Cariology and Operative Dentistry

1. Staffs and Students (April, 2010)

Professor: Junji Tagami
Associate Professor: Masayuki Otsuki
Junior Associate Professor: Toru Nikaido, Masatoshi Nakajima
Assistant Professor: Takako Yoshikawa, Yasushi Shimada, Yuichi Kitasako, Ryuzo Kishikawa, Go Inoue, Eitetsu Cho, Keiichi Hosaka
Specially Appointed Junior Associate Professor (GCOE): Alireza Sadr
Specially Appointed Junior Associate Professor: Shoji Nakashima
Specially Appointed Assistant Professor: Noriko Hiraishi
Hospital Staff: Tomohiro Takagaki, Meu Ariyoshi, Miho Nishimura, Seiko Yamamoto
Technical assistant: Peththahandi Gayani Kanchana
Secretary: Shiori Ogi, Noriyo Miura
Research Student: Shinji Ogura, Mineo Kijima, Tomomasa Nomura
Intern: Masahiro Ono, Ichiro Ikeda, Shima Ito, Kanako Shida

2. Purpose of Education

Cariology and Operative Dentistry section offers a four-year graduate program. First-year graduate students attend lectures and seminars given in the graduate school and are expected to gain an understanding of the fundamentals about methodology and the knowledge necessary for their research. The contents of the classes given in our section include topics related to cariology and operative dentistry: caries diagnosis, biocompatibility, caries treatment and restoration,
prevention and control, dental materials, new instruments and equipment. In keeping with the internationally orientated philosophy of this section, lectures are conducted in English and are open to all foreign students. First-year graduate students also undergo clinical training the procedures of modern adhesive restorations. Laboratory work, which commences in the first year, is performed under the supervision of our faculty staff. During the four-year program, several papers are required to be presented in domestic and / or international conferences and submitted to journals. The minimum requirements are completing the prescribed courses, a supervised research project and a dissertation for the degree published in a top international journal.

3. Research Subject
Mechanism of dentin bonding
Adhesive of resin restoration systems to tooth substance and other restorative materials
Structure, diagnosis and treatment of dentin caries
Physical-chemical and manipulative properties of restorative materials
Durability of restorative materials
Pulpal response to restorative materials
Improvement of various restorative techniques for direct and indirect restorations
Improve of various esthetic treatment techniques
Caries risk assessment and prevention of recurrent caries
Development and introduction for clinical works of OCT (Optical coherence tomography)

4. Clinical Service
Operative Dentistry clinic provide restoration of teeth with fillings for dental cavities, trauma and tooth wear, and root canal treatments.

5. Publications
Original Articles


Review articles

Books