

3.1 General information on the Integrated Graduate College (GK)**3.1.1 Title: Integrated Graduate Programme in Adoptive T Cell Therapy****3.1.2 Coordinators:****Prof. Dr. rer. nat. Uckert, Wolfgang**, 19.01.1952

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Does the principal investigator hold a permanent position?

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 yes No, extension is planned through June, 2014

3.1.3 Previous and requested funding

Financial Year	Funding for staff	Funding for consumables	Fellowships (basic amount plus allowance for additional expenditures)	Total
2006/2				
2007/0.4	14,3	13,6	7,1	35,0
2008	57,0	78,2	56,9	192,1
2009	57,0	78,2	56,9	192,1
2010/1	28,5	41,6	28,5	98,6
Subtotal	156,8	211,6	149,4	517,8
2010/2	29,4	39,4	24,8	93,6
2011	58,8	77,8	49,5	186,1
2012	58,8	80,2	49,5	188,5
2013	58,8	80,2	49,5	188,5
2014/1	29,4	43,2	24,8	97,4

(Figures in thousands of euros)

3.2 Summaries

3.2.1 Kurzzusammenfassung

Das integrierte Graduiertenkolleg „Adoptive T-Zelltherapie“ verwirklicht eine strukturierte und transparente Doktorandenausbildung, die eine enge Betreuung und Motivation zur Eigenständigkeit beinhaltet. Das Lehr- und Studienprogramm fördert die interdisziplinäre Kommunikation von Naturwissenschaftlern und Medizinern, um gezielt die Lücke zwischen Labor und Klinik zu schließen und um eine effiziente Umsetzung von Erkenntnissen der Forschung in klinische Studien zu ermöglichen. Kernstück der Ausbildung ist ein Vorlesungs- und Fachkursprogramm, das den Graduierten zusätzliche Berufsfelder eröffnen soll.

3.2.2 Brief summary

The Integrated Graduate Programme in Adoptive T Cell Therapy (GK) provides a structured and transparent doctoral training programme that features close supervision and fosters motivation to perform independent research. The training programme promotes interdisciplinary communication between scientists and physicians to help bridge the gap between basic research in the laboratory and clinical practice and to efficiently translate insights gained through research into clinical trials. A core feature of the GK is a lecture and speciality course curriculum whose purpose is to advance the students' career opportunities in a wider spectrum of fields.

3.2.3 Extended summary

There is a strong interest in utilising the immune system to fight tumour diseases and infections. The adoptive transfer of virus-specific T cells allowed reconstitution of anti-viral immunity in many patients, and allogeneic T cells showed anti-leukaemic activity in bone marrow stem cell transplantations. These positive findings justify an expansion of the clinical application but technical limitations in the production of antigen-specific T cells and insufficient understanding of the details of the *in vivo* functionality of these T cells currently limit a routine use of adoptive T cell therapy. To overcome these limitations, scientists from Berlin and Munich with expertise in immunological and clinical research, molecular biology, virology and experience with innovative clinical approaches founded the Transregional Collaborative Research Centre “Principles and Applications of Adoptive T Cell Therapy” (SFB-TR36).

Since its implementation on 15.11.2007, the Integrated Graduate Programme in Adoptive T Cell Therapy (GK) has successfully launched numerous activities in Berlin and Munich, through which the students gathered in-depth knowledge on select topics (see 3.8. Development Report). This very successful programme will be continued in the upcoming period. The GK will provide a structured and transparent doctoral training programme that provides close supervision and fosters motivation to perform independent research.

The aim of the GK is to accelerate the transfer of existing expertise and scientific and technical innovations that are developed in the SFB-TR36 projects to young scientists. From the specific mission of the SFB-TR36, which is to combine basic research with clinical application, two important goals can be derived for the GK in the upcoming period:

- to inspire interest and appreciation for research in the field of clinical and translational medicine in PhD students of the natural sciences
- to motivate and train medical students to approach and solve questions in the field of basic biology

Through the lecture and study programme of the GK, interdisciplinary communication is stimulated in order to bridge the laboratory/clinic gap in the future and to ensure an effective implementation of insight gained from basic research into clinical studies. This objective will be realised through a combination of specific courses, the core of which is an interactive lecture on immune therapy and a specialised course programme for learning key technologies in the field of adoptive T cell therapy. Along with this, a new supervision/support concept, which integrates a second supervisor at the reciprocal city, using a young postdoc (on-site tutor), will be continued.

Additional qualification measures include interdisciplinary workshops (see 3.4.1. Student Retreats), a visiting scientist programme (3.4.2.) and international laboratory exchanges (3.4.3.).

The geographical separation of the two SFB-TR36 locations in Berlin and Munich is overcome by a number of regular transregional events. To facilitate the exchange of topics and to gain insight into the lectures of the partner cities, we will now establish an E-learning platform for the students. An anonymous survey will be taken from the students, for quality control of the teaching activities and to identify new topics that the students suggest to be included in future teaching. Joint teaching activities will also be established with other immunological Collaborative Research Centres in Berlin and Munich.

3.3 Profile of the Integrated Graduate Programme

The main objective of the GK is the development and realisation of a course programme, which goes beyond the activities of single scientific institutes or universities and provides structured training in specific topics in the field of adoptive T cell therapy for tumour and virus diseases. In comparison to usual PhD programmes, the expectations and requirements that the PhD students of the GK have to meet are above average, but as compensation the students will receive specialised training and support. The course work is designed to adequately convey broader insight and experience, without lengthening the time designated for the dissertation. Established university structures are already in place at both locations, in which principle investigators of SFB-TR36 projects are already integral members. The GK further integrates and supplements these structures, without producing thematic overlap. The GK is supported by university lecturers and clinicians who have distinguished themselves through outstanding publications and clinical achievements in their special fields and who have experience in teaching. In particular, these are:

Prof. Dr. rer. nat. Thomas Blankenstein (Berlin)

Prof. Dr. med. Dirk Busch (Munich)

Dr. rer. nat. Bernhard Frankenberger (Munich)

Dr. rer. nat. Thomas Kammertöns (Berlin)

Prof. Dr. rer. nat. Wolfgang Hammerschmidt (Munich)

Prof. Dr. med. Hans-Jochem Kolb (Munich)

Dr. rer. nat. Andreas Moosmann (Munich)

PD Dr. rer. nat. Elfriede Nößner (Munich)

Prof. Dr. med. Ulrike Protzer (Munich)

Prof. Dr. rer. nat. Andreas Radbruch (Berlin)

Prof. Dr. med. Petra Reinke (Berlin)

Prof. Ph.D. Dolores Schendel (Munich)

Prof. Dr. rer. nat. Thomas Schüler (Berlin)

Dr. rer. nat. Lilian Stärck (Berlin)

Prof. Dr. rer. nat. Andreas Thiel (Berlin)

Prof. Dr. rer. nat. Wolfgang Uckert (Berlin)

Prof. Dr. med. Lutz Uharek (Berlin)

Prof. Dr. med. Hans-Dieter Volk (Berlin)

Dr. rer. nat. Gerald Willimsky (Berlin)

Prof. Dr. med. Martin Zeitz (Berlin)

The direct supervision of the PhD students is the responsibility of the project's principle investigator. Additionally, each of the doctoral students selects a co-supervisor from the reciprocal city. We will maintain a third advisory level as part of an innovative supervisory concept that we introduced during the first application round. For this, an on-site tutor (PhD student/postdoc) at each location - Berlin and Munich - also has responsibility for the supervision of the doctoral students. In addition the on-site tutors perform some teaching and exercise organisational and controlling tasks in connection with the study programme and are contact persons, advisors and confidential counsellors for the PhD students of the GK. In this way, they qualify themselves for a future career in research and teaching and, additionally, they serve as direct role models for the PhD students. The PhD students benefit from the on-site tutors because they receive more complex feedback on their projects. The responsibilities of the on-site tutors include the following: they maintain close contact with each other and to the PhD supervisors and help to overcome disadvantages that might arise due to the two locations of the GK.

