Six-monthly progress report 1

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User requirements and specification of the ACGT internal clinical trial

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ABSTRACT:

This Deliverable presents the full range of project activities during its first six months, including management activities, disseminations activities as well as technical and scientific activities foreseen in the ACGT Description of Work.

KEYWORD LIST: Progress report, Workpackages activity, achievements, deliverables.

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Contents

1 Executive Summary

The main objectives of the project during the reporting period were to:

a) Officially launch the project and establish the various management bodies, as well as the technical and advisory boards of the project;

b) Focus on the development of a coherent and shared vision of the overall project and the various scientific and technical challenges faced by the project;

c) Perform an in depth state of the art review of all scientific domains relevant to the vision and work programme of the project;

d) Document user requirements, as the starting point for the subsequent technical and scientific work with respect to drafting the initial architecture of the ACGT technological platform and the initial implementation of the various tools and services required.

Significant efforts have been devoted by the Project Management to assure that all partners are committed and actively involved in the various project activities. Potential issues have been identified and corresponding measures have been taken to address them. In addition, ACGT has initiated cooperation with major international activities in the field, with significant success.

Altogether, substantial work has been done in the project during these initial six months of activity. The project is on track, and while some specific activities are slightly delayed, all other activities are performing better than originally planned.

2 Project objectives and major achievements over reporting period

From the overall management point of view, the main focus of this fist period was to launch successfully the different ACGT activities.

It implies setting up all the different bodies composing the project (boards and Workpackages), the organisation of a kick-off meeting, and ensuring that the different cooperation and support tools were operational and made available to all partners. The online collaboration tools (BSCW, Wiki) have been implemented in the earliest stages of the projects, allowing partners to discover their functionalities. The external advisory board of the project was established, although we are continuing to seek additional external expertise in specific domains, in particular in the field of clinical trials.

From the dissemination point of view, significant activities were undertaken; initial dissemination material was produced. XXXX Initial experiences made us realise that a more coherent project presentation was required, which led us to the formation of an Editorial Board, at the project level, with the object of coordinating all project dissemination material in terms of scientific quality and relevance. The Management has also devoted significant efforts to link the project with major international projects/initiatives and several such links have already been established.

From the technical and scientific point of view, the main focus was laid on clinical aspects of the project. The state of art review in clinical trials was a main objective, which was necessary to develop an integrated environment for cancer research on the Grid. Main points that were investigated and reviewed were:

1. User needs for clinicians and basic researchers to facilitate interdisciplinary research and communication by respecting legal and ethical issues

2. Current guidelines for clinical trials (e.g. ICH and GCP)

3. Tools and software for the management of clinical trials

4. The needs for clinico-genomic integration, including technological, legal and ethical issues, security and quality control, was defined.

5. Specific clinico-genomic scenarios were implemented in the clinical studies as defined in WP12.

Significant efforts were devoted to the detailed specification of the post-genomic trials to be supported by the project. The selection of ACGT clinical trials were based on the following criteria:

a) they should not involve experimental therapeutics that could raise concerns about the health of the patients (i.e. drugs under development etc),

b) they should address or include an advanced post-genomic research question (i.e. identification or validation of a molecular marker or signature), and

c) they should be in an advanced preparation state, possibly already adopted by local ethical or regulatory committees (in order to avoid delays in their implementation within ACGT).

On this basis the TOP trial on breast cancer and SIOP trial on nephroblastoma trials were selected during the kick-off meeting in Nice (February 27 – March 1, 2006).

Further detailed discussions were launched among the clinical partners, the clinicians and researchers involved (surgeons, oncologist, pathologists, molecular biologists in UoC, EIO, Uoxf) about the number of patient cases to be included, about details of clinical practice, and about additional research questions and analyses that could be included etc.

Specific technical meetings were organised (i.e. common meeting between WP2 and WP12, Saarbrücken, April 7, 2006) to assist the process of Requirement Analysis.

⇒ It was decided that, due to the complexity of the domain a *Scenario Based Requirement Engineering approach should be adopted.*

⇒ It was agreed that a set of scenarios should be written in order to describe in detail the technological need, to resolve the granularity of the clinical trial protocols and thus to produce the specifications of the ACGT infrastructure.

⇒ It was decided that scenarios should present the purpose of the clinical research activity and should describe the format of the collected data, the information systems that are used for storage and management, the processes and tools that are used for analysis and their output.

Explicit scenarios, presenting both user-driven stories expressing user-needs, as they are documented by representative users, as well as technology-driven description of requirements of the system under design, representing indicative functionality, as understood by experienced technological experts, have been developed.

These initial scenarios are included in the Deliverable 2.1 but additional post-genomic scenarios will continue to be released and improved through out the duration of the project. Current and future user-driven or technology-driven scenarios must:

a) *Include post-genomic research activities and require integrated access to multi-level, heterogeneous data;*

b) *Rely on scientific analytical workflows that integrate cross-site and cross-platform clinical, image and genomic data;*

c) *Comply to ethical, regulatory and technical specifications, requirements and provisions for the implementation of the trials within ACGT.*

Based on these activities (i.e. the ACGT internal clinical trial definition and the specification of a number of detailed post-genomic scenarios) the process of reviewing the state of art in all relevant scientific domains has begun; also the requirements specification process was initiated.

Due to the complexity and ample scope of the project as well as the size of the project with its many partners with complementary expertise, we primarily focused in defining a minimal set of requirements from where to build on the ACGT technological platform and secondly, minimize wheel reinvention by identifying which technological components are available, and which are required to be built, in order to comply with such requirements.

An iterative requirement engineering process has been adopted, mainly based on scenarios and prototyping. Inputs to the requirements engineering process are information about existing systems, user and stakeholder needs, organizational standards, regulations and other domain information.

Several working meetings were planned (Budapest, May 2006; Athens, June 2006) for enabling organised discussion to take place and assignment of work to individual partners. All these activities culminated in the timely production of D2.1, which is a major Project Milestone.

In addition to these activities, it was also decided that, although most of the technical Workpackages of the project officially begin their work on month 7 (T0+6) of the project, it would be beneficial to speed up the beginning of the work of most such WPs. Most technical WPs have, as a result, planned and performed their kick-off meeting, and have begun refining their scope and objectives, defining their immediate and longer term scientific questions to be addressed and made detailed plans for their work.

3 Workpackage progress report over the period

Workpackage 1 - Project Management

- **Partner Responsible :** ERCIM
- **Contributing partner(s):** FORTH, Philips, UPM
- **Reporting Period:** 01/02/2006 – 31/07/2006
- **Workpackage objectives and starting point of work at beginning of reporting period**

  -**The Workpackage has the following major objectives:**

  - Ensure overall Coordination of the ACGT activities
  - Define and implement an administrative frame to the ACGT activities
  - Provide all the necessary support tools and procedures help teams reach their objectives
  - Monitor progress against the workplan and sure the coordination of work across the different Workapckages.

  - Objectives during reporting period

  The main focus of this fist period was to launch successfully the different ACGT activities. It implies setting up all the different organs and bodies composing the project (boards and Workpackages), the organisation of a kick-off meeting, and ensuring that the different cooperation and support tools were made available and operational. It also implied the definition of clear and efficient procedures to provide a framework to WP cooperation, progress monitoring, evaluation of the WP activity and Quality assessment.

  - Progress towards objectives

  All the different organs composing the overall ACGT infrastructure has been established and activated. The kick-off meeting triggered WP activity and cooperation. Reporting procedures have been adopted and implemented. Deliverable D1.2 “Definition and guidelines for the Quality Assurance Process” has been produced together will all the ACGT partners. WP leaders are driving the activities towards their objectives, while interacting with the other ACGT Workpackages using a wide array of cooperative tools and functionalities.

The Overall coordination is ensured by Remi Ronchaud (ERCIM), while the scientific coordination and progress monitoring is carried out by Manolis Tsinakis (FORTH) and the Quality Manager, Dr Norbert Graf.

- Main Activities & Tasks worked on

- Organisation of the ACGT kick–off meeting
- Composition of the different managerial boards and bodies
- Implementation of several collaborative tools and procedures
- Preparation of D1.2 “Guidelines for the Quality Assurance Process”
- Assignment of the Quality Manager position to Dr Norbert Graf
- Definition of evaluation and self assessment procedures
- Supervision of dissemination activities
- Coordination of all WP and of their respective interactions

- Major Achievements towards planned objectives, identify main partners Involved

- Organisation of the ***kick-off meeting*** in Juan-les Pins on 27/02 to 1/03 2006.

- To minimise the administrative burden on the Consortium members, the coordination developed a number of ***web-based templates and forms***, to facilitate the preparation of documents and the transfer of results from one Workpackage to another. The forms are available on the BSCW server, a cooperative platform allowing the exchange of documents and acting as an internal repository.

