Developing the Japan Academic Detailing Training Program: Bridging Basic Pharmaceutical Science & Clinical Practice

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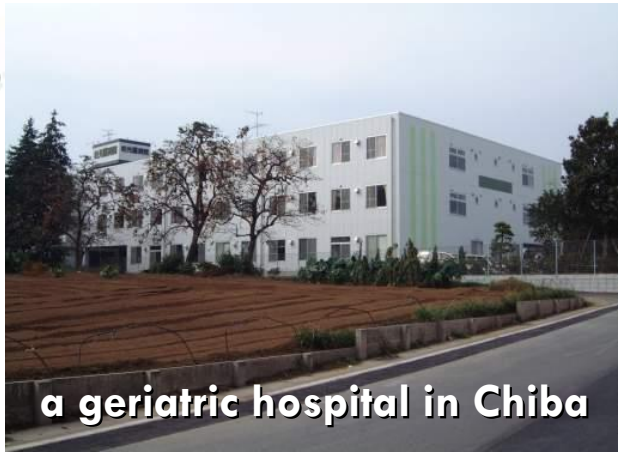
Conflict of Interest

- There are no conflicts of interest to disclose about my presentation.

1. Project background/introduction
2. Intervention(s) and details of implementation
3. Successes to share
4. Conclusions
5. Participant engagement elements you'll incorporate

The main roles of Japanese pharmacists

I had been working as a pharmacist at a geriatric hospital in Chiba, near Tokyo.



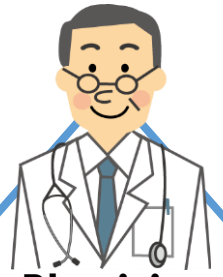
Post-prescription tasks

If pharmacists had any questions, they would hesitantly contact the Physician.

Pharmacist

For a long time, the role of Japanese pharmacists has traditionally been limited to post-prescription tasks.

Japan's medical field has been a top-down society with physicians at the top.



Physician

Pharmacist nurse, x-ray technician, dietician, caregiver, et.al.

- In the 2000s, there was a **push for patient-centered care** and the **promotion of team-based medicine.**
- However, many hospitals still have physicians as directors, and the **culture of not being able to oppose physicians remains strong.**

Physician

Pharmacist

Tokyo University of Science (TUS)

FACULTY OF PHARMACEUTICAL SCIENCES

The duration of university pharmacy courses:

- **University pharmacy courses were originally 4 years in length.**
- **In 2007, courses were extended to six years in an effort to improve clinical education.**

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Visited the MD Anderson Cancer Center in 2008

The pharmacist registered the regimen and prescribed an additional medicine.

The first clinical pharmacist

Outpatient Gastrointestinal Clinic

Nurse

Physician

Pharmacist

The pharmacist registered the next regimen.

Outpatient Breast Cancer Clinic

Pharmacist

The pharmacist fills the prescription.

