



Information system for analyzing morphofunctional changes in the central nervous system in the study of the effects of ionizing radiation and other factors

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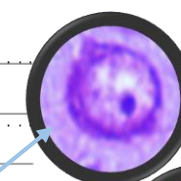
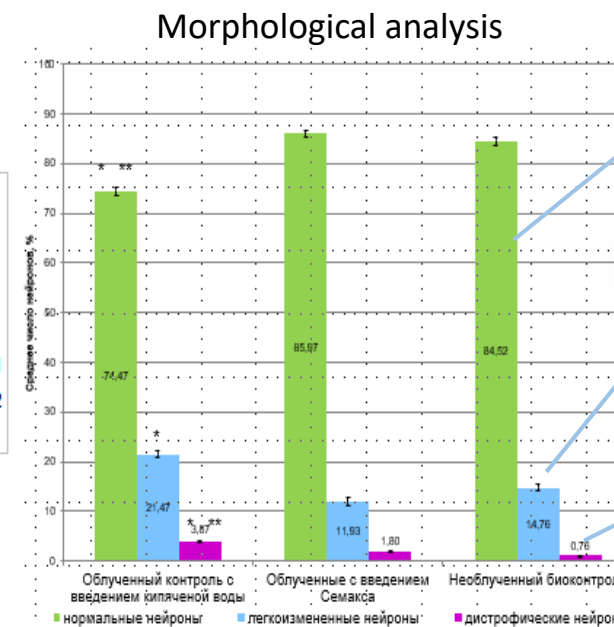
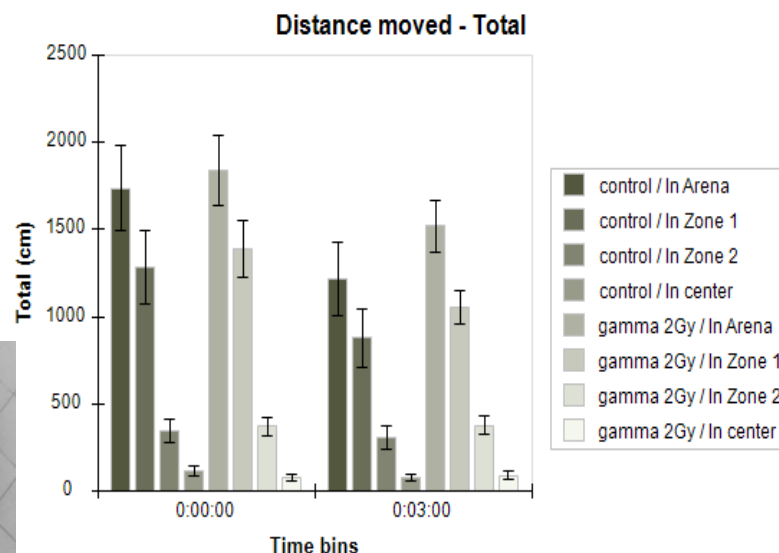
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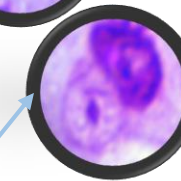
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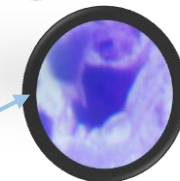
Comprehensive analysis of the results obtained at all stages of the study



