

PROJECT ACHIEVEMENTS DURING THE REPORTING PERIOD

Research Achievements

TEAM II, London

(PI: Bhattacharya, Young researchers: Maubaret/Bujakowska/Fiocco)

A whole genome scan (687 markers in total) was performed in a large English adRP family. Analysis of segregation (calculation of two-points LOD-scores and construction of haplotype) is still in progress. A considerable amount of work has been undertaken to have a better understanding of RP11, caused by mutations in the splicing factor gene PRPF31. First of all, a KI mouse model carrying the A216P mutation found in human adRP patients has been generated and is now undergoing comprehensive biochemical, histological and electrophysiological characterization. Histology and ERG have been found to be normal up to 6 months of age in the KI animals. No significant differences in the tunnel assay and calpain activity have been observed between the KI and WT mice. Nevertheless, a very slight, non-significant increasing in cell death may have been detected in the 6 months old mice by the tunnel assay. The KI mutation is lethal in the homozygote state in the mouse. The study of one year old mice will begin in January 2007. By yeast-two-hybrid, interactions between PRPF31 and MAGI3, TRAK2 and ZNF143 have been detected. These results need to be confirmed by different techniques.

TEAM III, Dublin

(PI: Humphries, Young Researcher: Chadderton)

We have achieved more than 80% suppression of human rhodopsin (RHO) through AAV mediated delivery of shRNA targeting RHO following subretinal injection to transgenic rho+/- mice. Similar levels of suppression have been achieved both in vitro and in vivo for the IMPDH1 gene. Coupled with suppression of the mutant RHO gene is the requirement for a functional 'replacement' RHO gene. AAVs expressing the most efficient shRNA together with a corresponding suppression-resistant RHO gene have been generated. Levels of RHO expression have been optimized to match those seen in transgenic mice with normal ERG responses. Initial results suggest some improvement in ONL thickness following delivery to Pro23His RP transgenic mice.

TEAM IV, Tuebingen

(PI: Wissinger, Young researchers: Roni/Carpio)

In 2006 we finished our study on the mapping of transcription start sites (TSSs) of human retina expressed genes (BMC Genomics, submitted in revised form): Among the 54 genes studied we were able to obtain new sequences for 41 genes, some of which contain not yet annotated exons. Results can be grouped in five categories as compared to the RefSeq: (i) TSS located in new first exons, (ii) splicing variation of the second exon, (iii) extension of the annotated first exon, (iv) shortening of the annotated first exon, (v) confirmation of previously annotated TSS. Our results highlight the necessity to address the issue of a tissue specific approach to complete the existing gene annotation. The new TSSs and transcribed sequences are essential for further exploration of the cis-regulatory sequences at the 5' end of the genes. We now have started to test promoter activity of region located upstream the new TSSs of selected genes by Luciferase Reporter Assays in different retinal and non-retinal derived cell lines.

TEAM V, Naples

(PIs: Banfi/Marigo, Young researchers: Karali/Trifunovic)

We have completed the expression analysis of the selected human and murine cDNAs and miRNAs by RNA in situ hybridization (ISH) at various developmental stages. For some of the analyzed cDNAs and miRNAs we performed a combination of fluorescence in situ hybridization and immunofluorescence to more precisely identify the cell types in which they are expressed. We reported the results obtained on the microRNA expression studies in an article accepted for publication in Investigative Ophthalmology and Visual Science. We are currently generating an expression atlas by RNA ISH in human and mouse of known genes responsible for RP in human. In the fourth year of this project, we will focus our studies on the identification of the mRNA targets of eye-expressed microRNAs and on the evaluation of the possible role in eye diseases of some of the novel eye-expressed cDNAs that we identified during the course of this project.

