

2022 3rd Term Dental School		Jpn / Eng English
<div><div></div><div>口腔感染防御論 Oral Infection and Immunology</div></div>		
<div><div></div>Course No.</div>	<div><div></div>Classification</div>	<div><div></div>Term</div>
076049		3rd Term
<div><div></div>Numbering code</div>	<div><div></div>Classroom</div>	
NDGZ0DEDZ4004A	総診棟地下大講義室 講義室 1)	
<div><div></div>Required / Elective</div>		
Required		
<div><div></div>Number of credits</div>	<div><div></div>Day & Period</div>	
1	Tue.2,Tue.3	
<div><div></div>Instructor(s)</div>		
高柴 正悟 [TAKASHIBA Shogo]		

Sustainable Development Goals (SDGs)



Target students

Open to other faculties

No

Contact information

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Office hours

Office is open for students; 8:00 - 9:00 Monday, 17:00 - 18:00 Tuesday, and 8:00 - 9:00 Thursday at the office of Professor in Department of Pathophysiology - Periodontal Science located on the 4th Floor of Central Clinics, Okayama University Hospital.
 It is strongly recommended to send e-mail at least a day before you come, because the schedule may be changed.
 Use the official e-mail address provided by Okayama University, or your e-mail may be classified as junk/spam mail automatically.

Faculty, Program, or Graduate School specific items

Dental Education Model ・ Core ・ Curriculum (revised edition of 2016)

A Basic qualities and abilities required of a dentist
 A-2 Medical knowledge and ability to deal with problems
 A-2-1) Ability to explore and solve problems
 A-2-2) Way of learning
 A-6 Medical quality and safety management
 A-6-1) Secure safety
 A-7 Medical practice in society
 A-7-1) Contribution to regional medical care
 A-8 Scientific inquiry
 A-8-1) Oriented Recharge for Medical Research (Recharge of Research Mind)
 B Society and dentistry
 B-1 Health concept
 C Life science
 C-4 infection and immunity
 C-4-1) Infection
 C-4-2) Immunization
 C-5 Etiology and pathology

C-5-4) Circulation injury
C-5-5) Inflammation
E Clinical dentistry
E-6 Medical knowledge necessary to collaborate with doctors

Language

Japanese or English depending on the students

Course description

We describe the conditions of marginal periodontitis and pulpal disease / apical periodontal disease based on biological basis and teach the etiology, diagnosis, treatment and prevention methods of these diseases. In addition, understand the influence of local chronic inflammation in the general condition and make you understand the developmental and interdisciplinary way of thinking for 'oral medicine'.

Learning objectives

General Goal (GIO):

In order to understand the pathology of oral infection and its effect on the whole body, biological basic knowledge on periodontal tissue and the morbid periodontal disease, the pathology of pulpal disease / apical periodontal disease and treatment based thereon Understand the law.

Learning outcomes

Action target (SBOs):

1. Explain the host factors and pathogenic factors that modify the pathology of intraoral infection (recall)
2. Explain the pathology of marginal periodontal disease, pulpal disease / apical periodontal disease from the viewpoint of balance between bacterial infection and biological defense (recall)
3. Explain the diagnosis and treatment of intra-oral infections (explanation)
4. Explain the concept of individual medical care (recall)
5. Explain the relationship between oral infection and systemic disease (recall)
6. You can make scientific judgments by appropriately utilizing papers etc. (Interpretation)
7. To acquire the habit of thinking through intraoral infections with general health (attitudes and habits)

Course schedule

Due to the COVID-19 crisis, this class may be changed to online live lecture.

1st October 4

Introduction to clinical infection and immunity: Translational guidance from basic science to current clinical problems (compromised hosts)

2nd October 11

Specific characters of periodontal tissue; Anatomical characteristics and existence of general host responses

3rd October 18

Host-parasite interactions: Causes of tissue destruction

4th October 25

Symbiosis with indigenous bacteria; Microflora in oral cavity (mouth) and intestine as gastrointestinal tract

5th November 8

Hospital infection: Increase of compromised hosts and drug-resistant bacteria, latent spread of infection by dental practice

6th November 15

Emerging infection and pandemic infection: Systematic investigation of infection cause, outbreak countermeasures

7th November 22

Oral biofilm infection: Actual condition, affects on systemic health, and countermeasure

8th November 29

Exam and summary: The first half is for written examination, the second half is for summary of lectures and examination

Learning activities outside of classroom

Required to see some of the past lecture materials in advance. Access from the following link. Password is ps6675.

<https://www.cc.okayama-u.ac.jp/~perio/bind21/lectures.html>

Teaching format

Teaching format-a ratio of [Lecture] to [Not lecture] in this class

50% : 50%

Active learning-Collaborative activities

pair/group work, discussions, and presentations

Occasionally

Active learning-Teacher-student interaction

Occasionally

Active learning-Thinking activities (critical thinking making a research question)

Often

Active learning-Reflections(exercises, quizzes, reports)

Very often

Teaching format-Practical training

Not applicable

Teaching format-Message to the students

You should have sense/motivation for improve yourself by studying even though you do not have preliminary knowledge.

