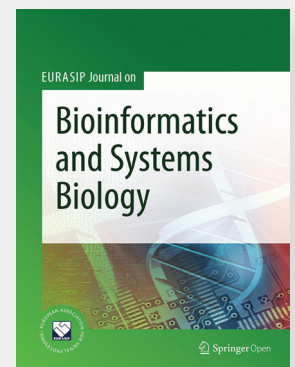


EURASIP Journal on Bioinformatics and Systems Biology

Special Issue on
Signal processing and control solutions
for individualized therapies

An individualized therapy is a form of personalized medicine and popularly described as “the right therapy at the right dose in the right patient”. The way of achieving the desired therapeutic effect differs from disease to disease and can be e.g., a pharmacotherapy, a neuromodulation therapy, or a radiation therapy. The technological challenge is in the high inter- and intra-individual variability of the therapeutic effect as well as the quantification of patient response. In clinical situations, a physician is required to be included in the decision-making process to determine the “optimal” dosing strategy, in correlation with the long-term therapeutic goals and drug side effects. Signal processing and fusion of sensor information related to the patient state expedite and improve the decision-making by quantifying the symptoms. A quantified outcome of a drug dose administration offers also the possibility of applying feedback control strategies in therapy as the next intervention can be implemented by taking into account the effect of the previous actions. Full and previously unpublished papers describing novel signal processing, mathematical modeling, and control solutions for individualized therapy in substantial detail will be considered for publication. Tutorial papers pertaining to the above research areas are equally welcome.



Call for
Papers

Potential topics include, but are not limited to:

- Personalized Medicine
- Pharmacogenomics
- Stratified Medicine
- Targeted Therapy
- Model-based drug delivery
- Mathematical modeling for precision medicine
- Genomic signal processing
- Control strategies for drug scheduling
- Algorithms for diagnosis and intervention

Submission Instructions:

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Submission Schedule

Manuscripts due:

March 1, 2016