

List of scientific achievements which present a major contribution to the development of a specific discipline

I. INFORMATION ON SCIENTIFIC ACHIEVEMENTS SET OUT IN ART. 219 PARA 1. POINT 2 OF THE ACT

A series of scientific articles related thematically, pursuant to art. 219 para 1. point 2b of the Act, entitled

Regulation of gene expression at RNA level in the brain and pathologies of the central nervous system, consisting of the following publications:

P1

Comprehensive analysis of microRNA expression profile in malignant glioma tissues.

Piwecka M*, Rolle K*, Belter A, Barciszewska AM, Żywicki M, Michalak M, Nowak S, Naskręt-Barciszewska MZ, Barciszewski J[#]. *Molecular Oncology* 2015; 9(7):1324-40. <https://febs.onlinelibrary.wiley.com/doi/abs/10.1016/j.molonc.2015.03.007>
IF 2014 = 5.367; MNiSW 2015 = 40; MNiSW 2024 = 140; Cyt=78

P2

Loss of a mammalian circular RNA locus causes miRNA deregulation and affects brain function.

Piwecka M*, Glažar P*, Hernandez-Miranda LR*, Memczak S, Wolf SA, Rybak-Wolf A, Filipchyk A, Klironomos F, Cerda Jara CA, Fenske P, Trimbuch T, Zywitzka V, Plass M, Schreyer L, Ayoub S, Kocks C, Kühn R, Rosenmund C, Birchmeier C, Rajewsky N[#]. *Science* 2017; 357(6357). <http://science.sciencemag.org/content/early/2017/08/09/science.aam8526.full>
IF 2016 = 37.205; MNiSW 2016 = 50; MNiSW 2024 = 200; Cyt=881

P3

Single-Molecule Fluorescence In Situ Hybridization (FISH) of Circular RNA CDR1as.

Kocks C, Boltengagen A, **Piwecka M**, Rybak-Wolf A, Rajewsky N[#]. *Methods in Molecular Biology* 2018;1724:77-96. https://link.springer.com/protocol/10.1007%2F978-1-4939-7562-4_7
IF= n.d. (book series); MNiSW: n.d. (book series); Cyt=27

P4

miR-218 affects the ECM composition and cell biomechanical properties of glioblastoma cells.

Grabowska M*, Kuczyński K*, **Piwecka M**, Rabiasz A, Zemła J, Głodowicz P, Wawrzyniak D, Lekka M, Rolle K[#]. *Journal of Cellular and Molecular Medicine* 2022, 26(14):3913-3930. <https://onlinelibrary.wiley.com/doi/10.1111/jcmm.17428>
IF 2021 = 5.295; MNiSW 2024 = 100; Cyt=4

P5

Single-cell and spatial transcriptomics: deciphering brain complexity in health and disease.

Piwecka M, Rajewsky N, Rybak-Wolf A[#]. *Nature Reviews Neurology* 2023, 19(6):346-362.
<https://www.nature.com/articles/s41582-023-00809-y>

IF 2021 = 44.711; MNiSW 2024 = 200; Cyt = 45

The Applicant's name is in bold font.

[#]corresponding author;

^{*} authors who equally contributed to the work.

n.d. – no data.

Scientometric data on the habilitation achievement was provided based on *Web of Science Core Collection*, record from 16/08/2024.

Total *Impact Factor* from the year preceding the publication = **92.578**

Total number of MNiSW points from the year preceding the publication = **390**

Total number of MNiSW points according to the newest list published 05/01/2024 = **640**

Total number of citations= **1035**

Statements confirming the habilitation candidate's contribution to the work are included in **Appendix No. 5**. Copies of the above publications are included in **Appendix No. 6**.

II. INFORMATION ON SCIENTIFIC ACTIVITY

1. List of published scientific articles (excluding the publications listed in section I)

A. After obtaining PhD diploma

P6

Micromanaging the neuroendocrine system - a review on miR-7 and the other physiologically relevant miRNAs in the hypothalamic-pituitary axis.

Zacharjasz J*, Sztachera M*, Smuszkiewicz M, **Piwecka M**[#]. *FEBS Letters* 2024 Jul; 598(13):1557-1575. doi: 10.1002/1873-3468.14948.

