

FEBS
EDUCATION COMMITTEE

REPORT

7.06.2010

July 2009 - June 2010

Report Plan:

1. Introduction
2. Structure and Composition of the Committee
3. Committee Meetings
4. Representation at EX-COM Meetings and at WOGCEE visit
5. Educational Events
 - Cluj-Napoca Biochemistry Education Workshop
 - Athens Biochemistry Education Workshop
 - Gothenburg Congress 2009
 - Future Events
6. Liason with other bodies within and outside of FEBS
 - WOGCEE
 - Science and Society Committee
 - FEBS Constituent Societies
 - IUBMB
7. Other Issues
8. Conclusion

1. Introduction

FEBS Education Committee started officially on 1st January 2007, following the historical decision of the FEBS Council which convened in Istanbul in June 2006, to transform the “Working Group on Teaching Biochemistry, Chaired by Prof. Jean Wallach (2001-2007)” into an “Education Committee (2007-), with its first Chair, Prof. Edward J Wood”.

As is known, FEBS Education Committee faced the sad event of losing its first Chair on December 14, 2008. FEBS Governing bodies Prof. Gül Güner-Akdogan was agreed by to take over as acting Chair until 31st January 2009. Gül Güner was elected as Chair at Prague Council (July 2009) and started as of 1st January 2010.

This report on the activities of the Education Committee comprises the one-year period from July 2008 to June 2009.

2. Structure and Composition of the Committee

According to the latest version of FEBS Statutes, the Education Committee is composed of “a chair elected by Council, four ordinary members elected by Council” and ex-officio members with voting rights, Secretary General of FEBS, Treasurer of FEBS, and Chair of Advanced Courses Committee”.

The four ordinary members are:

Jason Perret (Elected at Vienna FEBS Council, 2007)

Miguel Castanho (Elected at Vienna FEBS Council, 2007)

Karmela Barisic (Elected at Athens FEBS Council, 2008)

Constantin Drainas (Elected at Athens FEBS Council, 2008)

Chair: Gül-Güner Akdogan (Elected at Prague FEBS Council, 2009).

Co-Opted:

Keith Elliott (Since January 1st, 2008)

Peter Ott (Since May 14th, 2010)

Ex-Officio Members: Israel Pecht, John Mowbray, and Karl Kuchler.

3. Committee Meetings

Between July 2009 and June 2010, the Committee has held two meetings:

- **Izmir Meeting:**

First Meeting:

On October 24th, 2009, a Committee Meeting was held in Izmir. The Meeting, hosted by Gül Güner-Akdogan, was attended by K Barisic, M Castanho, C Drainas, K Elliott (co-opted), J Perret, and I Pecht. Apologies were received from J Mowbray. The first part of this meeting was dedicated to reflections on the educational events at the Prague Meeting and on the report of Cluj-Napoca Workshop. Then, future arrangements for Gothenberg (2010) and Torino (2011) FEBS Congresses were discussed. Among other issues was the organisation of Biochemistry Education workshops in eastern European

countries in 2011- firstly, in Slovakia and then in Estonia. Collaboration with other organisations was discussed, as well as the organisation of an interactive web-site.

- The second Education Committee Meeting during this year was held in Athens on May 15th, 2010. The Meeting was chaired by Prof. Gül Güner-Akdogan and hosted by Constantin Drainas, member of FEBS Education Committee. Attendance was the following: K Barisic, C Drainas, Gül Güner-Akdogan, K Elliott (co-opted), G Güner, J I Mowbray, I Pecht, and J Perret. Apologies were received from Miguel Castanho, who, at the same time, participated at a Biochemistry Education Symposium, organised by Portuguese Society of Biochemistry and Molecular Biology. The main issues discussed were the arrangements for the educational events at the Gothenburg Meeting, the organisation of a Workshop in Croatia in 18-19 September 2010 (Opatija near Rijeka), and future activities of FEBS Education Committee.
- The next Meeting of the Education Committee was agreed to take place in Opatija near Rijeka, on September 17, 2010.

4. Representation at EX-COM Meetings and Council:

- The Committee was represented by Gül Güner-Akdogan at the Prague EX-COM Meeting and at Prague Council during FEBS Congress 2009 and Tallinn EX-COM Meeting on November 14th, 2009.