- Creation and composition of all ***managerial bodies*** within ACGT

- ***Organisation of regular technical meetings*** to ensure strong cohesion of teams and to support timely interactions across Workpackages

- ***Implementation of the ACGT mailing lists***:
  * ACGT general mailing list
  * ACGT Managerial board mailing list
  * ACGT editorial board mailing list
  * Implementation of dedicated mailing for every Workpackage

- Organisation of ***regular audio conferences*** for the management board and for Workpackages

- ***Dedicated templates*** have been prepared to collect the contribution of the different partners to the periodic reports.

- ***Cooperation WP12 leader*** to supervise the ***dissemination activities***, in accordance with the expectations of the ACGT consortium.

- ***D1.2 Quality assurance guidelines*** has been delivered and implemented to support the internal monitoring of activities.

- ***Preparation of the first periodic report***.

- **Deviations from the project work programme, and corrective actions taken/suggested**

  The ACGT Project is on track. The deliverable to be produced will be delivered, yet the project as taken some delay, in particular due to the preparation of a joint ontology. This has slightly delayed the project by 2 months. Efforts are however being mage to respect the deliverables delivery deadlines, and to align the project with its planned schedule.

- **List of deliverables, including due date and actual/foreseen submission date**

Deliverable	Deliverable title	Planned	Expected
D1.2	Definition and guidelines for Quality Assurance Process	T+3	T+9
D15.1	Project website (internal and external)	T+3	T+9
D12.1	Definition of the ACGT clinical studies according to the clinical scenarios	T+4	T+7
D1.1.1	Six-Monthly Progress Reports	T+6	T+9
D1.3	Publication of a Project Handbook for *ACGT*	T+6	T+10
D1.4	Risk Analysis of ACGT	T+6	T+10
D2.1	User Requirements and Specification of the ACGT internal clinical trials	T+6	T+10
D14.1	Functional & technical specification of the *ACGT* portal	T+6	T+10
D3.1	The ACGT initial architecture	T+9	T+10
D4.1	Report on security infrastructure	T+9	T+10
D5.1	Consolidated requirements and specifications for data access	T+9	T+10
D6.1	Consolidated requirements analysis report for data mining, analysis and the visualization environment	T+9	T+10
D7.1	Consolidated requirements on Ontological approaches for integration of multi-level biomedical information	T+9	T+10
D8.1	Consolidated Requirements (including information flows) of the in silico simulation models	T+9	T+10
D11.1	Consolidation of security requirements of ACGT and initial security architecture	T+9	T+10
D12.1	Bio-bank protocols and regulations	T+9	T+11
D15.2	Initial Dissemination plan	T+9	T+10

- **List of milestones, including due date and actual/foreseen achievement date**

  Formation of boards and committees (month 2) M1 has been completed in time at T+2

Workpackage 2 - User Needs Analysis & Specifications

- **Partner Responsible :** UdS

- **Contributing partner(s):** FORTH, Philips, IJB, SIB, UMA, UPM, FHG, BIOVISTA, UOC, UHANN, PSNC, Custodix, ICCS, SIVECO, UoH

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - **The Workpackage has the following major objectives:**

  - To review current guidelines for clinical trials, tools and software for the management of clinical studies
  - To define the needs for clinico-genomic integration
  - To ensure the feasibility of implementing clinical studies for cancer into ACGT by providing specific clinico-genomic scenarios

  - Objectives during reporting period

  The main focus was laid on clinical aspects of the project. The state of art review in clinical trials was a main objective, which was necessary to develop an integrated environment for cancer research on the Grid. Main points that were investigated and reviewed were:

  User needs for clinicians and basic researchers to facilitate interdisciplinary research and communication by respecting legal and ethical issues

  Current guidelines for clinical trials (e.g. ICH and GCP)

  Tools and software for the management of clinical trials

  The needs for clinico-genomic integration, including technological, legal and ethical issues, security and quality control, was defined.

  Specific clinico-genomic scenarios were implemented in the clinical studies as defined in WP12.

  - Progress towards objectives

  The reviewing of guidelines for clinical trials, tools and software for the management of clinical studies is well done. The definition of needs for clinico-genomic integration is going on.

Specific clinico-genomic scenarios are developed for testing the ACGT platform. Further scenarios have to be developed including a scenario for anonymisation and pseudonymisation.

- Main Activities & Tasks worked on

The main focus was laid on the state-of-the-Art Review on all aspects which are relevant to ACGT (T2.1) is leaded by FORTH (Manolis Tsiknakis). Progress is made according to the objectives and tasks as defined. There are no major delays. The deliverable D2.1 is finished in time with the help of most of the partners.

- Major Achievements towards planned objectives, identify main partners Involved

The aim of task T2.1 was to provide an elaborate and thorough state of the art review on all aspects which are relevant to ACGT. Task leader for T2.1 is Manolis Tsiknakis from Forth. The deliverable D2.1 was coordinated by him. The review 'User requirements and specification of the ACGT internal clinical trials' is devided into 2 parts. Part 1 deals with the user needs and the specification of requirements and part 2 with the state of the art review of technological domains that are relevant to ACGT. Major achievements are listed below giving also the partners contributing to task T2.1 and the deliverable D2.1:

SoA in clinical trials – **UdS**
SoA in Grid technologies and middleware – **PSNC**
Data access services – **Philips**
Modelling of the future clinico-genomic Electronic Health Record - **Philips**
Tools for the creation and management of clinical trials – **FhG/IBMT&FORTH**
Data mining and knowledge discovery (DM/KDD) - Grid enabled DM/KDD – **FhG**
Bioinformatics methods and tools - Grid enabled DM/KDD – **SIB&UMA&FORTH**
Biomedical (Cancer) Ontologies – **IFOMIS**
Semantic mediation – **UPM**
In silico modelling and Simulation – **ICCS**
Workflows Management and Enactment Systems – **FORTH**
Visualisation techniques and standards – **Biovista&FORTH**
Legal and Ethical Guidelines – **UHANN**
Security related issues – **Custodix**
Evaluation Methodologies - **SIB**
Online training platforms and standards - **Siveco**

- **Deviations from the project work programme, and corrective actions taken/suggested**

There was only one problem occurring during the work program. The questionnaire regarding User Needs and Requirements was started after the Management Board meeting in Budapest in May 2006.

Only few partners did answer to the questionnaire. This was not increased by contacting the partners several times by UMA and UdS. The reason for this problem is unknown. It did not cause a time delay.

- **List of deliverables, including due date and actual/foreseen submission date**

  D2.1 will be delivered in time. The final version will be delivered to the commission by the 15th of September.

- **List of milestones, including due date and actual/foreseen achievement date**

  Requirements and specifications for the ACGT integrated platform (MWP2.1) as a major Milestone will be achieved in time.

Workpackage 3 - Architecture and Standards

- **Partner Responsible :** Poznan Supercomputing and Networking Center

- **Contributing partner(s):** PSNC, FORTH, UvA, PHILIPS, LundU, UMA, UPM, FHG, Biovista, Custodix, ICCS, USAAR, FUNDP, UoH, UHok

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - **Objectives during reporting period**

  The main objective for WP3 in first six months was to prepare for work on initial architecture of ACGT environment. To achieve this goal we were looking closely on work concerning gathering and defining end-user requirements by WP2.
  Besides, the WP3 representatives took part in initial meetings of other Workpackages to familiarize with work in all areas of the project

  - **Progress towards objectives**

  Based on the work done in WP2 we are able to work on initial architecture of ACGT environment.

  - **Main Activities & Tasks worked on**

  Analysing end user requirements; Analysis of reference architectures from projects such as: myGrid, InteliGrid, OntoGrid, caBIG.

  - **Major Achievements towards planned objectives, identify main partners involved**

  After the 6 months of work we better understand the scope of the clinical trials. We have identified major difficulties, such as hospital databases connectivity, infrastructure etc.

- **Deviations from the project work programme, and corrective actions taken/suggested (if any):**

  No deviations. Some partners had difficulties in hiring personnel for this WP. Most of the work was performed using partners own efforts.

- **List of deliverables, including due date and actual/foreseen submission date**

  No deliverables were foreseen.

- **List of milestones, including due date and actual/foreseen achievement date**

  No milestones were foreseen for this period.

Workpackage 4 - Biomedical Grid Technology Layer

- **Partner Responsible :** Poznan Supercomputing and Networking Center
- **Contributing partner(s)**: FORTH, UMA, FHG, Custodix, SIVECO, UHok
- **Reporting Period:** 01/02/2006 – 31/07/2006
- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  - The main objective for WP4 in first six months was to explore existing Grid solutions in bioinformatics area. Research was focused mainly on two projects: caBIG and myGrid.
  - The other goal was to start discussion about building Grid testbed for ACGT environment.

  - Progress towards objectives

  We were able to gather knowledge about existing Grid solutions, try to compare them with proposed by WP4 PSNC grid toolkit, and end user requirements identified by WP2.
  We also initiated discussion about ACGT grid testbed and gathered first declaration of participation from project partners

  - Main Activities & Tasks worked on

  - State of the art research
  - End user requirements analysis in context of requirements from Grid
  - PSNC Grid Toolkit (Gridge)
  - ACGT Grid Tesbed

  - Major Achievements towards planned objectives, identify main partners involved

  Grid tesbed participation declaration:
  - PSNC
  - Fraunhofer AIS

- Custodix NV
- FORTH
- UPM
- Fraunhofer IBMT
- University of Malaga

- **Deviations from the project work programme, and corrective actions taken/suggested :**

  No deviations. All as planned.

