

PERSONAL INFORMATION

Máté Manczinger

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Nationality: Hungarian

On the web: [Group site](#), [Twitter](#), [Google Scholar](#), [ResearchGate](#), [Hungarian Doctoral Council](#)

EDUCATION

2016 Ph.D. - Department of Dermatology and Allergology, University of Szeged, Hungary, Supervisors: Lajos Kemény & Lóránt Lakatos; [thesis](#)

2016 Dermatologist specialization – Department of Dermatology and Allergology, University of Szeged, Hungary

2010 Medical degree („summa cum laude“)
Faculty of Medicine, University of Szeged, Hungary

CURRENT POSITION(S)

2020- [Mentor](#)

Szeged Scientist Academy

2012– Principal investigator
Biological Research Centre, Szeged, Hungary

2016– [Assistant professor](#)
Department of Dermatology and Allergology, University of Szeged, Hungary

PREVIOUS POSITIONS

2010 – 2013 External lecturer
Department of Pathophysiology, University of Szeged, Hungary

2017 – 2020 Junior mentor
Szeged Scientist Academy

2017 – 2021 Project leader
Csaba Pál Laboratory, Biological Research Centre, Szeged, Hungary

FELLOWSHIPS

2018 - 2021 - [János Bolyai Research Fellowship](#)

2016, 2017, 2018, 2019, 2020 - New National Excellence Program Fellowship

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

Between 2016 and 2021:

Two graduate students (Yoshida Mio, Sára Viemann, both wrote their theses with my supervision)

Three Szent-Györgyi students ([Benjamin Papp](#), [Anna Tácia Fülöp](#), Leó Asztalos)

Three Ph.D students ([Balázs Koncz](#), [Gergő Balogh](#), [Benjamin Papp](#)), Balázs has submitted his Ph.D. thesis in 2021

TEACHING ACTIVITIES

2007 – 2013 Teaching position – Pathophysiology seminars, Department of Pathophysiology, University of Szeged, Hungary
2014 – Teaching position – Dermatology practices and seminars, Department of Dermatology and Allergology, University of Szeged, Hungary
2021 – HCEMM Translational medicine course

INSTITUTIONAL RESPONSIBILITIES

2018 – Member of the Scientific Student Council, Faculty of Medicine, University of Szeged, Szeged, Hungary

COMMISSIONS OF TRUST

2018 – Public body member of the Hungarian Academy of Sciences

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2015 – Member, European Society for Dermatological Research
2011 – Member, Hungarian Society of Immunology

MAJOR COLLABORATIONS

[Tobias L. Lenz](#) – HLA Promiscuity, Evolutionary Immunogenomics Research Unit, Department of Biology, University of Hamburg, Hamburg, Germany
[Attila Bérces](#) – Omixon Biocomputing Ltd., Budapest, Hungary

OTHER

2020: Excellent Tutor of Scientific Student Circle at Faculty of Medicine, University of Szeged
2018: National Institute of Allergy and Infectious Diseases (NIAID) Scholarship
2017: 90th Hungarian Dermatological Society Meeting - Resdevco prize 1st place
2016: SZTE Innovation Prize 2nd place
2014: EADV Educational Grant (Bioinformatics for Skin Research Summer School)

SCIENTOMETRY

All publications:

Total number: 16

D1: 8, Q1: 4

Citations: Google Scholar: 238 (on 2022/01/05)

First and last authored publications:

Total Number: 8

D1: 5, Q1: 1

Citations: Google Scholar: 115 (on 2022/01/05)

EDITORIAL AND REVIEW ACTIVITIES

Editorial board member of the [Immunoinformatics](#) (Elsevier) journal

Reviewer activity in: Annals of Oncology, Scientific Reports, Frontiers in Immunology, Genome, Advanced Science (reviewing 2-4 manuscripts/year)

Reviewer of the premium postdoctoral fellowship of the Hungarian Academy of Sciences.