Additional contact persons for the doctoral students are the coordinators of the GK (Uckert, Nößner, Kammertöns), as well as the spokesperson (Blankenstein) and the deputy spokesperson (Schendel) of the SFB-TR36.

By integrating scholarships for doctoral students in medicine (altogether 6), we place specific emphasis on translational medical research. The fact that the GK is located in Berlin and Munich means high mobility for the participants in the GK. National and international visibility of the scientific results of the doctoral students is ensured by presentations at the annual symposia of

the SFB-TR36. High-quality data are also presented at the symposia of national and international societies, such as DGfI, DG-GT, ESGCT, ASH and ASGT.

3.4 Qualification concept

The lectures and courses of the GK convey specialist knowledge in tumour immunology, molecular and cell biology and virology. The interactive **Immune Therapy Lecture** and the specialised **Course in Key Technologies** form the core of the qualification concept. The lectures and courses synergistically benefit from the scientific excellence of both locations and thus offer the PhD students a broad specialised qualification which cannot be provided by one location alone. This concept opens up additional career opportunities for the PhD students, e.g. in pharmaceutical and biotechnological research. In addition to the speciality training, we offer courses conveying basic skills, such as “scientific writing” or “good scientific practise”. These courses are realised in conjunction with our cooperation partners, the Dahlem Research School, the Helmholtz Zentrum München, and other graduate colleges in Munich and Berlin.

By transferring some organisational tasks to the students of the GK, their independence and individual responsibility will be strengthened. The qualification concept includes a regular progress monitoring of the PhD students’ research work. This takes place at the annual doctoral students’ symposia (**Student Retreats**) and at **Result and Progress Colloquia** carried out together with the supervisors and the tutor. Additionally, a **Progress Report** is submitted annually to the supervisory/mentoring committee. Doctoral students who successfully complete the GK receive a **Programme Certificate**. Attendance and active participation in the required courses of the study programme and a good evaluation of the PhD student by the supervisory committee, based on the annual progress reports and colloquia, practical skill development, knowledge transfer to fellow students, i.e. medical students, is decisive for receiving the certificate.

3.4.1 Study programme

The GK offers theoretical and practical training by immunologists, biologists, molecular biologists, pharmacists and physicians. This includes a structured study programme that is specifically oriented on the thematic area of adoptive T cell therapy in tumour and viral diseases and ensures continuous practical instruction at the workplace. Through the study programme the following objectives are to be:

- a higher level of training for the doctoral students

- early integration of highly qualified junior physicians in challenging research to enable a career in academic medicine
- creation of possibilities to integrate graduates from neighbouring disciplines, such as biochemistry, chemistry and pharmacology, in order to advance their career opportunities in biomedical research

The GK provides the following qualification possibilities:

3.4.1.1 GK-specific courses

GK-specific courses (Table 1) are offered which are not components of the course programmes of the universities in Berlin and Munich and are not offered by the respective regional non-university research institutions and other existing Transregional Collaborative Research Centres. These courses are unique and for this reason are also made available to additional PhD students from the research groups involved in the SFB-TR36, who are not directly part of the GK.

Presence at the mandatory courses and events is documented through signature. The active participation in the study programme is a requirement for successful completion of the GK programme with a certificate.

Table 1. Graduate programme-specific courses

Course	Scope: semester hours per week	Number/Year	Participation
Lecture <i>Immune Therapy</i> , regionally networked	monthly/4-hours	12	mandatory
Speciality course <i>Key Qualifications</i>	2-day	2	mandatory
Literature discussion/Journal Clubs, regional	1	~ 46	mandatory
Results Colloquium, regional	1	~ 25	mandatory
Progress Colloquium, transregional	1	1	mandatory
Laboratory visit, regional	4-6	2	optional
Laboratory visit, transregional	individual	as agreed	optional
Student Retreat	2-day	1	mandatory

Lecture: Interactive Lecture Immune Therapy

The objective of this course is to convey current knowledge in the field of immune therapy, in general, and adoptive T cell therapy, in particular. The lectures are held in parallel in Berlin and Munich and cover similar topics to those of the first granting period. One lecture is given each

month, encompassing for a four-hour session. This consists of a one-hour lecture and three subsequent hours of interactive discussion on the topic. The lecture is delivered by a principle investigator of the SFB-TR36 and conveys the fundamentals of the topic. Thereafter, under the guidance of the lecturer and the on-site tutor, the PhD students carry out literature searches on the topic (approx. 1-2 hours) and then present their findings in brief presentations to the group. Through an E-Learning platform that the students can access by password, the lecture contents from the reciprocal cities are made accessible to all students. As a means of quality control, but also to identify new topics which the students would like to have included in the future, anonymous surveys are taken from the students on a regular basis.

Table 2. Topics of the Interactive Lecture Immune Therapy

Lecture Topic	Responsible in Berlin	Responsible in Munich
From Bench to Bedside: Translational Research	Radbruch	Kolb
Innate Immunity/Antigen Presentation/Antigen Recognition	Romagnani	Nöbner
Lymphocyte Development/T Cell Homeostasis	Schüler	Heikenwälder
Lymphocyte Activation/Effector Lymphocytes	Thiel	Busch
Immunological Tolerance/Autoimmunity	Löhning	Frankenberger
The role of Regulatory T Cells in Human Tumour and Autoimmune Diseases	Fillatreau	Frankenberger
Chemokines/Cell Trafficking/Inflammatory Processes and Tumour Disease	Kammertöns	Hu (on-site tutor)
Clinical Tumour Immunology/Immune Escape, Tumour Antigens	Reinke	Schendel
Tumour microenvironment: Target and Modulator of Immune Responses	Kammertöns	Nöbner
The Immunosurveillance Hypothesis Revisited	Blankenstein	Hu (on-site tutor)
New Immunological Methods/Immune Monitoring	Charo	Neuenhahn
New Forms of Immune Therapy (Monoclonal Antibodies, Chimeric Antigen Receptors)	Uharek	Protzer
Novel Vectors and Approaches in Gene Therapy	Willimsky	Hammerschmidt
Mouse Models/Preclinical Models for Tumour Therapy	Blankenstein	Busch
Immune (Gene) Therapy: Molecular and Clinical Approaches	Uckert	Kolb
Clinical Studies: Problems-Theory-Models-Applications	Zeitz	Neuenhahn
Cell Proliferation/Cell Cycle/Cell Death/Senescence	Uharek	Moosmann
Stem Cell Biology/Organogenesis/Tumorigenesis	Stärck	Kolb
Production of GMP-compliant Reagents, Clinical Implementation	Volk/Kopp/Reinke	Bigalke/Schendel
Databases/Bioinformatics/Biostatistics	Willimsky	Genomatics (external)
Oncogenic Viruses	Uckert	Hammerschmidt
Epigenetics/Genetic Predispositions	Reinke	Moosmann
Signal Transduction/Growth Factors/Cytokines	Schüler	Hu (on-site tutor)
Immunologic Memory	Willimsky	Heikenwälder
Communicating Science	Blankenstein / Bachtler	Schendel
Gender in Immunology and Medicine	Kurmeyer / Kammertöns	Nöbner
Historic Landmarks of Immunology	Guest speakers (eg. Liz Simpson, Hans Schreiber)	Guest speakers (eg. Liz Simpson, Hans Schreiber)

