

Presentation of the Project Design by Core Group of the Faculty

Dental Educat. Project at University of Peradeniya
January 1998 - December 2002

Project Design Matrix (PDM)
Name of the Project:
Cooperation Period:

Narrative Summary	Objective Verifiable Indicators	Means of Verification	Important Assumptions
<p>OVERALL GOAL To promote continuing advances in Dental Teaching, Service and Research in the Dental Faculty</p>	<p>Sri Lankans Postgraduate MS/MPhil Degrees are increased from (5% 1997) to (15% 2002) No. of Dental graduate practicing 4 hands dentistry (X 1997) to (Y 2002) Postgraduate research seminar will increase from (X 1997) to (Y 2002) No. of distant education practiced by the Faculty from (X 1997) to (Y 2002)</p>	<p>Record of degrees (Univ. Perad. HQ) Questionnaire/Survey conducted by the Faculty Record of Activities in the Faculty</p>	<p>Sri Lankans recognized the new Dental Faculty/Hospital Complex of the best training and treatment Institute</p>
<p>PURPOSE The Dental Faculty achieves optimum standard of function</p>	<p>Student performance at examinations improved pass rate increase by 10% honors increase by 3% Patient waiting lists reduced from (X 1997) to (Y 2002) No. of SS groups working for the Faculty increase 2,1997 to 18, 2002</p>	<p>Faculty Records Record of Activities in the Faculty Training activities will continue locally</p>	<p>Govt. continue to appreciate importance of dental training An appropriate scheme of patient charges will be formulated and adopted The Ministry of Higher Education will continue to provide adequate funds</p>
<p>OUTPUTS 1. Knowledge and skills of Academic Staff are improved 2. Capability of Technical Staff is Improved 3. Capability of General Nurses & Dental Nurses is improved 4. Management skills of the Dental Faculty Staff are developed 5. To have the capability to develop continuing education programmes</p>	<p>1.1 The number of patients treated is increased from 20,000 / yr 1997 to 100,000 / yr 2002 1.2 The total number of biopsies reported is increased from 1000 / yr 1997 to 4000 / yr 2002 1.3 Number of publications from the staff will double 1.4 Number of textbook / manuals written by Faculty staff increased 3, 1997 to 18, 2002 2.1 Technical work output of each division increases 50% by 2002 3.1 Incidence of cross infection reduced from (X% 1997) to (Y % 2002) 3.2 Four-handed dentistry will be practiced in 1998 Restorative/ Paedo/Perio/O, Surg/ Prosthetics 4.1 Microscopes fungal contamination less than 10 % 4.2 Breakdown rate of hand piece head after one year 100% 1997 to 20%, 1999 4.3 Punctuality & attendance of staff improved from (X% 1997) to (Y % 2002) 4.4 Maintenance Records are continuously organized in all 18 areas 5.1 Continuing education programmes will be increased from X to 4 yr</p>	<p>Faculty Records Record of Divisions Hospital Records Faculty Records Faculty Records</p>	<p>Trained staff will work hard with dedication Trained Technicians are present</p>

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ACTIVITIES	Important Assumption
<p>1.1 Identify what knowledge and skills are lacking for each discipline</p> <p>1.2 Identify the training needs of each discipline</p> <p>1.3 Prioritize the training needs of the disciplines</p> <p>1.4 Identify the trainees</p> <p>1.5 Determine the mode of training</p> <p>1.6 Effective training programme developed</p> <p>1.7 Undertake academic staff training programmes</p> <p>1.8 Identify the equipment and materials required for training</p> <p>2.1 Identify the sectors which have technicians</p> <p>2.2 Identify the training needs of each sector</p> <p>2.3 Prioritize the area of technical training needed</p> <p>2.4 Equipment & materials needed for training to be identified</p> <p>2.5 Identify the trainees</p> <p>2.6 Determine the mode of training</p> <p>2.7 Effective training programmes developed</p> <p>2.8 Undertake Technical Staff training programmes</p> <p>3.1 Committee dealing with education of Nurses is established</p> <p>3.2 Protocols to specific Nursing activities developed</p> <p>3.3 Evaluation / monitoring procedures for Nursing protocols are formulated</p> <p>3.4 Identify the trainees</p> <p>3.5 Determine the mode of training</p> <p>3.6 Effective training programmes for Nurses developed</p> <p>3.7 Undertake Nursing staff training programmes</p>	<p>4.1 Identify the sectors where management skills are important for the efficient functioning of the Dental Faculty</p> <p>4.2 Identify the job descriptions of each manager</p> <p>4.3 Provide basic management skills</p> <p>4.4 Organize a workshop in management training</p> <p>4.5 Disseminate the importance of the concept of management to all staff</p> <p>4.6 Monitoring and evaluation of management skills</p> <p>5.1 Identify the means of practitioners with regard to continuing education</p> <p>5.2 To organize updating course for General Dental Practitioners in General Dentistry</p> <p>5.3 To organize short courses in selective specialized disciplines for practising dentists</p> <p>5.4 Continuing education programme for Consultant Dental Surgeons</p> <p>5.5 Undertake a training programme for practitioners</p> <p>5.6 Education programmes in Basic Dental Research for Junior Faculty Academic Staff</p> <p>5.7 Undertake continuing education programmes for Dental Chair side Assistants</p> <p>5.8 Undertake continuing education programmes for Dental Technicians</p> <p>5.9 Undertake continuing education programmes for Laboratory Technicians</p> <p>5.10 To plan educational programmes for local post graduate degrees</p>
<p>INPUTS -</p> <p>JAPAN</p> <p>Experts</p> <p>Equipment</p> <p>Training in Japan</p>	<p>PRE-CONDITION</p> <p>New Dental Faculty / Hospital Complex built by Japanese Grant Aid completed and available</p>
<p>SRI LANKA</p> <p>Personnel / Trainee</p> <p>Materials / Consumable</p> <p>Finance for maintaining facilities</p>	<p>* X and Y need to be filled after collecting baseline data.</p>

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PROJECT	DESIGN	MATRIX	(P D M - 1997)
Project for the improvement of Faculty of Dental Sciences, University of Peradeniya	of Faculty of Dental Sciences, University of Peradeniya	Sciences, University of Peradeniya	Peradeniya
Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Promote prevention & treatment of oral disease	1. Reduce prevalence & treatment needs of oral diseases* 2. Type & distribution of dental services improved by year 2005 3. Employment patterns of dental surgeons improved by year 2005	1. Epidemiological & clinical records of Ministry of Health (MOH) and Dental Faculty (DF) 2. Statistics-MOH & DF 3. Man power reports- MOH	Commitment to improve the Dental Services including preventive aspects at a national level
Project Purpose Quality of teaching and services improved in the DF	Educational inputs improved in 1998	1. Curriculum, clinical & laboratory records of the DF 1999 2. Assessment of teaching & patients care in 1999.	Regular admission of quality students
Outputs 1. Modern & appropriate physical facility provided (1.1-1.13)** 2. Modern & appropriate equipment provided (2.1-2.5)** 3. Facilities for clinical research & teaching methodology provided (3.1-3.4)** 4) Additional training of faculty staff & Japanese expertise provided (4.1-4.3)** 5) Facilities for continuing education provided (5.1-5.9)**	a) Lecture/training space sq m 2934 (1994)- 3299(1998) b) Teaching staff space sq m 125(1994)-1054(1998) a) 25 student/lab group 1994- 5 students/lab group 1998 b) Microscopes/dental chair/unit & student 1994- 1 piece to 1 student 1998 c. Dental Hospital, in/out patients 45,000 1994- 105,000 (1999) a) Research out put increased by 25%. b) No. of patients for Restorative/Prosthetics increased from 10,000 (1994) to 20,000 (1999) c) Histopathology reporting increased from 1000(1994) to 4000(1999) d) Total no. of clinical cases increased from 45,000 (1994) to 105,000(1999) Trained staff increased by 25% by year 2005 100% continuing education programme by year 2005	Final floor plans of the physical facility (1998) Records of teaching & service activities of DF (1999) Departmental publications & DF statistics (1999) Personal information of DF staff (1998-2000) Annual report of the DF (1997-2005)	a) Provision of adequate security & facilitate construction of the physical facility by the University b) New facility will attract more patients a) Curriculum reform implemented b) Clinical & research facilities fully utilized Staff remain in service Greater keenness for continuing education shown by dental surgeons
* Oral diseases- Dental caries, Periodontal diseases, Oral cancer & other Oral diseases ** details are given in the head out	INPUTS		PRE-CONDITIONS Cooperation of the University, MOH & other related agencies to implement the Dental Faculty/Hospital Project

Background of the Project for Improvement of the Faculty of Dental Sciences.

- ⊛ Formal education in Dentistry, at university level – 1943
- ⊛ Establishment of the Dental School at Peradeniya – 1954
- ⊛ Affiliated to the Faculty of Medicine, Peradeniya – 1965
- ⊛ Separate Faculty status – 1986
- ⊛ Preliminary Study Team – 1994
- ⊛ Basic Design Team – 1995
- ⊛ Detailed Design Team -- 1996
- ⊛ Letters of exchange -- May - 1996
- ⊛ Foundation laying ceremony – October – 1996
- ⊛ Signing of Project Type Technical Cooperation Assistance - 1998
- ⊛ Ceremonial opening of the Dental Faculty/Hospital Complex – 12th June 1998

Department of Prosthetic Dentistry
Technical cooperation - Training Programme

28 July 1998

Experts from Japan

SL-1-1-1998

We have an expert from Japan to help us in clinical training of our academic staff. Dr. Soneda Kenji is a senior lecturer from Tokyo Medical and Dental University who has come as a technical expert of Prosthetic Dentistry. He has already started his training programme. He has helped us organising the casting laboratory equipment. He is now conducting the training programme for our academic staff members in advanced metal casting technique for denture construction.

SL-2-1-1998

Mr. Hirofumi NATSUME has come from Japan as a technical expert in dental technology. He is involved in the training of two dental technicians in the construction of metal partial dentures. Mr. NATSUME has already helped us in organising the casting laboratory and selecting the materials for laboratory work.

SL-9-1-1999

In 1999 we will have an expert from Japan to improve the standard of prosthetic rehabilitation of the post surgical maxillo facial defects. This will include the construction of obturators, surgical prostheses and the prostheses, which replaces the lost ear, eye and nose. This training will help us to improve the knowledge and skill of our staff members in the construction of maxillo facial prostheses.

SL-25-2-2000

In the year 2001 an expert from Japan will be helping in the construction of advanced prostheses like over dentures, precision attachments and complex dentures. We will be able to undertake construction of implant dentures with the help of experts in Oral Surgery and Prosthetic Dentistry. Implant dentures are extremely useful in the management of patients with highly resorbed alveolar ridge.

Training in Japan

J-1-1-1998

This has been postponed to the year 2000. This training programme in Japan will be available for one of our senior academic staff member to gain knowledge and skill in advanced Prosthetic Dentistry work. This will include the construction of maxillo facial prostheses, osseointegrated implants stability stabilised dentures and the use of precision attachment in Prosthetic Dentistry.

J-23-2-2000

This training programme will be available to one of our senior technician to obtain experience in advanced laboratory technology, which will enable him on his return to construct advanced prostheses in our laboratory. This training will update the knowledge and skill in laboratory technology.

Department of Restorative Dentistry and Advanced Restorative Laboratory
Faculty of Dental Sciences, University of Peradeniya, Sri Lanka

A) Japanese experts visiting Sri Lanka

- 1) Programme - SL:1-1-1998-Rest., Prost. - Endodontics, Operative Dentistry & Materials Science
< 1 year >
Aim - Upgrade the knowledge and management skills in Operative Dentistry, and training of staff.
Present status - Dr. Soneda arrived at the Faculty in May 1998. The following items have been ordered :
- (1) Obutura heated GP delivery system
 - (2) Wide dental mirrors
- 2) Programme - SL:2-1-1998-Rest., Prost., Ortho - Dental Technology < 1 year >
Aim - Improve the theoretical and laboratory skills of technicians specially in relation to Crown & Bridge work and advanced prosthetics.
Present status - Mr. Natsume arrived at the Faculty in May 1998. He has already started training three technicians in basic skills of Crown & Bridge and advanced prosthetics.
The following items have been ordered :
- (1) Steam cleaner
 - (2) Vacuum mixer
 - (3) Ultrasonic bath
- 3) Programme - SL:8-1-1999-Rest. - Restorative Dentistry, Endo/ Op. Dent./ Dent. Mat. < 1 year >
Aim - Further upgrading of knowledge and skills of academic staff.
- 4) Programme - SL:24-2-2001-Rest. - Restorative Dentistry < 6 months >
Aim - Further strengthening of knowledge and skills not covered in previous programmes.
- 5) Programme - SL:29-3-2002-Rest. - Dental materials < 1 year >
Aim - Upgrading knowledge and research programmes specially in relation to dental materials.

B) Sri Lankan counterparts for training in Japan

- 1) Programme - J:5-1-1998 Rest. - Training in Crown & Bridge work (Ac staff) < 6 months >
Unfortunately this programme which was given highest priority in the initial plan was not carried out. It will be carried out in late 1999 or 2000.
Aim - Improve the knowledge, skills and planing of Crown & Bridge work and gaining clinical experience in a Japanese centre.
- 2) Programme - J:23-2-2000 Rest-Advanced training in dental technology (Technician) < 6 months >
Aim - Further strengthening of knowledge and skills of the advanced restorative technician and gaining valuable experience in a Japanese Rest. laboratory.

HOW HANDY ! JUST DO IT !!

