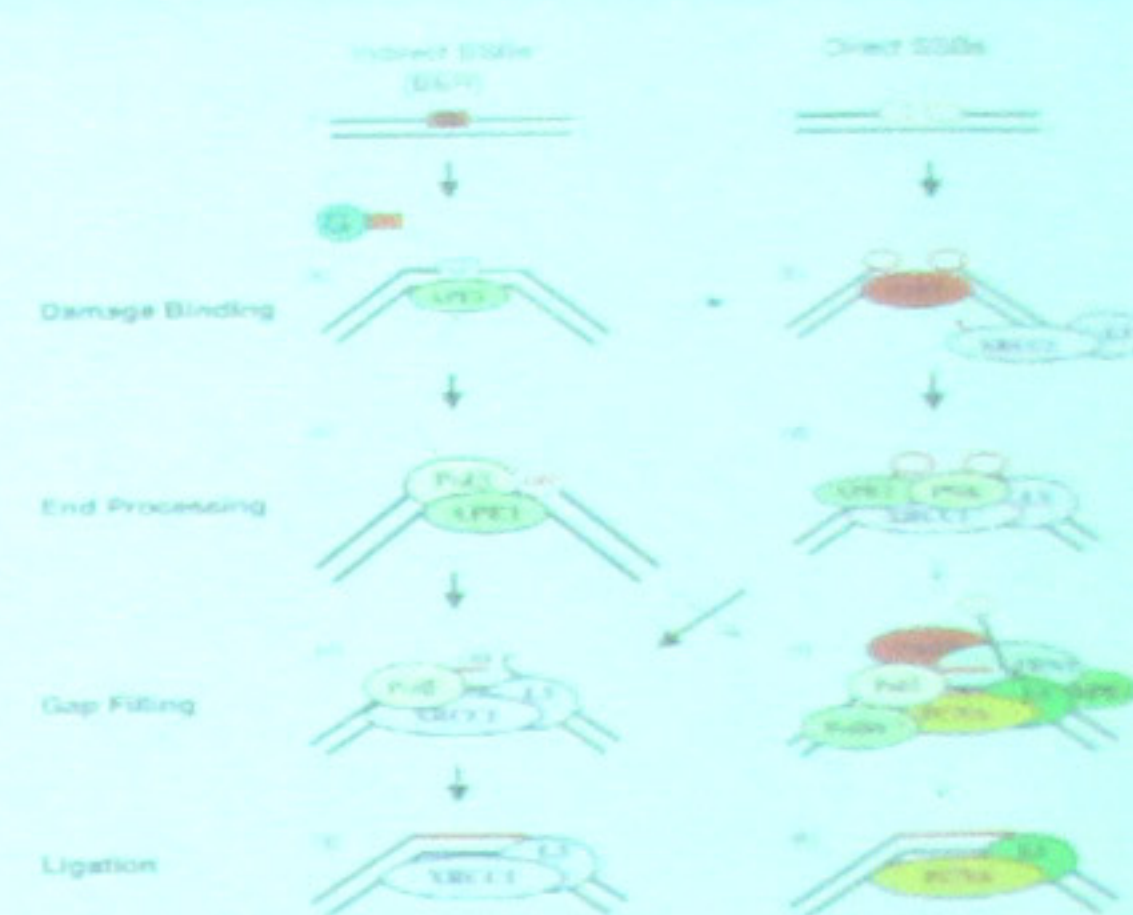


X-ray repair cross-complementing protein 1

- involved in BER or SSBR pathway
- a protein scaffold or a protein loading platform
- involved in repair of DNA SSBs formed both endogenously and exogenously
- a molecular marker in detection and analyses of DNA SSBs



Division of Cell Biophysics
Faculty of Biochemistry, Biophysics and Biotechnology

[Cadevall, 2002]