Speciality Course: Key Technologies

To a decisive extent, the success of translational biomedical research is based on successful interaction between scientists and clinicians. These courses convey to physicians the experimental prerequisites for the utilisation of adoptive T cell therapy and convey to scientists the problems that occur in transferring experimental results to clinical application. These courses utilise the competence of the reciprocal locations in specific key technologies (e.g. Berlin: cloning of T cell receptor genes, animal models; Munich: obtaining and working with primary cell material, immune monitoring). Consolidating the expertise in the form of these speciality courses creates synergism exceeding the possibilities that each location could offer by itself to the students. The courses are one of the main pillars of the PhD training programme. The multiple-day block courses, alternatively held in Berlin and Munich, are open to all PhD students in the GK. They enable the doctoral students to learn and apply essential techniques and methods of the research area and they promote the interdisciplinary understanding between scientists and physicians. Some of the courses cover technologies that are important for the Transregional Collaborative Research Centre SFB-TR36, others convey general skills necessary for research and a scientific career (e.g. documentation and presentation of scientific results). Together, key qualities are provided that qualify the students for various career fields in the pharmaceutical industry and biotechnology.

In addition to these courses, further non-university training measures are offered (see below), which help deepen the specialist knowledge of the PhD students and help them qualify for a professional career.

Table 3. Special courses for key qualifications

Course	Year	Location	Topic	Responsible SFB-TR 36 TP
1	2010	Berlin	New Techniques for TCR Gene Transfer	A12, Z1
2	2011	Munich	Obtaining and Analysing Primary Cell Material	A1, B8, Z1, Z2
3	2011	Berlin	Animal Models	A2, B1, B20, B9
4	2012	Munich	Immune Monitoring Techniques	A2, B1, B2, A13
5	2012	Munich	Assays for T cell Stimulation and Functional Assessment	A1, A13, A4
6	2013	Berlin	Production of GMP-compliant Reagents/Clinical Trials/Patents and Intellectual Property Rights	External
7	2013	Munich	Documentation and Presentation of Scientific Results	External
8	2014	Berlin	Techniques to Study Antigen Presentation/ <i>In vivo</i> imaging techniques	B10, B2

To make effective use of time and funds, one course per year will be coupled with the doctoral students' symposium.

Course: Laboratory Visits

Due to the positive experience made with transregional laboratory exchanges in the first period of the SFB-TR36, e.g. Matthias Leisegang (Berlin) visiting the Schendel and Bernhard research groups (Munich), and Susanne Wilde and Stefani Spranger (Munich) working in the laboratory of Uckert (Berlin), we will maintain such exchanges as an integral part of the training programme.

Transregional laboratory visits will primarily facilitate learning important techniques that promote the collaboration between the research groups and accelerate the PhD thesis process. Additionally, it allows performing experiments according to standardised procedures at both SFB locations. Depending on the time needed to solve the research problems, the laboratory visits can last several weeks. The method registry, created in the first application period, will serve as the basis to find the appropriate laboratory for the exchange visits. The methods registry will be regularly updated by the PhD students in the GK.

Regional laboratory visits will foster the interaction among the PhD students of the reciprocal locations. During the laboratory visits, the PhD students tour the laboratories of the SFB-TR36. The techniques and work programmes of the host laboratory are presented and discussed.

Scope: 4 - hours, Number: 2 times a year

Course: Literature discussion/Journal Club

The Journal Club will help the PhD students to independently select and present current project-relevant scientific publications in the circle of the PhD students, postdocs and research group leaders. The presentations are held in English to train this important skill for international interactions.

Scope: 1 semester hour per week, Number: ~ 46 per year.

Course: Results and Progress Colloquia

In the Regional Results Colloquium, PhD students present their current research results in the circle of their respective research teams and discuss the next steps in the experimental procedure up to submission of a manuscript. This course allows internal achievement control. It is conducted in English.

Scope: 1 semester hour per week, Number: ~ 25 per year

In a Transregional Progress Colloquium, the PhD student present their research results in English to a supervisory board consisting of the research group leader, the co-supervisor, the on-site tutors, the PhD student representative and a member of the SFB-TR36 board. The goal of the event is to control the scientific progress of the individual project and provide early identification and measures to overcome potential problems (see supervisory/support concept).

Scope: once a year

Course: Student Retreat (Doctoral Students' Symposium)

Based on the experience of the first application period of the SFB-TR36, the PhD students strongly benefit from independently organising and chairing a scientific symposium. The objective of this event is the presentation and the documentation of the achieved progress of the student's own projects in English, and the initiation of project-spanning discussions and cooperation. It is at the discretion of the students to invite leading scientists in the field of adoptive T cell therapy or other speciality areas to this event. The on-site tutors provide feedback on the quality of the presentations. As an interdisciplinary effort, we now plan to invite PhD students from other disciplines (the humanities) and organise an afternoon session, where three students from another discipline and three students from our "Integrated Graduate Programme in Adoptive T Cell Therapy" present their projects. Here, the students will benefit by experiencing different problem solving approaches and by learning to conceptualise and express one's own area of expertise in a way that can be understood by people outside the discipline. Interfacing with different disciplines will also help to broaden the students' experience and network and help them to discuss new opportunities. In order to recruit students for such events, we have contacted the Graduiertenkolleg "InterArt / Interart Studies", a doctoral training programme of the Department of Philosophy and Humanities of the FU-Berlin and are in contact with the organisation team of the Helmholtz PhD programme "Environmental Health".

Scope: 2 days, Number: once a year

3.4.1.2 Supplementary offerings from universities and other research institutions

Course programme of the universities

PhD students of the GK may also participate in lectures (L) and seminars (S) relevant to their defined research area, offered by the different universities in Berlin and Munich. To a large extent, these lectures and seminars will be held by staff members of the SFB-TR36.