<https://febs.onlinelibrary.wiley.com/doi/10.1002/1873-3468.14948>

IF 2022 = 3.5; MNiSW 2023 = 140; MNiSW 2024 = 100; Cyt=0

P7

miR-7 controls glutamatergic transmission and neuronal connectivity in a Cdr1as-dependent manner

Cerda-Jara CA, Kim S, Thomas G, Farsi Z, Zolotarov G, Georgii E, Woehler A, **Piwecka M**, Rajewsky N[#]. *EMBO Reports* 2024; 2024 Jun 3. doi: 10.1038/s44319-024-00168-9. Online ahead of print. <https://www.embopress.org/doi/full/10.1038/s44319-024-00168-9>

IF 2021 = 9.071; MNiSW 2023 = 140; MNiSW 2024 = 140; Cyt=0

P8

ciRS-7 and miR-7 regulate ischemia-induced neuronal death via glutamatergic signaling.

Scoyni F[#], Sitnikova V, Giudice L, Korhonen P, Trevisan DM, Hernandez de Sande A, Gomez-Budia M, Giniatullina R, Ugidos IF, Dhungana H, Pistono C, Korvenlaita N, Välimäki NN, Kangas SM, Hiltunen AE, Gribchenko E, Kaikkonen-Määttä MU, Koistinaho J, Ylä-Herttuala S, Hinttala R, Venø MT, Su J, Stoffel M, Schaefer A, Rajewsky N, Kjems J, LaPierre MP, **Piwecka M**, Jolkkonen J, Giniatullin R, Hansen TB, Malm T[#]. *Cell Reports* 2024; 43(3):113862. <https://doi.org/10.1016/j.celrep.2024.113862>

IF 2023 = 8.8; MNiSW 2023 = 200; MNiSW 2024 = 200; Cyt=1

P9

Editorial: RNA at a breaking point? Cytoplasmic cleavage and other post-transcriptional RNA processing in neurodevelopment and disease.

Piwecka M[#], Luisier R, Andreassi C. *Frontiers in Molecular Neuroscience* 2023; 16:1214853. <https://www.frontiersin.org/articles/10.3389/fnmol.2023.1214853/full>, eCollection 2023.

IF 2022 = 5.639; MNiSW 2021 = 140; MNiSW 2024 = 140; Cyt=0

P10

RNA regulation in brain function and disease 2022 (NeuroRNA): A conference report.

Piwecka M[#], Fiszer A, Rolle K, Olejniczak M. *Frontiers in Molecular Neuroscience* 2023, 16:1133209. <https://www.frontiersin.org/articles/10.3389/fnmol.2023.1133209/full>

IF 2022 = 5.639; MNiSW 2021 = 140; MNiSW 2024 = 140; Cyt=0

P11

Analyses of circRNA Expression throughout the Light-Dark Cycle Reveal a Strong Regulation of Cdr1as, Associated with Light Entrainment in the SCN.

Ivanov A[#], Mattei D, Radscheit K, Compagnion AC, Pett JP, Herzel H, Paolicelli RC, **Piwecka M**, Meyer U, Beule D. *International Journal of Molecular Sciences* 2022, 23(20):12347. <https://www.mdpi.com/1422-0067/23/20/12347>

IF 2021 = 5.6; MNiSW 2021 = 140; MNiSW 2024 = 140; Cyt=4

P12

RNA-protein interactomes as invaluable resources to study RNA viruses: Insights from SARS CoV-2 studies.

Koliński M, Kałużna E, **Piwecka M**[#]. *Wiley Interdisciplinary Reviews: RNA* 2022, 13(6):e1727. <https://wires.onlinelibrary.wiley.com/doi/10.1002/wrna.1727>

IF 2021 = 9.349; MNiSW 2021 = 140; MNiSW 2024 = 140; Cyt=3

P13

Inhibition of miR-21 in glioma cells using catalytic nucleic acids.

Belter A*, Rolle K*, **Piwecka M***, Fedoruk-Wyszomirska A, Naskręt-Barciszewska MZ, Barciszewski J[#]. *Scientific Reports* 2016, 6:24516. <https://www.nature.com/articles/srep24516>

IF 2015 = 5.228; MNiSW 2015 = 40; MNiSW 2024 = 140; Cyt=26

P14

The Sequence and Structure Determine the Function of Mature Human miRNAs.

Rolle K*, **Piwecka M***, Belter A*, Wawrzyniak D, Jeleniewicz J, Barciszewska MZ, Barciszewski J[#]. *PLoS One* 2016; 11(3):e0151246.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151246>

IF 2015 = 3.234; MNiSW 2015 = 40; MNiSW 2024 = 100; Cyt=36

P15

Hyperosmia, ectrodactyly, mild intellectual disability, and other defects in a male patient with an X-linked partial microduplication and overexpression of the KAL1 gene.

