Curriculum Vitae

Name (DOB) : Deni Hardiansyah (31 May 1988)
Website. : https://physics.ui.ac.id/deni-hardiansyah/
Occupation : Associate Professor at Physics Department, FMNS, University of Indonesia, Depok, Indonesia.

Awards

(1). The 1st winner of Tomio Inoue Award 2024 at AOCNMB conference.
(2). International Best Abstract at the SNMMI Conference 2024, Toronto, Canada.
(3). International Best Abstract at the SNMMI Conference 2023, Chicago, USA.
(4). Best Presenter at 28th IToraySF Seminar on Science and Technology 2022.
(5). International Best Abstract at the SNMMI Virtual Conference 2021, USA
(6). Top Downloaded Paper 2018-2019 Award in Clinical and Translational Science Journal.

Grants

(1). SDG DAAD project from BMZ Germany 2023-2026, Total~300,000 euro.
(2). PUTI Q1 Universitas Indonesia 2024, Total~$27,000.
(3). PUTI Universitas Indonesia 2023, Total~$18,000.
(4). World Class Professor Grant from DIKTI 2022, Total~$6,500.
(5). PUTI Universitas Indonesia 2022, Total~$10,000.
(6). PKR BRIN 2022, Total ~$12,000.
(7). Science & Technology Research Grant 2021 from ITSF, Total ~$3000**.**
(8). PUTI Universitas Indonesia 2020, Total~$11,000.

International recognition

(1). Organizer of Grand Challenge-AAPM TACTIC 2023; https://www.aapm.org/GrandChallenge/TACTIC/
(2). Leader of Focus Group 8, SIGFRID EFOMP 2024-2026; https://www.efomp.org/index.php?r=pages&id=sig-frid
(3). Member of Focus Group 1 and 5, SIGFRID EFOMP.
(4). Member of WG4 of multi-international EU COST RATIONALE, https://www.cost.eu/actions/CA22118/#tabs+Name:Working%20Groups%20and%20Membership
(5). Software developer of OpenDose3D for molecular radiotherapy dosimetry.

Scholarships

(1). BPPLN DIKTI (2.5 years, 2013-2016) in Doctoral Degree (Heidelberg University, Germany).
(2). BPPDN DIKTI (1.5 years, 2011-2013) in Master Degree (ITB, Indonesia).
(3). Putera Sampoerna Foundation (4 years, 2006-2010) in Bachelor Degree (UPI, Indonesia).

Education

(1). November 2013-May 2016, PhD in Medical Physics. GPA 4/4.
(2). August 2011-January 2013, Master in Physics. GPA 3.83/4.
(3). September 2006-July 2010, Bachelor in Physics. GPA 3.5/4.

Work Experiences

(1). September 2019-now, Associate Professor at Physics Department, FMNS, University of Indonesia, Depok, Indonesia
(2). August 2016-June 2019, Postdoctoral Research Scholar at University of Kentucky, USA.
(3). March 2015 – May 2016, Lectures in Heidelberg University in Biomedical engineering/Medical Physics Programs.

Research Collaborations

(2024-now) ICO Nantes Universite, France. Collaborators: Prof. Nicholas Vermenot, and Prof. Ludovic Ferrer.
(2023-now) Universitaetklinikum Freiburg, Germany. Collaborators: Prof. Michael Mix, Dr. Felix Kind, and Dr. Juri Ruf.
(2023-now) OPEN DOSE Developer, INSERM, France. Collaborators: Prof. Manuel Bardies, and Jose Ferguso, MSc.
(2023-now) Radboud University Medical Center, The Netherlands. Collaborators: Prof. Mark Konijnenberg, and Dr. Steffie B. Peters.
(2023-now) Universitaetklinikum Wuerzburg, Germany. Collaborators: Prof. Michael Lassmann, and Dr. Heribert Haencheid.
(2022-2024) NewGround Pharm. Consulting LLC, USA. Collaborators: Prof. Dr. Chee M. Ng.
(2020-now) TU Munich, Germany. Collaborators: Prof. Matthias Eiber.
(2019-now) Ulm University, Germany. Collaborators: Prof. Gerhard Glatting, Dr. Peter Kletting, Prof. Ambros Beer, and Dr. Elham-Yousefzadeh.