TEAM VI, Paris

(PI: Leveillard, Young Researchers: Fridlich/Cronin)

Transcriptomic and functional analysis of neuroprotective factors with therapeutic potential in the retina (project of Therese Cronin)

The differential expression patterns during overexpression, under-expression and complete knockdown of RdCVF are to be analysed. These studies are carried out in parallel with functional analyses of the retinas. Constructs containing the short and long forms of the murine RdCVF cDNA and expressed by the RPE-specific Vitelline Macular Dystrophy 2 (VMD2) promoter were prepared and are currently being made by Genoway transgenics. The RdCVF knockout mice colony is being expanded and the genotyping performed for each generation. Initial ERG results for this model show a reduction in oscillatory potential in RdCVF^{-/-} (n = 7, age = 11 weeks) compared to BalbC controls. In addition to the RdCVF transgenic studies, it is hoped that microarray-analysis of rd retinal explants following trophic support may identify the relevant changes in gene-regulatory networks during the rescue of a degeneration. Therefore RNA is being produced from experiments involving the coculture of retinal explants from retinal degenerative models (rd1 and rd7 at PN35) with wild-type (C57BL6 at PN35) or growth-factor-transformed Cos1 cells. Finally, AAV-RdCVF virus, provided by Jean Bennett is being used to deliver RdCVF to the RdCVF^{-/-} mice and the analysis will be undertaken over the coming few months.

The main objective of Ram Fridlich's project is to identify RdCVF interaction proteins.

Screening a chicken cone library cDNA with RdCVF did not show any potential colony.

Immuno-precipitation and Gel shift assay (EMSA) showed that RdCVF is not expressed in yeast (MAV203, PJ69). Furthermore, screening of different cDNA libraries (bovine and human retina) with RdCVF1 long form did not give any positive colony (in collaboration with the group from Nijmegen). Yeast two hybrid system experiments did not detect a potential protein partner of RdCVF. Consequently, we decided to change strategy and try a proteomics approach- GST-RdCVF pull down assay. Preliminary results have shown that RdCVF might interact with Histone, H1.10. This result will be validated by mammalian two hybrid system (Gal4-RdCVF is expressed in COS1 cells)

TEAM VII, Illkirch

(PI: Poch, Young Researchers: Raffelsberger/Reddy)

During the 3rd year of RetNet activities we emphasised our efforts on the exploitation of the retinal transcription profiles collected and integrated into RETINOBASE. The transcriptomics projects were further analysed with respect to project specific questions as well as to meta-analysis type approaches. In order to improve the initial analysis steps a novel algorithm for filtering transcriptomics data has been developed and has been made available to all RetNet partners. The infrastructure of RETINOBASE was largely improved by making new query types available via the user-interface on a secured web-site. The database hosts experiments from RetNet members (with restricted access) as well a collection of publicly available data. Furthermore, new graphical display options were developed to enhance and facilitate the reception of the results.

TEAM VIII, Nijmegen

(PI: Cremers, Young Researchers: Mukhopadhyay/Nikopoulos)

We published a major article on the molecular causes and disease mechanisms of Wagner disease and erosive vitreoretinopathy (ERVR), in which we solved 90% of all Dutch cases. We hypothesize that exon 8 splice site mutations of CSPG2/Versican, which result in the upregulation of splice variants V2 and V3, cause Wagner disease and ERVR due to the underlying haploinsufficiency of isoforms V0 and V1. In one family, Wagner disease co-segregated with markers at chromosome 12 flanking the COL2A1 gene, and a COL2A1 exon 2 protein-truncating mutation was identified. Real-time quantitative RT-PCR of mRNA from 11 additional Wagner disease patients did not reveal an upregulation of the V2 and V3 mRNA splice variants. Moreover, none of these families showed CSPG2/Versican splice site mutations. We hypothesize that in some of these families, causal variants or genomic rearrangements are situated in CSPG2/Versican introns.

