



**Maximizing investment in Immersive Learning  
in a time of budget restrictions.**



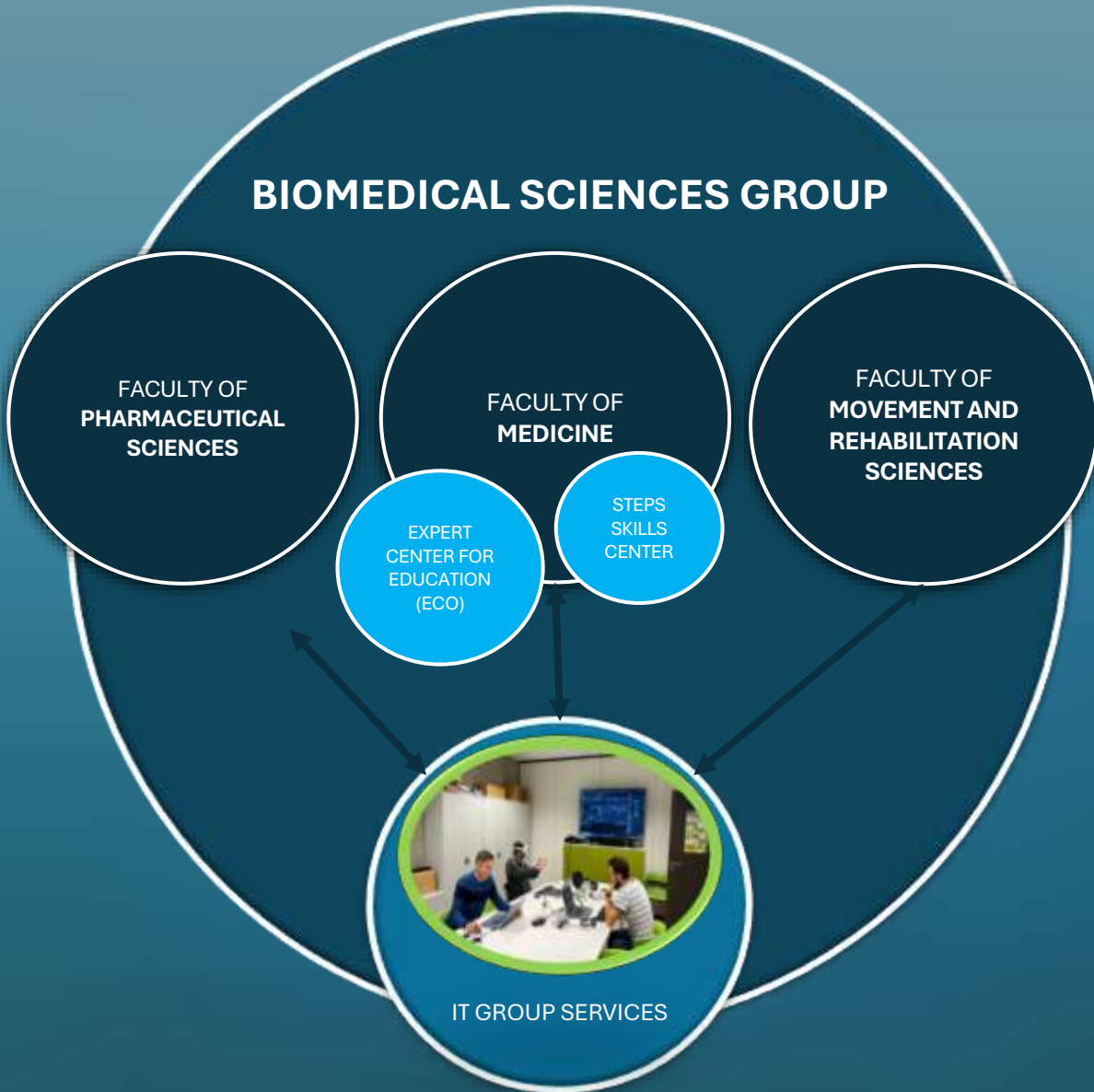
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**KU LEUVEN**



