



## **PCCCMU 1 WEEK TRAINING COURSE**

### **F-18-FDG PRODUCTION**

#### **TRAINEE QUALIFICATIONS:**

1. Graduated in Pharmacy / Chemistry / Medical physics / Biology / Medicine / Radiological technology / Paramedical science or related fields.
2. Have experience in laboratory work.
3. Good in Thai or English, can speak and understand reasonably well in both conversational and academic language.

**NUMBER OF TRAINEE:** 1-3

**TRAINING PERIOD:** 1 week / 5 training days / 40 training hours

**VENUE:** PET/CT & Cyclotron Center Chiang Mai University, Center for Medical Excellence, Faculty of Medicine, Chiang Mai University, Muang, Chiang Mai, 50200 THAILAND

**COURSE FEE\*:** 85,000 THB for one trainee,  
45,000 THB for a trainee in case of more than one person.

\*PET/CT & Cyclotron Center Chiang Mai University reserves the right to make adjustments to pricing and course contents at any time for reasons including, but not limited to, consumables price fluctuation, personnel availability and equipment performance.

**TRAINING ACTIVITIES:** Lecture 13 hours, Laboratory practice 27 hours

**OBJECTIVES:** In the training course, the trainee will be given the opportunities to;

1. Understand the whole process of F-18-FDG production and Quality Control
2. Practice hands-on synthesis of F-18-FDG with F300E synthesizer
3. Perform quality control tests according to international standard for F-18-FDG
4. Experience the concept of Quality Management and relevant regulations, including Radiation protection, Radiation Safety management and Radiopharmaceutical cleanrooms in Cyclotron facility
5. Observe the workflow and administration of F-18-FDG PET/CT for routine clinical examination in the Hospital setting

<b>COURSE CONTENTS</b>	<b>HOUR(S)</b>	
	<b>Lecture</b>	<b>Practice</b>
Introduction to Hospital Cyclotron and Radiation Protection	4	8
<ul style="list-style-type: none"> <li>• Radiation safety management in cyclotron unit</li> <li>• Cyclotron structure</li> <li>• Cyclotron operation</li> </ul>		
FDG production	3	9
<ul style="list-style-type: none"> <li>• F-18- FDG synthesis chemistry</li> <li>• Chemicals &amp; equipment preparation for F-18-FDG synthesis</li> <li>• F-18-FDG synthesis module; F300E SUMITOMO</li> </ul>		
Quality control testing	3	9
<ul style="list-style-type: none"> <li>• Radionuclidic purity</li> <li>• Radiochemical purity</li> <li>• Chemical impurities</li> <li>• Sterility test</li> <li>• Endotoxin test</li> </ul>		
GMP requirement for F-18-FDG manufacture	3	1
<ul style="list-style-type: none"> <li>• Thai GMP (follow the PICS GMP)</li> </ul>		
<b>TOTAL</b>	<b>13</b>	<b>27</b>

**TRAINING ASSESSMENT:** 80% passing of MCQ test

100% success in practical assignment

**For more detail please contact:** PCCCMU Radiopharmaceutical production team

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