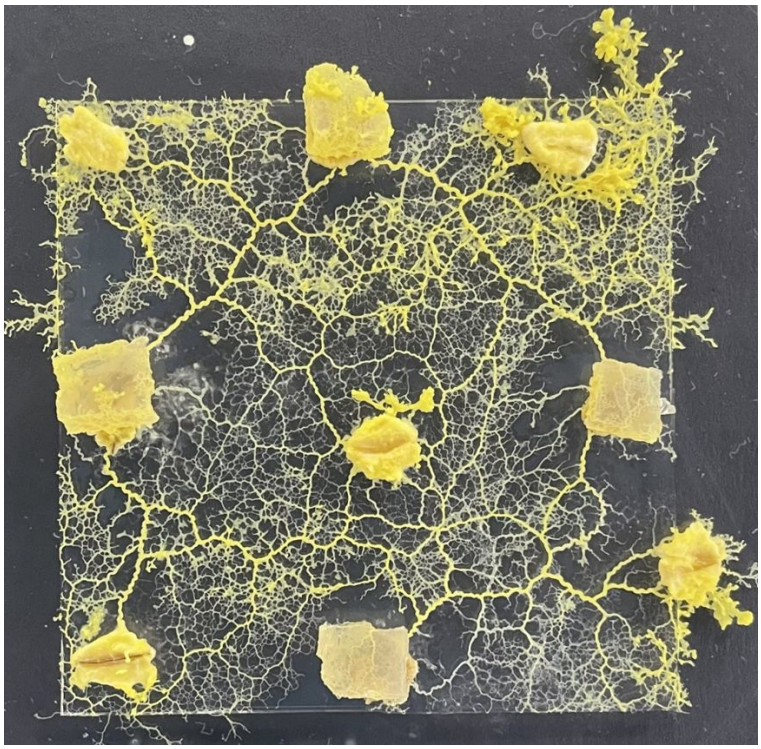


Figure S1. Overgrowth and network formation between *P.polycephalum* (north, south, east, and west) according to the distribution of multiple nutritional sources (center, northeast, northwest, southeast, and southwest).

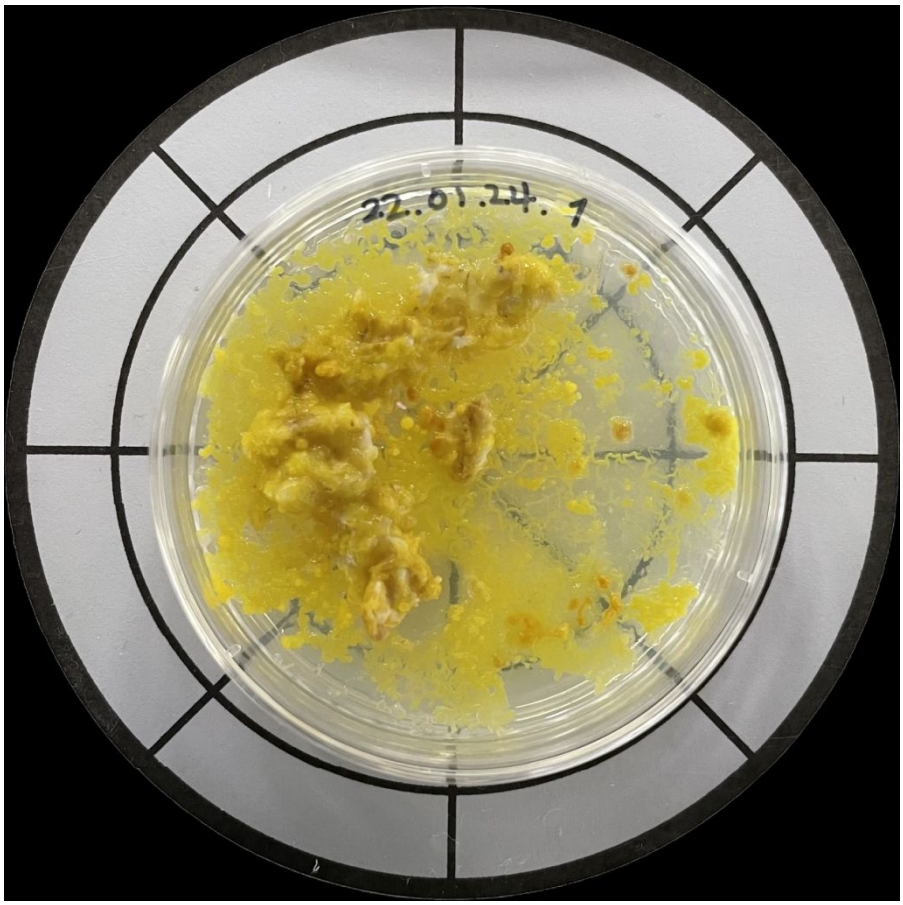
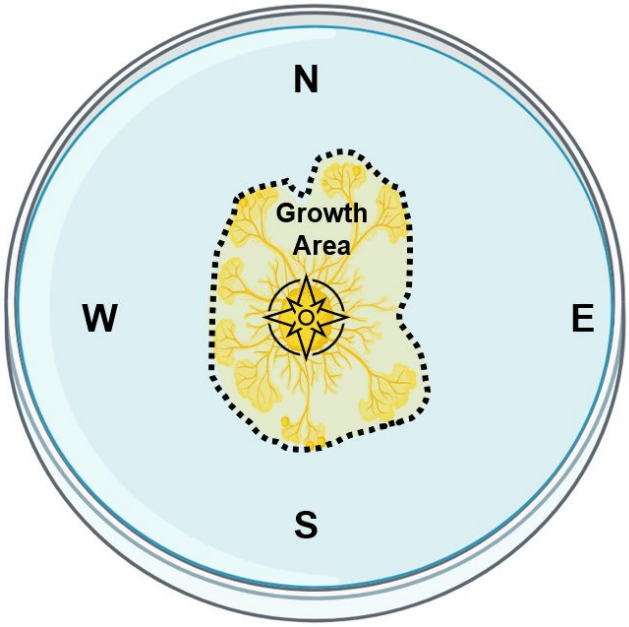


