UNIVERSITY OF SZEGED

Department of Dentistry and Oral Surgery

Albert Szent-Györgyi Medical & Pharmaceutical Centre

DentEd Visit Report

23-27 September 2000

UNIVERSITY OF SZEGED

Department of Dentistry and Oral Surgery

Part I School Self assessment Document

Part II Visitors Comments and Executive Summary

Contents

Part I – Self Assessment Document

Part II – Visitors' Comments and Executive Summary

INFORMATION FOR DENTED VISITORS

The school is asked answer the following questions using the reference number for each section. Explanations and description of courses and structures from the host school are essential pieces of information for the visitors before the visit.

Name of School:	University of Szeged Faculty of Medicine Department of Dentistry And Oral Surgery Albert Szent-Györgyi Medical and Pharmaceutical Center
Address:	H-6720 Szeged, Tisza Lajos körút 64.
Dean of School:	Prof. Dr. Albert **Mari** e-mail: fax: 36-62/545-282 mari@stoma.szote.u-szeged.hu
Contact Person:	Prof. Dr. András **Fazekas** e-mail: fax: 36-62/545-303 fazekasa@stoma.szote.u-szeged.hu
Secretary assigned to Visitors by School:	Györgyné **Dittmann** e-mail: fax: 36-62/545-282 dittmann@stoma.szote.u-szeged.hu
Dates for visit:	09. 23. 2000. to 09. 27. 2000.
Visitors (to be confirmed):	Anders **Nattestad** e-mail: fax: an@odont.ku.dk
	Frank **Burke** e-mail: fax: fmburke@iol.ie
	Henk **Kersten** e-mail: fax: h.kersten@acta.nl
	Marie de Montfort **Supple** e-mail: fax: mdsupple@dental.tcd.ie
Regional Co-ordinator	Jindrich **Pazdera** e-mail: fax: pazderaj@fnol.cz

Part I – Self Assessment Document

Section 1 – Introduction and General Description

University of Szeged Faculty of Medicine

Department of Dentistry And Oral Surgery

1. **General introduction and description of your school**

University of Szeged Faculty of Medicine Albert Szent-Györgyi Medical and Pharmaceutical Center Department of Dentistry and Oral Surgery was established in September 1949. The Dental clinic at that time was established with the aim of teaching medical students of the university, treating patients with special problems and continuing scientific work.
It is a state university. The clinic functions in the present building since 1950. The education of dental students began in 1960. Since that time about 800 students got dental degree in our dental school. There are nine departments in the dental clinic, 16 different subjects are taught. Dental medicine is taught for dental students in Hungarian and for general medical students in Hungarian and English language.
At present the Department of Dentistry and Oral Surgery has different functions such as specialized patient care (out-and in-patient), educating dental and medical students and perform research work in dental medicine. The dental school is also one of the four university dental clinics, which are (according to the law of high education authorities) responsible for the governmentally subsidized postgraduate vocational training of two years, which includes not only a tutor controlled dental medical activity, but also theoretical and practical courses. The aim of this training is to prepare the graduates to convert their knowledge and skills learned in the undergraduate period into a professional daily routine.
The construction fulfilment of the curriculum and teaching program, according to the general prescriptions by governmental authorized committees and by the medical chamber is since October 1999 also a task of the teaching staff of the dental school.

2. **A mission statement and the primary aims and objectives of your school**

The aim of the Dental School is to educate dentists, who have a high level knowledge in dental sciences and in medicine, as well. The students have to acquire all the attributes needed to become a dentist with a profile of European demands. They must have great responsibility and sense of vocation during their work. They have to be able to read foreign books and dental publications, they have to take part in a continuing education, even in the frame of self education. They have to know the clinical and legal rules of their activity, They have to be able to use health informatics.

3. **How you manage to achieve your stated aims and objectives**

We integrate the latest results of the theoretical and clinical medical sciences in the teaching. We plan to introduce modern technical, video programs, computer programs, etc. We plan to introduce the credit system in our Dental School. It is necessary to start a PhD program.

4. **Specific characteristics of your teaching programme including any unusual features,** innovations (avoid detail as this will be repeated in detail in the appropriate section)

The specific characteristic of our teaching is the good teacher/student ratio, which is 1:5-6. In the clinical and laboratory training the teachers show and control every small steps and movements. The teachers know all the students well, they know there problems, and also when they need help or more control.

5. **General reference to resources (staffing administration) and facilities**

The house of the clinic is old and it wasn't planned to function as a dental clinic. So the building has some shortcomings to fulfil the requirements of a modern clinic. The number of the students increased in the last years. It would be necessary to build a new, and modern clinic. The number

of the teaching staff members is sufficient to teach the students, they possess the necessary theoretical and practical knowledge to fulfil all the tasks needed to the education of dental students.

6. Overview of Research

Earlier the main research topic was caries epidemiology, the research subjects of the last years are implantology, anthropology, oral cancer and microbiology.

7. Coping with continuous improvement of quality in teaching, research and patient services

The colleagues follow the results of the dental medicine researches. There are journals in all fields of clinical sciences of dental medicine available in the library. The clinic has a foundation, which helps to buy new books in dentistry. Photo and slide documentation is made about different cases for the students and for presentation in congresses. The doctors take part in conferences and other scientific programs. The financial support, offered by the university, of such activities is low.

The patients of the students treated in practical courses receive prosthetic appliances for a lower price, since it is subsidized by the university. In this way the students can practice every kind of prosthodontic work during their education.

8. Significant aspects of the school's programme.

The main goal of the teaching program of Szeged University Dental School is to educate students during the undergraduate period and to make them capable to apply all the basic methods of diagnosis, treatment, follow up care and prevention in dental medicine. Moreover, they should be prepared to be able providing medical emergency interventions in case of accidents and especially to solve the problems of medical emergencies in the outpatient dental ambulatory service. They have to possess all those basic knowledge of general medicine, which make them capable to diagnose the general health problem of their patients and to be able to refer them adequate to medical care. The students should be prepared to provide the dental medical care on the bases of ethical and legal rules of the medical profession. After getting their dental degree they have to take part in a residency program, which is a vocational training with the duration of two years in the field of dental medicine and also in professional continuing education.

Section 2 - Facilities

(including Library, Lecture Theatres, Seminar Rooms etc.)

2.1 Clinical Facilities

General Explanation

The building of the dental clinic has a central situation in the city, close to the other clinics and institutes of the university. It is a four-storey house with a cellar and with two staircases. The building has two main parts. In one of them are situated the surgeries of the different departments, the lecture room, the technical laboratory for the students and for technicians, the museum or seminar room, some offices for the staff. In the other part of the building one can find the operating theatres, the in-patient ward, the library, the histological laboratory and the office of the dean of the dental clinic. The students' dressing room and the store room got a place in the cellar. There are two additional buildings in the yard, one for the chemical laboratory and another for the storage of different materials.

Strengths

The building is situated close to the other clinic of the university. All the departments, which are necessary for the education of the dental students, can be found in one building. The communication and connection among the departments is easy, the clinic is suitable for teaching comprehensive dental care. The surgery of the conservative dentistry and some smaller surgeries are installed with modern dental units, they are suitable for all kinds of dental treatment and student practise.

Weaknesses

Since it is an old building there is a need of a continuous repair. The surgeries are not big enough, the dentists don't have separate surgeries to work without being disturbed by the student practices. Only some of the doctors have an own office to work in it and keep their books and slides there.

Best Practices

Innovations

Visitors Comments

2.2 Teaching Facilities

General Explanation

Strengths

Weaknesses

Best Practices

Innovations

Visitors Comments

Library

There are more thousand books in the dental and medical literature and also text books written in Hungarian, German and English languages. In the library one can find computer with access to the Internet. In comparison with the number of the teaching staff the area of the room is small. All the Hungarian professional periodicals and the journals of oral surgery, orthodontics, periodontology, prosthodontics and restorative dentistry are available. Regular use of this well-situated room promotes the professional continuing education and scientific research of both the doctors and the students.

Lecture room

In this room we perform lectures to dental students. Besides them medical students from both the Hungarian and the English program are given here lectures, too. Compared to the number of students the lecture room has the adequate size and equipment. There is a video equipment and overhead-projector and two slide-projectors. During lectures all these facilities are used. The quality of the equipments is good, but of course it doesn't mean that some innovation wouldn't be needed.

Seminar room

Our seminar room is the so-called "Museum", where all the study aids are stored. It is connected to the lecture room. The room is suitable for smaller meetings and consultations. The students have exams here, as well.

2.3 Teaching Laboratory

General Explanation

Teaching laboratory is on the second floor. It consists of two rooms. One of these is a plastering room, providing possibility to different working processes, like casting gypsum, impression process and polishing systems. There are fourteen places as working benches in the other room, where the practical courses go on. Fourteen students are able to be educated one time. Second, third and fourth year students take part in a pre-clinical course. The third and fourth-year students have practical education in restorative dentistry, prosthodontics and orthodontics, where they learn all the theoretical and practical basics, which they need for treating patients (eg.: fillings, root-canal treatments, preparation for crowns and bridges) and the technical processes as well. The aim of the courses in the teaching laboratory is to give practical experience to students covering the complete laboratory sequence of events during complete denture, crown and fixed bridge constructions. The most important aim of laboratory work is to train students for clinical sessions providing practical knowledge.

Strengths

Every student has an own working bench equipped with phantom heads, micromotor and handpieces. The working benches are in good statement. There is a possibility to make the wax-up technic, the whole armamentarium is applied in the laboratory. The conditions are suitable to continue preclinical courses for different subjects, as conservative dentistry, prosthodontics and orthodontics and dental technical courses, as well.

Weaknesses

The students use a great amount of materials while practicing. Unfortunately they are not replaced on a regular basis. Sometimes we are not able to demonstrate the newest and most modern way of treatments and materials. There is a huge need for the modernization of the equipments, mainly the phantoms.

There is no possibility to simulate the clinical circumstances in the laboratory, therefore the students cannot be prepared perfectly for the clinical courses. Working benches are not equipped with suitable phantom heads, turbins, exhaustors, etc.

Best Practices

Innovations

Visitors Comments

2.4 Research Laboratory

General Explanation

The laboratory help the research work of the dental clinic. These are some chemical practices in the curriculum, which take part in the laboratory. The students can use the equipments of the laboratory under the supervision of the research worker of the clinic. The work in the laboratory provides the possibility for research for the staff and the students, as well. Examinations are carried out for the other institutes of the university regularly.

Strengths

In the research projects of the last years many chemical analysis were carried out. These are appropriate equipments for such work. The analytical measurements are made mainly with spectrophotometry. There is possibility for the cooperation with all the laboratories of the university in the research work.

Weaknesses

With the instruments available in the laboratory it is not possible to make all kinds of analytical work. The facilities of the research laboratory cover only a limited field of scientific research activities. Some of the instruments are old, there is no possibility get new ones.

Best Practices

In the last decades the most inspiring research field of the clinic was in connection with salt fluoridation. Therefore the laboratory is very much prepared for the chemical analysis of the fluoride compounds. The quantitative and qualitative analysis of the fluorides are examined in body fluids and different anorganic solutions.

Innovations

There were no innovations in the last years

Visitors Comments

2.5 Library

General Explanation

Library is an integral part of our Dental School. Almost all the books and scientific literature in our University concerning with dentistry can be found here. The Central University Library plays an integral role and the specific literature are placed in the (clinical) libraries of the specialities. One librarian is responsible for the stock of the library, she works in a six hour per day working time. After this time the library is available only for the staff of the Dental Clinic .

Strengths

Good connections with other libraries of the university and libraries of other Hungarian dental schools. Rare old books of dental science. Important representative periodicals of up-to-date dental science.

Internet connection, Med-Line is available.

Xerox multiplication is possible.

Access to Other Library Resources

Internal phone connection with the Central University Library and other libraries of the University. Consultation with other in, or out-country libraries via phone call. E-mail, fax or mail is possible.

Information Service

The location of special issues in the University or other Hungarian library can be found on Med-Line or in the Central University Library.

Weaknesses

There is a lack of up-to-date study-books and issues. Only one computer is available in the library. Some of the older papers and books are attainable only with delay as located elsewhere.

Best Practices

Quick looking up of specific articles, and quick copying, making it possible to use them at distance.

Innovations

Taking into account the financial condition of the University subscription to further periodicals is improbable. With the development of the computers and net-connection journals in electronic formats, on-line training programs can be available.

Visitors Comments

Section 3: Organisational and Administrative Structures

Person in School who will explain and show this to the visitors:

Name: Dr. János **Perényi**

E-mail: perenyi@stoma.szote.u-szeged.hu

Please explain (in simple diagram form if possible) the organisational structures under which the school operates including its relationship to hospital, university, medical school/faculty as well as the departmental structures within the dental school.

Please explain what information technology systems your school employs in respect of student education/training, patient records, management and finance systems. Explain if any of these systems are innovative or potentially useful to other dental schools.

Departmental Structures within the Clinic of Dentistry and Oral Surgery

Department of Oral and Maxillofacial Surgery
- Out-patient ambulatory
- Oral radiology
- Oral medicine and stomatological ambulatory
  - – Histology
- Operating theatre
- In-patient ward

Department of Periodontology

Department of Prosthetic Dentistry
- Dental technology laboratory

Department of Conservative Dentistry

Department of Orthodontics and Pediatric Dentistry

Other out-patient ambulatory
- Ambulatory for temporomandibular joint diseases
- Ambulatory for diabetes and renal diseases
- Ambulatory for haemotological diseases
- Ambulatory for maxillo-facial rehabilitation

Other facilities
- Registration office
- Training laboratory for dental pre-clinics (phantom-courses)
- Secretariat
- Office of information technology
- Library
- Cloakroom
- Dressing rooms
- Waiting rooms
- Photo- and documentation laboratory and office

Information technology

The contents of lectures are stored in computers and can be used easily, when required. Illustrative and text-slides are constructed with the aid of slide-editing programs, like Microsoft Power Point, making easy to change or correct the contents of the figure. Computer facilities are at the students and clinicians disposal. With internet accessibility valuable information are attainable. All clinicians have
e-mail address, so the communication is easy and quick for members of the university or practitioners.
Executed treatments are registered on patients files. This is followed by computer registration and data are processed and evaluated by an appropriate program. Processed data are transmitted to the local office of the National Health Care Insurance Company via computer files.

Section 4: Staffing

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. András **Fazekas**

E-mail: fazekasa@stoma.szote.u-szeged.hu

4.1 Please explain the strengths and weaknesses of your staffing levels and describe innovations in gaining maximum benefit from staff available.

Similar to other dental schools in Szeged there are also different departments, as conservative dentistry, prosthodontics, oral and maxillofacial surgery, radiology, oral medicine and oral pathology, orthodontics and paediatric dentistry, periodontology. In the departments there are smaller sections according to the well-defined special tasks. The heads of the departments are all scientifically qualified experienced teachers, who are responsible for the quality of the taught subjects. There are teachers in university position and doctors, who work in their own private practice, who are available for the dental education at the university. This structure provides the required good quality in the teaching of theory and in the practical courses.

Weakness:

The salary of the university teachers is so low, that they have to get other tasks (private practice) in order to increase their income. This second job takes lot of energy from the scientific research work.

List of Staff

List of Academic Staff, by Department, and their Qualifications
(list below)

Conservative Dentistry
Dr. Albert **Mari**, Full Professor
Dr. István **Gorzó**, Associate Professor
Dr. Zoltán **Kiss**, Assistant Professor, Scientific Contributor
Dr. Tibor **Bartha**, Clinical Doctor
Dr. József **Németh**, Clinical Doctor
Dr. Éva **Tóth**, Consultant
Dental Radiology
Dr. Péter **Kapros**, Instructor
Implantology
Prof. Dr. András **Fazekas**, Full Professor
Maxillo-Facial Rehabilitation
Dr. Albert **Mari**, Full Professor
Dr. Katalin **Nagy**, Assistant Professor
Oral and Maxillofacial Surgery:
Prof. Dr. Ádám **Kovács**, Full Professor
Dr. László **Borbély**, Associate Professor
Dr. Ákos **Fehér**, Assistant Professor
Dr. Eszter **Szontágh**, Assistant Professor
Dr. Péter **Kapros**, Instructor
Dr. László **Seres**, Clinical Doctor
Oral Medicine and Oral Oncology
Dr. István **Sonkodi**, Associate Professor
Dr. Jenő **Halász**, Assistant Professor
Paedodontics and Orthodontics
Dr. Gábor **Kocsis Savanya**, Associate Professor
Dr. Erzsébet **László Kókai**, Assistant Professor
Dr. Eszter **Traub**, Instructor
Dr. András **Kocsis**, Clinical Doctor
Dr. Bernadett **Rácz**, Clinical Doctor
Periodontics
Dr. István **Gorzó**, Associate Professor
Dr. Péter **Vályi**, Clinical Doctor
Prosthetic Dentistry
Prof. Dr. András **Fazekas**, Full Professor
Dr. Márta **Radnai**, Assistant Professor
Dr. Anette **Stájer**, Instructor
Dr. István **Pelsoczi Kovács**, Clinical Doctor
Dr. János **Perényi**, Clinical Doctor

Sections 5 - 16: The Dental Curriculum

Please ask the staff member(s) in the subject areas 5 - 16 inclusive (below) to answer the questions set out on the following pages. Because we are collecting information from so many schools we ask that your staff members be as concise as possible yet unambiguous in their answers. Please bear in mind that the visitors may be entirely unfamiliar with some of the systems in the curriculum in your school, so please think of the reader when completing the format set out on the next page.

Schools may decide to combine these subject areas within the main sections 5 - 16 inclusive if that is more convenient. Other schools might choose to use all of the sub-sections listed for purposes of clarity.

Section 5:
- 5.1 Biochemistry
- 5.2 Molecular Biology
- 5.3 Genetics

Section 6:
- 6.1 Anatomy
- 6.2 Physiology
- 6.3 Histology

Section 7:
- 7.1 Pharmacology
- 7.2 Microbiology
- 7.3 General Pathology

Section 8:
- 8.1 General Medicine
- 8.2 General Surgery
- 8.3 Anaesthesiology

Section 9:
- 9.1 Orthodontics
- 9.2 Paediatric Dentistry

Section 10: Public Oral Health and Preventive Dentistry

Section 11: Restorative Dentistry:
- 11.1 Conservative Dentistry
- 11.2 Endodontics
- 11.3 Prosthodontics
- 11.4 Dental Occlusion and Function

Section 12: Periodontology

Section 13:
- 13.1 Oral Surgery
- 13.2 Oral/Dental Radiology and Radiography

Section 14:
- 14.1 Oral Medicine
- 14.2 Oral Pathology

Section 15:
- 15.1 Integrated (Comprehensive) Patient Care
- 15.2 Dental Emergencies
- 15.3 Care of special need patients

Section 16: Practice Management and Communications

- 16.1 Behavioural Sciences
- 16.2 Communications
- 16.3 Ethics and Jurisprudence
- 16.4 Practice Management

Section 5 – The Biological Sciences

5.1 Biochemistry

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. Laszlo **Dux** MD PhD DSc, professor, department head

E-mail: dux@biochem.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The Biochemistry course is taught to the students of dentistry program during the 3rd and 4th semesters. The aim of the course is to bring closer the chemical phenomena in the living system, first of all in human, at the molecular level. Basic enzymology, thermodynamics, and the intermedier metabolism are the topics during the 3rd semester. Biochemistry of tissues and organs as well as the biochemical regulation of living systems, including signal transduction processes are the topic of the 4th semester.
2. Primary Aims – no more than two
   The primary aims to teach basic knowledge in basic biochemistry
   Develop understanding toward equilibrium processes, and regulated systems, basic patho-biochemical processes
3. 6-10 main objectives (list in brief sentences)
   Teaching thermodynamic principles in life
   - Correlation between structure and function at the enzyme level
   - Metabolic pathways in carbohydrate, lipid, amino acid and nucleotide traffic
   - Integration of metabolism in citric acid cycle and bioenergetics
   - Integration of molecular structure and function in tissues and organs
   - Biochemical regulation, signal transduction systems
   - Adaptation, limits of adaptation, health and disease at molecular level
4. Hours in the Curriculum – if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   3rd semester 3 hours lectures, 2 hours practicals per week
   4th semester 4 hours lectures, 3 hours practicals per week
5. Method fo learning/teaching (one/two paragraphs)
   The course is based on lectures, introducing the students to the field, enlighten correlations and general principles. Raising interest and provide vision in the field is preferred over pushing data. Small group seminars are aimed to discuss the topics, complete and further deepen the content of lectures. Individual activities, self motivated activities are encouraged on the part of the students. Practicals are following the topics of the lectures. Certain hands on experiments are aimed to general enzymology. Most of the practicals are focussed on the applied medical biochemistry, i.e. clinical biochemistry, laboratory diagnostics of different metabolites, enzymes etc. Contemporary laboratory diagnostic methods, equipments are demonstrated to the students.
6. Assessment methods (one paragraph)
   During the semesters, students are required to write assay and multiple choice type tests, in a total of three times, to give a feed back about their preparedness. At the end of the 3rd semester an end semester examination, at the end of the 4th semester a final examination, both oral are taken to prove the lexical knowledge as well as the flexible thinking of the students about topic taught during the two semesters.
7. Strengths (one paragraph)
   The strengths of the course are the medical, pathobiochemical approach in discussing areas of biochemistry. Theachers of the course are mainly medically trained colleagues. This provides links and integration toward other subjects taught during the semester (Physiology, anatomy, histology). Good cooperation with producers of equipment and reagents in clinical biochemistry field enables us to keep an updated supply for student practicals.

