Annual Report of Research & Development (R&D)

2002

SCHOOL OF DENTAL SCIENCES (PPSG)
HEALTH CAMPUS

Prepared by: A.B. Hakim
A. Report of PPSG Research Committee

The first ever PPSG Research Committee was formed officially in the First Meeting organised on 6th August 2002. The Committee was embodied by 10 people selected based on their vast experience and deep knowledge in research. They were: -

1. Assoc. Prof. Dr. Ab. Rani Samsudin (Dean – Chairman)
2. Prof. Rusli Nordin (Deputy Dean of Research)
3. Dr. Abdul Rashid Ismail
4. Dr. Mohd Ayub Sadiq
5. Dr. Wihaskoro Sosroseno
6. Dr. Afifi Sheikh Abu Bakar
7. Dr. Widowati Witjaksono
8. Dr. Hj. Ramli Saad
9. Prof. Asma Ismail
10. Abdul Hakim Abdul Basir (Secretary)

Term of reference as a Committee Member is to help the Chairman in the following: -

1. To review and vet new research proposals and then present it to the Research Committee.
2. To evaluate consultation proposals and present it to the Center of Innovation and Consultancy.
3. To examine the progress and final reports of research carried out in the school.
4. To scrutinize the technicality and ethical issues of the submitted research and consultation proposals.

Only two meeting was organized in 2002, as not many proposals were coming from the researchers in PPSG. The second meeting was organized on 27th October 2002 and two proposals were vetted. They were: -

1. Detection of EGFR Mutation in non-Syndromic Cleft Lip Palate (CL± P) Patients in HUSM (Khairani Idah Mokhtar)
2. Identifications of HVR1 and HVR2 mutations in mitochondrial DNA of dentine amongst Malay populations (Azlina Ahmad)

