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A SUMMARY OF STAGES OF LIMB REGENERATION IN THE AXOLOTL

This material is taken from a paper, "A staging system for fore-limb regeneration in the axolotl Ambystoma mexicanum" which is currently in press in the Journal of Morphology. The authors are Patrick W. Tank, Bruce M. Carlson, and Thomas G. Connelly. This staging system was worked out on animals ranging from 150 to 180 mm in total length. The limbs were amputated at the mid-upper arm level. For those interested in limb regeneration in smaller axolotls, a partial staging system is included in a paper by J. Faber, (1959) Arch. Biol. 71: 172.

SUMMARY OF KEY GROSS OBSERVATIONS USED IN DEFINING STAGES OF REGENERATION

<u>Figure</u>	<u>Stage</u>	
a	WH	Begins with amputation; ends with rounding of the edges of the stump.
b	DD	From rounding of the edges of the stump until the first evidence of blastema outgrowth.
c	EB	From first blastema outgrowth to formation of a symmetrically contoured, cone-shaped regenerate.
d	MB	Starts with a symmetrical cone which curves markedly in a posterodorsal direction. Ends with the first indication of flattening of the cone.
e	LB	Begins with flattening of the dorsally curved cone and ends with the appearance of the first digital primordium.
f	Pal	The period beginning with the gross appearance of the first and ending with the appearance of the fourth digital primordium.
g, h	DO	The period from appearance of the fourth digital primordium to stabilization of the mature regenerate.