8. Weaknesses (one paragraph)
   Besides the textbooks, and lecture notes more written material, handouts are needed,

considering the fast changing specialized nature of the course. Core money to support the teaching activities, and infrastructure is often limited.

9. Innovations and Best Practices – list no more than five

Integration of basic biochemistry with the applied medical aspects of the course, pathobiochemistry and clinical biochemistry

Introduction of new equipment and methods of clinical biochemistry into the practical curriculum.

10 Plans for future changes (one paragraph)

In the future the content of the course will be updated, obsolete, or redundant information reduced or eliminated. More weight on the molecular biology, cell biology will be placed, both at normal and pathological sense. Computer modelling of macromolecular structure and function will be expanded in the practicals, in the field of enzymology and functional biochemistry.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

László **Dux** MD PhD DSc	professor, department head	dux@biochem.szote.u-szeged.hu
Ernő **Zádor** PhD	senior research associate	erno@biochem.szote.u-szeged.hu
Péter **Ferdinandy** MD PhD	associate professor	peter@biochem.szote.u-szeged.hu
Margit **Keresztes** MD PhD	associate professor	margo@biochem.szote.u-szeged.hu
Mariann **Török** PhD	senior research associate	mariann@biochem.szote.u-szeged.hu
Anikó **Görbe** MD	assistant professor	aniko@biochem.szote.u-szeged.hu
Zsuzsanna **Kiss**	research associate	zsuzsa@biochem.szote.u-szeged.hu

5.2 Molecular Biology

Person in School who will explain and show this to the visitors:

Name:Prof. Dr. János **Szabad**

E-mail: szabad@comser.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Molecular biology is taught in the frame of medical biology.
2. Primary Aims - no more than two
   The medical Biology course aims the teaching of modern concepts of genetics, molecular and cell biology to the students, foundation their future studies and profession. Much attention will be devoted to evolution of living organisms as well as the values of our environment.
3. 6 - 10 main objectives (list in brief sentences)
   Cytosceleton and cell movements
   Membranes and cell communication
   Hormones and their molecular avtions
   The cell cycle
   Molecular biology of tumor formation
4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Thirty-four hours in the Medical biology theoretical course and fifty-six hours in the Medical biology practical course
   For the next questions see Section 5.3 Genetics
5. Method of learning/teaching (one/two paragraphs)

6. Assessment methods (one paragraph)

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Zsuzsanna **László** PhD kizs@comser.szote.u-szeged.hu
    György **Seprényi** PhD seprenyi@comser.szote.u-szeged.hu

5.3 Genetics

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. János **Szabad** MD PhD DSc, professor, department head

E-mail: szabad@comser.szote.u-szeged.hu

1. **An introductory** single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

   Genetics is taught within the frame of Medical biology. Medical biology is taught during the first year of the curriculum. The theoretical course means 56 hours (two semesters x 14 weeks/semester x two hours of lectures/week). Frame of the Medical biology course is genetics, molecular and cellular biology. “strict genetics” is taught in 34 hours. The Medical biology practical course covers 77 hours (14 weeks during the first semester x 2,5 hours/week plus 14 weeks during the second semester x 3 hours/week). Genetic (including molecular genetics) aspect of the practical course cover 56 hours. A voluntary problem solvingcompetition is organized throughout the semester. Students have to pass an exam following the first semester and a final exam following the second semester. The exam, and also the first part of the final exam, is written. Students are respected to solve six problems and define ten terms in two hours. The final exam has a verbal part. Accomplishment during the practical courses are credited by grades at the end of both semesters.

2. **Primary Aims -** no more than two

   1. Understand the mechanism of inheritance. (The Mendelian laws, linkage and genetic maps.)
   2. Understand fuctions of the genetic material. (Replication, transcription, translation, mutation, regulation of gene expression.)
   3. Understand principles and practice techniques of molecular biology (Restriction enzymes, RFLP, VNTR, PCR etc.)
   4. Understand genetic regulation of development. (Maternal effect, homeosis, atavism, signal transduction, cell differentation, cancer formation.)

3. 6 - **10 main objectives** (list in brief sentences)

   1. Make students familiar with chromosomal basis of inheritance, chromosome organization, chromosome abnormalities, cytology, the transmission of chromosomes and the defects that stem from abnormal segregation of chromosomes (nondisjunction and chromosome loss).
   2. Teach students the bases of genetic variability: meiosis, crossing over and genetic mapping.
   3. Teach students essential features of DNA, i.e. lay down foundations of molecular biology and gene functions.
   4. Teach students principles of recombinant technology.
   5. Make students practice molecular genetic techniques and show the power of DNA-based diagnosis.
   6. Teach students heritable changes in the DNA (mutations) and their role in development, cancer formation and evolution.
   7. Explain cell functions in lights of gene function.

4. **Hours in the Curriculum** - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

   Thirty-four hours in the Medical biology theoretical course and fifty-six hours in the Medical biology practical course (See paragraph #1)

5. **Method of learning/teaching** (one/two paragraphs)

   In addition to the theoretical lectures and the practical course the following was are of help to the students.

- A “Biology Booklet” with 28 chapters (~8 pages/chapter) summarizing messages of the lectures
- The books that serve the basis of the lectures are available in multiple copies in the library of the Biology Department.
- A Study Guide booklet is provided to every student with the list of the lectures and the practicum, the references as well as the exam topics.
- A “Biology Practical Booklet” that covers materials of the practical course.
- A voluntary weekly problem solving competition is organized. (Students have a week to solve 4-6 problems associated with the past lecture. The correct answers to the study questions are presented after a week.)
- Four voluntary exercises (two hours each) are organized during the two semesters. (The voluntary exercises are organized as the exams.)
- Consultations upon requests.

6. **Assessment methods** (one paragraph)

Achievements of the students are assessed and credited four times:

- The exam and the final exam evaluate achievements in the theoretical course.
- Achievements of during the practical course are weekly evaluated by the practical teacher and credited at the end of both the first and the second semesters.

7. **Strengths** (one paragraph)

There are few student every year who show much interest in genetics and are impressed by genes and abnormalities in dentistry.

8. **Weaknesses** (one paragraph)

The general interest of dentistry students is not impressively high in not only Medical biology but also the theoretical courses in general. It is hard to convince them about the general importance (not only intellectual but also practical) of the basic courses.

9. **Innovations and Best Practices** - list no more than five

1. The use of microscopes and microscopic measurements.
2. Prenatal chromosome and DNA-based diagnosis.

10. **Plans for future changes** (one paragraph)

It has been long planned to make use of DNA-based diagnosis in (I) to monitor bacterial infections in dentistry patients and (II) to determine histocompatibility aiming transplantation in dentistry.

11. **Visitors Comments**

12. Append staff names, qualifications and email addresses for this Department

Zsuzsanna **László** PhD kizs@comser.szote.u-szeged.hu
György **Seprényi** PhD seprenyi@comser.szote.u-szeged.hu

Section 6 – Pre-Clinical Sciences

6.1 Anatomy

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. András **Mihály**

E-mail: mihaly@anat-fm.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Dental School student learn Anatomy for two years (1st and 2nd) – four semesters. he curriculum includes descriptive and topographical anatomy of the whole body; exactly the same what is taught to General Medicine students. The head and neck regions (skull, cranial, nerves, etc …) are in the last semester.

2. Primary Aims – no more than two
   Exact knowledge on organs and organ systems. Exact practical knowledge of topographical anatomy.

3. 6-10 main objectives (list in brief sentences)
   Exact knowledge on organs and organ systems. Exact practical knowledge of topographical anatomy.

4. Hours in the Curriculum – if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Lectures: 154 hours (incl. Histology and embryology)
   Practicals: 168 hours.

5. Method fo learning/teaching (one/two paragraphs)
   Textbooks, lecture notes, cadaver dissection

6. Assesment methods (one paragraph)
   Written (MCQ, Essay), oral, practice (cadaver demonstration)

7. Strengths (one paragraph)
   Regular dissections – regional and organs; availability of cadaver preparations; students dissect on their own.

8. Weaknesses (one paragraph)
   Lack of multimedia; large number of students; large practical groups.

9. Innovations and Best Practices – list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. Lajos **Tóth**, MD, PhD	associate professor	toth@anat-fm.szote.u-szeged.hu
Dr. Annamária **Kovács**, MD, PhD	associate professor	kovanna@anat-fm.szote.u-szeged.hu
Sarolta **Karcsú**, MD, PhD	associate professor	
Dr. István **Pór**, M.Pharm.	associate professor	por@anat-fm.szote.u-szeged.hu
Endre **Dobó**, PhD	associate professor	dobo@anat-fm.szote.u-szeged.hu

Zsuzsanna **Boti**, M.Pharm.	associate professor	
Andrea **Szabados**, MD	teaching assistant	
Erika **Bálint**, MD	teaching assistant	
Bertalan **Dudás**, MD	teaching assistant	dudas@anat-fm.szote.u-szeged.hu
Dr. Ibolya **Farkas**, MD	teaching assistant	farkasi@anat-fm.szote.u-szeged.hu
Dr. Andrea **Czigner**, MD	teaching assistant	czigner@anat-fm.szote.u-szeged.hu
Dr. Réka **Szakács**, MD	teaching assistant	szakacs@anat-fm.szote.u-szeged.hu
Julianna **Jójárt**, MD	teaching assistant	
Imre **Farkas**, PhD	teaching assistant	farkas@anat-fm.szote.u-szeged.hu

6.2 Physiology

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. György **Benedek**

E-mail: benedek@phys.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The physiology curriculum embraces all the normal functions of the human body. The subject is taught in lectures, seminars and laboratory practicals, in 2 semester in 2nd year. Both semester are closed by exam. The main topics of the course are as follow: membrane functions, basic neural functions, muscles, fluid compartments, blood and immune functions, heart and circulations, respiration, functions of the kidneys and regulation of volume, osmolarity and pH of body fluids, gastrointestinal tract, nutrition, metabolism, thermoregulation, sport psychology, motor, sensory and integrative functions of the nervous systems, autonomic nervous systems, endocrine systems.

2. Primary Aims - no more than two
   Primary aims of the course are to provide adequate knowledge about the mechanisms of living functions in the human body and to provide explantations for these functions based on the principles of physics, chemistry, biochemistry and molecular biology.

3. 6 - 10 main objectives (list in brief sentences)
   The course should provide appropriate knowledge of human living functions to serve as a basis for studying pathophysiology and pharmacology and learning about human illnesses. Students should learn methods for studying human physiological functions both in theory and practice. The course serves as a basal education also for those, who are going to do research later.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Lectures: 150 hours (6 and 4 hours per week in the 1st and 2nd semesters respectively)
   Seminars: 60 hours (2 hours per week in both semesters)
   Laboratory practicals: 60 hours (2 hours per week in both semesters)

5. Method of learning/teaching (one/two paragraphs)
   Physiology is taught in lectures, seminars and laboratory practicals. The topics of the preceding lectures are discussed in the seminars, where students can ask questions concerning of the chapter involved. Students should take part in these seminars with good background knowledge. On the laboratory practicals experimens and clinical tests are performed.

6. Assessment methods (one paragraph)
   Students undergo three interim demonstrations (exams) during each semester. The 1st semesters is closed by an end semester exam, the 2nd one by a final exam. These exams have oral and written (MCQ, essay) parts. The final exam also involves practical exam.
   Quality control: The written, anonymous opinions of students are collected after each semester. There are staff meetings for evaluation of teaching.

7. Strengths (one paragraph)
   Since seminars are in each week students often have consultation opportunity.

8. Weaknesses (one paragraph)
   Some the equipment on the practicals are too old and bad shape. Some of the clinical tests performed on the practicals are getting a bit outdated.

9. Innovations and Best Practices - list no more than five
   Two years ago our department got a new, modern practical room, but some of the equipment

need to be changed also.

10. Plans for future changes (one paragraph)
Computers are going to be used in the education more often than up to now. Instead of animal experiments we would like to have more human examinations on the practicals.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. György **Benedek**	MD, PhD	benedek@phys.szote.u-szeged.hu
Dr. Andrea **Antal**	biologist, PhD	aantal@phys.szote.u-szeged.hu
Dr. Ferenc **Bari**	engineer, PhD	bari@phys.szote.u-szeged.hu
Balázs **Bodosi**	pharmacist	bbalazs@phys.szote.u-szeged.hu
Dr. Stefánia **Borda**	MD	borda@phys.szote.u-szeged.hu
Dr. Krisztina **Boros**	MD	borosk@phys.szote.u-szeged.hu
Dr. Ferenc **Domoki**	MD	domoki@phys.szote.u-szeged.hu
Dr. Mária **Dux**	MD, PhD	dux@phys.szote.u-szeged.hu
Dr. Gyöngyi **Horváth**	MD, PhD	horvath@phys.szote.u-szeged.hu
Prof. Dr. Gábor **Jancsó**	MD, PhD	jancso@phys.szote.u-szeged.hu
Gabriella **Joó**	pharmacist, PhD	joogabi@phys.szote.u-szeged.hu
Dr. Gyula **Kovács**	biologist, PhD	gkovacs@phys.szote.u-szeged.hu
Dr. Károly **Köteles**	biologist, PhD	koteles@phys.szote.u-szeged.hu
Dr. Zoltán **Lelkes**	MD, PhD	lelkes@phys.szote.u-szeged.hu
Prof. Dr. Ferenc **Obál**	MD, PhD	obal@phys.szote.u-szeged.hu
Dr. Péter **Sántha**	MD	santha@phys.szote.u-szeged.hu
Dr. Gyula **Sáry**	MD, PhD	sary@phys.szote.u-szeged.hu
Tamás **Tompa**	biology teacher	ttompa@phys.szote.u-szeged.hu

6.3 Histology

Person in School who will explain and show this to the visitors:

Name: Dr. András **Mihály**

E-mail: mihaly@anat-fm.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Dental School students learn histology for 1.5 years (three semesters). The curriculum includes cytomorphology, general histology (basic tissues) and the histology of organs and organ systems.

2. Primary Aims – no more than two
   Exact knowledge on cell structure and basic tissues; understanding the functional microscopic structure of the main organs and organ systems. Basic facts in molecular cytology. Understanding of basis of clinical cytology.

3. 6-10 main objectives (list in brief sentences)
   Exact knowledge on cell structure and basic tissues; understanding the functional microscopic structure of the main organs and organ systems. Basic facts in molecular cytology. Understanding of basis of clinical cytology.

4. Hours in the Curriculum – if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Lectures: 154 hours (incl. Histology and embryology) – Histology is not separated from Anatomy. The microscopic structure of the organs is described together with gross anatomy.
   Practicals: 84 hours.

5. Method fo learning/teaching (one/two paragraphs)
   Textbooks, lecture notes; microscopical investigation of slides of human tissues, stained with hematoxilyn – eosin, orcein, immunohistochemistry and silver impregnations; 90 histological slides are investigated.

6. Assesment methods (one paragraph)
   Written (MCQ, essay), oral, practice (light microscopic examination of slides)

7. Strengths (one paragraph)
   The histological slide collection is of good quality and all are human tissues, made in the Department.
8. Weaknesses (one paragraph)
   Lack of multimedia, large number of students, large practical groups.

9. Innovations and Best Practices – list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. Lajos **Tóth**, MD, PhD	associate professor	toth@anat-fm.szote.u-szeged.hu
Dr. Annamária **Kovács**, MD, PhD	associate professor	kovanna@anat-fm.szote.u-szeged.hu
Sarolta **Karcsú**, MD, PhD	associate professor	
Dr. István **Pór**, M.Pharm.	associate professor	por@anat-fm.szote.u-szeged.hu
Endre **Dobó**, PhD	associate professor	dobo@anat-fm.szote.u-szeged.hu

Zsuzsanna **Boti**, M.Pharm.	associate professor	
Andrea **Szabados**, MD	teaching assistant	
Erika **Bálint**, MD	teaching assistant	
Bertalan **Dudás**, MD	teaching assistant	dudas@anat-fm.szote.u-szeged.hu
Dr. Ibolya **Farkas**, MD	teaching assistant	farkasi@anat-fm.szote.u-szeged.hu
Dr. Andrea **Czigner**, MD	teaching assistant	czigner@anat-fm.szote.u-szeged.hu
Dr. Réka **Szakács**, MD	teaching assistant	szakacs@anat-fm.szote.u-szeged.hu
Julianna **Jójárt**, MD	teaching assistant	
Imre **Farkas**, PhD	teaching assistant	farkas@anat-fm.szote.u-szeged.hu

Section 7 - Para-Clinical Sciences

7.1 Pharmacology

Person in School who will explain and show this to the visitors:

Name: Dr. János **Patericza** MD PhD

E-mail: patericza@phcol.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Pharmacology has been taught for the fourth-class students of the faculty of dentistry. Two semesters involve in the curriculum with a final oral exam.

2. Primary Aims - no more than two
   The aim of the pharmacological study is to each the students for evaluating the effectiveness and use of drugs in the clinical practice.

3. 6 - 10 main objectives (list in brief sentences)
   Main objectives are:
   a., general pharmacology
   b., autonomic nervous system
   c., drugs acting on the blood
   d., local anesthetics
   e., antibiotics
   f., prescription writing
   g., central nervous system drugs
   h., cardiovascular drugs
   i., toxicology
   j., pharmacology of specific diseases of tooth

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   2 lectures per week in the first semseter, 2 lectures and 1 practical per week in the second semester.

5. Method of learning/teaching (one/two paragraphs)
   Lectures serve the frame of the topic, Neal's Pharmacology at a glance supplies the details. Emphasis are on teaching prescription of drugs. Computer assisted practicals helps for learning the main topics.

6. Assessment methods (one paragraph)
   The skills of the students is controlled every two weeks. There are 3 main multiple choice tests for evaluating the knowledge each semester.

7. Strengths (one paragraph)
   The attendance of dentistry students is very good; the relatively small number of students allows teaching in a tutorial system. Intorducing computer practicals greatly improved the interest.

8. Weaknesses (one paragraph)
   Hours per week (2 in the first and 3 in the second semester) are not enough for detailed study of pharmacology. Lack of a dental pharmacology book or distributed lecture would be necessary.

9. Innovations and Best Practices - list no more than five
   For good teaching and learning we need:
   1., a pharmacology syllabus specific for the students of dentistry

2., two-fold more hardware
3., software for practicals especially in the subjects of cardiovascular, local anesthetic and blood pharmacology

10. Plans for future changes (one paragraph)

Projects in the future include:
1., writing pharmacology syllabus for students
2., developing more softwares for practicals
3., introducing 500 test questions ready for everyday practice on computer
4., writing distributed notes for computer practicals

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. János **Patericza** MD PhD patericza@phcol.szote.u-szeged.hu
Attila **Kun** registered pharmacist kuna@phcol.szote.u-szeged.hu

7.2 Microbiology

Person in School who will explain and show this to the visitors:

Name: Dr.József **Molnár**

E-mail: molnarj@comser.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

   Students attend the lectures for 60 hours per semester, which includes 45 lectures and 15 hours practical on the 1st semester of the 3rd class. Participation in the practicals is compulsory. The lectures give essential information on the oral microbiology in general, focusing on oral pathogens (bacteria, viruses, fungi and parasites). Special attention is devoted to the aetiology and pathomechanisms of plaques, caries, calculus formations, parodontosis, gingivitis, the role of oral flora in various diseases. Sterilization, disinfection, microbial genetics, basic immunology, chemotherapy, pathogenicity of microbes and diagnostic microbiology are the subjects of the curriculum in oral microbiology.