Sowińska-Seidler A, **Piwecka M**, Olech E, Socha M, Latos-Bieleńska A, Jamsheer A[#]. *Journal of Applied Genetics* 2015; 56(2):177-84. <https://link.springer.com/article/10.1007%2Fs13353-014-0252-7>

IF 2014 = 1.67; MNiSW 2014 = 20; MNiSW 2024 = 140; Cyt=9

P16

Mature miRNAs form secondary structure, which suggests their function beyond RISC.

Belter A, Gudanis D, Rolle K, **Piwecka M**, Gdaniec Z, Naskręt-Barciszewska MZ, Barciszewski J[#]. *PLoS One* 2014; 9(11):e113848.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0113848>

IF 2013 = 3.534; MNiSW 2013 = 40; MNiSW 2024 = 100; Cyt = 37

The Applicant's name is in bold font.

[#]corresponding author;

*authors who equally contributed to the work,

Cyt – citations.

Scientometric data on the habilitation achievement was provided based on *Web of Science Core Collection*, record from 16/08/2024.

Total *Impact Factor* from the year preceding the publication = **61.264**

Total number of MNiSW points from the year preceding the publication = 1180

Total number of MNiSW points according to the newest list published 05/01/2024 = 1480

Total number of citations = **116**

B. Before obtaining PhD diploma

P17

Nucleic acid-based technologies in therapy of malignant gliomas.

Piwecka M, Rolle K, Wyszko E, Żukiel R, Nowak S, Barciszewska MZ, Barciszewski J[#]. *Current Pharmaceutical Biotechnology* 2011; 12(11):1805-22. <http://www.eurekaselect.com/75835/article>
IF 2010 = 3.455; MNiSW 2010 = 20; MNiSW 2024 = 100; Cyt=12

P18

Promising human brain tumors therapy with interference RNA intervention (iRNAi).

Rolle K, Nowak S, Wyszko E, **Nowak M**, Zukiel R, Piestrzeniewicz R, Gawronska I, Barciszewska MZ, Barciszewski J[#]. *Cancer Biology & Therapy* 2010; 9(5):396-406. <https://www.tandfonline.com/doi/pdf/10.4161/cbt.9.5.10958>
IF 2009 = 2.305; MNiSW 2009 = 27; MNiSW 2024 = 100; Cyt=45

P19

A new and efficient method for inhibition of RNA viruses by DNA interference.

Nowak M, Wyszko E, Fedoruk-Wyszomirska A, Pospieszny H, Barciszewska MZ, Barciszewski J. *FEBS Journal* 2009; 276(16):4372-80. <https://febs.onlinelibrary.wiley.com/doi/abs/10.1111/j.1742-4658.2009.07145.x>
IF 2008 = 3.321; MNiSW 2008 = 20; MNiSW 2024 = 100; Cyt=6

P20

A multivariate analysis of patients with brain tumors treated with ATN-RNA.

Wyszko E, Rolle K, Nowak S, Zukiel R, **Nowak M**, Piestrzeniewicz R, Gawrońska I, Barciszewska MZ, Barciszewski J. *Acta Poloniae Pharmaceutica* 2008; 65(6):677-84. http://www.ptfarm.pl/pub/File/Acta_Poloniae/2008/6/677.pdf
IF 2007 = 0.234; MNiSW 2007 = 4; MNiSW 2024 = 100; Cyt=27

P21

Leadzyme formed in vivo interferes with tobacco mosaic virus infection in *Nicotiana tabacum*.

Wyszko E, **Nowak M**, Pospieszny H, Szymanski M, Pas J, Barciszewska MZ, Barciszewski J. *FEBS Journal* 2006; 273(22):5022-31. <https://febs.onlinelibrary.wiley.com/doi/abs/10.1111/j.1742-4658.2006.05497.x>
IF 2005 = 3.304; MNiSW 2005 = 24; MNiSW 2024 = 100; Cyt=3

The Applicant's name is in bold font.

[#]corresponding author;

*authors who equally contributed to the work,

Cyt- - citations.

Scientometric data on the habilitation achievement has been provided based on *Web of Science Core Collection*, record from 16/08/2024.