- **List of deliverables, including due date and actual/foreseen submission date**

  No deliverables were foreseen for this period.

- **List of milestones, including due date and actual/foreseen achievement date**

  No milestones were foreseen for this period.

Workpackage 5 - Distributed Data Access and Applications

The aim of WP5 is:

- Provide seamless and interoperable data access services to the distributed data sources, by developing a set of compatible software key modules/services based on Web Services
- Provide services for ontology-based ubiquitous interoperability in the integrated *ACGT* environment (developed in WP9)
- Define a generic architecture that enables distributed access to all relevant patient data across the healthcare enterprise

- **Partner Responsible : Philips**

- **Contributing partner(s):** FORTH, Philips, IJB, LundU, UMA, UPM, Fraunhofer, Biovista, ICCS-NTUA, Saarland UdS, Oxford Univ., Hokkaido Univ

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  The activities in this WP officially start in month 6.

  The main objective of this Workpackage is to provide seamless and interoperable access to the distributed data sources in the ACGT environment. It will develop services to be used by the other ACGT Workpackages, based on the scenarios defined in the User requirements and specification of the ACGT internal clinical trial document (D2.1).

  - Objectives during reporting period

  To gather and analyse the user requirements with respect to data access, which will be included in deliverable 5.1.

  - Progress towards objectives

  * We have collected a list of questions relevant for the data access, based on which we synthesize the requirements regarding the data access services.

  * We have organized workshops at the main clinical trial sites IJB and UdS to identify the relevant scenarios with respect to data access.

  * We have set up a collaborative work environment for ACGT.

- Main Activities & Tasks worked on

The work focused on tasks 5.1, 5.5, and 5.6.

- Major Achievements towards planned objectives, identify main partners involved

* A collaborative work environment has been set up (Task 5.6). (Philips)

* Preparatory work has been carried out for Task 5.1 Consolidation of requirements and Task 5.5 Implementation of tools for the creation, management and monitoring of clinical trials and biobanks.

* Workshop at IJB to analyse requirements with respect to data access (Philips, UMA, IJB)

* Workshop at UdS to analyse requirements with respect to data access and with respect to the tools for creation, management and monitoring of clinical trials (Philips, Fraunhofer, UdS)

- **Deviations from the project work programme, and corrective actions taken/suggested:**

  No deviation

- **List of deliverables, including due date and actual/foreseen submission date**

  Consolidation of requirements analysis with respect to distributed data access and applications Nov. 2006/ Nov. 2006

- **List of milestones, including due date and actual/foreseen achievement date**

  Specification of the ACGT data access services Nov. 2006 / Nov. 2006

Workpackage 6 - Data Mining and Knowledge Discovery Tools

A kick-off meeting of work package 6 has been held in Madrid, Spain on June 15th. The main results of this meeting were an identification of important sub-tasks and critical points in the work package, the development of an initial timeline, and an assignment of tasks and responsibilities to the project partners. This results have been documented in the meeting minutes and will be covered in detail in Deliverable 6.1.

An initial version of Deliverable 6.1, which is due on month 9, has been produced and presented on the management board meeting in Athens.

Another main activity was to establish contact and interact with all related work packages, which has been done by participating in meetings of other work packages and by discussions on the project Wiki. Critical points that have been identified are the user requirements and use cases with respect to data analysis, the grid infrastructure and the requirements for the user interface. In particular, to bridge the gap between high-level user requirements and the necessary low-level use cases and algorithmic requirements, it was decided to implement a first demonstrator of the analytical services of ACGT using the grid-bases data mining software developed by the partner responsible : FHG.

- **Partner Responsible : FHG (Fraunhofer IAIS)**

- **Contributing partner(s): FORTH, INRIA, UvA, SIB, LundU, UMA, UPM, Biovista, IEO**

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - **Objectives during reporting period**

  The main objectives during the reporting period were to get a clear understanding of the user requirements with respect to data analysis, an overview of the envisioned ACGT architecture and the requirements to the architecture put up by data analysis tasks, and develop a clear understanding of the partners' roles in the work package.

- **Progress towards objectives**

During this reporting period, progress was made by defining the each partner's role in the work package. Responsibilities have been assigned to each partner and an initial timeline and work plan has been developed.

Contact with other work packages, in particular WPs 2, 3, 4, 7 and 9, has been established and discussions regarding the architecture and objectives of this work package and the ACGT platform in general are carried on, in particular by using the Project Wiki.

- **Main Activities & Tasks worked on**

DataMiningGrid project.

- Major Achievements towards planned objectives, identify main partners involved

The major achievement of this reporting period was production of a draft version of Deliverable 6.1, the consolidated requirements analysis (see Task 6.1), which is produced under the coordination of SIB with input of all partners.

As a first step towards Task 6.2, the integrated ACGT analysis environment, the development of an initial demonstrator has been started with main contributions by FORTH and FHG.

- **Deviations from the project work programme, and corrective actions taken/suggested (if any):**

  There are no deviations from the project work programme.

- **List of deliverables, including due date and actual/foreseen submission date**

  Deliverable 6.1 is due on month 9 of the project (i.e. end of October). A first version of the deliverable has been produced in July and the production is currently under way. No delays in the production of this deliverable are foreseen.

  Deliverable 6.2 is due on month 18. No delays in the production of this deliverable are foreseen.

- **List of milestones, including due date and actual/foreseen achievement date**

  The first milestone of this work package is the delivery of the data mining and KDD services and tools on month 18 as part of the major project milestone M7. No delays in the achievement of this milestone are foreseen.

Workpackage 7 - Ontologies and Semantic Mediation Tools

- **Partner Responsible :** Universidad Politécnica de Madrid (UPM)

- **Contributing partner(s):** FHG, USAAR, INRIA, LundU, FORTH, Philips, BIOVISTA, UOXF, IEO, IJB, SIB

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  Objectives during reporting period

  During this first period, the main goals in WP7 have been:

  * To establish communications **among all the involved partners**,

  * The organization of the **requirement analysis task**,

  * The development of the **ACGT Master Ontology**

  * To **analyse the state of the art in** the area of work and exchange the acquired knowledge. Gaps in the state of the art will be combined with the specific expertise and skills of each partner for establishing some common action.

  - Progress towards objectives

  The WP7 Kick-off meeting has been celebrated (together with WP6), with the participation of the main partners involved in WP7, so all the partners have had to opportunity of getting to know each other. UPM has been studying the state of the art on the areas related to WP7, including Semantic Mediation, Ontologies and their relation with other technologies related to ACGT. IFOMIS people have been developing the initial draft version of the ACGT Master Ontology, which 1st version has been presented during the Kick-off meeting sessions.

- **Main Activities & Tasks worked on**

  UPM has organized the WP7 Kick-off meeting in Madrid. During this first period, a study of the state of the art have been performed, and a study of the available tools and documents (throughout all partners) relevant to WP7, as well as a study of the interaction between WP7 and other Work Packages (such as WP5 and WP6). IFOMIS people have been working on the first draft of the ACGT Master Ontology on Cancer, and their progresses are accessible online for all partners in ACGT.

- Major Achievements towards planned objectives, identify main partners involved

- Draft version of the Master Ontology available (IFOMIS)

- **List of deliverables, including due date and actual/foreseen submission date**
  - *D7.1. Consolidated requirements on Ontological approaches for integration of multi-level biomedical information (T0+9) – to be submitted in T0+10*
  - *D7.2. The ACGT Master Ontology (T0+15)*
  - *D7.3. Demonstration and report of the Ontology Mediation services (T0+18)*
- **List of milestones, including due date and actual/foreseen achievement date**
  - *M5. Initial ACGT master ontology for cancer trials (T0+15)*

Workpackage 8 - Technologies and Tools for In Silico Oncology

- **Partner Responsible :** ICCS Institute of Communication and Computer Systems

- **Contributing partner(s):** ICCS, University of Saarland, Institut Jules Bordet, INRIA, University of Amsterdam, FORTH, FhG

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  Objectives (WP8) pertaining only to the first 6 months of ACGT
  [For the first 18 month objectives please see Description of Work]
  The general objectives for WP8 for the first 6 months were the following:
  * To establish an efficient partner network in order to implement the in silico oncology workpackage.
  * To make the work to be done quite concrete (e.g. clinical data and procedures specification etc.)
  * To check the infrastructure to be used during the project's lifetime
  * To start work directly related to the workpackage

  - Progress towards objectives

  All the first 6 month objectives have been implemented as shown on the list of the main activities and tasks worked on.

