PhD Data Modelling

<table>
<thead>
<tr>
<th>Location</th>
<th>Amsterdam / Leiden</th>
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<tbody>
<tr>
<td>Education</td>
<td>University</td>
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<tr>
<td>Focus</td>
<td>Research</td>
</tr>
<tr>
<td>Working week</td>
<td>(Fulltime) 36 hours</td>
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<tr>
<td>Closing date</td>
<td>18 July 2016</td>
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<td>Vacancy number</td>
<td>MK25-16 EXT</td>
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Job description

Patient privacy is increasingly sensitive in scientific research and substantial fines may be imposed in case individual patient data enter into the public domain. Individual patients may suffer damages in case health related information is leaked, and one might even conclude that in such cases the universal human right on privacy is violated. Hospitals are obliged by law to register any blood transfusions administered to patients. This information, in combination with other patient and hospitalization data, can be used to systematically improve blood transfusion practice: it allows benchmarking blood use, studying the effectiveness of transfusions in patients and the identification and quantification of (hitherto unknown) risk factors. However, to what extent are individual patient data required to perform such analyses?

In this research project meta-models will be developed that allow exchange of information on patient groups rather than the individual patient data itself in order to study differences between patient groups. This approach opens up new opportunities for data exchange and data analysis, and will contribute to the ability of data exchange whilst ruling out the risk of compromising patient privacy. The research will be performed in collaboration with Leiden University, UMC Utrecht and Sanquin.

Where you will work

The Transfusion Technology Assessment (TTA) research group is an ongoing collaboration between Sanquin Blood Supply Foundation and the Health Technology Assessment Department of the Julius Center of the Utrecht University Medical Hospital. The TTA department provides quantitative models and analysis to support managerial decision making. Over the years TTA has compiled a considerable amount of data on the blood transfusion chain that is unique to The Netherlands and ready to be explored. For this project you will be located at Leiden/Amsterdam.

We are looking for

Candidates are required to have:
- a master's degree in mathematics, statistics, computer science (preferably with a specialization in artificial intelligence and/or machine learning), or a related discipline;
- excellent grades, proven research talent, affinity with computational statistics or machine learning and excellent programming / data-management skills;
- excellent command of English, and good academic writing and presentation skills;
- interest in doing research with health care data, interested in contributing to clinical research;
- the ability to work in an international setting, and to communicate and collaborate effectively with researchers from other disciplines.

We offer

A unique research opportunity in a dynamic environment in an area where data science, clinical epidemiology and quality management meet.

In addition:
- salary conform CAO Sanquin;
- a complementary MSc/PhD program;
- 8,33% end-of-year bonus;
- partial reimbursement of travel costs;
- pension plan with Pensioenfonds Zorg & Welzijn (PFZW);
- collective discounts on various insurances;
- at fulltime employment (36 hours) 201 hours of leave per annum.

More information

For additional information please contact Dr. Mart Janssen, head of the TTA department (Mobile +31650251433). Does this vacancy trigger you and do you recognize yourself in the profile? Please apply using the button below!

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