Charite

- Basic Principles of Immunology (L, 2 h/w; Blankenstein, Kammertöns, Schüler)
- Immunology/Allergology: Problem-Theory-Model-Application (L, 2 h/w; S, 3h/w; Blankenstein, Kammertöns, Schüler)

Free University Berlin, Department of Biology

- Immunology (L, 2 h/w; Blankenstein, Charo, Kammertöns, Schüler)
- Current Topics of Immunology (S, 2 h/w; Blankenstein)*

Humboldt University Berlin, Institute of Biology

- Gene Therapy (L, 2 h/w; Uckert, Willimsky)
- Molecular Cell Biology II (L, 2 h/w; Uckert, Stärck)
- Current Topics of Immunology (S, 2 h/w; Uckert)*

Ludwig-Maximilians-Universität Munich

- Hemato-Oncological Diseases and New Therapy Approaches (L, 1 h/w; Kolb, Moosmann; Schendel, Nößner)
- Basic Principles of Immunology (L, 2 h/w, Nößner)
- Current Topics of Immunology, Journal Club (S, 2 h/w, Nößner)

Technische Universität München

- T cell club: Discussion of recent scientific papers (S, 2 h/w; Busch)
- Interface of Infection and Immunity (Busch)

*These seminars are conducted by both universities.

Other research institutions

PhD students of the GK may participate in different non-university programmes.

In Berlin, lectures and courses are offered by the Centre for Infection Biology and Immunity (ZIBI), the international PhD programme “Molecular Cell Biology”, and programmes, by various Berlin institutions (MDC, RKI, DRFZ, IWF, MPI for Infection Biology).

MDC

- PhD Lecture Series on Molecular Cell Biology (L, 1 h/w)

DRFZ

- T Cell Club (2 SWS)
- Clinical Immunology Club (S, 2 h/w)

In Munich, courses are offered by:

Helmholtz Zentrum München

- PhD Lecture Series on Special Immunology (L, 1 h/w)
- Presentation of research topics of the students of the Helmholtz Zentrum München PhD Programme (2 h/w)
- Special courses in rhetoric, project management and computer programmes
- Lecture series “Environmental Health”

Max Planck Society

- Interdisciplinary Lecture Series: From Biology to Medicine (IMPRS)

3.4.1.3 Supplementary offerings by industry and business in the private sector

Besides courses offered by the SFB-TR36, the universities and non-university organisations, the PhD students may participate in special training events of private-sector business and industry. These courses, which are offered in Berlin and Munich, convey knowledge from the perspective of industry, in particular considering legal requirements.

GMP Basic Course Biotechnology

(BBB Management GmbH Campus Berlin-Buch, “Life Science Learning Lab”)

The goal of this training course is to convey a deeper understanding for fulfilling legal specifications, which are essential for the development, production and marketing of biopharmaceutical products.

Biotech & Pharma Business Summer School

(BBB Management GmbH Campus Berlin-Buch, “Life Science Learning Lab”)

In this course, instructors from basic research, biotechnology and pharma companies engaged in research provide a basic overview of the process of drug development in biotechnology and the pharmaceutical industry.

Qualification Course GLP-GMP-GCP

Part 1: GLP (Good Laboratory Practice) – held by Ascenion

Part 2: GMP (Good Manufacturing Practice) – Dr. Iris Bigalke/Dr. Stefanie Tippmer

Since participation in these courses is subject to fees, we request 5,000 EUR per year in funding.

3.4.2 Visiting scientist programme

The members of the GK will invite three guest speakers to the annual SFB-TR36 symposium. Furthermore, they will invite two additional guest speakers per year within the scope of the regular SFB-TR36 lecture series. As a rule, the invited guest speakers will be available to the research groups and in particular to the PhD students for discussion during the evening of the lecture and the following morning.

We have a number of close interactions with international scientists who are participating as external student advisors for the GK. Prof. Elizabeth Simpson (Division of Medicine, Imperial College of London) has served twice as a visiting scholar for an extended period of several days, spending these days with the students discussing their projects and advising them on further experiments. Additionally, Prof. Hans Schreiber (University of Chicago) has attended several of our symposia.

3.4.3 Additional qualification measures

In cooperation with the principle investigators, the applicants of the GK and the SFB-TR36 spokespersons will arrange research sojourns for the GK students in laboratories within Germany and in other countries. Prof. Nicholas Gascoigne (Scripps Institute, La Jolla) was one of the guest speakers invited by the GK and he is eager to accept exchange students from our GK programme.

3.5 Organisational and supervisory/support concept

3.5.1 Advertisement for student position openings and selection procedure

The call for applications for the PhD training positions and fellowships will be published in daily newspapers and monthly journals, e.g. "Laborjournal" and "Lab Times", and in international scientific journals. The invitation for application will also be sent to medical and science faculties with the request for posting it on information bulletin boards. The selection of candidates is based on their achievements and includes direct interviews with the candidates. The pre-selection of the applicant will be made by the principle investigator of the subtopic by reviewing the applications and selection interviews. Suitable candidates are then presented to a commission consisting of two members of the extended SFB-TR36 board, the on-site tutors and the representatives of the PhD students. This commission will determine the suitable candidate following the interview. Selection criteria include: a) swift completion of undergraduate studies with an above-average final grade (for science candidates) or the first pre-residency part of the medical examination (for doctoral students in medicine); b) recognisably broad knowledge in the

special area; c) personality (team competence, commitment). National and international applicants will be considered in equal measure and the principles of equal opportunity will apply.

3.5.2 Supervisory/support concept

The objective of the supervisory concept is to ensure transparent, successful and swift completion of the PhD process on a high academic level. To achieve this goal, the PhD students are supervised by a committee consisting of the principle investigator, an additional scientist from the reciprocal cities (co-supervisor), the on-site tutor and the spokesperson for the PhD students. The principle investigators of the project are directly responsible for the research topic and the conceptual planning of the dissertation. The co-supervisor helps to evaluate the project concept, advise with respect to project implementation and, if need be, he/she may suggest changes in the project orientation. The co-supervisor is chosen by the PhD student. For the locations, the following persons are available as co-supervisors:

Munich: Dirk Busch, Bernhard Frankenberger, Wolfgang Hammerschmidt, Andreas Moosmann, Ulrike Protzer

Berlin: Jehad Charo, Max Löhning, Chiara Romagnani, Thomas Schüler, Andreas Thiel, Lutz Uharek, Gerald Willimsky

The on-site tutor and the spokespersons chosen by the doctoral students to represent them in Berlin and Munich serves as the regional contact persons, advisors and confidential counsellors for the PhD students. They support the PhD student in the implementation of their learning objectives and moderate in conflict situations. In conflict situations, the spokesperson (Berlin) and the deputy spokesperson (Munich) of the SFB-TR36 are involved.

