

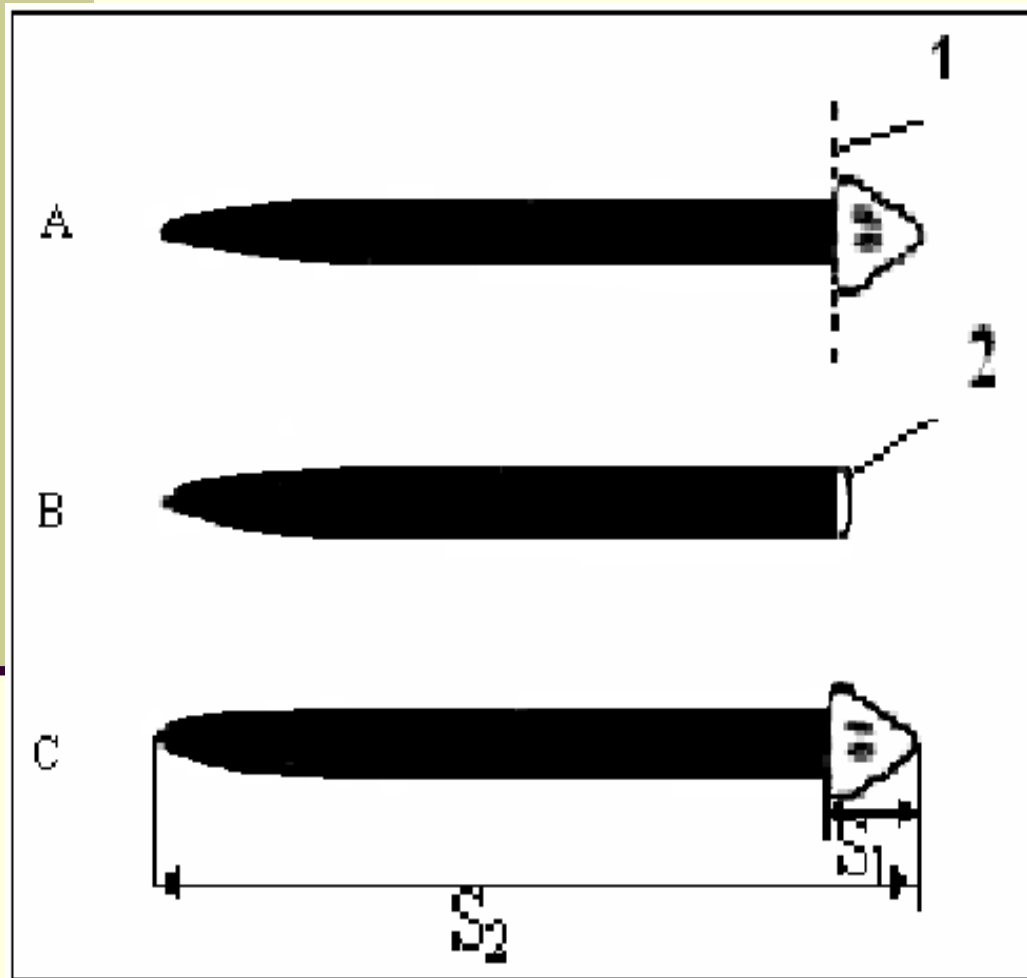
Taurida National V.I.Vernadsky University

**MOVEMENT DYNAMICS OF PLANARIA
DUGESIA TIGRINA REGENERATING UNDER
CONDITIONS OF ELECTROMAGNETIC
SHIELDING**

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Stages of the study of planarian regeneration



