

CURRICULUM VITAE

Name: Petra Dunkel PharmD, PhD
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EDUCATION

2024- Master of Medical Education, University of Dundee
2024 Pharmacist specialist training in Drug discovery and medicinal chemistry'
2022 AMEE – ESME Certificate in Medical Education
2021 Research and Innovation Manager postgraduate specialist training, Pannon Universtiy, Veszprém (Hungary)
2005-2008 PhD degree (2011), Semmelweis University, Budapest (Hungary), Doctoral School of Pharmaceutical Sciences
supervisor: Prof Péter Mátyus, PhD thesis: Novel extensions of the tert-amino effect: synthesis of azecine- and oxazonine-fused ring systems
2003-2008 Dramaturgy and Theatre History and Sciences MA (2009), University of Theatre and Film, Budapest (Hungary)
2000-2005 Pharmacy MSc, Semmelweis University, Budapest (Hungary)
supervisor: Prof Péter Mátyus, Dr Gábor Krajsovsky, MSc thesis: Synthesis of halopyridazinones via halogen displacement reactions and their applications in the synthesis of fused ring systems

PROFESSIONAL EXPERIENCE

2018- Assistant professor, Semmelweis University, Budapest (Hungary)
2017-2018 Research chemist, Servier Research Institute of Medicinal Chemistry, Budapest (Hungary)
2014-2016 Postdoctoral researcher, Université Paris Descartes, Paris (France)
supervisor: Dr Peter I. Dalko, project: Synthesis of two-photon optimized 'caged' compounds for neurosciences (Marie Curie Intra-European Fellowship (FP7 MC-IEF))
2012-2013 Postdoctoral researcher, Université Paris Descartes, Paris (France)
supervisor: Dr Peter I. Dalko, project: Gamma and X-ray photolysis as a strategy for controlled drug delivery to tissues and tumours deep within the body (Ville de Paris 'Research in Paris 2012' Fellowship)
2009, 2010 Academic visit (2×2 month), University of Ljubljana, Ljubljana (Slovenia)
supervisor: Prof Danijel Kikelj, project: Synthesis of potential dual antithrombotic compounds based on a 1,4-benzodioxine scaffold (Hungarian-Slovenian bilateral programme ('TÉT'))
2008 Academic visit (3 month), Università degli Studi di Milano, Milano (Italy)
supervisor: Prof Carlo De Micheli, project: Regioselective synthesis of 5-substituted isoxazol- and isoxazoline-3-phosphonates

2006	Academic visit (1 month), Università degli Studi di Milano, Milano (Italy) <i>supervisor: Prof Daniela Barlocco, project: Semicarbazide-sensitive amine-oxidase substrates and inhibitors (Hungarian-Italian bilateral programme ('TÉT'))</i>
2008-2016	Junior research fellow, Semmelweis University, Budapest (Hungary)
2005	Internship (1 month) in community pharmacy, Helsinki (Finland) (<i>International Pharmaceutical Students' Federation's Student Exchange Program</i>)

TEACHING EXPERIENCE

2021-	PhD supervisor, Semmelweis University School of Doctoral Studies, Budapest (Hungary)
2020-	course lead (Organic Chemistry I-II.), Semmelweis University, Budapest (Hungary)
2018-	teaching organic chemistry theoretical and practical course, Semmelweis University, Budapest (Hungary)
2009-	supervision (research internship/diploma work), Université Paris Descartes, Paris (France); Semmelweis University, Budapest (Hungary)
2005-2012	organic chemistry practical course, Semmelweis University, Budapest (Hungary)

AWARDS, PRIZES, SCHOLARSHIPS

2025	France Excellence Hongrie scholarship
2023	EUniWell Leadership Fellowship
2019,2020,2021	Bolyai+ Scholarship for Young Higher Education Teachers and Researchers, New National Excellence Program, Hungary
2019	János Bolyai Research Fellowship, Hungarian Academy of Sciences
2014	FP7 Marie Curie Intra-European Fellowship (EC Research Executive Agency)
2014	Eötvös Fellowship, Hungarian Scholarship Board Office
2012	'Research in Paris 2012' fellowship, postdoctoral category (Ville de Paris, France)
2010	Faculty Excellence Award ('Mozsonyi Sándor Alapítvány') for young lecturers, Semmelweis University, Budapest (Hungary)
2004, 2005	Faculty Excellence Award ('Mozsonyi Sándor Alapítvány') for pharmacy students, Semmelweis University, Budapest (Hungary)
2009, 2012	Conference stipend, Richter Gedeon Plc. 'Centenárium Alapítvány' (Hungary)
2009, 2011	Conference stipend, Hungarian Chemical Society