Every year, the supervisory committee evaluates the progress of the PhD student and supports him/her in the project planning. To evaluate the progress of the project, the PhD student completes a report in the first and second year, respectively, on the status of the results and further project planning and submits this report to his/her supervisory committee. Upon completion of the report, the PhD student invites his supervisors to a project discussion (Progress Colloquium), in which the PhD student gives a 20-minute presentation on his/her research. Following this, the supervisory committee discusses the progress of the project and the objectives intensively with the PhD student. Concrete suggestions are made as to how the project should continue in the future. Of particular importance is the progress report/colloquium at the end of the first year, since here the supervisory body evaluates the suitability of the doctoral student for a scientific career. If his/her suitability is doubted, possibilities for improvement or

other career options are discussed. Together with the doctoral student, concrete objectives are agreed upon, which will be re-evaluated after a supervised “probationary period” of six months. The main focus of the progress report of the second year is to identify a publishable achievement. It is the goal that through the discussion with the supervisory committee, the PhD student will see how the results can be brought to a publication within the next (=third) year of the doctoral programme. The progress report and the progress colloquium are mandatory for every PhD student and its organisation is the responsibility of the PhD student.

Further progress checks occur through the regular presentations of results in the internal laboratory group discussions (Result Colloquium) and at the annual doctoral Students’ Symposium and the SFB-TR36 Symposium. The evaluation of the progress reports and colloquia by the supervisory committee and the participation in the GK study programme form the basis for the award of the GK Certificate. The national and international visibility of the scientific results of the PhD students is ensured through presentations, which take place in the framework of the annual SFB-TR36 symposia and through participation in national and international conferences.

The independence and responsibility of the doctoral students is developed through the execution of specific tasks. Each year the PhD student must write a progress report and organise his supervisory committee for a progress colloquium. Furthermore, the students must organise an annual two-day doctoral students’ symposium, to which they will also invite guest speakers. The design of the scientific programme and the social events within a specified budget is the responsibility of the members of the GK. Other tasks include helping with the visiting scientist programme, e.g. suggesting and inviting two guest speakers, actively helping with the design of the course programme (delivering individual lectures and supervising courses), presentation of one’s own data and independent literature searches.

3.5.3 Organisation

The coordinators of the GK represent the GK to the outside. They bear the main responsibility for the coordination of the GK. They manage the day-to-day business and are supported in this task by the on-site tutors. At the annual SFB-TR36 Symposium, issues concerning the GK are discussed by the extended SFB-TR board, the GK coordinators of the two locations, the on-site tutors and the doctoral students’ representatives.

The main responsibility in organising the mutual events rests on the doctoral students (e.g. the Student Retreat, laboratory visits). They are supported by the SFB-TR36 office, the on-site tutors and the PhD students’ representatives. The doctoral students also have control over the courses

offered in the GK, in that an anonymous questionnaire survey on the quality of the different courses and training events will be carried out.

The following structure is planned in order to promote regular scientific exchange:

Regional:

- Lecture series “Immune Therapy”, Journal Clubs, Results Colloquium and Guest Lectures
- Laboratory visits

Transregional:

- Courses to convey key technologies
- Student Retreat
- SFB-TR36 Symposium
- Website for the GK, containing:
 - Staff and funding information
 - Course catalogue and calendar of events
 - Current references on research topics
 - Methods registry
 - List of publications of members of the Integrated Graduate Programme
 - Discussion forums

3.6 (Non-) university environment of the GK

The GK is integrated into the existing course structures at the two locations and is harmonised with the respective examination regulations. Outside the universities there are additional opportunities for the training of junior scientists (see the offerings of other research institutions). There is no thematic overlap at the locations of existing Collaborative Research Centres (SFBs)/Graduate Programmes (Berlin: SFB 633 “Induction and Modulation of T cell Mediated Immune Reactions in the Gastrointestinal Tract”, SFB 650 “Cellular Approaches to Suppression of Undesirable Immune Reactions”, SFB 421 “Protective and Pathological Consequences of Antigen Processing”, ZIBI/GRAKO “Genetic and Immunologic Determinants of Pathogen-Host Interactions”; Munich: SFB 455 “Viral Vectors and Immune Modulation”, SFB 456 “Target Structures for Selective Tumor Interventions”, SFB 576 “Facultative Microbial Pathogenesis and Innate Immunity”, SFB 571 “Autoimmune Reactions: From Manifestation and Mechanisms to Therapy”, GK 333 “The Biology of

Human Diseases”, GK 1202 “Oligonucleotides in Cell Biology and Therapy”). The general course and event programmes can be used by all members of the GK, across all disciplines.

Non-university research institutions (Berlin: DRFZ, IWF, MDC, MPI for Infection Biology, RKI; Munich: Helmholtz Zentrum München, MPI for Biochemistry and Neurobiology) are represented through principle investigators of the SFB-TR36 and form a network for potential cooperation initiatives.

Location-specific structures, such as child care centres in Berlin and Munich, facilitate the combination of family and career and contribute to the integration of and equal opportunity for women.

3.7 Auxiliary support for the project „Integriertes Graduiertenkolleg“

	2010/2			2011			2012			2013			2014/1		
Funding for staff	Salary scale	No	Sum €												
	E13/2	2	29,4	E13/2	2	58,8	E13/2	2	58,8	E13/2	2	58,8	E13/2	2	29,4
MGK tutors	total	2	29,4	total	2	58,8	total	2	58,8	total	2	58,8	total	2	29,4
Funding for direct costs	Sum €														
Small equipment (up to € 10,000)															
Consumables	39,400			77,800			80,200			80,200			43,200		
Other															

Fellowships	basic amount €/month	person month								
doctoral fellowships										
doctoral fellowships for medical students	585	36	585	72	585	72	585	72	585	36
additional expenditures	103	36	103	72	103	72	103	72	103	36
total:		24,768		49,536		49,536		49,536		24,768

3.7.1 Staffing of the project

	Name, acad. title, position	Field of research	Department of the university or non-university institution	Work performed in the project in hours/week (consultancy: C)	Salary scale
<i>Core support</i>					
3.7.1.1 Research assistants (incl. student assistants)	1. Uckert, Wolfgang; Prof. Dr. rer. nat. 2. Nößner, Elfriede; PD Dr. rer. nat. 3. Kammertöns, Thomas; Dr. rer. nat.	Cell Biology Gene Therapy Immunology	Humboldt Universität, MDC Helmholtz Zentrum München, Institut für Molekulare Immunologie Institut für Immunologie, Charité	6 6 6	
3.7.1.2 Non-scientific assistants					
<i>Auxiliary support</i>					
3.7.1.3 Research assistants (incl. student assistants)	4. Leisegang, Matthias; PhD student; tutor 5. Hu, Bin; Dr. rer. nat; tutor 6.-11. N.N.; cand. med.	Immunology Immunology Medicine	Max Delbrück Zentrum für Molekulare Medizin Helmholtz Zentrum München, Institut für Molekulare Immunologie	19,5 19,5 19,5	E 13/2 E 13/2 StMD
3.7.1.4 Non-scientific assistants					

Job description of staff paid from core support for the funding period requested

1. Uckert, Wolfgang
2. Nößner, Elfriede
3. Kammertöns, Thomas

Prof. Uckert (member of the SFB-TR36 board, principle investigator), Dr. Nößner (principle investigator, student confidant of the PhD programme at the Helmholtz Zentrum München) and Dr. Kammertöns (principle investigator, lecturer at the Charite) are responsible for the coordinating of the GK. They oversee the regional and transregional events in close interaction with the on-site tutors and student representatives.