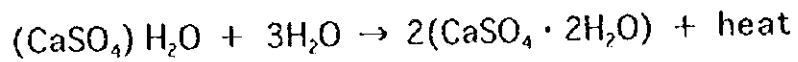
	Water Powder Ratio (W/P)																			
	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35
50	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
60	9.6	10.2	10.8	11.4	12.0	12.6	13.2	13.8	14.4	15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0
70	11.2	11.9	12.6	13.3	14.0	14.7	15.4	16.1	16.8	17.5	18.2	18.9	19.6	20.3	21.0	21.7	22.4	23.1	23.8	24.5
80	12.8	13.6	14.4	15.2	16.0	16.8	17.6	18.4	19.2	20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0
90	14.4	15.3	16.2	17.1	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	29.7	30.6	31.5
100	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
120	19.2	20.4	21.6	22.8	24.0	25.2	26.4	27.6	28.8	30.0	31.2	32.4	33.6	34.8	36.0	37.2	38.4	39.6	40.8	42.0
150	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5	42.0	43.5	45.0	46.5	48.0	49.5	51.0	52.5
180	28.8	30.6	32.4	34.2	36.0	37.8	39.6	41.4	43.2	45.0	46.8	48.6	50.4	52.2	54.0	55.8	57.6	59.4	61.2	63.0
200	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0
240	38.4	40.8	43.2	45.6	48.0	50.4	52.8	55.2	57.6	60.0	62.4	64.8	67.2	69.6	72.0	74.4	76.8	79.2	81.6	84.0
250	40.0	42.5	45.0	47.5	50.0	52.5	55.0	57.5	60.0	62.5	65.0	67.5	70.0	72.5	75.0	77.5	80.0	82.5	85.0	87.5
300	48.0	51.0	54.0	57.0	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0	90.0	93.0	96.0	99.0	102.0	105.0
350	56.0	59.5	63.0	66.5	70.0	73.5	77.0	80.5	84.0	87.5	91.0	94.5	98.0	101.5	105.0	108.5	112.0	115.5	119.0	122.5
360	57.6	61.2	64.8	68.4	72.0	75.6	79.2	82.8	86.4	90.0	93.6	97.2	100.8	104.4	108.0	111.6	115.2	118.8	122.4	126.0
400	64.0	68.0	72.0	76.0	80.0	84.0	88.0	92.0	96.0	100.0	104.0	108.0	112.0	116.0	120.0	124.0	128.0	132.0	136.0	140.0
420	67.2	71.4	75.6	79.8	84.0	88.2	92.4	96.6	100.8	105.0	109.2	113.4	117.6	121.8	126.0	130.2	134.4	138.6	142.8	147.0
450	72.0	76.5	81.0	85.5	90.0	94.5	99.0	103.5	108.0	112.5	117.0	121.5	126.0	130.5	135.0	139.5	144.0	148.5	153.0	157.5
480	76.8	81.6	86.4	91.2	96.0	100.8	105.6	110.4	115.2	120.0	124.8	129.6	134.4	139.2	144.0	148.8	153.6	158.4	163.2	168.0

(ml)

Powder (g)

CAST AND DIE MATERIALS

Setting reaction of hemihydrate



The reaction is exothermic

Manipulation of dental plaster

1. The mixing is carried out using a clean mixing cup and plaster spatula.
2. Water in the correct proportion is taken in the mixing cup.
3. The correct proportion of the dental plaster is added to this little by little.
4. The contents of the mixing cup are now thoroughly mixed by the vacuum mixing machine.
5. The mixing is completed in about 60 seconds.
6. The mixing is now gently vibrated to clear all the air bubbles.
7. Now, the mixing is ready for use.

Differences between α and β hh (hemihydrate)

Both α and β hh(hemihydrate) are chemically same and they are $(\text{CaSO}_4) \cdot \text{H}_2\text{O}$.

The difference between the two is only PHYSICAL difference.

β hh	α hh
• Particles larger, irregular and porous	• Smaller, more regular and less porous
• Water Powder ratio 100g powder 50ml to 60ml (W/P ratio is about 0.5 to 0.6)	• 100g powder 25ml to 35ml water (W/P ratio 0.25 to 0.35)
• Set faster (Initial setting time 7 to 10minutes)	• Set slower 10 to 15minutes
• Setting expansion 0.4%	• Setting expansion 0.1%
• Usually colored white	• Green, Blue, Brown, or Yellow
• Used to make study casts and for mold for acrylic denture	• Used to make working casts, die
• Less hard	• More hard

Setting expansion

Both α and β hh show expansion when they change to dihydrate.

This expansion is due to the outward thrust of the growing crystals.

For β hh the setting expansion is 0.4% and for α hh it is 0.1%.

Water / Powder ratio

The amounts of water and hemihydrate powder should be gauged accurately.

The ratio of the water to the hemihydrate powder is usually expressed as the water / powder ratio or the quotient obtained when the weight of the water is divided by the weight of the powder.

The ratio is usually abbreviated as W/P.

For example, if 100grams of plaster are mixed with 60ml of water, the W/P ratio will be 0.6.

Programme Number:11

Training Title: Training in anaerobic oral microbiology

Training Purpose:

After Training the trainee(s) is (are) able to:
 Carry out an effective teaching programme in anaerobic oral microbiology, and improve service functions while strengthening the research capabilities of the division of microbiology.

Division: Microbiology

Programme: 1

Candidate Venue: <<Peradeniya : Japan>> Sri Lanka

Duration (plan):wks.....6-9.....month(s)

Trainee(s): All lecturers in the division

Training Materials(s):

Equipment Input(s) to FDS/UP

Narrative Summary of the Programme

GOAL

Improve quality of teaching and strengthen the research capabilities of the division.



TRAINING PURPOSE

Training in anaerobic oral microbiology.



OUTPUTS (EXPECTATIONS OF THE TRAINING)

1.

Acquire a comprehensive theoretical knowledge in anaerobic oral microbiology with special emphasis to dental plaque.

2.

Anaerobic culture techniques are mastered.

3.

Training in advanced microbiological diagnostic techniques obtained.

4.

Training obtained in the usage of microbiological equipment provided by the Government and project.

5.

6.

UNIVERSITY OF PERADENIYA, FACULTY OF DENTAL SCIENCES

OBJECTIVES OF 3rd COURSE IN PHARMACOLOGY

At the end of the course, the student

01. Should be able to explain how drugs
 - 1.1. are absorbed in the body
 - 1.2. are distributed
 - 1.3. are metabolised
 - 1.4. act in the body
 - 1.5. are eliminated
 - 1.6. Interact with other drugs
02. Should be able to state and discuss
 - 2.1. how drugs may produce undesirable(adverse)effects
 - 2.2. how such undesirable effects may be avoided or reduced
 - 2.3. the principles of managing the undesirable effects when present.
03. Should be able to list and discuss drugs that
 - 3.1. are used in dentistry and management of dental patients
 - 3.2. are used in the management of important systemic disorders which are of concern to the dentist
 - 3.3. produce oral adverse effects
 - 3.4. though used for systemic disorders may influence dental management of patients.
04. Should be able to state and explain the clinical pharmacology and application of drugs used in the management of medical emergencies which may occur in the dental surgery, including drug toxicity and allergies.
05. Should be able to list and explain ::

Special/vulnerable groups of patients in whom certain drugs(especially those which may be prescribed for dental purposes) have to be used with caution as they may produce complications.
06. Should be able to state and explain
 - 06.1. Dosage regimen
 - 06.2. principles involved in determining dosage regimen
07. Should be able to state and explain drug usage for
 - 7.1. dental conditions
 - 7.2. fever, chills, headache, vomiting, diarrhoea, common infections, allergies, bronchospasms and anxiety states.
08. Should know the uses, contraindications, adverse, effects and precautions to be taken with
 - 8.1. antimicrobials
 - 8.2. corticosteroids
 - 8.3. opioid analgesics
 - 8.4. Local anaesthetics
 - 8.5. Non steroidal anti-inflammatory agents
Fluorides. + Anti-ulcers
09. Should be able to list and state the action of certain drugs in relation to the systems of the body eg. nervous, cardiovascular system etc.
10. Should be able to evaluate drug therapy and give reasons for therapeutic failure.

11. Should be able to identify and give emergency treatment to patients with
- a. Drug allergy
 - b. Drug toxicity
12. When presented with a patient having an oral condition, should be able to state and explain the appropriate drug therapy to be used.

Teaching / Learning methods

lectures
 assignments
 tutorial
 patient contact
 discussions
 contact
 reading

Evaluation

	In course	end of term
3 hrs	theory papers	- 20
10 min	oral	- 10

? Disease oriented teaching
 e.g. periodontal disease
 gingivitis
 Carotid artery
 nail + mucosal ulcers

GENERAL PHARMACOLOGY

INTRODUCTION

Objectives :

The student should be able to

1. Explain the following :

- * Pharmacology
- * Drug
- * Pharmacodynamics
- * Pharmacokinetics
- * Absorption
- * Distribution
- * Metabolism
- * Elimination
- * Excretion
- * Permeation
- * Weak acid, Weak base
- * Zero-order, first-order elimination

2. List and discuss the common routes of drug administration and excretion.

PHARMACODYNAMICS

3. Explain the following giving examples.

- * Receptor
- * Receptor agonist
- * Partial agonist
- * Physiologic antagonist
- * Chemical antagonist
- * Competitive antagonist
- * Irreversible antagonist
- * Dose-response curve
- * Drug efficacy
- * Drug potency
- * ED₅₀ , TD₅₀ , LD₅₀ Therapeutic Index

PHARMACOKINETICS

4. Explain the following :

- * Bioavailability
- * First-pass effect
- * Half-life
- * Hepatic blood flow-limited elimination
- * Minimum therapeutic concentration
- * Volume of distribution
- * Therapeutic index

session 3 Dept. of Oral Pathology /Microbiology /Pharmacology(3spc.)
DEPARTMENT OF ORAL PATHOLOGY INCLUDING DIVISION OF
GENERAL PATHOLOGY

28.7.98
16.35

SRI LANKA TO JAPAN 1998

1. **TECHNICIAN – MR. A.K. SURaweera (MLT Qualified)**
J: 3 – 1 –1998 O.Path & G.Path (Six months)

TRAINING PURPOSE:(Advanced Histopathology)

- 1.1. To set up cryostat, frozen sections expertise for
Prof. Sato/Prof. Amaratunga → Surgical margins
- 1.2. Immunohistochemistry/Immunofluorescence → Direct method
(Liq. N₂/Fluorescent microscope)
- 1.3. FNAB & Cytology Smears → Papanicolaou stain
Fluorescence Techniques
- 1.4. be familiar with chemicals for procedures.

JAPAN TO SRI LANKA 1998

2. **Professor Amamiya**

SL: 7-1-1998 (Oral Path) Six months

- 2.1. Visiting Professor Dept. of Oral Pathology (3rd Floor "B" building)
2.2. To overview the smooth running of the entire Department
2.3. To help set up a fully functional Immunolaboratory
2.4. Quality Control Systems in place for OT and rapid diagnosis
2.5. Involved with routine diagnosis
2.6. Involved with Research

3. 3.1. **Year 2000 – SL: 17-2-2000 O.PATH**

One Japanese Expert Pathologist with us for 12 Months for
Immunohistochemistry and Routine Diagnosis

- 3.2. **Year 2001 - SL: 27-2-2001 GEN.PATH.**

One Japanese Expert for the Development and Functioning of
Molecular Biology with us for 6 Months → 3 Staff trained
+
2 Technicians trained
by 2001

4. 4.1. **Year 2002 – J: 18-3-2002 ORAL PATHOLOGY**

Dr. E.A.P.D.Amaratunga for Training – Immunohistochemistry (12 Months)

- 4.2. **Year 2002 – J : 20-3-2002 GENERAL PATHOLOGY**

Molecular Biology .

ORAL PATHOLOGY AND GENERAL PATHOLOGY

28.07.98
16.35

4.35 PM -- 5.50 PM

1. Shifted on 12.06.98 – Grand Opening – CPC Room
With many Path. Staff helping

1. Teaching Function

Final Part I (9), Final Part II (8), MS (Oral Surg) Part 2 (5),
MS (Ortho) (1), MS (Restorative) (2), MS Part I (Napalee St.) (03),
Foreign Graduates (8)

Lecture Theatre - 1/CPC Room (5 OP Lecturer)
Lecture Theatre - 2 (2 Tuto. Rooms)

2. Service Function

- 2.1. Date 1.6.98 to 30.6.98 (1 month)
2.2. Path Rep. No.352/DP/98 - 437/DP/98
2.3. Total No. of Biopsies - 86
2.4. Distribution Islandwide
Polonnaruwa (136 km) 11, Nuwara Eliya (76 km) 01,
Matara (276 km) 19, Panadura (140 km) 06, Horana (130 km) 01,
Badulla (109 km) 24, Colombo (115 km) 07, Nawalapitiya (30 km) 02,
Galle (230 km) 01, Anuradhapura (145 km) 02 and
Dental Hoospital 12.
- 2.5. Decalcification Required 09
2.6. Museum Mounting 04 (388/98, 401/98, 408/98,429/98)
2.7. All 86 reported by Prof. R. Mendis within 15 days of receipt of biopsies.
2.8. Diagnosis Profile of 01 Month's material.

