Frog Embryo in the Blastula Stage

By: Michaels, Chinami Keywords: vegetal pole, animal pole

Illustration of the animal-vegetal gradient in Xenopus laevis (African clawed frog) eggs after fertilization. During fertilization, the sperm's point of entry determines the future dorsal side (shaded) and ventral side (unshaded) of the embryo. The prospective ventral side of the embryo forms on the side where the sperm enters while the prospective dorsal side forms opposite the sperm's point of entry. The animal pole (dark green), marginal zone (lime green) and the vegetal pole (yellow - green) are delineated here as the animal-vegetal gradient is determined in the egg before fertilization. The blastopore groove forms across from the sperm's point of entry (roughly 180°).

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