Physician

Pharmacist

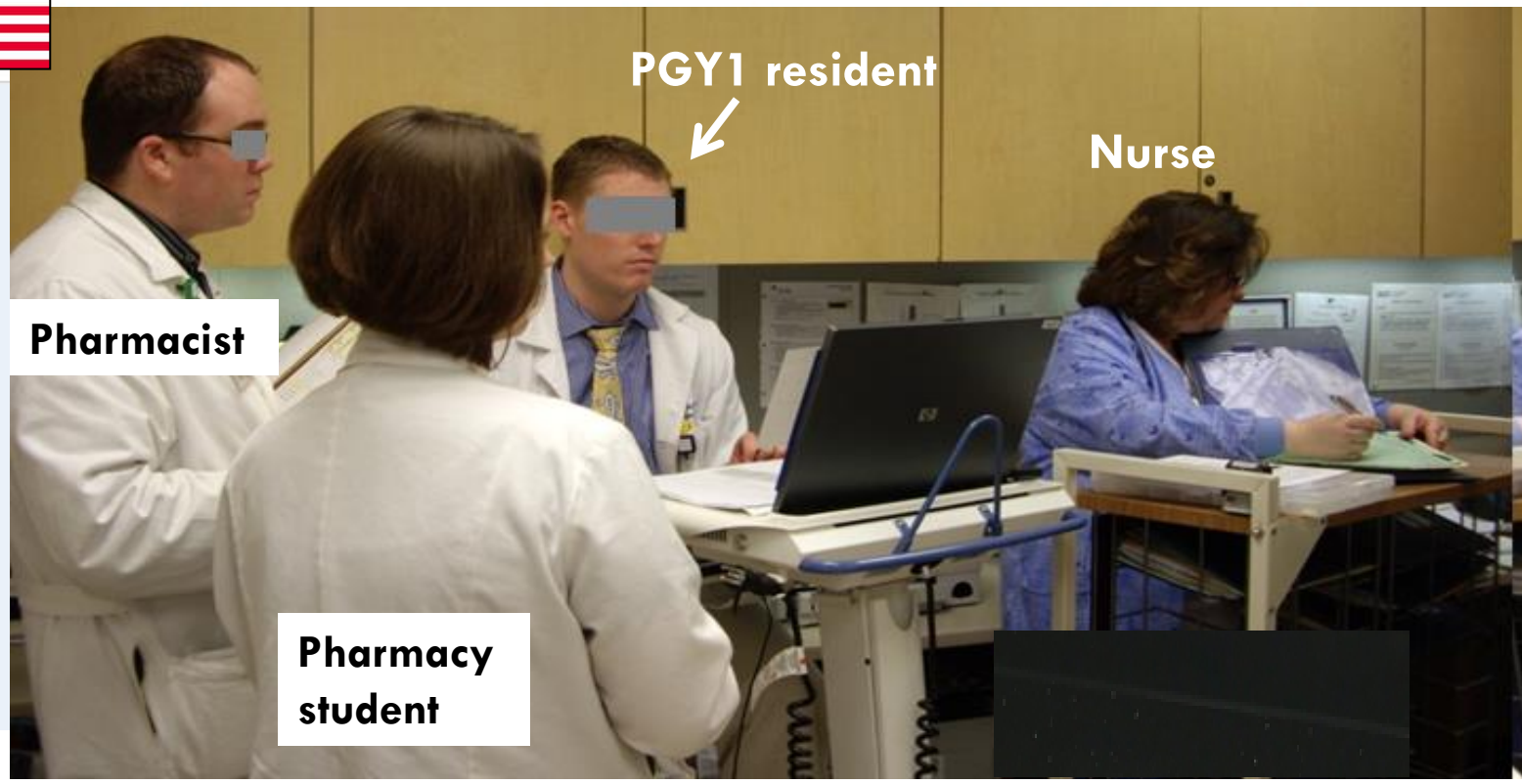
The pharmacist explains the prescription to the physician and obtains consent.

Houston Methodist Main Site | International Patients | Careers

HOUSTON Methodist LEADING MEDICINE

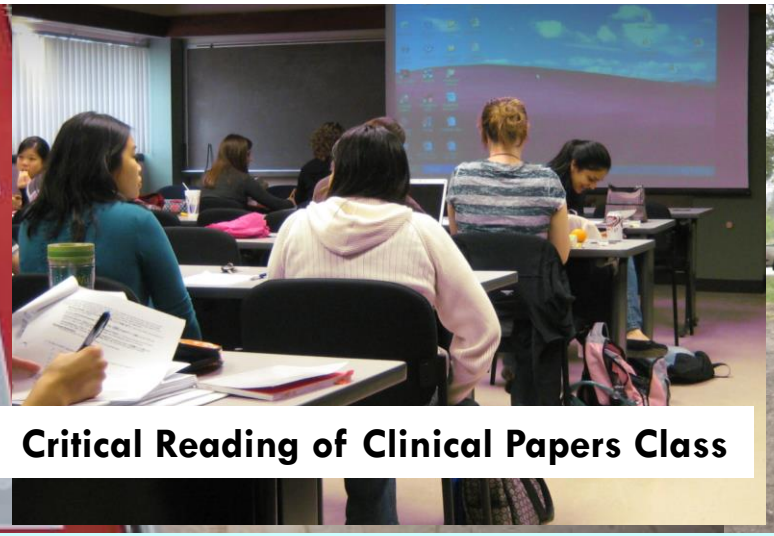
Visited the Methodist Hospital in 2010

The PGY1 resident was making a lot of prescription proposals.



This experience highlighted the need for us to rethink and elevate our professional roles and responsibilities.

Visited the University of Houston College of Pharmacy



Critical Reading of Clinical Papers Class

The head of the clinical department is a scientist.

We compared the pharmacy education in Japan and the US.

