



UNIVERSITAS
OSTRAVIENSIS

STUDENTS HELP US TO CREATE VIDEOS USED FOR STUDYING OF BIOLOGY

Eva Bártová

Department of Biology and Wildlife Diseases, FVHE, University of Veterinary
and Pharmaceutical Sciences Brno, Brno

bartovae@vfu.cz

Information
and Communication
Technology in Education

ICTE 5. - 7. 9.

Nowadays students

- ❑ show decrease in motivation to study, attend additional courses or study extra information
 - ❑ show little interest in excellent grading, they are satisfied to pass
- **it is harder to keep the attention of students and to motivate them**



Learning of biology at universities

practical lessons, lectures and self-studying

❑ microscope, experiments, calculation....

❑ hand books, books, ppt, discussions, tests....

➤ modern alternative methods can attract students and motivate them (moving diagrams, songs and animations available on YouTube, interactive board, e-learning, blogging activity, videos)

➤ not only students, but also teachers should be enthusiastic



Inovation of education at VFU Brno

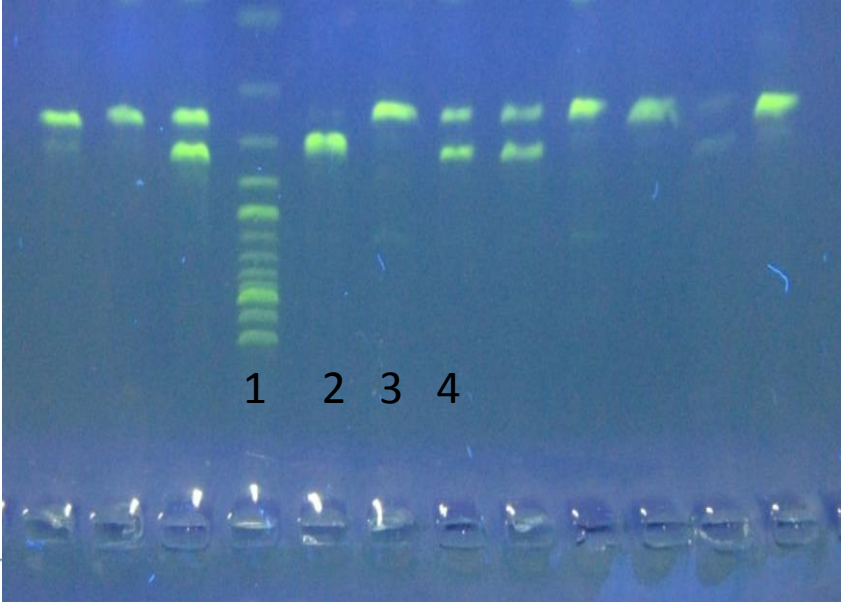
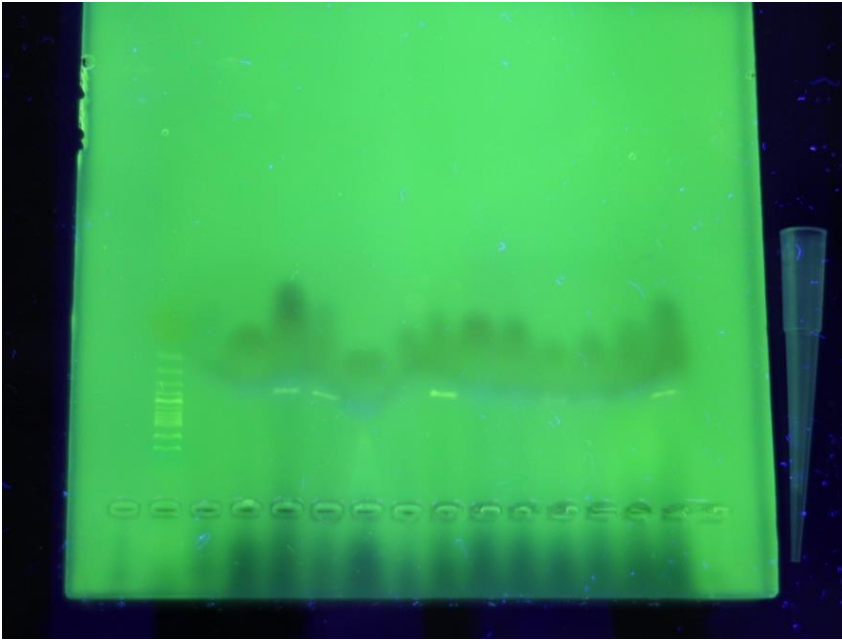
OPVK

- ❑ Master's study programs (2009 – 2012)
- ❑ Bachelor study programs (2012 – 2015)
- new practical courses, handbooks, e-learning, case studies....