5. Educational Activities Organized by the Committee

- **Report and discussion of the “Educational Events” organized during Prague FEBS Meeting, 4-9 July 2009**

Educational events organized during the Prague Meeting were reported by Gül Güner and discussed with the Committee.

Workshop on Ethics Education, Sunday, July 5, 17:30-20.00 (Co-sponsored by IUBMB):

The main goal of the workshop was to review the present system of bioethics education to bioscience and medical teachers and students and discuss new perspectives. The workshop, coordinated by Chris Willmott and Gül Güner, was extensively publicized using FEBS website, FEBS-News bulletin of the Prague congress and on posters and flyers prepared by the Education Committee. The number of participants who attended were around 80 for the plenary sessions and, in spite of the late evening hour, 25 actively participated in the small-group discussions. The Workshop was preceded by a Tribute to Ed Wood, by Keith Elliott. After a brief introduction to the Workshop by Gül Güner-Akdogan, the plenary lectures were carried out: “Research Ethics”, by Göran Hermeren (Lund University) and “Implementation of Ethics Curriculum in a Medical School”, by Barbara Maier (Paracelsus University). The interactive session which followed was coordinated by Chris Willmott (Leicester University). This interactive session was based on the discussion of three different cases. It was noted that the participants who attended were very interested. There was enough time for question-answer sessions at the end of each activity as well as at the end of the Workshop.

Structured feedback forms were distributed to the participants who attended and the average rating of the Ethics Education Workshop was 3.7 out of 5.0 for the plenary lecture session and 3.9 out of 5.0 for the interactive session.

Workshop on Systems' Biology Education

The Workshop, coordinated by David Fell and Keith Elliott, was run in two sessions:

Session 1: Plenary Lectures (Tuesday, July 7, 12:00-14:00)

In the first of the two sessions, which consisted of plenary lectures, in spite of the lunch hour, there were about 90 participants and the majority stayed till the end. Several examples of current approaches to Systems Biology education, at levels from undergraduate to post-doctoral were illustrated by four speakers;

Rui Alves, Uni. de Lleida, Spain, Vicky Buchanan-Wollaston, Warwick U, UK, David Fell, Oxford Brookes University, UK, and Simon Moon, Imperial College, UK

Session 2: Interactive Session (Wednesday, July 8, 12:00-14:00)

This session consisted of small-group discussions allowing participants to debate a variety of issues relevant to this topic, according to their specific interests. The chairman and speakers from the first session acted as moderators, and three discussion groups were formed (international training, undergraduate education, and graduate education) to address questions such as:

- *What is the appropriate content for a Systems Biology course? Is this different at undergraduate, postgraduate and post-doctoral level?*
- *How can we cater for students with very different backgrounds? What are the suitable backgrounds?*
- *Can a single institution maintain viable class sizes across all components of the course, and if not, what are the solutions?*
- *What is the scope for national and international cooperation in provision? Who should be coordinating this?*
- *How big a role could be played by residential schools, web-based courses or distance learning in making provision more widely available?*
- *Additional topics which emerged from the discussion of the speakers' talks in session 1.*

The participants who attended both of the sessions were given the structured feedback forms to fill in. The results have shown that the overall rating of the plenary sessions were (average of four lectures) 4.51 out of 5.0. The small-group discussion session was rated overall as 4.54 out of 5.0.

In general, it was concluded that both workshop activities were well-accepted and the written evaluations were encouraging.

- **CV Advising Sessions**

Keith Elliott was invited to attend the pre-Congress YSF to talk to the participants about making the most of their CV's. Supported by Jason Perret, they ran, during the congress, one-to-one sessions and saw over 30 CV's from individuals resident in 14 different countries. The feedback from the participants was positive, though some were not aware of the importance of starting early.

- **Workshop on Biochemistry Education in Cluj-Napoca (Romania) (30 September, 2009):**

(The Report, as it has appeared in FEBS News, December 2009)

On September 30, 2009, this workshop was run in conjunction with the annual International Congress of RSBMB.

At the March 2009 meeting of the FEBS Executive Committee (EX-CO), Gul Guner-Akdogan, the new Chair of FEBS Education Committee, presented the proposal from the Committee to run a workshop on education in Cluj-Napoca, Romania. The founding Chair of the Committee, Ed Wood, had started the planning in 2008, with the intention of running it before or after the Sofia Workshop; however, it was found out that the Romanian Society could unfortunately not host it in 2008.