2. Primary Aims - no more than two

   The primary aims of oral microbiology are: to given an overwiev of normal and pathogenic oral flora; basic knowledge in clinically important related subjects such as hygiene, public health, epidemiological aspects of caries; sufficient knowledge to evaluate diagnostic methods in oral microbiology and chemotherapy of the treatment of various oral infections.

3. 6 - 10 main objectives (list in brief sentences)

   The main objectives of the curriculum are general and oral microbiology, microbial genetics, pathogenesis, immunology and chemotherapy. THe curriculum will include medical microbiology focusing on oral bacteriology, virology and mycology.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

   Students have to attend lectures (3 hours per week) and practicals (1 hour per week) during one semester (15 weeks).

5. Method of learning/teaching (one/two paragraphs)

   The guidelines are emphasized in lectures, practicals textbook and handouts. In the regular lectures overhead transparencies (sometimes slides) while practicals posters and other demonstrative materials give the opportunity of a clear understanding of the subject and in addition personal notes are available for preparation and that can help to recall the most important points of the lecture when they are not mentioned in the textbook.

6. Assessment methods (one paragraph)

   Midsemester exam of the multiple choice type, a written examination is compulsory. Two trials are available. The final, end-semester exam is an oral examination based on the material and information studied in the lectures, practicals, textbook and handouts.

7. Strengths (one paragraph)

   Bacteriology of caries and periodontal diseases, biochemistry and microbiology of plaque formation and caries, chemotherapy of oral infections. Some oral bacteria are emphasized such as streptococci, eikenela, veillonella, rothia, bacteriodes groups.

8. Weaknesses (one paragraph)

   Funds, special; media, anaerostats and fITC labelled monoclonal antibodies for the detection of pathogens in situ are currently unavailable. This weakens the demonstration of the detection and differentiation of non-pathogenic and some pathogenic members of oral bacteria in the practicals. Application of fluorescent microscopy for rapid diagnosis and atomic force microscopy to analyze the fine texture of bacterial plaques and of caries development. Enamel structure should be demonstrated in one of the practicals but the techniques are not readely available.

9. Innovations and Best Practices - list no more than five

Demonstration of immunological methods, nutrient media, differential diagnosis of streptococci and enteric bacteria by classic microbiological methods in the practicals. Tissue culture and other methods for detection of viruses.

10. Plans for future changes (one paragraph)

Special practical for selective isolation and enumeration of cariogenic streptococci from plaques and caries.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. Éva **Gönczöl**
Csilla **Miskolci** csilla@comser.szote.u-szeged.hu
Dr. Yvette **Mándi** yvette@comser.szote.u-szeged.hu
Dr. József **Molnár** molnarj@comser.szote.u-szeged.hu
Dr. Rozália **Pusztai**
Krisztina **Wolfard**

7.3 General Pathology

Person in School who will explain and show this to the visitors:

Name: _____

E-mail: _____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

2. Primary Aims - no more than two

3. 6 - 10 main objectives (list in brief sentences)

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

5. Method of learning/teaching (one/two paragraphs)

6. Assessment methods (one paragraph)

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Section 8 – Human Diseases

General Medicine, Surgery and Pathology
(includes Anaesthesiology and Sedation)

8.1 General Medicine

Person in School who will explain and show this to the visitors:

Name: Dr. Zsuzsanna **F. Kiss**

e-mail: kizs@in1st.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   We teach Internal Medicine in two semester in the third and in the fourth year.

2. Primary Aims - no more than two
   - to give overall picture about the Internal Medicine
   - to teach the most important dental relations of Internal Medicine
   - to demonstrate the close connection between the Dentistry and the Internal Medicine

3. 6 - 10 main objectives (list in brief sentences)
   We teach cardiology, pulmonology and the most important features of autoimmun diseases and diabetes mellitus in the first semester, while in the second semester gastroenterology, haematology, nephrology and endocrinology.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Students have 2 hours lectures and 1 hours practise per week in the first, while 3 hours lectures and 2 hours practises per week in the second semester. It means 73 hours lectures and 44 hours practise per year.

5. Method of learning/teaching (one/two paragraphs)
   - The students get a list about the recommended reading and textbook.
   - We teach and show the correct method of the physical examination and the taking of case history, the medical investigation and treatment.

6. Assessment methods (one paragraph) –

7. Strengths (one paragraph)
   Only 5-6 students take part in a practise.

8. Weaknesses (one paragraph) –

9. Innovations and Best Practices - list no more than five –

10. Plans for future changes (one paragraph) –

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Participants in the practical training:

Dr. Zsuzsanna **F. Kiss** senior lecturer	kizs@in1st.szote.u-szeged.hu
Dr. Zsuzsanna **Lénárt** assistant lecturer	lezs@in1st.szote.u-szeged.hu
Dr. Gerda **Lencse** M.D.	lege@in1st.szote.u-szeged.hu

Participant in theoretical education:

Dr. István **Nagy** M.D.	nagi@in1st.szote.u-szeged.hu
Dr. Tamás **Takács** M.D. Ph.D.	takt@in1st.szote.u-szeged.hu
Prof. Dr. György **Ábrahám** M.D. Ph.D.	agy@in1st.szote.u-szeged.hu
Prof.Dr. Sándor **Sonkodi** M.D. Ph.D.	sons@in1st.szote.u-szeged.hu
Dr. Csaba **Lengyel** M.D.	lecs@in1st.szote.u-szeged.hu
Dr. János **Julesz** M.D. Ph.D.	
Dr. Ferenc **László** M.D. Ph.D.	lasf@in1st.szote.u-szeged.hu
Dr. Zsuzsanna **F. Kiss** M.D.	kizs@in1st.szote.u-szeged.hu

8.2 General Surgery

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. Ádám **Balogh**

E-mail: ba@surg.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The course contains of the main topics of general surgery and its borderlands. We offer the opportunity to our students to get o know the practise of physical examination, the process of making diagnosis, as well as the evaluation of laboratory data, imagines and other methods. The participnats will be acquainted with the indications and contraindications and the risk of different methods of the main surgical interventions as well as surgery itself. Complications and outcome will also be discussed in details.

2. Primary Aims – no more than two
   a: To get to know all the knowledge of surgery that are important for a dentist to know.
   b: To introduce the students the basic knowledge of the physical examinations and observations.

3. 6-10 main objectives (list in brief sentences)
   The history of surgery; The examination of surgical patients; The surgery of the neck; The surgery of the breast, chest and lung; The surgery of the oesophagus and stomach; The surgery of the liver and portal hypertension; The surgery of the of the pancreas and the biliary tract; The surgery of the large bowel and the anorectum; Vascular surgery; Organ transplantation; Blood transfusion.

4. Hours in the Curriculum – if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   There are 15 weeks in a term and every week there are 2.5 hours of practical training.

5. Method fo learning/teaching (one/two paragraphs)
   1. The topics if the practical training are co-ordinated to the actual lecture every week.
   2. Regular home studying proposed.

6. Assesment methods (one paragraph)
   The term is finished by a final examinations.

7. Strengths (one paragraph)
   Every lecture is held by specialists of the acual topics.

8. Weaknesses (one paragraph)
   There is no oportunity to observe emergency cases during the training.

9. Innovations and Best Practices – list no more than five
   1. Presentation of operation on video tapes.
   2. The follow-up of the healing of the presented patients.

10. Plans for future changes (one paragraph)
    Participation is duty in the emergency ambulance. If the practical training matches thr OP working hours, a visit could be possible.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. Ádám **Balogh** MD, PhD, Dept. of Surgery ba@surg.szote.u-szeged.hu
Dr. András **Petri** MD, PhD, Dept. of Surgery pa@surg.szote.u-szeged.hu
Dr. Imre **Troján** MD, PhD, Dept. of Surgery –
Dr. György **Lázár** MD, PhD, Dept. of Surgery lg@surg.szote.u-szeged.hu
Dr. János **Márton** MD, Dept. of Surgery mj@surg.szote.u-szeged.hu
Dr. István **Zöllei** MD, Dept. of Surgery zi@surg.szote.u-szeged.hu
Dr. Róbert **Sipka** MD, Dept. of Surgery sr@surg.szote.u-szeged.hu
Dr. László **Varga** MD, Dept. of Surgery va@surg.szote.u-szeged.hu
Dr. Pál **Szenohradszky** MD, Dept. of Surgery sp@surg.szote.u-szeged.hu
Dr. Klára **Vezendi** MD, PhD, Dept. of Transfusology vezendi@blood_server.szote.u-szeged.hu

8.3 Anaesthesiology

Person in School who will explain and show this to the visitors:

Name: prof. Dr. Judit **Méray**

E-mail: meray@orto.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   It is a one semester-course in 15 hours (15 theoretical lectures) about **the Principles of Emergency Medicine and Anaesthesia in Dentistry**

2. Primary Aims – no more than two
   The aim of the is to give future dental surgeons the minimum knowledge and the necessary algorythmes in handling the most common emergency situations in the dental practice and in the use of local anaesthetics, analgetics and sedatives.

3. 6-10 main objectives (list in brief sentences)
   - Methods of anaesthesia. Theoretical basis of local anaesthesia. Local anaesthestics
   - Use of vasoconstirtive agents. Complications of local anaesthesia, prevention
   - General anaesthesia. Methods, indications, contraindications, risk factors
   - Sedation in dentistry, methods, dangers, competence
   - Emergency situations in the dental practice - most common causes. Tasks of the dentist - course of action
   - Cardiopulmonary resuscitation - ABC of CPR
     Basics of toxicology. Prehospital Immediate Medical Care, First Aid in Trauma Situations

4. Hours in the Curriculum – if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   15 hours

5. Method fo learning/teaching (one/two paragraphs)
   Lecture (Mainly classic formal lectures in the amphitheatre with spontaneously organized practice and demonstration) + Learning from handout

6. Assesment methods (one paragraph)
   oral examination at the end of the semester

7. Strengths (one paragraph)
   Despite of theoretical teaching curriculum there is a possibility (and demand among the students) for practical demonstration and training
8. Weaknesses (one paragraph)
   Lack of more practical hours
   Handout is old

9. Innovations and Best Practices –list no more than five
   Training in CPR (on phantom) and simulation-training in the use of local anaesthetics

10. Plans for future changes (one paragraph)
    Converson of half of the lessons to practicals.
    New, modernized edition of the local handout

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dept. of Anaesthesia And Intensive Therapy of the Szeged University

Lecturers:

Prof. Dr. Judit **Méray**, university professor, head of dept. meray@orto.szote.u-szeged.hu
Dr.Melitta **Roszik**, assistant roszik@stoma.szote.u-szeged.hu
Dr. Ilona **Pap**, assistant lecturer (Dept. of Cardiology)
Dr. Janos Aurel **Simonka,** university professor, head of Dept. of Traumatology

Section 9 - Orthodontics and Child Dental Health

9.1 Orthodontics

Person in School who will explain and show this to the visitors:

Name: Dr. Gábor **Kocsis S.**

e-mail: kocsiss@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   We teach Orthodontics in three semesters in the fourth and in the fifth year.

2. Primary Aims - no more than two
   - to give overall picture about the orthodontics
   - to teach the most important diagnostic and (theoretical) therapeutic procedures.
   -

3. 6 - 10 main objectives (list in brief sentences)
   We teach the abnormal development of the face and the dentition;
   the common developmental abnormalities with their causes;
   the diagnostic procedures;
   the plan of therapy and its modifications;
   the types of the therapeutic procedure;
   the retention and the failures in orthodontics.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Students have 1 hour lecture and 3 hours practice (in the technical laboratory) per week in the first orthodontic semester (in the 8th semester); while 6 hours lectures (1 hour in 6 weeks), and 3.5 hours per week clinical practice in the orthodontics in the second orthodontic semester; and 2 weeks pre-examine practice in the clinic under supervision of the trainers in the third orthodontic semester.

5. Method of learning/teaching (one/two paragraphs)
   - The students get a list about the lectures, and the recommended textbooks.
   - We teach the correct method of the physical and other diagnostic examinations.
   - We get the students to practice the initial procedures, the technical methods in technical laboratory, and the practice in the clinic.
   -

6. Assessment methods (one paragraph)
   The students have to write 2 essays pro semester, and the assessment of the clinical ability occurs by numerical qualification given by the trainers.

7. Strengths (one paragraph)
   Only 5-6 students take part in the clinical practice.

8. Weaknesses (one paragraph)
   We do not have enough teachers and supplementary staff. The materials and equipment is not sufficient enough.

9. Innovations and Best Practices - list no more than five
   The best field is is the basic theoretical knowledge.

10. Plans for future changes (one paragraph)
    We are planning to design the whole material on CD-ROM.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. Gabor **Kocsis S.** associate professor kocsiss@stoma.szote.u-szeged.hu
Dr. András **Kocsis** instructor kocsa@stoma.szote.u-szeged.hu

9.2 Pediatric Dentistry

Person in School who will explain and show this to the visitors:

Name: Dr. Erzsébet **László Kókai**

e-mail: lkokaie@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The pediatric dentistry goes on in the 8th and 9th semester for 15 weeks in each semester. There is a clinical rotation in the 10th semester, the duration of this course is 2 weeks.

2. Primary Aims - no more than two
   The primary aim of the course is the teaching of the treatment of milk and permanent teeth based on the principals of prevention, as well as the conservative treating of injured teeth. Acquaintance of the importance of the therapy related age groups in child dentistry as well as the recognition and treatment of different oral diseases in childhood.

3. 6 - 10 main objectives (list in brief sentences)
   Creation of preventive view. Early diagnosis of development disorders. Painless and fearless stomatological treatment. Application of basic orthodontial treatment in the pediatric dentistry. Acquaintance of applicated materials and medicines. Acceptance of age related characteristic during treatment.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   8th semester: 14 lectures and 28 hours of practicals
   9th semester: 4 lectures and 62,5 hours of practicals
   10th semester: 50 hours of practicals

5. Method of learning/teaching (one/two paragraphs)
   Application of notes, books and video tapes.

6. Assessment methods (one paragraph)
   Written and oral examinations.

7. Strengths (one paragraph)
   Creation of preventive attitude in pediatric dentistry.

8. Weaknesses (one paragraph)
   Simulation of treatment is impossible in preclinical courses, the practical work is done on the child itself.

9. Innovations and Best Practices - list no more than five
   Introducing of preventing methods, application if dinitrogen-monoxide (N_2O) in the treatment of anxious children.

10. Plans for future changes (one paragraph)
    Optimal use of technical facilities.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dr. Erzsébet **László Kókai** MD, senior lecturer lkokaie@stoma.szote.u-szeged.hu
    Dr. Bernadett **Rácz** MD, lecturer raczd@stoma.szote.u-szeged.hu

Section 10 - Public Dental Health and Prevention

Person in School who will explain and show this to the visitors:

Name: Dr. Erzsébet **László Kókai**_____

e-mail: lkokaie@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The course consist of 4 lectures (1 hour/lecture), during which the students get knowledge about the primary prevention.

2. Primary Aims - no more than two
   One of our primary aims is the creation of the preventive view considering the economy and treatment. The students have master the basics of the primary, secondary and tercier-, as well as the complex oral prevention.

3. 6 - 10 main objectives (list in brief sentences)
   Importance of nutritional behaviours
   The importance of motivation for oral hygiene
   Acquaintance of instruments of oral prevention
   The importance of fluorides (toxicology, effect, application)
   The importance of dental care of point of view of cariology, parodontology and orthodontics
   The organization of the treatment of high risk groups
   Acqaintance of different epidemiological scores

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Lectures 4 hours. Practicals of the subject Prevention are included in the teaching of Pediatric Dentistry.

5. Method of learning/teaching (one/two paragraphs)
   Our teaching method is the application of notes, books and educating video tapes.

6. Assessment methods (one paragraph)
   Students will be assessed by multiple choice tests.

7. Strengths (one paragraph)
   We give exact theoretical and practical knowledge about the whole field of oral prevention.

8. Weaknesses (one paragraph)
   Lack of certain instruments.

9. Innovations and Best Practices - list no more than five
   Application of the complex prevention in adults.
   Emphasising the importance of the prevention for patients in circumstances of a follow up.

10. Plans for future changes (one paragraph)
    The spreading out of oral prevention methods are required in the future.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Prof. Dr. Albert **Mari** MD, PhD mari@stoma.szote.u-szeged.hu
    Dr. Erzsébet **Molnár** MD, consultant
    Dr. Erzsébet **László Kókai** senior lecturer lkokaie@stoma.szote.u-szeged.hu

Section 11 - Restorative Dentistry

11.1 Conservative Dentistry
11.2 Endodontics

Person in School who will explain and show this to the visitors:

Name: Dr. István **Gorzó**_____

e-mail: gorzo@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

Conservative dentistry as a discipline taught three years long. Phantom head course starts in the 3rd year where in the first semester the students must learn the basic instruments and steps (cavity preparation for different filling materials, lining, etc.) of conservative dentistry. During the second semester they supposed to get enough experiences in the root canal treatment methods. Alltough the third year is only preclinical course, but they have to perform diiferent fillings and root canal treatments on extracted teeth as well. This course is built up from theoretical lectures (14 hours/semester) and practice parts (3 hours/week). In the 4th year students have to treat patients, during the first semester they do conservative treatments (simple cases) and in the second semester they do endodontic treatments too. This year the students participate 14 hours theoretical lectures and clinical practical courses (4 hours weekly) and seminars.In the 4th year the students must be able to recognize the different form of caries and pulp diseases and make sufficient diagnosis and differential diagnosis. In the 5th year they have only clinical practical courses including seminsars. In the first semester the students spend five hours/week, in the second semester they spend altogether 120 hours/semester with clinical practice. In the 5th year students suppose to know everything about etiopathology of caries and pulp diseases and should know the possible ways of prevention of caries and all kinds of treatment measures.

2. Primary Aims - no more than two

Conservative dentistry

1. Students should have a broad knowledge of prevention, etio-pathogenesis of dental caries.
2. Students must be familiar with examination methods, diagnosis and every kind of treatment modalities.

Endodontics

1. Students must understand the normal morphology, phisiology and pathophisiology of dental pulp and periapical tissues.
2. Students must be clear with all theoretical and practical knowledge concern pulp diseases.

3. 6 - 10 main objectives (list in brief sentences)

Operative dentistry

A.) Theoretical part:

3. Should be familiar with the prevention of dental caries.
4. Must have knowledge of development of dental caries.
5. Must be familiar with possible treatment methods of dental caries.

B.) Practical part:

1. Students should apply all of their theoretical knowledge in practice.
2. Suppose to know all kind of preparation technic which used to different filling methods (amalgam, tooth-coloured materials, inlays, onlays, post and core and parapulpal pin)

Endodontics

A.) Theoretical part:

1. Students should know the normal phisiology, morphology of dental pulp in case of different type of teeth.
2. Must understand the role of different ethiological agents in the pathogenesis of pulp tissue diseases.
3. Should have a complete knowledge of diagnosis and differential diagnosis of pulp

disease, further on all kind of possible treatment methods.

B.) Practical part:

1. They should know all kinds of endodontic instrumenst (hand, rotatory and vibrating).
2. Should get expertise in field mechanical and chemical cleaning and shaping of root canal (continuous tapering, step back, step down, Pro-File, etc.).
3. Should be able to apply the different root canal filling materials and methods (lateral-, vertical condensation, lentulo-technic, thermoplastic, etc.).

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

3rd year 1st term: theory 14 hours (one hour per week) including seminar
practice 42 hours (three hours per week per group) including tutorials
3rd year 2nd term: theory 14 hours (one hour per week) including seminar
practice 42 hours (three hours per week per group) including tutorials
Both are phantom head course
practice 4th year 2nd term: theory 14 hours (one hour per week) including seminar
practice 84 hours (six hours per week per group) including tutorials
4th year 2nd term: theory 14 hours (one hour per week) including seminar
practice 70 hours (six hours per week per group)
5th year 2nd term: practice 56 hours (four hours per week per small group)
5th year 2nd term: practice 120 hours (six hours per week per small group a month long)

5. Method of learning/teaching (one/two paragraphs)

In the 3rd year the students have to sit for short written examination on every practical course. In the 4th year following the patient examination students have to present the case to the course leader (diagnosis, possible treatment methods, indications, contraindications, etc.). In both years (3rd and 4th) students have to write test and essay twice in a semester. If somebody fails than have to pass in an oral exam. The end of 4th year they have oral examination. During the 5th year student have present every case before treatment, and during the treatment every phase must show to teacher. They also have two times written test and essay examination. In second semester students sit for oral examination too.
They may use books, lecture notes and they can consultate with teacher.

