ACGT is a European Commission co-funded project that develops open-source, semantic and grid-based technologies in support of post-genomic clinical trials in cancer research.

Hokkaido University’s role in a European Union FP6 Integrated Project

www.eu-acgt.org
The EU Framework Programmes are the main source of research funding in the European Union. The First Framework Programme ran from 1984 to 1987; the Sixth Programme, FP6, from 2002 to 2006.

Since FP4, research partners from outside Europe have also been welcome. Conditions for a Japanese organisation to join an ICT project in FP6:
- Conformity with the mutual interests of EU and Japan
- Substantial added value for implementing EU Science Policy
- Inclusion of a minimum number of legal entities from the Community and Associated States (3 + 1); project coordinator must be one of these
- No financial support from the EC for Japan-based organisations
- Japanese organisations established in EU or associated states can receive financial support

ACGT is one of 10 ICT projects in FP6 (including 7 Integrated Projects) that include a Japanese partner.

FP6 had a total budget of €17.5bn (approx. ¥2trn at 2002 rates). FP7 runs from 2007 to 2013 with a budget of over €50bn.

Hokkaido University's participation in ACGT
We were invited as the sole non-European member of the 25-partner, 13-country ACGT consortium on the basis of our graduate school's combination of computer science and bioinformatics research groups, and our long-standing research connections with FORTH, the project's scientific coordinators.

Our participation has been funded with the help of Japanese government research grants – initially under the JSPS Core-to-Core Programme, and later through the Global Centre of Excellence established at the graduate school.

Our implementation responsibilities
1. Development of a graphical Trial Outline Builder (TOB) for ObTiMA, ACGT's ontology-based clinical-trial management tool. ObTiMA development is led by the University Hospital of the Saarland, Germany. The TOB is built using our "WebbleWorld" meme-media environment, resulting in an application within which a trial chairman can build, by simple direct-manipulation operations, a trial outline that simultaneously serves as:
   a. a graphical view of the trial as a whole, editable by the trial chairman to reflect major updates to the treatment protocol
   b. the interface to be used by doctors to enter the progress of their individual patients through the trial
   c. the interface to be used by the trial chairman or ethical committee to track multiple patients' progress and perform queries against their data

2. Development of the OncoRecipeSheet, a graphical front end for generating and comparing results from in-silico modelling of tumour growth and therapy response, as supported by the ACGT OncoSimulator.

Work on the OncoSimulator is led by the National Technical University of Athens, Greece. Our front-end interface is based on the RecipeSheet, a spreadsheet-like environment that incorporates so-called subjunctive interface techniques to support the viewing of multiple cases side by side to facilitate their comparison.

Computer Science
- Yuzuru Tanaka – professor, laboratory director
- Aran Lunzer – GCOE assoc. professor
- Micke Kuwahara – system engineer
- Jérémie Julia – student intern (from UM2-PolytechMontpellier)

Bioinformatics
- Toshinori Endo – professor
- Katsuhiko Mineta – assoc. professor