In 2009, Gül took over from where Ed had started; and the Romanian Society of Biochemistry and Molecular Biology accepted to host a FEBS Workshop, with Prof. Carmen Socaciu as the local coordinator, on 30 September as an annex to their International Congress of Biochemistry, to take place at the University of Agricultural Science and Veterinary Medicine (USAMV), Cluj-Napoca 1-3 October, 2009. With the approval from the EX-CO, Keith and Gül, supported by Jason Perret, reorganised the programme and duly delivered it on 30th September. Mathias Sprinzl, the new Chair of WOGCEE, also joined the FEBS Education group for helping them as well as for possible contacts with the students, faculty, and directors.

According to the records of the local organisers, besides 85 participants to the RSBMB Conference, there were 28 registered active participants to FEBS Biochemistry Education Workshop from different universities (university may mean faculty in Romania), including USAMV (University of Agricultural Science and Veterinary Medicine), Medical University of Cluj-Napoca, Babes-Bolyai University, Timisoara, Bucharest, Constanta, and the Romanian Academy of Sciences. Booklets including the program of the Workshop, the slides of the presentations, the descriptions of the interactive sessions and the CV's of the Workshop runners were distributed to each registered participant. In addition, the FEBS-News issues as Memorial to Ed Wood, sent from FEBS London office, were also delivered. The workshop was opened by Prof. Carmen Socaciu, the local coordinator, Head of the Department of Biochemistry (University of Agricultural Sciences and Veterinary Medicine, Napoca-Cluj) and the President of the International Meeting of the RSBMB, who welcomed the FEBS group and the participants. The president of RSBMB, Prof. Octavian Popescu, also gave a talk to welcome the participants in the name of RSBMB.



From FEBS Education Committee, Gül Güner-Akdogan made a brief talk, describing the mission and activities of FEBS Education Committee and remembering their founding chair, Ed Wood. Gül summarized the program of the Workshop, as well as the expected outcomes.



Introduction to the workshop- Gül Güner-Akdogan, Chair of FEBS Education Committee

The program of the Workshop, as agreed by both parties, consisted of a 4-hour morning session on "Problem-Based-Learning" and a 3-hour afternoon session on "Post-Graduate Education".



Some participants in the workshop with the FEBS Group

An introduction to Problem-Based- Learning and how it is applied in Manchester and Dokuz Eylül (Izmir) were presented by Keith Elliott and Gül Güner-Akdoğan, respectively.



Keith Elliott giving his lecture on Problem-Based-Learning.

Tutorials were run in parallel, with Keith Elliott and Gül Güner-Akdogan as tutors and Jason Perret and Mathias Sprinzl as co-tutors. Participants split into groups to find out what it is like to be a student in a PBL session. The groups were arranged so that there were PhD students present in each group. All entered into the spirit and lively discussions ensued. Following one and a half hour of small group discussions, the groups came together to discuss the process of PBL and an interactive discussion was chaired by Keith Elliott.



Keith Elliott and Jason Perret co-tutoring a group on a case from Manchester University.



Gül Güner-Akdogan's group, with Mathias Sprinzl co-tutoring, discussing a Dokuz-Eylül case "Melis Bora".

Dinner was served in Chios- UASVM in a warm atmosphere.



Elena MA Ganea, Maria Dronca, Adela Pinta, Gül Güner-Akdogan, and Jason Perret at dinner at Chios.

The afternoon session started with a presentation by Gül Güner-Akdogan on "Quality of PhD: Setting Standards". She overviewed the European and international projects on "Post Graduate Education" with a special emphasis on the "Standards of IUBMB for PhD Candidates in Biomolecular Sciences", the Doctoral Programme Project of the European Universities Association (EUA) (with special emphasis on the curriculum, student acceptance criteria, criteria for supervisors, and the quality of thesis) and the conclusions of the 2009 ORPHEUS Meeting in Aarhus on "Setting Standards for PhD education in Life Sciences". She finished with an example of a PhD education reform from Dokuz Eylül University- the formal courses, arranged in weekly blocks, also included transferable skills such as project proposal writing, biostatistics, writing a scientific article, communication skills, etc. Only faculty presenting evidence of ongoing projects were eligible for supervising a PhD student and finally, the publication of all or part of the PhD thesis in a journal cited in the expanded SCI was a prerequisite for the defence of the PhD thesis. It was happily found out that in Romania, two published articles on the thesis were a prerequisite.

