



Key words

Biomedical Engineering, Medical Physics, DW-MRI, Hyperthermia, treatment optimization.

Long Bio

Daniela Sanchez Escalante studied her BSc degree in Biomedical Engineering at Universidad Anáhuac México, in Mexico City, from where she graduated with honours on 2018. During the final year of her studies, she focused on medical imaging and radiation. In addition, she was an intern in the radiotherapy division of the medical physics department, in the medical centre of the Mexican Maritime Forces (CEMENA). She became passionate about radiotherapy and decided to further specialised in the area. She received her MSc degree in Medical Physics with merit at the University of Glasgow, in 2020.

Her MSc dissertation, titled “Investigation of Diffusion Weighted MRI in squamous cell cancer of the oropharynx and software package development for display of radiotherapy contours on MRI images” contributed to the medical research project “Study of diffusion weighted MRI as a predictive biomarker of response during radiotherapy for high and intermediate risk squamous cell cancer of the oropharynx: The MeRInO study” (Paterson et al, 2017), a multidisciplinary work developed in collaboration with the National Health Service of Scotland (NHSS) and the University of Glasgow and published in the Clinical and Translational Radiation Oncology journal (DOI: 10.1016/j.ctro.2016.12.003). Her work showed a quantitative analysis between DW-MRI acquisition techniques and complemented the results of The MeRInO study. It has also been recently presented at the biomedical sciences week “Jornadas Biomédicas” of the Universidad Anáhuac México.

Currently, she is the fellow researcher in training for the Hyperboost ESR 6 project, where she focuses on developing optimisation strategies for hyperthermia treatment planning systems, all under the supervision of PI Dr. Petra Kok. She is also working towards her PhD, at the University of Amsterdam.

Activities, projects and awards:

- 2020: Guest speaker at “Jornadas Biomédicas”- Universidad Anáhuac México. This scientific conferences are organised by the Biomedical Engineering programme of the university. She shared her experience as an international MSc student and presented her dissertation work.
- 2019: National Science Scholarship – CONACYT^[11]_{SEP} The Mexican Council of Science and Technology (CONACYT) awarded her a full scholarship to study her MSc degree at the University of Glasgow, for her high academic performance and desire to pursue a career in science.
- 2019: Graduate Skills Award – College of Medical, Veterinary and Life Sciences Awarded by the University of Glasgow for the completion of different extracurricular activities that cultivated social, science divulgation and creative skills throughout her postgraduate studies.
- 2018: Faculty of Engineering’s project fair 1st place winner – Universidad Anáhuac México. Her BSc thesis project “Design and development of a prototype respiratory assistance device for patients with COPD” was awarded the first place of this contest for its design, innovation and creativity.
- 2018: Leadership and Academic Excellence Award: Vértice – Universidad Anáhuac México Norte. This award marks the completion of three years of extracurricular activities and classes, focused on enhancing communication, teamwork, leadership and problem solving skills.
- 2017: Co-founder of Universidad Anáhuac’s first and only Biomedical Engineering Students Society (SIBA). The society coordinates multiple activities for the students to get informed and involved with investigation activities, career options and overall, promote the different areas of the biomedical sciences.