# Division of Hospital Pharmacy Department of Pharmacotherapeutics School of Pharmaceutical Sciences

#### **Outline**

The faculty members of the Hospital Pharmacy Department have practical experience and also work in the Health Sciences University of Hokkaido Hospital, Department of Pharmacy. Our research themes are diverse, focusing on various problems that arise in daily clinical settings, and we are conducting research to clarify clinical issues for the effective and safe use of medicines. In addition, research is also conducted clarify the effects and interactions of orally administered medicines and food on the drug absorption process.

## **Faculty members**

Associate professor Kazunari IWAO, Ph. D.

Board certified Senior Clinical Pharmacist-Scientist (BCSCPS-JSPHCS),

Infection Control Doctor (JSIPC)

Associate professor Osamu KIMURA, Ph. D.

Senior assistant professor Shigeo TAKAMURA, B. Pharm.

Assistant professor Hiroko FUJISAKI, M. S.

Takashi OIKAWA, M. S. Takuya BANDO, B. Pharm.

Accredited Pharmacist of Ambulatory Cancer Chemotherapy (APACC)

#### **Research themes**

- 1) Establishment of a side effect reporting system for medication-related osteonecrosis of the Jaw through collaboration between medical, dental and pharmaceutical department.
- 2) Appropriate use of various drugs in patients with renal dysfunction.
- 3) Food-drug interactions using cultured cells.
- 4) Effects of medicines on pregnant women and fetuses.
- 5) Practice and education of physical assessment by pharmacists.
- 6) Pharmacist intervention and evaluation in pharmacotherapy.
- 7) Influence of endogenous substances on pharmacotherapy.

### **Current publications (Year 2020-2025)**

- Iwao K, Development of clinical practice and clinical pharmacy research aiming proper use of medicines. *Journal of the Hokkaido Hospital Pharmacy*, 109, in press
- Endo T, Kimura O, Terasaki M, Kato Y, Fujii Y, Haraguchi K, Ontogenetic growth changes in mercury and stable isotope ratios of carbon, nitrogen, and oxygen in male and female *Dalli*-type Dall's porpoises (*phocoenoides dalli*) stranded in Hokkaido, Japan. *J Mar Sci Eng*, 13(5), 892 (2025).
- Endo T, Kimura O, Terasaki M, Kato Y, Fujii Y, Haraguchi K, Changes in carbon, nitrogen, and oxygen stable isotope ratios and mercury concentrations in Killer Whales (*Orcinus orca*) during and after lactation. *J Mar Sci Eng*, 12(4), 623 (2024).
- Endo T, Kimura O, Terasaki M, Fujii Y, Haraguchi K. Kato Y, Comparison of carbon, nitrogen, and oxygen stable isotope ratios and mercury concentrations in muscle tissues of five beaked whale species and sperm whales stranded in Hokkaido, Japan. *Isotope Environ Health Stud*, 60 251-271 (2024).
- Iwao K, Takahashi A, Kawano Y, Oikawa T, Endo T, Yoshida J, Changes in outpatient prescriptions and blood tests for magnesium oxide preparations before and after providing information on proper use. *Journal of the Hokkaido Hospital Pharmacy*, 105, 11-13 (2023).
- Fujii Y, Harada KH, Ito Y, Yoshitake M, Matsunobu C, Kato Y, Ohta C, Koga N, Kimura O, Endo T, Koizumi A, Haraguchi K, Profiles and determinants of dicofol, endosulfans, mirex, and toxaphenes in breast milk samples from 10 prefectures in Japan. *Chemosphere*, Jan311, 137002 (2023).

- Fujii Y. Kimura O, Kato Y, Correspondence on "Low Levels of Perfluorooctanoic Acid Exposure activates Steroid Hormone Biosynthesis through Repressing Histone Methylation in Rats" *Environ. Sci. Technol*, 57, 7097-7098 (2023).
- Endo T, Kimura O, Terasaki M, Nakagun S, Kato Y, Fujii Y, Haraguchi K, Baker CS. Carbon, nitrogen, and oxygen stable isotope ratios of striped dolphins and short-finned pilot whales stranded in Hokkaido, northern Japan, compared with those of other cetaceans stranded and hunted in Japan. *Isotopes Environ. Health Stud*, 59, 230-247 (2023).
- Fujii Y, Harada KH, Kato Y, Kimura O, Endo T, Haraguchi K, Dietary Exposure to Dicofol, Endosulfan, and Naturally Produced Halogenated Bipyrroles: 24-hr Food Duplicate Surveys from Five Prefectures in Japan. *Exposure and Health*, 16, 989-999 (2023).
- Iwao K, Fujisaki H, Endo T, A pilot study on the promotion of the proper use of medicines in dental outpatient prescriptions utilizing laboratory data related to renal function. *Oral Therapeutics and Pharmacology*, 41, 43-48 (2022).
- Kimura O, Fujino R, Satoh E, Hotta Y, Hayasaka M, Endo T, Hyperfiltration in diabetic patients associated with mild hyponatremia. *Adv. Diabetes Endocrinol*, 6, 1-7 (2022).
- Endo T, Terasaki M, Kimura O, Stable isotope ratios of carbon, nitrogen, oxygen, and mercury concentrations in north pacific baleen whales and the comparison of their calves with toothed whale calves. *J. Veter. Sci. Med*, 10, 1-10 (2022).
- Akita M, Kimura O, Atobe K, Endo T, Yamada S, Haraguchi K, Kato Y, Teratogenic effects of organohalogen contaminants extracted from whale bacon in a whole-rat-embryo culture system. Int. *J. Environ. Res. Public Health*, 19, 12065. (2022).
- Kimura O, Ohta C, Koga N, Kato Y, Haraguchi K, Endo T, Inhibitory effect of 5,7-dimethoxyflavone on rosuvastatin uptake from the apical membrane of Caco-2 cells. *J. Pharmaceu. Pharmacol*, 9, 1-9 (2022).
- Yamazaki Y, Takeno T, Iwao K, Sato K, Takahashi H, Komatsuzaki Y, Utinuma T, Tanaka H, Yamane R, Kimura H, Abe S, Saito Y, Hanaoka H, Ukai T, Okayasu S, Uenaka K, Hokao N, Iimura E, Trends in antimicrobial use in dentistry and current situation and problems of Antimicrobial Resistance measures. *Oral Therapeutics and Pharmacology*, 40, 9-21 (2021).
- Endo T, Kimura O, Terasaki M, Kobayashi M. Body length, stable carbon, and nitrogen isotope ratios and mercury levels in common minke whales stranded along the coast of Hokkaido, Japan. *Aquatic Mammals* 47(1), 86-95 (2021).
- Ogasawara H, Hayasaka M, Maemoto A, Furukawa,S, Ito T, Kimura O, Endo T. Levels of major and trace metals in the scalp hair of Crohn's disease patients: correlations among transition metals. *Biometals* 34 197-210 (2021).
- Fujii Y., Harada KH, Nakamura T, Kato Y, Ohta C, Koga N, Kimura O, Endo T, Koizumi A, Haraguchi K, Perfluorinated carboxylic acids in edible clams: A possible exposure source of perfluorooctanoic acid for Japanese population. *Environ Pollut*. 263 114369 (2020).
- Kimura O, Fujii Y, Haraguchi K, Kato Y, Ohta C, Koga N, Endo T, Effects of perfluoroalkyl carboxylic acids on the uptake of sulfobromophthalein via organic anion transporting polypeptides in human intestinal Caco-2 cells. *Biochem Biophys Rep*, 24 100807 (2020).