Following Gül Güner Akdogan's lecture, the participants were divided into small discussion groups moderated by Gül, Mathias, Keith, and Jason. The topics discussed were:

1. Student abilities and supervisor's skills
2. Role of the supervisory committee
3. PhD curriculum
4. Experimental research-based thesis



Discussion on "Research-based-Thesis", Mathias Sprinzl as group moderator.

The lively small group discussions were perhaps helped by the presence in the groups of real PhD students who were able to say what it was like for them!

Following one-hour of small-group discussions, the groups met together and a reporter from each group presented to the audience important points from the group's discussion to the whole group.

This was followed by a presentation from Jason Perret on "Abilities Expected from the Students and the Supervisor's Skills" built around Ed's pre-prepared lecture on the responsibilities of students and supervisor.

In the closing session of the workshop, Gül Güner-Akdogan asked for oral and written feedback from the participants. Those participants who made it to the end were then presented with attendance certificates signed by Keith Elliott, Gül Güner-Akdogan, Jason Perret, and Mathias Sprinzl.

The Workshop was celebrated at a gorgeous reception given by USAMV.



Despite missing Ed, this Biochemistry Education Workshop was well received, as the one in Sofia, last year.

The FEBS Group was impressed by the quality of the science of biochemistry and molecular biology and by the interactive and multidisciplinary environment provided. In addition the warm hospitality of the local coordinator Prof. Carmen Socaciu, Assoc. Prof. Adela Pinta, and all others was impressive.

To quote, from the participants:

- “..Very nice and useful workshop. Well organised”...
- “It is a great need to have more connections between Romanian University teachers with other lecturers from foreign countries so that students get a more uniform education in the Biochemistry field-the best contacts (are) the FEBS staff from the Education Committee...”
- ...“(there is) a necessity for the recognition of the biochemistry PhD degree (conferred) in Romania..”

Quote from the Coordinator of Workshop and the Rector of the University:

“... It was a good opportunity to discuss interactively the situation of Biochemistry and Molecular Biology teaching and research conditions in Romania. The working groups were very active and the FEBS representatives coordinated the discussions and enjoyed the open attitude of participants, as well as their wish to improve the impact of Biochemistry and Molecular Biology for a better PhD level.

We were extremely grateful to the FEBS team, a very professional one and we hope to keep active links with FEBS ...”

The FEBS group was also present at the International Congress of the Romanian Society of Biochemistry and Molecular Biology which, following the education workshop, took place 1-2 October in the same venue. Keith participated in the Opening Ceremony and talked on behalf of FEBS. The FEBS Group found that the interactions with biochemists from all over Romania were very useful for both sides.



FEBS representatives at the RSBMB conference.

This meeting ended with a memorable "wine testing event" in the Agronomia of the



Delia, PhD, presenting the secrets of wine-tasting.

This productive Workshop activity of FEBS Education Committee has, for the second time (after the first one ran in Sofia last year), been well accepted and useful for both sides. We all hope it will be followed by many such workshops in the future.

- **Athens Workshop on Biochemistry Education**

On May 14th, a FEBS Workshop on Biochemistry Education was held in Athens, hosted by Costas Draianas who is a member of Hellenic Society for Biochemistry and Molecular Biology. The Chair of Education Committee of HSBMB, Prof. Kyriakidis, was the coordinator for this Workshop, which was attended by around 30 participants representing a number of institutions from all over Greece. The scientific program of the Workshop was accomplished, as given below:

**FEBS WORKSHOP ON BIOCHEMISTRY EDUCATION
INSTITUT PASTEUR, ATHENS, GREECE (Friday, 14 May, 2010)**

Provided by the Education Committee of FEBS

Coordinator: DA Kyriakidis (HSBMB)

From FEBS: K Elliott, G Güner-Akdogan, J Perret, C Drainas

From HSBMB: DA Kyriakidis, C Drainas

08:30-09:00 Registration

09:00-09:15 Opening and Introduction to the programme

DA Kyriakidis, C Drainas, G Güner-Akdogan, K Elliott

09.15 -13.00 Problem-Based Learning

09.15-10.45 "Problem-based learning (PBL) – the experience in Manchester and in Izmir"

K Elliott (Manchester) and G Güner-Akdogan (Izmir)

10.45-11.00 Introduction to the Workshop and dividing into groups

11:00-12.30 Workshop: work in groups with examples of problems-cases.