A - planarians to decapitation,

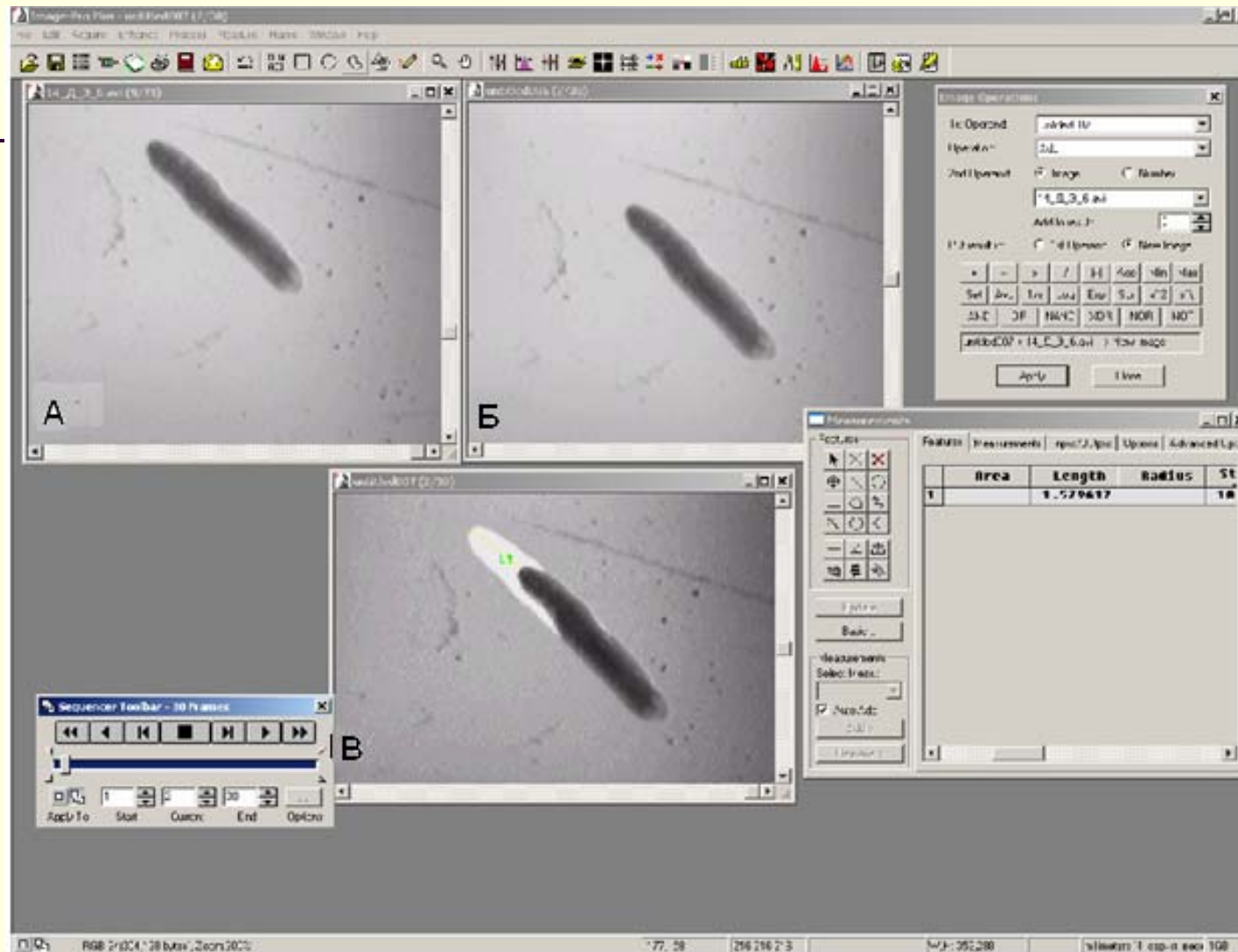
B - the initial stage of regeneration;

C - planarians formed with the head;

1 - boundary decapitation;

2 - blastema

Example of calculating the velocity of planarians



(A, B - plots a series with a difference in one second; B - the result of superposition of these video sequences with frame by frame subtraction images)

The experiment organisation

Groups experimental animals

Control group

Long-term shielding
(23 hours per day)

Short-term shielding
(1 hour per day)