3.8.1. Primary Tumours of Non-Dental Tissue

1.	Squamous cell papilloma	01
2.	Squamous cell carcinoma	25
3.	Lymphoma	01
4.	Benign Melanoma	01
5.	Lymphangionma	01
6.	Ossifying fibroma	02

3.8.2. Odontogenic tumours

I. Odontogenic epithelium

1. Adenomatoid Odontogenic Tumour 01 410/98
2. Calcifying Epithelial Odontogenic
Tumour 01 414/98

II. Calcified Dental Tissue without Odontogenic
Epithelium NIL

- III. Lesions consisting of Odontogenic Mesechymal
Odontogenic Myxoma 01 427/98

3.8.3	Tumours of Salivary Gland	
1.	Monomorphic Adenoma	01
2.	Warthin's Tumour	01
3.	Adenoid Cystic Carcinoma	01 428/98
4.	Lipoma	01 429/98
3.8.4.	Other lesions of salivary gland	
1.	Mucocele	01
2.	Mucous Extravasation Cyst	02
3.	Mucous Retention Cyst	04
4.	Sialadenitis	04
3.8.5	Jaw Cysts/Cysts	
1.	Dental Cysts	03
2.	Sebaceous Cysts	01
3.	Dentigerous Cysts	01
3.8.6	Oral Mucosal Lesions	
1.	Leukoedema	01
2.	White spongy naevus	02 374/98
3.	Benign nevus	01 406/98
4.	Non specific ulcer	02
5.	Oral Submucous Fibrosis (OSMF)	01 416/98
6.	Precancerous lesions	08
3.8.7	Skin Lesions	
1.	Abscess	01
2.	Chronic discharging sinus	01
3.8.8	Lymph node related pathology	
1.	ALHE	01 373/98
2.	SHML (RDD)	01 343/98
3.8.9	Gingiva; swelling/Mucosal swelling	
1.	Pyogenic granuloma	01
2.	Fibrous Epulis	01
3.	Fibroepithelial polyp	03
3.8.10	Toxoplasmosis	01
3.8.11	Granulomatous Lesions	
	Actinomycosis	01 401/98
3.8.12	Tooth related pathology	
	Abnormal Odontogenesis	01
	Hypercementosis	01
3.8.13	Non specific	01

3.8.14. Miscellaneous

Necrosed tissue	01
With Prof.N.Ratnatunga Gen. Path.	01
Cut Deeper	<u>01</u>
	<u>86</u>

4. **Visit by Team of Japanese Expert Pathologists**
 - Visit by Prof. Kobeyashi and Prof. Kaku – 15.9.98 9.30 AM

5. **Academic Staff Training**

Dr.P.R.Jayasooriya (Lecturer) Presently in Japan following Dental Surgery Course.
 She will do a (Ph.D) Project.

Dr.W.M.Tilakaratne (Lecturer) Guy's Hospital London (Reading for MRCPATH).
 Dr.U.B.Dissanayaka (Lecturer) King's College London (Reading for Ph.D. Programme)

Programme Number: SL: 7-1-1998 ORAL PATH.

Division: Oral Pathology/General Pathology

Training Title: Immunohistochemistry and Frozen section preparation

Training Purpose:

After Training the trainees are able to:

Perform cryostat frozen sections of operation theatre material for routine diagnosis.

Candidate Venue: <<Peradeniya >>

Duration (plan):wks.....3.....month(s)

Trainee(s): All academic/technical staff in Oral Pathology

Training Materials(s): A few items may be necessary.

Equipment Input(s) to FDS/UP: A cryostat machine is available. A few small items may be required at the time of implementation.

Narrative Summary of the Programme

GOAL

The diagnostic parameters of Oral Histopathology are improved in quality and quantity.



TRAINING PURPOSE

To set up and prepare cryostat aided routine diagnosis.



OUTPUTS (RESULTS OF THE TRAINING)

1.

To set up a fully functional cryostat.

2.

Technique of cryostat section preparation will be mastered by all staff in the department.

3.

Quality control systems in place for operation Theatre (OT) for rapid diagnosis.

4.

To overview the smooth running of the entire department.

5.

6.

Additional Information:

Programme Number: SL: 17-2-2000 O.PATH.

Division: Oral Pathology

Training Title: Immunohistochemistry (IHC) and Routine Diagnosis

Training Purpose:

After Training the trainee(s) is (are) able to:

Practice immunohistochemical examinations at the Faculty of Dental Sciences, University of Peradeniya, for service and research

Candidate Venue:<<Peradeniya>>

Duration (plan):wks.....12.....month(s)

Trainee(s):

Trainer : Expert Japanese Pathologist in IHC and routine diagnosis

Training Materials(s): Basic Kits required

Equipment Input(s) to FDS/UP: Basic equipment available with grant aid. A few items may be required at the time of implementation. A microradiography apparatus

Narrative Summary of the Programme

GOAL

The diagnostic parameters of oral histopathology are improved in quality and quantity.



TRAINING PURPOSE

To set up immunohistochemical techniques for service and research at the Faculty of Dental Sciences.



OUTPUTS (RESULTS OF THE TRAINING)

1.

To set up a fully functional laboratory for IHC.

2.

All 4 academic staff and 3 technical staff will be trained in IHC.

3.

Technical of cryostat section preparation will be mastered by all staff.

4.

Quality control systems in function in the Dept. of Oral Pathology.

5.

Additional Information:

The visiting Japanese expert oral pathologist is welcome to develop and formulate other outputs related to general pathology eg. teaching slide material preparation.

Programme Number: SL: 27-2-2001 GEN.PATH.
Division: General Pathology
Training Title: Basic Molecular Biology Diagnostic Techniques.
Training Purpose:

After Training the trainees are able to:
 Run a molecular biology laboratory for advanced diagnosis

Candidate Venue: <<Peradeniya >>

Duration (plan):wks.....6.....month(s)

Trainee(s): Academic staff and Technical staff of Oral and General pathology

Training Materials(s):

Equipment Input(s) to FDS UP: As per General Pathology programme J: 20--3-2002

G.PATH

Narrative Summary of the Programme

GOAL

To establish a molecular biology laboratory for advanced diagnosis.



TRAINING PURPOSE

Laboratory work using molecular biology techniques is improved.



OUTPUTS (RESULTS OF THE TRAINING)

1.

Laboratory equipment installed and be made functional.

2.

Academic and technical staff will be trained to handle the equipment together with the day to day maintenance.

3.

Consumables and other chemicals used in the molecular biology laboratory would be in place.

4.

Practical skills of the academic staff and technical staff on molecular biology techniques will be improved.

5.

6.

Additional Information:

Programme Number: J: 3-1-1998 O.PATH., G.PATH.

Division: Oral Pathology/General Pathology

Training Title: Laboratory Technician Oral Pathology/General Pathology

Training Purpose:

After Training the trainee is able to:

Help the Oral Pathology and other staff in the Faculty with service (Diagnosis) and research

Candidate Venue: << Japan >>

Duration (plan):wks.....6.....month(s)

Trainee: Mr. A.K.Suraweera

Training Materials(s): A few consumables

Equipment Input(s) to FDS/UP : None

Narrative Summary of the Programme

GOAL

Capacity building of technical staff in oral pathology is developed with the introduction of new technology.



TRAINING PURPOSE

To help Oral Pathologist and other staff in the Faculty with service (Diagnosis) and research in immunohistochemistry.



OUTPUTS (RESULTS OF THE TRAINING)

1.

Training in the maintenance of a modern routine immunohistopathological laboratory.

2.

Be familiar with chemicals and consumables necessary to set up immunohistochemical work

3.

Determine dilutions of antibodies and make dilutions for laboratory work.

4.

Master the handling of the two staff and three staff immunohistochemical procedure.

5.

Prepare positive and negative controls for internal and external quality assurance.

6.

Be exposed to all other activities in the department.

Additional Information:

This training is for an experienced technician who has mastered H & E methods. He will work full time in immunohistochemistry on his return

Programme Number: J: 18-3-2002 G.PATH

Division: Department of Oral Pathology

Training Title: Immunohistochemistry (IHC)

Training Purpose:

After Training the trainee is able to:

Practice immunohistochemical examinations at Faculty of Dental Sciences, University of Peradeniya for Service and Research

Candidate Venue: << Japan >>

Duration (plan):wks.....12.....month(s)

Trainee(s): Dr. E.A.P.D. Amaraunga, Senior lecturer in Oral Pathology

Training Materials(s): Some Immunohistochemistry chemicals

Equipment Input(s) to FDS/UP: Basic equipment available with grant aid. A few items may be required at the time of implementation.

Narrative Summary of the Programme

GOAL

The diagnostic parameter of histopathology are improved in quality and quantity.



TRAINING PURPOSE

The trainee is able to practice immunohistochemical examinations (#) for service and research at the Faculty of Dental Sciences, University of Peradeniya.



OUTPUTS (RESULTS OF THE TRAINING)

1.

Theoretical knowledge of immunohistochemistry is strengthened.

2.

Basic laboratory techniques of immunohistochemistry is obtained.
2.1. to 2.6.

3.

Replace cryostat sections and gain experience with the cryostat for frozen section preparation.

4.

Techniques of Immunohistochemistry laboratory management including quality control is obtained.

5.

Specific interpretation of results in immunohistochemistry is obtained.

6.

Specific exposure with the immunohistochemistry techniques (+) listed below is obtained.

Additional Information:

Histologic staining methods of high specificity to verify existence of some chemical substances in the tissue.

+ Keratine 1-19, desmin, actin, neurofilaments, S-100, factor VIII, CD3, CD4, HLA-B45, AL26, UCHL-1, Synaptophysin, AIP, and so on

Programme Number: J: 20-3-2002 G.PATH

Division: General Pathology

Training Title: Basic Molecular Biology Diagnostic Techniques

Training Purpose:

After Training the trainee is able to: Practice diagnostic procedures, do research and train others in the field of Molecular Biology.

Candidate Venue: << : Japan >>

Duration (plan):wks.....12.....month(s)

Trainee: (Name will be announced later)

Training Materials(s): Chemicals used for molecular biology techniques

Equipment Input(s) to FDS/UP

Centrifuge, UV spectrophotometer, PCR reactor (Perkin Elmer)

Narrative Summary of the Programme

GOAL

To establish a molecular biology laboratory to identify leukoplakias which would eventually turn into oral carcinomas.



TRAINING PURPOSE

Laboratory work using Molecular Biology Techniques is improved by the provision of basic skills and knowledge.



OUTPUTS (RESULTS OF THE TRAINING)

1.

Thorough knowledge in cell biology, DNA, Genetics, Recombinant DNA technology, and molecular biology technology is strengthened.

2.

Theoretical knowledge of the techniques of DNA extraction, Electrophoresis, DNA digestion, PCR Southern Blotting and Data analysis is strengthened.

3.

Practical skills of DNA extraction, Electrophoresis, DNA Digestion, PCR, Southern Blotting are improved.

4.

Knowledge of tissue preservation techniques and preparation technique for molecular biology studies is strengthened.

5.

Experience in Laboratory management and maintenance is enhanced.

6.

Knowledge of application of molecular biology techniques for human diseases is strengthened.

Additional Information:

1. Training should be in Japan in an Institution with an established molecular biology laboratory.
2. Problem of oral carcinoma in Sri Lanka is enormous and establishment of a such a unit for early detection of lesions at risk would markedly increased the survival rate - Please see explanatory note

Orthodontics is a speciality which deals with prevention and correction of irregularities of teeth. The division of orthodontic is responsible for conducting undergraduate training programme and postgraduate training programme and training dental technicians in orthodontic laboratory techniques.

Unit consists of four academic staff members and ten non academic staff members. Two academic staff members are qualified orthodontists. There are four chair side assistants and four orthodontic technical officers attached to the unit.

In addition to the academic programmes unit provides orthodontic care to the public. Specialized Orthodontic units are available only in Central and the Western provinces of the country. The dearth of specialists has resulted in overcrowding of the existing clinics. In contrast to other specialities in dentistry, Orthodontic patients need prolonged period of treatment (average is about 2 years) which leads to accumulation of patients who need continuing treatment in the clinic.

Present Statistics

Year	No. New Patients	No. Continuing	Total
1994	1074	4193	5267
1995	1378	5623	7001
1996	1405	7087	8492
1997	1278	5773	7051

These case can be divided into

1. Simple malocclusions which can be treated by a general dental practitioner, these cases are mainly used for undergraduate teaching.
2. Severe malocclusions requiring advanced orthodontic treatment with fixed appliances which are used for postgraduate teaching.
3. Severe disfiguring dentofacial anomalies which need treatment by the specialist.

At present these cases are managed using,

1. Removable appliances
2. Functional appliances
3. Fixed appliances. -Standard edgewise technique -Straight wire Begg technique - tip edge technique.

PRESENT PROBLEMS.

1. Training technical staff.

Since majority of appliances are made in the laboratory which includes all removable appliances functional appliances and certain parts of fixed appliances it is important to have well trained technical staff members in order to increase the quantity of service provided while maintaining the quality. Proposed training programme in orthodontic technology will provide an opportunity to train all orthodontic technicians locally and to give an opportunity to one of them to work in a well equipped orthodontic laboratory in a centre of excellence in Japan where many orthodontists with diverse experience are working in one unit.

2. Orthodontic treatment of patients with skeletal malocclusions.

Orthodontic treatment for patients with skeletal discrepancies is expensive since it involve use of fixed appliances. Our health care system cannot provide service to meet the ever increasing demand. It is the responsibility of the clinicians to investigate and devise techniques to minimize the complexity of these cases using growth modification techniques. The assistance of a Japanese expert under proposed training programme will help our clinicians to develop methods of monitoring growth and timing of treatment and develop skills necessary to select appropriate functional appliance for a given case. This will reduce the financial burden of the unit reducing the number of cases which need fixed appliance treatment.

3. Accurate Diagnosis and treatment planning.

The diagnosis and treatment planning of orthodontic patients is done mainly on clinical evaluation which can lead to inaccuracies often leading to treatment failure.

The proposed training programme in cephalometry will,

1. Improve the management of patients by improving the knowledge and skills in accurate diagnosis and treatment planning using radiographic cephalometrics.

2. enable the clinician to reduce the treatment failure by using cephalometrics to estimate the magnitude and the direction of facial growth as well as develop the ability to visualize treatment objectives.

4. Management of patients with severe dentofacial deformities.

Clinical skills of our staff in the management of patients with dentofacial deformities is not adequate. None of our academic staff members has experience in working in a well organized cleft palate unit. The proposed training programme will enable the clinicians to develop skills necessary to plan and carryout presurgical and postsurgical orthodontics.