6. Assessment methods (one paragraph)

When the students show the different treatment phase to the teacher, they get mark for every step during the practical course. Students have present a certain amount of fillings, root fillings, inlays and under this minimum they can not pass. The end of 4th and 5th year in addition they have pass on an oral examination too.

7. Strengths (one paragraph)

Students get a good skill of any kind of filling therapy and root canal treatment, inlay and they should know exactly the indications and contraindications of these treatment. They have to prove their experience to make correct diagnosis.

8. Weaknesses (one paragraph)

We are not pleased with their skill at different root canal filling methods, and would be good to increase the number of inlay and onlay treatments.

9. Innovations and Best Practices - list no more than five

We would like to get more and better endodontic instruments for root canal treatment.

10. Plans for future changes (one paragraph)

The students should make more esthetic restorations and inlays.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. Albert **Mari** professor, MD, PhD, DDS, head of Division mari@stoma.szote.u-szeged.hu

Prof. Dr. József **Szentpétery** professor emeritus, MD, PhD, DDS
Dr. István **Gorzó** reader, MD, DDS, PhD, MSc gorzo@stoma.szote.u-szeged.hu
Dr. Éva **Tóth** lecturer, DDS totheva@stoma.szote.u-szeged.hu
Dr. Tibor **Bartha** registrar, DDS bartha@stoma.szote.u-szeged.hu
Dr. József **Németh** DDS nemethj@stoma.szote.u-szeged.hu
Dr. Péter **Vályi** registrar, DDS valyi@stoma.szote.u-szeged.hu
Dr. Ferenc **Ferber** consultant, private dentist, DDS (part time)
Dr. Helga **Füzesi** consultant, private dentist, DDS (part time)
Dr. Tibor **Olasz** consultant, private dentist, DDS (part time)
Dr. Ferenc **Hegyesi** consultant, private dentist, DDS (part time)

11.3 Prosthodontics. [Fixed and Removable Prosthodontics. Edentulous State]

Person in School who will explain and show this to the visitors:

Name: Dr. Márta **Radnai**

e-mail: radnai@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

   The education of the undergraduate dental students in prosthodontics begins in the fifth semester and goes on till 10th semester. The pre-clinical courses, like occlusion and dental materials and technologies give basic knowledge for the phantom course.
   The students have to learn the basic material science, ganthology, clinical and dental laboratory technologies in the pre-clinical phantom courses in the 6-8th semesters. Main topics in these courses: occlusal wax-up technics, crowns, fixed and removable partial dentures and complete dentures. The students get clinical practice in prosthodontics, covering the same topics as in phantom courses in the 7-10 semesters.

2. Primary Aims - no more than two

   Primary aims of teaching prosthodontics are: to provide the students adequate theoretical and practical knowledge, so they will be able to begin treating prosthetic patients alone or with small theoretical help after getting their degree. The students have to learn the theory and the basic technical and clinical skills in the topics of gnathology, crown and bridgeworks, removable partial and complete dentures and they theory of dental implantology.
   Another aim is to teach the students, how they can synthetize their theoretical knowledge of other subjects, since the need to use almost all the knowledge of dental medicine in the prosthetic treatment.

3. 6 - 10 main objectives (list in brief sentences)

   5th semester: The pre-clinical phantom course is combined with the practice in occlusion. The students learn the wax-up technology in the first part of the semester, and they begin to prepare plastic teeth in all kind of preparation form.
   6th semester: The students continue teeth preparation for crowns in phantom heads. Following the preparation they produce Jacket, metal and esthetic crowns for the prepared teeth. The aim of this course to learn the technology of making different type of crowns.
   7th semester: From this semester the students have laboratory and clinical courses. Tasks in the technical laboratory: prepare bridges in different situations on phantom. Tasks in the clinic: to learn, how to examine the patients, how to make treatment plans, how to carry out the treatment in simple cases, crown and bridgework.
   8th semester: Technical laboratory: preparing upper and lower full dentures (technical procedure) and planning partial removable dentures for different cases, preparing wax-up of the partial dentures. Clinical tasks: The students have to treat edentulous patients, they have the possibility to prepare two pairs of full dentures during the semester.
   9th semester: During the clinical course the students treat partially edentulous patients. We use the so called problem solving teaching during the 9-10th semester. The students have to examine the patients, to make alternatives for the treatment. They must be able to report to the tutor on the patient with the help of study models, X-ray films and patients-cards. They have to explain their treatment plan, it is discussed with the tutor and with the other students in the group. They make plans for the realization of the treatment and they have to organize and carry out the necessary pretreatments (conservation, endodontic, surgery, periodontal).
   10th semester: The students have the same tasks as in the 9th semester, more independence is expected in the planning and the treating the patients, but all the activity in the course are controlled by the tutor.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

	Lectures	Practice in technical laboratory	Clinical Practice (patient treatment)
5th semester	7 h/sem	4 h/week	–
6th semester	1 h/week	4 h/week	–
7th semester	2 h/week	3 h/week	4 h/week
8th semester	1 h/week	3 h/week	4 h/week
9th semester	–	–	4 h/week
10th semester	–	–	18 h/week through 8 weeks

5. Method of learning/teaching (one/two paragraphs)

The theoretical knowledge is transmitted by lectures. The content is illustrated by slides, projector or videofilms.
All the subjects of prosthodontics are delivered in the lectures, then demonstrated in the pre-clinical course or in the clinical course. After it the students must prove their proficiency in the subject theoretically and in the technical laboratory. At last they gain practice in the clinical work.

6. Assessment methods (one paragraph)

The students write 2 tests in each semester. The average of the notes must be above 2 (in Hungary the best note is 5), but they have to repeat the test if they get a note 1. At the beginning of the clinical lessons/practices they have to tell the process what they plan to carry out. They get a note for the propedeutic courses as well. Till the end of the 10th semester the students must pass an interim exam in prosthodontics after the 8th semester. There is a final exam, which takes place at the and of the clinical practice in the 10th semester. For this time they must be able to take proper history, to examine the patient, to establish diagnosis and to set up a complex treatment plan with alternatives. They must be able to carry out the clinical steps in all kind of prosthetical work except of implant-prosthodontics. They have to know the laboratory procedures of crown and bridgework, removable partial and complete dentures. They have to know the materials used in the clinical practice and in the dental laboratory.
At the very end of the dental training program the students must pass a State Board Examination for qualification. The State Board Examination includes a comprehensive multiple choice test on basic sciences, medicine and dentistry, a practical part and an oral presentation. During the term of the 10 th semester students must write up and successfully defend a short dissertation (30-35 pages Diploma Work) as well. After passing the State Board Examines students graduate with a degree equivalent to that of the D.M.D. degree in the United States. After being registered by the Hungarian Medical Registrar the fresh graduates can work full time as an associate or can be employed by group or private practices. Two more years of full time practice is required to seat down for the qualifying speciality examination in general dentistry and obtain a licence to carry on independent private dental practices.

7. Strengths (one paragraph)

The strength of our education is the good relation between the number of the students and the teachers. Being a small university the student-groups are small. It is a great advantage during the demonstration of the different steps of technical or clinical work. The control of the students is efficient. We can control and help them practically in every moment during their work. There are thousands of slides to illustrate the lectures. Besides the written material of the textbooks the students get knowledge of the up-to-date dental medicine during the lectures. The state supports the prosthetic appliances, to there are always enough patients for the students.

8. Weaknesses (one paragraph)

There are old units in the prosthetic department, without micromotors and strong suckers, consequently the students cannot learn the four handed dentistry. The number of the clinical lessons are not enough to carry out bigger treatments in one occassion, the patients have to come many times to get combined (fixed and removable) dentures.

9. Innovations and Best Practices - list no more than five

The new curriculum (introduced four years ago, there are dental subjects since the first semester) amde it possible to teach dental implantology in the 8th semester. Gnathology and science of occlusion is taught since 1968, first in Hungary in our university in the frame of

prosthodontics.
The problem solving education as a synthesis of all the knowledge was introduced in 1995 in the 9th and 10th semester. Earlier the tutor gave the students a treatment plan for the case, since 1995 the students have to plan the whole treatment, they have to make alternatives of crown the tutor decides the optimal plan.

10. Plans for future changes (one paragraph)

We plan to change the dental units in the department for new ones. We want to buy new phantom-heads for the technical laboratory. We change the curriculum in order to have a whole semester for teaching dental implantology. The schedule of the 10th semester is planned in order to make the patient treatment better.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. András **Fazekas**, Full Professor fazekasa@stoma.szote.u-szeged.hu
Dr. Márta **Radnai**, Assistant Professor radnai@stoma.szote.u-szeged.hu
Dr. Anette **Stájer**, Instructor anette@stoma.szote.u-szeged.hu
Dr. István **Pelsoczi Kovács**, Clin. Doctor pelsoczi@stoma.szote.u-szeged.hu
Dr. János **Perényi**, Clinical Doctor perenyi@stoma.szote.u-szeged.hu
Dr. András **Antal**, consultant
Dr. János **Hoppenthaler**, consultant

11.4 Occlusion and Function of the Masticatory System.

Person in School who will explain and show this to the visitors:

Name: Dr.János **Perényi**_____

e-mail: perenyi@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Occlusion is taught with in the frames of gnathology. Lectures are held during the fourth semester, practices are is the fourth and mainly in the fifth semester. Functions of the masticatory system is educated distributed during the fourth semester in gnathology lectures, the fifth semester in oral biology. Malfunctions and clinical significance of occlusal disturbances are taught within the frames of prosthodontics during the eights semester.

2. Primary Aims - no more than two
   To make dental students understand the fuction of elements of gnathostomatic system, and supply them with a basic knowledge of oral manifestation of problems related to inproper occlusion.

3. 6 - 10 main objectives (list in brief sentences)
   The aim of the course's lectures is to teach the students the fundamental elements of the stomatognathic system, their morphology based function. The morphology of teeth and elements of the occlusal surface is taught more detailed. Their contacts based on different occlusal concepts and their movements during masticatory functions are discussed later, also the guiding path of different movements. Some morphological specificity of higher diagnostical significance is also discussed. Subject of last lectures of the theoretical course are appliances used by gnathology: occludors, and different types of articulators, panthographs, facebows. During the eight semester some lectures have the objective to teach the students the basic pathological alteration of the temporomandibular joint, including those with occlusal origin. During the practical course students have to be able to build up with the wax-up technique three molars and four premolars, understanding the dimensions of the separate elements and the significance of their position. They are expected to be able to mount casts of dental arches to occludor, confectional articulator, to have practice in the usage of facebow.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Gnathology: During the fourth semester term time: from February to middle of March theoretical course 2 hours a week. From middle March to middle of May practical course 2 hours a week.
   During the fifth semester within the frames of Propedeutical Course of Prosthodontics from September till the middle of November 4 hours a week practical course.
   During the eight semester two lectures within the frames of Prosthodontics.

5. Method of learning/teaching (one/two paragraphs)
   The theoretical part is based on oral lectures held by members of the prosthodontic department. Colour slides and video tapes are also used for this purpose. Lecture notes written by A. Szentpétery help the students to prepare for the written examination.
   Practical course is taken place in the educational laboratory with the supervision of doctors of the prosthodontic department and help of a dental technician. Slides are used at the beginning of the practices to discuss the objective of the given practice. The exercise is demonstrated first by a clinician. After completing the given task the result is evaluated and discussed with the students.

6. Assessment methods (one paragraph)
   At the end of the theoretical part two written examination serve the evaluation of the students' knowledge. During the practical part oral questions and written tests help to value their theoretical preparedness. At the end of the practical course their wax-up work is evaluated and possible defectiveness is discussed. At the end of fourth semester as a part of the Prosthodontics oral

examinations knowledge of occlusion is evaluated and during the tenth semester Gnathology is a part of the final Prosthodontics exam.

7. Strengths (one paragraph)

The students get the knowledge of morphology and role of surface characteristics of teeth with wax build-up technique. Using colour wax the special role of separate parts of the occlusal surface can be understood.

The usage and advantages, disadvantages of different types of occludors and confectional articulators can be learned during the practices.

8. Weaknesses (one paragraph)

Learning of examination and treatment of patients with occlusal abnormalities or temporomandibular joint problem is only by chance during practices of prosthodontics. The usage of fully adjustable articulator can be learned only in theory. The usage of semi-adjustable articulators in patient treatment is seldom.

9. Innovations and Best Practices - list no more than five

In the last semester after completing the wax-up course students have to build up the occlusal surface of a specific premolar or molar tooth without help of the clinicians. After finishing it their work is evaluated.
Our staff members have a great practice is educating wax-up technique. This method has been introduced in our curriculum in 1984.

10. Plans for future changes (one paragraph)

Future changes are determined by financial conditions. First of all we would change our articulators to newer ones. Training of occlusion in patient-care should have greater significance.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. András **Fazekas** professor of dept. of prosthodontics fazekasa@stoma.szote.u-szeged.hu
Dr. Márta **Radnai** first assistant radnai@stoma.szote.u-szeged.hu
Dr. Anette **Stájer** clinician anette@stoma.szote.u-szeged.hu
Dr. István **Pelsőczi Kovács** clinician pelsoczi@stoma.szote.u-szeged.hu
Dr. János **Perényi** clinician perenyi@stoma.szote.u-szeged.hu
Dr. András **Antal** consultant
Dr. János **Hoppenthaler** consultant

Section 12 - Periodontology

Person in School who will explain and show this to the visitors:

Name: Dr.István **Gorzó**

e-mail: gorzo@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)

   Periodontal courses start at fourth year in the second semester. The basic aims are the students get knowledge about the normal periodontal structure, etio-pathogenesis of inflammatory (acut, chronic) periodontal diseases and the host defense mechanisms. It is important to obtain practice in charting and examining patients with periodontal problems. They should be aquainted with diagnosis of acut and chronic form of periodontal diseases. In field of therapy students must get experience in the initial therapy both the hygienic (home care, mechanic and chemical plaque control, including motivation and hygienic intsruction) and conservative phase (i.e. supra- and subgingival hand scaling, polishing, root planning and curettage). During the fifth year (first semester) they have to get good skill in the simpliest method of corrective therapy as gingivectomy, ENAP, modified Widman procedures. Students must know the indications and contraindications and limits of above mentioned therapeutical measures. We emphasised the views of prophylaxis and special attention pay to the possible harmful effects of dental treatments.

2. Primary Aims - no more than two
   1. A broad knowledge of etio-pathogenesis of chronic inflammatory diseases.
   2. Should get expertise in examination, diagnosis and initial treatment phase.

3. 6 - 10 main objectives (list in brief sentences)

   A. Theoretical part:
   1. Should be familiar with the anatomy of periodontal tissues up to EM level and functional features.
   2. Must have knowledge of development, composition of dental plaque.
   3. Must understand the role of host defense in the etiology of periodontal diseases.
   4. Must understand the role of bacteria in the pathogenesis of periodontal tissue destruction.
   5. Must be able to recognise the different forms of periodontal disease and make diagnosis and differential diagnosis.

   B. Practical part:
   1. Must be aquainted with all theoretical measures (initial, corrective, maintenance phase) and their indication, contraindication, advantages and disadvantages and effectiveness.
   2. Must be familiar with the traumatic occlusion and their effect on periodontal tissue.
   3. Must be aware the relation between the periodontal problems and restorative, endodontic, orthodontic, prosthetic therapy.
   4. Must be aware the interaction of systemic and periodontal diseases.
   5. Should have a basic knowledge of dental implant.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

   Fourth year second term:
   theory 14 hours (one hour per week) including seminars
   practice 14 hours (one hour per week per group) including tutorials, very small group (4-6 persons)

   Fifth year first term:
   theory 14 hours (one hour per week) including seminars
   practice 28 hours (two hour per week per group) including tutorials, very small group (4-6 persons)

   Fifth year second term:
   practice 14 hours (one hour per week per persons) including tutorials
   as a part of comprehensive dental therapy clinics.

5. Method of learning/teaching (one/two paragraphs)

The beginning of practical course we examine the theoretical knowledge of students. In addition twice in every semester they have to write test and essay. Who not passed these exams have to sit for oral exam and if it fail student must repeat the year. The students can use book, lecture notes for learning and they can talk with the lecturer and practice leader.

6. Assessment methods (one paragraph)

Students have to present at least 5 cases (with examination charting diagnosis, who were motivated, instructed, scaled, root planned). We estimate the student knowledge by written and oral examination. The written examination consists of two parts: test and essay. At the final examination we take the written, oral and practical achievements into consideration.

7. Strengths (one paragraph)

Students get a very good skill in initial phase of treatment methods and maintenance care and they know very well their limits in case of different treatment methods. They have enough experience to make diagnosis different type of periodontal diseases.

8. Weaknesses (one paragraph)

We are not content with their skill in field of corrective therapy, namely different surgical techniques and dental implantation.

9. Innovations and Best Practices - list no more than five

We would like to get more time for practice and would.
It would be desirable to start teaching periodontology at 3rd year.
We would like to have more hand instruments
We would like to have more ultrasonic scalers
We would like to have a bigger periodontal division.

10. Plans for future changes (one paragraph)

Would like to introduce a preclinical course of surgery where the students can practice gingivectomy, modified Widman flap, dissection of furcation involved tooth on animal jaw.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. István **Gorzó** reader, MD, DDS, PhD, Msc	gorzo@stoma.szote.u-szeged.hu
Dr. Péter **Vályi** registrar, DDS	valyi@stoma.szote.u-szeged.hu
Dr. Annamária **Kertész** consultant, DDS	–
Dr. Endre **Kiss** consultant, DDS (part time)	–

Section 13 - Oral Surgery and Dental Radiography and Radiology

13.1 Oral Surgery

Person in School who will explain and show this to the visitors:

Name: Prof. Dr.Ádám **Kovács**

e-mail: kovacsad@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Oral surgery and dental radiology are essential parts of dental education. Therefore oral surgery course takes 4 semesters and is one of the main subject of the final exams. The dental radiology is only 1 semester.

2. Primary Aims - no more than two
   The primary aim it to teach the students to get practice in minor oral surgery which should be carried out in general practical work.

3. 6 - 10 main objectives (list in brief sentences)
   - local anaesthesia in dentistry
   - odontogen infections
   - simple and surgical removal of teeth
   - preprosthetic surgery
   - maxillofacial traumatology
   - diseases of TMJ
   - diseases of salivary glands
   - orthognath surgery
   - cleft lip and palate
   - surgical treatment of oral cancer (including reconstructive surgery)

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   3rd year 2nd semester: 2 lectures/week (14 or 15 weeks); 3 hours practice/week
   5th year 1st semester: 2 lectures/week (14 or 15 weeks); 4 hours practice/week

5. Method of learning/teaching (one/two paragraphs)
   During theoretical lectures patients with oral surgical problems are also presented.

6. Assessment methods (one paragraph)
   At the end of 8th and 9th semester the students' knowledge are assessed by oral exams.

7. Strengths (one paragraph) –

8. Weaknesses (one paragraph)
   The number of the patients' for surgical procedures is limited and there is no possibility to increase it.

9. Innovations and Best Practices - list no more than five –

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Prof. Dr. Ádám **Kovács** full professor kovacsad@stoma.szote.u-szeged.hu
Dr. László **Borbély** associate professor borbely@stoma.szote.u-szeged.hu
Dr. Ákos **Fehér** senior registrar fehera@stoma.szote.u-szeged.hu
Dr. Jenő **Halász** senior registrar halaszj@stoma.szote.u-szeged.hu
Dr. Eszter **Szontágh** senior registrar szontagh@stoma.szote.u-szeged.hu

13.2 Radiography and Radiology

Person in School who will explain and show this to the visitors:

Name: Dr.Péter
Kapros_____

e-mail: kapros@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   The Dental Radiology course is a two-week program with 2 hours of lecture and 2 hours of lab/week.

2. Primary Aims - no more than two
   The purpose of the training is to teach students how to take radiographs as well as to interpret them, and to establish the right diagnosis.

3. 6 - 10 main objectives (list in brief sentences)
   The primary aim of the course is to train students for the interpretation of radiographs. The students learn how an X-ray device works, and they also get acquainted with radiology techniques used in dental practice. This allows them to perform X-ray diagnostics by themselves in the future. Also, students become familiar with the radiology aspects of the anatomy of teeth and related bones, with emphasis on differences between normal and pathological cases. Lectures also deal with clinical radiographic diagnosis. In the labs, students practice radiology techniques and dark room procedures.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   Hours in the curriculum: 2 hours of lecture and 2 hours of lab per week.