Figure S2. Subculture conditions (growth media with oatmeal) of *P.polycephalum*. *P.polycephalum* was fully cultured for 48 hours and subsequently subcultured to several petri dishes by dicing (1 × 1 cm^2).



$$\text{Growth rate (\%)} = \frac{Growth\ Area}{Initial\ Area} \times 100\ (\%)$$

Figure S3. *P.polycephalum* growth rate equation.

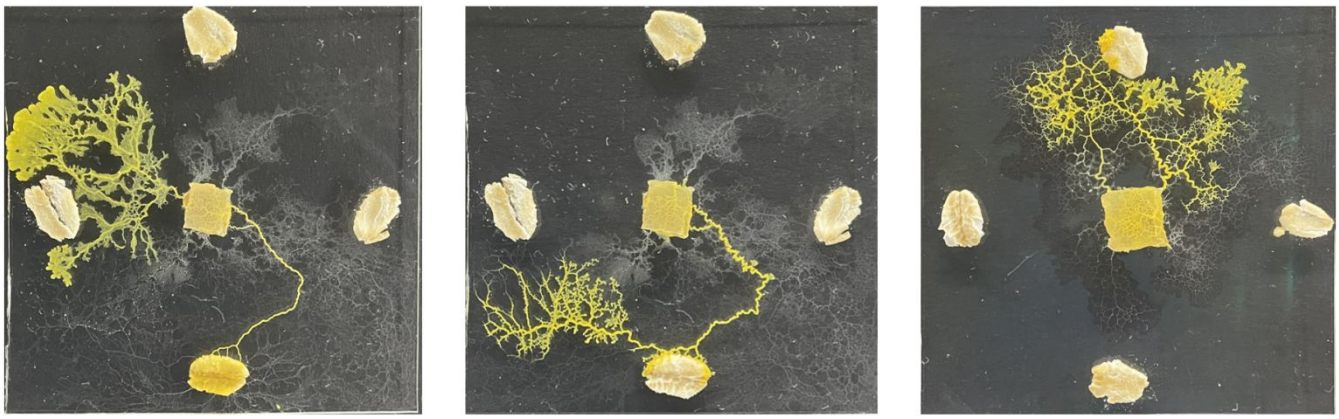


Figure S4. Multidirectional growth (24 hours) of *P.polycephalum* in response to spatially dispersed nutrient sources.

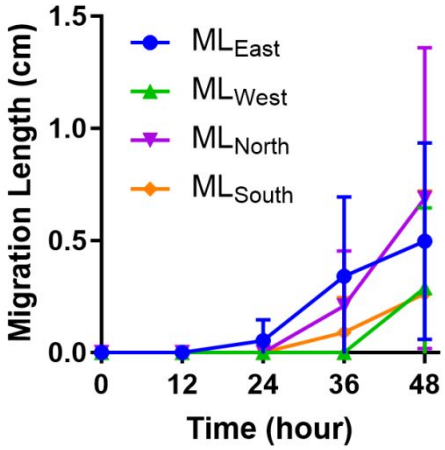


Figure S5. The plot of the migration length (ML_{East}, ML_{West}, ML_{North}, and ML_{South}) of *P.polycephalum* over time in the absence of hydrophobic barrier (Figure 4a).