Division of Dental Anatomy and Histology

Dental Anatomy & Histology is taught to the undergraduate students during their 2nd BDS course. Teaching of Dental Anatomy and Histology is mainly based on

- * Dental Morphology
- * Development of oral Tissues
- * Structure of oral and para oral tissues at light microscopic and electron microscopic level
- * Development and growth of the skull and jaws

There are two academic staff members and one technical staff member in this division Through the Japanese Grant Aid Project we have received a well equipped Histology Laboratory and a histology preparation room with all modern facilities for histological preparation of hard and soft tissues.

Present requirements

- * Preparation of light microscopic slides of oral hard tissues and soft tissues
- * Update on current knowledge of Dental Anatomy and Histology
- * Experience in research in Dental Anatomy

Training Programmes

1. Development of teaching materials in Dental hard and soft tissues

This training programme will enable us

- * to have a detailed knowledge of oral hard and soft tissues.
- * to have the skills in operating and maintaining the tissue preparation systems.
- * to have a high degree of skills in the preparation of oral hard and soft tissues.

This programme will help us to acquire the basic ground work.

2. Improvement of teaching in Dental Hard and soft tissue.

This training programme will enable us

- * to gain advanced knowledge of all aspects of Dental Anatomy and histology.
- * to gain competence in all aspect of electron microscopy
- * to gain experience in advanced research in Dental Anatomy and histology.

This training will help us to strengthen the Dental Anatomy Teaching programme.

3. Improvement of teaching and research in Dental Anatomy and histology.

This will enable us to improve the teaching and research in Dental Anatomy and histology.

DIVISION OF ANATOMY, DEPARTMENT OF BASIC SCIENCES.

INTRODUCTION

The Curriculum in Anatomy for the 2nd BDS Dental Students includes

1. Gross Anatomy
2. Embryology
3. Histology and
4. Neuro Anatomy.

At the end of the academic year, students are expected to have a sound knowledge of Human Anatomy and the various body systems at a developmental, Histological and functional level as well as a good basic understanding of Neuroanatomy.

Emphasis is given to areas of special relevance to Dentistry and Oral Surgery. In this context the head, neck and thorax are done in great detail as are the relevant areas of the above mentioned sections.

TRAINING PROGRAMMES.

PROGRAMME 1

CADAVER PREPARATION AND SETTING OF AN ANATOMICAL MUSEUM.

Priority has been given to a training programme aimed at strengthening the practical teaching by providing well preserved cadavers and an Anatomical Museum.

At the end of the programme, trainees are expected to formulate selection criteria for cadaver selection, acquire a high level of competence in cadaver preservation and competence in preparing and displaying of museum specimens.

In addition, skills in preparation of specimen sections for comparison with CT and MR Images and interpretation will be acquired by an academic member.

PROGRAMME 2

IMPROVEMENT OF THE PRESENT TEACHING PROGRAMME IN NEUROANATOMY AND EMBRYOLOGY FOR DENTAL STUDENTS

The purpose of this would be to improve the teaching programme in Neuroanatomy and Embryology to be specifically targeted to the needs of the Dental Students.

At the end of the programme, the trainee will have the knowledge to formulate a teaching programme with emphasis on Oro facial Neuroanatomy and also an in-depth knowledge of human Embryology including a thorough knowledge of congenital disorders with special emphasis to the Oro facial region.

Practical teaching will be strengthened with meaningful practical programmes using Anatomical, Pathological and Clinical material for Neuroanatomy while the Embryology practical programme will be augmented by the ability to prepare embryological specimens in various stages of development

PROGRAMME 3

IMPROVEMENT OF TEACHING & RESEARCH IN ANATOMY AND DENTAL ANATOMY.

This programme is more or less a continuation of programme 2 in combination with the discipline of Dental Anatomy to further improve teaching and research by optimum usage of the facilities available in the new Faculty.

The objectives are the efficient management of the facilities and further improvement of the teaching and research with the help of experts

DIVISION OF ORAL AND MAXILLOFACIAL RADIOLOGY (OMFR)

Introduction:

The discipline of oral and maxillofacial radiology is new to Sri Lankan dentistry as an organized discipline. But we are aware that the discipline is much advanced in developed countries, particularly Japan, and forms an important component of university dental curricula. Although the newly formed radiology unit of this new dental hospital has already commenced to discharge its duties, on a limited scale, to provide a diagnostic radiology service to the hospital and teaching theoretical and practical skills in dental radiography to dental students, it suffers from a lack of fully-trained oral and maxillofacial radiologist and radiographer with specialized training in this field. Furthermore, the teaching of OMFR needs to be strengthened with exchange of experience and ideas.

Training Course proposed and Justification:

A training course for Oral and Maxillofacial radiology (OMFR) has been proposed with a trainer who is a senior academic from a Japanese dental school visiting our new radiology division for a reasonable length of time. As mentioned earlier we do not have a fully trained OMF radiologist at present, and therefore, I wish to request that this is given high priority and an expert is sent to us in the near future.

The visiting expert could contribute in the following areas:

1. Maximizing the use of the available equipment for radiological diagnosis.
2. Instructing in techniques that are feasible with the present equipment. for example, tmj arthrography and arthrocentesis with the aid of fluoroscopy unit.
3. Improving and developing our dental radiology curriculum and teaching methods.
4. Training our radiographer(s) to fulfill the above needs.
5. Improving the administration of the radiology department and better management of our present resources.
6. Initiating staff and equipment development in the direction mentioned below in the considerations for future development.

Considerations for future development:

Oral malignancy with cervical lymph node metastasis is a common problem in Sri Lanka which requires surgical ablation and follow-up. Throughout the world, ultrasonography and computerized tomography have become established as indispensable methods in the monitoring of patients who have had cancer surgery, for possible recurrence. It would be a great advantage to obtain an ultrasonograph machine to train the local staff in this field by the visiting radiologist.

Although computerized tomography is now available at the Kandy General Hospital, it is quite difficult to obtain this service for Oral and Maxillofacial Diagnosis given the work load that unit has to cope with from various medical specialties. It is important that we acquire our own facilities in the future. In addition, the desirability of having an MRI unit cannot be overemphasized.

DIVISION OF ORAL MEDICINE

Introduction:

The Division of Oral Medicine is involved in the teaching of the discipline of oral medicine to the undergraduate and postgraduate students. In addition, the division is actively involved in providing consultancy service in oral medicine and laboratory diagnostic service in haematology and clinical chemistry for out-patients and in-patients. In addition a diagnostic screening service to the dental hospital is provided by the department to facilitate smooth functioning of the hospital.

The division specializes in the diagnosis and management of orofacial pain disorders, temporomandibular disorders, oral mucosal diseases with particular emphasis of oral precancer and oral cancer detection, orofacial manifestation of systemic diseases, salivary gland disorders etc. Undergraduate students and postgraduate students receive didactic teaching in these areas and the management of medically compromised patients.

Training Courses proposed and Justification:

We feel some of our functions mentioned above could be improved to a greater extent with the availability of external help in the form of expertise and equipment. We have identified the following three areas for receiving training from the JICA Technical Cooperation Project together with the provision of relevant equipment:

1. Management of Temporomandibular Joint (TMJ) disorders
2. Haematological and Biochemical Laboratory Technology
3. Management of Oral Mucosal Disease

For the first two it is proposed to train a member of the academic staff and our laboratory technologist in Japan. For the third one we require a Japanese expert to visit here and share his/her experience in the management of oral mucosal disease with us. We would like to learn the use of modern treatment methods including the use of chemoprophylactic methods and of laser in this regard.

In order to maximize the benefits of the training in TMJ disorders, certain equipment such as Occlusal analysis machines, electromyograph, jaw tracking devices, transcutaneous nerve stimulators etc have been identified as some of the important equipment.

We would like the laboratory technologist to learn in Japan under suitable experts all aspects of laboratory haematology and biochemistry. Another important area we seek Technical cooperation, and the technologist and the academic staff wish to learn is the detection of the effects of mercury contamination among Sri Lankan dental health care workers. At this juncture it must be pointed out that this problem caused by poor mercury hygiene among dentists and ancillary staff is potentially a dangerous one that is still undetected. Monitoring and drawing the attention of the dental profession can prevent the appearance of long standing toxicity in the profession's different categories of workers. For this purpose we seek a mercury analysis system which can be used with our spectrophotometer.

Presentation to Japanese Delegation for technical Cooperation**DIVISION OF PERIODONTOLOGY**

The division of Periodontology undertakes the teaching to undergraduates and postgraduates, and in addition provides a service function to the patients with disease of the gingiva and related structures.

With the opening of the New Hospital the patient turnover increased by several folds. The average patient in take for the first 25 working days of the Periodontology clinic in the new hospital was 80 patients per day. Ideally we wish to examine, diagnose, make a treatment plan, for all the patients that visit the clinic for the first time and have oral health education session. Due to the increase number of patients 30 of them were provided with oral health education only, and appointment is given for further treatment. As health education is a very important part in management of periodontitis this procedures is acceptable. In the division we diagnose and manage various types of periodontal diseases, mainly:

Adult Periodontitis

Mild form

Moderate form

Severe form

Early onset periodontitis

Rapidly progressive periodontitis

Juvenile periodontitis

Prepubertal periodontitis

Refractory periodontitis

Recurrent periodontitis

In the past periodontal disease was considered as a single entity and much less emphasis given to diagnose each type of periodontitis. Now it is established that correct diagnosis is of paramount importance in the management.

The management of periodontal disease varies from plaque management to tissue regenerating procedures. In fact few decades ago periodontitis was considered as a condition of irreversible tissue breakdown. However the present knowledge of the periodontium, periodontitis, procedures available could provide a new periodontium for the lost tissues.

Program No. SL-13-1999

Improvement of the management of periodontal diseases

As mentioned above there is spectrum of periodontitis types. Therefore it is necessary to improve the diagnosis of these types in the management of diseases. In the recent past the clinical data and special investigations like radiograph and vitality testing was used to diagnose the conditions. However with the new facility we could use improved radiology facilities, microbiology and hematology in the diagnosis of periodontal diseases. There are new innovations in the specialty such as immunological techniques, PCR techniques for the diagnosis. Therefore an expert periodontologist's services and advice will be very much helpful in planning a protocol for diagnosis of various types of periodontal diseases. The experience of such an expert could be shared among the senior and junior academic staff of the division. Therefore I recommend an expert periodontologist should visit Sri Lanka as scheduled.

Program No. 10.2.2000

Management of advanced periodontitis

Management of periodontitis has changed immensely in the past decade. From a goal of curing and arresting the disease it has changed to curing, arresting, restructuring and restoration.

Recently many techniques have been introduced to manage advanced periodontitis, namely bone graft techniques, synthetic bone graft techniques, guided tissue regeneration etc.

New advances are seen in repair of congenital and acquired gingival defects. This area of periodontology is called periodontal plastic surgery. In this area the procedures like pedicle graft, free graft and mucoperiosteal molding and guided tissue regeneration are practiced.

Most of these are very recent techniques. And they are practiced widely in Japan and other developed countries. Therefore a short training in Japan on these procedures will enable us to get the maximum from the equipment and facilities provided to us.

TECHNICAL COOPERATION TYPE ASSISTANCE
Consultation Team for Dental Education

REPORT OF THE DEPT. OF ORAL SURGERY

1. *Scope of the Dept. of Oral Surgery*
2. *Improvement of Physical Facilities by Grant-aid Project*
3. *Technical Cooperation Type Assistance*
 - 3.1 *Visiting Experts*
 - 3.2 *Equipment*
 - 3.3 *Trainees proceeding to Japan*

1. Scope of the Dept. of Oral Surgery

The main function of the Department of Oral Surgery is training undergraduates and postgraduates in the field of Oral Surgery.. The department undertakes treatment of patients on a large scale for the purpose of teaching and also as a service to the community. Treatment may vary from simple procedures such as removal of teeth to excision of large cancers with reconstruction of the facial structure. Other surgical procedures would include facial injury, developmental deformities such as Cleft lip & Palate and Jaw deformities.

Our department is a training centre for the Postgraduate Institute of Medicine, University of Colombo and we undertake training of about five postgraduates a year. The department engages in research in areas such as Oral Cancer, Trauma Cleft Lip & Palate and Facial Deformities.

2. Improvement of Physical Facilities by Grant-aid Project

Physical resources of the department has been improved to a great extent by the Grant-Aid Project. Facilities for undergraduate training is excellent and the students can now work under ideal conditions. Infection Control is facilitated by the new premises and modern equipment. Grant aid Project provided us with wards and operation theatres including Intensive care facilities. Major Oral & Maxillo-Facial Surgery could be carried out under modern conditions with adequate safety

3. Technical Cooperation Type Assistance

Technical Cooperation Type Assistance Project has undertaken a very ambitious programme to develop our human resources and physical facilities. Several Experts from Japan are here with us at present and much additional equipment have been supplied.

3.1 Visiting Experts: Three experts are visiting with us at present:

3.1.1 Dr Junichi Sato- Senior Lecturer in Oral & Maxillo-Facial Surgery Tsurumi University

Dr Sato's mission is to train local surgeons in microvascular anastomosis in maxillofacial reconstruction surgery, which is totally lacking in our unit at present. He has already completed the simulated training programme using the dissecting microscope and started working on patients. Four patients with oral cancer have been treated with free transfer of tissue and microvascular anastomosis. Several other patients also have been treated under his guidance. Dr Sato will be with us for one year.

3.1.2 Dr Katsuyuki Tanaka- Senior Lecturer in Dental Anaesthesiology Aichigakuin University

Dr Tanaka has assisted and guided our anaesthetist in familiarising with new equipment. As he has special knowledge of the requirements of the maxillo-facial surgery he has been a great asset and an inspiration to start the new theatre. Dr Tanaka's assignment is for three months.

3.1.3 Miss Tomoko Hisada- Nursing Supervisor Medical & Dental Hospital, Tokyo University

Miss Hisada has undertaken to train our nursing staff in their work in the operation theatre and this duty she performs most satisfactorily. Her expert knowledge in infection control, theatre equipment, commitment to duty and general kindness is appreciated by our staff. Miss Hisada will be with us for six months.

