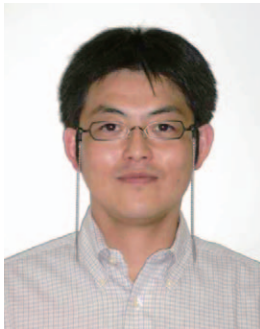


# 放射線健康リスク科学 (磯辺 智範)

## Radiation Health Risk Science (ISOBE Tomonori)



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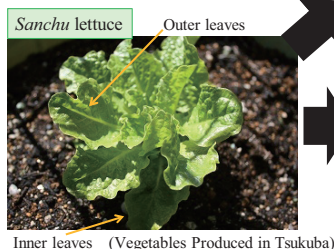
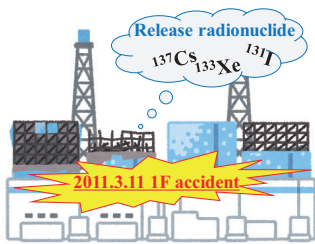
### 放射線災害の全時相に立ち向かう

放射線災害発生時、初期対応では救急医療と放射線防護、亜急性対応期では放射線計測、防護、クライシスコミュニケーション、災害回復期では疫学、統計、リスクコミュニケーション、メンタルヘルスなど、時相ごとに融合複合した知識・技術が必要であり、その総称が新学術領域である「放射線健康リスク科学」です。私たちの研究室では、将来起こりうる放射線リスク対策として、放射線災害のあらゆる状況を想定した“全時相”をキーワードとし、「スペシャリスト」の人材育成を目指しています。研究分野は、放射線計測、放射線防護、放射線管理、さらには健康リスク管理まで幅広く研究テーマを抽出し、新たな技術の開発やエビデンスの確立につなげる研究に取り組んでいます。

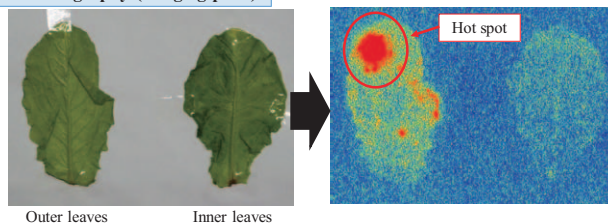
### Face 'all-time-phase of radiation disasters'

In the event of radiation disasters, the necessary knowledge and skills are different depending on the time phase: (1) 'emergency medical care' and 'radiation protection' after the occurrence of radiation disasters, (2) 'radiation measurement', 'radiation protection', 'radiation emergency medicine' and 'crisis communication' in the subsequent phase, (3) 'epidemiology', 'statistics', 'decontamination', 'risk communication' and 'mental health' in the recovery period, and (4) 'disaster training' in the pre-preparation stage. Our group is working on education of the specialist of radiation disasters with the 'all-time-phase of radiation disasters' as a key word. Research themes are radiation measurement, radiation protection, radiation control, health risk management, etc., aiming for developments of new technologies and research aiming at the establishment of new evidence.

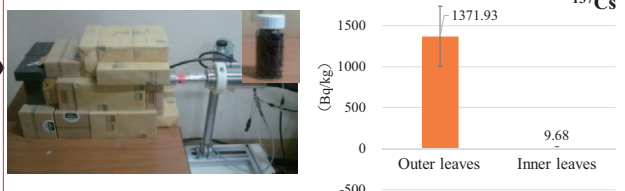
#### Evaluation of internal exposure dose



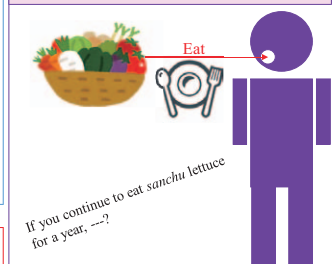
#### Autoradiography (Imaging plate)



#### HP-Ge semiconductor detector



#### Annual exposure dose due to intake of sanchu lettuce



Nuclear species	Annual exposure [mSv]	
	Outer leaves	Inner leaves
<sup>137</sup> Cs	0.8889	0.0063

The internal exposure dose will not breach the annual safety limit prescribed by ICRP, even if contaminated outer leaves are consumed regularly.