		UH	TUS
1st & 2nd year	Basic chemistry and physics	△	○
3rd year	Critical reading of clinical papers	○	×
4th year	Clinical application of basic pharmaceutical sciences	○	△
5th year	Advanced Pharmacotherapy for optimal prescriptions	○	×
6th year	On-site training specialized for clinical practice	○	×
	Graduation research	×	○

○ Clearly more hours, △ There are hours, but not many, × There are no hours

Shinohara, H., Komoda, M., et al. Chiba Pharmaceutical Journal. 2014; 60: 3-11

Outpatient Prescription Support Started in 2011

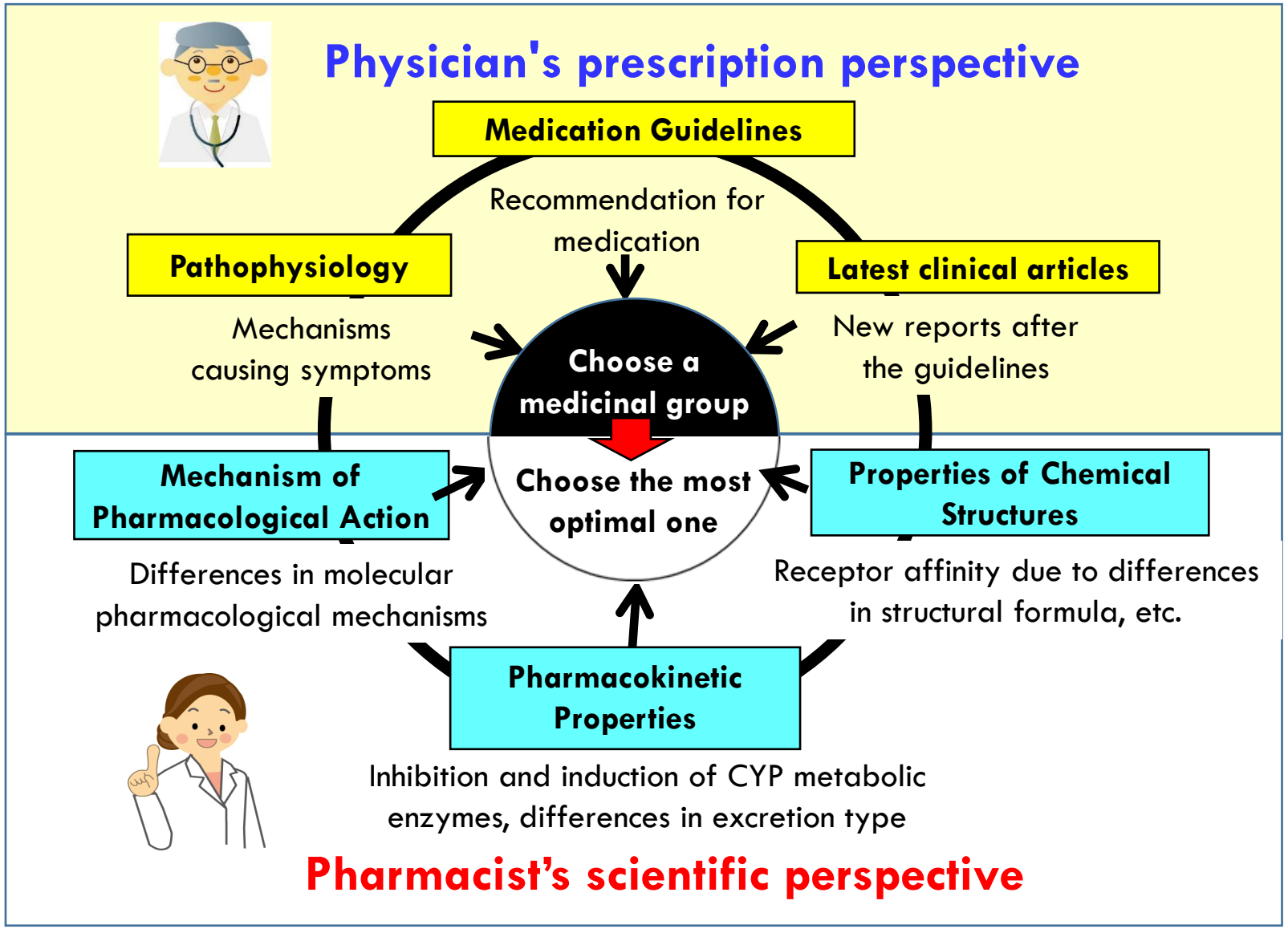
I took the big step of starting to provide prescription support in the outpatient setting once a week.

The physician asked me to provide prescription support from the unique perspective of a pharmacist.

The outpatient clinic of the university hospital's breast cancer center.