MAJOR SCIENTIFIC DISCOVERIES

- I have developed a drug repurposing algorithm, which was [applied for patenting](#) in the U.S.
- The previously neglected concept of HLA promiscuity was elaborated in detail with my leadership (Manczinger et al., PloS Biology, 2019). Also, I led the project, which discovered the role of this HLA feature in antitumor immunity (Manczinger et al., Nature Cancer, 2021). HLA promiscuity has been proved to be an accurate biomarker and we have contracted with a company in the US to work together on its application in healthcare.
- We have recently published the results of another project, which focused on a provocative topic (Koncz et al., PNAS, 2021). We proposed that T cell positive selection results in a defective T cell repertoire. Consequently, overly dissimilar peptides to our own proteins are unlikely to be recognized by the immune system.

SCIENCE PROMOTING ACTIVITIES

- Regularly holding lectures in the Researcher's Night Program
- Holding lectures in the [HiSchool](#) career orientation program
- Regularly holding lectures in the "Magyar Tudomány Ünnepe" series
- Laboratory presentation for high school students (Szeged Scientist Academy activity)

TALKS ON INTERNATIONAL CONFERENCES

- **Manczinger M** COVID-19 and HLA: The Current State of Knowledge and Future Directions, webinar @ Omixon Academy, 2020
- **Manczinger M** Pathogen diversity and generalist human MHC alleles. 5th Annual ISEMPH Meeting, 2019, Zürich, Switzerland
- **Manczinger M** Pathogen Diversity Drives the Evolution of Promiscuous Peptide Binding of Human MHC-II Alleles. Keystone Symposia –Translational Systems Immunology 2018, Snowbird, USA
- **Manczinger M** Drug Repurposing for Psoriasis – ESDR Academy for Future Leaders in Dermatology 2017, Barcelona, Spain

- **Manczinger M**, Boross G, Papp BT, Papp B, Kemény L, Pál C: Parasite load drives rapid evolution of promiscuous peptide binding in human MHC-II alleles. One Past Health Workshop 2017, Max Planck Institute for Evolutionary Biology, Plön, Germany
- **Manczinger M**, Kemény L: Novel factors in psoriasis pathogenesis and potential drug candidates are found with systems biology approach. Functional Genomics & Systems Biology 2013, Wellcome Trust Conference Centre, Hinxton, Cambridge, UK

LIST OF 5 KEY PUBLICATIONS FROM THE LAST 5 YEARS

Authors	Title	Journal	Date	Cit.	Alt*
Balázs Koncz, Gergő Mihály Balogh, Benjamin Tamás Papp, Leó Asztalos, Lajos Kemény, Máté Manczinger	Self-mediated positive selection of T cells sets an obstacle to the recognition of nonself	Proceedings of the National Academy of Sciences	2021/9/14	1	59
Máté Manczinger , Balázs Koncz, Gergő Mihály Balogh, Benjamin Tamás Papp, Leó Asztalos, Lajos Kemény, Balázs Papp, Csaba Pál	Negative trade-off between neoantigen repertoire breadth and the specificity of HLA-I molecules shapes antitumor immunity	Nature Cancer	2021/7/08	1	73
Máté Manczinger , Gábor Boross, Lajos Kemény, Viktor Müller, Tobias L Lenz, Balázs Papp, Csaba Pál	Pathogen diversity drives the evolution of generalist MHC-II alleles in human populations	PloS Biology	2019/01/31	33	43
Máté Manczinger , Lajos Kemény	Peptide presentation by HLA-DQ molecules is associated with the development of immune tolerance	PeerJ	2018/07/03	7	6
Edit Szél, Renáta Bozó, Éva Hunyadi-Gulyás, Máté Manczinger , Kornélia Szabó, Lajos Kemény, Zsuzsanna Bata-Csörgő, Gergely Groma	Comprehensive proteomic analysis reveals intermediate stage of non-lesional psoriatic skin and points out the importance of proteins outside this trend	Scientific Reports	2019/08/06	11	1