TEAM IX, LUND

(PIs: Van Veen/Ekstroem, Young Researchers: Paquet-Durand/Talukdar/Silva)

The project concerns the mechanisms behind retinal degeneration and uses the rd1 mouse as a model for the human hereditary disease Retinitis pigmentosa (RP). During 2006 we have continued to work on calpains, calcium-activated proteolytic enzymes that we have previously correlated with retinal degeneration. Our current results indicate that calpain inhibition can provide neuroprotection to the

degenerating photoreceptors of the rd1 retina, findings that shortly will be submitted for publication. The calpain work has taken place in conjunction with other RETNET partners, as has the work on poly(ADP-ribose) polymerase (PARP), another player in the retinal degeneration. We are now submitting a report in which the involvement of PARP in the degeneration of the rd1 retina is described. Furthermore, we here also demonstrate that PARP inhibition to a certain extent confers neuroprotection to the rd1 photoreceptors. In another line of research we have published an article that highlights some pathways engaged in neurotrophic factor dependent photoreceptor protection.

TEAM X, Munich

(PI: Ueffing, Young Researchers: Del Rio Medina/Koertvely/Gorza)

In the search for the physiological role of rac in photoreceptors, we have identified a novel interactor of rac-GDP, Son. The function of this protein is yet unresolved but may be linked to transcriptional regulation of yet undefined genes. In a joint effort with the lab in Nijmegen, we have been able to elucidate the interactome of a protein Lebercilin involved in severe forms of retinal degenerations. The protein interactions (including motor proteins and cytoskeletal proteins as well as scaffolds) point to a role of this protein in protein transport. Searching for the active components of Müller Glia derived secreted proteins that give neuroprotective support to photoreceptors we have in a joint effort with the IP EVI-Genoret identified several protein candidates including members of the IGFBP family, that are now cloned and currently under evaluation in an in vitro photoreceptor assay.

Training and ToK

TRAINING AND TOK REPORT (01/01/2006-31/12/2006)

INDIVIDUAL TRAINING:

Cecilia Maubaret went to Nimjigen in Holland for a lab exchange and learnt the yeast two-hybrid system for the study of protein-protein interactions as well as the quick cloning with the GATEWAY system. Along with a biotech company, Biogene, Cecilia has been appraising a new software for allele recognition for genotyping. The software is named Genemarker and in the process she gained valuable experience in interactions with the company. She also did some site-directed mutagenesis experiments, which was new to her. Additionally, she is helping Francesca Fiocco in designing her experiments, which is for her an opportunity in learning how to supervise postgraduate students. Finally, the editing of a review (prepared by all 3 RetNet fellows) is giving her an overview of management needed in scientific writing.

Kinga Bujakowska has received laboratory training in molecular genetics techniques (DNA, RNA isolation, PCR, quantitative PCR, sequencing) as well as biochemistry training (western blot, affinity purification of antibodies). Kinga has also worked with cell culture and histology (cutting mouse eye sections, apoptotic tests on the eye sections). The editing of a review (prepared by all 3 RetNet fellows) is giving her an overview of management needed in scientific writing.

Francesca Fiocco has received laboratory training in molecular biology techniques such as PCR, sequencing, DNA isolation, the whole yeast two-hybrid technique, as well as health and safety procedures. The editing of a review (prepared by all 3 RetNet fellows) is giving her an overview of management needed in scientific writing.

Naomi Chadderton has continued acquiring the techniques needed to perform the scientific investigations required to achieve the objectives of this project. She has taken an active role in departmental activities and made a valid contribution to student development. During her laboratory exchange to Prof. van Veen at the University of Lund, Naomi learnt and developed techniques to explant and culture retinae from p7 mice. Through her exchanges with Dr. Leveillard's laboratory in Paris her French comprehension has improved whilst her communication requires further visits. Naomi actively partook in 'La Chandeleur', improving her awareness of European traditions.