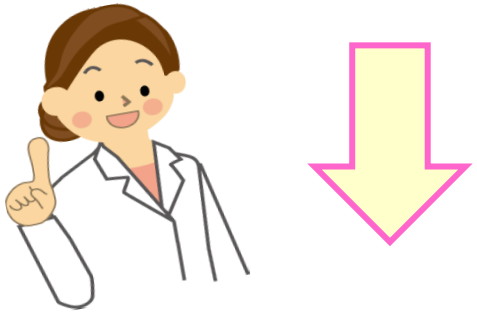
I began considering how the pharmacist's perspective differs from the physician's.

Different Perspectives of Physicians and Pharmacists



The unique definition of Academic Detailing in Japan

Academic Detailing is a new approach to medicine information provision that actively provides comparative information on medicines based on fair and neutral basic and clinical evidence that is not commercial-based.



Influence physician prescribing behavior and optimize prescribing

1. Project background/introduction:
2. Intervention(s) and details of implementation:
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4. Conclusions:
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The Birth of Academic Detailing in Japan

Prof. Jerry Avorn and Prof. Michiko Yamamoto at Brigham and Women's Hospital, Harvard Medical School

Academic detailing would change the roles of Japanese pharmacists.

In 2013; Prof. Michiko Yamamoto gave a lecture on academic detailing at the Conference in Pharmaceutical Society of Japan.

In 2014; Established the Academic Detailing Department at Tokyo University of Science.

I got some grants!

In 2017; Started the Lifelong Learning Academic Detailing Training Program

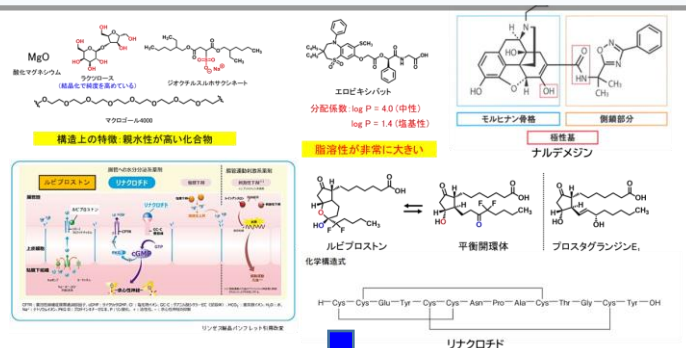
In 2018; Established the Basic Academic Detailing Training Program for fourth-year pharmacy students.

In 2021, Established the Japanese Society of Academic Detailing, which took over the Lifelong Learning Program at Tokyo University of Science.

The Academic Detailing Training Program in Japa

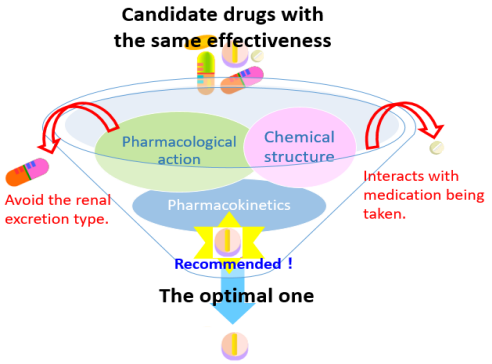
Based on the unique education of the University of Houston College of Pharmacy, the following four lifelong training programs are being implemented.

1． Basic Pharmaceutical Sciences

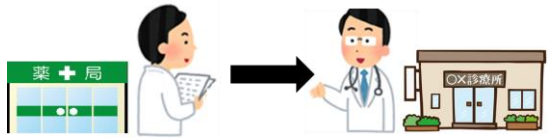


2． Critical Thinking of Clinical Papers

3． Clinical Decision-Making for Prescription Proposals



4． Pharmacist to Physician Communication Training



How to use the basic pharmaceutical science for prescription proposals:

1． Basic Pharmaceutical Sciences → 3． Clinical Decision-Making for Prescription Proposals

In the case of a new constipation treatment

- In the guidelines for constipation epithelial function-modifying medicines are the most recommended.
- However, there are two such medicines, Lubiprostone and Linaclotide, and the guidelines state that they are equally effective.

Physician

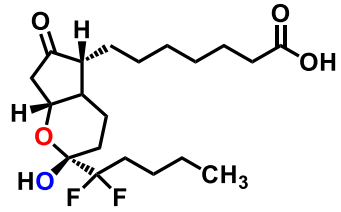
Which would a pharmacist recommend to a patient with renal dysfunction?