## **A BRIEF INTRODUCTION**



## XR DEV TEAM



**Sven Graindor**  
IT Project Lead  
Game Design



**Karel Lommaert**  
Game Development



**Bram Ghuys**  
Game Development

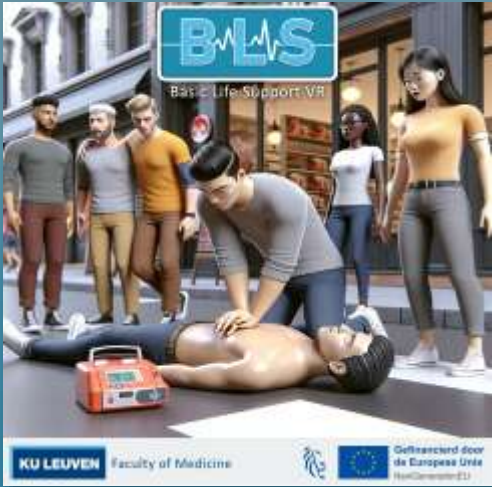
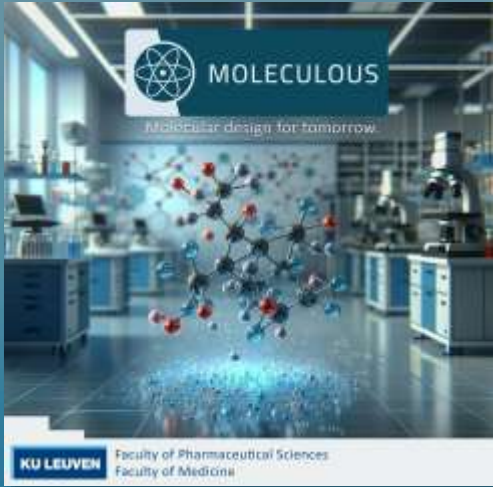
## WEB DEV TEAM (IAS)



**Steven Jespers**  
PHP Development



**Jen Waring**  
Testing  
3D Modeling  
Instruction Videos



Demo





## **LESSONS LEARNED WHEN WORKING ON A BUDGET**



**VIRTUAL REALITY HEADSET**



**COMPUTER / MOBILE**

*“3D Simulations on-screen are often ignored in favour of a VR applications even though they have many practical benefits.”*



## PREPARATION



Define a list of learning goals and prioritize (frequently).

Know what you are developing and manage expectations: teacher tool vs. student tool, training tool vs. teaching tool.

Develop a proof-of-concept (in weeks). This can be a demo application or interactive wireframes in Figma/AdobeXD etc

Make up an implementation plan upfront (and try to roll it out gradually or start with a pilot).

Keep your core project team as small as possible.

Look at grants that you can use (EU, Engine grants, Sector specific etc...)

## DEVELOPMENT



Use an agile (iterative) approach where you build and test features gradually but frequently.

Buy asset packs (models, audio, icons, plugins) on marketplaces like fab.com to speed up the process.

Internships can accelerate the development if the students have the right skills.

There are some great packages to help you setup a 360° VR application without development skills.

Use the power of AI to create speech, images, design instruction sets etc.

## IMPLEMENTATION



Students sometimes have really bad hardware 😞  
Use upscaling techniques like AMD FSR (pc) or Meta spacewarp (VR).

An online video tutorial is a cheap way to show how things should be done (instead of an expensive in-game tutorial).

Embedding the application in the curriculum (vs. optional) is key for its succes. The teacher is the best ambassador.

Come up with a maintenance plan for the headsets.

To measure is to know (and improve). Use analytics if possible to understand when and how your tool is used.

## TESTING & FEEDBACK



Testing can take up much of the project budget. Ask the devs for test automation features and shortcuts.

Do not (only) rely on written questionnaires. They often raise more questions than answers. Include open discussions with your testing audience.

Test frequently on target audiences and always include users that do not know the application yet.

Use (agile) tools like Linear or Jira to register, manage and prioritize all feedback instead of spreadsheets.



**THANK YOU!**

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**<https://gbiomed.kuleuven.be/english/IT/biomedical-technology-lab/public>**