  - Main Activities & Tasks worked on

  TUMOUR RESPONSE SIMULATION CODE DEVELOPMENT (T8.1, T8.2)

  ICCS: Development of a two-compartment pharmacokinetic mathematical model for vincristine and use of literature-based reasonable parameter values.

Priliminary parametric studies have been initiated. The Development of a three-compartment epirubicin pharmacokinetic model using the SAAM software was also started.

CLINICAL DATA INPUT (T8.1, T8.2)

USAAR: a number of sets of anonymized imaging data (MRI, CT, ultrasound) has been electronically provided to ICCS, in order reach a decision on the appropriate imaging data input to the simulation code. Furthermore, pertinent molecular data literature has been provided by USAAR to ICCS in order to reach a decision on the exact content and form of the molecular data that will constitute the input to the simulation code.

IJB: Sample imaging and histopathologic data, their corresponding diagnoses, and the case report forms of the Test Of Principle (TOP) trial have been provided by IJB to ICCS in order to reach a decision on the exact content and form of the molecular data that will constitute the input to the simulation code.

CODE EXECUTION ACCELERATION (T8.3)

An obsolete version of a glioblastoma radiotherapy response simulation code has been sent from ICCS to INRIA in order to test their computing facilities and be prepared for the new code demands. A constructive interaction has lead to the clarification of certain important points including code parallelization, code cross-checking etc

VISUALIZATION OF CLINICAL DATA AND SIMULATION PREDICTIONS (T8.4) - Previous glioblastoma imaging data and simulation predictions have been provided form ICCS to UvA in order to shape the visualization procedure to be used for the ACGT WP8 needs. The imaging data have been visualized by UvA using in-house developed tools based on VTK (the Visualization Toolkit). Perspective rendering, interactive VR rendering and fly-around animations of the tumour region have been tested.

IMAGE PROCESSING (T8.3)

Previous glioblastoma imaging data have been provided from ICCS to FORTH, in order to shape the image processing procedure to be used for the ACGT WP8 needs. An interaction process extending to further related areas has been initiated between FORTH and ICCS..

Data base system to be used for data handling

ICCS-FORTH-FhG: Outlining of the data base system to be used for data handling. Furthermore, the detailed algorithm of the In Silico Oncology clinical trial has been formulated in close collaboration with WP2 and WP12.

- Major Achievements towards planned objectives, identify main partners involved

The major achievements during the first 6 months period are outlined in the previous progress list. Further details are available in the ACGT deliverables D2.1, D12.1

- **Deviations from the project work programme, and corrective actions taken/suggested (if any):**

  No deviations for the project work programme have been observed.

- **List of deliverables, including due date and actual/foreseen submission date**

  Although no deliverables exclusively related to WP8 have been foreseen for the first 6 months, a substantial contribution of WP8 to the preparation of deliverables D2.1 and D12.1 has been made.

- **List of milestones, including due date and actual/foreseen achievement date**

  No milestones concerning WP8 have been foreseen to the first 6 months of ACGT.

Workpackage 9 - The Integrated ACGT Environment

- **Partner Responsible :** FORTH

- **Contributing partner(s):** UvA, Philips, IJB, SIB, LundU, UPM, FHG, BIOVISTA, PSNC, Custodix, ICCS, UHok

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  The objectives during the first 6 months of the project were to start elaborating the requirements and scope of WP9 and investigating prior work in other European and international projects and relevant efforts.

  - Progress towards objectives

  Although the official kick-off of the Wp is planned for September, significant foundational work and progress has been done.

  - Main Activities & Tasks worked on

  A state of the art review of available standards and tools was carried out and incorporated in the deliverable D2.1. This review was mainly focused on the Workflow Management Systems, which is the main topic of Task 9.2 “Integrated ACGT Environment” leaded by FORTH. With respect to Task 9.1 “Definition of Integration Guidelines” FHG which will be the responsible leader has also started gathering requirements and doing explorative work. Nevertheless it was early recognized that input from other work packages and especially WP3 “Architecture and Standards” is required in order to start the discussion about the ACGT integration guidelines.

  - Major Achievements towards planned objectives, identify main partners involved.

  Regarding Task 9.2 apart from the State of the Art review an initial evaluation of two of the seemingly most promising workflow management tools, Taverna and

Triana, has started. FORTH is gaining experience with Taverna whereas FHG is looking into Triana.

- **Deviations from the project work programme, and corrective actions taken/suggested:**

  None

- **List of deliverables, including due date and actual/foreseen submission date**

  None during the reporting period

- **List of milestones, including due date and actual/foreseen achievement date**

  None during the reporting period

Workpackage 10 - Ethical, Legal and QA Issues

- **Partner Responsible : UHANN**

- **Contributing partner(s):** FORTH, IJB, UOC, Custodix, USAAR, FUNDP, UH, UOXF, IEO

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - **Objectives during reporting period**

  1. Definitions of legal terminology
  2. Identification of data flow and quality of the data
  3. **Production of an Informed Consent form**
  4. **Report on ethical and legal requirements within ACGT**

  - Progress towards objectives

  1. Definitions were sent out
  2. The structure of the data flow within the nephroplastoma trial is identified. We are working on the identification in detail.
  3. Informed Consent form in progress
  4. Report on ethical and legal requirements in progress

  - Main Activities & Tasks worked on

  - Definition of common legal terminology
  - Identification of data flows and quality of data within ACGT
  - WP-meeting with WP 2, WP 11 and WP 12
  - Analysis whether pseudonymous data can be seen as anonymous data
  - Work on a definition for additional knowledge that is attributable to the data controller
  - Analysis of the role of a trusted third party in the process of aliasing
  - Analysis whether the local physician can act as a trusted third party
  - An article in one of the main German law journals for data protection is in progress

- Ethical and legal Issues in ACGT for Deliverable 2.1

- Major Achievements towards planned objectives, identify main partners involved

- Definition of common legal terminology within ACGT (UHANN/FUNDP)
- The structure of the data flow within the nephroplastoma trial is identified. (UHANN/FUNDP/USAAR)
- Ethical and legal Issues in ACGT for Deliverable 2.1 (UHANN/FUNDP/UH)

- **Deviations from the project work programme, and corrective actions taken/suggested**

  - Missing contact to IEO; we didn't get any response to e-mails that were addressed to all WP 10 - participants, therefore we unsuccessfully tried to get in contact with them by e-mail on the 2nd Jun. 06; we informed WP1 on 10th Jul. 06.

- **List of deliverables, including due date and actual/foreseen submission date**

  - D10.1: Production of inform-consent form in compliance with the clinical trials, post-genomic research and genetic data handling requirements (month 12) in progress
  - D10.2: The ACGT ethical and legal requirements (month 12) in progress

- **List of milestones, including due date and actual/foreseen achievement date**

  - MWP10.1: The ACGT ethical and legal requirements (month 12), Major Project Milestone M4 is due and foreseen 31st of January 2007.

Workpackage 11 - Trust & Security

- **Partner Responsible :** Custodix NV (Partner 16)

- **Contributing partner(s):** 9-UMA, 10-UPM, 11-Fraunhofer, 14-UHANN, 15-PNSZ, 16-Custodix, 21-FUNDP, 22-UH

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  According to the ACGT DOW, WP11 was planned to start in M7. Hence, no clear objectives were formulated for this reporting period. However preparatory work has been done in order to ensure successful kick-off of the joint work.

  - Progress towards objectives

  See above.

- **- Main Activities & Tasks worked on**

  Preparatory work. i.e. analysis of state-of-the art GRID security systems. Study (including proof-of-concept) of authentication & message level security technology for Service Oriented Architectures based on WS standards.

  Formal cooperation with WP10 has been established.

  - Major Achievements towards planned objectives, identify main partners involved : (N/A)

- **Deviations from the project work programme, and corrective actions taken/suggested (if any**

- N/A (preparatory work was started earlier than planned)

- **List of deliverables, including due date and actual/foreseen submission date**
  N/A

- **List of milestones, including due date and actual/foreseen achievement date**
  N/A

Workpackage 12 - Clinical Trials

- **Partner Responsible :** Institute Jules Bordet & FORTH – IMBB

- **Contributing partner(s):** University of Hanover, University of Hamburg, University of Saarland, Biovista, European Institute of Oncology, University of Oxford, University of Crete, Swiss Bioinformatics Institute, Custodix, University of Namur, University of Lund.

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  a) Select advanced clinico-genomic studies including post-genomic research activities collecting multi-level, heterogeneous data.

  b) Satisfy ethical, regulatory and technical specifications, requirements and provisions for the implementation of the trials within ACGT.

  c) Develop workflow scenarios that integrate cross-site and interrogate cross-platform genomic data and image data.