Job description of staff paid from auxiliary support for the funding period requested

4. Leisegang, Matthias; PhD student (on-site tutor in Berlin, E13/2)
5. Hu, Bin; Postdoc (on-site tutor in Munich, E13/2)

To facilitate an excellent supervisory concept, we ask the DFG to support two ½ postdoctoral positions covering the on-site tutors of Berlin and Munich. The tutors assume important responsibilities in the GK (detailed below) that require persons who have successfully completed a PhD program and thus can advise students in their endeavours. Additionally, experience in laboratory routine and work management are required to allow provision of technical guidance to the students. These responsibilities cannot be carried out by a PhD student, thus explaining our application for postdoctoral positions.

As roughly half of the tutor's time will be spent with duties for the GK, we are applying for finances for ½ of the postdoctoral position through this grant. The other half of the position, which is dedicated to the development of the person's research profile, has been financed in Munich through institutional resources. We will receive this support again in Munich and expect a similar support from Berlin.

The responsibilities of the tutors are the following:

- a) Teaching and supervising the doctoral students throughout their PhD projects;
- b) Helping with the coordination of GK events and facilitating the communication between the students of the GK and the student spokespersons. These two tasks will foster the person's career in academia.
- c) Development of an individual research profile. For this, the tutors will be thematically associated with subtopics that are of general relevance to the SFB-TR36 (involving ~50% of their working hours). Mr. Leisegang will be involved in the development and testing of TCR

delivery vectors with controllable gene expression. Additionally, he will be involved in the establishment of mouse models. Mr. Hu will establish confocal microscopy techniques for the analysis for TCR signalling events. The research activities should help them develop skills that increase their competitiveness in the scientific community.

Both individuals have been part of the current GK. Matthias Leisegang has helped in organising events in Berlin. Bin Hu carried most of the organisational work in Munich and has given several lectures. He has organised and supervised the workshops in Munich. Both persons are experienced researchers and tutors and have gained the students' trust.

6.-11. 6 x N.N.; Fellowships for medical students

The study curriculum of the medical student training severely restricts their time for performing an extensive research oriented thesis project. We are applying for 6 fellowships over the complete duration of the GK application (4 years). Each medical student will be supported for a maximum of 12 month, thus over the 4-year application period four students will be supported consecutively (in total $6 \times 4 = 24$ individuals).

The fellowships will be an incentive for the medical students to interrupt their study for two semesters to conduct scientific research for their MD thesis. The research will allow the student to develop in-depth knowledge in molecular medicine and application of preclinical models. The medical student's topic will be closely connected to the research of a student of the natural sciences to allow for a rich cross-disciplinary interaction and exchange of expertise at the junior level.

3.7.2 Distribution and justification of funding for direct costs (excl. salaries and instrumentation) (by financial year)

	2010/2	2011	2012	2013	2014/1
Estimated core support available for direct costs	2,5	5,0	5,0	5,0	2,5
Requested funding for direct costs (corresponds to consumables for direct cost in Table 3.7):	39,4	77,8	80,2	80,2	43,2

(All figures in thousands of euros)

The institutions involved with the SFB-TR36 guarantee the access to the laboratories including all facilities of cell culture, FACS analysis, PCR equipment, refrigerators, microscopy, ELISA, Bioplex and ELISPOT equipments, FPLC- und HPLC and animal units. The institutions carry the costs for radioactive waste, transportation, copying, telephone, liquid nitrogen and costs for service.

Justification for auxiliary support for direct costs

	2010/2	2011	2012	2013	2014/2
Research consumables	4,000	8,000	8,000	8,000	4,000
Advertisement of positions	1,000	1,000	1,000	1,000	
Material for lectures and speciality courses	2,700	5,400	5,400	5,400	2,700
Courses offered by industry	2,500	5,000	5,000	5,000	2,500
(527) Travel expenses transregional lab exchanges	2,400	4,800	4,800	4,800	2,400
speciality courses	6,600	13,200	13,200	13,200	6,600
external laboratory visits	8,400	16,800	16,800	16,800	8,400
international congress	2,400	4,800	7,200	7,200	7,200
(533) Publication costs	2,400	4,800	4,800	4,800	2,400
(535) Speakers and Symposia					
Guest scientists	2,000	4,000	4,000	4,000	2,000
Student Retreats	5,000	10,000	10,000	10,000	5,000
Total Sum	39,400	77,800	80,200	80,200	43,200

(All figures in euros)

The GK is composed of 16 graduate students of the natural sciences, 2 postdoctoral fellows (on-site tutors) and six medical students (24 members in total). The justification for applied auxiliary support is as follows:

Research consumables: For each of the two ½ postdoctoral positions applied through the GK we are asking for a global sum of 4,000 € per year. (8000 €/year).

Material for lectures and speciality courses: We are applying for 150 € for each person per year for lecture materials, protocols for techniques, pamphlet binding (24 x 150 € = 3,600 €). For the speciality courses (twice yearly), we are calculating expenses of 900 € for bench reagents (2 x 900 € = 1,800 €/year). (total cost: 5,400 €/year).

Courses offered by industry: We are encouraging the students to participate in courses offered by private industries, e.g. *GMP-Basic Course Biotechnology, Biotech & Pharma Business Summer School*, to provide them with insight into the working procedures of companies and restrictions imposed by regulatory units. As the participation comes with costs, we are calculating a total of 5,000 € per year.

(527) Travel expenses:

Expenses for laboratory exchanges (Berlin/Munich): It is expected that each year four students will participate in Munich/Berlin (and vice versa) exchange programmes. Depending upon the specific requirement, these laboratory exchanges can last several weeks. We are applying for 1,200 € (350 € travel costs; 850 € lodging for 14 days). (in total 4,800 €/year).

Expenses for participation in speciality courses: There are two scheduled courses per year (alternating between Munich and Berlin). Participation in these courses is mandatory for all 24 members of the GK. For lodging, we are calculating 100 € (two days) (total: 2 x 2,400 € per year). Travel expenses are assumed to amount to roughly 350 € for each participant. Since each time only ½ of the GK members have to travel, we are applying for a total travel expense of 8,400 € per year. In total, the costs will amount to 13,200 €/year.

Workshops/external laboratory visits: Each student is thought to attend one workshop or visit one external laboratory. Applied costs amount to 700 €/year per student. (total: 24 x 700 € = 16,800 €/year).

International congress participation (2./3. year): It is expected that each student at the end of the PhD work (2. or 3. year of thesis completion) can attend an international high quality congress to present the results of the thesis. We are applying for 1,200 € per student (24 x 1,200 € = 28,800 €). The expenses are unequally distributed over the application period with an estimated two students in 2010 (2,400 €), four students in 2011 (4,800 €), six students in 2012 (7,200 €), six students 2013 (7,200 €) and six students in 2014 (7,200 €).