During the last year Valeria Roni performed the following experimental procedures: isolation of RNA and DNA from human, established human and mice cell lines, plasmid isolation, restriction endonuclease digestion of DNA, agarose gel electrophoresis, DNA gel extraction, retro-transcription of cDNA, Polymerase Chain Reaction (PCR), TA cloning of PCR products,

subcloning, dideoxy sequencing of plasmid DNA and PCR products, bacterial transformation with plasmid DNA, RNase Ligase Mediated Rapid Amplification of cDNA Ends (RLM-RACE) and Primer Extension. In addition she used available public database information to perform in silico assemblies and analyse of 5'transcript termini. She has also performed computer-based techniques as: alignment and clustering of ESTs, interspecies gene comparisons and measurement of their distances, localization of transcription factors binding sites and genomic alignment of transcripts. Besides the lab-training she participated in progress reports and journal clubs of the laboratory.

During the last year Ronald Carpio has performed the following experimental procedures: isolation of RNA and DNA from human, established human and mice cell lines, plasmid isolation, restriction endonuclease digestion of DNA, agarose gel electrophoresis, DNA gel extraction, retro-transcription of cDNA, Polymerase Chain Reaction (PCR), TA cloning of PCR products, subcloning, dideoxy sequencing of plasmid DNA and PCR products, bacterial transformation with plasmid DNA, retina whole mount in situ hybridization, RNase Ligase Mediated Rapid Amplification of cDNA Ends (RLM-RACE), cryosectioning of mouse retinal tissue, mammalian cell transfections with plasmid DNA, Luciferase Reporter Assay and cell culture methods. In addition he used available public database information to perform in silico assemblies and analyse of 5'transcript termini. He has also performed computer-based techniques as: alignment and clustering of ESTs, interspecies gene comparisons and measurement of their distances, localization of transcription factors binding sites, promoter predictions and genomic alignment of transcripts. Besides the lab-training he participated in progress reports and journal clubs of the laboratory.

The techniques performed by Marianthini Karali include: Expression analysis of microRNAs and their host transcripts on sections and whole-mount mouse embryos by RNA in situ hybridisation; selection of putative targets for the microRNAs of interest by combining predictions from several publicly-available algorithms; in vitro luciferase assays to test microRNA: target binding; sequence-specific mutagenesis of microRNA binding sites; generation of cell-lines for the stable overexpression of microRNAs; design of morpholinos against selected microRNAs for injection in medaka fish; in silico analysis of the genomic regions surrounding the microRNAs under study to search for putative sequence control elements regulating their expression.

Dragana Trifunovic performed the following experimental procedures / techniques: RNA in situ hybridization experiments to generate an expression atlas of human genes responsible for Retinitis Pigmentosa in both human and murine eyes: retrieval of suitable probes using both bioinformatic (selection of appropriate EST clones from genome and EST databases) and experimental procedures (RT-PCR on retina total RNA or PCR on human and mouse genomic DNA) with sequence specific primers; training in animal techniques, preparation of human and mouse tissues for cryopreservation, RNA in situ hybridization procedures, data interpretation. In addition, she performed immunohistochemistry and immunofluorescence procedures to determine the protein distribution of some selected RP genes.

Over the last year in our laboratory in Paris, Ram Fridlich had the opportunity to learn several new skills. At a practical level, his work has incorporated the following techniques: Molecular Biology, EMSA analysis, Biochemistry, Chromatography, GST-pull down assay, chicken eye dissection and two-hybrid system. During 2006 he gave 2 presentations in front of the laboratory staff and also attended several presentations given by invited scientists from all over the world. Speaking French each day really improved his French skills and contributed to his integration into the French society and culture.

Therese Cronin received further training and improvement in the following general skills: Lab animal techniques (handling rodents, anesthesia etc), transformed and primary cell culture (COS1, Hela, HEK293 and mouse explants) and microscopy, recombinant DNA techniques (cloning, purification) and some protein work (Western blot). More specific skills, in which she received training, included viral delivery and manipulation (Adeno-associated virus), the purification of nucleic acid (by ultracentrifugation through a caesium chloride gradient) to achieve high titre, high purity RNA for microarray studies, the preparation of photoreceptor-pure mouse retinal explants, the preparation of cone-enriched chick retinal explants and the use of an automated cone-counting platform.