  - Progress towards objectives

  a) *The selection of ACGT clinical trials were based on the following criteria:*

  1) They should not involve experimental therapeutics that could raise concerns about the health of the patients (i.e. drugs under development etc),

  2) they should address or include an advanced post-genomic research question (i.e. identification or validation of a molecular marker or signature), and

  3) they should be in an advanced preparation state, possibly already adopted by local ethical or regulatory committees (in order to avoid delays in their implementation within ACGT). On this basis the TOP trial on breast cancer and SIOP trial on nephroblastoma trials were selected during the kick-off meeting in Nice (February 27 – March 1, 2006). Further detailed discussions were launched among the clinical partners, the clinicians and researchers involved (surgeons, oncologist, pathologists, molecular biologists in UoC, EIO, UoOx) about the number of patient cases to be included, about details of clinical practice, and about additional research questions and analyses that could be included etc.

b) *During the common meeting with WP2 partners in Saarbrücken (April 7, 2006)* it was agreed that a set of scenarios should be written in order to describe in detail the technological needs, to resolve the granularity of the clinical trial protocols and thus to produce the specifications of the ACGT infrastructure. Scenarios should present briefly the purpose of the research activity and should describe in detail the format of the collected data, the information systems that are used for storage and management, the processes and tools that are used for analysis and their output. The basic scenarios should be included in the Deliverable 2.1 but should continue to be released and improved through out the duration of the project.

c) *The collection and processing of personal and sensitive health data, the analysis of clinical biospecimens* in order to obtain extensive genetic information is subject to legal and bioethical requirements. These had been discussed in the common meeting with WP10 in Hanover (May 5, 2006) and the obligations related to data flow and exchange were examined. Particular tasks were launched to ensure the compliance with national and European legislation and guidelines during the implementation of the clinical studies.

- Main Activities & Tasks worked on

- T12.1 Preparing multi-centric, advanced clinico-genomic trials/studies
- T12.1.0 Development of the clinical scenarios, definition of ACGT clinical studies and submission for approval to monitoring committee (in collaboration with WP2).
- T12.1.1 Compliance with bioethical, regulatory and technical requirements. Data protection requirements and technical requirements ensuring clinical data privacy and security will be adopted (in collaboration with WP10 and 11)

- Major Achievements towards planned objectives, identify main partners involved

- Identification, evaluation and selection of clinical trials to be implemented within ACGT (Institute Jules Bordet & FORTH – IMBB, University of Saarland, University of Crete).
- Preparation of the first (model) scenarios illustrating the technological needs of the clinical research activities to be included in the D 2.1 (FORTH, University of Saarland, Biovista, Swiss Bioinformatics Institute, Custodix, University of Lund).
- Overview of the legal and bioethical considerations in relation to the clinical and genetic data (University of Hanover, University of Hamburg, University of Saarland, Custodix, University of Namur).

- **Deviations from the project work programme, and corrective actions taken/suggested:**

  Although the evaluation and selection of clinical trials fulfilling the set criteria had been achieved within the first month of the project, their adoption by the ACGT clinical partners requires detailed examination by all involved clinicians and researchers. Feasibility questions, particular difficulties in the implementation, and possible extension of the protocol in order to include side or additional research activities, such as the in silico study or the genotype profiling, have caused significant delay in the final detailed description and delivery of the D12.1. In order to avoid subsequent delays other depending tasks activities it has been agreed that the production and development of clinicogenomic scenarios should proceed independently of the final definition of the clinical trials.

- **List of deliverables, including due date and actual/foreseen submission date**

  D12.1 Definition of the ACGT clinical trials (due on month 4/forseen on month 9)
  D12.2 Bio-bank protocols and regulations (due on month 9/forseen on month 12)

- **List of milestones, including due date and actual/foreseen achievement date**

  Definition of the ACGT clinical trials (due on month 4/forseen on month 9)

Workpackage 13 - Evaluation and Validation

The aim of WP13 is to formulate evaluation criteria, verification procedure and feedback report guidelines, to coordinate local validation activities and feedback reports and to write a final evaluation report.

- **Partner Responsible :** SIB

- **Contributing partner(s):**
  FORTH, UvA, IJB, SIB, UMA, UOC, ICCS, UdS, UOXF.BP, IEO

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  WP13 is formally due to start on Month 9 (October 2006). The objectives of the Month 1-6 period, as stated during the ACGT kick-off meeting in Nice, is to conduct some preparatory work, namely define test scenarios based on ACGT clinical trials, obtain list of goals from engineering WPs, define strategies to modularize test material to be able to test individual components and to address the suitability of formal evaluation procedures in the context of ACGT.

  - Progress towards objectives

  Preliminary evaluation and validation datasets, list of tools and list of existing QC procedures were obtained.

  - Main Activities & Tasks worked on

  As it became obvious that data from actual ACGT trials would not be immediately available, SIB proposed a set of three scenarios based on published clinical studies in the context of WP2. The associated datasets will be used as evaluation and validation material in the context of WP13. Preliminary lists of tools to be developed were obtained from WP6; however, the level of detail with which they have been described is currently too low to allow WP13 producing actual test data.

An internal literature survey of existing QC procedures was conducted, as well as a poll of QC procedures in ACGT partners' institutions. The results of these two activities need to be submitted to the other partners in WP13.

- Major Achievements towards planned objectives, identify main partners involved

No major achievement in the current period.

- **Deviations from the project work programme, and corrective actions taken/suggested:**

  No deviation from the project work programme. WP13 kick-off meeting will be organized shortly.

- **List of deliverables, including due date and actual/foreseen submission date**

  D13.1 "Evaluation criteria and verification procedures of the ACGT platform", not started, due on Month 18, July 2007.

- **List of milestones, including due date and actual/foreseen achievement date**

  Deliverable D13.1 is part of Milestone M7 due Month 18, July 2007

Workpackage 14 - Training

- **Partner Responsible :** SIVECO

- **Contributing partner(s):** FORTH, INRIA, IJB, UPM, FHG, UOC, UHANN, Custodix, HealthGrid, ICCS, USAAR, FUNDP, IEO

- **Reporting Period:** 01/02/2006 – 31/07/2006

- **Workpackage objectives and starting point of work at beginning of reporting period**

  - Objectives during reporting period

  The first 6 months objective of WP14 was concerned, in conjunction with WP2, with the consolidation of user requirements for the development of the *ACGT* Portal to provide a grid-enabled integrated, customisable, multi-lingual, and user-friendly interface to end-users.

  - Progress towards objectives

  The first variant of the "Functional & technical specification of the *ACGT* portal" document was completed at the end of Month 6. The document will be subject to continuous update during the next project months, such that to be correlated with the consolidation of user requirements that has to be produced by other WPs.

  - Main Activities & Tasks worked on

  The main activity worked on in this reporting period is:

  T14.1 Consolidation of Requirements analysis for *ACGT* portal (and feedback to WP2).

  With the portal usage scenarios, the work to the next task – prototyping the ACGT Portal – was started and will be continued with the development of sample visual prototypes of the portal. This task is due to Month 12 of the project.

- Major Achievements towards planned objectives, identify main partners involved

The requirements analysis for the ACGT Portal is the main achievement of this reporting period. The task was completed by SIVECO and the other contributing partners, especially with the contribution of FORTH and HealthGrid.

- **Deviations from the project work programme, and corrective actions taken/suggested**:

  There were no deviations from the project work programme for this WP.

- **List of deliverables, including due date and actual/foreseen submission date**

  The only deliverable included in this reporting period is:
  D14.1 Functional & technical specification of the *ACGT* portal

  The deliverable was completed in due time (Month 6) and is subject to internal review. The document will be sent to the Commission in 45 days from the due date.

- **List of milestones, including due date and actual/foreseen achievement date**

  This WP does not include its own milestones, but is involved in the Major Project Milestone M7 which is due to Month 18.

Workpackage 15 - Dissemination

- **Partner Responsible : HealthGrid**
- **Contributing partner(s):** All the partners (from 1 to 25 participants id)
- **Reporting Period:** 01/02/2006 – 31/07/2006
- **Workpackage objectives and starting point of work at beginning of reporting period**

- Objectives during reporting period

During this period our objectives were to create a branding identity for the project as well as to define the initial dissemination plan for ACGT activities.

- Progress towards objectives

Creation of an editorial board, release of the internal and the external website (www.eu.acgt.org), production of bookmarks, set up of a wiki site

- Main Activities & Tasks worked on

T15.1 – T15.7 External & internal websites

The architecture and layout of the websites have been drafted. The external website already presents the main objectives of the project and his ready to disseminate all success stories which will be achieved within the project.

T15.2 Collaborative communication & notification tools

A BSCW server has been setup which allows partners to store and share easily working documents. 21 mailing lists have also been setup for the purpose of the project as well as a wiki website.

Contacts have been taken for the production of the video and quotations have been asked for.

T15.3 Events organisation, participation and presentation

The ACGT project has already been presented in 2 conferences (ISGC06 and ICT for Biomedical Science 2006).

T15.5 Project conference

WP15 has also started to prepare the first project conference which will take place early in 2007

T15.6 Publication production and dissemination

Some leaflets (150) were produced for dissemination.

