

Wound Management and Skin Care

We aim at constructing the evidence of wound management and skin care from an interdisciplinary approach!

Clinical Research

- Evaluation of skin structure and function using engineering devices such as ultrasonography, thermography and MRI.
- Verbalization of skin and pressure ulcer's shape and characteristics by qualitative sketching technique.
- Evaluation of skin using molecular biological analytical technique.



Qualitative sketching for pressure ulcer

Nursing Bioengineering

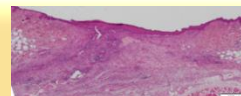
- Development and evaluation of products necessary for medical treatment environment by the Academic-Industrial research collaboration



Development of air-mattress

Basic Research

- Mechanism elucidation of wound healing using an animal and cell-line model.
- Anatomical verification on the course and positional relationship of nerves and veins, and evaluation of the site determination method for puncture.



Tissue staining of skin

Skills you are able to develop in our laboratory

Practical skills of wound management and skin care required for a nurse

- 1) Develop knowledge about pressure ulcer.
- 2) Improve comprehensive wound assessment, practical skills of wound management and skin care.

Skills needed for basic researchers in nursing field

- 1) Develop knowledge and operation skill about various devices in research.
- 2) Acquire knowledge and technique through animal experiments and molecular biological analysis

Writing manuscripts and presentation skills

- 1) Learn from planning your research to submission your manuscript.
- 2) Improve presentation skills in weekly seminar and various conferences with Japanese and international researchers.

Our laboratory staff

All staff support you to acquire these skills!!



Professor
Mayumi Okuwa



Professor
Makoto Oe



Associate Prof.
Kazuhiro Ogai*



Associate Prof.
Kanae Mukai



Assistant Prof.
Yukari Nakajima



Assistant Prof.
Shohei Okida



Assistant Prof.
Sayumi Tsuchiya

* AI Hospital/Macro Signal Dynamics Research and Development Center

Graduate students in our laboratory

* The number of present students

Full-time **5** (4 students from Indonesia)
 Part-time **10**

* The number of alumni

Master course **69** (6 international students)
 Doctor course **27** (6 international students)

(Update on March 16 2021)



We have many international students!

Researches in our supervisors

Prof. Mayumi Okuwa

Research Theme

- Wound assessment, management, and preventive care
- Technical development and preventive care for leg ulcer
- Evaluation of vibration massage in patients with high risk for peripheral arterial disease

Associate Prof. Kazuhiro Ogai

Research Theme

- Development and utilization of non-invasive skin protein analysis with proteomics technique
- Investigation of the changes of skin physiological functions and skin dysbiosis in older people

Prof. Makoto Oe

Research Theme

- Observation of inflammation in the callus using thermography
- Development of an automatic detection function for high-risk areas of foot ulcers using thermography
- Development of DMIST for monitoring healing of diabetic foot ulcers

Associate Prof. Kanae Mukai

Research Theme

- Evaluation of the effect of estrogen on cutaneous wound healing
- Investigation of the relationship between cutaneous nerves and veins
- Investigation of the influence of hormones for improvement of the women's wellness

Collaboration with other fields and facilities



Other fields in our university

- Medical Sciences
- Pharmaceutical Sciences
- Health Sciences
- Science and Engineering
- Institute for Frontier Science Initiative
- Institute for Gene Research etc.

Other university

- The University of Tokyo
- Osaka city University
- Kanazawa medical University
- Toyama Prefectural University
- University of Nottingham
- Muhammadiyah University etc.

Medical care facilities

- Kanazawa University Hospital
- Sengi Hospital
- Johoku Hospital
- Kitamura Clinic in Indonesia etc.

Presentations in Conferences



International Conferences

- Asia Pacific Enterostomal Therapy Nurse Association Conference
- International Lymphoedema Framework Conference
- World Union of Wound Healing Societies
- East Asian Forum of Nursing Scholars

Domestic Conferences

- Japanese Society of Pressure Ulcers
- Japanese Society of Wound, Ostomy & Continence Management
- Japanese Society for Wound Healing

Career after graduation from our laboratory



Hospital

- Kanazawa University Hospital
- Nagoya University Hospital
- Yamagata University Hospital etc.

Educational Institution

- Kanazawa University
- Kanazawa Medical University
- Komatsu University
- Ishikawa Prefectural Nursing University
- The University of Tokyo etc.

We sincerely welcome international students from abroad!

Let's join our laboratory!

Please visit our website today for more information on specific activities, papers, and lab member

URL: <http://wmn.w3.kanazawa-u.ac.jp/>