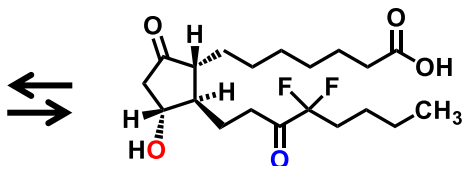
Pharmacist

A case where the lack of clinical evidence is supplemented by basic pharmaceutical science:

Clinical trials evaluating the safety of lubiprostone versus linaclotide in patients with renal dysfunction have not been conducted.

Lubiprostone

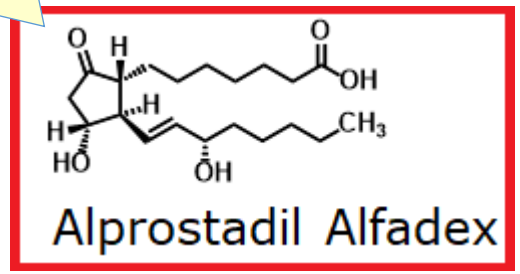




equilibrium ringlet

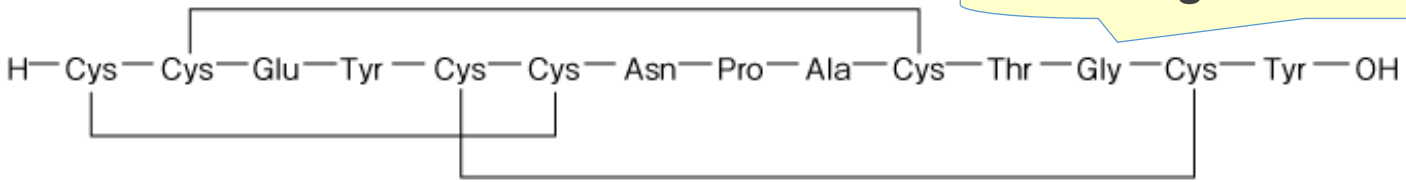
Linaclotide

structural similarity



Alprostadil Alfadex

a long chain of amino acids



Pharmacists recommend linaclotide to patients with renal dysfunction.

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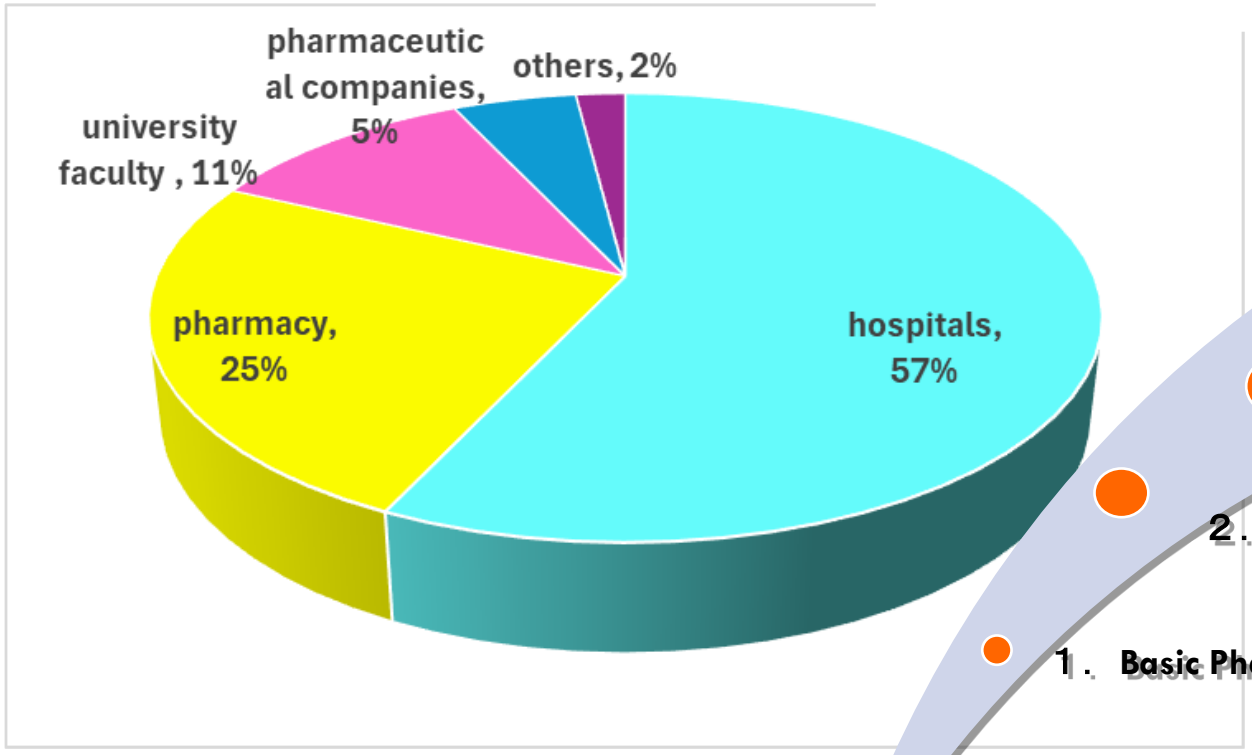
Japan Academic Detailer Certification System

