

EDUCATION

Dec. 2023 – Present	Master of Business Administration (Cand.)	UNIVERSITY OF WESTERN AUSTRALIA, AUSTRALIA
Feb. 2020 – Oct. 2021	Master of Medical Physics (Distinction) Thesis title: “Investigation of small-scale radiotherapy dose deposition in the lung: Monte Carlo Simulation”	UNIVERSITY OF SYDNEY, AUSTRALIA
Jun. 2014 – May. 2019	B.Sc. in Applied Physics (Cum Laude) Thesis title: “Rheological characterization of carrageenan-pectin binary mixture in linear and nonlinear viscoelastic regimes”	UNIVERSITY OF SAN CARLOS, PHILIPPINES

WORK EXPERIENCE

Nov. 2023 – Present	Diagnostic Imaging Physicist IV Chong Hua Hospital - Fuente and Cancer Center, Department of Radiology and Nuclear Medicine	CHONG HUA HOSPITAL, PHILIPPINES
Feb. 2022 – Present	Assistant Adjunct Professor IV College of Allied Medical Sciences	CEBU DOCTORS UNIVERSITY, PHILIPPINES
Apr. 2023 – Oct. 2023	Quality Assurance Manager Cebu Doctors University Hospital and HappyDoc Diagnostics	CEBU DOCTORS' UNIVERSITY HOSPITAL, PHILIPPINES
May 2023 – July 2023	Research Consultant (Contract) Office of the Group of President	ABOITIZ EQUITY VENTURES INC., PHILIPPINES
Sept. 2021 – Oct. 2023	Medical Physicist Center for Nuclear Medicine and PET-CT Facility	CEBU DOCTORS UNIVERSITY HOSPITAL, PHILIPPINES

INTERNSHIP

Feb. 2020 – Jun. 2021	Postgraduate Intern Australian Cancer Research Foundation Image X Institute	UNIVERSITY OF SYDNEY, AUSTRALIA
Jul. 2019 – Aug. 2019	Summer Research Intern , Institute of Biological Chemistry	ACADEMIA SINICA, TAIWAN
Apr. 2017 – May. 2019	Undergraduate Intern , Medical Biophysics Laboratory	UNIVERSITY OF SAN CARLOS, PHILIPPINES

PUBLISHED PEER-REVIEWED JOURNAL ARTICLES

Authors who equally contributed to peer-reviewed journal articles are marked with a †.

1. **Montinola D.**, McNamara AL, Kuncic Z, Byrne HL (2022) *Investigation of micron-scale radiotherapy dose deposition in the lung: effect of magnetic field and nanoparticles - a Monte Carlo Simulation* . Front. Phys. doi:10.3389/fphy.2022.835016
2. Roque AM †, **Montinola D**†, Geonzon L, Matsukawa S, Lobarbio CFY, Taboada EB, Bacabac RG, (2022) *Rheological elucidation of the viscoelastic properties and network interaction of mixed high-methoxyl pectin and kappa-carrageenan gels*. Food Hydro. doi:10.1016/j.foodhyd.2022.107647

CERTIFICATES

- 2023 **Completion**, Quality Control and Dosimetry in Digital Radiology By International Atomic Energy Agency (IAEA)
- 2023 **Completion**, Diagnostic Reference Levels in Medical Imaging By International Atomic Energy Agency (IAEA)

SKILLS

- Experienced in Monte Carlo simulation using TOPAS (Geant4 software toolkit)
- Knowledgeable in handling Siemens, Philips, and GE diagnostic imaging systems
- Experienced in handling and operation of molecular and cellular biology equipment and techniques: pipetting, bio-safety, cell culture and reconstitution, protein over-expression and purification, binary gel mixing, and 3D printing
- Acquainted with MatLab, Pymol, LabVIEW, Origin Lab, Wings 3D, LaTeX and Microsoft Office
- Can work individually and with multifaceted team