(533) Publication costs: It is the goal of the GK training that each GK members finishes the programme with at least one publication. Therefore, we apply for a cost of 200 € per student and year for publication cost. (24 x 200 € = 4,800 €).

(535) Colloquia and Symposia:

Guest speakers/visiting professors: Prof. Elizabeth Simpson visited the GK twice (in 2008 and 2009), each time spending extended hours with the students to discuss and advise on the individual's projects. The expenses were each time around 1,000 € for flight and lodging. We will continue this successful external student supervisory activity and we are applying for a similar expense per year (1,000 €/year). For guestspeakers, two are invited by the students each year, we are assuming a cost of 3,000 € per year. The costs are according to our experience with similar activities of the previous funding period. (total: 4,000 €/year).

Student Retreat: For Student Retreats, we are calculating a total sum of 10,000 €/year. The cost is based on previous experience with similar events, e.g. the fall retreat at Spitzingsee in 2009.

3.8 Integrated Graduate Programme Development Report

A "Junior Scientist Faculty" (JSF) was formed as part of the SFB-TR36 to facilitate the flow of know-how between the different projects and to foster the communication between the students of Berlin and Munich. Regional speakers were elected by the students in Berlin and Munich to assist the transregional communication. The JSF organised two workshops, „Klonierung von T-Zellrezeptoren“ (12.-14.12.2006) and “Anwendung transgener Mausmodelle” (29.05.2007) (see attachment A2). Additionally, a PhD retreat was held where all students participated and presented the results of their research (Tutzing, 14.-15.05.2007) (attachment A3).

When granted on 15.11.2007, the Integrated Graduate Programme (GK) could build upon a number of successful activities of JSF. Those were supplemented with new activities to form a comprehension qualification programme. The central goal was the provision of a state-of-the art tutoring programme for the transfer of scientific and medical information and the communication of aspects of ethics and integrity. The students should receive advanced qualifications that would endow them with unique and superior skills allowing them to excel in a future career in academia or industry.

Since its implementation, the GK has successfully launched the **Immunotherapy Lecture** in Berlin and Munich, where the students gather in-depth knowledge on select topics (see Attachment A1) and practise up-front presentations. A sign-in sheet attests to the student's attendance. With focus on hands-on learning of state-of-the art technologies, **Technical Courses** (Workshops) were conducted in Berlin and Munich (see Attachment 2). Additionally, there were a number of **Student Exchanges** between labs in Munich and Berlin in order to conduct specific experiments, for which the techniques were available in the reciprocal other laboratory (see Attachment 2).

A **Scientific PhD Student Retreat** (“Alte Wurzhütte” at Spitzingsee, see Attachment A3) was held, where the students discussed their projects by oral and poster presentation. The students themselves were given the responsibility to select the location, organise the schedule and manage the costs. Additionally, the students were involved in selecting **Guest Speakers** and were given responsibility to organise their respective itineraries. We had guest scientists visiting for several days discussing projects with students and giving advice on how to further proceed (see Attachment 3).

To foster the communication between the medical and basic science disciplines, the GK has successfully recruited **Medical Students** to perform their dissertation in the laboratories side by side with students from the basic sciences (see Attachment 2).

Part of the students' qualification programme involves a **Supervisory/Mentoring Programme** that provides support and advice for the students beyond that given by the individual principle investigator. Thereby, each student has selected a second thesis advisor who is from the reciprocal city to foster the transregional aspect (see Attachment 4). The students have given yearly written reports to their mentors and have met with them personally after completion of the first year of training. The PIs in return have given advice to the students on how to best continue the projects. The organisers of the GK (EN, WU) personally assessed that each student of the GK is enrolled in a regular lab meeting and journal club. The GK is integrated into a number of activities provided by the regional universities and research centres, providing the students with the opportunity to gain additional knowledge beyond that offered by the GK itself.



GRADUIERTEN KOLLEG SFB-TR36

IMMUNOTHERAPY LECTURE - BERLIN

Immer am letzten Montag des Monats; 13:00

MDC Communication Center, Raum Dendrit II / III

25.02. 2008	T. Schüler: Lymphozytenentwicklung / T-Zell-Homöostase
31.03. 2008	T. Kammertöns, U. Höpken: Chemokine / Zell-Trafficking / Entzündliche Prozesse und Tumorerkrankung
28.04. 2008	T. Blankenstein: Mausmodelle / präklinische Modelle für die Tumorthherapie
26.-29.05. 2008	SFB-TR26 Symposium and „Mouse course“, in Berlin
29.09. 2008	W. Uckert: Oncogene Viren
10.11. 2008	A. Rehm: Cell biology of CTL: How does a cytotoxic T cell kill a target cell?
26.01. 2009	T. Blankenstein, T. Kammertöns: Anleitung zum Schreiben eines Review
23.02. 2009	A. Thiel: Regulatory T cells – facts, myth and miracles
11.+12.03.2009 13. 03. 2009	SFB-TR36 Retreat in München Fortschrittsbesprechungen
30.03. 2009	T. Kammertöns, A. Gerbitz: Mouse and human MHC complex
27.04. 2009	F. C. Luft: Ethics and clinical studies
25.05. 2009	L. Stärck: Stem cells and haematopoietic stem cells
29.06. 2009	T. Kammertöns: Sex/gender in immunological research
05.10. 2009	T. Blankenstein: Answering scientific questions after presentations
26.10. 2009	C. Romagnani: Natural killer cells and innate immunoreceptors
30.11. 2009	J. Luy: Grundgedanken der dem europäischen Tierversuchsrecht zugrunde liegenden Ethik
Anschließend Diskussion mit verschiedenen Parteien (Tierschutzbeauftragter des LAGeSo und tierexperimentell arbeitende Wissenschaftler)	
25.01. 2010	T. Schüler: Signaltransduktion, Wachstumsfaktoren, Cytokine
22.02. 2010	A. Pezzutto: Immunescape
29.03. 2010	J. Charo: Immunmonitoring
26.04. 2010	H.-D. Volk: Produktion GMP-gerechter Reagenzien; klinische Umsetzung
28.06. 2010	N.N.: Datenbanken / Bioinformatik / Biostatistik



GRADUIERTEN KOLLEG SFB-TR36

IMMUNOTHERAPY LECTURE - MUNICH

Immer am letzten Freitag des Monats; 15:00

Ort/Raum wird vom Diskussionsleiter bestimmt.

Eine Woche vorher bitte ca. 7 Fragen zum Thema formulieren (mit je einem einschlägigen Übersichtsartikel) und an noessner@helmholtz-muenchen.de schicken. Die Fragen werden reihum den Studenten zugewiesen, welche diese dann in der Diskussionsrunde der gesamten Gruppe präsentieren.