K Elliott, G Güner-Akdogan, J Perret, C Drainas

(Coffee will be served at the tables)

12.30-13.00 General Discussion (Whole Group) K Elliott (Moderator)

13:00-14:30 Lunch

14.30-18.30 Post-Graduate Education

14:30- 15:15 Qualities in Post-Graduate Education and Post-Graduate Education in Greece

G Güner-Akdogan (Chair, FEBS Education Comm) and C Drainas (Chair, HSBMB)

15:15- 16:00 "What abilities are needed by the student and what skills are needed by the supervisor" J Perret (Bruxelles)

16:00-16:15 Introduction to the Workshop and dividing into groups

16:15 - 17:15 Small Group Discussions on 1. Student abilities and supervisor's skills, 2. Role of the supervisory committee, 3. PhD curriculum, 4. Experimental research-based thesis.

C Drainas, DA Kyriakidis, J Perret, K Elliott, G Güner-Akdogan

(Coffee will be served at the tables)

17:15 – 18:00 Presentation of small groups to the whole group (J Perret-Moderator)

18.00-18:30 General Discussion on Post-Graduate Education (Whole Group)

G Güner-Akdogan, K Elliott, J Perret, C Drainas, DA Kyriakidis

18:30-19:00 Concluding the Workshop

DA Kyriakidis, C Drainas, G Güner-Akdogan, K Elliott, J Perret



Constantin Drainas, giving his talk on Post-Graduate Education in Greece.

Constantin Drainas, who is a member of FEBS Education Committee, besides hosting this workshop together with Prof. Kyriakidis, the Chair of Education Group of HSBMB, has kindly accepted to give a talk on the post-graduate education in Greece. He presented the results of his investigation applied to all the state universities of Greece.



Gül Güner-Akdogan, tutoring a problem-based-learning group.

The participants formed two small-groups and two cases, representing two different approaches to case-writing, were used for discussion. While both cases were excellent for motivating learning through problem-solving, there were differences in the way the cases were written. Izmir case, Melis Bora, a case on obesity, was structured in consecutive sections, each giving new data on the case, and asking questions for discussion. This case represented the "New Mexico" style. The case from Manchester on diabetes was designed with a different approach, being less structured and allowing more space for independent learning. Both groups worked well and enjoyed the way the PBL functioned.



Keith Elliott and Jason Perret co-tutoring.

Both groups were observed to be very enthusiastic about the process of Problem-Based-Learning. The teachers played the role of students and tried to think the way students would receive this active learning process. They asked questions to each other, discussed, formed hypotheses, approached the limit of their knowledge, and , finally created learning issues on which to work independently till the next session.

At the end, there was a discussion session for the whole group and this time, the teachers discussed the philosophy and mecanism of PBL from the pedagogical points.

- **Education events at 2010 Gothenburg FEBS Congress:**

The events planned by the Committee are as follows:

- (1) Workshop on "Research in Undergraduate Education"
- (2) Workshop on "Research Oriented Education at High Schools"
- (3) Practical Systems Biology Workshop
- (4) CV clinics.

The Workshops on "Research in Undergradaute Education" and "Research-Oriented Education at High Schools" will be held on Monday, June 28th. These activities will be treating a primordial issue in education- the education of research both in

universities and in high schools. Presentations from experts in this field will be followed by panel/small group discussions. Besides faculty members, academicians and research associates, the target audience for these workshops are also "high school teachers. The Organisers have kindly waived the registration fees for the one-day participation of high-school teachers.