Total *Impact Factor* from the year preceding the publication = **12.619**

Total number of MNiSW points from the year preceding the publication = **95**

Total number of MNiSW points according to the newest list published 05/01/2024 = **500**

Total number of citations= **93**

C. List of the scientific works published in journals not indexed in the *Journal Citation Reports* (JCR) database and not included in the habilitation achievement.

P22

α B-crystallin as a new therapeutic target in high-grade gliomas.

Piwecka M, Rolle K, Wyszko E, Barciszewska AM, Nowak S, Barciszewski J. *Neuroskop* 13: 55-63(2011).

P23

Nucleic acids as a tool in the therapy of brain tumors.

Rolle K, **Piwecka M**, Starosta O, Nowak S, Żukiel R, Barciszewska MZ, Barciszewski J. *Neuroskop* 13:47-54 (2011).

P24

Small cytoplasmatic RNA in mammalian nervous system.

Rolle K, Kozłowicz M, **Piwecka M**, Nowak S, Żukiel R, Barciszewski J. *Neuroskop* 11: 67-76 (2009).

P25

RNA interference in brain tumor treatment.

Nowak M. *Annual Report 2009. Polish Academy of Sciences*, 116-117 (2009).

P26

RNA interference in therapy of high-grade cerebral neoplasms regrowth.

Piesterzeniewicz R, Żukiel R, Nowak S, Wyszko E, Rolle K, **Nowak M**, Barciszewski J. *Neuroskop* 10:88-96 (2008).

P27

Interference RNA intervention in the brain tumors. In: *Therapeutic Ribonucleic Acids in Brain Tumors*. (monografia)

Rolle K, Nowak S, Wyszko E, **Nowak M**, Żukiel R, Piesterzeniewicz R, Gawronska I, Barciszewska MZ, Barciszewski J. *Springer Berlin Heidelberg*, 2009, pp:221-253.

D. Pre-prints of the articles which are under review for publication (as for 9/07/2024)

P28

Interrogation of RNA-Bound Proteome with XRNAX Illuminates Molecular Alterations in the Mouse Brain Affected with Dysmyelination.

Sztachera M, Wendlant-Stanek W, Serwa RA, Stanaszek L, **Piwecka M**[#]. Available at SSRN: <https://ssrn.com/abstract=4829051> or <http://dx.doi.org/10.2139/ssrn.4829051>

2. Information about the presentations given at national or international scientific conferences and meetings, including a list of lectures delivered upon invitation and plenary lectures.

2.1. Published conference presentations

A. After obtaining PhD diploma

- Regulatory RNAs in the brain and neuroendocrine system.

Piwecka M. *FEBS Open Bio*, Volume 14 Supplement 2, June 2024, <https://doi.org/10.1002/2211-5463.13836>

- Anti-miRNAzymes as a potential tool for therapy of brain tumors.

Rolle K, **Piwecka M**, Belter A, Barciszewska AM, Barciszewska MZ. *FEBS Journal* 2015;282 (SI, Suppl. 1):160-161. 40th Congress of The Federation of European Biochemical Societies (FEBS), 04-09.07.2015, Berlin, Germany.

- Secondary structure of mature miRNAs suggests therapeutic approach.

Belter A, Rolle K, Gudanis D, **Piwecka M**, Gdaniec Z, Naskret-Barciszewska M, Barciszewski J. *FEBS Journal* 2015; 282 (SI, Suppl. 1): 219-220. 40th Congress of The Federation of European Biochemical Societies (FEBS), 04-09.07.2015, Berlin, Germany.

- MicroRNA expression profiling studies in brain tumors.

Piwecka M, Rolle K, Belter A, Sosińska P, Barciszewski J, Barciszewska MZ. *Acta Pol. Bioch.* Vol 60, sup. 1/201348, 48th Congress of the Polish Biochemical Society, 2-5.09.2013, Toruń, Poland.

- α B-Crystallin as a novel target in malignant glioma therapy.

Piwecka M, Rolle K, Wyszko E, Barciszewska A-M, Nowak S, Barciszewska MZ, Barciszewski J. *Acta Biochimica Polonica* 2012;59 (Suppl. 3):103. 47th Congress of the Polish Biochemical Society Polish-German Biochemical Societies Joint Meeting, 11-14.09.2012, Poznań, Poland.

B. Before obtaining PhD diploma

- Inhibition of human brain tumour invasion with RNA.

Barciszewski J, Wyszko E, Rolle K, **Piwecka M**, Barciszewska M, Zukiel R, Nowak S. *Współczesna Onkologia*; vol. 14; 2: 100-101. IInd Congress of Modern Oncology, Cancer - the challenge of the 21st century. Personalized Oncology, 22-24.04.2010, Poznań, Poland.

