



FEBS

EDUCATION COMMITTEE

REPORT

1.01.2009 - 31.12.2009

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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, it was transformed from the "Working Group on Teaching Biochemistry, Chaired by Prof. Jean Wallach (2001-2007)" to the "Education Committee (2007-)" having as its first Chair, Prof. Edward J Wood. At the same Council Meeting, Prof. Jean Wallach and Prof. Gül Güner-Akdogan were newly elected as members of the Committee. Prof. Jason Perret and Dr. Keith Elliott were agreed to continue on from the Working group as members of the Committee till January 1, 2008. Prof. Peter Ott (webmaster) would remain as a Committee member till 1st of January 2009.

As is known, FEBS Education Committee faced the sad event of losing its first Chair on December 14, 2008. Prof. Gül Güner-Akdogan was agreed by FEBS Governing bodies to

serve as the Acting Chair of the Education Committee and she was asked by the General Secretary, early in January 2009, to take over until 31st December 2009, and a new Chair was to be elected at the FEBS Council in Prague.

Although the Education Committee is relatively new, it has many advantages:

- The Committee had its beginnings as a Working Group and gradually, over time, developed into a Committee.
- The Chair of the Working Group (Jean Wallach) and the First Chair of the Committee (Edward Wood) were professors dedicated to the Science of Biochemical Education and experts in the field.
- The Working group, from its beginnings, as well as the Committee, enjoyed the significant support of all its members and Ex-Officio members.

This report on the activities of the Education Committee comprises the one-year period from 1st January 2009 to 31st December 2009.

2. Structure and Composition of the Committee

The Education Committee has contributed ideas and suggestions to the development of the Statutes and By-laws of FEBS. 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 Drinas (Elected at Athens FEBS Council, 2008).

Acting Chair: Gül-Güner Akdogan (Elected as member at the Istanbul FEBS Council, 2006 and has been Acting Chair till 31st December 2009). Gül-Güner Akdogan was elected at Prague Council to take over as Chair of the Committee, as of 1st January 2010.

Co-Opted: Keith Elliott (Since 1st January, 2008)

Ex-Officio Members: Israel Pecht, John Mowbray, and Karl Kuchler (the latter, when the Statutes are approved by the Council)

3. Commemoration for late Prof. Edward J Wood, Committee Chair

FEBS Education Committee faced the sad event of losing its First Chair, Prof. Edward J Wood, on December 14th, 2008, who had made a significant impact on the development of the Committee as well as on the promotion of Biochemical Education throughout Europe and the whole world.

The following steps were taken by the Education Committee, to commemorate Ed Wood:

- A letter of condolences was sent to Helen Wood, Benjamin and Dominic Wood and families
- Prof. Gül Güner-Akdogan attended, in the name of FEBS Education Committee, the Memorial Gathering for Ed Wood on 3rd February 2009, organised by his Family and the University of Leeds. Gül Güner was given the chance to talk to the participants and share the Committee members' thoughts and feelings for Ed Wood.
- Ed Wood was remembered by a short talk by Keith Elliott at the Ethics Education Workshop organized by the Education Committee (Co-sponsored by IUBMB) on Sunday July 5th, 2009, during the Prague Congress.

- FEBS News Special Issue on Prof. Edward J Wood was prepared for the Prague FEBS Congress

4. Committee Meetings

In 2009, the Committee held two meetings:

- The first Education Committee Meeting during this year was held in Lisbon on March 28th, 2009. The Meeting was chaired by Prof. Gül Güner-Akdogan and hosted by Prof. Miguel Castanho, member of FEBS Education Committee. Attendance was 100%: K Barisic, M Castanho, C Drainas, K Elliott (co-opted), G Güner, J Mowbray, I Pecht, and J Perret. The main issues discussed were the arrangements for the educational events at the Prague Meeting, the Commemoration of Ed Wood, the organisation of a Workshop in Romania in September 2009 (Napoca-Cluj), and future activities of the FEBS Education Committee.
- The second Meeting of the Education Committee took place in Izmir, Turkey on October 24th, 2009, with Gül Güner Akdogan as the hostess. The Meeting 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 Gothenburg (2010) and Torino (2011) FEBS Congresses were discussed. Among other issues was the organisation of Biochemistry Education workshops in eastern European countries in 2011- in Slovakia and in Estonia. Collaboration with other organisations was discussed, as well as the organisation of an interactive web-site.

5. Representation at EX-COM Meetings

- The Committee was represented by Gül Güner-Akdogan at the Strasbourg EX-COM Meeting on March 14th, 2009 and at the Tallinn EX-COM Meeting on November 14th, 2009.

6. 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. Four speakers illustrated several examples of current approaches to Systems Biology education, at levels from undergraduate to post-doctoral:

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 SRBMB 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-Akdoğan 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-Akdoğan, 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-Akdogan, 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 university.



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.

- **Future Events**

In 2010, another Biochemistry Education Workshop is envisaged to be organised in an Eastern European country. Croatia seems to be the near candidate, and Prof. Karmela Barisic, a member of FEBS Education Committee, is helping with the correspondence. Further applications are being invited from different FEBS Constituent Societies (Please see under 6c). Educational events (Workshops on “Research in Undergraduate Education” “Research-Oriented Education in High Schools”, and “Practical System’s Biology”) will be organised during FEBS Gothenburg, in June 2010. CV advising sessions will also be conducted during this Congress.

7. Liason with other bodies within and outside of FEBS:

- **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. These visits were realized early in October 2009, 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**

FEBS Education Committee appreciates the kind support of Prof. Georgia Semenza, 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. In fact, Prof. Göran Hermeren (Lund University), who was a key-note speaker in the Science and Society session, kindly accepted to change his flight to arrive in time to give a plenary lecture on “Research Ethics” during the “Ethics Education” Workshop of the Education Committee.

- **FEBS Constituent Societies**

In order to enhance communication and collaboration with the possible education groups of the Constituent Societies of FEBS, a letter and a questionnaire have recently been sent to Constituent Societies- some responses have already been collected. With their permission, information on their Education Groups will be posted on FEBS website.

- **IUBMB**

Collaboration with IUBMB Education Committee is one of the objectives of FEBS Education Committee, as indicated in the FEBS Statutes. Following the communication between Susan

Hamilton, the Chair of IUBMB Education Committee and Gül Güner-Akdogan, a Project proposal was prepared by the latter, to seek for the co-funding of the Ethics Education Workshop. This issue had been presented to the ED-COM by Gül Güner-Akdogan in Strasburg, in order to seek authorization from the Committee to go ahead with the Proposal, which was kindly given. The results of the proposal is that IUBMB agreed to co-fund this Workshop-with the special feedback note from the reviewer that "An excellent Project has been prepared" .

8. Other Issues

There has been an agreement to inaugurate an interactive FEBS education platform, with the aim of providing information on educational resources, innovations on education, as well as stimulating discussions.

9. 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 2nd, 2010.