- **Major Achievements towards planned objectives, identify main partners involved**

- **Deviations from the project work programme, and corrective actions taken/suggested**

Delay of 3 months compared to the due delivery

- **List of deliverables, including due date and actual/foreseen submission date**

  - D15.1 Project Website (internal and external): PM3/PM6
  - D15.2 Initial Dissemination Plan: PM9/PM10
  - D15.3 First Dissemination Report PM15
  - D15.4 Organisation and Report of a yearly project conference: PM15
  - D15.5 Revised Dissemination Plan: PM18
  - D15.6 ACGT Video: PM15

- **List of milestones, including due date and actual/foreseen achievement date**

Workpackage 16 - Market Investigation and Exploitation

- **Partner Responsible :** BIOVISTA
- **Contributing partner(s):** ERCIM, PHILIPS, UPM, FHG, SIVECO, FUNDP
- **Reporting Period:** 01/02/2006 – 31/07/2006
- **Workpackage objectives and starting point of work at beginning of reporting period**

  The overall objective of this work package is to consider and where appropriate implement the exploitable results of the project. The challenge for ACGT partners rises from the fact that open source code is a major objective of the project which means that exploitation in a 'commercial' sense is not foreseen for the great majority of partners. Nevertheless, the consortium includes a number of for-profit organisations and therefore accommodating their commercial considerations is also a goal.

  - Objectives during reporting period

  This is the first reporting period of the project and therefore the objectives have been rather modest given that in many cases time is spent in eliciting and understanding user requirements and identifying specific partner roles and expected results of each. For the reporting period the following objectives were set:

  * *OBJ1:* Establish the contact person within each consortium member that will be responsible for the exploitation issues concerning their organization.

  * *OBJ2*: Develop a common basic framework for defining, organizing and presenting exploitable results into categories that address specific purposes and target groups (e.g. s/w code, services, patents etc.).

  * *OBJ3*: Review current practices for exploitation of open-source code and consider how ACGT can be exploited in a CT setting.

  - Progress towards objectives

  * *OBJ1*: Completed. Certain partners have raised the possibility of changing their contact person later in the project.

  * *OBJ2:* In progress. A technical report in draft form is being compiled. The report is expected to be completed early in the 2nd reporting period.

* *OBJ3:* In progress. Background material is being collected and analysed. A technical report is expected to be completed in the 2nd reporting period.

- Main Activities & Tasks worked on

* Compilation of the contact list of those responsible for the exploitation of results in each participating organization.

* Compilation of the exploitation framework document.

* Collection of background material on models for exploiting open-source results.

- Major Achievements towards planned objectives, identify main partners involved

All partners with resources allocated to this P have been involved. Details are reported in the individual partner person-month activity reports.

- **Deviations from the project work programme, and corrective actions taken/suggested**:

  No deviation has occurred in this period. It has been noted that a relatively small number of partners (7 out of 25) have resources allocated to this WP. The issue has been raised with the PMB and the intention is for each partner to allocate a minimum of resources to this WP.

- **List of deliverables, including due date and actual/foreseen submission date**

  D16.1 "The ACGT Initial exploitation plan" is due on month 12. Work is under progress.

- **List of milestones, including due date and actual/foreseen achievement date**

  WP16 has a single milestone which according to the TA is the delivery of the ACGT exploitation plan on month 18. An initial version of this plan is scheduled for month 12 at which point deliverable D16.1 is due. It is currently foreseen that this milestone will be met as specified.

4 Consortium Management

➢ **Project Meetings *(including WP technical meetings)***

Title	*Place and Date*	*Main conclusions*
Kick-Off Meeting	Juan-Les-Pins (France), 27 February – 1 March 2006	https://bscw.ercim.org/bscw/bscw.cgi/98390
Kick-Off Meeting WP2	Saarbrücken, 7. April 2006	The time schedule for actions to be taken was fixed. It was stated that a common language between the different groups of participants is important. A glossary has to be made. The definition of scenario was clarified. The workflow of data has to be clearly outlined in each scenario. There should be as much scenarios as possible. Legal and ethical requirements have to be respected. https://bscw.ercim.org/bscw/bscw.cgi/d112599/ACGT%20WP2.meeting.07042006%20UdS%20v1%20rev0.doc
Kick-Off meeting WP10 *Meeting with WP02, WP11, WP12*	Hannover, 3 May 2006	Is provided by the WP Leader: https://bscw.ercim.org/bscw/bscw.cgi/d118624/minutes%20of%20the%20WP10-meeting%2020060503.doc
Kick-Off meeting WP3, WP4 and WP5	Eindhoven, 15 may 2006	
Management Board Meeting	Budapest, 29 – 30 May 2006	Is given in the minutes of the meeting: https://bscw.ercim.org/bscw/bscw.cgi/d145111/ACGT_MB1_minutes_Budapest_29-05-06_final.doc

Kick-Off meeting WP6 and WP7	Madrid, 15-16 june 2006	Is given in the minutes of the meeting: https://bscw.ercim.org/bscw/bscw.cgi/d144850/ACGTminutes%20WP71%20Madrid%2016-06-06%20v1.doc
Kick-Off meeting WP8	Athens, 10 July 2006	Is given in the minutes of the meeting: https://bscw.ercim.org/bscw/bscw.cgi/d151772/ACGT_WP8_KICKOFF_ATHENS_10_JULY_2006_MINUTES.pdf
Technical Board Meeting	Athens, 11. – 13. July 2006	Is given in the minutes of the meeting: https://bscw.ercim.org/bscw/bscw.cgi/d151276/Minutes%20of%20the%20ist%20TMB%20meeting.doc

- **Local meetings:**

Title	***Place and Date***	***Topics***
Meetings of UdS/IFOMIS, FhG/IBMT, UdS/Pediatric Oncology	Homburg, 13 March 2006	Cooperation of UdS/IFOMIS, FhG/IBMT and UdS/Pediatric Oncology
	Homburg, 21 March 2006	Logistics of ACGT
	Homburg, 11 April 2006	Inquiry of clinical trial software
	Homburg, 14 June 2006	Discussion about clinical trial software
	Saarbrücken, 28 June 2006	Ontology for the nephroblastoma trial
	Saarbrücken, 7 July 2006	Ontology for the nephroblastoma trial
	Homburg, 3 August 2006	Ontology for clinical trials

5 Use and Dissemination

➢ Conferences and/or Workshops organised/foreseen by the project

Planned/actual Dates	Name	Particip. profile	Type	Number of Particip.	ACGT Partner responsible /involved
11/04/06	JURACON, Frankfurt/Main	General public, especially for lawyers	Exhibition	100	UHANN (Participation And presentation)
04/04/06	Press release (http://idw-online.de/pages/de/news153573)	General public Germany	Press release		UdS / UdS
07/04/06	Press release (http://www.uni-saarland.de/de/medien/2006/04/1144141058)	General public Germany	Press release		UdS / UdS
13/04/06	FDA meeting	Regulatory body professionals	Meeting	10	Biovista
30/05/06	BioMedical Informatics Working Group, Budapest	ERCIM members and general public	Conference	15	UHANN (Participation and presentation)
30/05/06	Organisation of workshop jointly with the ERCIM WG on BMI at Budapest. Worshop title: ***"Advancing Clinico Genomics: Information Integration and Knowledge Dicsovery Issues"*** www.ercim.org/WG/BMI/....	Biomedical Informatics Researchers	Scientific Workshop www.ercim.org/WG/BMI/....	Appr 30	FORTH
29/04/06 – 04/05/06	Yannick Legré	Scientific public/ GRID users	ISGC 06 Taïpei Taïwan	40	HEALTHGRID
11/05/06	Project ELAN2LIFE in	Research	Conference	10	UdS / UdS

Planned/actual Dates	Name	Particip. profile	Type	Number of Particip.	ACGT Partner responsible /involved
	Homburg	ers, politicians from South America			
21-24/05/06	Ontological Spring II, Training Course in Biomedical Ontology, Dagstuhl, Germany			11	USAAR (organizer)
29/05/06	MB meeting in Budapest	MB member	ACGT Management Board Meeting	20	ERCIM and FORTH
28/05/06 – 31/05/06	Nathanaël Verhaeghe and Yannick Legré	Scientific public	Management Board during ERCIM week 06 Budapest	15	HEALTHGRID
19/06/06	GPOH meeting of the IT Group - Berlin	IT people from GPOH Germany	Conference	15	UdS / UdS
February to June 06	Pierre Bernat and Nathanaël Verhaeghe	Scientific and general public	Project web-site		HEALTHGRID
29/06/06 – 30/06/06	Nicolas Spalinger	Politic and Scientific public	ICT for Biomedical Sciences 06 Brussels	500	HEALTHGRID
29-30/06/06	ICT for Bio-Medical Sciences 2006, Brussels		Scientific conference	11	
June and July 06	Pierre Bernat and Nathanaël Verhaeghe	Scientific and general public	Posters/ Flyers		HEALTHGRID
10/07/06	TB meeting in Athens	MB member	ACGT Techn.Bod Meeting	20	ERCIM and FORTH
31/07/06 –	Nathanaël Verhaeghe and	Scientific	Working	3	HEALTHGRID