3.2 Equipment

Several essential equipment were acquired through the technical cooperation type assistance

1. Operating Microscope
2. Patient Controlled Analgesia Pump
3. Syringe Pump
4. Electrocardiograph
5. Cardiac Defibrillator
6. Nerve Stimulator
7. Glucocheckmeter
8. Blood Gas Analyzer**

3.3 Trainees proceeding to Japan

Dr J.U. Weerasinghe- Senior Lecturer in Oral Surgery will be proceeding to Japan to undertake training in Orthognathic Surgery and Speech Therapy at Tsurumi University. Finer aspects in Orthognathic Surgery has to be learnt by our staff and speech therapy is an aspect which is neglected in this country. Dr Weerasinghe's training programme will be of six months duration

Management of the Faculty of Dental Sciences

Introduction

The New Dental Faculty/Hospital complex will have two main functions, namely Teaching and Service, i.e. Patient's care. In the former set up both these functions came under the administrative control of the Dean, Faculty of Dental Sciences, however, in the new facility, service function will come under the Deputy Director of the Dental Hospital and the Director, General Hospital, Peradeniya, two officers appointed by the Ministry of Health. Nevertheless, teaching including research activities in the Faculty as well as in the Dental Hospital will come with in the perview of the Dean, Faculty of Dental Sciences.

Organizational structure of the Faculty.

The Faculty is comprised of seven academic departments which include 18 academic divisions (for details see the attached sheet). Each Head of a Department is responsible for organizing the academic programme. In addition he is responsible for the general, personnel and financial administration of the Department.

Curriculum

The Faculty has embarked on a major exercise of revising the entire undergraduate curriculum and this activity will be finalized towards the end of this year.

Staff Development Programme

Total number of probationary lecturers in the Faculty	27
No. of probationary lecturers undergoing training abroad	12
No. of probationary lecturers registered for post graduate degrees locally	15
No. training programmes conducted under Technical Cooperation project at present	06
No. of training programmes to be commenced under the Technical Cooperation programme during this year	05

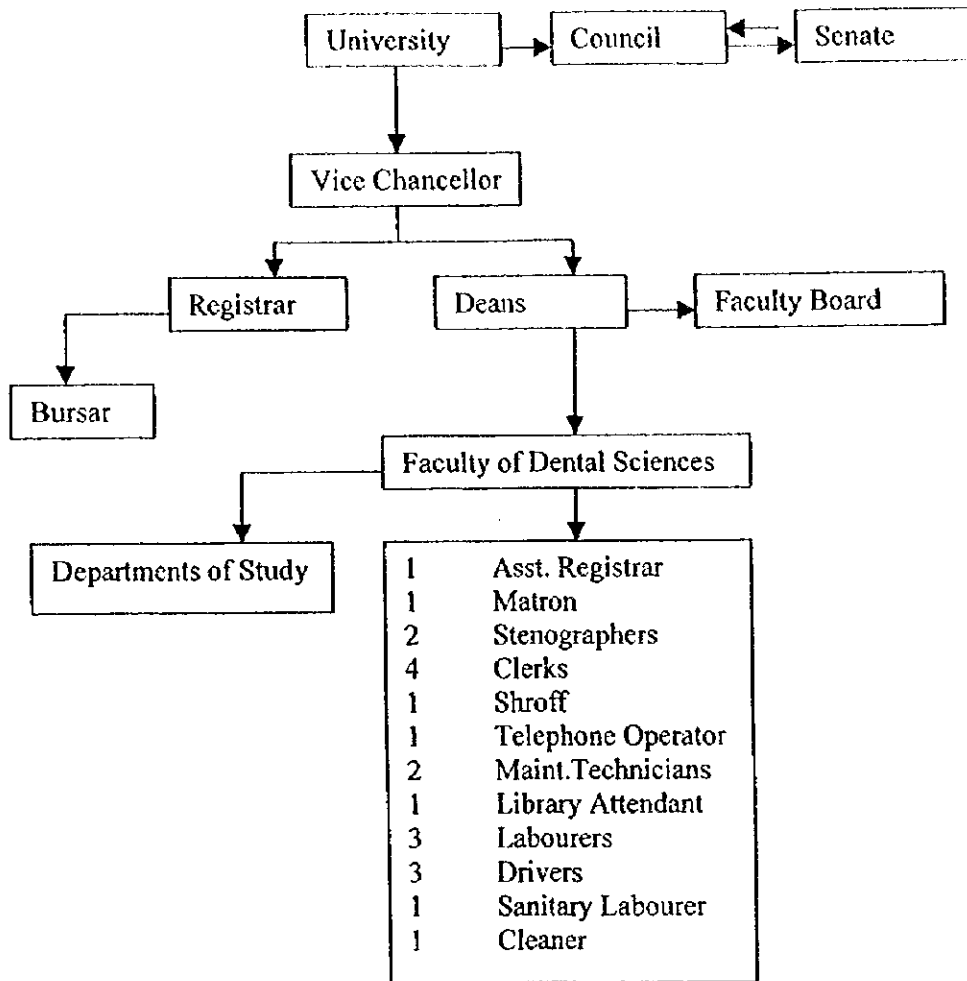
Staff cadre for the New Facility

Seven academic and 52 non academic new cadres have been approved by the University Grants Commission (see the attached copy for details) for the new facility and nearly 70% of these vacancies have already been filled. The remaining staff positions will be filled within 4-8 weeks.

Finances

Details of funding received by the Faculty from the Ministry of Education for the year 1998 is given below.

Consumables/Materials	Rs.
Normal grant	4,600,000
Additional grant	4,000,000
Total	8,600,000
Equipment, books & furniture	
Normal grant	1,214,733
Additional grant	4,000,000
Grant for furniture	7,500,000
Books	810,000
Total	13,524,733



Names of University Staff working in the Dean's Office			
No.	Name	Address	Signature
	Office Staff		
	Mr.W.D.V.Wijeratne	Asst. Registrar/Dental Sciences	
	Mrs.M.C.Kulatunga	Matron	
	Miss. R. Abeyratne	Shroff	
	Mr. K.M.B.Mahindasiri	Store keeper	
	Mr. Tissa Wijeratne	Clerk	
	Mr. C.B.Dodanwela	Clerk	
	Miss. N. Pushpakanthi	Clerk	
	Miss. Anushka Priyadharasani	Clerk	
	Miss. Inoka Rambukewela	Telephone Operator	
	Mrs. Padmini Hettiarachchi	Stenographer	
	Miss. Menaka Silva	Stenographer	
	Miss. Ruwani Dissanayaka	Typist	
	Mr. Ranjith Abeyratne	Computer Programmer	
	Mr.J.H.P.Dharmasena	Maintenance Technician	
	Mr. Shantha Bandara	Maintenance Technician	
	Miss.E.G.Chandrawathie	Library Assistant	
	Mr. D.G. Wijeratne Banda	Labourer	
	Mr. Ajantha Dissanayaka	Labourer	
	Mr. W.R.M.Wickramasinghe	Labourer	
	Mr. T.M.Lyanage	Driver	
	Mr. H.A.M. Abeysiri	Driver	
	Mr. V.H.G.Dharmasena	Driver	
	Mrs. P.G.Seelawathi	Sanitary Labourer	
	Mr. L.P.Hemachandra	Bus Cleaner	
	Head/Dept. of Basic Sciences	Dr.A.J.Pitigala Arachchi	
	Technicians		
	Mr.U. Abeygunaratne		
	Mr. N. Gunaratne		
	Miss. D. Senanayaka		
	Mrs. B. Pelris		
	Mr. K.U.C.Kuburegedara		
	Mr. S.P.U.Premachandra		
	Mr.D.D.Ehalagedara		
	Miss. W.W.M.K.Weerakoon		
	Mr. M.G.B.Gangadara		
	Minor employees		
	Mr.K.V.G.Heamapala		
	Mr.Sarath Banda		
	Mr. A.M.Ariyaratne		

Names of University Staff working in the Dental Hospital			
No.	Name	Address	Signature
	Department of Oral Surgery		
	Prof.N.A.de S.Amaratunga	Head/Dept. of Oral Surgery	
	Nurses	Dept. of Oral Surgery	
	Mrs. I.Serasinghe		
	Mrs. D.Ellepola		
	Miss. S.Werake		
	Miss. P. Samarakoon		
	Stenographer		
	Mrs. N.K.Werake		
	Minor employees		
	Mr.Asoka Herath		
	Mr. Athula Senaka		
	Mr. K. B.Herath		
	Mrs. I.Amarasinghe		
	Department of Oral Pathology		
	Prof.B.R.R.N.Mendis	Head/Dept. of Oral Pathology	
	Technicians	Dept. of Oral Pathology	
	Mr.A.K.Suraweera		
	Mr. G.G.Bandara		
	Mr. P. Tennekoon		
	Stenographer		
	Miss.M.Udugama		
	Minor employees		
	Mr.H.M.Navaratne Banda		
	Mr. Mahinda Yapa		
	Mr.K.G.H.Harschandra		
	Mr. W.M.U.B. Seneviratne		

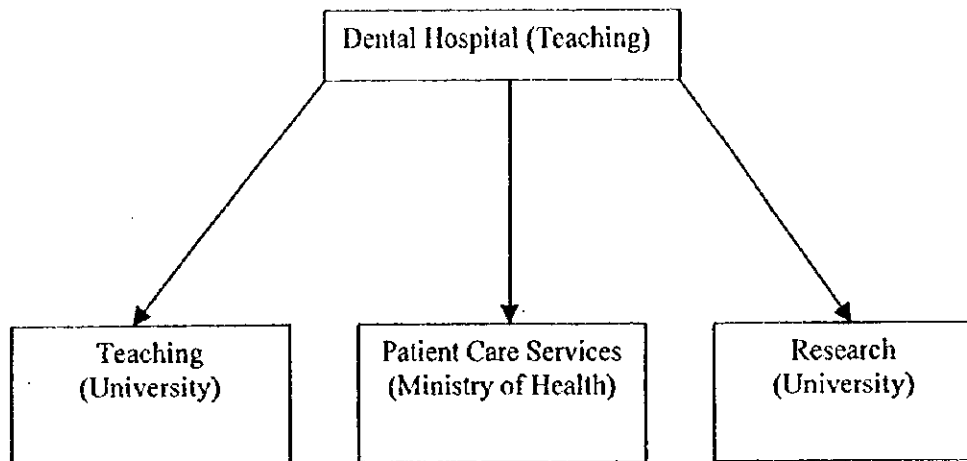
Department of Restorative Dentistry		
Dr.K.A.Wettasinghe	Head/Dept. of Restorative	
Nurses	Dept. of Restorative Dentistry	
Mrs. G. Padmadasa		
Mrs. Ranjani Wijesekera		
Miss. Srimathi Kusumalatha		
Miss. L. Dharmadasa		
Miss P.Samaranayaka		
Technicians		
Mr.R.A.D.N.L.Ratnayaka		
Minor employees		
Mr.K.S.P. de Silva		
Mrs. I.Ranasinghe		
Department of Prosthetic Dentistry		
Dr.T.Anandamoorthy	Head/Dept. of Prosthetic Dentistry	
Nurses	Dept. of Prosthetic Dentistry	
Mrs. Ramya Dissnayaka		
Mrs. M.R.M.Pelera		
Miss. Kumari Yapa		
Technicians		
Mr.J.R.Kulatunga		
Mr.W.Jayathilaka		
Mr. A. Mediwake		
Mrs. H.M.Illangasinghe		
Mrs. H.M.P.Shrani		
Mrs. N.Mahalekam		
Mrs. Shirnai de Silva		
Mrs. Mala Kandage		
Mrs. V. Abeyratne		
Miss.A.S.Jayatillaka		
Clerk		
Mr.A.K.Galpothethegedera		

	Minor Employees	
	Mr. A.G. Albert	
	Mr.N. Premaratne	
	Mr.P.R.M. Loku Banda	
	Mrs.W.Dodantenne	
	Department of Oral Medicine & Periodontology	
	Dr.A.Chandrasekera	Head/Division of Periodontology
	Nurses	
	Mrs.S.B.Dissanayaka	Dept. of Oral Medicine & Perio.
	Miss. Jayantha Manchanayaka	
	Mrs. D.Jayathilaka	
	Miss. Inoka Welagedara	
	Technicians	
	Miss. Shanz Cuncheer	
	Miss. Madubarshani Perera	
	Minor employees	
	Mr. E.G.Simlon	
	Mr.G.Wimalasena	
	Division of Orthodontics	
	Dr.Ms.S.P.N.P.Nagaratne	Head/Division of Orthodontics
	Nurses	
	Miss. A.K. Keerthilatha	Division of Orthodontics
	Miss. P. Piyasena	
	Mrs. D. Galpoththegedara	
	Technicians	
	Mrs. M. Bandaranayaka	
	Mrs. S. Ginige	
	Mr.S. Perera	
	Mr.L.S.Bandara	