The in-lab training of Wolfgang Raffelsberger covered a wide range of aspects from statistics, oligo-design for real-time PCR for highly conserved gene-families, gene- and genome annotation tools and further computer programming skills. In terms of statistics he benefited from training in understanding multiple hypothesis testing correction and several approaches to estimate the False Discovery Rate. In conjunction with learning to understand the principles and use of novel gene and genome annotation techniques he also learned about specialized statistical tests that can be used to test for functional enrichment. In terms of computer programming skills he learned about high throughput automation and data-base networking aspects in R and partially in TCL/TK. Finally his training was completed with additional training in didactic skills while presenting to his research group, collaborators and to PhD students from the University.

Ravi Krian Reddy has received training in developing physical models using SYBASE power designer for the RETINOBASE, in database creation and management of PostgreSQL, an open source database and PHP (Hypertext Preprocessor) as part of his work to create a user-friendly interface and various query methods for RETINOBASE. He additionally received training to utilize TRANSFAC (a database on eukaryotic transcription factors, their genomic binding sites and DNA-binding profiles) in order to be able to predict transcription factors for retinal specific genes. He also learned to use R-package (a free software environment for statistical computing and graphics), specifically for Affymetrix data analysis and FASABI for clustering.

A. Mukhopadhyay performed real-time quantitative RT-PCR (QPCR) to evaluate the differences in the expression levels of genes involved in vitreoretinopathy. He performed QPCR on genomic DNA to identify copy-number variations. He analysed microsatellite markers in families and performed sequence analysis of the candidate genes. He performed multiplex ligation-dependent probe amplification (MLPA) analysis to screen for a putative genomic deletion/duplication. He designed and interpreted FISH data. He was trained in the planning of the strategy for different aspects of vitreoretinopathy studies. He also was involved in the supervision of the fellow K. Nikopoulos. In addition, he was trained in manuscript writing and oral presentations in and outside the Department of Human Genetics.

K. Nikopoulos performed sequence analysis of the CSPG2/Versican and COL2A1 genes in patients with Wagner disease. He extracted RNA and DNA from fresh blood. He performed reverse transcriptase PCR experiments on total RNA from fresh blood to study the expression of CSPG2/Versican splice variants in patients with Wagner disease. He performed genomic qPCR on patient(s) with Wagner disease to test for putative regional gene copy number variation of the normal allele(s). He performed segregation analysis of (CA)_n microsatellite markers in patients with Wagner disease concerning CSPG2/Versican and COL2A1. In addition, he was extensively trained in oral presentations and he attended several courses and practical workshops.

The ER Francois Paquet-Durand has continued his acquiring of techniques needed to perform scientific investigations towards the scientific objectives. Apart from adapting and developing methods related to the analysis of protein expression and enzymatic activities in histological sections, there has also been ample training in various types of electrophoresis and accessory methodologies. Other training activities have dealt with the retinal explant technique and application of potential neuroprotective compounds. A particular focus was put on different in vivo application methodologies. In addition to methods and techniques connected to practical lab work, the fellow has improved his skills in writing scientific articles and grant applications and he also assisted in the supervision of a graduate and a PhD student. The opportunity to present his work in an international environment has also strongly improved his scientific presentation skills.

Regretfully, the ESR Tanuja Talukdar was for various reasons not active in the project for more than a couple of months during the reporting period and eventually resigned officially by the end of June, 2006. During the thus very short active time at the lab, her work was concentrated on pursuing and refining already started experiments.

The ESR Jose Silva started in May 2006 as a replacement for the ESR Tanuja Talukdar. He has for the subsequent part of the reporting period focused on getting supervised hands-on experience of several general laboratory techniques. There has also been training in more specialised methods for protein expression and enzymatic activities in for instance histological sections. In addition, the

fellow has been trained in animal care and handling, including preparation of eye samples. In all of these aspects, and also with respect to exercises in scientific presentation, the outcome has been most satisfactory. Finally, the fellow has also been educated on the science behind retinal degenerations in the form of group tutorials. No attendance in conferences and meetings outside those arranged by RETNET has yet taken place, but are planned for the coming period.

