

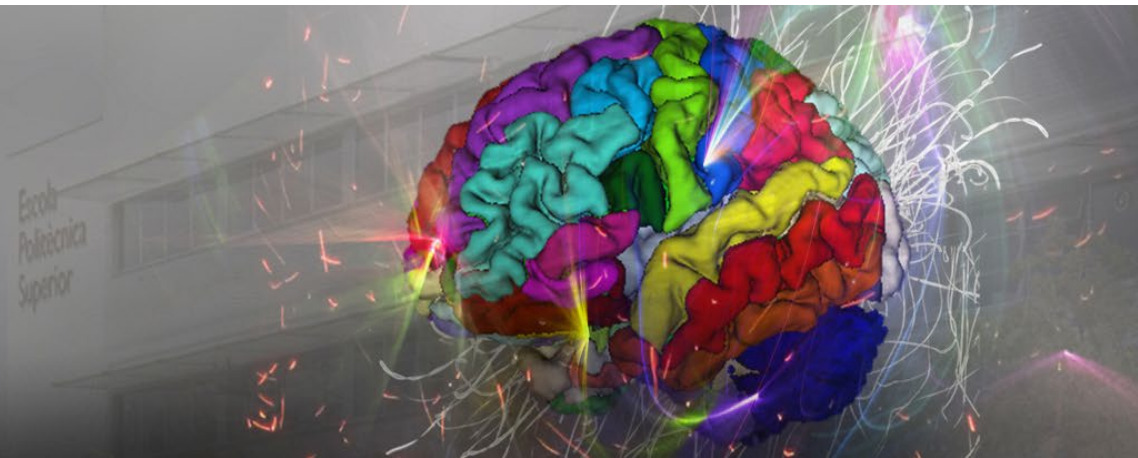


# Medical Image Segmentation and Applications (MISA)

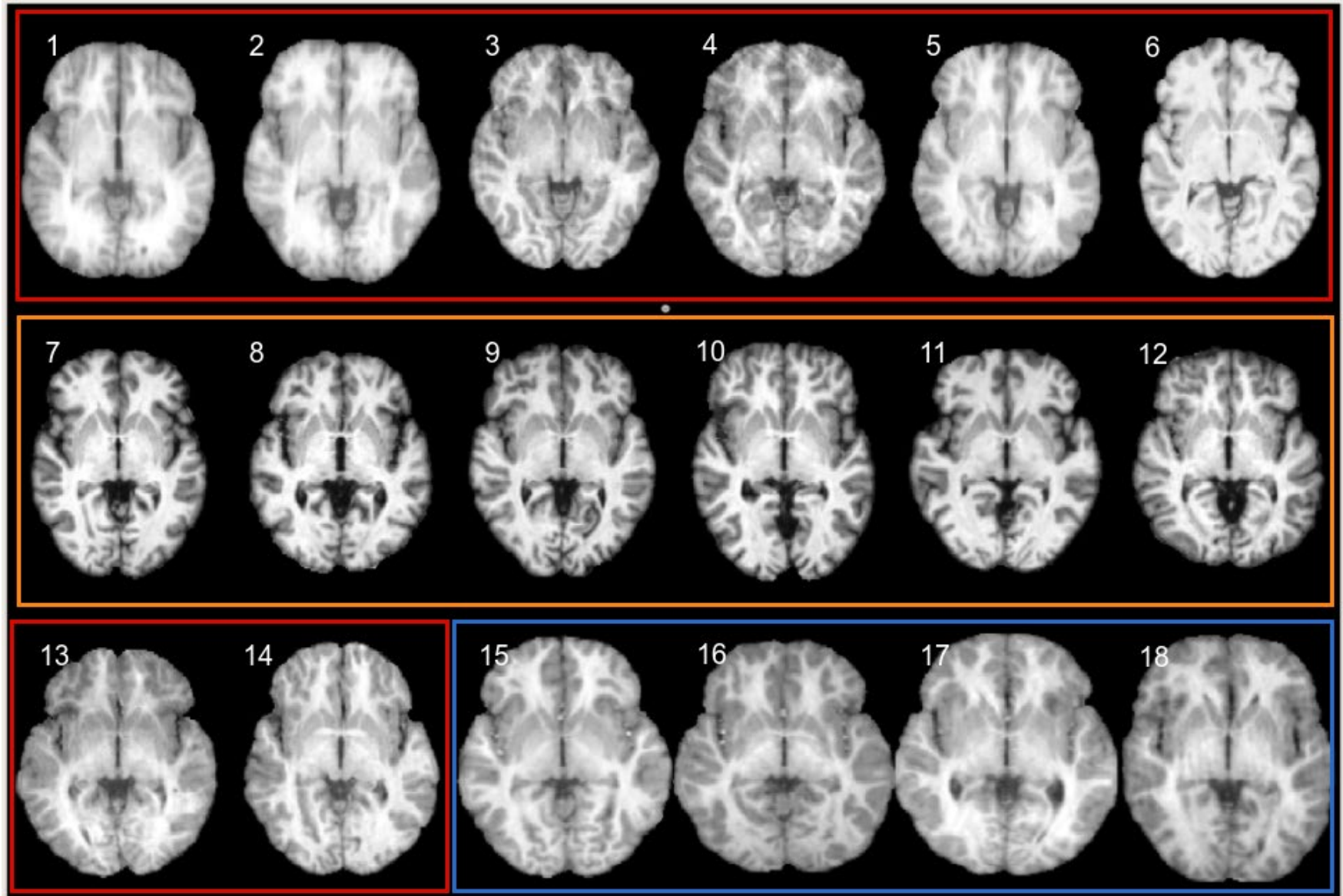
## IBSR18 PROJECT

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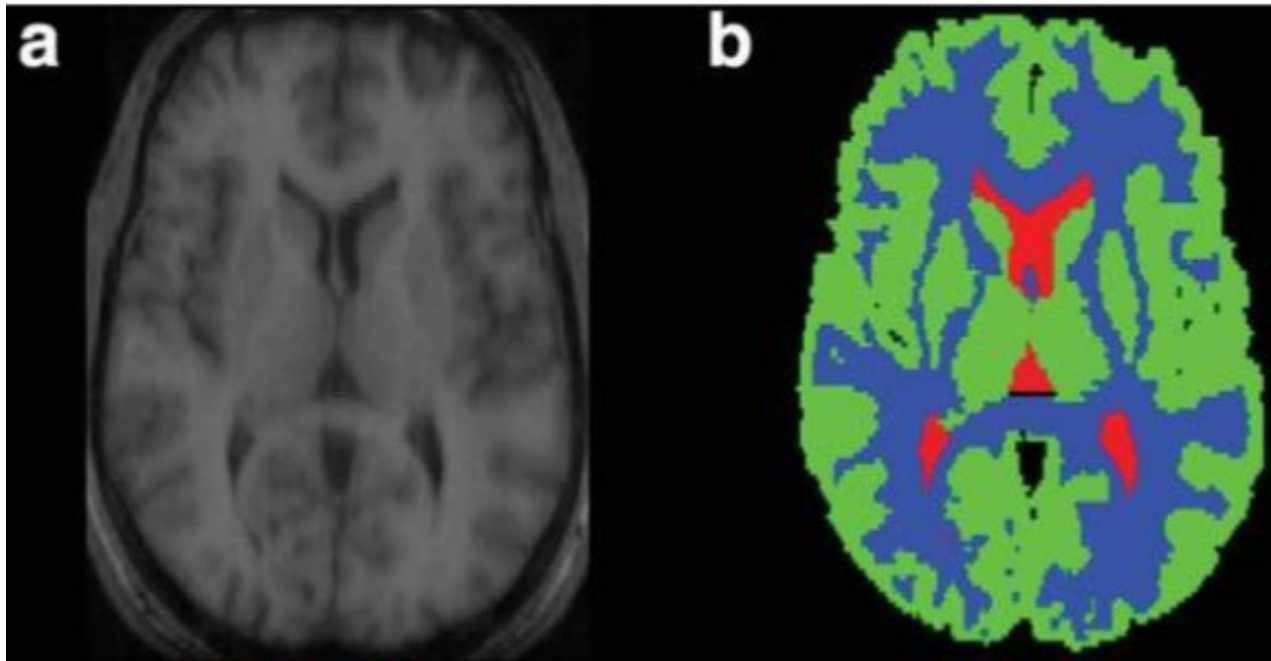
# Challenge: IBSR18 Dataset



# Project objective

## Brain tissue segmentation

- Three tissue classes
  - WM, GM, CSF masks



# Image sets

- 10 images for training (**with GT**)
  - Can be used for any purpose (ex. train a supervised system, build an atlas, or implement a multi-atlas approach)
- 5 images for validation (**with GT**)
  - You will use it to provide quantitative (DSC, HD and AVD) and qualitative evaluation
- 3 images for testing (**NO GT**)
  - Will be used to perform a competition among groups. The ranking will take into account the similarity of the submitted tissue masks wrt the GT (only one submission per group)

# Expected task

- Study the IBSR dataset and propose a segmentation solution
  - Choose a good strategy
  - Choose the appropriate features / classifiers
  - Which methods perform best given specified training data?
- Test the proposed solutions on the supplied data
  - Provide results for all the validation images (you could also report training results if needed)
  - Explain all the strategies analysed and solutions and improvements

# Agenda

- Lectures
  - Lab sessions
  - Seminars
  - Final Project
- Atlas (MIRA + MISA)

setembre 2023

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B	25	26	27	28	29	30	

octubre 2023

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	30	31					

novembre 2023

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desembre 2023

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B	18	19	20	21	22	23	24
	25	26	27	28	29	30	31

Deadline Final Project: 12/01/2024





Good luck!!!

Hope you will enjoy this project!

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