2.2. Invited lectures and oral presentations (not mentioned in 2.1.)

A. After obtaining PhD diploma

W1. Invited lecture - FEBS Congress 2024, title: „Regulatory RNAs in the brain and neuroendocrine system”, 29.06-03.07.2024, Milan, Italy.

W2. Invited lecture at the *Lab Retreat* for the scientist from dr. Ivano's Legnini group from *Human Technopole* institute (Milan, Italy), title: „*Interrogation of RNA-bound proteome with XRNAX illuminates molecular alterations in the mouse brain affected with dysmyelination*”, 29-31.05.2024, Vason, Italy.

W3. Invited lecture - webinar “*Spatial Discovery Seminar*” organizer: Innovative Medical Center, Institute of Human Genetics PAS, title of the talk: “*Spatial transcriptomics of mouse pituitary gland*”, 23.11.2023, online.

W4. Oral presentation EMBO Workshop “Gene regulatory mechanisms in neural fate decisions”, title: “*Proteome-wide identification of RNA-bound proteins in the mouse brain tissue with XRNAX method*”, 7-10.09.2023, San Juan de Alicante, Spain.

W5. Invited seminar Międzynarodowego Instytutu Biologii Molekularnej i Komórkowej, title: “*Illuminating non-coding RNA functions and RNA-protein interactions in the mammalian brain*”, 2.06.2022 (online), Warsaw, Poland.

W6. Invited lecture at the Brain Week in Poznań during the international Brain Awareness Week, title: “*Brain cell heterogeneity*”, 14/02/2022, Poznań, Poland.

W7. Invited lecture na Young Researchers' Neuronal Epigenetics and Transcription (Y-NET) Symposium, title: “*Circular RNA in the brain: quest to decipher the enigmatic molecules*”, 1.10.2021, Londyn, UK.

W8. Invited seminar Wydziału Biologii UAM, title: “*CircRNAs in the mammalian nervous and neuroendocrine systems*”, 20.11.2020 (online), Poznań, Poland.

W9. Invited lecture - ReMedy/CeNT UW Mini-Symposium, title: “*Deciphering networks of noncoding RNAs in the central nervous system*”, 13-14.05.2019, Warsaw, Poland.

W10. Invited seminar - Institute of Biochemistry and Biophysics PAS, title: “*Functions of circular RNAs in the mammalian brain*”, 06.02.2018, Warsaw, Poland.

W11. Oral presentation EMBO/EMBL Symposium *The Non-coding Genome*, title: “*Knocking out Cdr1as, a conserved mammalian circular RNA, causes miRNA deregulation and a neuropsychiatric phenotype in mice*”, 13-16.09. 2017, Heidelberg, Germany.

W12. Invited lecture - 12th Microsymposium on Small RNA Biology, title: “*Loss of Cdr1as, a conserved mammalian circular RNA, causes miRNA deregulation and a neuropsychiatric phenotype*”, 26-28.05.2017, Vienna, Austria.

W13. Oral presentation “*MicroRNA expression profiling studies in brain tumors*”, Conference for 25th Anniversary of the Institute of Bioorganic Chemistry of the Polish Academy of Sciences „Towards New RNA World”, 12-14.11.2013, Poznań, Poland.

W14. Oral presentation “*MicroRNA expression profiling studies in brain tumors*”, 37th Polish Biochemical Society Meeting, 2-5.09.2013, Toruń, Poland.

W15. Oral presentation “*New inhibition methods of Tobacco mosaic virus expression with nucleic acid-based tools: DNA interference and leadzyme*”, COST FA0806, 5th WG1 meeting and ESF–EMBO conference ‘*Antiviral RNAi: From Molecular Biology towards Applications*’, 13.06.2012, Pułtusk, Poland.

W16. Invited lecture at XIV Neurosurgery Days, title: “*αB-crystallin as a new therapeutic target*”, 20.04.2012, Poznań, Poland.

B. Before obtaining PhD diploma

W17. Invited lecture “*Terapeutyczne zastosowanie kwasów nukleinowych*” at the conference summarizing the project “*Scholarship support for doctoral students in fields considered strategic for the development of Wielkopolska*” in the academic year 2010/2011, 16.11.2011, Poznań, Poland.

W18. Invited lecture “*New molecular targets for glioblastoma multiforme therapy*”, 19.04.2008, Xth Neurosurgery Days, Poznań, Poland.