*Altmetric score

LIST OF OTHER KEY PUBLICATIONS (whole career)

Authors	Title	Journal	Date	Cit.
Barbara Gubán, Krisztina Vas, Zsanett Balog, Máté Manczinger , Attila Bebes, Gergely Groma, Márta Széll, Lajos Kemény, Zsuzsanna Bata-Csörgő	Abnormal regulation of fibronectin production by fibroblasts in psoriasis	British Journal of Dermatology	2015/10/15	33
Máté Manczinger , Lajos Kemény	Novel factors in the pathogenesis of psoriasis and potential drug candidates are found with systems biology approach	PloS ONE	2013/11/26	17

OTHER PUBLICATIONS (whole career)

Authors	Title	Journal	Date	Cit.
Dániel László Vidács, Zoltán Veréb, Renáta Bozó, Lili Borbála Flink, Hilda Polyánka, István Balázs Németh, Szilárd Póliska, Benjamin Tamás Papp, Máté Manczinger , Róbert Gáspár, Seyedmohsen Mirdamadi, Lajos Kemény, Zsuzsanna Bata-Csörgő	Phenotypic plasticity of melanocytes derived from human adult skin	Pigment Cell & Melanoma Research	2021/08/31	2
Nóra Belső, Barbara Gubán, Máté Manczinger , Bernadett Kormos, Attila Bebes, István Németh, Zoltán Veréb, Márta Széll, Lajos Kemény, Zsuzsanna Bata-Csörgő	Differential role of D cyclins in the regulation of cell cycle by influencing Ki67 expression in HaCaT cells	Experimental Cell Research	2019/01/15	7
Máté Manczinger , VÁ Bodnár, BT Papp, SB Bolla, K Szabó, Boglárka Balázs, Erzsébet Csányi, Edit Szél, Gábor Erős, Lajos Kemény	Drug repurposing by simulating flow through protein–protein interaction networks	Clinical Pharmacology & Therapeutics	2017/06/23	3
Máté Manczinger , Alexandra Bocsik, Gabriella F Kocsis, Andrea Vörös, Zoltán Hegedűs, Lilla Ördögh, Éva Kondorosi, Annamária Marton, Csaba Vízler, Vilmos Tubak, Mária Deli, Lajos Kemény, István Nagy, Lóránt Lakatos	The absence of N-acetyl-d-glucosamine causes attenuation of virulence of Candida albicans upon interaction with vaginal epithelial cells in vitro	BioMed Research International	2015/07/28	2
Miklós Palotai, Zsolt Bagosi, Miklós Jászberényi, Krisztina Csabafi, Roberta Dochnal, Máté Manczinger , Gyula Telegdy, Gyula Szabó	Ghrelin and nicotine stimulate equally the dopamine release in the rat amygdala	Neurochemical Research	2013/07/09	15
Miklós Palotai, Zsolt Bagosi, Miklós Jászberényi, Krisztina Csabafi, Roberta Dochnal, Máté Manczinger , Gyula Telegdy, Gyula Szabó	Ghrelin amplifies the nicotine-induced dopamine release in the rat striatum	Neurochemistry International	2013/07/03	18
Andrea Heinzlmann, Gusztáv Kiss, Zsuzsanna E Tóth, Roberta Dochnal, Ágnes Pál, Ildikó Sipos, Máté Manczinger , Gyula Szabó, Hitoshi Hashimoto, Katalin Köves	Intranasal application of secretin, similarly to intracerebroventricular administration, influences the motor behavior of mice probably through specific receptors	Journal of Molecular Neuroscience	2012/07/01	6
Katalin Köves, Gusztáv Kiss, Andrea Heinzlmann, Roberta Dochnal, Máté Manczinger , Ágnes Pál, Ildikó Sipos, Gyula Szabó	Secretin Attenuates the Hereditary Repetitive Hyperactive Movements in a Mouse Model	Journal of Molecular Neuroscience	2010/07/06	8