Normal cell



Altered cells

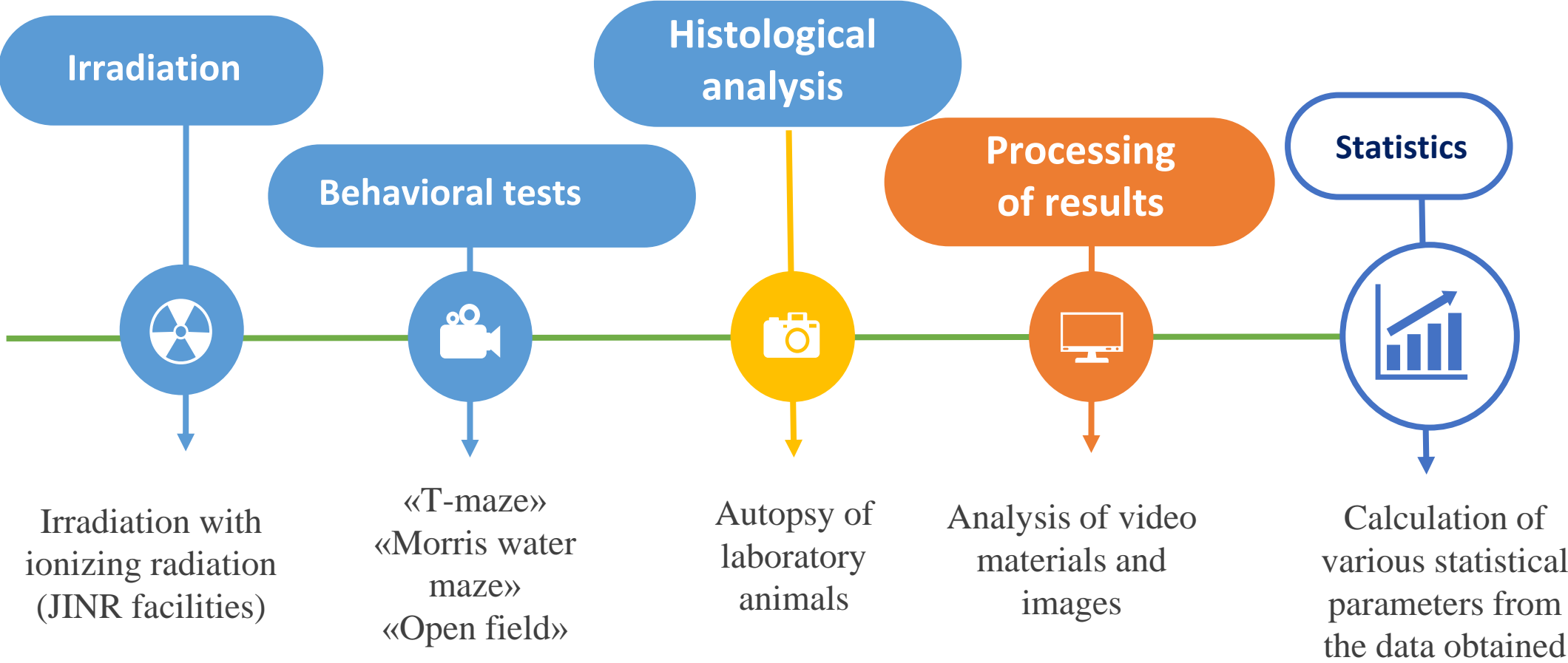


Serious damage

The information system is necessary for

- Storing the entire array of experimental data (photo and video materials, pdf, excel, doc files with information about the experiment) and minimizing the risk of losing information.
- Convenient access to all members of the research group and the ability to carry out both step-by-step and complex data analysis in a single information space.
- Reducing the time spent on data processing, increasing the speed of obtaining high-quality results and reducing the subjectivity of the approach to processing experimental data.

General scheme of the experiment





Information system for radiobiological research (Joint project of LIT and LRB)



1

Restricted access

Users access the service after authentication

2

Work with experimental data

Storing of different data in the DB, and their modification and deletion

3

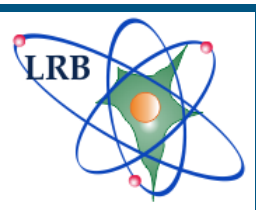
Uploading and storing files

Saving photos and videos from experiments in the server file system.

4

Presentation of results

Statistics, charts and graphs



Information system for radiobiological research (Joint project of LIT and LRB)



Video demonstration of the system will be available during the poster session

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Conclusion

Information system has been implemented as a web application and it has a client-server architecture.

The information system under development allows one to combine and structure data of different types from different experiments and experimental groups into a unified information space that can provide both the convenience of storing and accessing data and a set of advanced (relevant) algorithmic procedures for data analysis automation to solve problems related to the diagnosis of different pathologies of the central nervous system after irradiation.

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