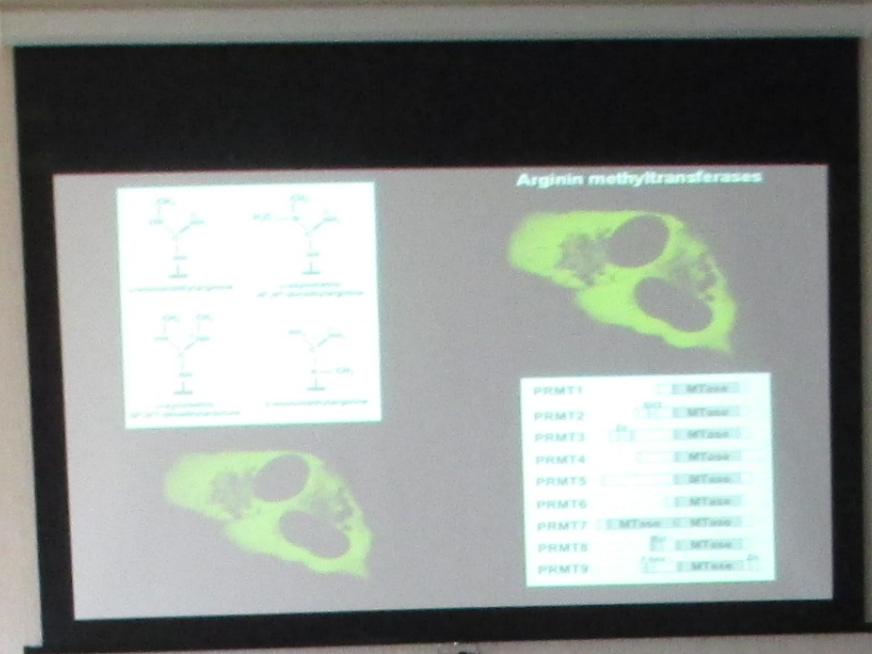
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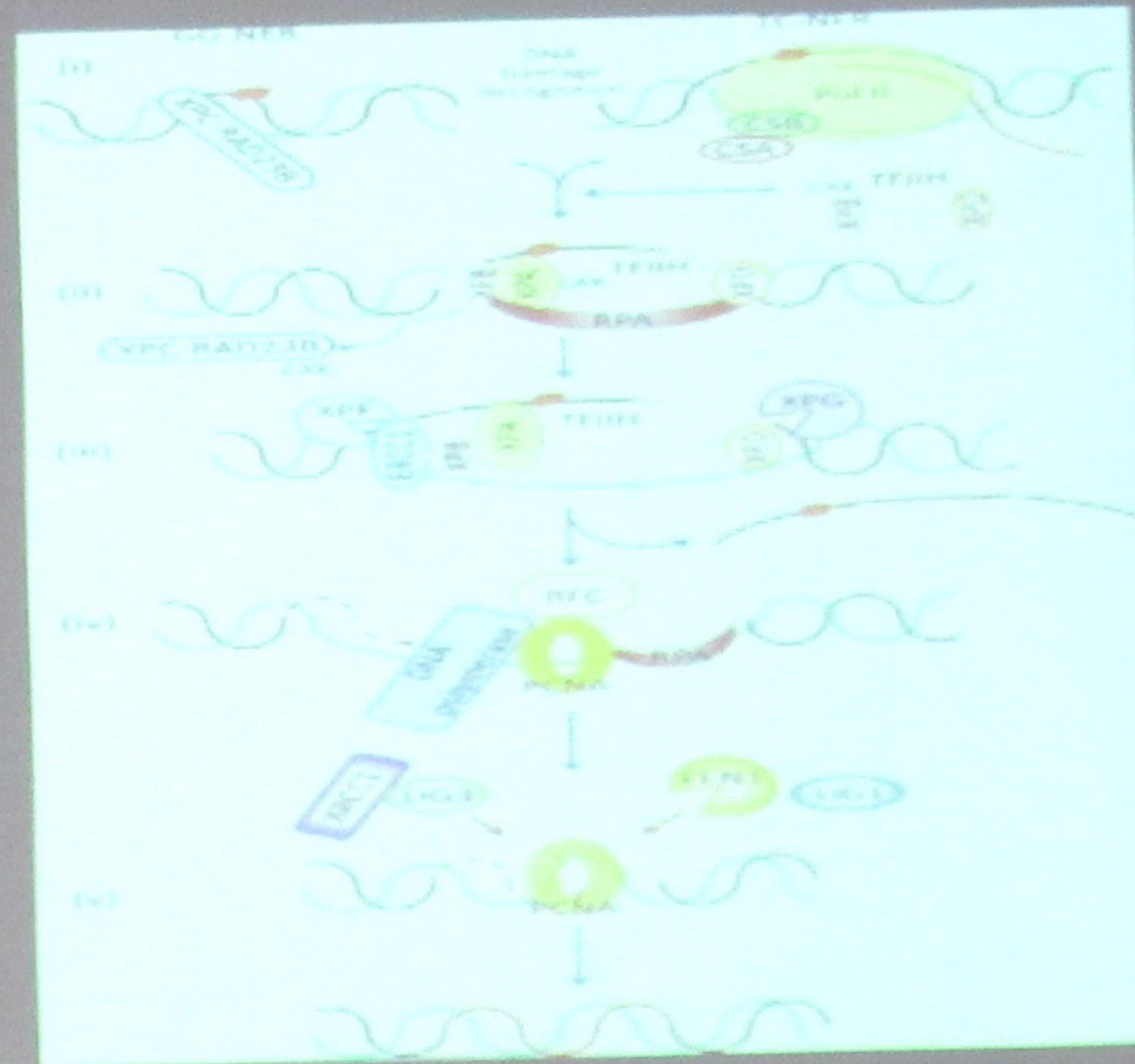
A female presenter in a black top and necklace stands at the front of the room, facing the audience. She is positioned next to a whiteboard.