Publications of Dr.sc.hum. Hardiansyah

https://pubmed.ncbi.nlm.nih.gov/?term=deni+hardiansyah&sort=date
https://scholar.google.com/citations?hl=en&user=5nT1628AAAAJ

1. **Hardiansyah D**, Riana D, Haencheid H, Beer AJ, Lassmann, Glatting G. Non-linear mixed-effects modelling and population-based model selection for 131I kinetics in benign thyroid disease. EJNMMI Phys. 2025. 12(1),1-13.
2. **Hardiansyah D**[$]*, Budiansyah I*, Riana A, Pawiro SA, Beer AJ, Glatting G. Accuracy and precision analysis of single-time-point dosimetry utilising physiologically-based pharmacokinetic modelling and non-linear mixed-effects modelling. EJNMMI Phys. 2025. 12. $Corresponding author, *equal contribution
3. Patrianesha BB, Peters SMB, **Hardiansyah D**[$], Ritawidya R, Privé BM, Nagarajah J, Konijnenberg MW, Glatting G. Single-time-point dosimetry using model selection and the Bayesian fitting method: A proof of concept. Phys Med. 2025. 129. 104868. [$]Corresponding author
4. Subangun RM*, **Hardiansyah D**[$]*, Ibrahim RFI, Patrianesha BB, Hidayati NR, Beer AJ, Glatting G. Few-time-points time-integrated activity coefficients calculation using non-linear mixed-effects modeling: Proof of concept for [111In]In-DOTA-TATE in kidneys. Phys Med. 2025. 129. 104865.*equal contribution, [$]Corresponding author
5. **Hardiansyah D**, Yousefzadeh-Nowshahr E, Kind F, Beer AJ, Ruf J, Glatting G, Mix M. Single-Time-Point Renal Dosimetry Using Nonlinear Mixed-Effects Modeling and Population-Based Model Selection in [177Lu]Lu-PSMA-617 Therapy. J Nucl Med. 2024. 65(4),566-572.
6. Jundi AF, Naqiyyun MD, Patrianesha BB, Mu'minah IAS, Riana A., **Hardiansyah D**. Uncertainty Analysis of Time-Integrated Activity Coefficient in Single-Time-Point Dosimetry Using Bayesian Fitting Method. Nucl Med Mol Imag. 58(3),120-128.
7. Ivashchenko OV, O'Doherty J,**Hardiansyah D**, Cremonesi M, Tran-Gia J, Hippeläinen E, Stokke C, Grassi E, Sandström M, Glatting G, Time-Activity data fitting in molecular Radiotherapy: Methodology and pitfalls. Physica Medica. 117(2024).
8. **Hardiansyah D**, Riana A, Beer A, Glatting G. Single-time-point dosimetry using model selection and nonlinear mixed-effects modelling: a proof of concept. *EJNMMI Phys*. 10: 12 (2023)
9. **Hardiansyah D**, Riana A, Eiber M, Beer A, Glatting G. Population-based model selection for an accurate estimation of time-integrated activity using non-linear mixed-effects modeling. *Z Med Phys*. In print 20 Feb 2023.
10. **Hardiansyah D**, Riana A, Beer A, Glatting G. Single-time-point estimation of absorbed doses in PRRT using a non-linear mixed-effects model. *Z Med Phys*. 2023;33(1), 70-81.
11. **Hardiansyah D**, Ng CM. Minimal Physiologically-based Pharmacokinetic Model to Investigate the Effect of Charge on the Pharmacokinetics of Humanized anti-HCV-E2 IgG Antibodies in Sprague-Dawley Rats. *Pharm Res*. 2022;39:481-96.
12. **Hardiansyah D**, Riana A, Kletting P, Zaid NRR, Eiber M, Pawiro SA, Beer AJ, Glatting G. A population-based method to determine the time-integrated activity in molecular radiotherapy. *EJNMMI Phys*. 2021 Dec 14;8(1):82.
13. **Hardiansyah D**, Kletting P, Begum NJ, Eiber M, Beer AM, Pawiro SA, and Glatting G. Important pharmacokinetic parameters for individualization of (177) Lu-PSMA therapy: A global sensitivity analysis for a physiologically-based pharmacokinetic model. *Med Phys*. 48:556-568 (2021).
14. **Hardiansyah D**[*$], Attarwala AA[*], Romano C, Jimenez-Franco LD, Roscher M, Wangler B, and Glatting G. Performance assessment of the ALBIRA II pre-clinical SPECT S102 system for (99m)Tc imaging. *Ann nucl med*. 35:111-120 (2021). [*]equal contribution.[$]corresponding author.
15. **Hardiansyah D**, Ng CM. Quantitative Systems Pharmacology Model of Chimeric Antigen Receptor T cell *Clin Transl Sci.* 2019;12(4):343-349.
16. **Hardiansyah D**, Ng CM. Minimal Physiologically-based Pharmacokinetic Model to investigate the Effect of pH Dependent FcRn Affinity and the Endothelial Endocytosis on the Pharmacokinetics of Anti-VEGF Humanized IgG1 Antibody in Cynomolgus Monkey. *Eur J Pharm Sci.* 2018;125:130-141.
17. **Hardiansyah D**, Ng CM. Effects of the FcRn developmental pharmacology on the pharmacokinetics of therapeutic monoclonal IgG antibody in pediatric subjects using minimal physiologically-based pharmacokinetic modelling. *mAbs*. 2018;10(7):1144-1156.
18. **Hardiansyah D**, Ng CM. Two-Pore Minimum Physiologically-based Pharmacokinetic Model to Describe the Disposition of Therapeutic Monoclonal IgG Antibody in Humans. *Pharm Res*. 2018.35(3):47.
19. **Hardiansyah D**, Maass C, Attarwala AA, Müller B, Kletting P, Mottaghy FM, Glatting G. The Role of Patient-Based Treatment Planning in Peptide Receptor Radionuclide Therapy. *Eur J Nucl Med Mol Imaging.* May 2016;43(5):871-880.