SIGNIFICANT ACHIEVEMENTS

- 2023 **2nd Place**, Oral Presentation Category, Philippine Conference in Medical Physics
- 2020 **Awardee**, Asia Pacific Youth Exchange and Global Social Innovation Idea Competition - Korea
- Recipient**, Department of Science and Technology - Science Education Institute, Foreign Graduate Scholarship in Priority Field in Science and Technology
- 2019 **Awardee**, Department of Science and Technology - Bank of the Philippine Islands National Science Awards
- Awardee**, Ten Outstanding Students of the Philippines
- Awardee**, The Outstanding Graduate, 36th University of San Carlos Excellence Awards
- 2018 **Awardee**, The Outstanding Leader, 35th University of San Carlos Excellence Awards
- Verbal Commendation Awardee**, Asia Youth International Model United Nations - Thailand
- Best Poster Presentation on Physics Concept and Education**, 19th National Physics Conference, Samahang Pisika ng Visayas at Mindanao
- 2017 **President**, University of San Carlos, Carolinian Physics Society
- 2016 **Senator**, University of San Carlos, School of Arts and Sciences Council

SCIENTIFIC/CONFERENCE PAPERS

1. **Montinola D.** and Byrne H. (2023). "Investigation of Dose Deposition in the Lung Due to Nanoparticle Clustering on MRI-Linac with Varying Electron Source - A Monte Carlo Simulation", Proceedings of Philippine Conference in Medical Physics, Manila, Philippines.
2. **Montinola D.**, Lan K., Qui Y.H., Ko K.T., Draczkowski P., Sriramoju M.K., Puri S., Hsu S.T.D. (2019). "BAP1 Mutants: Purification, Functional Characterization, and Determination of Its Structure Using Cryogenic Electron Microscopy", Proceedings of Taiwan International Graduate Program – International Internship Program, Academia Sinica, Taipei, Taiwan.
3. Roque, A.M., **Montinola D.**, Bacabac R.G., Lobarbio C.F. (2018). "Rheological Characterization of Mango Peel Pectin Extracted at Different pH". Proceedings of the 37th Samahang Pisika ng Pilipinas, National Physics Conference, Bohol.
4. **Montinola D.**, Roque A.M., and Bacabac R.G. (2018). "Linear rheological characterization of commercial apple pectin", Proceedings of the 20th SPVM National Physics Conference, Almont Inland Resort, Butuan City.

5. Abac A.G.[†], Legaspi C.R.B.[†], **Montinola D.[†]**, and Pastor M.G. (2017). "Global temperature anomaly, carbon dioxide concentration, and sea level variation modelling and projections", Proceedings of the 19th SPVM National Physics Conference and 5th International Meeting on Complex System, University of San Carlos, Cebu City.

SERVICE TO THE SCIENTIFIC COMMUNITY

Speaker	The Department of Surgery Conference, Cebu Doctors University Hospital, Introduction to Quality Assurance in Healthcare: Ensuring Excellence in Patient Care, 2023
Technical Organizer	7 th IUPAP International Conference on Women in Physics 2020
Technical Organizer	Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM): Practical Image Registration 2020
Technical Organizer	MedPhys20: The 15 th Student Research and Education Symposium of the New South Wales and Australian Capital Territory Branch of the ACPSEM 2020
Organizer and Speaker	University of San Carlos-Tokyo University of Marine Science and Technology Joint Mini-Symposium on Food Hydrocolloids and Soft Matter 2018

AFFILIATION

President	Philippine Society of Nuclear Medicine - Cebu Chapter 2022-2023
Member	Society of Medical Physicist in the Republic of the Philippines
Member	Philippine Society of Nuclear Medicine

IN THE MEDIA

40 Under 40: Meet the new breed of game changers in Cebu (Tech Innovation)

Link: bit.ly/dmsunstar

These Simple Innovations Could Be Game Changers for the Environment

Link: bit.ly/dmvicecom

REFERENCES

Ms. Rhodesa U. Cruzet

Medical Physicist and Radiation Protection Officer, Cebu Doctors' University Hospital

phone: +639275912845

e-mail: rhodesacruzet@gmail.com

Dr. Hilary Byrne

Program Manager, Research Fellow ACRF Image-X Institute, The University of Sydney

phone: +61431876614

e-mail: hilary.byrne@sydney.edu.au

Prof. Rommel G. Bacabac

Professor and Principal Investigator, Medical Biophysics Laboratory, University of San Carlos

phone: +639177023956

e-mail: rbacabac@usc.edu.ph