

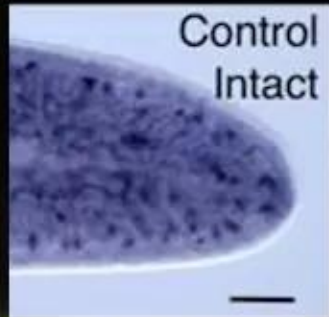
Control RNAi



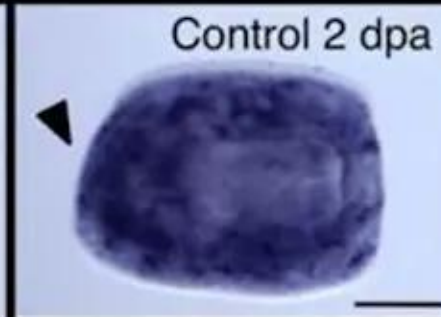
H,K-ATPase RNAi



Control
Intact



Control 2 dpa



1
00:00:03,350 --> 00:00:01,790
in this article by Michael Levin and

2
00:00:05,150 --> 00:00:03,360
Wendy Bean the importance of tissue

3
00:00:07,130 --> 00:00:05,160
Remodeling and maintenance of proportion

4
00:00:09,169 --> 00:00:07,140
during organism-wide tissue scaling for

5
00:00:10,850 --> 00:00:09,179
regenerative medicine is discussed while

6
00:00:12,770 --> 00:00:10,860
it was known that making new cells alone

7
00:00:14,749 --> 00:00:12,780
was not enough for tissue regeneration

8
00:00:16,369 --> 00:00:14,759
it wasn't clear whether new cell

9
00:00:18,170 --> 00:00:16,379
production and remodeling were a

10
00:00:20,689 --> 00:00:18,180
separate or integrated process this

11
00:00:23,810 --> 00:00:20,699
study on planaria invited a specific ion

12
00:00:25,429 --> 00:00:23,820
transporter h plus K plus atpase that

13
00:00:27,650 --> 00:00:25,439

regulates tissue remodeling via

14

00:00:29,870 --> 00:00:27,660

apoptosis during regeneration the role

15

00:00:32,210 --> 00:00:29,880

of membrane depolarization calcium entry

16

00:00:33,889 --> 00:00:32,220

and apoptosis in shaping the tissues was

17

00:00:35,750 --> 00:00:33,899

also explored the study provides new

18

00:00:36,950 --> 00:00:35,760

genetic entry points into how remodeling

19

00:00:38,450 --> 00:00:36,960

events are coordinated with

20

00:00:40,130 --> 00:00:38,460

predetermined templates for shape

21

00:00:41,869 --> 00:00:40,140

determination the research shows that

22

00:00:43,729 --> 00:00:41,879

these ions play a key role in

23

00:00:45,350 --> 00:00:43,739

determining anatomical polarity and

24

00:00:47,389 --> 00:00:45,360

regulating shape determination and

25

00:00:49,549 --> 00:00:47,399

allometric scaling during regeneration

26

00:00:51,410 --> 00:00:49,559

the concept of morphallaxis was also

27

00:00:53,270 --> 00:00:51,420

discussed with the focus on the signals

28

00:00:55,069 --> 00:00:53,280

directing the scale and geometry of the

29

00:00:56,810 --> 00:00:55,079

processes during regeneration this can