Planned/actual Dates	Name	Particip. profile	Type	Number of Particip.	ACGT Partner responsible /involved
01/08/06	Pierre Bernat	public	Meeting at Sophia Antipolis France		
03/08/06-07/08/08	Université européenne d'été - Droit de la santé et Ethique Biomédicale	Student / post-graduate	Lessons	50	FUNDP - Crid
07/08/06 **11/08/06**	16th World congress on Medical Law in Toulouse	Medical people (lawyers, doctors, etc…)	Conference	500	FUNDP - Crid
20/09/06	TG6 Meeting at EGTD 2006	IT public	Conference	50	FUNDP - Crid
25–26/09/06	Organisation of the **"2nd International Advanced Research Workshop on In Silico Oncology: Advances and Challenges"** http://www.ics.forth.gr/bmi/2nd-iarwiso/	Biomedical Informatics Researchers	Scientific Workshop	Appr 70	FORTH and ICCS
2-6/10/06	Annual Meeting of the Gesellschaft für Informatik e.V., Workshop about Electronic Data Custodianship, Dresden	Members of the organization and general public	Conference		UHANN (Participation and presentation)
25/10/06	Organisation of a pre-conference workshop entitled: **"ICT technologies for Cancer research and management in the post genomic era"** [http://medlab.cs.uoi.gr/itab2006/preconference.htm]	Biomedical Informatics Researchers and students	Conference / Exhibition		FORTH
PLANNED: 14-18/10/06	SfN Neuroscience meeting. October 14th - 18th, **2006**, **Atlanta**, USA	Industry and Academia	Conference / Exhibition	30.000	Biovista

- **Scientific publications**

Date and Type	Details
06/10/05	Luttenberger, N; Kollek, R. et al.: Design of Individual Donor Feedback Processes in Biobank Research. Paper given at the workshop "Electronic Data Custodianship—Applications, Methods, Foundations", INFORMATIK 2006, Oct. 2 – 6, 2006, Dresden (Annual Conference of the Gesellschaft für Informatik) in co-operation with the GI Special Interest Group "Privacy Enhancing Technologies". Paper will be published in the Informatik 2006 workshop proceedings, to appear in the GI series "Lecture Notes in Informatics (LNI)".
27/10/05 (Online early access) *journal article*	Ismael Navas-Delgado, Maria del Mar Rojano-Muñoz, Sergio Ramírez, Antonio J. Pérez, Eduardo Andrés León; Jose F. Aldana-Montes, and Oswaldo Trelles; *"Intelligent client for integrating bioinformatics services";* Bioinformatics, vol.22 no.1 2006 pages 106-111
2006. *Refereed journal article*.	V. Maojo, M. García-Remesal, H. Billhardt, R. Alonso-Calvo, D. Pérez-Rey, F. Martín-Sánchez, "Designing new methodologies for integrating biomedical information in clinical trials". Methods of Information in Medicine 2006 45 2: 180-185.
Foreseen for autumn 2006	Datenschutzrechtliche Aspekte der Forschung mit genetischen Daten / article / DuD (Journal) / by Marian Arning, Nikolaus Forgó, Tina Krügel
03-04/08/06 *CONFERENCE PROC*.	G.S. Stamatakos, "Towards a collaborative formulation of the Mathematical Principles of Natural Philosophy: Living Matter. The paradigm of In Silico Oncology" DIMACS Workshop on Computational Tumor Modeling, August 3 - 4, 2006, DIMACS Center, CoRE Building, Rutgers University,Piscataway NJ, USA.

07/02/06 *Journal article*	Carmona-Saez P, Chagoyen M, Rodriguez A, Trelles O, Carazo JM, Pascual-Montano A; *"Integrated analysis of gene expression by association rules discovery";* BMC Bioinformatics 2006, 7:54
17/03/06	M. Tsiknakis, Open Grid Services for improving medical knowledge discovery on Cancer: The ACGT integrated project, Workshop on Clinical Decision Support Systems, Scientific and Technological Park of Epirus, Ioannina – 17 March 2006.
9-12/04/06	M. Tsiknakis, D. Kafetzopoulos, Requirements and architectural specifications of a European Biomedical Grid: The ACGT Integrated Project, Annual Conference of the Cancer Biomedical Informatics Grid (caBIG), April 2006, Washington.
May 2006 *Journal article*	José María Sayagués, María Dolores Tabernero, Angel Maíllo, Oswaldo Trelles, Ana Belén Espinosa, Maria Eugenia Sarasquete, Ana Rasillo, Marta Merino, Jaime Fernandez Vera, Angel Santos-Briz and Alberto Orfao; *"Microarray-Based Analysis of Spinal versus Intracranial Meningiomas: Different Clinical, Biological, and Genetic Characteristics Associated with Distinct Patterns of Gene Expression";* Journal of Neuropathology and Experimental Neurology, vol.65 No 5; May 2006; pp. 445-454
May 2006	Programming Grid Applications with Gridge, J Pukacki, J. Nabrzyski et al., in "Journal of Computational Methods in Science and Technology" 12(1), Issue subtitled: Grid Applications, New Challenges for Computational Methods, pp. 47-68, Scientific Publishers OWN,2006.
27/05/06	Kollek, R.: Paradoxes and politics of "personalized" medicine. Paper given at the 1. International Conference on Ethics and Politics, 24.-28. May 2006, Heraklion, Crete (Greece).

27/05/06	Kollek, R.: Paradoxes and politics of “personalized“ medicine. Paper given at the 1. International Conference on Ethics and Politics, 24.-28. May 2006, Heraklion, Crete (Greece).
6-8/06/06	M. Tsiknakis, D. Kafetzopoulos, G. Potamias, C. Marias, A. Analyti, A. Manganas. Developing a European Biomedical Grid on Cancer: The ACGT Integrated Project, HealthGRID 06 Conference, 6-8 June 2006,Valencia, Spain.
August 2006. *Refereed journal article*.	V. Maojo, C.A. Kulikowski, “Reflections on Biomedical Informatics: From Cybernetics to Genomic Medicine and Nanomedicine”. Methods of Information in Medicine (in press).
August 2006. *Lecture Note in International Congress*.	D. Pérez-Rey, A. Anguita, J. Crespo, ”OntoDataClean: Ontology-.based Integration and Preprocessing of Distributed Data”. ISBMDA 06 – 7th International Symposium on Biological and Medical Data Analysis, Thessaloniki, Greece.
August 2006 *Journal paper*	G. S. Stamatakos*, V. P. Antipas, N. K. **Uzunoglu A Spatiotemporal, Patient Individualized Simulation Model of Solid Tumor Response to Chemotherapy *in Vivo*: The Paradigm of Glioblastoma Multiforme Treated by Temozolomide** IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, VOL. 53, NO. 8, AUGUST 2006 1467
August 2006	"L'espace européen de la santé en ligne: vers un marché des données médicales", *Journal de médecine légale, droit médical, victimologie dommage corporel*, abstracts of the 16th World Congress on Medical Law, August 2006, p. 130, J. Herveg.
25-26/09/06 *CONFERENCE PROC*.	N. Uzunoglou, ICCS-NTUA, Athens, Greece “**Established sciences and technologies as sources of inspiration and guidance for the emerging discipline of *in silico* oncology. The ISOG/ICCS/NTUA approach**” accepted to be published in the Proc. of 2nd Advanced Research Workshop on In Silico Oncology, Kolymbari, Chania, Crete, Greece, Sept 25-26 2006

25-26/09/2006 *CONFERENCE PROC*.	N. Sofra[1], G. Stamatakos[1], N. Graf[2], N. Uzunoglu[1], [1]ICCS-NTUA, Athens, Greece, and [2]University of Saarland, Saarbruecken, Germany "**A four dimensional simulation model of the *in vivo* response of nephroblastoma to vincristine**" , accepted to be published in the Proc. of 2nd Advanced Research Workshop on In Silico Oncology, Kolymbari, Chania, Crete, Greece, Sept 25-26 2006
October 2006	Datenschutzrechtliche Aspekte bei der Forschung mit menschlichen Genen / article / conference transcript / by Marian Arning, Nikolaus Forgó, Tina Krügel
26-28/10/06	M. Tsiknakis, D. Kafetzopoulos, G. Potamias, A. Analyti, K. Marias, S. Sfakianakis, (2006), Developing a European Biomedical GRID for post-genomic research on Cancer, IEEE Information Technology and Applications in Biomedicine, 25-28 Oct, Ioannina, Greece.
Foreseen for autumn 2006	Datenschutzrechtliche Aspekte der Forschung mit genetischen Daten / article / DuD (Journal) / by Marian Arning, Nikolaus Forgó, Tina Krügel

6 Disseminated Project Results

Description	Details
Patents, Software prototype…	At this stage of the project, no patents or software prototype are presented.