5. Method of learning/teaching (one/two paragraphs)
   Method of teaching: In the lectures, first, X-ray machines radiology techniques and radiographic anatomy and characteristics of teeth and related bones are discussed. This is followed by lectures on diagnostics in radiology.
   Method of learning: Attending lectures, observing practical methods, taking X radiographs, processing films, evaluate results with the help of an instructor.

6. Assessment methods (one paragraph)
   Assessment methods: Verbal exams and consultations with the instructor in the labs serve to stimulate continuous preparation and ensure active participation of students. Also, students have to interpret radiographs taken by themselves. There are two written exams in the topics covered by lectures.

7. Strengths (one paragraph)
   Strengths: Students have regular lecture and practical tests; they have to take at least 44 radiographs by themselves.

8. Weaknesses (one paragraph)
   Obsolete equipment, absence of instruments necessary to perform paralleling techniques.

9. Innovations and Best Practices - list no more than five
   Innovations: Motivation of students by presenting interesting cases, more frequent exams, more radiographs to be taken by the students. Paralleling techniques and computer imaging should also be applied.

10. Plans for future changes (one paragraph)
    Plans for future changes: In the future, we plan extend written exams by regular quizzes. For students to get more hands-on experience in radiology, they will have to be more actively involved in taking radiographs. In order to broaden their understanding in using advanced

methods, students will get acquainted with paralleling techniques and computer aided applications.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. Péter **Kapros** kapros@stoma.szote.u-szeged.hu

Section 14 - Oral Medicine and Oral Pathology

14.1 Oral Medicine
14.2 Oral Pathology

Person in School who will explain and show this to the visitors:

Name: Dr.István **Sonkodi**_____

e-mail: sonkodi@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Oral Medicine is an essential part of dental education with theoretical, practical and clinical elements, to prepare dentists for roles in prevention, diagnosis and treatment of orofacial diseases. This subject is multidisciplinary and amount of information originating from each discipline is immense.

2. Primary Aims - no more than two
   - Out primary aim that Oral Medicine should collaborate closely with medical services to ensure that dental students obtain access to patients with a wide range of systemic and oncologic diseases with oral manifestation.
   - The time in our dental curriculum devoted to oral oncology a positive distribution.
   -

3. 6 - 10 main objectives (list in brief sentences)
   - In our basic dental education to provide an appropriate understanding of the following elements of Oral Medicine.
   - Basic terminology and definitions relating orofacial diseases, premalignancies and malignancies.
   - An outline of causative factors of common orofacial diseases, stomato-oncologic diseases and their machanisms of action.
   - General principles of relevant epidemiology including registration, and ways in which statistical data can be used.
   - Principal aspects of the pathology of orofacial diseases, premalignancies and malignancies relating these to clinical features, diagnosis and treatment.
   - Principles involved in preventation of mucosal diseases malignancies and public health policies and health education strategies.
   - Methods by which orofacial diseases, premalignancies and malignancies can be diagnosed clinically and in the laboratory.
   - Clinical symptoms and signs of systemic, oral and stomato-oncologic diseases.
   - General principles of the main treatment strategies in oral medicine and the potential side effects and limitations of these treatments.
   - Knowledge of these factors which dictate prognosis of orofacial diseases, premalignancies and malignancies.
   -

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   In the 4th year (first semester)
   Term time: from September to middle of December (15 weeks)
   Students should participate 2 hours per week in the compulsory lectures

5. Method of learning/teaching (one/two paragraphs)
   The Oral Medicine course involves theoretical and practical work. Besides formal lectures our main emphasis to present patients suffering different type of orofacial diseases. In order to broaden students experience we regurarly project slides which material has been collected in the Oral Medicine Department (since 1971)

6. Assessment methods (one paragraph)

Evaluation of the students knowledge of subject they should take interim demonstrations with patients. So we can test their skills in diagnosis and treatment plan of orofacial diseases. The end of the term students should pass an oral closing examination.

7. Strengths (one paragraph)

It is a particular value that besides Oral Medicine we can increase stomato-oncology-related teaching, because our Department of Oral Medicine, as it is a centrum of three counties with >4000 Oral Medicine-Oncology patient attendances per annum. So the broad variaty of oro-facial diseases the students have the opportunity to gain more experience in this subject.

8. Weaknesses (one paragraph)

Problems that we are encountered shortage of time in an already overfull curriculum, and lack of teachers with Oral Medicine and Oncology education skills.

9. Innovations and Best Practices - list no more than five

- We have many years of cryosurgery and lasersurgery experience in the treatment of orofacial diseases, especially oral premalignancies and early malignancies. So the students can be familiar with these progressiv treatment modalities.
- In order to increase Oral-Medicine-related teaching we had been published books:
  „Colour atlas of orofacial diseases" 1992
  „Oral Medicine" 1994, 1996 (second revised edition)
  „Cryosurgery in the orofacial region" (under publication)

10. Plans for future changes (one paragraph)

For future changes we would need more practical hours for improvement of the courses, and additional rooms to provide better facilities for teaching and the treatment of patients.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Dr. István **Sonkodi** PhD sonkodi@stoma.szote.u-szeged.hu

Section 15 - Integrated Patient Care and Dental Emergencies and Special Needs Patients

Person in School who will explain and show this to the visitors:

Name: Dr. Eszter **Szontágh**_____

e-mail: szontagh@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   To teach this topic there is not organized a separate course, but all the aspects of this topic are integrated in the other subjects of the curriculum, first of all in oral surgery.

2. Primary Aims - no more than two
   To diagnose a pathologic state, when the immediate care delivery is indispensable to prevent a much more serious health damage.

3. 6 - 10 main objectives (list in brief sentences)

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

5. Method of learning/teaching (one/two paragraphs)

6. Assessment methods (one paragraph)

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dr. Eszter **Szontágh** szontaghvstoma.szote.u-szeged.hu

15.2 Dental Emergencies

Person in School who will explain and show this to the visitors:

Name: Dr. Eszter **Szontágh**_____

e-mail: szontagh@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   To teach this topic there is not organized a separate course, but all the aspects of this topic are integrated in the other subjects of the curriculum, first of all in oral surgery.

2. Primary Aims - no more than two
   The treatment methods are taught, which are needed in an emergency case to stop the given pathologic process, and to enable the further diagnostic and treatment procedures.

3. 6 - 10 main objectives (list in brief sentences)

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

5. Method of learning/teaching (one/two paragraphs)

6. Assessment methods (one paragraph)

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dr. Eszter **Szontágh** szontaghvstoma.szote.u-szeged.hu

15.3 Care of Special Need Patients

Person in School who will explain and show this to the visitors:

Name: Dr. Erzsébet **László Kókai**_____

e-mail: lkokaie@stoma.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   There is no separate course for teaching this topic, but the theory and the methods of the dental care of handicapped patients are included in pedodontics. The aspects of treating cancer patients or injured patients are integrated in oral surgery, conservative dentistry and prosthodontics. The aspects of the cleft-palate patients' are integrated in oral surgery, orthodontics and prosthodontics.

2. Primary Aims - no more than two

3. 6 - 10 main objectives (list in brief sentences)

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

5. Method of learning/teaching (one/two paragraphs)

6. Assessment methods (one paragraph)

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five

10. Plans for future changes (one paragraph)

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dr. Erzsébet **László Kókai** lkokaie@stoma.szote.u-szeged.hu

Section 16 – Behavioural Sciences

Introduction:

The aim of the Section of Behavioural Sciences and Medical Psychology is that, the role of the personality of the dental doctor and the patient should take its rightful and scientifically based place healing, in the spirit of great Hungarian traditions.

The Section of Behavioural Sciences Teach different branches of behaviour sciences in a holistic, human-environmental approach. While each subject has its own traditions and methodology, they are very closely interrelated.

Section organizes 5 different subjects for students of dentistry

1. year: Introduction on Medicine
2. year: Medical Anthropology
3. year: Ethic and Bioethic for students of dentistry
   Medical Psychology for students of dentistry
4. year: Social Politics

We explain the different disciplines separately.

16.1.1. Introduction to medicine

Person in School who will explain and show this to the visitors

Name: Dr. habil, Katalin **Barabás** Ph. D. and Dr. Judit **Pogány** clinical psychologist

E-mail: bar@nepsy.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)

   As there is an agreement that medical students should learn what preventive approach to medicine means as early as possible in their medical training, the first semester begins with the course “Introduction to Preventive Medicine”. This course is an introductory one for several reasons. First, it introduces students to Public Health emphasizing the social and socio-psychological influences of health promotion and epidemiology. Second, it introduces students to medical sociology and gives an outline of the social factors affecting health needs and demands. And finally, it introduces students to health psychology drawing attention to the importance of stress and coping in disease prevention. Thus this course provides a basic theoretical ground for later disciplines and helps developing a preventive attitude to medicine for the future clinical stage of medical training.

2. Primary Aims:

   The main purpose of the course is to give an outline of the science and art of medicine. To gain this purpose, a multidisciplinary approach is used which has the following backgrounds:
   - History of Medicine
   - Health Philosophy
   - Public Health
   - Clinical Sciences

3. 6-10 main objectives:

   Students should acquire
   1. familiarity with the historical background of medicine
   2. understanding of the effects of social, behavioural and environmental factors on health state
   3. understanding of preventive aspects of the medical work in theory and practice
   4. understanding of curative aspects of the medical work
   5. understanding of the opportunities of preventing and managing diseases
   6. knowledge of the changing patterns of diseases and the major trends of mortality and morbidity
   7. understanding the need for statistical methods to develop a community diagnosis and knowledge of resources to obtain the necessary information.

4. Hours in the curriculum
   15 hours (1 hour/week) in lecture format in the first semester of the first year.

5. Methods of learning /teaching:

6. Assessment methods:
   Written test-exam at the end of the first semester. The mark (1-5) of the exam is assessed as an ESE (End-semester exam). Students should also write a free style essay on „What an ideal physician should be".

7. Strengths

8. Weakness

9. Innovation and Best Practices

10. Plans for future change

11. Visitor Comments

12. Append staff names, qualifications and E-mait adresse for this Department

16.1.2. Medical Anthropology

Person in School who will explain and show this to the visitors

Name: Dr. habil. Katalin **Barabás** Ph. D._____

E-mail: bar@nepsy.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)
   Medical Anthropology is organized in second semester of second year, 14 hours seminars.

2. Primary Aims:
   The main purpose of the course is to give an outline of the medical and clinical application of anthropology. Medical anthropology aims to demonstrate a systematic study of human nature, the cross-cultural similarities and differences of health, illness and healing.

3. 6-10 main objectives:
   - The concept and development of cultural, philosophical and medical anthropology. The biology of human behaviour: basic principles of human ethnology and sociobiology. The culture of human behavioural: ethnology and cross-cultural study.
   - Medical anthropology of anatomy and psysiology.
   - Medical anthropology of gender and reproduction.
   - Anthropological aspects of stress and pain. Cross-cultural differences in pharmacology.
   - Anthropology of handicap. Homosexuality and other stigmatizing differences.
   - Medical anthropology of death and dying. Basic principles of thanatology.
   - Anthropological aspects of health care and doctor-patient relationship.

4. Hours in the curriculum
   1 hour seminar per week (14 hours seminars/semester)

5. Methods of learning /teaching:
   Small-group methods

6. Assessment methods:
   By questioners. Our educational method is considered one of the traditional and accepted method.

7. Strengths –

8. Weakness –

9. Innovation and Best Practices
   We would like to use the Internet and video assisted teaching methods.
10. Plans for future change
    Medical anthropology is a new subject in the curriculum.

11. Visitor Comments

12. Append staff names, qualifications and E-mait adresse for this Department
    Dr. Bettina **Pikó** Ph. D. piko@nepsy.szote.u-szeged.hu
    Dr. Erzsébet **Kapocsi**
    Serfőzőné Adél **Tóth**

16.1.3. Social politics for dental students

Person in School who will explain and show this to the visitors

Name: Borbála **Prónai** economist_____

E-mail: _____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)
   Social politics seminars for the dental students: total of 14 hours in the second semester of the 4th year.

2. Primary Aims:
   Students should learn the basics of social politics, which are essential for their work as practicing doctors and to strengthen their social sensibility.

3. 6-10 main objectives:
   - The definition and the main features of social politics
   - Social politics in wellfare countries
   - Social politics in Hungary nowadays
   - Social insurance: - health insurance services
     - old-age pension supply
   - Services controlled by the social law
   - Social politics concerning groups that are especially depending on social politics
     - the unemployed
     - the homeless
     - the gipsies
     - the refugees
     - the drug addicts
   - Social activity of denominations in Hungary

4. Hours in the curriculum
   1 hour seminar/week

5. Methods of learning /teaching:
   Seminars for small groups. Students must present reports on topics given by the teacher.

6. Assessment methods:
   Our education method is considered one of the traditional and accepted method.

7. Strengths

8. Weakness

9. Innovation and Best Practices

10. Plans for future change

11. Visitor Comments

12. Append staff names, qualifications and E-mait adresse for this Department

16.1.4. Medical Psychology for students of dentistry

Person in School who will explain and show this to the visitors

Name: Dr. Judit **Pogány** Ph. D. clinical psychologist_____

E-mail: bar@nepsy.szote.u-szeged.hu_____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)
   The two interrelated subjects of Medical Psychology are Communication Theory and Practice and Medical Psychology for students of dentistry. Of these, Communication is taught in the first year and the other subject in the third year. Communication: 14 hours seminars or training in the second semester of the first year. Medical Psychology for students of dentistry: 14 hours lectures and 28 hours seminars in the first semester in the third year.

2. Primary Aims:
   Knowledge and application of the behaviour laws of psychical and mental health. Within this, the physical and mental health of those in helping professions in medical training, its role in connection with helping. The special role of doctor-patient relationship, the psychological consequences of sickness, pain an handicap and coping with these problems. Behavioural medicine significance of anxiety and depression, behavioural medicine approach to pain, behaviour disorders in other cronic, non-specific disorders.

3. 6-10 main objectives:
   - Basic psychic functions and their disorders, general overview of examination and personality study (psychometric methods examining).
   - Psychology of pain, and the coping methods.
   - General overview of theories of the personality, through the example of personality test and questionnaries.
   - The doctor-patient relationship: with the involvement of patients planning the consideration of the first interview..
   - The psychological consequences of sickness handicap, and hospitalization and coping with them, through practical examples.
   - The role of behaviour factors in the development, prevention and treatment of disease. The therapeutic effect of the doctor's behaviour and its laws.

   Compulsory themes of the practical training:
   Diagnosis and therapy as problem-solving in the dental praxis, through examples. Foundations of psychotherapy, behavioural medicine in the treatment of somatic symptoms of psychic origin, presented in methods applied by the behavioural scientist.

4. Hours in the curriculum

5. Methods of learning /teaching:
   Lecture, and small-group methods

6. Assessment methods:
   By questioners. Our educational method is considered one of the traditional and accepted method.

7. Strengths

8. Weakness

9. Innovation and Best Practices
   Video assisted communication methods.

10. Plans for future change

Implementation of a special communication training for the dentist students.

11. Visitor Comments

12. Append staff names, qualifications and E-mait adresse for this Department

16.2. Communication

Person in School who will explain and show this to the visitors:

Name: Dr. habil, Katalin **Barabás** Ph. D. and Dr. Judit **Pogány** clinical psychologist

E-mail: bar@nepsy.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain the courses taught)
   Communication is taught in the first year integrating to Introduction on Medicine
   Communication: 14 hours training or seminar, in the second semester of the first year.

2. Primary Aims - no more than two
   The main purpose of the course os to give a basic information about the different type of the communication. Good communication between people fundamental to successful medical medical practice.
   Questions of the transfer of information in any system, with special regard to the biological, technical and – last, but above all-social sytems. The process of regulation, development and adaptation, as interactions

3. 6 - 10 main objectives (list in brief sentences)
   - The system model of communication. The laws of direct human communication.
   - Basic forms of the use of communication outlook to socially important areas.
   - Possibilities of developing communication skills
   - The promotive role of communication
   - Communication aspects of the development of self-knowledge and regulation of themselves image.
   - Students of dentistry communication

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training
   1 hour seminars per week: 14 seminars/semester

5. Method of learning/teaching (one/two paragraphs)
   Small-group seminar or training course

6. Assessment methods (one paragraph)
   By questioners

7. Strengths (one paragraph)

8. Weaknesses (one paragraph)

9. Innovations and Best Practices - list no more than five
   We would like to set up a new video cabinet system

10. Plans for future changes (one paragraph)
    We will use so called Pendleton model

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department
    Dr. Judit **Pogány** clinical psychologist bar@nepsy.szote.u-szeged.hu
    Dr. Tibor **Rudisch** Ph. D. clinical psychologist rudisch@nepsy.szote.u-szeged.hu

Section 16.3.1. Behavioural sciences/ Introduction to Medical Ethics
Person in School who will explain and show this to the visitors

Name: Adél **Tóth** medical ethicist_____

E-mail: _____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)
   "Intorduction to Medical Ethics" is a part of a complex subject named "Introduction to Medicine". The "Introduction to Medical Ethics" course consists of seven one-hour-length classes in the fall term of the first academic year. One class out of the seven is a lecture given by a distinguished clinician for all students, while other classes are practices led by a medical ethicist for each group separately. The course is mandatory for all medical students, so for students of dentistry too.

2. Primary Aims:
   The primari task of this introductory course is to make students sensitive to the ethical dimensions of medical activity by emphasizing the normative, value-laden characteristics of medical practice. An other basic aim of the course is to give a useful method for structuring and solving the ethical dilemmas arising in the field of health care by the help of major ethical theories and ethical principles.

3. 6-10 main objectives:
   Main features of ethics and mortality, characteristic of ethical conduct
   Traditional medical ethics, codex ethics and the birth of biomedical ethics
   Deontological ethical theories
   Utilitarian ethical theories
   Major ethical principles: respect for autonomy
   Major ethical principles: non-maleficence, beneficence, justice

4. Hours in the curriculum
   1 hour/week

5. Methods of learning /teaching:
   Small-groups practices can serve well the students personal value clarification and give an appropriate scene for case analysis. Video films, newspaper stories also help the students is acquiring the required skills and knowledge and can promote the application of ethical theories and principles.

6. Assessment methods:
   Student are required to analyse a case in written form, and the course is closed by an end-semester-exam in the form of a multiple-choice-test.

7. Strengths
   Small-group-teaching is advantageous. Students have the opportunity to express their thoughts and feelings concerning the case. This form of teaching is also appropriate to acquire cognitive knowledge about ethics in general and about medical ethics in particular. This preliminary course can serve well theoretical clarification, which can be a good base for later studies in medical ethics.

8. Weakness
   The time is very limited, there are only seven classes altogether. This limited time is not enough for valid personal value clarification, the course gives only the first impulse to it. Theoretical knowledge of the students sometimes does not find connections to every day clinical practice. This medical ethic course is separated from other first year subjects where ethical questions can arise.

9. Innovation and Best Practices

Usage of videofilms, case analysis, vivid debate, independent case analyses of the students.

10. Plans for future change

It is essential to encourage the students to present and analyse their own stories, to build the classes more intensively on the activity of the students, to ask the students to study the appropriate paragraphs of the required textbook in advance.

11. Visitor Comments

12. Append staff names, qualifications and E-mait adresse for this Department

16.3.2. Ethics & Jurisprudence

Person in School who will explain and show this to the visitors

Name: Adél **Tóth** medical ethicist_____

E-mail: _____

1. An introductory single paragraph explaining the course and its timing in the curriculum (sufficient information to explain courses taught)
   "Intorduction to Medical Ethics" is a part of a complex subject named "Introduction to Medicine". The "Introduction to Medical Ethics" course consists of seven one-hour-length classes in the fall term of the first academic year. One class out of the seven is a lecture given by a distinguished clinician for all students, while other classes are practices led by a medical ethicist for each group separately. The course is mandatory for all medical students, so for students of dentistry too.

2. Primary Aims:
   The primari task of this introductory course is to make students sensitive to the ethical dimensions of medical activity by emphasizing the normative, value-laden characteristic of medical practice. An other basic aim of the course is to give a useful method for structuring and solving the ethical dilemmas arising in the field of health care by the help of major ethical theories and ethical principles.

