**Figure A**

- Green arrows indicate the direction of movement.
- Black arrows indicate the opposite direction.

**Figure B**

- DAPI staining.

**Figure C**

- Green arrows indicate the direction of movement.
- White arrows indicate the opposite direction.

**Figure D**

- Merge image with 10 µm scale bar.

**Transplantation**

- The transplantation process involves the careful placement of cells or tissues into the host environment to facilitate regeneration or repair.

**References**

1. *Science Translational Medicine*
2. *Nature Communications*
3. *Journal of Biomedicine & Biotechnologies*
In situ

A. The protein is localized to the endoplasmic reticulum (ER) and nucleus (N) of the cell. The ER is stained with a red dye (R) and the nucleus is stained with a blue dye (B).

B. The protein is localized to the mitochondria (M) and plasma membrane (PM) of the cell. The mitochondria are stained with a green dye (G) and the plasma membrane is stained with a yellow dye (Y).