An audience of approximately ten people is seated around a large U-shaped wooden conference table. They are looking towards the presenter. The table is equipped with laptops, papers, and white cups. Small flags of the European Union, the Czech Republic, and the Russian Federation are placed on the table. The room features a tiled floor, a window with light-colored curtains on the left, and a glass-walled office area on the right.

06/07/2013

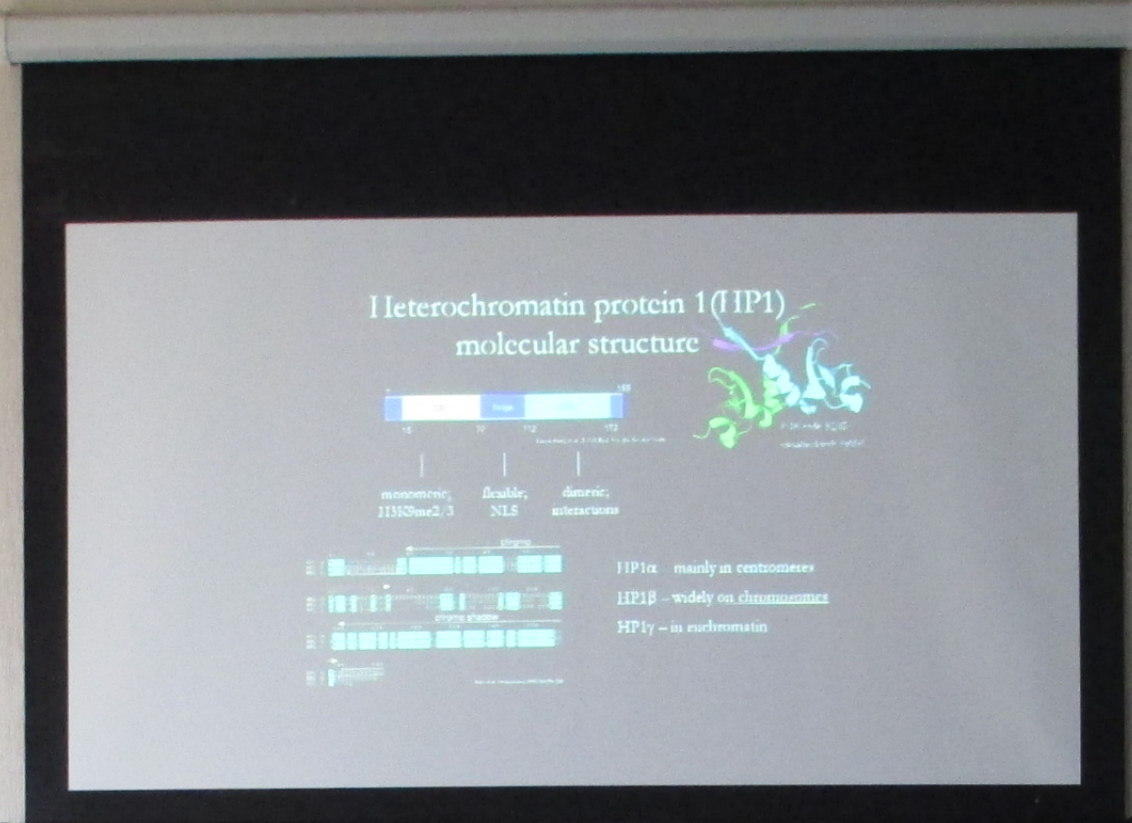
NUCLEOTIDE EXCISION REPAIR

- GG-NER / TC-NER
- Repair of CPDs, 6'-4' photoproducts, bulky adducts
- Structure specific endonucleases (XPG / ERCC1-XPF)
- XPB, XPD and TFIIH -> opening of the DNA duplex around the lesion
- RPA -> replication protein A, binds to ssDNA
- XPA -> mediates interactions of other proteins
- XRCC1/LIG3 or FEN1/LIG1 seals the gap



Iyama, Wilson, DNA repair, 2013.