3. 6-10 main objectives:
   Main features of ethics and mortality, characteristic of ethical conduct
   Traditional medical ethics, codex ethics and the birth of biomedical ethics
   Deontological ethical theories
   Utilitarian ehtical theories
   Major ethical pronciples: respect for autonomy
   Major ethical principles: non-maleficence, beneficence, justice

4. Hours in the curriculum
   1 hour/week

5. Methods of learning /teaching:
   Small-groups practices can serve well the students personal value clarification and give an appropriate scene for case analysis. Video films, newspaper stories also help the students is acquiring the required skills and knowledge and can promote the application of ethical theories and principles.

6. Assessment methods:
   Student are required to analyse a case in written form, and the course is closed by an end-semester-exam in the form of a multiple-choice-test.

7. Strengths
   Small-group-teaching is advantageous. Students have the opportunity to express their thruogts and feelings concerning the case. This form of teaching is also appropriate to acquire cognitive knowledge about ethics in general and about medical ethics in particular. This preliminary course can serve well theoretical clarification, which can be a good base for later studies in medical ethics.

8. Weakness
   The time is very limited, there are only seven classes altogether. This limited time is not enough for valid personal value clarification, the course gives only the first impulse to it. Theoretical knowledge of the students sometimes does not find connections to every day clinical practice. This medical ethic course is separated from other first year subjects where ethical questions can arise.

9. Innovation and Best Practices

Usage of video films, case analysis, vivid debate, independent case analyses of the students.

10. Plans for future change

It is essential to encourage the students to present and analyse their own stories, to build the classes more intensively on the activity of the students, to ask the students to study the appropriate paragraphs of the required textbook in advance.

11. Visitor Comments

12. Append staff names, qualifications and E-mail addresses for this Department

16.4 Practice Management

Person in School who will explain and show this to the visitors:

Name: Dr.István **Gorzó**

e-mail: gorzo@stoma.szote.u-szeged.hu

1. An introductory single paragraph explaining the course and its timing in the curriculum(sufficient information to explain the courses taught)Built up of two parts:

Part I.: Infection control in dentistry taught in fifth year first semester and it built on 8 hours lectures and seminars.
Students should have the necessary care knowledge relevant to the need for infection control whenever invasive surgery is taking place as well as during routine clinical work involving both staff of the clinic and members of the public.

Part II.: Practice management taught in fifth year first semester where the students participate on 20 hours of lectures and seminars.
Students should have knowledge in field different form of health ventures, economic side of a health venture, the public health condition of foundation private practice, financial conditions of a practice and economical working of practice, rules of taxing, and condition of price-list.

2. Primary Aims - no more than two –

3. 6 - 10 main objectives (list in brief sentences)

Part I.:

1. The students should have knowledge of the basic principles of infection, crossinfection and infection control.
   The students should have of all means that can be used to prevent contamination during dental work and should be able to use these techniques in a clinical setting.
2. The students should have knowledge of decontamination and sterilization procedures and should be able to apply these techniques in a clinical setting.
   The students should be familiar with the principle of work organisation in order to respect infection control.
3. The students should have knowledge of the specific infectioncontrol measurements for surgical intervention.
   The students should have knowledge of the specific infectioncontrol management in case of: radiographic procedures, restorative dentistry, prosthetic dentistry, periodontology, orthodontic treatment.
4. The students should have knowledge of infectioncontrol management regarding to dental technical laboratory including the handling of impressions, prosthetic dental appliances and casts.
   The students should have knowledge of all necessary measurments of infectioncontrol to be applied in case of risk patients, carriers of hepatitis or HIV virus and immuncompromised patients.
5. The students should have knowledge of the management of sharps injuries in case of accidental exposure to hepatitis and HIV.

Part II.:

6. The students should know the possible forms of careers, have to realize a health adventure, how to make a business place.
7. The students should have knowledge how to built up a healthprogram, what kind of administration and financial recording are necessary.
8. The students should know the subjective and objective conditions of a health venture, what is the minimal accessories demands in the dental practice.
9. They supposed to know the obligation to Health Insurance Company and State Tax Office.

4. Hours in the Curriculum - if a clinical subject identify the estimated number of hours students actually spend treating patients per week per year of training

Part I.: All the of practical course take during fifth year at different divisions (conservative dentistry, prosthetic dentistry, orthodontics, children dentistry, dento-alveolar surgery,

periodontology).
Part II.: This subject goes on in the fifth year and the students get 20 hours/semester lecture and seminars.

5. Method of learning/teaching (one/two paragraphs)

Students can use books, lecture notes for learning and during the seminars can be solved the problems together.
The teaching as it mentioned consists of lctures, and seminars and regularly used slides and video films.

6. Assessment methods (one paragraph)

Part I. and II.: Written examination at the end of (part I. and part II.) course, consists of test and essay. They have to be passed to an agreed level. If somebody not pleased with the mark it is possible to sit for oral examination.

7. Strengths (one paragraph)

Part I.: The infection control is taught in every clinical subject but only attention payed for the specialities, during this course the student get a comprehensive and synthetised view of infectioncontrol. On base of this the students skill be able to give information on cross Infection effectively to others in the dental team.
Part II.: The students have some idea the advantages and disadvantages of different careers and they should understand that not enough to know the profession. The students have to learn a lot of legal, economic, financial, tax and public health knowledge.

8. Weaknesses (one paragraph)

Part I.: We believe that infection control should be taught earlier, perhaps before the cllinical practice starts, i.e. at the third year.
Part II.: Practice foundation is too far from fifth year, so the students sometimes believe that this is an unnecessary subject.

9. Innovations and Best Practices - list no more than five

Part I.: It should be taught at third year.
It should be independent subject ad should be practice on phantom head course some hours.
Part II.: It is difficult to invite the best experts for a lecture, because the fee is very low.
Sometimes it causes also problem that the best experties are not the best lecturer.

10. Plans for future changes (one paragraph)

Part I.: Should introduce a pre-clinical programme, where the student should show knowledge and understanding of microbiology of relevance to Cross Infection Control in Dentistry, and be able to define and discuss routes of transmission of infection of dentistry, furthermore be able to define the terms sterilization and disinfection and the relevant techniques for these procedures in dentistry.
Part II.: Last year we wrote a new book about practice management, hoping that this year will be published.

11. Visitors Comments

12. Append staff names, qualifications and email addresses for this Department

Part I.:
István **Gorzó** reader, MD, DDS, PhD, Msc subject coordinator
gorzo@stoma.szote.u-szeged.hu

Part II.:
Péter **Vályi** lecturer, DDS valyi@stoma.szote.u-szeged.hu
Endre **Kiss** DDS, consultant, private dentist
Eleonóra **Orovecz** chief jurist at ÁNTSz (Hungarian Public Health Authority)
Tamás **Milassin** MD, ÁNTSz
Éva **Mazzag** MD, ÁNTSz
Pál **Szentgyörgyi** economist, financial expert ERSTE-Bank

Péter **Nagy** jurist, tax specialist APEH (State Tax Office)
Tibor **Olasz** DDS, consultant, private dentist

Section 17: Examinations, Assessments and Competences

Person in School who will explain and show this to the visitors:

Name: Dr.Katalin **Nagy**

e-mail: nagynk@stoma.szote.u-szeged.hu

Staff are asked to describe the following:

1. Describe as briefly as possible the overall approach to assessments in the school and explain where they are summative or formative
2. How much does the school rely on exams to motivate students
3. Strengths
4. Weaknesses
5. Innovations and/or Best Practices
6. Plans for future changes
7. Explain as to what level external examiners are involved
8. What formal completion of an exam is required of the school/university for students to qualify and register as dentists (e.g. final examination)
9. The extent to which the school seeks those competences recommended by the EU Advisory Committee on the Training of Dental Practitioners. This document is on the DENTED website at **http://www.dented.org**

In our Dental Faculty we count with approximately 20 students/year, which very small number gives the great opportunity for all the lecturers and examiners to built up personal contact with every students, so actually throughout the semester the teacher forms an almost full idea about the knowledge of the particular student.

Visiting the practical classes gives the highest priority of their study. The students are always informed at the first lecture of the current semester requirements. The requirements can not be modified after the start of the current teaching period. In case of excused absence, the Head of Department has the right to demand that the student makes up the missed practicals as a condition of signing the index, as a acception of fulfilment of the requirements.

Refusal to sign the index or a failed practical grade should be imported to the student in the penultimate week of the semester.

Participation in practicals is certified by the instructor of the practical, and the fulfilment of the subject requirements is recorded in the index by the head of the relevant Department Head.

The student should sit for examination period of the actual semester (unless otherwise provided in the individual study program).

The examination period should be scheduled so that the students can take the examinations proportionally distributed and may attempt to repeat failed exams within the period.

Reason for absence from the examination should be certified with proper documents/medical certificates submitted to the Dean's Office within 5 days from the date of the examination.

Oral examination are open, practicals, where patients are involved entrance may be restricted to professionals.

Final examination are to be conducted before a Board of at least two members.
The grade achieved is entered in the index and confirmed by the signature of the examiner.

Basic form of testing knowledge:
The evaluation of knowledge in the subject may be by the following grade system:
very good (5), good (4), acceptable (3), passed (2), failed (1)
The student must meet the requirements of the subject evaluated with a practical grade within the semester.

Achievement at the mid semester oral examinations, demonstrations, tests can be taken into consideration when calculating practical grades.

The final-semester examination consiss of, in general a comprehensive oral examination when a subject is tested on the basis of subject-matter defined on the beginning of the semester. A final exam consist of a complete oral examination in a core subject, covering and concluding two or more semesters. The Curriculum may prescribe a final examination as a complex oral examination in several subject.

Students must write theses on the topic suggested by the Faculty or chosen individually and approved by the Department. The Defence of the Theses takes place before the board.

State Board Examinations are form of written and oral examination that concludes the student complete higher education. Having completed the basic training of the Faculty, the student proves the possession of the knowledge required for the qualification and the capability to apply the acquired knowledge. Always external examiners are involved.

Section 18: Other Influences

Person in School who will explain and show this to the visitors:

Name: Dr. András **Fazekas**

e-mail: fazekasa@stoma.szote.u-szeged.hu

Please describe how the following influence the students' curriculum and/or clinical training:

18.1 Regional oral health needs

The caries frequency is about 96 % in Hungary. According to an examination 1990/91 in villages around Szeged the DMF-T index at the age of 28-32 years was 15.5, at the age of 43-47 years was 20.08. The DMF-T average in children at the age of 12 years was 4.3 between 1991-94. Consequently the oral health needs are great in Hungary, and in our region as well. Unfortunatelly the costs of the dental treatment are much more than earlier, so the number of the patients dropped back in the last years. The prevention is emphasized in the curriculun and in the training as well.

18.2 Evidence based treatments

The teaching and the work goes on according the principles of the evidence based treatment.

18.3.Involvement in other university activities and sport

At the end of the semesters there is a meeting, where the students can tell their problems and opinion about teaching, learning and their difficulties. All the teachers are present at this time and they can discuss the problems with the representatives of the students. The students make research work with the help and direction of a tutor. Once a year there is a scientific forum where they can have presentations about their results.

The students have an own organization to represent their interests. This association organizes sport events at the university. There are yearly sport events, when students of other universities come together and make competitions in different braches of sport. Dental students have more than 35 lessons/week, therefore they don't have too much time for sports or recreation.

18.4.Recreation

There are clubs for the university students, where they can make different cultural and free-time activities during the week and in week-ends.

18.5.Student selection procedures

In the fourth year of the secondary school the students can apply for four different university or college place. To be enrolled in the medical university the have to sit for the entrance examination, which has a written and an oral part. Every candidate has to take an exam in biology, but they can choose between physics and chemistry. They bring 60 points from the secondary school marks and they can win 60 points at the entrance examination. The students need generally more than 107-108 points to get into the university.

18.6.Labour Market Perspectives

In the last years all of our students could find a job in clinics or in private praxis, one or two doctor comes generally to work to the dental clinic. The labour market perspectives are good with the exception of university cities.Many of the young dentists go back to their birthplace to work, some of them go to Budapest, only a very few stay in Szeged.

Please write a short paragraph on the employment opportunities for your graduates and particularly if there is a significant movement of your graduates to another country

In Hungary there is a numerus fixus at the medical and dental schools to try to avoid an "overproduction" of physicians and dentists. The ratio of the population/practicing dentists is not

ideal. It is about 3200:1, which is quite far from the ratio which would needed on the base of the oral morbidity indices of the Hungarian population. Moreover there are big differences in the regional distribution.

There is no significant movement to other countries.

Please describe whether any particular time is devoted to involvement in sport or other university activities outside the faculty or school of dentistry.

What efforts are made to ensure students have sufficient time for student reflection
The students have opportunities in regularly organized meetings to discuss their opinion about the education with the teaching staff, this question is exposed in an other part of this document.

Section 19: Student Affairs

Visitors should meet full class together of final year together with the class representatives of earlier years
Name of Student representatives (2 for each class) who will discuss this:

Final Year:
Balázs **Sivók**_____

Zsuzsanna **Révész**_____

Fourth Year:
Krisztina **Andrusik**_____

Andrea **Kajnai**_____

Third Year:
Márk **Antal**_____

Melinda **Martus**_____

Second Year:
Beáta **Lippai**_____

Dávid **Barta**_____

This will be the basis of a discussion with visitors.

19.1 Basic Data from Dental Schools

a) Average number of dental students qualifying per year: __22___
b) Average number of dental students admitted to the first year: __28___
c) Length of course in years and/or semesters: _5/10____ years/semesters
d) Is there a separate period of vocational training following graduation as a dentist in your country? YES/NO
e) If yes to d) above, is that organised by the University/Dental School YES/NO

19.2 List different postgraduate courses –

19.3 List different auxiliary/technology/other courses and state number who qualify per year

There is a course for educating dental assistants every year. The course goes on for one year, the assistants have classes on one day in every week. Some doctors of the Dental Clinic take part in the teaching of theory and practice. During the education the dental assistants spend a short time in every department to take part in the practical education. At the end of the course the assistants have to make a theoretical and practical exam.
The average number of the students are 30 in a year.

19.4 Describe briefly student counselling services in the University

In our Dental Clinic the students have a form-master, and in addition every class has a patron, who are the members of the staff. The form master and the patron have to help the students in solving their study problems and in organising their university life. If it is necessary, they give help in social problems too.
In the University students have a representation, what's name is HÖK. This is an elected corporation, which represents every student in the different forums. Their office is open every day, the students can find them with their problems.

Section 20: Research and Publications

Host school should set out the publications of all staff according to the sections set out below strictly confined to past 36 months - please exclude abstracts and articles in non-scientific or non-refereed journals

20.1 number of publications in refereed journals 19

20.2 number of textbooks published by staff 2

20.3 number of chapters in books 1

20.4 grants received > €1,000 2

OTKA T015975 “Replacing of the jaw by vascularised bone graft. Prosthetic rehabilitation of patients rehabilitated already by maxillofacial surgery“ 1995-1998
19,133.30 €

OTKA T029322 “Improving the life quality of patients after oral cancer surgery“ 1999-
20,741.21 €

20.5 Number of invited presentations at international meetings (excluding abstracts) 8

-The 8th Scientific Conference of College of Dentistry, University of Baghdad
1. Occlusal Rehabilitation with Implant Supported Dental Replacements: The Prosthetic Procedure in Focus.
2. Practical Demonstration
Prof. András **Fazekas** 28-30.04.1998.

-The 9th Scientific Conference of College of Dentistry, University of Baghdad
1. The effect of the individual and professional plaque controll methods on the transmucosal surface of the titanium implants.
Prof. András **Fazekas**, Dr. Anette **Stájer**, Ádám **Mechler**, Zsolt **Bor** 01-03.03.1999.

2. Experiences in dental implantation combined with autologous bone transplantation
Dr. Istvan **Vajdovich**, Dr. Mihály **Bandula**, Dr. Zsuzsanna **Tóth**, Prof. András **Fazekas** 01-03.03.1999.

3. Clinical study of the individual and tooth borne bridges.
Prof. András **Fazekas**, Dr. Márta **Radnai**, Dr. István **Vajdovich**, Dr. Doris **Kostinek** 01-03.03.1999.

-The 10th Scientific Congress College of Dentistry University of Baghdad
1. Thermal surgery of the orofacial region.
2. Malignant tumours of the orofacial region.
Dr. István **Sonkodi** 13.04.2000.

-Román Fogorvosegyesületek Kongresszusa, Bukarest, Romania
Planing of dental prosthesis for implant treatment
Prof. András **Fazekas** 23-25.09.1999.

Please provide a list of publications.

Publication in referred journals:

Bánóczy J., Fazekas A., Mari A., Pintér A., Szabó J., Szõke J.: Ajánlás a só fluordúsításának caries preventív célból történõ magyarországi bevezetésére. Fogorv. Szle. 90, 351-360, 1997.

Kocsis A., Kocsis S. G.: Fogszabályzó kezelések során fellépõ káros következmények. Fogorv. Szle. 90, 327-332, 1997.

G. Kocsis S. and A. Kocsis: Supernumerary occlusal cusps. Acta Biol. Szeged 42, 217-223, 1997.

A. Ashar, S. M. Khateery and Á. Kovacs: Mandibular metastatic hepatocellular carcinoma: A case involving severe postbiopsy hemorrhage. J. Oral Maxillofac. Surg. 55, 547-552, 1997.

K. Nagy-N., I. Szõke, E. Nagy, I. Sonkodi, L. Borbély, A. Mari and H. N. Newman: Microflora of Biofilms on Oral Carcinomata. J. Dent. Res. 76, (IADR abstr.) 3404, 1997.

Nagy K., Pethõ Z., Borbély L., Sonkodi I., Mari A.: Fej-nyak daganatos betegek rehabilitációja, kiemelt figyelemmel a pszichés gondozásra. Fogorv. Szle. 90, 55-59, 1997.

Kiss Gy., Borbély L., Kovács Á.: Állcsontpótlás microvascularis módszerrel átültetett fibulával. Orv. Hetil. 138, 1855-58, 1997.

Redl P., Borbély L.: Kiterjedt intraoralis hegesedés kezelése mikrosebészeti módszerrel. Fogorv. Szle. 91, 87-90, 1998.

Stephen, K. W., MacPherson, L. M., Gorzó I., Gilmour, W. H.: Caries, fluorosis és sófluorozás Szegeden. Fogorv. Szle. 91, 275-280, 1998.

E. Molnár, G. S. Kocsis und M. Maczel: Entwicklungsanomalien der Zähne bei Skeletresten aus der ungarischen Awarenzeit von Pitvaros - Poster. HOMO Vol. 49, Suppl., p. S68, 1998.

A. Ashar, Á. Kovács, S. Khan and J. Hakim: Blindness Associated With Midfacial Fractures. J. Oral Maxillofac. Surg. 56, 1146-50, 1998.

Ashar, A., Khateeery, S. M., Faahd, M. S., Kovács, Á.: Ameloblastoma of the jaw: Enucleation with immediate cancellous bone graft – Report of two cases. Pakistan Oral & Dent. Jr. 18, (1) June 98

Maráz K., Gorzó I., Olasz T., Kapros, P.: Szövodményes periapicalis elváltozás konzervatív kezelése. Egy eset kapcsán a kalcium-hidroxidról. Fogorv. Szle. 91, 347-354, 1998.

L. Kemény, Gy. Szolnoki, A. Szabó Kenderessy, R. Gyulai, M. Kiss, G. Michel, K. Nagy, T. Ruzicka, A. Dobozy: Identification of a soluble interleukin-8 inhibitor in the supernatant of polymorphonuclear leukocytes. Immunology Letters 64 (1998) 23-29.

K. N. Nagy, I. Sonkodi, I. Szoke, E. Nagy, H. N. Newman: The microflora associated with human oral carcinomas. European Journal of Cancer, 34, 4, 304-308, 1998.

Radnai M., Fazekas A., Vajdovich I., Kostinek D.: Implantátumon és természetes fogon rögzített hidak klinikai vizsgálata. Fogorv. Szle. 91, 195-202, 1998.

Szontágh E., Szoke I., Nagy E., Mari A.: Orofaciális tájék odontogén és non odontogén gyulladáasinak baktériumflórája. Fogorv. Szle., 92: 45-50, 1999.

Kohalmi T., Gorzó I., Mari A., Nagy K.: Különbözo tömoanyagok széli záródásának *in vitro* összehasonlítása I. Az alkalmazott tömoanyag hatása a széli záródásra. Fogorv. Szle., 92: 87-95, 1999.