- 25.04.08 Elfriede Nößner: T cell receptor recognition of peptide-MHC – Structural aspects relevant for antigen specificity, MHC restriction, alloreactivity, discrimination between agonists and non-agonists?
Ort: Hämatologikum
- 26.-29.05.08 SFB-TR26 Symposium and „Mouse course“, in Berlin
- 27.06.08 Dolores Schendel: Plasticity of dendritic cells: Why do some DC induce Th1 responses others induce Th2 or Treg; What determines tolerogenic or immune stimulatory capacity
Ort: Hämatologikum
- 25.07.08 Gastredner: Prof. Elizabeth Simpson (Imperial College London): Minor Histocompatibility Antigens: From discovery to clinical application
Ort: Hämatologikum
- 29.08.08 Bernhard Frankenberger: Rolle von Kostimulationsmolekülen bei der Entstehung von Immunantworten
Ort: Hämatologikum
- 26.09.08 Andreas Moosmann: Virale Latenz und Immunität
Ort: Hämatologikum
- 31.10.08 Ralph Mocikat: Antikörpertechnologie: Anwendung in der Immuntherapie
Ort: Hämatologikum
- 28.11.08 Carole Bourquin: Innate immunity: the role of pattern-recognition receptors in treatment and disease
Ort: Ziemssenstraße 1, Abteilung für Klinische Pharmakologie (Ausschilderung Station 19, dann die Treppe runter)
- 30.01.09 Bin Hu: T cell receptor signalling
Ort: Hämatologikum
- 27.02.09 Besprechung: Einladung Gastredner
- 11.+12.03.09 SFB-TR36 Retreat in München
13. 03.09 Fortschrittsbesprechungen
- 27.03.09 Georg Bornkamm: Immunodeficiencies
Ort: Hämatologikum

- 19.05.09 Hans-Jochem Kolb: Stammzellen in der Tumorentstehung und Tumorthapie
Ort: Hämatologikum
- 26.06.09 Angela Krackhardt: Cancer surveillance, Immune Escape und Immune Evasion: Bedeutung für die Entwicklung von Immuntherapien gegen Tumoren
Ort: Hämatologikum
- 31.07.09 Guest speaker: Prof. Simpson: Historic landmark papers for adaptive T cell responses
Ort: Hämatologikum
- 28.08.09 Peter Nelson: Chemokine networks
Ort: (wird noch festgelegt)
- 23.09.09 Guest speaker: Nicholas Gascoigne: Themis in thymocyte development and visualizing inter-molecular interactions in T cell activation
Ort: Hämatologikum
- 30.10.09 Bin Hu: Integrins in immune cell function
Ort: Hämatologikum
- 27.11.09 Dirk Busch: Präklinische Modelle für die Tumorthapie
Ort: (wird noch festgelegt)
- 29.01.10 Silke Raffegerst: Epigenetik regulation
Ort: Hämatologikum
- 26.02.10 Heike Pohla: Standardisierung von Immunmonitoringmethoden
Ort: Hämatologikum
- 26.03.10 Slavoljub Milosevic: Minor histocompatibility antigens
Ort: Hämatologikum
- 30.04.10 Ulla Protzer: Oncogenic viruses
Ort: wird noch festgelegt
- 25.06.10 Iris Bigalke: Produktion GMP-gerechter Reagenzien, klinische Qualitätskontrolle
Ort: Hämatologikum
- 30.07.10 Elfriede Nößner:
Ort: Hämatologikum



GRADUIERTEN KOLLEG SFB-TR36

TECHNICAL COURSES

Datum	Thema	Ort
12.-14.12. 2006	Klonierung von T-Zellrezeptoren	Berlin
29.05. 2007	Transgene Mausmodelle	Berlin (lokal)
28.-29.05. 2008	Tiermodelle	Berlin
11.-12.12. 2008	Patentrecht	München
23.-24.07. 2009	Immunmonitoring-Techniken	München

STUDENT EXCHANGES

Berlin → München

Leisegang (A7)

Sommermeyer (Z1)

Grömminger (B4)

München → Berlin

Wilde (A1)

Spranger (A1)

Krebs (B8)

MEDICAL STUDENTS FELLOWSHIPS

2008:

Anna Rupp	01.05. 2008 - 30.10. 2008	B4 / Mautner
Ulrike Lettenmeyer	01.05. 2008 - 31.12. 2008	A7 / Nößner
Margarethe Przewoznik	01.05. 2008 - 30.04. 2009	A8 / Mocikat
Maya Schreiber	01.06. 2008 - 31.12. 2008	A7 / Uckert
Sophia Böcker	14.08. 2008 - 13.08. 2009	B6 / Nelson

2009:

Ainhoa-Marie Figel	15.03. 2009 - 14.03. 2010	A7 / Nößner
Marcella Naujoks	15.05. 2009 - 30.10. 2009	A8 / Mocikat
Laurin Rötzer	01.08. 2009 - 31.07. 2010	B6 / Endres
Peter Friedrich	01.11. 2009 - 31.07. 2010	A3 / Volk



GRADUIERTEN KOLLEG SFB-TR36

STUDENT RETREAT

Date	Organised by:	Location
14.05.07 – 15.05.07	Junior Scientist Faculty	Evangelische Akademie Tutzing
19.10.09 - 21.10.09	PhD Retreat Grad School	Spitzingsee

“Alte Wurzhütte” at Spitzingsee



GUEST SCIENTIST PROGRAMME

Date	Visiting Scientists:	Title:
25.07.2008 – 30.07.2008	Prof. Elizabeth Simpson	Student Mentoring
25.07.2008	Prof. Elizabeth Simpson	Minor Histocompatibility Antigens: From Discovery to clinical application
31.07.2009	Prof. Elizabeth Simpson	Historic landmark papers for adaptive T cell responses
23.09.2009	Prof. Nicholas Gascoigne	Themis in thymocyte development, and visualizing intermolecular interactions in T cell activation



GRADUIERTEN KOLLEG SFB-TR36

Mentoring Programme

SFB (GK) Studenten München	Erstbetreuer	Zweitbetreuer Berlin	TP	Tel.-Nr.	e-mail
Adriana Turqueti-Neves	E. Nößner	A. Thiel	A7	089 7099-323	adriana.turqueti@helmholtz-muenchen.de
Georg Dössinger	D. Busch	H.-D. Volk	B3	089 4140-6244	georg.doessinger@helmholtz-muenchen.de
Stefani Spranger	D. Schendel	T. Schüler	A1	089 7099-339	stefani.spranger@helmholtz-muenchen.de
Maja Bürdek	D. Schendel	T. Schüler	A1	089 7099-319	maja.buerdek@helmholtz-muenchen.de
Stefanie Iskra	Moosmann/ Hammer-schmidt	H.-D. Volk	A4	089 7099-232	stefanie.iskra@helmholtz-muenchen.de
Luise Weigand	A. Krackhardt	T. Schüler	A8	089 7099-412	luise.weigand@helmholtz-muenchen.de
Niklas Münchmeier	P. Nelson	T. Schüler	B6	089 218075846	niklas.muenchmeier@med.uni-muenchen.de
Xiaoling Liang	A. Krackhardt	J. Charo	A8	089 7099-360	xiaoling.liang@helmholtz-muenchen.de
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