



CANON MEDICAL RESEARCH USA, INC.

Made For life

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[APPLY HERE](#)

SENIOR SCIENTIST (CT)

Vernon Hills (Chicago), IL

www.research.us.medical.canon

COMPANY DESCRIPTION

Canon Medical Research USA, Inc. (CMRU) is a multi-modality R&D organization creating next-generation medical imaging systems. It is equipped with cutting-edge instrumentation, prototyping, hardware labs and scientific computing facilities in order to perform research targeted to pre-clinical and clinical CT, PET, MRI, and X-ray systems. For those who like to develop new technologies and research new ways of using them, Canon is a rewarding place to work, due to its focus on innovation as the lifeblood of new products.

CMRU is committed to recognizing and appreciating the variety of characteristics that make individuals unique in an atmosphere that promotes work/life balance and celebrates individual and collective achievement. We are especially interested in qualified candidates who can contribute, through their experience, education, research and/or service, to the diversity and excellence of our organization and the scientific and engineering community at large.

CMRU offers a great work environment, professional development, challenging careers, and competitive compensation and benefits. We are an equal opportunity employer (EOE).

SUMMARY OF POSITION

CMRU has an immediate opening for a **Senior Scientist** (entry or principal levels will be considered too) to participate in the research and development of Spectral CT systems using Photon Counting Detectors. Our research team investigates system and detector design, data acquisition methods and calibration algorithms.

RESPONSIBILITIES

- Through modeling and experiments, optimize the system and detector design, as well as data processing algorithms, to achieve better system performance.
- Develop and improve calibration algorithms for Spectral CT systems.
- Evaluate overall PCCT system performance and image quality.
- Translate ideas into testable prototypes, product requirements and specifications in conjunction with engineers.

- Document, present and review new ideas, research details and present conclusions.
- Collaborate on conference presentations, published articles and patents.

QUALIFICATIONS

Education

- Ph.D. in the relevant area of specialization (Physics, Medical Physics, Biomedical Engineering, nuclear Engineering or the equivalent).

Experience

- More than 3 years of related work experience in imaging or detection system development, preferably in product development environment. Academic or research settings will be considered as well.
- Own or lead development of complex imaging or detector system development.
- Direct experience in CZT detector development, photon-counting system design, and system calibrations are preferred.

Key Competencies

- Expertise in medical imaging physics and radiation detection.
- Expertise in system calibration and data processing.
- Expertise in system modeling and optimization.
- Familiar with testing hardware, ability to design, set-up and carry out experiments.
- Familiar with common programming languages and analytical software.

Travel

- Ability to complete domestic and international travel (up to 10% of time)