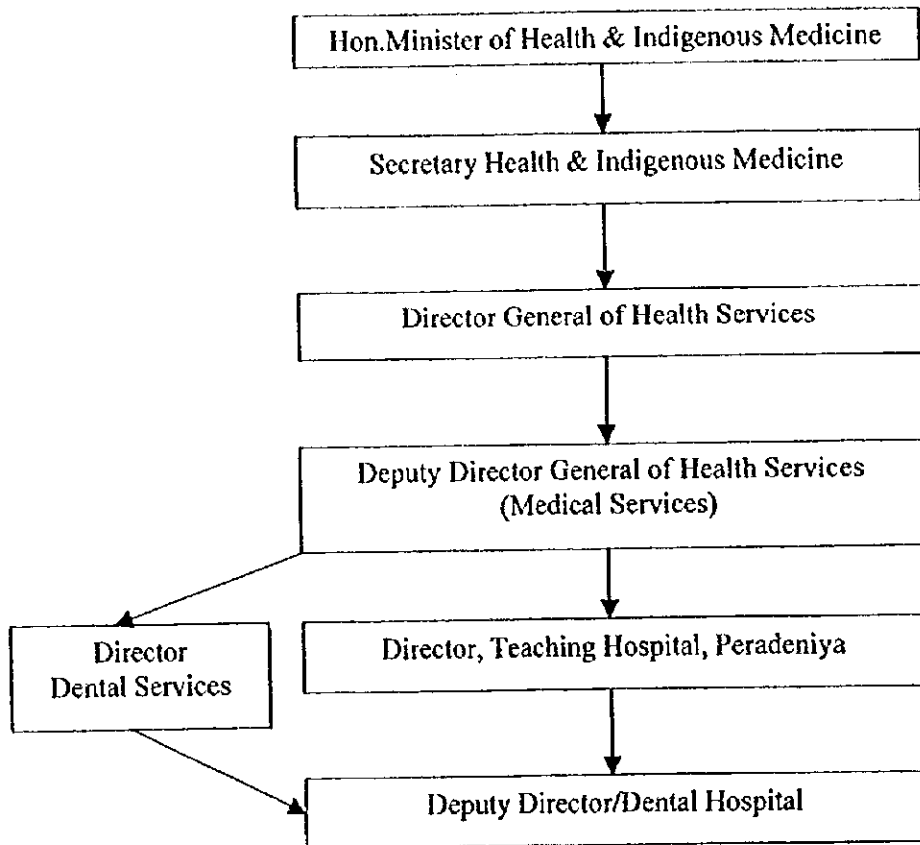
	Minor employees		
	Mr.J.K.Ratnayaka		
	Mr.A.Tilakaratne		
	Division of Paedodontics		
	Dr.R.L.Wijeyeweera	Head/Diviston of Paedodontics	
	Nurses		
	Mrs.D.Gamage	Division of Paedodontics	
	Mrs. Sriyani Ekanayaka		
	Mrs. Shiroma Seneviratne		
	Minor employees		
	Mr. T.M.Chandratne		
	Mr.Ajith Bandara		
	Miss.G.G.de Silva	Trainee Nurses	
	Miss. A.M.Y.S.K.Adikari		
	Miss. M.D.Gunawardena		
	Miss. S.M.Pallegedera		
	Miss.S.Sugathadasa		
	Miss. S.K.Rajapakse		
	Miss. A.Kularatne		
	Miss. W.Nanayakkara		
	Miss.G.M.K.Gunatilleke		
	Miss.K.N.Rajaratne		
	Miss S.H.K.Weerasekera		
	Miss.R.Sudharshani		
	Miss. V.K.Daulagala		

SUMMARY TABLE OF THE CADRE REQUIREMENTS FOR THE YEAR 1997

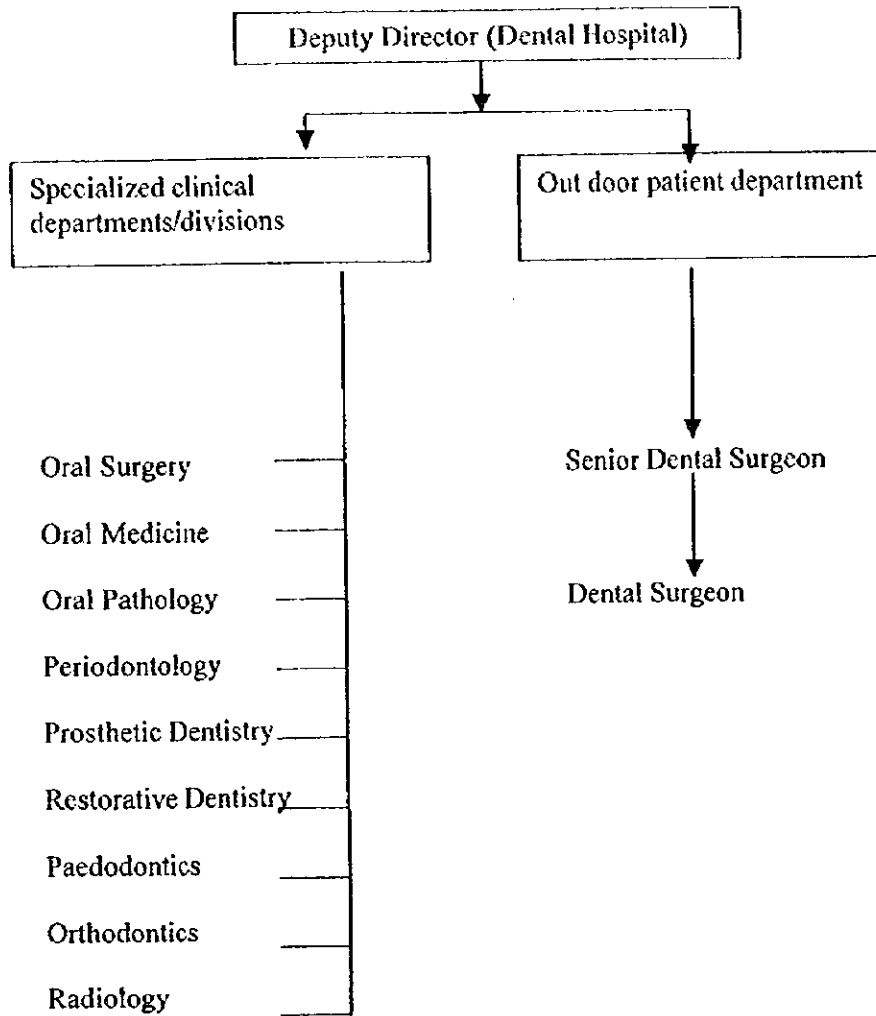
Departments	Professors	Professors/Lecturers	Dental Nurses	Technicians	Steno Typists	Clerks	Labourers	Attendants	Others	Total
Dept. of Oral Medicine & Periodontology	-	2	2	2	1	-	-	-	-	-
Dept. of Oral Surgery	-	-	2	-	-	-	-	-	-	-
Dept. of Oral Pathology/Gen.Pathology	-	-	-	1	1	-	-	-	-	-
Dept. of Community Dental Health	-	-	4	1	1	2	1	-	1	-
Computer Programme = 1	-	-	-	-	-	-	-	-	-	-
Dept. of Restorative Dentistry	-	-	4	1	1	-	-	-	-	-
Dept. of Prosthetic Dentistry	-	-	1	-	1	-	-	-	-	-
Dept. of Basic Sciences	-	4	-	5	2	2	5	4	-	-
Dean's Office - Common Facilities	-	-	-	1	-	3	1	-	-	-
Photographer = 1	-	-	-	-	-	-	-	-	1	-
TOTAL	-	6	13	11	7	7	7	4	2	57



Organization Chart of Ministry of Health, Sri Lanka



Organization of Care Services at Dental Hospital



Composition of Clinical Department

University

Professors

Lecturers

Demonstrators

Dental Surgery Assistants

Laboratory Technicians

Clerks/Stenographers

Labourers

Ministry of Health

Dental Surgeons (S.H.O.)

Dental Surgeons (H.O.)

Nursing Officers

Labourers

Other supportive services provided to Dental Hospital by the Ministry of Health

Supply of Pharmaceuticals and services of pharmacists

Radiological services

Linen and laundry services

Maintenance of building

Water supply/Electricity

Cleaning service

Communication facilities

Supply of General Store Items/Furniture/Consumables

Central Sterilize Supplies Department (CSSD)

Maintenance of Dental and Surgical equipment instrument

Security services

Supportive services provided to Dental Hospital by Teaching Hospital, Peradeniya

Blood Bank services

Medical Laboratory service

Transport Services

Provision of diets

Medical Coverage

E.C.G. Service and physiotherapy and other paramedical services

附属資料③ 合同調整委員会に提出された保健省のレポート

Constraints faced by MOH for smooth functioning of the Dental Hospital (Teaching), Peradeniya.

1.1. Project Environment

1. In order to maintain & manage the Hospital, the building has not been handed over to the MOH.

1.1.1. Utilisation of Physical Facilities

2. The MOH officers who perform 50% of the patient care services do not have adequate space to work in (clinical area) or rest during the lunch hour.
3. There isn't sufficient space to store drugs and consumables.
4. The directors room is not adequate.
5. The clerical staff cannot move into the hospital because there is no room to do so.
6. Chief Pharmacist has no office room.

SOLUTION

There are many unutilised rooms which can be re-distributed.

1.1.2. Equipment Installation & Usage

7. Drugs & consumables have to be indented one year ahead.
Eg. Panoramic X'rays were requested in June 1998.
8. The shortage of instruments are due to a lack of foresight in requesting for same by the relevant Departments.
9. The use of sterilisers in the OPD is due to the fact that the MOH was not involved in the planning stage of the Hospital and the facilities available were not made known.
10. The shortage of drugs in the Departments may be due to the fact that the DSA are not willing to take the drugs over from the Health Department Pharmacist. This is unsatisfactory because the drugs which come down a professional line cannot be handed over to a General Storekeeper who has no knowledge of storage and distribution of drugs. The importance of compliance need to be incorporated into the DSA training module.
11. Large numbers of disposable syringes are being requested, but the MSD is unable to meet this requirement. The Dental Hospital too has to fall in line with the other hospitals and be satisfied with re-usable syringes.
12. Under estimation of drugs.

1.1.4. Deployment of Human Resources

13. The following are in place:

Anaesthetists 8 (will be appointed by mid August)
Dental Surgeons 14 (others will be released in the
course of this month)

Ward Clerks Appointed as clerks

Nurses 10 more will be appointed as soon as possible

Pharmacists 2

Radiographer 1 will report on 1.1.98

7. General Management of the Faculty & Hospital

14. As there can be only one board of management for the Teaching Hospital, it has been suggested that the Dental Hospital has an "Advisory committee for management of the Dental Hospital" . Two members of this Board will be represented on the main Board of Management.

12. There is no parking facility for patients who seek treatment.

SJ-CODES JICA

Fact Sheet of the Project

SJCP-IDE
Sri Lanka – Japan Collaborative Programme
For the Improvement of Dental Education
In the Faculty of Dental Sciences University of Peradeniya
(Japanese Government /JICA Technical Cooperation Project)

FACT SHEET

Preamble

This fact sheet is intended to provide basic information pertaining to a major collaborative project between Sri Lanka and Japan that is currently being implemented. The project encompasses the spheres of both education and health in Sri Lanka. It has drawn on the resources of and has significant implications for both sectors. The fact sheet may be of use to all those who may have a general interest in this unique project including those agencies, organisations, or individuals who may wish to make a positive contribution towards it.

What is the aim of the project ?

The ultimate aim of the project is to facilitate an improvement in the standard of oral and dental health in the Sri Lankan population through the provision of better preventive, curative and rehabilitative services to the public. To this end the project specifically focuses on

- > Improving the quality of dental education in the Faculty of Dental Science of the University of Peradeniya
- > The provision of high quality oral and dental treatment incorporating a range of modern technologies through a new dental hospital complex (teaching) which is to be managed by the Ministry of Health as a counterpart of the Faculty of Dental Science .
- > Stimulating dental research in the University

What is the scope of oral health and why is it important ?

Oral and dental health is essential for good general health. Oral and dental diseases primarily involve the teeth and jaws, the mucous membrane of the mouth and the neighbouring tissues. More rarely these diseases and their complications may extend to include other areas of the head and neck including the face. Moreover many serious human diseases have oral manifestations which are a clue to their diagnosis.

Oral diseases include a large number of infective and degenerative conditions, injuries to the face and jaws resulting from accidents and violence, some inherited conditions - as well as cancer of the mouth which is the most common cancer in Sri Lanka and the Indian sub continent. Such conditions - of which dental caries and gum diseases are the most common - may lead to pain and discomfort, premature loss of teeth, functional disability, aesthetic impairment or disfigurement, a significant reduction in the quality of life - and in some situations even death.

Such diseases have a variety of social, behavioural and psychological dimensions. The economic consequences to society include the high cost of treatment and the many working days lost due to absenteeism since oral diseases tend to be a highly prevalent nuisance to millions of people worldwide.

What is the role of dental education ?

Dental education is the means of producing the health manpower required to manage the burden of oral disease in society. Such manpower includes dentists and certain types of dental auxiliaries. In Sri Lanka dentists are exclusively trained in the Faculty of Dental Science of the University of Peradeniya by means of a 4 year degree course. Upon graduation nearly all dentists opt to join the Ministry of Health where dental services are provided integrated with other medical services through a network of government hospitals. In the future it is likely that more and more dentists will be called upon to serve in the private sector.

Why was this project started in Sri Lanka ?

This project was initiated in Sri Lanka based on a recognition of the following :

- > Common oral diseases have a high prevalence in Sri Lanka with a large backlog of unmet need. For example according to recent national data, 73% of 6 year olds have at least one milk tooth and 80% of 35-44 year olds at least one permanent tooth with active dental caries. Moreover 63% of 15 year olds have been diagnosed as needing some restorative treatment. It is estimated that 20% of 35-44 year olds may need complex treatment for Periodontal disease. Some other conditions like unsightly mottling of the teeth caused by excess fluoride in the drinking water are a major public health problem in some areas.
- > Cancer of the mouth is the most common cancer in Sri Lanka comprising 30% of all cancers in males with an estimated annual incidence of 11.9 per 100,000.
- > The infrastructure of the Faculty of dental Science of the University of Peradeniya which is the only institution for the training of dentists in Sri Lanka was old, inadequate and obsolete. This deficiency has had an adverse effect on educational standards and has compromised the quality of services provided to patients. Every country needs at least one modern training facility capable of producing dentists who can adapt modern technologies and styles of treatment to the oral health problems of their societies. Sri Lanka has lacked such a facility.

Where is the project being implemented ?