Eloed Koertvely uses almost the entire repertoire of the yeast two-hybrid-related techniques, from the isolation of the prey plasmids to the confirmation of the interaction by backtransformation of the isolated plasmids into competent yeasts. In addition he applies some basic techniques (e.g. RT-PCR, Northern analysis) and transfects selected human cell lines with plasmids containing cDNAs. Western analyses are also in progress.

Training in Frans Cremers's lab, Nijmegen, The Netherlands, May 1-31, 2006: Yeast two-hybrid screen was performed aimed at identifying interacting partners of GDP- vs. GTP-bound Rac1 proteins in the retina.

Training in Pete Humphries lab, Dublin, Ireland, December 9-16, 2006: Purification of AAV particles enabling high-level and photoreceptor specific expression of mutant Rac proteins in mice.

Matteo Gorza performed during this half-year the following experimental procedures and techniques: construction of expression plasmids for bacteria (PCR, enzymatic digestion, ligation, DNA analysis on agarose gel, DNA sequencing, transformation of several bacteria strains); construction of expression plasmids for eukaryotic cell lines; protein analysis (cell lysis, SDS-PAGE, GST-pulldown); Yeast two-hybrid screening for identification of new interactors (construction of plasmids suitable for interaction screening, growth and transformation of yeasts, evaluation of interaction, screening of a placenta library is ongoing); study of subcellular distribution and localization of protein utilizing built-up fluorescent reporter constructs, suitable for immunocytochemistry and FRET assays (Fluorescent Resonance Energy Transfer). Planning for 2007: To complement the scope of this work, additional lab exchange training in the laboratory of Prof. Frans Cremer (Nijmegen, The Netherlands) for Y2H library screenings would be appropriate in expanding the current training and knowledge.

Patricia del Rio Medina has been trained in biochemical and molecular biology methods, such as Western blotting and RNA isolation. She has been learning culture and histology techniques using a mouse line that expresses GFP under the human GFAP promoter. Patricia is in the process of learning how to section mouse retinae, establishing primary RMG cell populations by FACS sorting, and conducting immunohistochemistry to test several antibodies in retinal sections. To expand the scope of this work, additional lab exchange training to assay the efficacy of neuroprotective agents in retinal explants of an animal model of retinal degeneration (rd1 mouse) using both in vitro and in vivo based methodologies would expand Patricia's current training and knowledge. Possible studies would be in vivo administration of neuroprotective agents in the rd1 mouse as model of retinal degeneration. Evaluation of neuroprotective effects by histopathology, immunohistochemistry, in situ hybridization, western and northern blotting, and Q-RT-PCR of photoreceptor-specific molecules may be carried out in the laboratory of Prof. Theo van Veen/Per Ekstroem, partner in the RetNetnetwork.

TRAINING COURSES (for details see Annex 2: Training and Tok (inclusive Training Assessment)):

(1) Training Course in Tuebingen, 15.-18.05.2006

A) Courses:

International Project Management I
International Project Management II
Team Work
Team Building Measures
How to write a competitive proposal

B) Workshops:

Getting ready for framework 7

C) Talks:
Evolution of science and human societies

(2) RETNET Fellows Training Course in Venice, 22.-23.11.2006

Lab-Exchanges:
Seven young researchers performed lab exchanges in 2006
(for details see Annex 2: Training and Tok)

Management

RETNET MANAGEMENT REPORT (01/01/2006-31/12/2006)

ORGANISATION AND IMPLEMENTATION OF WEBPAGE

2006: Weekly update and evolution of the webpage <http://www.euro-ret.net>

ORGANISATION AND IMPLEMENTATION OF MEETINGS

RETNET Midterm Review Meeting, 21.-22.02.2006, in Brussels, Belgium
Participated by all Principal Investigators and by all Fellows; Agenda and Minutes available
RETNET 3rd Annual Meeting, 20.-21.11.2006, in Venice, Italy
Participated by all Principal Investigators and by all Fellows; Agenda and Minutes available
RETNET Fellow's Meeting, 18.-19.11.2006, in Venice, Italy
Participated by all Fellows; Agenda available

ORGANISATION AND IMPLEMENTATION OF RECRUITMENT

2006: When necessary, update of the CORDIS webpage and the respective vacancy tool.