Kohalmi T., Gorzó I., Mari A., Nagy K.: Különbözo tömoanyagok széli záródásának *in vitro* összehasonlítása II. A preparálás helyének és módjának a hatása a széli záródásra különbözo tömoanyagok esetén. Fogorv. Szle., 92: 111-20, 1999.

Vályi P., Gorzó I., Mari A.: Higiénia a fogászatban I.: Kézidarabok és az egységkészülékek fertozöttsége. Fogorv. Szle. 92: 167-74, 1999.

Vályi P., Gorzó I., Mari A.: Higiénia a fogászatban II.: Kézidarabok dezinficiálása. Fogorv. Szle. 92: 213-8, 1999.

Kohalmi T., Gorzó I., Rácz B., Mari A., Boda K., Mihalik E.: Különbözo esztétikus tömoanyagok széli záródásának változása hokezelés hatására. Fogorv. Szle. 92: 301-6, 1999.

Nagy, K., Borbély, L., Kovács, Á., Fazekas, A., Vajdovich, I., Mari, A.: Implant Prosthetic Rehabilitation after Segmental Mandibulectomy and Bone Grafting. Journal of Long-Term Effects of Medical Implants, 9 (3): 185-91, 1999.

Radnai, M., Fazekas, A.: Caries prevalence in adults seven years after previous exposure to fluoride in domestic salt. Acta Med. Dent. Helv., 4: 163-6, 1999.

Ashar, A., Kovács, Á., Khateery, S.: Etiology and patterns of facial fractures in Al Ain, Inited Arab Emirates. Saudi Dental J., 11: 109-13, 1999.

Szabó, G., Kreidler, J., Hollmann, K., Kovács, Á., Németh, G., Németh, Zs., Tóth-Bagi, Z., Barabás, J.: Intra-Arterial Preoperative Cytostatic Treatment versus Preoperative Irradiation. Cancern, 86: 1381-6, 1999.

Stephen, K. W., MacPherson, L. M. D., Gorzó, I., Gilmour, W. H.: Effect of fluoridated salt intake in infancy: a blind caries and fluorosis studey in 8th grade Hungarian pupils. Comm. Dent. Oral Epidemiol., 27: 210-5, 1999.

Textbooks:

Kovács Á.: Maxillofacialis traumatológia. Semmelweis Kiadó, Budapest, 1999.

Chapters in books:

Arctájéki és szájüregi fájdalmak és egyéb rendellenességek. In: Szarvas F. (szerk.): Differenciáldiagnosztikai kalauz. Medicina, Budapest, 1997

Szájsebészet, maxillofacialis sebészet. Ed.: Szabó Gy. egyetemi tankönyv. Semmelweis Kiadó,

Budapest, 1997.
6. fejezet: Kovács Á., Divinyi T., Szabó Gy.: A maxillofacialis tájék cystái. pp. 79-94.
7. fejezet: Kovács Á., Szabó Gy.: A maxillofacialis terület gyulladásai. pp. 95-106.
8. fejezet: Kovács Á., Szabó Gy.: Maxillofacialis traumatológia. pp. 107-126.
12. fejezet: Kovács Á., Szabó Gy.: A fej-nyak, illetve maxillofacialis daganatok sebészi és gyógyszeres kezelése. pp. 184-198.
13. fejezet: Borbély L.: Az ajak- és szájpadhasadék sebészete. pp. 199-215.
14. fejezet: Borbély L., Vízkelety T.: A dysgnathiák sebészei kezelése. pp. 216-240.
15. fejezet: Borbély L.: Craniofacalis sebészet. pp. 241-256.

Oral and Maxillofacial Surgery. Ed.: Szabó Gy. egyetemi tankönyv. Alapítvány a Száj-, Arc- és Állcsont-sebészeti Betegségek Gyógyításáért, Budapest, 1997.
6. Á. Kovács, T. Divinyi, Gy. Szabó: Maxillofacial cysts. pp. 125-144.
7. Á. Kovács Á.: Infections and inflammation in the maxillofacial region. pp. 145-166.
8. Á. Kovács, Gy. Szabó: Maxillofacial traumatology. pp. 167-186.
12. Gy. Szabó, Á. Kovács: Surgical and medical treatment of tumours of the head and neck. pp. 249-260.
13. L. Borbély: Surgery on cleft lift and cleft palate. pp. 261-280.
14. L. Borbély, T. Vízkelety: Surgical treatment of dysgnathias. pp. 281-307.
15. L. Borbély: Craniofacal surgery. pp. 308-326.

A prevenció szempontjai a protetikai ellátásban. In: Bánóczy J. és Nyárasdy I. (szerk.): Preventív fogászat. Medicina, Budapest, 1999.

Nagy, K., Szoke, I., Sonkodi, I., Mari, A., Nagy, E.: Inhibition of microflora associated with oral malignancy (Infection Control). Oral Oncology Book Chapter. MacMillan India Limited, New Delhi, India, Vol. VI. pp. 459-65, 1999.

Nagy, K., Borbély, L., Kovács, Á., Sonkodi, I., Fazekas, A., Mari, A.: Prosthetic Restauration of Head and Neck Tumour Patients using Vascularised Bone Graft and Endosseous Implants. Oral Oncology Book Chapter. MacMillan India Limited, New Delhi, India, Vol. VI. pp. 473-9, 1999.

Kovács Á., Divinyi T., Szabó Gy.: A maxillofacialis tájék cystái. In: Szabó Gy.: Szájsebészet, maxillofacialis sebészet. Semmelweis Kiadó, Budapest, 1999.

Kovács Á., Szabó Gy.: A maxillofacialis terület gyulladásai. In: Szabó Gy.: Szájsebészet, maxillofacialis sebészet. Semmelweis Kiadó, Budapest, 1999.

Kovács Á., Szabó Gy.: Maxillofacialis traumatológia. In: Szabó Gy.: Szájsebészet, maxillofacialis sebészet. Semmelweis Kiadó, Budapest, 1999.

Kovács Á., Szabó Gy.: A fej-nyak, illetve maxillofacialis daganatok sebészi és gyógyszeres kezelése. In: Szabó Gy.: Szájsebészet, maxillofacialis sebészet. Semmelweis Kiadó, Budapest, 1999.

Szabó, G., Kreidler, J., Hollmann, K., Kovács, Á., Németh, G., Németh, Zs., Tóth-Bagi, Z., Barabás, J.: Intra-arterial preoperative cytostatic treatment versus preoperative irradiation (prospective, randomized trial investigating lingual and sublingual carcinomas). In: Eckardt, A.: Intra-arterial Chemotherapy in Head and Neck Cancer. Einhorn-Presse Verlag, Reinbek, 1999.

Arctájéki és szájüregi fájdalmak és egyéb rendellenességek. In: Szarvas F. (szerk.): Differenciáldiagnosztikai kalauz. Medicina, Budapest, in press.

Section 21: Quality Development or Continuous Improvement Policies/Schemes

Person in School who will explain and show this to the visitors:

Name: Dr. Gábor **Kocsis Savanya**_____

e-mail: kocsiss@stoma.szote.u-szeged.hu___ fax: _____

Dean to complete:

Do you or any members of the staff have any recommendations on appropriate methods of promoting the development of quality assurance methods or a continuous improvement policy. Does your school have any plans for improving or implementing new quality development methods? If yes, please explain very briefly as this is a topic for European consideration.

Faculty and staff development:

Aims

We think it is very important to build in the latest theoretical and clinical results and methods of the medical sciences into the education. It is necessary to introduce modern technics, including video programs, interactive computer programs, simulating practices and lectures conducted by computers. We plan to introduce the credit system into the education. We have to organize the system of optional subjects, with exams and credit points. These subjects must be mainly practical subjects. The research work of the interested students is supported by the staff. The PhD program of the Dental School will start is the close future.

Implementation

In the field of prevention and patient treatment we use the newest materials and methods, sometimes in a cooperation with the firms which produce or sell these materials. It is planned to develop the Dental Medical Faculty, since now the Dental School functions as a Department of the Medical School. To get to know the new results in research we can use our own library and all the libraries in the university. Through a system it is possible to get literature from other cities and countries as well. The colleagues take part in congresses, trainings, study trips, which are expected and partly supported by the head of the university. Members of the staff have the task to take part in research, education and patient treatment. This way they have experiences in all the fields of dental medicine, what they can use in teaching the students. To apply the materials and methods, as well instruments and dental units we need more financial support.

Evaluation

The quality of the education in evaluated on different levels. Students have the possibility to tell their opinion and problems in a frame of a meeting with the staff at the end of the semester in the Dental School and in a bigger circle, in the Medical School as well. After completing the different subjects they fill out a questionnaire concerning the quality of lectures and practices. There are different corporations of the University dealing with the questions and problems of the education.

Staff

A scientific conference is organized yearly for the doctors, who studied dentistry in our clinic. Meeting with the former students is a very good feed-back of the education. There are requirements regarding the scientific work of the staff, which have to be fulfilled in order to got the promotion and scientific degree. There are co-operations with other (Hungarian and foreign) Dental Schools in order to promote the postgraduate education and the research work of the staff. We have to keep on building out further international contacts. We have to learn how to manage the research projects in our new economical system, since the financial support for the research work doesn't come automatically from the state as earlier.

Student Evaluation

In the student evaluation there are traditional methods, like tests and exams. We should work out more and more the possibilities of the informatics in teaching and evaluating the students as well.

International Contacts – Undergraduate Programme

Programme – literature lists

Student and staff visits abroad

- Students have the possibility to spend the 4 weeks summer practice in different universities in abroad, it is organized by the dean's office and the organization of the students.
- Staff visits abroad are supported by the head of the university, but it is not regular, the personal contacts with foreign university in special projects have a big role in such visits.

Foreign students visits to the actual school

Foreign students come regularly for summer practice to our Dental School, first of all from the neighbouring countries.

Part II Sections 22 and Section 23

Section 22: Visitors Comments

UNIVERSITY OF SZEGED - Department of Dentistry and Oral Surgery

Visiting Team:
Anders Nattestad (Chiarman),
Frank Burke (Rapporteur),
Henk Kersten,
Marie de Montfort Supple

1. Introduction

The visitors wish to express their appreciation of all the work by the staff of the Dental School in preparation for the visit. They are grateful for all the arrangements put in place for them, which facilitated the smooth running of the visit.

The small size of the school makes it possible for the teachers to have an integral knowledge of all students and develop personal relationships. The school is too small in terms of critical mass to fulfil the oral health needs of the local population with the developing economy and oral health requirements.

We commend the initiative of establishing the Foundation to generate funds from alumni and other sources.

There needs to be greater focus on the dental school as an independent entity such as a Dental Faculty. This would facilitate a focused approach to the delivery of dental education, there would be increased financial responsibility and transparency and co-operation with other Faculties would be enhanced.

The mission statement of the high level of knowledge in medicine is not in line with the number of hours spent on general medicine compared to hours spent on basic biological sciences. Also the mission statement focuses on health informatics, we endorse this aspiration but do not find adequate evidence to demonstrate its fulfilment.

The planned use of modern techniques and the use of video and computer programs are to be commended, but in view of the current financial constraints appears to be unrealistic.

The strategic plan for the Dental School needs to receive a broader input, be distributed more widely and be reviewed and updated at regular intervals.
The clinical progress of students is well monitored with a logbook for each student. However it would be better if the logbooks were merged into one logbook for each student. If the student lost or mislaid their logbook no grade would be given for that session.

The subjects within the semester are longitudinally arranged so the students have to divide their attention over too many subjects, which, from an educational point of view, is not optimal.

There is an obvious lack of a curriculum committee for dental education and curricular developments. This problem should be solved with the establishment of an independent faculty. The curriculum committee should contain members of all cognate departments as well as undergraduate students and recent graduates.

The basic sciences; anatomy, physiology, biochemistry and biology are taught together with medical students with exactly the same course content. Although an initial patient contact has been commenced in the second year in the main the dental students have very late patient contact in the 4th year. This can be problematic in relation to career choice and the understanding of basic principles and relevance for oral health care as related to the basic sciences. A promotion of earlier patient contact and more time devoted to dental subjects at the beginning of the curriculum, would require a reduction in the hours of basic sciences.
We encourage the general introduction of the competency-based curriculum, as this is promoted by the European Union and facilitates harmonisation and convergence towards higher standards. The many hours spent on biological sciences was only justified by status and the perceived need for communication on equal levels with physicians. This overemphasis is in contrast to the medical subjects such as pharmacology and internal medicine. A competency-based approach would aid the reduction of the basic science curriculum. The clinical dental staff should drive the entire content of the curriculum.

While the concept of the summer practicals is innovatory the quality of the summer practicals conducted outside the Dental School is not controlled and it is the students' initiative to obtain a place.

Szeged dental school is the first choice among many dental students and they usually come from other parts of the country. After graduation most of the students go back to their area of origin. The final year students were very open, responsible and loyal to their school.

The patient treatment hours were not well organised giving much unproductive time.

The individual responsibility of total patient care is not supported by the system with several students carrying out treatment for an individual patient. This does not occur in clinical practice, it prevents the students from building up a relationship with their patients and it does not prepare the students appropriately for the final examination. Consequently the teaching of Comprehensive Patient Care is advocated. This would be supported by a unique centralised set of patient records for each patient. The patient records were unacceptably disjointed and not uniform. We promote the development of one comprehensive patient record common for all departments to be maintained centrally.

2.1 Clinical Facilities

The Dental School serves a large region of Southern Hungary. The building is located in the centre of the town close to other university facilities and transport infrastructure. The building however seems inappropriate for a contemporary dental school making it difficult to achieve an optimum level of education and oral health care.

The in-patient ward seems out of place in the dental school. Under the present circumstances it is difficult to guarantee patient care, especially Intensive Care. It would be better situated in a general hospital, leaving only a surgery for outpatients and instead building a close co-operation with the general hospital with students rotating in the department. This would also serve to free up some space in the Dental Hospital itself.

There is extremely limited office space for staff and the lack of dedicated surgery space

makes it difficult for staff to carry out treatment in seclusion. In the current building there is no realistic possibility of having private or research patients for the staff to increase the income of the school.

The clinical facilities are all limited both in space, ergonomic patient care, and appropriateness for cross-infection control and clinical waste management. The number of students is very high compared to the clinical facilities and student failure compounds this problem by increasing the numbers in subsequent years. The improvements in surgery, equipment and instrument design of the last decades are not reflected in the facilities.

The waiting rooms are clean, functional but are sparse and uninviting. With minimal modification they could be made more relaxing and could be used to promote health education messages. Additional hot and cold drink dispensing machines could enhance patient comfort and provide a source of revenue for the Dental School.

Neither the staff nor the students have a room for social interaction or studying. Such facilities would not only provide a locale for reflection and learning but a coffee room or even a cyber-café would promote an exchange and sharing of ideas.

The students feel that they have limited clinical experience in oral surgery and prosthodontics and they feel incompetent and uncertain in medical emergencies.

A substantial portion of the final year students would be willing to continue into specialty training if possible. This represents a valuable potential source of staff and income for a Dental School with sufficient space, staffing and equipment to support such training.

The system of having students work in pairs in the clinic reduces the hours of student contact with patients in a treatment role. We recommend that final year students have access to professional assistance rather than fellow students to increase the number of treatment hours. A solution to this may be by having the Second Year students assist the Fourth Year students and the Third Year students assist the Final Year students. This would introduce the more junior students to clinical contact at an earlier stage and increase the direct patient contacts for the senior students.

2.2 Teaching facilities

The lecture and seminar rooms are reasonably equipped compared to the number of students. The facilities for the basic sciences were not assessed.

2.3 Teaching laboratories

The teaching laboratories are adequate in space considering the current number of students. The equipment is old and especially new phantom heads and related modern instruments should have a high priority. The use of simulation units with turbine machinery is encouraged. The current equipment is inadequate for teaching a full range of operative dentistry.

2.4 Research laboratory

The facilities for research are extremely limited and out of date.

2.5 Library

The library is comparatively well equipped, although there are limitations in up-to-date study books and International journals. There is currently no librarian in post and the students therefore have limited access. If the situation with staffing is not solved, other options such as moving the books and journals to the main library of the university should be considered.
The computer located in the library should be moved to a separate facility with 24-hours access if this is not possible in the library.
There is no clear policy for prioritising the purchase of journal subscriptions and books. The wish to have more computers in the school for students is commendable but in the present financial situation, together with space constraints, seems inappropriate.

3. Organisational and administrative structures

The infrastructure after the recent combination of several universities into one university is not yet clearly defined. The organisation of the school is externally determined, as the dental school is a department in the medical faculty as opposed to an independent entity. We endorse the aspiration of the dental school to become an independent faculty. The internal structure in the dental school is not clear and the department heads have no autonomy.

There are 5 sub-departments with in the dental school. The dean of the dental school is the only departmental chair and is appointed for life by the dean of the medical school.
It would appear to be a more healthy system if the staff of the dental school elected the dean of the dental school democratically for a limited number of years with the possibility of reappointment.

The financial support for the school comes mainly from the government through the university in a per capita per year system. There is also a health insurance system, but this does not cover all the costs of dental treatment. The income of the dental school is obviously insufficient to maintain an acceptable level of maintenance and development. There seems to be little monitoring of financial and administrative procedures.

There is a complicated structure for buying new materials going from staff over department head to the dean of the dental school, who does not have the buying power, but recommends the purchases to the administrative office of the dean of the medical school. In many cases it is not possible to get all the required materials and especially towards the end of the year, many common materials are not available and treatments must be carried out

using sub-optimal materials and/or methods. This situation was contradicted by some staff. In line with the previous comments on the stature of the dental school as a department within the medical faculty, this problem of complicated and non-obvious procedures would be easier to solve should the dental school become an independent unit. In this scenario also the priorities of budgeting could be more transparent and be decided in a structure where all department heads had influence. In relation in the need for newer and modern instruments, we endorse an arrangement whereby the undergraduate students have financial responsibility for the use instruments.

The access to information technology is limited for staff and more or less non-existing for students. There is access to more modern facilities through the central university library and computer laboratories. There are no computer-aided learning programs available to students and there seems to be no integration of new technologies into the curriculum. Within the current limitations, the integration of information technology into the curriculum has great potential, but would require a specific member of staff coupled with investment in hardware, software and infrastructure. In contrast to staff opinion, only a minority of the students have computers at home and only few with Internet access.

4. Staffing

In common with other eastern European countries, the salary of the staff at all levels is extremely low and is considered to be a major problem. The low salary makes it necessary to spend quite a number of hours a week in private practice which leaves less time for preparing education and carrying out research. In a future with a possible membership of the European union, there must be some equalisation of the salaries to maintain a high educational standard inside Hungary. Furthermore innovative approaches to other forms of staff reward such as support to participate in international courses and meetings warrant consideration.

The University and Faculty International Office/International Liaison Office should be encouraged to support Dental School staff in participating in international exchange.

The state thus takes the dedication of the staff for granted and in a market driven society, with open borders, this is considered unreasonable. It is noteworthy that there has been a high number of staff leaving the Dental School, 15 since 1995.

We are impressed with the level of external influence obtained from experience abroad under the current and previous limitations. On joining the European union, the staff will have the challenge of being exposed to European union levels of knowledge and techniques. We encourage junior and senior staff to take part in the *DentEd* program or other international activities. An enhancement of the current very limited access to information technology will facilitate this development.

The recent developments in compulsory continuing education is very commendable and in line with the most contemporary European postgraduate education programs. These developments will both generate an income for the university and enhance the status of the academic staff. However caution must be exercised because of the danger of overloading an increasingly overworked academic staff.

There appears to be no formal staff development plan and career opportunity appeared to rely mostly on age and informal structures. There is a real concern that when the existing senior staff retire that there is no cohort of staff in training to succeed them. The junior staff, in particular, were very concerned with their financial status and career development potential. There was a pervasive air of pessimism when this group presented themselves. The majority of the junior staff was undergoing vocational training at the School and had only

limited contact with dental education. Their views on their own education was regrettably very passive and conservative. This is a serious concern; this group needs to be nurtured and encouraged to sustain academic dental development in Hungary. An international perspective was lacking in this group and they would benefit from exposure to national and international influences in dentistry.

The unacceptable salary and working conditions for all staff members create a climate where burn-out is a very real probability.

There is very limited exchange of staff between Hungarian schools. Greater inter-school exchange of staff would broaden the range of clinical expertise and enhance harmonisation of standards.