Equipment

Used-Audiovisual media (PowerPoint, CD, DVD)

Very often

Used-Study management system (Moodle)

Very often

Used-Support (Guest speakers, TA, Volunteers)

Occasionally

Used-Message to the students

Visual teaching materials using PowerPoint etc.

Students use ICT equipment to collect data (from HP in the research field)

Textbook(s)

Note

Introduce as appropriate during the lecture.

Preliminarily prepare materials on oral infection protection theory Oral Immunology in <http://www.cc.okayama-u.ac.jp/~perio/bind2/cn11/pg60.html> in advance.

Reference material

Reference book1	ISBN	978-4903553825	
	Book title	口腔感染症の脅威：静かに進展する病変とその対処法	
	Author	トーマス・モ・レビー著	
	Publisher	医学情報社	Year of publication 2020
Reference book2	ISBN	4263445414	
	Book title	続 史上最大の暗殺軍団デンタルブラック 口腔内に跋扈する魑魅魍魎の正体	
	Author	奥田 克爾 (著)	
	Publisher	医歯薬出版	Year of publication 2019
Reference book3	ISBN	978-4862270160	
	Book title	人は口から老い口で近く: 認知症も肺炎も口腔から	
	Author	落合邦康著	
	Publisher	日本プランニングセンター	Year of publication 2021
Reference book4	ISBN	978-4781311395	
	Book title	腸内細菌・口腔細菌と全身疾患	
	Author	落合邦康監修	

Publisher	シーエムシー出版	Year of publication	2015
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Note

Introduce as appropriate during the lecture. We also distribute lecture materials. It is also necessary to conduct searches using libraries and the Internet and gather information.

Please also refer to the following during the lecture.

1. 寄生虫なき病, モイゼズ ベラスケス=マノフ (著), 赤根 洋子 (翻訳), 単行本 507ページ, 文藝春秋 (2014/3/17), ISBN-10: 4163900357, ISBN-13: 978-4163900353, \2,376

An Epidemic of Absence: A New Way of Understanding Allergies and Autoimmune Diseases. Moises Velasquez-Manoff. ISBN-10: 1439199396, ISBN-13: 978-1439199398

2. 感染症から身を守る本—見えない敵の正体と脅威、これだけは知ろなさい (KAWADE夢新書) (単行本 (ソフトカバー)) 岡部 信彦 (著) ¥700

3. 図解 感染恐怖マニュアル (文春文庫PLUS) (文庫) 病原体との共存を考える会 (著) ¥600

4. 人類vs感染症 (岩波ジュニア新書) (新書) 岡田 晴恵 (著) ¥819

5. 人体常在菌のはなし—美人は菌でつくられる (集英社新書) (新書) 青木 阜 (著) ¥714

Grading

< Note > Due to the reduction of lectures as a result for anti-COVID-19 pandemic, short test will be scheduled for each lecture by using Okayama University moodle. Students' will be evaluated by both short tests and written reports. (You should consult Prof. Takashiba before in advance. Short test may be waived.)

(Former: Evaluate personal knowledge and thinking abilities as well as attitudes towards lessons by having them report on lecture contents and their impressions each time and submit it. Also, a written examination on the contents of the lecture (note that it is not simply asking for knowledge). 80%tests, 20%reports.)

Prerequisites

Mandatory for Dental Students

Self-learning ability and motivation

Ability to obtain something new information on your own

Ability of a logical statement to explain your opinion of different generations

Part of Teacher Training Program

Not applicable

Relation to JABEE

Not related

Sustainable Development Goals (SDGs)

(Good Health and Well-being)Good Health and Well-being

(Sustainable Cities and Communities)Sustainable Cities and Communities

Professional Faculty

Applicable

We are conducting research on the relationship between periodontal disease and systemic disease. In particular, we analyze the interrelationship between periodontitis and diabetes in terms of molecular biology and analyze the effect of periodontitis on compromised hosts. The importance of this field in dentistry has been rapidly increasing in recent years, and the content of research is incorporated into the lecture.

Leachers are dentists, and all of them perform research and clinical practice of Periodontal Medicine.

Other comments

This lecture has a translational role between basic and clinic to understand subsequent lectures, "Periodontology and Periodontics", "Endodontology and Endodontics". For evolution of "Periodontal Medicine", and understanding "Oral infection disease", students are intended to think what "Dentistry" is.

Learner-centered outcomes (LCOs)

Learner Centered Outcomes (LCOs)	Related core competencies	Evaluation method
Ability to understand and apply various medical management systems to dentistry.	Information Literacy	Discussion, Report, Written examination
Ability to apply knowledge of life sciences to dentistry.	Basic Knowledge of Humanities, Society, and Nature	Discussion, Report, Written examination
Ability to apply knowledge of clinical medicine to dentistry.	Lifelong Learning Skills	Discussion, Report, Written examination
Ability to adopt evidence-based practice in clinical decision making	Problem-solving Skills	

		Discussion, Report, Written examination
Ability to conduct and participate in global discussions of dental medicine.	Intercultural Skills	Discussion, Report, Written examination
Ability to explain the importance of in pursuing lifelong self-development as a medical professional.	Self-management Skills	Discussion, Report, Written examination

* [Explanation of core competencies](#)