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| **Name** | Sumana Paduka, M.Sc. |
| **Thai name** | อาจารย์สุมนา ปะดุกา |
| **Position** | Lecturer |
| **Responsibility for School** | 1.The committee and secretary of the executive committee of School of Radiological Technology<br>2.Head, Division of Radiation Therapy Technology |
| **Email** | sumana.pad@cra.ac.th |
| **Expertise** | Radiotherapy |
| **Research Interest** | Radiation dosimetry, quality assurance in radiotherapy, Treatment Planning, and imaging in radiotherapy |

**Educational Background**

| Education level | Graduation year | Education field | University/School | Province | Country |
|---|---|---|---|---|---|
| **Doctoral degree** | | | | | |
| **Master's degree** | 2010 | M.Sc. Medical Imaging | Chulalongkorn University | Bangkok | Thailand |
| **Bachelor's degree** | 2007 | B.Sc. Physics | Prince of Songkla University | Songkla | Thailand |
| **Upper secondary education** | 2004 | Science-Math | Demonstration School of Prince of Songkla University | Pattani | Thailand |
| **Lower secondary education** | 2001 | - | Princess Chulabhorn College School | Satun | Thailand |

**Work Experience**

| Start year | End year | Position | Organization | Province | Country |
|---|---|---|---|---|---|
| 2010 | 2013 | Medical physicist | Chulalongkorn Memorial Hospital | Bangkok | Thailand |
| 2013 | 2018 | Medical physicist/lecturer | Songklanagarind University | Songkla | Thailand |
| 2018 | Present | medical physicist/lecturer | Chulabhorn Royal Academy | Bangkok | Thailand |

**Publication**

| Year | Journal name | Title |
|---|---|---|

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|---|---|---|
| 2021 | Journal of Thai Association of Radiation Oncology | Nattakarn Kittiva, Chirasak Khamfongkhruea, Sasikarn Chamchod, **Sumana Paduka**, and Thiansin Liamsuwan. Optimal Gating Window for Respiratory-Gated Pencil Beam Scanning Proton Therapy for Lung Cancer: A pilot study |
| 2024 | Radiation Physics and Chemistry | **Paduka S,** Thongsawad S, Janthawanno P, Khaeongrod R, Ketphan K, Saiyo N. Assessment of organ doses from head and neck cone-beam computed tomography (CBCT) in adaptive radiation therapy: A phantom study. Radiation Physics and Chemistry. 2024 Feb 1;215:111338. |
| 2024 | Radiation Physics and Chemistry | Saiyo N, Thongsawad S, Jearaprasertporn R, Buakao C, Janthawanno P, Pairodsantikul P, Jaermsri S, Piantham W, **Paduka S**. Evaluation of normal organ doses for extended kV-CBCT protocol in para-aortic region treatment using nanoDot dosimeter. Radiation Physics and Chemistry. 2024 Sep 1;222:111850. |
| 2025 | Radiological Physics and Technology | Saiyo, N., Assawanuwat, K., Janthawanno, P., **Paduka, S.,** Prempetch, K., Chanphol, T., Sakchatchawan, B., & Thongsawad, S. Decision support using machine learning for predicting adequate bladder filling in prostate radiotherapy: a feasibility study. Radiol Phys Technol (2025). https://doi.org/10.1007/s12194-025-00916-z |

**Teaching Course**

| **Student level** | **Course code** | **Course name** |
|---|---|---|
| Undergraduate | CHRT 403 | Dosimetry and Radiation Treatment Technique |
| Undergraduate | CHRT 404 | Instruments and Quality Assurance in Radiotherapy |
| Undergraduate | CHRT 405 | Radiotherapeutic Technique and Clinical Application 1 |
| Undergraduate | CHRT 302 | Basic Radiation Protection |
| Undergraduate | HTRT 1102 | Radiation Physics |
| Undergraduate | HTRT 1103 | Radiation Dosimetry |
| Undergraduate | CHRT 403 | Dosimetry and Radiation Treatment Technique |
| Undergraduate | CHRT 404 | Instruments and Quality Assurance in Radiotherapy |