COMMUNICATION AND DISSEMINATION STRATEGY

Quarterly newsletter to all participating project partners and young researchers
In 2006 a RETNET calendar 2007 was designed and printed. For all fellows, P.I.s, coordinators and friends of RETNET.
Publication about the promotion of young scientists in Vision Research, in which also the RETNET project was introduced and described. (T.H. Wheeler-Schilling, E. Zrenner, U. Schiefer: "Integrativer Ansatz zur Nachwuchsfoerderung in der Sehforschung auf europaeischer Ebene"; Der Ophthalmologe, Vol. 103 (2), Feb. 2006)
Publication in the "Ophthalmology Times Europe": Thomas H. Wheeler-Schilling, Kristina Hoffmann, Shomi Bhattacharya "Education: the most powerful tool for progression and excellence in Europe. A strategy to promote young scientists in vision research and ophthalmology", (submitted).
Presentation of RETNET in the talk "Das European Retinal Research Training Network RetNet" given by Dr. Bernd Wissinger at the DOG (German Ophthalmological Society) Conference (Thursday, 21st September 2006).
RETNET was also presented and described in the talk "Integrated approach to the promotion of young academics in vision research at a European level" given by Dr. Thomas Wheeler-Schilling at the DOG (German Ophthalmological Society) Conference (Thursday, 21st September 2006).
Integration of the RETNET logo in the portfolio and homepage of the exclusive Meeting Center "Casino del Commercio" at the San Marco Square in Venice, Italy
Joint training and activities between the fellows of the RETNET, PERACT and NEUROTRAIN EU projects (15th - 18th May, Tuebingen, Germany).

FINANCIAL MANAGEMENT

Update of the financial resources by partner in the RETNET handbook (available on-line)
Cooperation with the respective financial bodies of each partner institution (FAQs)
Organisation of audit certificates (and all problems in relation to this and the new form C)

Processing of the financial resources of category F for the partners
Reimbursement of travel cost and eligible expenses by the central budget
Verification of the Financial Cost Statements of all contractors before submission of the reports and financial controlling of the distribution of EC funds
Financial controlling of the change in distribution of funds on the occasion of the contract amendment, which has been applied for in October 2006 (including new CPFs and budget calculation for category F)
Cost clearance of the single training measures and meetings and correlation of costs to the partners

GENERAL MANAGEMENT AND MISCELLANEOUS

Organisation, planning and check of the training courses 2006 (network-wide)
Planning and check of the training courses 2006 (individual lab rotations)
Organisation, planning and check of the Second Annual Activity Report 2005
Organisation for submission of the Second Annual Activity Report 2005 in time
Brainstorming sessions for new innovative ideas to be implemented by RETNET (e.g. get in contact with other funded FP6 RTNs; supporting team building measures)
Design and development of an evaluation formulary.
Statistical analysis of the evaluation formularies of training courses
Training Courses in Tuebingen, 15.-18.05.2006. Agenda and evaluation of the training available online.

Abbreviations: EC: European Community; FAQ: Frequent asked questions; MC: Managing coordinator; PI: Principal investigator; RETNET: European Retinal Research Training Network (MRTN-CT-2003-504003); RTN: Research Training Network; SAC: Strategic Advisory Committee; SC: Scientific coordinator; SO: Scientific officer; YR: Young researcher

DEVIATIONS/MODIFICATIONS TO THE ORIGINAL WORK PROGRAMME

Please indicate if the project

a) is, at this stage, being implemented as originally planned

If you answered b) or c) please include a detailed description of the modifications in the report (one page)

ADDITIONAL INFORMATION

Please indicate any additional information, which may be considered useful to assess the work done during the reporting period.