

## PLAN ZARZĄDZANIA DANYMI

<b>1. Opis danych oraz pozyskiwanie lub ponowne wykorzystanie dostępnych danych</b>
Sposób pozyskiwania i opracowywania nowych danych i/lub ponownego wykorzystania dostępnych danych
<p>All data will be collected during experiments designed in this project. Data will be produced in digital form by specialized software tools (Mercury, ExpeData, LightCycler96, Gen5) used to control scientific equipment. Raw instrumental data will be processed by a person responsible for a particular task using appropriate software tools to obtain user-friendly numeric data and used/reused by team members.</p> <p>All scientific equipment and data loggers will be precalibrated to obtain accurate results. In the case of any doubts, a given measurement will be repeated, if possible. If not, such data will be excluded from analyses. We do not plan re-using of any existing data.</p>
Pozyskiwane lub opracowywane dane (np. rodzaj, format, ilość)
<p>All experiments will be done on living animals. Tentative time schedule for the experiments (task 1-3) assumes that first series will be done on 150 hamsters and next ones on 120 animals. Body temperature will be measured continuously and all other measurements will be done every 6 months using pre-calibrated equipment.</p> <p>Data will be mainly, but not exclusively, collected as:</p> <ul style="list-style-type: none"> <li>• body temperature recordings - data downloaded from loggers as .dat files (task 2, 3)</li> <li>• raw data from ELISA tests for cortisol and IL-6 as .xls files (task 2, 3)</li> <li>• raw qPCR data for telomere length as .txt files (task 1)</li> <li>• ExpeData files for metabolic measurements as .exp files (task 2, 3)</li> </ul> <p>The size of each category should be less than 1GB.</p>
<b>2. Dokumentacja i jakość danych</b>
Metadane i dokumenty (np. metodologia lub pozyskiwanie danych oraz sposób porządkowania danych) towarzyszące danym
Raw and processed data will be organized in proper folders assigned to particular tasks, in a software-specific manner. Raw data will be accompanied by metadata like acquisition date, experiment date and details, data, author, and others if it will be necessary.
Stosowane środki kontroli jakości danych
Data will be obtained by qualified team members using precalibrated uquipment and validated analytical methods. When possible and appropriate (e.g. blood samples measurements), technical replicates will be performed. Data will be released, when meet validation criteria (for technical replicates relative standard deviation less than 15%). Manually entered data will be cross-checked by second person to avoid mistypes. Statistical software packages (IBM SPSS Statistics) will be used to check data consistency.
<b>3. Przechowywanie i tworzenie kopii zapasowych podczas badań</b>
Przechowywanie i tworzenie kopii zapasowych danych i metadanych podczas badań

Data will be stored in electronic form at mass storage devices of equipment used for data collection (personal computers) with proper backup. Raw data backup will be organized in regular manner, after each experimental series. Raw and processed data backup will be administered by PI. Mass-storage devices dedicated to project-related data backup will be purchased. All computers used to record and analyze data have proper security software.

Sposób zapewnienia bezpieczeństwa danych oraz ochrony danych wrażliwych podczas badań

We will not produce or store any sensitive data.

#### 4. Wymogi prawne, kodeks postępowania

Sposób zapewnienia zgodności z przepisami dotyczącymi danych osobowych i bezpieczeństwa danych w przypadku przetwarzania danych osobowych

Nie dotyczy

Sposób zarządzania innymi kwestiami prawnymi, np. prawami własności intelektualnej lub własnością. Obowiązujące przepisy

Appropriate form of intellectual property rights protection, in agreement with employer and funder rules, will be chosen, depending also on the option of CC licences given by a particular repository. When possible, we will encourage applying Creative Commons Attribution Share-Alike 4.0 (CC-BY-SA 4.0) license schema (<https://creativecommons.org/share-your-work/licensing-examples>).

We plan to published the results of our experiments in high impact open access journals. Before starting the project all team members will sign the internal intellectual property rights agreement. In the document it will be also stated that PI will be responsible for raw data sharing upon request and overall data management. After succesful grant application I will apply to the Local Ethical Comittee to get permit for experiments in which living vertebrates are used.

#### 5. Udostępnianie i długotrwałe przechowywanie danych

Sposób i termin udostępnienia danych. Ewentualne ograniczenia w udostępnianiu danych lub przyczyny embarga

Raw and processed data will be shared on reasonable personal request directly from data author. Raw data, if useful and needed, will be released maximum half year after the release through publication of main findings. Processed data will be published in high impact journal with an open access model and, if required by the journal, include raw and/or user friendly processed datasets as supplementary data. If not, data will be shared in chosen open repositories and databases appropriate to data format (e.g. Repository for Open Data – repOD <https://repod.pon.edu.pl/>) or other, specific to the study area.

Sposób wyboru danych przeznaczonych do przechowania oraz miejsce długotrwałego przechowywania danych (np. repozytorium lub archiwum danych)

Raw and processed data will be preserved on a hard drive and if possible on university servers as well as in repositories. Data-on-request will be available minimum ten years after data release. Carefully selected and useful data shared via repositories will be available as long as repository will be serving.

Metody lub narzędzia programowe umożliwiające dostęp do danych i korzystanie z danych

To access raw data-on-request specialized software may be necessary. When possible data will be exported to formats readable by open-source software. Processed data will be accessible using standard office applications.

Sposób zapewniający stosowanie unikalnego i trwałego identyfikatora (np. cyfrowego identyfikatora obiektu (DOI)) dla każdego zestawu danych

Data will be deposited in repositories offering free unique Digital Object Identifier (DOI) or other (URI).

#### **6. Zadania związane z zarządzaniem danymi oraz zasoby**

Osoba (np. funkcja, stanowisko i instytucja) odpowiedzialna za zarządzanie danymi (np. data steward)

Principal Investigator will be responsible for data management. Each person responsible for a particular task will be also responsible for proper data management in the scope of their task. Principal Investigator will be also responsible for the preparation of final files, and their upload into a chosen repository along with metadata.

Środki (np. finansowe i czasowe) przeznaczone do zarządzania danymi i zapewnienia możliwości odnalezienia, dostępu, interoperacyjności i ponownego wykorzystania danych

The proper data management, ensuring that the data will be FAIR, will be a part of each person tasks. Remuneration for team members was already included while calculating their salaries. After completion of the project, such work will be carried out by the project manager, a statutory employee of the University. Mass-storage devices dedicated to project-related data backup will be purchased.

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