The program is as follows:



(www.feb.org)

FEBS CONGRESS, GÖTEBORG
" EVENTS on RESEARCH EDUCATION" (28th June, 2010)

(The announcement as it appears on FEBS 2010 website):

WORKSHOP 1:

**"The Researching, Teaching and Learning Triangle at Universities: Unite or Divide?"
(Research in Undergraduate Education)**

Monday, 28th June: 13:00 – 15:30

Chairs: Miguel Castanho (U Lisbon) and Gul Guner-Akdogan (Dokuz Eylül U, Izmir)

Program:

10 min – Miguel Castanho – "Context, motivation and timeliness of the theme"

20 min – Ana Sebastião (U. Lisbon, Portugal) – "Research in undergraduate medical education"

20 min – Jane Saffell (Imperial College, UK) – "Research in the early stages of scientific curricula"

20 min – Jorge Guimarães (CAPES, Brazil) – "Nation-wide program for undergraduate research: The long Brazilian experience"

20 min – Susan Hamilton (Queensland, Australia) - "The Advanced Study program in science:

Exposing motivated and interested students to the research culture of the University of Queensland"

60 min – Panel discussion with the speakers

(Moderator: Jason Perret)

WORKSHOP 2:

"Research-Oriented Education at High Schools"

Monday, 28th June: 15:40-18:00

Chairs:

Jane Saffell (Imperial College, London) Gül Güner-Akdogan (Dokuz Eylül U, Izmir)

Participants: High school science teachers from different European countries, faculty involved in research education at undergraduate and/or graduate levels, PhD students, etc.

Program:

10 Minutes: Jane Saffell - Introduction to the Workshop

10 Minutes: Gul Guner-Akdogan - Coordinating Research Project competitions between High School students in the Izmir region

20 Minutes: Short Presentations from the science teachers (if requested)

60 Minutes: Small Group Discussions

Topics:

1. How research-oriented education is carried out in high schools?
2. What are some problems?
3. What are the solutions?
4. How can research education at high schools be integrated with universities?

30 minutes. Report to the whole group and whole group discussion
10 minutes: **Conclusions of the Workshop**

WORKHOP 3:

(The announcement as it appears on FEBS 2010 website):

“Practical System’s Biology; an Introduction to Mapping and Modelling of Cellular Signal Transduction”.

June 29th, 13:00-15:30

Workshop Chair: Stefan Hohmann

Coordinator of the Workshop: Marcus Krantz

The attendees will be introduced to different visualisation strategies for signal transduction pathways, and how to use pathway maps as a base to create mathematical models. The workshop will contain a brief introduction to mapping and modelling and to the software used. This will be followed by independent work with a set of small case studies that demonstrates the basic methodology.

The workshop will be basic as regards mapping and modelling and assume no prior knowledge of the methods or software used. However, it will assume a good understanding of the principles of cellular signal transduction. A brief introduction to the problems and strategies for visualisation of signal transduction pathways can be found in:

The Systems Biology Graphical Notation by Le Novère et al. (PMID: 19668183).

Important Note:

Participants are expected to bring their lap-tops with them.

Registration to the Workshop:

As the total number of participants will be limited, please send an e.mail, before May 31st, both to:

Marcus Krantz, Coordinator of the Workshop:

marcus.krantz@cmb.gu.se

and to:

Gul Guner-Akdogan, Chair of FEBS Education Committee:

gul.guner@deu.edu.tr

So far, 28 applicants from different universities in Europe have been accepted and 8 are on the waiting list.

Cv Clinics

CV Advising sessions will be run by Keith Elliott, supported by Jason Perret and Gül Güner-Akdogan. The main focus will be on the participants of YSF.

- **FEBS WORKSHOP ON BIOCHEMISTRY EDUCATION
OPATIJA NEAR RIJEKA, CROATIA (18-19 September, 2010)**

In 2010, the second workshop on biochemistry education organised by FEBS Education Committee will be held in Opatija near Rijeka, hosted by Prof. Karmela Barisic, who is a member of FEBS Education Committee. The program of the Workshop as agreed by all parties and as it appears on the website of CSBMB is given below:

Provided by the Education Committee of FEBS

Coordinator: Karmela Barisic

From FEBS:

K Elliott, G Güner-Akdogan, J Perret, K Barisic, C Willmott*, M Sprinzl**

*** Invited from Leicester University, UK**

****Kind support from the Chair of WOGCEE**

First Day (18 September 2010)

10.00-11.00 Registration

11.00-11.15 Opening and Introduction to the programme

11.15 -13.00 Ethics Education

11:15-11:45 "Different Approaches to Ethics Education"

Chriss Willmott

11.45- 13:00 "Interactive Session on Ethics Education"

Chriss Willmott

13:00-14:30 Lunch

14.30-18.15 Postgraduate Education

14:30-14:40 Introduction . Gül Güner-Akdogan (FEBS Education)

14.40-15.10 "Quality in Post-Graduate Education" Gül Güner-Akdogan

15.10-15.30 Short coffee break and dividing into groups

15.30 -16.30 Small Group Discussions on 1. Student abilities and supervisor's skills, 2. Role of the supervisory committee, 3. PhD curriculum, 4. Experimental research-based thesis.