20. **Hardiansyah D***, Attarwala AA*, Romano C, Roscher M, Molina-Duran F, Wangler B. Glatting G. A method for point spread function estimation for accurate quantitative imaging. *IEEE Transactions on Nuclear Sciences*. 2018. 65(3):961-969 *equal contribution.
21. **Hardiansyah D***, Attarwala AA*, Kletting P, Mottaghy FM, Glatting G. Prediction of time- integrated activity coefficients in PRRT using simulated dynamic PET and a pharmacokinetic model. *Physica Medica*. 2017;42:298-304. *equal contribution.
22. **Hardiansyah D**, Begum NJ, Kletting P, Mottaghy FM, Glatting G. Sensitivity Analysis of a PBPK Model Used for Treatment Planning in Molecular Radiotherapy. *Cancer Biother Radiopharm*. Aug 2016;31(6):217-224.
23. **Hardiansyah D**, Guo W, Kletting P, Mottaghy FM, Glatting G. Time-integrated activity coefficients estimation for radionuclide therapy using PET and a pharmacokinetic model: A simulation study on the effect of sampling schedule and noise. *Med Phys*, 2016. 43(9): p. 5145.
24. **Hardiansyah D**, Guo W, Attarwala AA, Kletting P, Mottaghy FM, Glatting Treatment planning in PRRT based on simulated PET data and a PBPK model. Determination of accuracy using a PET noise model. *Nuklearmedizin*. 2017. 56(1):23-30.
25. Maaß C, Rivas JRA, Attarwala AA, **Hardiansyah D**, Niedermoser S, Litau S, Wängler C, Wängler B, Glatting G. Physiologically based pharmacokinetic modeling of 18F-SiFAlin- Asp3-PEG1-TATE in AR42J tumor bearing mice. *Nucl Med Biol.* Apr 2016;43 (4):243-246.
26. Maaß C, Sachs JP, **Hardiansyah D**, Mottaghy FM, Kletting P, Glatting G. Dependence of treatment planning accuracy in peptide receptor radionuclide therapy on the sampling schedule. *EJNMMI Res.* Dec 2016; 6(1):30.
27. Attarwala AA, Karanja YW, **Hardiansyah D**, Romano C, Roscher M, Wängler B, Glatting G. Investigation of the Imaging Characteristic of the ALBIRA II Small Animal PET Imaging System for 18F, 68Ga and 64 *Zeitschrift für Medizinische Physik*. 2017. 27(2):132-144.
28. Bisma B Patrianesha, Achmad F Jundi, Rien Ritawidya, **Hardiansyah D**. The accuracy of kidneys TIA calculated for three time points biokinetic data of [177lu]Lu-DOTATATE using mono-exponential function. J Sains Tek Nuk Indo. 2023: 25(2), p92-100.
29. NR Hidayati, N Nuraeni, **Hardiansyah D**, SA Pawiro. Estimation of human absorbed radiation dose of radiopharmaceuticals based on animal biodistribution data: A review from last decade. AIP Conference Proceedings. 2024. 3210(1)
30. Jadidan A, Ananda FD, Muhammad Z, **Hardiansyah D**. Mathematical Model to calculate the total number of decays in peptide receptor radionuclide therapy using nonlinear mixed effect modeling. 2023 Phys.: Conf. Ser.2596 012033
31. Pratiwi N, Riana A, **Hardiansyah D**. Calculation of the total number of radiation decay of radiolabelled octretotate using non-linear mixed effect models. 2023 ITM Web of Conferences.61 01023
32. IR Apriani, DA Adlina, **Hardiansyah D**. Mathematical Model to Calculate the Total Number of Radiation Decays of Radiolabelled-Pembrolizumab in Mice. 2022 Phys.: Conf. Ser.2377 012029
33. AD Widyanugraha, N Atikah, **Hardiansyah D**. Estimation of The Main Effect and Total Effect of a PBPK Model Based on The Uncertainty of Individual Parameter for Treatment Planning in PSMA Therapy. IOP Conference Series: Earth and Environmental Science. 2021 913 (1), 012101
34. N Atikah, A Riana, A Dwi, Z Anwari, **Hardiansyah D**. Model Selection in Peptide-receptor Radionuclide Therapy for an Accurate Determination of Time Integrated Activity Coefficients. Journal of Physics: Conference Series 2019 (1), 012079
35. A Jadidan, MZ Anwari, A Riana, YW Sari, **Hardiansyah D**. Biodistribution study of lutetium hydroxyapatite (177Lu-HA) for liver cancer therapy. ICSPMB Conference 2020. AIP Conference Proceedings2346 (1), 030001
36. M Hasril, M Luthfy, A Riana, AN Ittaqa, SA Pawiro, **Hardiansyah D**. Study the effect of the physiological parameters to the optimal administration of lysine/arginine during peptide receptor radionuclide therapy (PPRT) using a physiologically-based pharmacokinetic (PBPK) model. ICSPMB Conference 2020. AIP Conference Proceedings2346 (1), 030004.
37. MZ Anwari, TS Humani, NR Hidayati, **Hardiansyah D**. Effect of different radiopharmaceutical drug to the performance of translation methods of TIACs from mice to human. ICSPMB Conference 2020. AIP Conference Proceedings2346 (1), 030005
38. LD HAM, Misrawati, AN Ittaqa, A Riana, **Hardiansyah D**. Study of the most important physiologic parameter using GSA with sobol method and a PBPK model for individualization of peptide-receptor radionuclide therapy. SNF Conference 2020. AIP Conference Proceedings2320 (1), 050030.
39. A Riana, SA Pawiro, **Hardiansyah D**. Study of population and covariate model in physiologically based pharmacokinetics model used for treatment planning in peptide receptor radionuclide therapy. SNF Conference 2020. AIP Conference Proceedings2320 (1), 050015.