**INDEX REGENERATION, MOVEMENT VELOCITY, GROWTH
RATE OF THE REGENERATION INDEX**

Statistical treatment

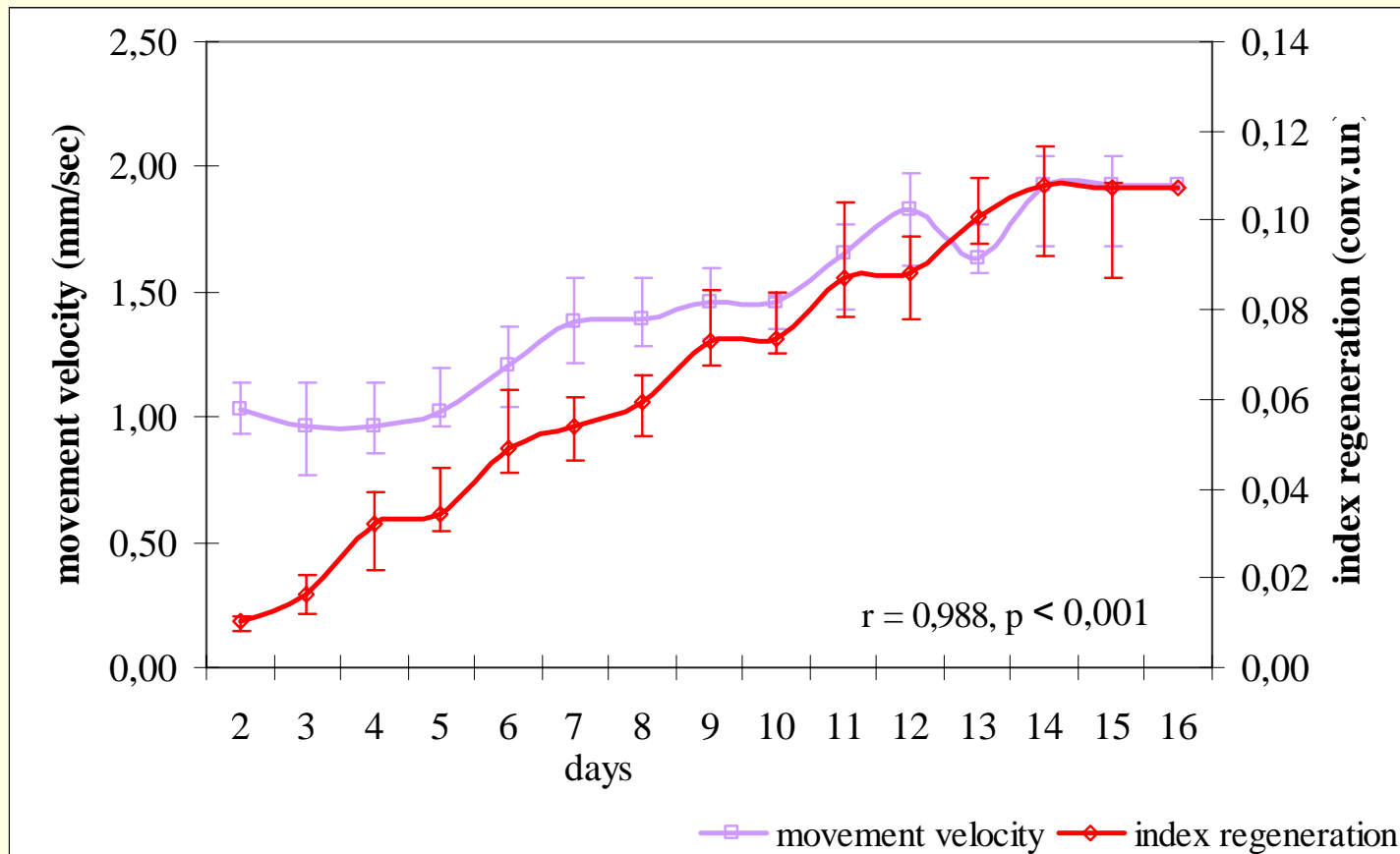
- median (M)
- interkvantilny interval between 25m and 75m percentiles