Karmela Barisic, Jason Perret, Matthias Sprinzl, Gül Güner-Akdogan, Keith Elliott, Chriss Willmott (If needed)

16.30-17.15 Presentation of small groups to the whole group

17.15- 18.00 "What abilities are needed by the student and what skills are needed by the supervisor" Jason Perret (Université Libre de Bruxelles)

18.00-18:30 General Discussion on Post-Graduate Education

(Gül Güner-Akdogan, Keith Elliott, Jason Perret, Mathias Sprinzl, Chris Willmott, Karmela Barisic)

18:00-18:15 Concluding the Workshop

18:30 – 20:00 Welcome Reception of the Workshop

(The program is visible on the website of CSMBM).

- **Educational Events during Torino FEBS Congress (2011)**

The planning of the educational events for Torino Workshop are under way. Two workshops are being envisaged:

The first one, on "Integrating bioscience education with medical training";

The second one, "Post-Graduate Education".

In addition, CV advising clinics for the young scientists from YSF will also be carried out, as in the previous years.

6. Liason with other bodies within and outside of FEBS

- **WOGCEE**

FEBS Education Committee is in close collaboration with WOGCEE.

In line with the suggestions of the past Chair of WOGCEE, Prof. Guy Dirheimer and the present Chair, Prof. Mathias Sprinzl, visits were planned to Biochemistry Departments in Romania, following the FEBS Education Workshop. These visits were realized early in October, in conjunction with the Education Workshop, in Cluj-Napoca. Keith Elliott and Jason Perret stayed a couple of more days for the later visits in Bucarest.

Gul Guner Akdogan, as ex-officio member of WOGCEE was present on the FEBS EX-COM team to visit Slovakia; hosted by the Slovakian Society of Biochemistry and Molecular Biology. During this visit, Gül had the chance to introduce the activities of FEBS Education Committee to the Slovakian biochemists and it was agreed that a FEBS Workshop on Biochemistry Education would be hosted by SSBMB in September 2011.

- **Science and Society Committee**

There is an ongoing collaboration between FEBS Education Committee and Science and Society Committee. FEBS Education Committee appreciated the kind support of the Chair of the Committee, for the information on possible invited speakers of the Science and Society session in Prague, to support the "Ethics Education" Workshop. Presently, further discussion for future collaborations is under way.

- **FEBS Constituent Societies**

In order to enhance communication and collaboration with the possible education groups of the Constituent Societies of FEBS, the questionnaires which have been sent to Constituent Societies- are being collected. These questionnaires provide evidence for the interest of the Societies on educational issues.

- **IUBMB**

Collaboration with IUBMB Education Committee is one of the objectives of FEBS Education Committee, as indicated in the FEBS Statutes. Gül Güner Akdogan has been offered to be a member of IUBMB Education Committee to enhance the collaboration. As last year, this year, also, a project proposal has been submitted to IUBMB to “co-fund” the Workshop on “Research in Undergraduate Education”, and a support of 5200 has been approved. In addition, Prof. Susan Hamilton, the Chair of IUBMB Education Committee, has kindly accepted to give a talk during this Workshop.

6. Other Issues

Web-site space of the Education Committee has been continually made up-to date and a project on using interactive web techniques for educational sessions has been agreed-on by the Committee during its Athens Meeting (May 15th). Peter Ott has been co-opted for this project.

7. Conclusion

FEBS Education Committee has largely fulfilled the goals set for the past year. We greatly appreciate all the support of FEBS EX COM and of other committees. FEBS Education Committee is determined to continue and uphold the legacy left by late Prof. Edward Wood.

Reported by:

Gül Güner-Akdogan
Chair, FEBS Education Committee

Izmir, June 7, 2010.