40. AN Ittaqa, SA Pawiro, A Riana, LDHA Mas'udi, **Hardiansyah D**. Estimation of main and total effect of PBPK parameters in Meningioma patients. ICTAP 2020. Journal of Physics: Conference Series1816 (1), 012101.
41. Hidayati NR, **Hardiansyah D**, Glatting G. Effect of Deviation in Image Quantification for Internal Dosimetry Assessment in Radionuclide Therapy. Research and Development on Nanotechnology in Indonesia. ISSN: 2356-3303. p. 49-51. V2. 2015.
42. **Hardiansyah D**, Male S, Haryanto F. Study the Sensitivity of Dose Calculation in PRISM Treatment Planning System Using Monte Carlo Simulation of 6 MeV Electron Beam. SEACOMP 2014. AIP Conf. Proc. 1615, 213 (2014).

Book Chapter

Hardiansyah D, Ng CM. Quantitative Pharmacology and Individualized Therapy Strategies in Development of Therapeutic Proteins for Immune-Mediated Inflammatory Diseases. Chapter: Quantitative Pharmacology Approach to Select Optimal Dose and Study the Important Factors in Determining Disposition of Therapeutic Monoclonal Antibody in Pediatric Subjects – Some Considerations. March 2019. Wiley, ISBN: 978-1-119-28919-7.