7 Person Month Status Report

1 February - 31 July 2006

	Actual total	Planned total
ERCIM	6,50	7,66
FORTH	28,67	23,00
INRIA	5,00	9,33
UVA	10,00	10,66
PHILIPS	15,00	18,66
IJB	7,33	7,33
SIB	6,00	7,33
LUNDU	3,80	11,83
UMA	10,00	11,66
UPM	10,30	24,66
FHG	14,87	24,00
BIOVISTA	4,30	11,00
UOC	7,50	6,00
UHANN	11,92	6,33
PSNC	9,10	50,00
CUSTODI	9,50	11,00
HEALTHG	7,19	5,66
ICCS	8,00	7,33
USAAR	11,75	13,33
SIVECO	7,00	7,66
FUNDP	7,75	6,00
UOH	8,50	7,33
UOXF.BP	6,00	6,66
UHOK	2,00	6,33
IEO	4,31	4,33
Total	**222,30**	**305,09**

Person-Month Status Table

CONTRACT N°: 026996
ACRONYM: ACGT
PERIOD 01/02/2006 31/07/2006

All Partners - Elligible Person-month per Workpackage

		TOTALS	ERCIM	FORTH	INRIA	UVA	PHILIPS	IJB	SIB	LUNDU	UMA	UPM	FHG	BIOVISTA	UOC	UHANN	PSNC	CUSTODI:	HEALTHG	ICCS	USAAR	SIVECO	FUNDP	UOH	UOXF.BP	UHOK	IEO
WP1	Actual WP total	6,08	5,00	0,28			0,50					0,30															
	Planned WP total	8,33	6,00	0,67			0,33					0,33	0,67				0,33										
WP2	Actual WP total	40,04		6,00	3,00	0,70	4,00	1,33	1,50	0,20	2,00	1,00	3,00	2,00	3,00	0,48		4,00		1,00	1,50	3,00		2,00			0,33
	Planned WP total	28,66		4,00	1,00	0,67	2,33	1,33	1,00	0,67	0,33	1,66	1,67	0,67	1,67		0,67	1,33		0,66	3,33	2,00		2,00	1,33		0,34
WP3	Actual WP total	9,55		2,00		1,00	2,50			0,30	0,50	1,00		0,25				1,00		1,00							
	Planned WP total	26,65		2,33		1,00	3,00			1,00	2,00	4,00	2,00	0,67			5,33	1,33		1,00	1,33			0,66		1,00	
WP4	Actual WP total	1,50		1,00							0,50																
	Planned WP total	16,66		0,67							2,66		2,67				6,67	1,33				1,00				1,66	
WP5	Actual WP total	16,17		2,00			6,00	0,67		1,00	1,50	1,00	3,00							1,00							
	Planned WP total	24,36		2,00			8,00	0,67		2,33	2,00	2,67	2,67	0,67	0,67					0,67	0,67				0,67	0,67	
WP6	Actual WP total	11,87		2,00		1,20			2,00	1,00	1,50	1,00	2,54	0,30													0,33
	Planned WP total	25,00		1,33	2,00	1,00			2,00	3,00	2,00	5,33	4,00	4,00													0,34
WP7	Actual WP total	15,35		2,80	1,00		1,00	0,67		0,50		3,50	3,00								2,55						0,33
	Planned WP total	25,99		2,00	3,00		2,00	0,67	1,00	2,00		6,00	4,00	1,33							3,33				0,33		0,33
WP8	Actual WP total	12,00		2,00	1,00	3,00		0,33					2,57							3,00	0,10						
	Planned WP total	11,68		2,00	2,67	2,66		0,33					0,67							3,00	0,34						
WP9	Actual WP total	8,23		4,00		1,00		0,67	0,50	0,30			0,76							1,00							
	Planned WP total	16,66		3,33		1,33	1,33	0,67	0,67	1,33		1,00	2,33	1,00			1,67	0,67		0,67						0,67	
WP10	Actual WP total	18,74		0,20				0,33								8,38		0,50					6,00	3,00			0,33
	Planned WP total	15,66		0,34				0,33							0,33	4,66		0,67			0,67		5,33	2,67	0,33		0,33
WP11	Actual WP total	5,59										1,00				0,09		4,00						0,50			
	Planned WP total	12,33									0,67	2,00	1,33			0,67	2,00	4,66						1,00			
WP12	Actual WP total	16,35		6,39				2,00	0,50					1,00	3,00	0,06					1,40						2,00
	Planned WP total	16,33		3,00				2,00	1,00	0,67				1,00	2,00	0,33					2,00			0,33	2,00		2,00
WP13	Actual WP total	3,50						0,67	1,50											1,00							0,33
	Planned WP total	7,35		0,67		0,67		0,67	1,33		0,67				0,67					0,67	1,00				0,67		0,33
WP14	Actual WP total	5,36						0,33											0,70			4,00					0,33
	Planned WP total	10,31		0,33	0,33			0,33				0,33	1,00		0,33	0,33		0,34	2,00	0,33	0,33	3,66	0,34				0,33
WP15	Actual WP total	11,66	0,60			0,10	0,50	0,33				1,50		0,50		0,06			6,49				0,75	0,50			0,33
	Planned WP total	13,95	0,66	0,33	0,33	0,33	1,00	0,33	0,33	0,33	0,33	0,67	0,66	0,33	0,33	0,34	0,33	0,67	3,66	0,33	0,33	0,33	0,33	0,67	0,33	0,33	0,33
WP16	Actual WP total	1,65	0,90				0,50							0,25													
	Planned WP total	4,67	1,00				0,67					0,67	0,33	1,33								0,67					
	Actual total	183,65	6,50	28,67	5,00	7,00	15,00	7,33	6,00	3,30	6,00	10,30	14,87	4,30	6,00	9,07		9,50	7,19	8,00	5,55	7,00	6,75	6,00			4,31
Total PM	Planned total	264,59	7,66	23,00	9,33	7,66	18,66	7,33	7,33	11,33	10,66	24,66	24,00	11,00	6,00	6,33	17,00	11,00	5,66	7,33	13,33	7,66	6,00	7,33	5,66	4,33	4,33

CONTRACT N°: 026996		AC Partners - Own Staff																										
ACRONYM: ACGT																												
PERIOD 01/02/2006	31/07/2006	TOTALS	ERCIM	FORTH	INRIA	UVA	PHILIPS	IJB	SIB	LUNDU	UMA	UPM	FHG	BIOVISTA	UOC	UHANN	PSNC	CUSTODI:	HEALTHG	ICCS	USAAR	SIVECO	FUNDP	UOH	UOXF.BP	UHOK	IEO
WP1	Actual WP total	0,20															0,20										
	Planned WP total	1,00															1,00										
WP2	Actual WP total	6,68				0,50					1,50				0,50	0,18	0,50				2,00			0,50	1,00		
	Planned WP total	3,24				0,50					0,50						2,00								0,24		
WP3	Actual WP total	5,10									0,50						4,00				0,10					0,50	
	Planned WP total	8,50															8,00									0,50	
WP4	Actual WP total	4,50															4,00									0,50	
	Planned WP total	10,50															####									0,50	
WP5	Actual WP total	1,10									0,50										0,10					0,50	
	Planned WP total	0,62																							0,12	0,50	
WP6	Actual WP total	2,30				0,50				0,30	1,50																
	Planned WP total	1,30				0,50				0,30	0,50																
WP7	Actual WP total	3,25								0,20											2,05				1,00		
	Planned WP total	0,26								0,20															0,06		
WP8	Actual WP total	2,25				2,00															0,25						
	Planned WP total	2,00				2,00																					
WP9	Actual WP total	0,50																								0,50	
	Planned WP total	5,50															5,00									0,50	
WP10	Actual WP total	5,92														2,67					0,50		0,75	2,00			
	Planned WP total	0,06																							0,06		
WP11	Actual WP total	0,20															0,20										
	Planned WP total	6,00															6,00										
WP12	Actual WP total	4,00													1,00						1,00				2,00		
	Planned WP total	0,35																							0,35		
WP13	Actual WP total	2,10																			0,10				2,00		
	Planned WP total	0,12																							0,12		
WP14	Actual WP total																										
	Planned WP total																										
WP15	Actual WP total	0,55															0,20				0,10		0,25				
	Planned WP total	1,06															1,00								0,06		
WP16	Actual WP total																										
	Planned WP total																										
	Actual total	38,65				3,00				0,50	4,00				1,50	2,85	9,10				6,20		1,00	2,50	6,00	2,00	
Total PM	Planned total	40,50				3,00				0,50	1,00						33,00								1,00	2,00	

	Actual total	222,30	6,50	28,67	5,00	10,00	15,00	7,33	6,00	3,80	10,00	10,30	14,87	4,30	7,50	11,92	9,10	9,50	7,19	8,00	11,75	7,00	7,75	8,50	6,00	2,00	4,31
Total PM	Planned total	305,09	7,66	23,00	9,33	10,66	18,66	7,33	7,33	11,83	11,66	24,66	24,00	11,00	6,00	6,33	50,00	11,00	5,66	7,33	13,33	7,66	6,00	7,33	6,66	6,33	4,33