The first proposal was approved with minor corrections whilst the second proposal had to be re-submitted and re-written.
<table>
<thead>
<tr>
<th>No.</th>
<th>Research Title</th>
<th>Key Researcher</th>
<th>Budget (RM)</th>
<th>Date of Approval</th>
<th>Type of Grant</th>
<th>Research Thrust</th>
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<tbody>
<tr>
<td>1</td>
<td>Craniofacial Growth Changes Following Surgically Created Defect on the Temporal Mandibular Joint</td>
<td>Dr. Suzina Sheikh Abd. Hamid</td>
<td>19,926.00</td>
<td>01/02/02</td>
<td>USM Short Term</td>
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<td>2</td>
<td>Clinical Measurement and Evaluation of Vertical Dimension of Face</td>
<td>Dr. Haryo Mustiko Dipoyono</td>
<td>7,492.00</td>
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<td>3</td>
<td>In-Vivo Cytotoxic Evaluation of Sea Coral on Human Fibroblast Cell Line</td>
<td>Nor Shamsuria Omar</td>
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<td>Dental Biomaterial</td>
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<td>4</td>
<td>3-D Craniofacial Morphometrics: Pre- and Post-Operative Assessment of Malay Cleft Lip and Palate Children</td>
<td>Abdul Hakim Abdul Basir</td>
<td>14,000.00</td>
<td>21/03/02</td>
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<td>5</td>
<td>In-Vivo Study of a Locally-Manufactured Hydroxyapatite-Based Material as Bone Replacement Material</td>
<td>Dr. Noor Hayati Abdul Razak</td>
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<td>6</td>
<td>Craniofacial Growth Changes in Malay Children and Young Adults: A Cross-Sectional 3-D CT Pilot Study</td>
<td>Abdul Hakim Abdul Basir</td>
<td>18,708.00</td>
<td>18/06/02</td>
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<td>Arginase Activity in Murine Macrophages Stimulated with Lipopolysaccharide from Actinobacillus actinomycetemcomititans In Vitro</td>
<td>Dr. Wihaskoro Sosroseno</td>
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<td>16/07/02</td>
<td>Fundamental</td>
<td>Oral Diseases</td>
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<td>8</td>
<td>A Cross Sectional Study of Oral Anomalies and Speech Abnormality in Non-Syndromic Cleft Lip and Palate Children</td>
<td>Dr. Normastura Abd. Rahman</td>
<td>13,150.00</td>
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<td>9</td>
<td>The Role of Nitric Oxide on the Proliferation of a Human Osteoblast Cell Line (HOS cells) Stimulated with Hydroxyapatite</td>
<td>Dr. Wihaskoro Sosroseno</td>
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<td>10</td>
<td>Genotoxicity Study of Sea Coral Used as Bone Replacement Material</td>
<td>Dr. Suzina Sheikh Abd. Hamid</td>
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<td>16/08/02</td>
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<td>In-Vitro Cytotoxicity Evaluation of Sea Coral on Human Osteoblast and Chondroblast Cell Line</td>
<td>Dr. Imran Ab. Ghani Azmi</td>
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<td>16/08/02</td>
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<td>Development of Malaysian Craniofacial Profiles for Surgical Services, Forensic, Training and Education</td>
<td>Prof. Ab. Rani Samsudin</td>
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<td>13</td>
<td>The Role of Nitric Oxide on the Induction of Immune Response to Actinobacillus actinomycetemcomititans in a Mouse Model</td>
<td>Dr. Wihaskoro Sosroseno</td>
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<td>Biomaterials for Medical Applications – Development of Bone Graft Substitutes Based on Calcium Phosphate Bioceramics</td>
<td>Prof. Ab. Rani Samsudin</td>
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<td>The Role of Nitric Acid on Hydroxyapatite-Stimulated Human Osteoblast Proliferation In Vitro</td>
<td>Dr. Erwan Sugiatno</td>
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<td>The Study of Hearing and Speech In Early vs Late Palatoplasty Cleft Lip and Palate Children</td>
<td>Dr. Nezreen Radzana Mohamed</td>
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<td>Psychosocial Aspects of Teenaged Cleft Lip and Palate Patients and Their Parents</td>
<td>Dr. Siti Noor Fazliyah Md. Noor</td>
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<td>Environmental Tobacco Smoke Exposure and the Risk of Non-Syndromic Oral Clefting Among Malays in Kelantan: A Clinical and Molecular Epidemiological Association</td>
<td>Dr. Ayu Abdullah</td>
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<td>15/11/02</td>
<td>USM Short Term Craniofacial Biology</td>
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Total value of grant: **RM 1,192,609.00**

**C. Research Activities Organized in 2002**


2) Research Presentation: USM and Prince of Songkla University (5 – 6 March 2002)

3) Clinical Pathology Conference (CPC): Eruption of Teeth. (7 March 2002)


9) “Seminar on Basic Dental Sciences for Scientists”. USM Health Campus. (1 August 2002).


D. List of publications in 2002


3) **Sosroseno W**, Barid I, Herminajeng E, Susilowati H. Nitric oxide production by a murine macrophage cell line (RAW264.7) stimulated with lipopolysaccharide from *Actinobacillus actinomycetemcomitans*. Oral Microbiology Immunology, 2002; 17: 72-78.


8) Jonarta ALS, Pudyani PS, **Sosroseno W**. Effect of high-density lipoprotein on lipopolysaccharide-induced alveolar bone resorption in rats. Oral Diseases, 2002; 8: 261-267.


10) Indahyani DE, Pudyani PS, Santoso ALS, Jonarta AL, **Sosroseno W**. The effect of fish oil on bone resorption following pulp exposure in rats. Dental Traumatology, 2002; 18: 206-211.

E. List of Awards Won in 2002

1) ITEX 2002 Gold Award “CORAGRAF Sea Coral for Bone Grafting.” – Dr. Suzina Sheikh Ab. Hamid, Prof. Dr. Ab. Rani Samsudin, Dr. Rosdan Salim & Ms. Nor Shamsuria Omar.