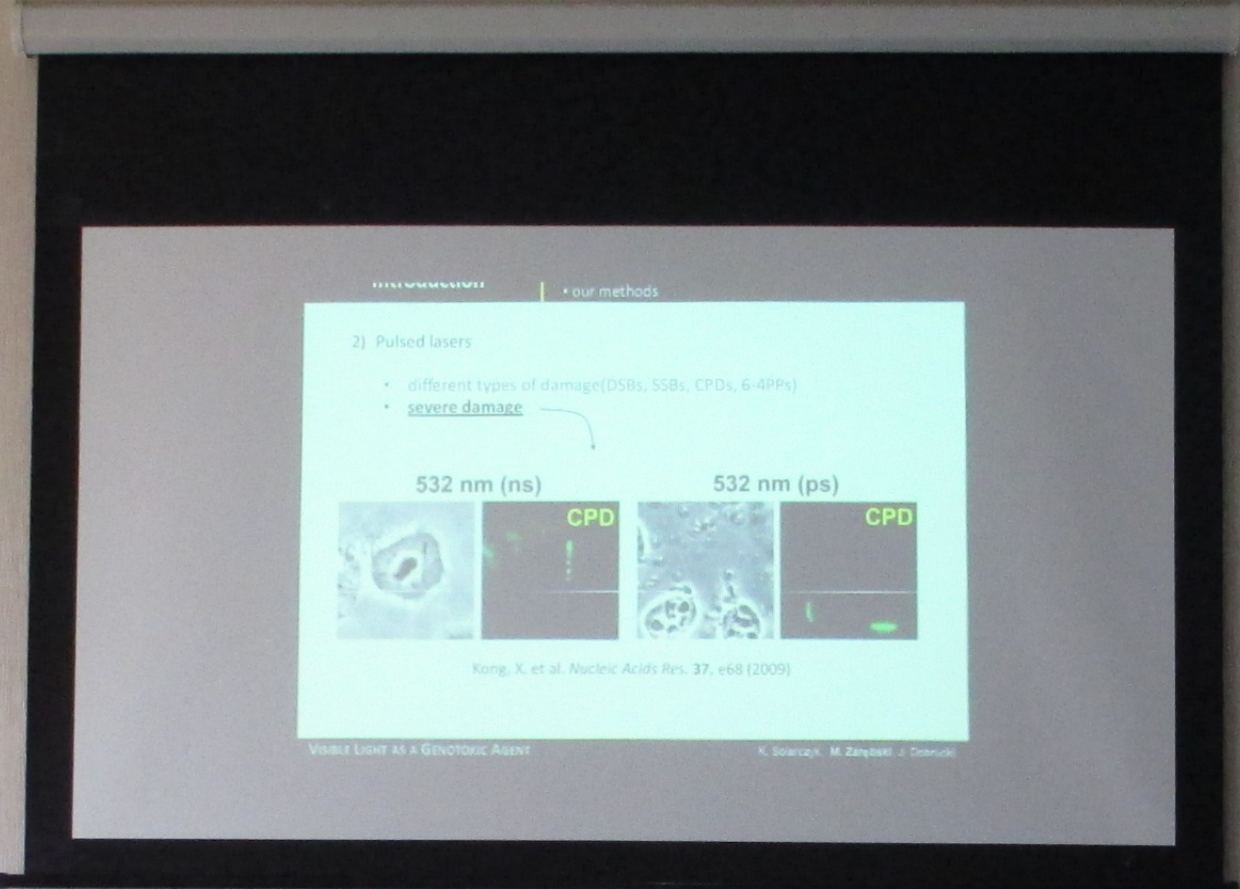
06/07/2013



A man in a black polo shirt is standing and presenting to the audience. He is holding a small device, possibly a remote or a phone.

A group of people are seated around a long wooden conference table, listening to the presentation. The table is equipped with laptops, papers, and white plastic cups. Small flags of the European Union, the Czech Republic, and Russia are placed on the table. A whiteboard is visible in the background.

06/07/2013



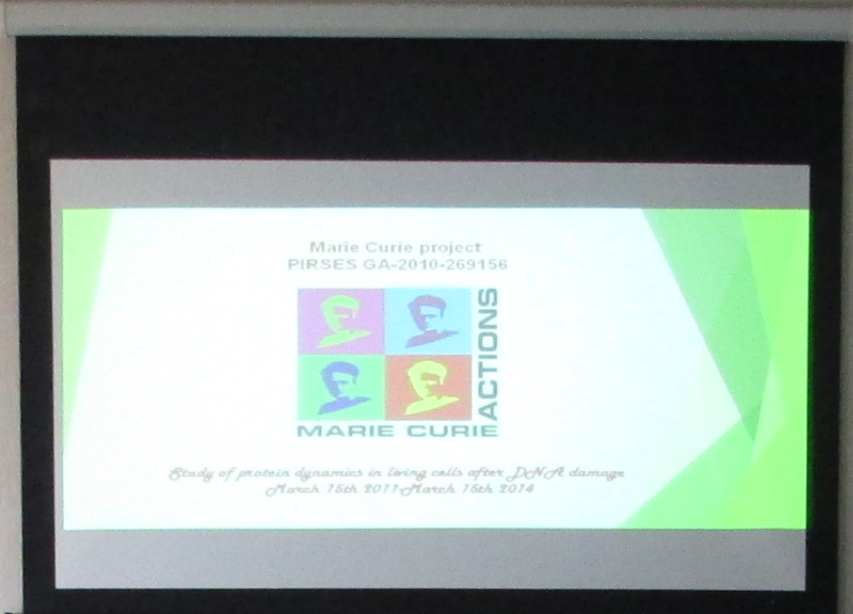
A male presenter with glasses and a beard, wearing a plaid shirt, stands in the center of the room, gesturing with his hands as he presents to the audience.

A woman with dark hair, wearing a green patterned top, is seated at the left end of the conference table, looking towards the presenter.

A woman with dark hair, wearing a dark blue polka-dot top, is seated at the right end of the conference table, resting her chin on her hands and listening intently.

The conference room features a long wooden table with several laptops, white disposable cups, and papers. Small flags of the European Union, the Czech Republic, Poland, and Russia are placed on the table. The room has a drop ceiling and a window with light-colored curtains on the left.

06/07/2013



06/07/2013