Score reliability

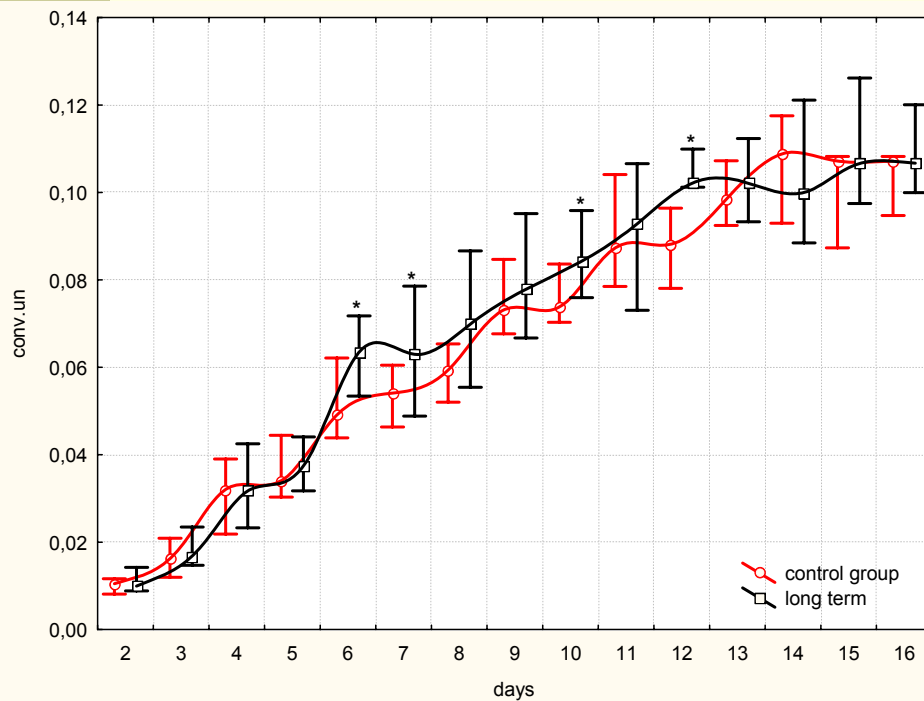
- U-Mann-Whitney
- Criterion Wilcoxon

Correlation analysis by Spearman

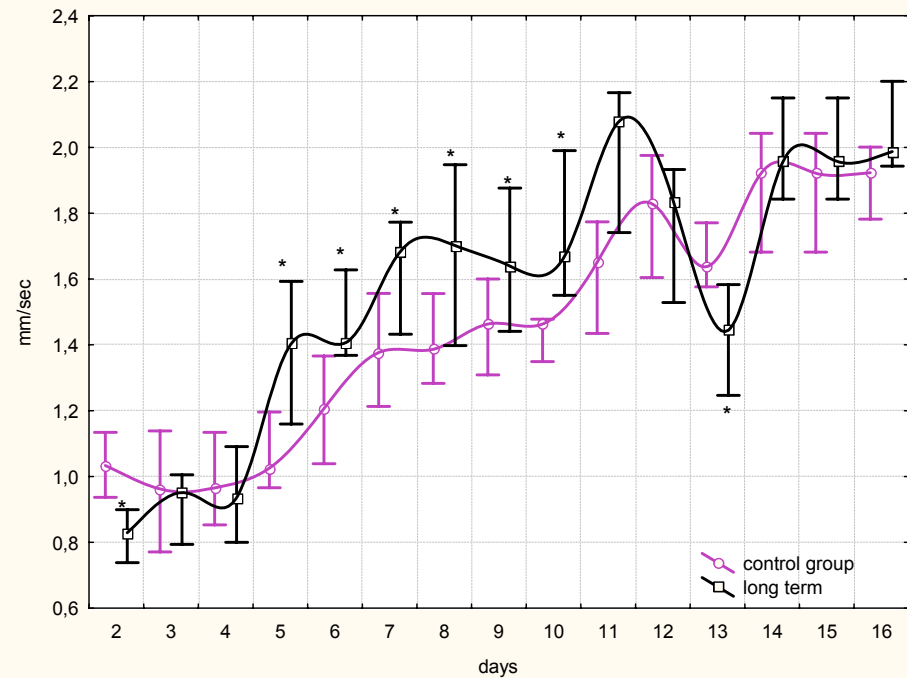
Dynamics of the index and the movement velocity of regeneration of planarians control group of animals



Dynamics of the index regeneration (A) and movement velocity (B) of planarian in the control group and in animals exposed to electromagnetic shielding long term

