



South Bohemian  
Research Center  
of Aquaculture  
and Biodiversity  
of Hydrocenoses

## Information for web pages



Technology Agency  
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**Name of software (Czech): Generátor protokolů**

**Name of software (English): Protocol generator**

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**Description (Czech):** Software představuje samostatně spustitelnou aplikaci navrženou pro standardizaci popisu experimentu z oblasti biologického experimentu. Software umožňuje vytvoření protokolu o experimentu, který popisuje všechny důležité podmínky realizace experimentu z pohledu reprodukovatelnosti experimentu. Protokol generátor umožňuje uživateli definování vlastního vzoru protokolu experimentu, pomocí XML jazyka a standardizovaných komponent, ze kterých je možné poskládat libovolný popis experimentu. Vzor experimentu je zpracován program, který vytvoří grafický formulář a nutí uživatele vyplnit všechny nutné údaje o provádění experimentu. Software po té provede uložení protokolu o experimentu dohromady se surovými experimentálními daty do lokální databáze. Software umožňuje tisk samotného protokolu do PDF souboru podle nastavení uživatele.

**Description (English):** It is a stand-alone application that should ensure the repeatability and correctness of the biological experiments. The tool is designed to lead the experimenter through the particular type of experiment as a supervisor and help. Protocol generator has two purposes: the first one is to control that the procedure of the experiment was done precisely and the second one is to produce all important setting belonging to the experiment in the form of report about the experiment. The method to ensure precise realization of experiment is to control if all necessary parameters and steps of the experiment were set and done. The list of necessary parameters is defined by the person responsible for the experiment in the form of protocol template in XML file. Necessary parameters and steps for the experiment are selected to ensure the repeatability (to get similar results) of the experiment. This method should provide some standardization for realization of the experiment. Description of the experiment is stored into a protocol that can be used for reporting and reproduction of the experiment. Protocol generator is able to store the protocols about the experiments into local database together with experimental data. The software allows the user to generate the pdf document from the protocol in several user defined ways.

**Installation:** - Download and run Protocol generator.exe and follow the instructions. The software will be installed into selected directory.

The installation contains:

- Protocol manager.exe – the software for database management
- Protocol generator.exe – software for generation of protocols
- Template generator.exe – software for generation of skeleton of the template
- Protocol generator.pdf – help
- Testing data – folder with testing data and protocol template

**Requirements:** - Operation system: Windows XP, Vista (32,64 bit) and 7(32,64 bit), .net framework 4.0

**Testing:** - The directory “Testing data” contains the subfolders with images. These images can be used as raw experimental data. The directory Protocol template contains example of protocol template for time lapse microscopy of cell cultivation.

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