The project is being implemented in the town of Peradeniya which is situated in the historic city of Kandy in the central highlands of Sri Lanka. The project focuses on the dental school and hospital of the Faculty of Dental Science of the University of Peradeniya, and is a cooperative endeavour involving the Government of Japan, and the Ministries of Education and Health in Sri Lanka.

When did this programme start and what is its expected duration ?

The initial phase of the project commenced in 1996 following one year of preparatory work. It is expected to continue until at least 2003.

How far has implementation progressed and what is the present status of the project ?

The implementation of the project has progressed in two phases. In the first phase which began in 1996 new buildings and equipment valued at approximately US\$ 22 m were provided under Japanese government Grant Aid for a new Faculty of Dental Science and modern Dental Hospital complex complete with wards and operating theatres for maxillofacial surgery. This phase will be complete in June 1998 when the new facilities will be commissioned. When completed the Dental Faculty complex will be managed by the University and the Dental Hospital complex by the Ministry of Health in a unique partnership involving active functional cooperation between

the health and education sectors.

The second phase of the project has just commenced and involves a Technical Assistance Program comprising training and consultancy services to ensure the efficient operation of the new facility in order that it may have the maximum health impact.

What specific health impact in Sri Lanka is expected from this project ?

- > The training of dentists, dental specialists and some types of dental auxiliaries in conformity with international standards of dental education
- > Improved standards of oral health in the population through the nationwide impact of the manpower that has received such training
- > The provision of high quality institutional oral and dental care incorporating modern preventive and therapeutic technologies and a comprehensive range of specialised services to patients from all parts of Sri Lanka.
- > The establishment of standards of institutionalised oral health care delivery that may be a model and an impetus for the progressive development of such services elsewhere in the health care system
- > Closer cooperation between the education and health sectors in the future planning of dental services, setting goals, and framing oral health policies.
- > Health promotion through the training of dentists in the mould of oral physicians who would be able to provide oral health care as an integral part of medical care in active collaboration with medical counterparts.
- > The promotion of Continuing Dental Education for the dental profession in Sri Lanka

What are the potential implications of the project for other developing nations in Asia and Africa ?

The new Faculty of dental Science may reflect a model approach to the training of dental manpower for a developing country which other countries with similar problems may wish to observe and emulate

- > The Faculty of dental Science of the University of Peradeniya can become a regional training centre for dental education which students from other developing countries may attend for undergraduate, postgraduate or shorter elective programs of study .
- > The new facility may serve as a regional 'centre of excellence' facilitating collaborative research and academic interaction between medical and dental research workers and specialists from Sri Lanka and abroad.
- > The management framework of the new dental teaching hospital - as well as the mode of clinical care provided within it blending technical sophistication with rational treatment philosophies and cost containment - may constitute a useful model of hospital dentistry for a Third world country.

RECORD OF DISCUSSIONS
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE DENTAL EDUCATION PROJECT AT UNIVERSITY OF PERADENIYA

With regard to the Japanese technical cooperation for the Dental Education Project at University of Peradeniya in the Socialist Republic of Sri Lanka, Mr. Yoshiaki Kano, Resident Representative of the Japan International Cooperation Agency in the Socialist Republic of Sri Lanka, held a series of discussions with the Sri Lankan authorities concerned. The discussions were in accordance with the result of the Japanese Supplementary Study Team conducted in the Socialist Republic of Sri Lanka from May 15 to June 18, 1997.

As a result of the discussions, both sides agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Colombo, January 6, 1998

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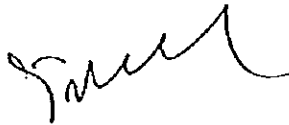
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野崎 良規

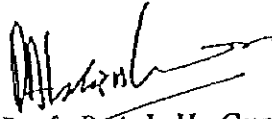
Mr. Yoshiaki Kano
Resident Representative
Sri Lanka Office
Japan International Cooperation Agency



Mr. Andrew de Silva
Secretary
Ministry of Education and Higher Education



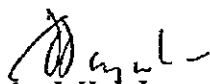
Prof. S. Thitakaratne
Chairman
University Grants Commission



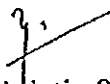
Prof. R.A.L.H. Gunawardana
Vice Chancellor
University of Peradeniya



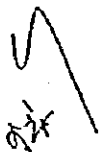
Dr. A.W. Ranasinghe
Dean
Faculty of Dental Sciences
University of Peradeniya



Mr. J.H.J. Jayamaha
Director
External Resources Department
Ministry of Finance and Planning



Mr. Christie Silva
Secretary
Ministry of Health and Indigenous Medicine



ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The government of the Socialist Republic of Sri Lanka will implement the Dental Education Project at University of Peradeniya (hereinafter referred to as "the Project") in cooperation with the Government of Japan.
2. The project will be implemented in accordance with the Master Plan which is given in Annex I.

II. MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In accordance with the laws and regulations in force in Japan, the Government of Japan will take, at its own expense, the following measures through Japan International Cooperation Agency (hereinafter referred to as "JICA"), according to the normal procedures under the technical cooperation scheme of the Colombo Plan for Cooperative Economic and Social Development in Asia and Pacific (hereinafter referred to as "the Colombo Plan")

1. **DISPATCH OF JAPANESE EXPERTS**
The Government of Japan will provide services of the Japanese experts as listed in Annex II.
2. **PROVISION OF MACHINERY AND EQUIPMENT**
The Government of Japan will provide such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III (hereinafter referred to as "the Equipment").
The Equipment will become the property of the Government of the Socialist Republic of Sri Lanka upon being delivered C.I.F. to the Sri Lankan authorities concerned at the ports and /or airports of disembarkation.
3. **TRAINING OF SRI LANKAN PERSONNEL IN JAPAN**
The Government of Japan will receive the Sri Lankan personnel connected with the Project for the technical training in Japan as listed in Annex IV.
4. **SPECIAL MEASURES**
To ensure the smooth implementation of the Project, the Government of Japan will take, in accordance with the laws and regulations in force in Japan, special measures through JICA for supplementing a portion of the local cost expenditures necessary for the execution of the middle-level trainees training programme.

III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF SRI LANKA

1. The Government of the Socialist Republic of Sri Lanka will take necessary measures to ensure the self-reliant operation of the Project during and after the period of Japanese technical cooperation, through the full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
2. The Government of the Socialist Republic of Sri Lanka will ensure that the technologies and knowledge acquired by the Sri Lankan nationals as a result of

Japanese technical cooperation will contribute to the economic and social development of the Socialist Republic of Sri Lanka.

3. The Government of the Socialist Republic of Sri Lanka will grant, in Sri Lanka, privileges, exemptions and benefits to the Japanese experts referred to in II-1 above and their families, which are no less favorable than those accorded to experts of third countries working in the Socialist Republic of Sri Lanka under the Colombo Plan technical cooperation scheme.
4. The Government of the Socialist Republic of Sri Lanka will ensure that the Equipment referred to in II-2 above will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.
5. The Government of the Socialist Republic of Sri Lanka will take necessary measures to ensure that the knowledge and experience acquired by the Sri Lankan personnel from technical training in Japan will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in force in the Socialist Republic of Sri Lanka, the Government of the Socialist Republic of Sri Lanka will take necessary measures to provide the following at its own expense for the Project:
 - (1) Services of the Sri Lankan counterpart personnel and administrative personnel as listed in Annex V;
 - (2) Land, buildings and facilities as listed in Annex VI;
 - (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided through JICA under II-2 above;
 - (4) Means of transport and travel allowances for the Japanese experts for official travel within the Socialist Republic of Sri Lanka; and
 - (5) Suitably furnished accommodations for the Japanese experts and their families.
7. In accordance with the laws and regulations in force in Sri Lanka, the Government of the Socialist Republic of Sri Lanka will take necessary measures to meet:
 - (1) Expenses necessary for the transportation within the Socialist Republic of Sri Lanka of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof;
 - (2) Customs duties, internal taxes and any other charges imposed in the Socialist Republic of Sri Lanka on the Equipment referred to in II-2 above, and
 - (3) Running expenses necessary for the implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. Vice Chancellor of University of Peradeniya, as the Project Director, will bear

overall responsibility for the administration and implementation of the Project.

2. Dean of the Faculty of Dental Sciences, University of Peradeniya, as the Project Manager, will be responsible for the managerial and technical matters of the Project.
3. The Japanese Chief Adviser will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
4. The Japanese experts will provide necessary technical guidance and advice to the Sri Lankan counterpart personnel on technical matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in Annex VII.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by the two Governments through JICA and the Sri Lankan authorities concerned, at the middle and during the last six months of the cooperation term in order to examine the level of achievement.

VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of Sri Lanka shall bear claims, if any arise, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Socialist Republic of Sri Lanka except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between the two governments on any major issues arising from, or in connection with this Attached Document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the Socialist Republic of Sri Lanka, the Government of the Socialist Republic of Sri Lanka will take appropriate measures to make the Project widely known to the people of the Socialist Republic of Sri Lanka.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five years from February 1, 1998.

02x

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Annex I

MASTER PLAN

1. OVERALL GOAL

To promote continuing advances in dental teaching, service and research in the Dental Faculty

2. PROJECT PURPOSE

The Dental Faculty achieves an optimum standard of function

3. OUTPUTS OF THE PROJECT

1. Knowledge and skills of Academic Staff are improved
2. Capability of Technical Staff is Improved
3. Capability of General Nurses & Dental Nurses is improved
4. Management skills of the Dental Faculty Staff are developed
5. To have the capability to develop continuing education programmes

ACTIVITIES OF THE PROJECT

- 1.1 Identify what knowledge and skills are lacking for each discipline
- 1.2 Identify the training needs of each discipline
- 1.3 Prioritize the training needs of the disciplines
- 1.4 Identify the Trainees
- 1.5 Determine the mode of training
- 1.6 Effective training programme developed
- 1.7 Undertake academic staff training programmes
- 1.8 Identify the equipment and materials required for training

- 2.1 Identify the sectors which have technicians
- 2.2 Identify the training needs of each sector
- 2.3 Prioritize the area of technical training needed
- 2.4 Equipment & materials needed for training to be identified
- 2.5 Identify the trainees
- 2.6 Determine the mode of training
- 2.7 Effective training programmes developed
- 2.8 Undertake Technical Staff training programmes

- 3.1 Committee dealing with education of Nurses is established
- 3.2 Protocols to specific Nursing activities developed
- 3.3 Evaluation/monitoring procedures for Nursing protocols are formulated
- 3.4 Identify the trainees
- 3.5 Determine the mode of training
- 3.6 Effective training programmes for Nurses developed
- 3.7 Undertake Nursing staff training programmes

- 4.1 Identify the sectors where management skills are important for the efficient functioning of the Dental Faculty
- 4.2 Identify the job descriptions of each manager
- 4.3 Provide basic management skills
- 4.4 Organize a workshop in management training
- 4.5 Disseminate the importance of the concept of management to all staff
- 4.6 Monitoring and evaluation of management skills

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- 5.1 Identify the means of Practitioners with regard to continuing education
- 5.2 To organize updating course for General Dental Practitioners in General Dentistry
- 5.3 To organize short courses in selective specialized disciplines for practicing dentists
- 5.4 Continuing education programme for Consultant Dental Surgeons
- 5.5 Undertake a training programme for practitioners
- 5.6 Education programmes in Basic Dental Research for Junior Faculty Academic Staff
- 5.7 Undertake continuing education programmes for Dental Chair side Assistants
- 5.8 Undertake continuing education programmes for Dental Technicians
- 5.9 Undertake continuing education programmes for Laboratory Technicians
- 5.10 To plan educational programmes for local post graduate degrees

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Annex II

LIST OF JAPANESE EXPERTS

1. Chief Adviser
2. Project Coordinator
3. Experts in the following fields
 - (1) Clinical Dentistry
(including Restorative Dentistry, Prosthetic Dentistry, Paedodontics, Orthodontics, Periodontology, Dental Laboratory Technology, and Dental Material Science)
 - (2) Community Dentistry
(including Public Health, Health Promotion)
 - (3) Oral-Maxillofacial Surgery and Diagnosis
(including Oral Medicine, Oral-Maxillofacial Radiology, Anaesthesiology and Operation Theatre Management)
 - (4) Basic Medical Sciences
(including Anatomy, Histology, Biochemistry, Physiology, Microbiology, Pharmacology and Oral & General Pathology)
 - 5) Other related fields mutually agreed upon as necessary

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Annex III

LIST OF MACHINERY AND EQUIPMENT

1. Equipment for training and education
2. Dental/Medical equipment
3. Dental/Medical supplies for the training
4. Equipment for information management
5. Equipment for transportation and communication including vehicles and their spare parts.
6. Equipment for the other related fields mutually agreed upon as necessary

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Annex IV

LIST OF TRAINEES IN JAPAN

1. Clinical Dentistry
(including Restorative Dentistry, Prosthetic Dentistry, Paedodontics, Orthodontics, Periodontology, Dental Laboratory Technology, and Dental Material Science)
2. Community Dentistry
(including Public Health, Health Promotion)
3. Oral-Maxillofacial Surgery and Diagnosis
(including Oral Medicine, Oral-Maxillofacial Radiology, Anaesthesiology and Operation Theatre Management)
4. Basic Medical Sciences
(including Anatomy, Histology, Biochemistry, Physiology, Microbiology, Pharmacology and Oral & General Pathology)
5. Other related fields mutually agreed upon as necessary

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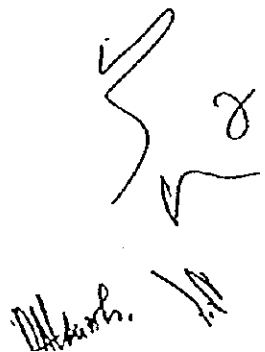
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Annex V

LIST OF SRI LANKAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

1. Project Director:
Vice Chancellor of University of Peradeniya
2. Project Manager:
Dean of the Faculty of Dental Sciences, University of Peradeniya
3. Counterpart personnel in the following fields
 - (1) Clinical Dentistry
(including Restorative Dentistry, Prosthetic Dentistry, Paedodontics, Orthodontics, Periodontology, Dental Laboratory Technology, and Dental Material Science)
 - (2) Community Dentistry
(including Public Health, Health Promotion)
 - (3) Oral-Maxillofacial Surgery and Diagnosis
(including Oral Medicine, Oral-Maxillofacial Radiology, Anaesthesiology and Operation Theatre Management)
 - (4) Basic Medical Sciences
(including Anatomy, Histology, Biochemistry, Physiology, Microbiology, Pharmacology and Oral & General Pathology)
 - (5) Other related fields mutually agreed upon as necessary
 - (6) Administrative personnel, and
 - (7) Other supporting staff mutually agreed upon as necessary
4. Steering Committee Members
 - (1) Functions
The Steering Committee will meet once a month, and work to formulate the Annual and monthly Work Plan of the Project within the framework of the R/D.
 - (2) Members
 - (a) Project Director (Chairperson of the Steering Committee)
 - (b) Project Manager
 - (c) Assistant Registrar / the Faculty of Dental Sciences, University of Peradeniya
 - (d) Core Group Members of the Counterpart Personnel listed above
 - (e) Chief Advisor
 - (f) Project Coordinator
 - (g) Project Experts

gk



Annex VI

LIST OF LAND, BUILDING, AND FACILITIES

1. Sufficient space for the implementation of the Project such as lecture rooms and meeting rooms necessary for technical transfer as well as space necessary for the installation and storage of the machinery, equipment and materials provided by the Government of Japan,
2. Offices at the Dental Faculty for Japanese Team Leader and Japanese experts,
3. Facilities such as electricity, gas, water supply, sewerage system, telephone service and furniture necessary for the Project activities, and
4. Other facilities mutually agreed upon as necessary.