Internal grants

JMMM (South Moravian Centre for International Mobility)

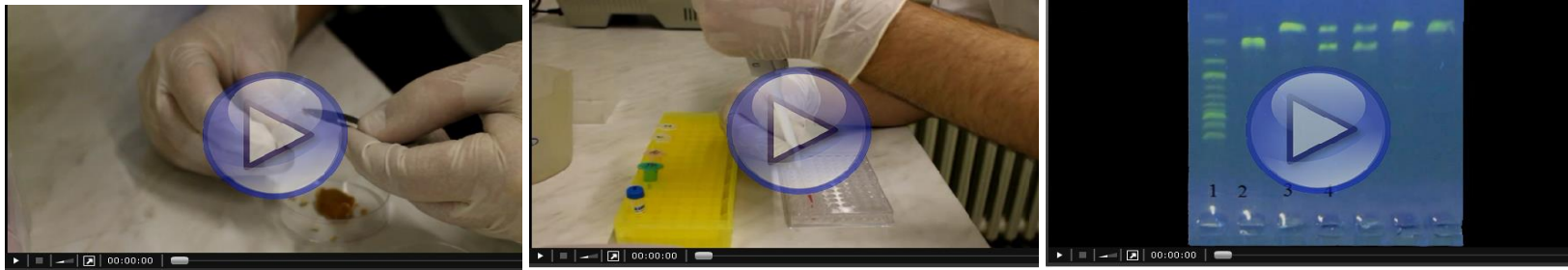
Methods of molecular biology used for detection of bird sex



Methods of molecular biology used for detection of bird sex

three parts (4 min each part), czech titles

<http://fvhe.vfu.cz/studium/multimedialni-pomucky/index.html>



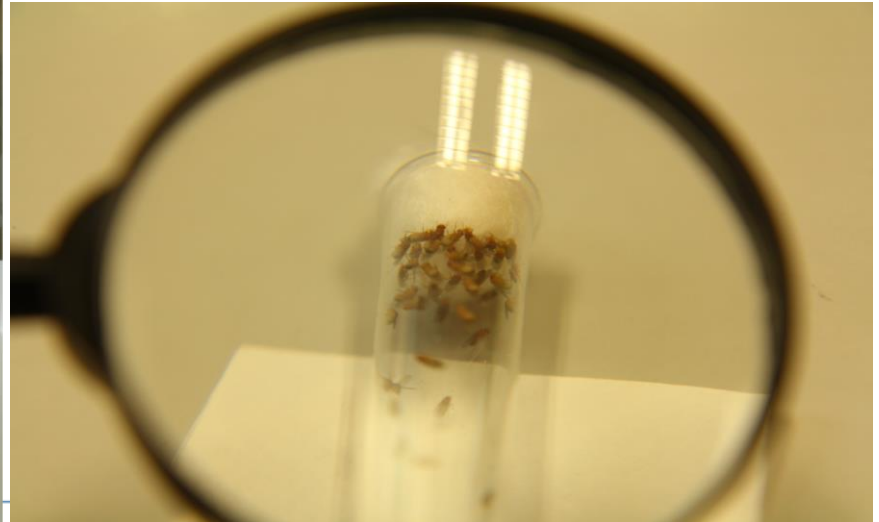
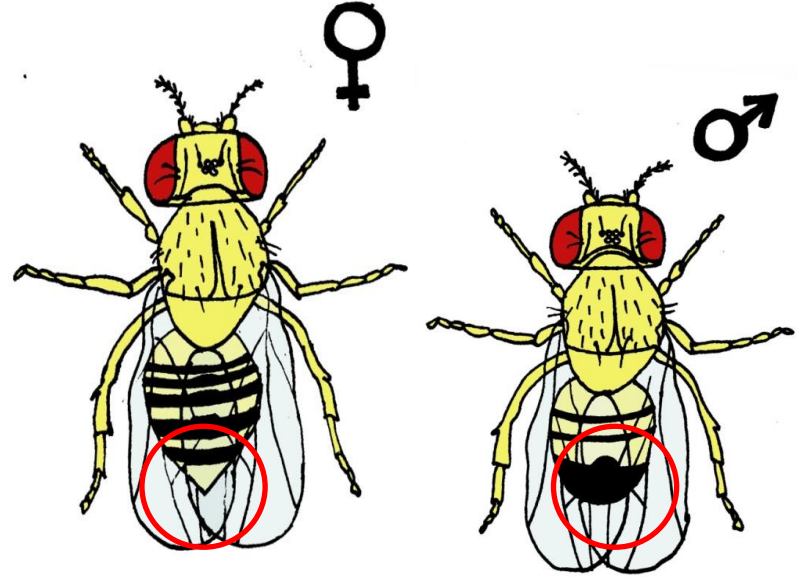
Inquiry (Survio.cz), 22 students responded

- understanding? **yes 59 %**, not sure 36%, no 5%
- length accurate? **yes 86%**, no 14%
- titles enough? **titles 23%**, spoken 23%, combination 55%
- music? **yes 59%**, no 41%

Inheritance of color of eyes in fruit fly - genetic experiment



Sex dimorphism



Inheritance of color of eyes in fruit fly - genetic experiment

Two parts (2-3 min), czech titles, music

<https://www.youtube.com/watch?v=UxYQvZ4g.ni4>

<https://www.youtube.com/watch?v=zXxUFKyCJlw>



Students and video



Young students

- good partners to prepare modern study materials
- more skilled in using of el. media and devices
- enthusiastic

However it need

- supervising
- feedback from teaches and students





Video creation

- Jana Juřicová
- Dominik Macháček
- Gábina Plchová

Financial support - South Moravian Centre for International Mobility

Example of video



Students create videos

Grant from JCMM (2015 – 2016)

- ❑ **2 students** (Secondary Technical School of Chemistry Brno) and 1 student (Grammar school Blansko)
- attended practical lessons, how to make video
- ❑ cameras and lenses Canon EOS 60D + Canon EF-S 17-55 mm/f2.8 and Canon EOS M + Canon EF-M 18-55 mm/F3.5-5.6
- ❑ Pinnacle studio, Edius 7, Picmonkey or Gimp 2.8