GRANTS RECEIVED

2023	RRF Educational Development Grant, project leader (Semmelweis University, Budapest, Hungary)
2021-2023	Synthesis+ Excellence Programme /ChemLearning project, participant (Eötvös Lorand University, Budapest, Hungary),
2021	ARRS - OTKA Lead Agency Call (Hungarian-Slovenian Bilateral Project), principal investigator <i>project: Photochemistry toolbox for discovery of advanced ATP-competitive chemical probes with Topoisomerase IIalpha inhibitory activity</i>

2020 Educational Development Grant, project leader (Semmelweis University, Budapest, Hungary)

LANGUAGES

Hungarian (native), English (fluent), French (fluent), basic notions of German and Italian

OTHER ACTIVITIES

2018- grant proposal evaluator: H2020-MSCA-IF, HORIZON-MSCA-PF, OTKA
2015- member of the Marie Curie Alumni Association
2009-2012 member of the executive board of 'AESCULAP' Foundation for Pharmaceutical Sciences and Education, Semmelweis University, Budapest (Hungary)

RESEARCH ACTIVITIES

i) preparation and reactivity studies of nitrogen-containing heterocyclic compounds (pyridazine, quinoline derivatives), ii) preparation of medium-size heterocycles via *tert*-amino effect type 2, iii) preparation and studies of two-photon cage compounds

RESEARCH OUTPUT

ORCID: 0000-0001-5445-8357

30+ articles in peer-reviewed international journals, 5 international patent applications

Hirsch index: 12, independent citations: 420

SELECTED PUBLICATIONS

Dunkel, P., Tran, C., Rigault, D., Kontra, B., Deprez, E., Tauc, P., Mucsi, Z., Dhimane, H. and Dalko, P.I. (2025), Breaking Bonds by Light: The Absorbance–Fragmentation Paradox. *Chemistry - A European Journal* e01839. <https://doi.org/10.1002/chem.202501839>

Kontra, B., Mucsi, Z., Ilaš, J. and Dunkel, P. (2025), The Quinoline Photoremovable Group (PPG) Platform - A Medicinal Chemist's Approach for Photocage Development and Applications. *Medicinal Research Reviews*. <https://doi.org/10.1002/med.22111>

Dunkel, P., Bogdán, D., Deme, R., Zimber, Á., Ballayová, V., Csizmadia, E., Kontra, B., Kalydi, E., Bényei, A., Mátyus, P., Mucsi, Z. (2024) C(sp³)–H cyclizations of 2-(2-vinyl)phenoxy-*tert*-anilines. *RSC Advances*, 14, 16784-16800. <https://doi.org/10.1039/D3RA08974F>

Fejes, I., Markacz, P., Tatai, J., Rudas, M., Dunkel, P., Gyuris, M., Nyerges, M., Provost, N., Duvivier, V., Delerive, P., Martiny, V., Bristiel, A., Vidal, B., Richardson, W., Rothweiler, E.M., Tranberg-Jensen, J., Manning, C.E., Sweeney, M.N., Chalk, R., Huber, K.V.M., Bullock, A.N., Herner, A., Seedorf, K., Vinson, C., Weber, C., Kotschy, A. (2024) Covalent Inhibitors of KEAP1 with Exquisite Selectivity. *Journal of Medicinal Chemistry*, 67 (23), 21208-21222. <https://doi.org/10.1021/acs.jmedchem.4c02019>

Barosi, A., Dunkel, P., Guénin, E., Lalatonne, Y., Zeitoun, P., Fitton, I., Journée, C., Bravin, A., Maruani, A., Dhimane, H., Motte, L., Dalko, P.I. (2020) Synthesis and activation of an iron oxide immobilized drug-mimicking reporter under conventional and pulsed X-ray irradiation conditions. *RSC Advances*, 10, 3366-3370. <https://doi.org/10.1039/C9RA09828C>