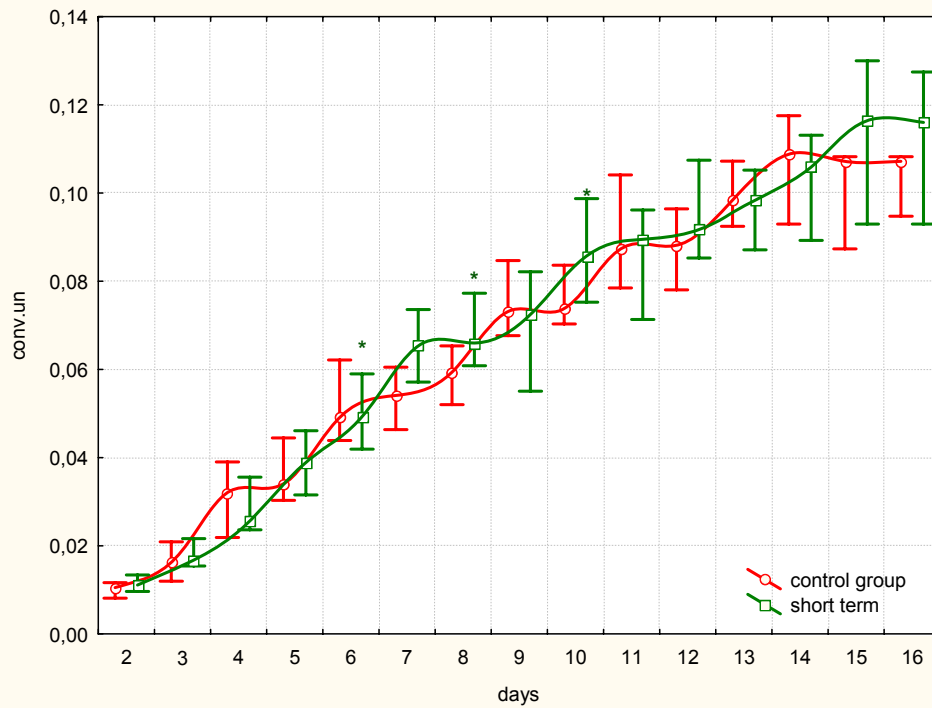


A

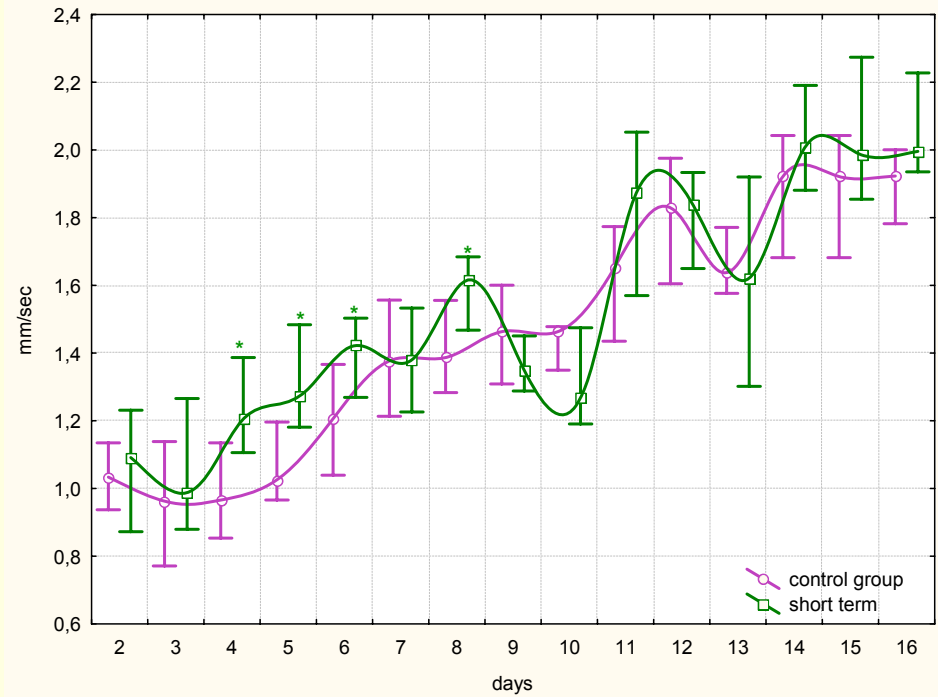


B

Dynamics of the index (A) and the movement velocity (B) of regeneration of planarians in the control group and to electromagnetic shielding short term



A



B

