dyNA-lyze—an analysis package for time-series NIRS imaging data

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INTRODUCTION

A clinicial example: functional neuroimaging

The operations that fall under the general scope of Dynamics Process tools include time-frequency analysis, signal separation, and rate analysis. For each of these operations, the user specifies a predefined parameter range for each operation, and the application performs the analysis over the entire time series. The results of these operations are then presented graphically and stored in a database for further analysis.

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Figure 6. Fluorescent Image Recovery Operations

CONCLUSIONS

The results were supported by the National Institutes of Health (NIH) under Grants R21-HL67387, R21-DK63692 and R41-CA96102 and by the US Army under

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Figure 5. Example of a case study. The data was processed with an algorithm designed to detect significant changes in the hemoglobin concentration. The algorithm was based on a combination of signal separation, time-frequency analysis, and rate analysis. The results of the algorithm were then presented graphically and stored in a database for further analysis.

Figure 4. Example of a case study. The data was processed with an algorithm designed to detect significant changes in the hemoglobin concentration. The algorithm was based on a combination of signal separation, time-frequency analysis, and rate analysis. The results of the algorithm were then presented graphically and stored in a database for further analysis.

Figure 3. Example of a case study. The data was processed with an algorithm designed to detect significant changes in the hemoglobin concentration. The algorithm was based on a combination of signal separation, time-frequency analysis, and rate analysis. The results of the algorithm were then presented graphically and stored in a database for further analysis.

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