In 2017, the Japanese society of Academic Detailing was established.

Number of certified academic detailers: 135



Academic Detailer

4. **Pharmacist to physician communication**
3. **Clinical decision-making for prescription proposals**
2. **Critical Thinking of Clinical Papers**
1. **Basic Pharmaceutical Sciences Training**

Physicians and nurses are cooperating with the training.

Academic Detailing can change the role of pharmacists.

From now on:

pre-prescription roles

With Academic Detailing, pharmacists are working to influence the prescription behavior of Physicians.

Academic Detailer

Physician

Before now:

post-prescription roles

If pharmacists had questions, they would hesitate to contact the Physician.

Pharmacist

1. Project background/introduction:
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The application of basic pharmaceutical science to clinical practice is important.

Basic Science faculty members

learn about the medication issues in the field

They may not be noticing real-world pharmaceutical issues.

Solving the Issues

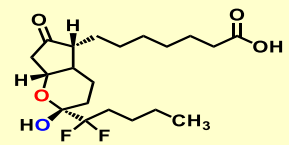
by learning from each other

Sharing the issues

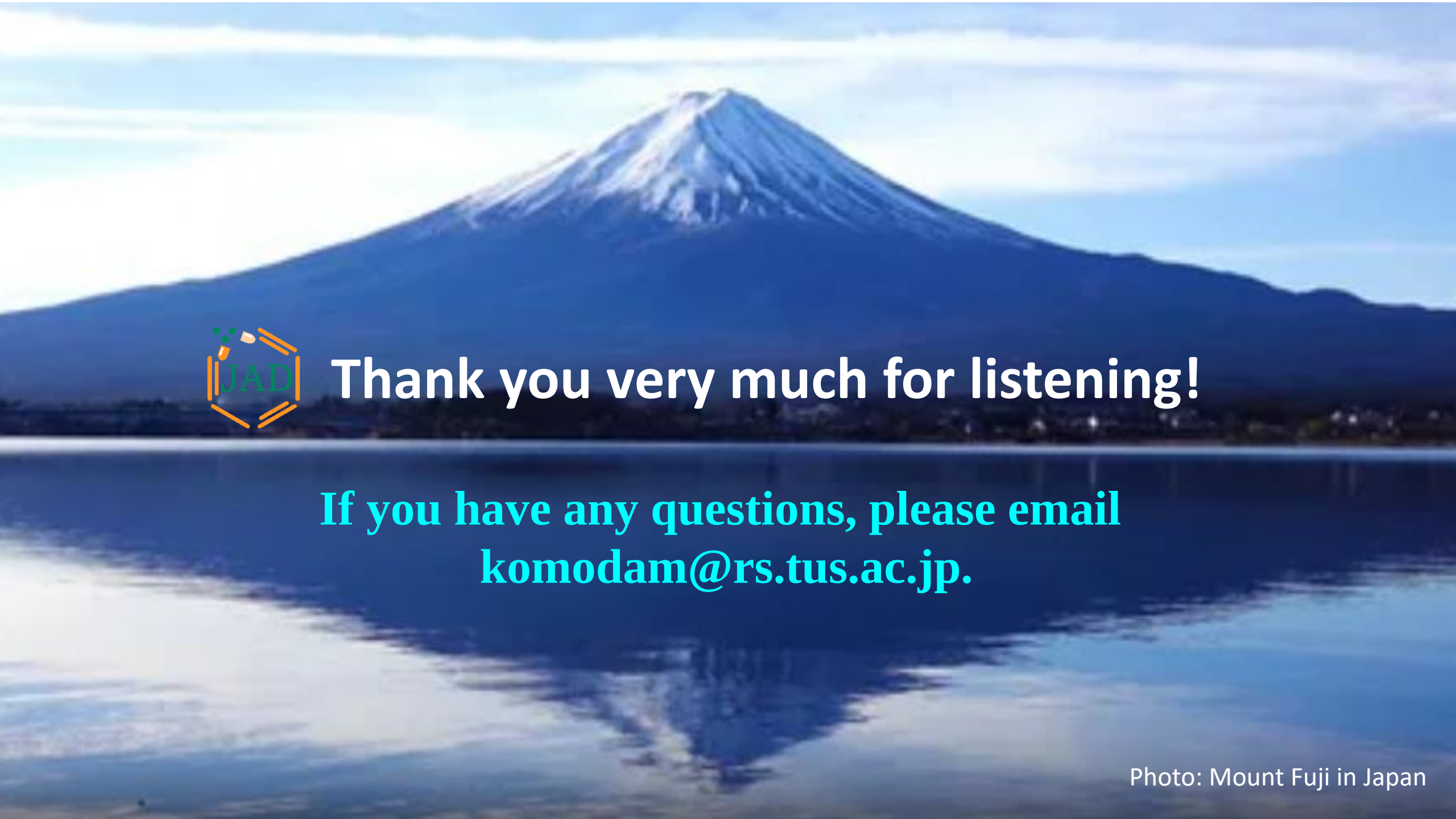
Pharmacists,
Clinical faculty members

Re-learn basic pharmaceutical sciences

They may have forgotten the structural formula and have not updated biopharmaceutics.



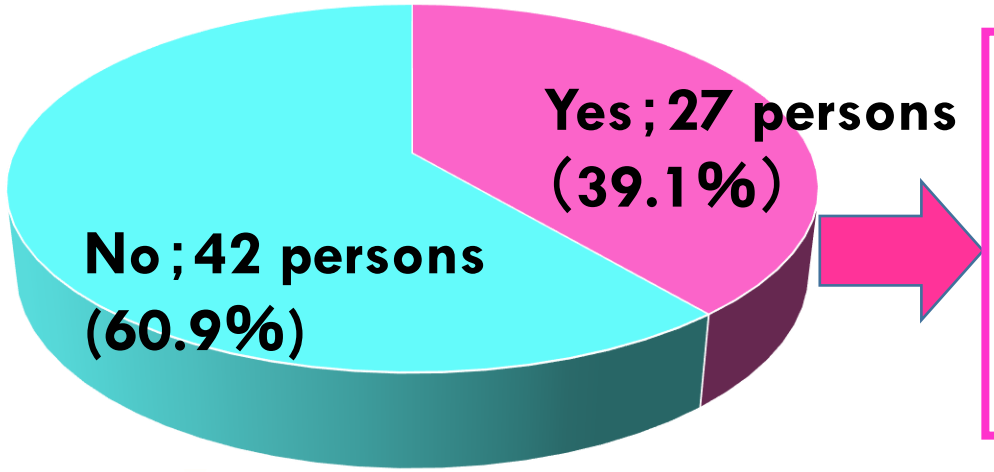
The expertise of pharmacists will be a key factor in the spread of academic detailing.


Thank you very much for listening!
If you have any questions, please email
komodam@rs.tus.ac.jp.
Photo: Mount Fuji in Japan

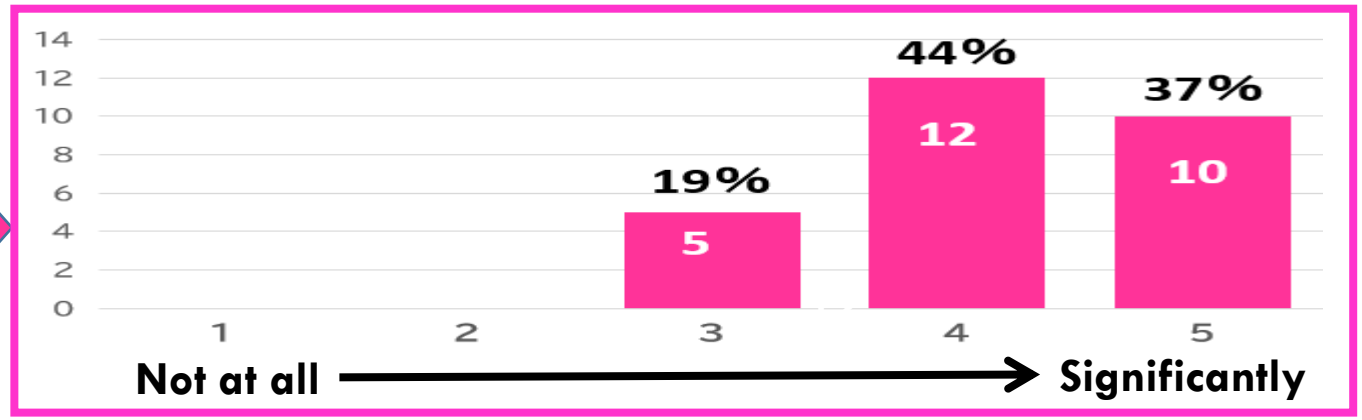
Survey of Trained Academic Detailers in May 2024

53% response rate N=69

Have you had the chance to practice academic detailing?