5.0 Biological sciences

In all the Biological Sciences the departmental size was appropriate. And the teaching staff were comparable to contemporary European standards in knowledge and research. Division of time for teaching (40%), research (50%) and administration (10%) was good. There was evidence of co-ordination between the basic science subjects in delivery of teaching to the undergraduates. The Departmental libraries appeared to be better equipped than the general Medical Faculty library.

All the departments felt that the dental students participated actively in the teaching. Both the attendances by the dental students at lectures and their laboratory skills were good. It was felt that the good exam results of the dental students were a result of the small group size of the dental group. All departments used the feedback questionnaire, which was used before the exams.

However there was no apparent dental input into what was taught in the Biological Sciences.

5.1 Biochemistry

A very comprehensive, detailed course in Biochemistry was taught to both the medical and dental students together. The use of medically trained personnel in the laboratory was an example of good practice. It was unclear whether any dentally trained personnel were involved in this phase of teaching. As a Department they wanted to give more time to education, specifically to prepare handouts, an increase in computer modelling programmes was requested as well as more qualified personnel to deliver the teaching programme.
The value to dental students of the extensively detailed course is questionable.

5.2 and 5.3 Molecular Biology and Genetics

This course was taught using innovative practices. Small booklets were used to guide the students through lectures and practicals. Weekly, voluntary problem-solving competitions were carried out. Extra training exercises and consultations were available on request. There was a desire in the Department for laboratory equipment pipettes and multi-media.
This course received favourable feedback from students in terms of interest and novel teaching methodology. However its relevance to clinical dentistry was not clear.

6.1 Anatomy and 6.3 Histology

This was a very comprehensive course delivered to medical and dental students, which appeared to cover all aspects of anatomy. The staff felt there was a lack of hardware to support Internet learning.

Use of whole body cadaver dissection as an assessment technique may have limited relevance for dental students. Particular emphasis is needed on head and neck anatomy as well as the masticatory system for the dental students. There was a time gap between the teaching of odontology in the second semester and its clinical application in the seventh semester

6.2 Physiology

A very comprehensive physiology course is taught in well-appointed laboratories. There was a desired shift away from animals to humans for experimentation. The desire to develop this further by having a Clinical Skills Laboratory for all students is a laudable aim. Care must be taken that oral physiology be incorporated into this laboratory.

The students did not like the physiology teaching and found much of it to be irrelevant.

7.0 Paraclinical sciences

The Departments of Microbiology and Pharmacology appeared to have a co-ordinated teaching programme, which avoids unnecessary duplication. Most of the lectures were to dental students only and lecture and practical attendance was good. The exam results for dental students were better than overall, possibly as result of more control over a smaller group.

The departmental libraries appeared to be better than the Medical Faculty library and the overall the facilities appeared to be better than in the Dental School.

Only microbiology had a strong focus on dentistry. Feedback was not as structured as in the Biological Sciences. Staffing levels were good in Microbiology and Pharmacology but retaining staff in Pathology was more difficult.

7.1 Pharmacology

In Hungary dentists can prescribe everything but the Department has only half the time with dental students as they have with the medical students consequently the Department would like more time to teach pharmacotherapy. Computer aided programs are used as a teaching tool and this is to be commended..

7.2 Microbiology

There was a strong emphasis on oral microbiology by an experienced teacher who was well informed about dentistry. There was a desire to make his practicals more technical as they currently appear to be more like demonstrations. Smaller groups of five, more space and materials were desired to accomplish this aim.

It is desirable to take samples, write a request and convey the sample safely and this should be incorporated into the curriculum. Greater clarity in the delivery of clinical cross-infection control teaching could be achieved by co-ordinating this aspect of the course with the course in General Practice.

There is a time-lag between teaching of microbiology and its clinical application.

7.3 Pathology

Recognition of gross pathological changes in a problem-based approach is used and there was a desire for more multi-media teaching.

There are difficulties in retaining trained staff. And the amount of time devoted to clinical service reduced the time available to do research.

Closer relationships with the clinical dental subjects, especially dental surgery, were desired. The relationship between the teaching of Pathology, Oral Pathology and clinical Oral Pathology were not clear

8.1 General medicine

The teaching in general medicine is exemplary in demonstrating the close relationship between medicine and dentistry. The teaching is specifically for dental students and focuses particularly on their needs. There are recommended textbooks in Hungarian, for which there is part subsidisation from the university. There are many practicals and the students get to see and examine real patients from the University Hospital.

8.2 General Surgery

The teaching in general surgery is carried out both by lectures and bedside practicals in small groups, which is a good example. However given the curriculum overload there may be some particular areas that could be shortened and give place for other topics. The teaching is specifically for dental students and focuses on their needs.

The planned emergency ambulance duty is supported and should be implemented as soon as possible, because students feel uncertain as to how to cope with medical emergencies.

8.3 Anaesthesiology

The content of the course is relevant and the existence of a protocol for emergency care is exemplary. This however is not evident in speaking with staff and students. The delivery of this important content should be examined. The addressed need for more practical hours is therefore advocated.

9. Clinical Sciences

All clinical subjects were evaluated on the quality of the teaching at the end of each semester by an anonymous questionnaire.

9.1 Orthodontics

The clinical independent training of students in orthodontics is limited to very simple procedures as in most European countries and the main focus placed is on diagnosis and understanding of growth principles.

The students have good opportunities to see patients during orthognathic surgery planning and cleft lip and palate patients, due to the close co-operation with the Paediatric and Maxillofacial Surgery departments.

The department suffers from lack of staff, nurses and materials which in some cases necessitates the use of sub-optimal appliances and treatments. This does not happen in private practices.

There is a recognised specialty in orthodontics and there are currently 3 postgraduates in training at the school.

The planned design of course material on CD-ROM seem unrealistic at the current moment given the lack of access to technology both at the school and at student homes. This may however change rapidly in the near future and we do therefore welcome such ideas.

9. 2 Paediatric Dentistry

The students are exposed to a broad range of operative Paediatric Dentistry (see 15,3 which says opposite)and special needs patients. There is also some exposure to patients with different developmental anomalies. The use of composites to restore deciduous molars is questionable, as is the fixed splinting of teeth that have apical third fractures.

The expressed wish for facilities for general anaesthesia for special needs patients is understandable but care should be taken that the referral criteria for these patients are stringent.

The clinical facilities for Paediatric Dentistry were uninviting for children. It was observed that no supine dentistry was carried out leading to unacceptable working posture from an ergonomic perspective. There was also concern about the cross-infection control. The use of rubber-dam, which can be very useful in Paedodontic management, is advocated.

10. Public Dental Health and Prevention

The introduction of a visitation program to the primary schools in the area on preventive issues is under consideration, which we endorse. We appreciate that the teaching in Dental Public Health is carried out by a clinician who is exposed daily to the need to provide prevention. However teaching of public dental health and prevention should not be confined to children and the lack of co-ordination between this course and the Behavioural Science course is regrettable and a missed opportunity. There is an imbalance between 57 hours teaching of Behavioural Science and 4 hours teaching of Dental Public Health and Prevention.

11.1 Conservative Dentistry

There is a good patient base with a vast need for oral health care.

The pre-clinical and clinical proportion follows conventional teaching and treatment methodology. The teaching of conservative dentistry is overly compartmentalised with patients being referred to Periodontology for preventive measures. Furthermore it appears that several students may undertake operative procedures on the same patient due logistical constraints. Limitations in material and equipment are noted and use of rubber-dam was not sufficient. There was no evidence of supine dentistry and the cross-infection control was unsatisfactory.

Gerodontology and tooth-wear are becoming greater oral health problems throughout Europe. Although the specific demographic data for Hungary is not known it can be assumed that these subjects will assume a greater importance in the curriculum in the future and consideration should be given to incorporating the aetiology, diagnosis and management of this condition into the curriculum.

Teaching of Dental Materials in the third semester resulted in a considerable time lag before its clinical application in the seventh semester.

11.2 Endodontics

Most of the endodontic techniques taught conform to the European standards. Some techniques like the obturation of prepared canals, one-visit endodontics and the use of endomethasone are not based on best evidence and should be adapted to evidence-based contemporary techniques. The lack of rubber-dam use in endodontic treatment is disturbing. The recent special funding-initiative for endodontic instruments is necessary and welcomed. This initiative serves as a good example to all other departments.

11.3 Prosthodontics

The sequence of treatments students carry out is logical and take the students through the phases of managing increasing levels of tooth-loss. The theoretical teaching of implantology and related oral biology is also to be commended. The implantology course in particular has the potential for further development as is the policy of out-sourcing laboratory work teach the students the skill of communication with laboratory technicians.

The partial state funding for prosthetic appliances facilitates the provision of care and teaching.

The preparation technique of indirect restorations is debatable. It is unclear what the exact function of the technical laboratory is and how this use of space and staff can be justified.

The unavailability of face-bows and semi-adjustable articulators for the provision of fixed and removable prostheses is very undesirable.

11.4 Occlusion

The course in occlusion and function of the masticatory system provides the students with an early introduction to clinical relevance of anatomy. The unavailability of face-bows and semi-adjustable articulators limited the effectiveness of such a course.

12. Periodontology

The pre-clinical laboratory course exposes the students to the principles of instrumentation prior to patient contact. The teachers of Periodontology seem focused and dedicated. The use of students progress forms is exemplary. The students are exposed to a wide variety of periodontal problems in their clinical training.

Future plans for teaching surgical Periodontology in animal models are impossible with the facilities currently available.

The lack of instruments prohibits broad-based contemporary periodontal treatment modalities from being taught.

For all the subjects in Restorative Dentistry, Conservative Dentistry, Endodontics, Periodontology and Prosthodontics the inability to carry out supine dentistry severely limits the students learning process and also has the potential for the students to develop ergonomic problems. The current configuration of the equipment and clinics makes the application of appropriate cross-infection control extremely difficult.

13.1 Oral Surgery

The presence of the in-patient ward at the Dental School seems out of place and it belongs in the main hospital with the facilities there for emergency care and surveillance. Only minor oral surgery on an outpatient basis should remain at the facility.

The overall content of the curriculum in theory and practicals seem appropriate. There is however a severe lack of patients which limits the clinical practice for the students. There is a discrepancy between the number of procedures carried out per student reported by the department versus those reported by the students. Perhaps this arises from the students carrying out their practicals in different locations with limited control. Therefore some students may graduate with very limited experience in minor oral surgical procedures. We recommend a system for minimum requirements as currently exists in some other

departments. The lack of patients must be due to limited promotion of oral health care.

13.2 Radiography and Radiology

The facility for Oral Radiography was comparatively well equipped and adequate In Redesigning a new building in the future, consideration should be given to having satellite radiography units in different clinics to minimise the movement of patients. The limited staff makes the teaching vulnerable to staff being unavailable.

The use of demonstrations with patients during lectures, practicals and clinical time are commendable. The planned introduction of computer-aided applications is endorsed.

14. Oral Medicine and Oral Pathology

The Oral Medicine and Oral Pathology clinic serves a population of over 1 million people. Therefore there is great opportunity for the students to see a diversity of diseases of the oral mucosa. At the same time the Hungarian law prohibits biopsies taken by practising dentists in cases of all tumours both benign and malignant. There is a recently introduced colour book on mucosal lesions written by the department head, which is an important contribution to the students education.

The use of demonstrations with patients during lectures, practicals and clinical time are commendable.

The possibility of the Internet as an adjunct educational resource does not seem to be appreciated.

The stated problem of shortage of time does not seem easily solved within the current organisational structure. The stated shortage of rooms for patient treatment and education is shared with all other areas of the school. As stated in Section 7.3 the relationship between the teaching of Pathology, Oral Pathology and clinical Oral Pathology was not clear

15. Integrated Dental Care and Dental Emergencies and Special Needs Patients

The absence of comprehensive dental care is compounded by departments pursuing their own independent philosophy, which the students often find to be confusing and frustrating. There also seemed to be little emphasis on the diagnosis and treatment of acute dental emergencies.

We encourage the development of a comprehensive oral health care program.

15.3 Care of Special Needs Patients

There are Special Needs lectures however the students have limited opportunity to treat special needs cases.

16. Behavioural Sciences

The Behavioural Sciences are perceived by the students as being unnecessarily duplicated during the course and their relevance is not obvious. The lack of co-ordination between this course and preventive dental care and dental public health is a missed opportunity.

The course in practice management is relevant, well structured and important. Furthermore inviting outside lecturers to speak is a welcome initiative. The infection-control course is also important but should be taught just prior to clinical contact. The remaining part of the practice management course could be moved to the last semester to increase the relevance perceived by dental students.

17. Examinations, assessments and competences

The favourable teacher/student ratio permits a good overview of the individual student performance and the opportunity to help the individual student. The semester exams are logically arranged and the continuous nature of the exams throughout the semesters is appreciated.

The students have logbooks in some departments to monitor the number of procedures carried out and the marks related to these. The scoring system for clinical work appears to be overly weighted towards passing the students. There is no formal system of giving warnings in case the requirements are not met. There is a need for objective clinical criteria to support the pre-clinical and clinical marking.

The final exam includes patient treatment planning which is commendable, but we recommend giving the students more time to reflect and prepare and thus get the patient some time before the exam. The comprehensive nature of the treatment planning part of the exam is in contrast to the lack of comprehensive oral health care in the curriculum. The students experience this contradiction as a severe problem.

18. Other influences

There is a great need for dental care in the population but little government awareness and response to this.

Evidence based dentistry is not well understood and as a result the students are not prepared for a life-long practice of gathering the best knowledge and how to apply it.

There is little time for student reflection. The students are programmed to attend lectures and practicals in the dental school throughout the week.
Data to come from Henk and Marie re nurses

19. Student affairs

There is a state system to support dental students financially directly and also through scholarships. Furthermore there is funding to support accommodation and purchase of books. This support is marginal. The structure of funding is complex. There exists a detailed study book and the students are well informed with regard to regulations pertaining to examinations.

The social harmony within each student year was obvious but the intensity of the contacts differs among the years. There is little obvious pastoral support for student's emotional needs.

The introduction of sporting activity into the first two years of the dental curriculum is a welcome innovation into the holistic development of the undergraduates. It is regrettable that this activity is not continued into the final three years of the course.

20. Research

The school has previously been strong in specific areas of research. The present environment, with lack of access to technology, laboratory facilities and financial support is not conducive to maintain the previous level of research activities and thus academic standards. Despite this situation there is continuing but individual research activities by some faculty at international level.

The newly amalgamated university presents new opportunities for interfaculty collaboration. The amount of oral disease in the population has a potential for international collaborative clinical studies.

21. Quality development / continuous improvement

The yearly scientific conference for staff and alumni is very innovative and could be further developed and possibly exploited. In this respect more formal feedback systems are recommended.

After the final exam the students are asked to evaluate their educational content and all their teachers in an anonymous form. These forms are in principle open to all departments, but there is no peer influence on the conclusions or decisions drawn from the evaluation. The sub department heads are totally autonomous in this respect also.

Section 23: Visitors Executive Summary

1. Introduction

The Dental School in Szeged was founded in 1949. Education of dental students commenced in 1960. Until 1 January 2000 it was part of the Medical University of Szeged. On 1 January 2000 the Medical University of Szeged merged with other the Universities of Szeged. It is one of the four dental schools in Hungary.

2. Aims and Objectives

2.1. Aims

The aim is to prepare dental students for independent dental practice.

2.2. Objectives

Preparation for independent practice is achieved by giving the students a comprehensive grounding in basic science and medicine prior to developing dental skills. The Dental School provides oral care for those patients required for the purposes of clinical teaching. The Dental School aims to conduct research into dental pathologies and treatments.

2.3. Translation of the aims and objectives in the programme

Within the constraints under which they operate , the staff perform admirably in their aim of preparing dental students for independent practice. Greater emphasis will be needed in integrated care. A research strategy is needed to focus the existing resources on their most efficient and effective utilisation.

3. Programme Characters

3.1. The structure and content of the programme

The undergraduate course is in three distinct phases. The first two years are taken up with an extremely detailed course in basic sciences which matches that delivered to the medical undergraduates. Following this there is a course in human diseases and a pre-clinical dental course. The final two years are occupied by a clinical course in the clinical dental disciplines. A Curriculum Committee is a priority.

3.2. Educational approach

The curriculum is delivered in a horizontal form with little vertical integration. The early years of the course appear to be delivered with little reference to the dental school and much of the relevance of the material covered is of peripheral to dentistry. There appears to belittle integration or co-ordination of subject matter especially between the dental subjects and the other subjects.

3.3. Examinations and assessments

There is a well co-ordinated examination system using traditional methods of student assessment with plenty of time for self-study in relation to the exams. There is a contradiction between having an exam in comprehensive patient care and no teaching in the subject.

The visitors would advocate development of alternative examination techniques, structured feedback from staff to students, and giving students more time on final comprehensive patient exam.

4. Students

There were approximately twenty students in each year. An objective examination system

was the mode of entry. All students were Hungarian

4.1. General comments

One of the greatest resources of the Szeged Dental School was the students. The introduction of sporting activity into the first two years of the curriculum is to be commended and this should continue throughout the course. There is concern about the lack of pastoral care afforded to the students.

4.2. Student competences

While it was unclear as to the specific competences expected of the students it did appear subjectively that the standard expected of the students was of an appropriate standard.

5. Facilities

The Dental School is well located in that it covers a wide catchment area geographically on which it can draw its patients, its central location easily accessible for patients, and it is close to rest of University. The Dental School building is inappropriate for contemporary teaching of dentistry in terms of cross-infection control, education, or undergraduate or postgraduate student numbers and the Visitors strongly recommend the building of a new Dental School. The Maxillofacial in-patient ward should be located in a general hospital with appropriate patient support facilities.

The Library should be upgraded, especially with IT facilities. Student and staff facilities unacceptable and a priority should be a coffee room for staff and students which could provide a heart for the Dental School. The Visitors identified a need to upgrade the clinical equipment, pre-clinical laboratories, and research facilities.

Clinically the waiting area should be made more user-friendly and secluded surgeries should be provided for the staff. The space utilisation and role of the Technical Laboratory was vague and should be clarified

6. Staff

6.1. The Visitors were very impressed with the quality and dedication of the staff who taught all five undergraduate years.

6.2. Staffing in general

The staff-student ratios appeared to be good especially in the clinical areas

6.3. Promotion

The promotion structure was unclear. It was noted that the morale of the junior staff was very low, mainly for financial reasons. There is a real danger that when the current cohort of senior staff retires there will be no succeeding generation of dental academics to take over from them.

6.4. Faculty and staff development

The staff remuneration was very low. This has led to a high rate of staff leaving the hospital in the last five years. With the continuing high workload and the increased emphasis on delivering postgraduate education there is a real concern of burnout of the remaining staff.

7. International perspectives

It was noteworthy how many of the staff had worked or trained abroad. Many of the journals in the library were in English. The visitors would encourage greater international collaboration; this could be encouraged through a greater use of IT and staff participation in international collaborative efforts such as *DentEd.*

8. Research and Publications

The Dental School is producing a limited amount of research and publications in spite of current financial and staff constraints. This is relying on the efforts of a minority of individuals. The Dental School would benefit from a cohesive research strategy making the most of the opportunities offered by collaboration with other departments in the University.

9. Administration of Hospital and Infrastructure

The Visitors felt strongly that the administrative structures were in need of a major overhaul. The Dental School would benefit from being a separate Dental Faculty, the Dean and Departmental Heads should be democratically elected for a finite period of time. Strategic plans covering all areas and staff committees on different levels would enhance flow of information and the implementation of the Dental School Mission statement. A Dental Curriculum Committee should determine the entire curriculum.

There should be greater financial autonomy and responsibility for the Heads of Department, The salaries should be reviewed to encourage the retention and attraction of the best and brightest talent to work in the Dental School. A coherent fee collection process for dental treatment should be developed.

A cohesive patient record system would enhance patient care, student education, and financial control.

10. Overall statement

The Visitors were very impressed by the dedication and quality of the teaching staff and the vibrancy and pride of the students. These groups are the greatest assets of the Dental School in Szeged. Concerns exist about the financial and physical infrastructure, which currently exists to support dental education. The Visitors main recommendations are;

- Independent organisation of faculty
- New building, equipment and instruments
- Salary of staff to be increased substantially

- Curriculum committee within dental school and rearrangement of curriculum
- Teaching of Comprehensive dentistry
- Bottom-up top-down information-giving and decision-making process
- Strategic plan at all levels
- IT considerably. developed
- Rearrangement of existing facilities to enhance patient care, student education and staff and student morale.

The Visitors would like to thank all in Szeged dental school for all their efforts on our behalf and they look forward to re-visiting Szeged in the future.

November 2000