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Annex VII

JOINT COORDINATING COMMITTEE

1. Functions

The Joint Coordinating Committee will meet at least once a year and whenever a necessity arises, and work:

- (1) To review and approve the Annual Work Plan of the Project prepared by the Steering Committee
- (2) To review the overall progress of the technical cooperation programme as well as the achievements of the above-mentioned Annual Work Plan
- (3) To review and exchange views on major issues arising from or in connection with the Project activities
- (4) To strengthen inter-sectoral collaboration among participating organizations in the Project

2. Composition

(1) Chairperson: Project Director (Vice Chancellor)

(2) Members: Sri Lankan side

- a) Project Manager (Dean of the Faculty of Dental Sciences)
- b) Assistant registrar / the Faculty of Dental Sciences)
- c) Representative of University Grants Commission
- d) Representative of Ministry of Education and Higher Education
- e) Representative of Ministry of Finance and Planning
- f) Representative of Ministry of Health and Indigenous Medicine

(3) Members: Japanese side

- a) Chief Advisor
- b) Project Coordinator
- c) Japanese Experts
- d) Resident Representative of JICA in Sri Lanka
- e) Other personnel dispatched by JICA, as necessary

f) Observers:

Official(s) of the Embassy of Japan in Sri Lanka

(5) The Joint Coordinating Committee can invite any related person to discuss specific issues

(6) An appropriate number of administrative secretaries shall be allocated to the Joint Coordinating Committee for record-keeping and other administrative tasks.

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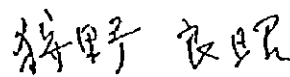
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TENTATIVE SCHEDULE OF IMPLEMENTATION
AND
PROJECT DESIGN MATRIX
FOR
THE DENTAL EDUCATION PROJECT AT UNIVERSITY OF PERADENIYA

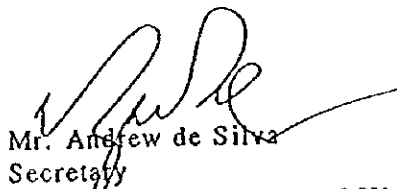
The JICA Sri Lanka Office and the Sri Lankan authorities concerned have agreed on the Tentative Schedule of Implementation and the Project Design Matrix of the Dental Education Project (hereinafter referred to as "the Project") extracted from the Report of the Supplementary Study conducted from 15 May to 18 June, 1997 and compiled by Dr. Yujiro Handa and Dr. Ajith W. Ranasinghe as attached hereto.

This schedule and the matrix have been formulated in connection with the attached document of the Record of Discussions signed between JICA and the Sri Lankan authorities concerned for the Project, on condition that the necessary budget be allocated for the implementation of the Project and that the schedule and the matrix are subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project.


Colombo, January 6, 1998



Mr. Yoshiaki Kano
Resident Representative
Japan International Cooperation Agency
in Sri Lanka



Mr. Andrew de Silva
Secretary
Ministry of Education and Higher
Education



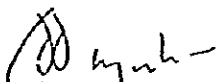
Prof. S. Thilakarathne
Chairman
University Grants Commission



Prof. R.A.L.H. Gunawardana
Vice Chancellor
University of Peradeniya



Dr. A.W. Ranasinghe
Dean
Faculty of Dental Sciences
University of Peradeniya



Mr. J.H.J. Jayamaha
Director
External Resources Department
Ministry of Finance and Planning



Mr. Christie Silva
Secretary
Ministry of Health and Indigenous
Medicine

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TENTATIVE SCHEDULE OF IMPLEMENTATION

	1998	1999	2000	2001	2002
	Phase 1 Lack of Training Today + Essential Novel Facility Tomorrow Consider the most deficient areas or disciplines in relation to teaching and service		Phase 2 Some Expertise Today + Novel Facility Tomorrow Strengthen teaching and service function		Phase 3 Expert Today + Novel Facility Tomorrow Research based
ITEMS / YEAR	1998	1999	2000	2001	2002
1. Dispatch of Japanese Experts					
a. Chief Advisor	*****	*****	*****	*****	*****
b. Project Coordinator	*****	*****	*****	*****	*****
c. Expert in the following areas					
Clinical Dentistry	*****	*****	*****	*****	*****
Community Dentistry	*****	*****	*****	*****	*****
Oral Surgery	*****	*****	*****	*****	*****
Basic Medical Science	*****	*****	*****	*****	*****
Other Related Area	*****	*****	*****	*****	*****
2. Counterpart Training in Japan					
Clinical Dentistry	△△△△△△△△△△	△△△△△△△△△△	△△△△△△△△△△	△△△△△△	
Community Dentistry	△△△△△△△△△△△△△△	△△△△△△	△△△△△△△△△△△△	△△△△△△△△△△△△	△△△△△△△△△△△△
Oral Surgery	△△△△△△△	△△△△△△	△△△△△△△△△	△△△△△△△△△△	△△△△△△△△△△△△
Basic Medical Science	△△△△△△△	△△△△△△△△△△	△△△△△△△△△△	△△△△△△△△△△	△△△△△△△△△△△△
Other Related Area	△△△△△△△		△△△△△△△		
3. Provision of Equipment	*	*	*	*	*
4. Japanese Mission to Sri Lanka			Technical Guidance / Consultation Team	Equipment Maintenance Team	Evaluation Team

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ITEMS / YEAR	1998	1999	2000	2001	2002
5. Sri Lankan Side					
Allocation of Counterpart Personnel					
a. Project Director	*****	*****	*****	*****	*****
b. Project Manager	*****	*****	*****	*****	*****
c. Counterpart Personnel In The Following Fields					
Clinical Dentistry	*****	*****	*****	*****	*****
Community Dentistry	*****	*****	*****	*****	*****
Oral Surgery	*****	*****	*****	*****	*****
Basic Medical Science	*****	*****	*****	*****	*****
Other Related Area	*****	*****	*****	*****	*****
Administrative Personnel	*****	*****	*****	*****	*****
Other Supporting Staff Mutually Agreed Upon As Necessary					
Provision of Land, Buildings and Other Facilities	*****	*****	*****	*****	*****
Supply or Replacement of Equipment, Machinery, Vehicles, Instruments, Tools and Any Other Materials Other Than Those Provided By The Government of Japan	*****	*****	*****	*****	*****
Provision of Running Expenses For The Project When Necessity Arises					

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Project Design Matrix (PDM)

Dental Educat. Project at University of Peradeniya
January 1998 - December 2002

Name of the Project:
Cooperation Period:

Narrative Summary	Objective Verifiable Indicators	Means of Verification	Important Assumptions
<p>OVERALL GOAL To promote continuing advances in Dental Teaching, Service and Research in the Dental Faculty</p>	<p>Sri Lankans Postgraduate MS/MPhil Degrees are increased from (5%, 1997) to (15%, 2002) No. of Dental graduate practicing 4 hands dentistry (X, 1997) to (Y, 2002) Postgraduate research seminar will increase from (X, 1997) to (Y, 2002) No. of distant education practiced by the Faculty from (X, 1997) to (Y, 2002)</p>	<p>Record of degrees (Univ. Perad. HQ) Questionnaire/Survey conducted by the Faculty Record of Activities in the Faculty</p>	<p>Sri Lankans recognized the new Dental Faculty/Hospital Complex of the best training and treatment institute</p>
<p>PURPOSE The Dental Faculty achieves optimum standard of function</p>	<p>Student performance at examinations improved pass rate increase by 10% honors increase by 3% Patient waiting lists reduced from (X, 1997) to (Y, 2002) No. of SS groups working for the Faculty increase 2,1997 to 18, 2002</p>	<p>Faculty Records Record of Activities in the Faculty Training activities will continue locally</p>	<p>Govt. continue to appreciate importance of dental training An appropriate scheme of patient charges will be formulated and adopted The Ministry of Higher Education will continue to provide adequate funds</p>
<p>OUTPUTS</p>	<p>1.1 The number of patients treated is increased from 30,000 / yr 1997 to 100,000 / yr 2002 1.2 The total number of biopsies reported is increased from 1000 / yr 1997 to 4000 / yr 2002 1.3 Number of publications from the staff will double 1.4 Number of textbook / manuals written by Faculty staff increased 3, 1997 to 18, 2002 2.1 Technical work output of each division increases 50% by 2002 3.1 Incidence of cross infection reduced from (X% 1997) to (Y % 2002) 3.2 Four-handed dentistry will be practiced in 1998 Restorative/ Paedo./Peño./O. Surg./ Prosthetics 4.1 Microscopes fungal contamination less than 10 % 4.2 Breakdown rate of hand piece head after one year 100%, 1997 to 20%, 1999 4.3 Punctuality & attendance of staff improved from (X% 1997) to (Y % 2002) 4.4 Maintenance Records are continuously organized in all 18 areas 5.1 Continuing education programmes will be increased from X to 4 yr</p>	<p>Faculty Records Record of Divisions Hospital Records Faculty Records Faculty Records</p>	<p>Trained staff will work hard with dedication Trained Technicians are present</p>
<p>1. Knowledge and skills of Academic Staff are improved</p>			
<p>2. Capability of Technical Staff is Improved</p>			
<p>3. Capability of General Nurses & Dental Nurses is improved</p>			
<p>4. Management skills of the Dental Faculty Staff are developed</p>			
<p>5. To have the capability to develop continuing education programmes</p>			

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ACTIVITIES	Important Assumption
<p>1.1 Identify what knowledge and skills are lacking for each discipline</p> <p>1.2 Identify the training needs of each discipline</p> <p>1.3 Prioritize the training needs of the disciplines</p> <p>1.4 Identify the trainees</p> <p>1.5 Determine the mode of training</p> <p>1.6 Effective training programme developed</p> <p>1.7 Undertake academic staff training programmes</p> <p>1.8 Identify the equipment and materials required for training</p> <p>2.1 Identify the sectors which have technicians</p> <p>2.2 Identify the training needs of each sector</p> <p>2.3 Prioritize the area of technical training needed</p> <p>2.4 Equipment & materials needed for training to be identified</p> <p>2.5 Identify the trainees</p> <p>2.6 Determine the mode of training</p> <p>2.7 Effective training programmes developed</p> <p>2.8 Undertake Technical Staff training programmes</p> <p>3.1 Committee dealing with education of Nurses is established</p> <p>3.2 Protocols to specific Nursing activities developed</p> <p>3.3 Evaluation / monitoring procedures for Nursing protocols are formulated</p> <p>3.4 Identify the trainees</p> <p>3.5 Determine the mode of training</p> <p>3.6 Effective training programmes for Nurses developed</p> <p>3.7 Undertake Nursing staff training programmes</p>	<p>4.1 Identify the sectors where management skills are important for the efficient functioning of the Dental Faculty</p> <p>4.2 Identify the job descriptions of each manager</p> <p>4.3 Provide basic management skills</p> <p>4.4 Organize a workshop in management training</p> <p>4.5 Disseminate the importance of the concept of management to all staff</p> <p>4.6 Monitoring and evaluation of management skills</p> <p>5.1 Identify the means of practitioners with regard to continuing education</p> <p>5.2 To organize updating course for General Dental Practitioners in General Dentistry</p> <p>5.3 To organize short courses in selective specialized disciplines for practicing dentists</p> <p>5.4 Continuing education programme for Consultant Dental Surgeons</p> <p>5.5 Undertake a training programme for practitioners</p> <p>5.6 Education programmes in Basic Dental Research for Junior Faculty Academic Staff</p> <p>5.7 Undertake continuing education programmes for Dental Chair side Assistants</p> <p>5.8 Undertake continuing education programmes for Dental Technicians</p> <p>5.9 Undertake continuing education programmes for Laboratory Technicians</p> <p>5.10 To plan educational programmes for local post graduate degrees</p>
<p>INPUTS</p> <p>JAPAN</p> <p>Experts</p> <p>Equipment</p> <p>Training in Japan</p>	<p>PRE-CONDITION</p> <p>New Dental Faculty / Hospital Complex built by Japanese Grant/Aid completed and available</p>
<p>SRI LANKA</p> <p>Personnel / Trainee</p> <p>Materials / Consumable</p> <p>Finance for maintaining facilities</p>	

* X and Y need to be filled after collecting baseline data.

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JICA