Do you think academic detailing has influenced doctors' prescriptions?



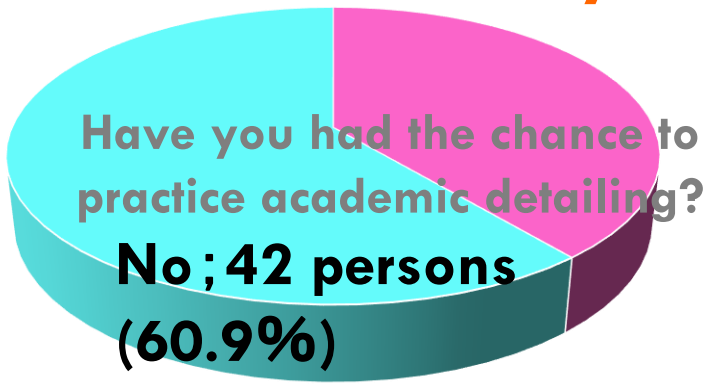
Academic Detailer

- 10 people (37%) think that their AD had significantly influenced the prescriptions of physicians.
- 12 people (44%) think that their AD had probably influenced the prescriptions of physicians and 5 people (19%) were unsure.

Additionally, all of the practicing academic detailers want to continue it in the future.

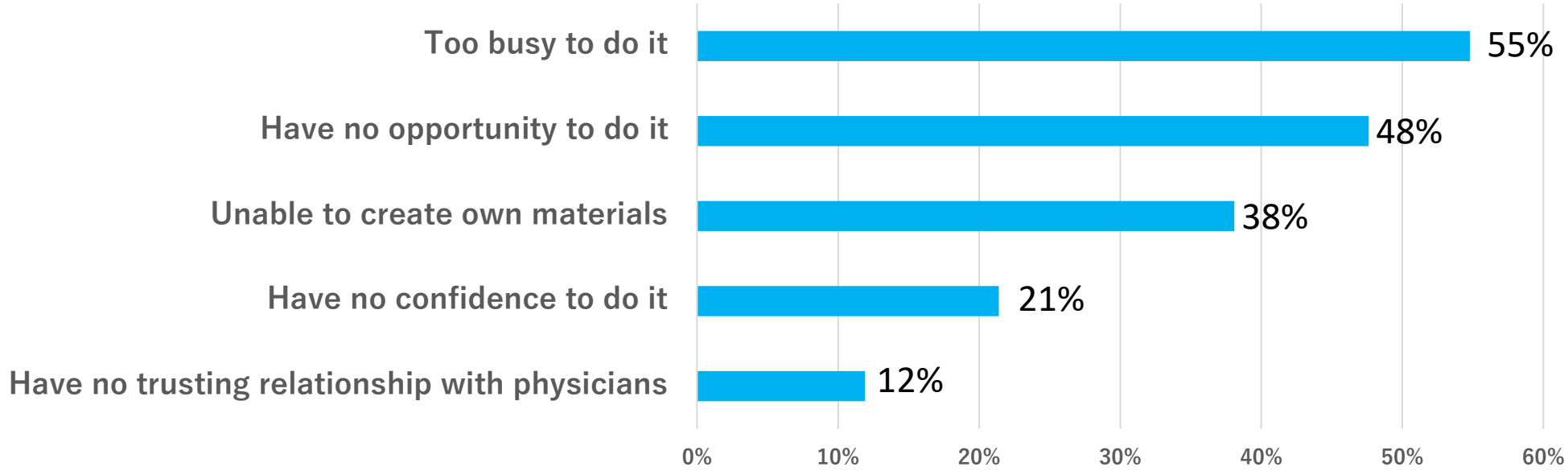
Survey of Academic Detailers in May 2024

53% response rate N = 69



Of the academic detailers, 60% **were not able to practice academic detailing**.

What is the reason you are not able to practice academic detailing?



Academic Detailer

We’d like to learn what is needed to improve our training that leads to do academic detailing.