2.3. Poster presentations – as presenting author (not mentioned in 2.1)

A. After obtaining PhD diploma

- Poster “*Spatial transcriptomics of mouse pituitary gland*”, EMBO-EMBL Symposium “The non-coding genome”, 11-14.10.2023, Heidelberg, Germany.
- Poster “Proteome-wide identification of RNA-bound proteins in the mouse brain tissue with XRNAX method”, 11-14.10.2023, Heidelberg, Germany.
- Poster “*Dissecting circRNA and pre-miRNA expression at single-cell level in the pituitary gland*”, 84th Cold Spring Harbor Laboratory Symposium on Quantitative Biology. RNA Control & Regulation, 29.05-03.06.2019, Cold Spring Harbor, USA.
- Poster “*The consequences of knocking out Cdr1as locus encoding a brain-enriched circular RNA*”, 11th FENS Forum of Neuroscience, 7-11.06.2018, Berlin, Germany.
- Poster: “*Functional characterization of CDR1as, a circular RNA highly and specifically expressed in the mammalian brain*”, EMBO/EMBL Symposium: The Complex Life of mRNA, 5-9.10.2016, Heidelberg, Germany.
- Poster: “*Functional studies of circRNAs using CRISPR/Cas9*”, EMBO/EMBL Symposium: The Non-coding Genome, 18-21.10.2015, Heidelberg, Germany.
- Poster: “*Anti-miRNA ribozymes as a potential tool for therapy of brain tumors*”, Bioinnovation International Summit 2012, International Conference on Molecular Biotechnology and Innovation for Healthy Life, 22-23.10.2012, Gdańsk, Poland.
- Poster “*αB-crystallin as a novel target in malignant glioma therapy*”, Polish-German Biochemical Societies Joint Meeting, 11-14.09.2012, Poznań, Poland.

B. Before obtaining PhD diploma

- Poster “*Tenascin-C as a novel target in malignant glioma therapy with interference RNA intervention*”, Workshop FEBS „*Therapeutic Target In Cancer Cell Metabolism & Death*”, 23-26.10.2010, Capri, Italy.
- Poster „*DNA interference*”, XLV Meeting of the Polish Biochemical Society, 20-23.09.2010, Wisła, Poland.
- Poster, 1st BioScience Partnering Event: Berlin-Brandenburg meets Poznan, 30-31.03.2006, Poznan, Poland.

2.4. Other conference presentations – as a co-author (not mentioned in. 2.1).

- Oral presentation “*Dynamics of non-coding RNAs expression in the postnatal mouse pituitary gland*”, 13th Neuronus Neuroscience Forum, 25-27.04.2024, Kraków, Poland. Authors: Zacharjusz J*, Sztachera M, Smuszkiewicz M, Szcześniak M, Ivanov A, **Piwecka M.**
- Poster „*Dynamics of miRNAs expression in the postnatal mouse pituitary gland and insights into cell-type specific miRNA regulation in pituitary cells*”, 11-14.10.2023, Heidelberg, Germany. Authors: J. Zacharjusz*, E. Kaluzna, M. Sztachera, **M. Piwecka**
- Oral presentation “*Investigation of RNA-protein interactions and brain-specific RBPome in the mouse brain tissue*”, Polish RNA Biology Meeting, 28-30.09.2023, Warsaw, Poland. Authors: M. Sztachera*, Wendlandt-Stanek W, Serwa R, Stanaszek L, **Piwecka M.**
- Poster “*Spatial transcriptomics of mouse pituitary gland*”, Polish RNA Biology Meeting, 28-30.09.2023, Warsaw, Poland. Authors: Kałużna E*, Zacharjusz J, **Piwecka M.**
- Poster “*Identification of RNA-bound proteins in the brain tissue with XRNAS method*”, EMBO Workshop Non-coding RNA medicine, 15-18.05.2023, Poznan, Poland. Authors: Sztachera M*, Wendlandt-Stanek W, Serwa R, **Piwecka M.**
- Poster & oral presentation “*Analysis of Synapse-enriched Circular RNAs for Loss-of-Function Studies in Primary Cortical Neurons*”, 8th European Synapse Meeting, 20-21.10.2022, Coimbra, Portugal. Authors: Olcay A*, Pietras M, Kaluzna E, Pol M, Przybyl M, **Piwecka M.**
- Poster “*Spatial and temporal expression pattern of selected synapse-enriched circular RNA in the mouse brain*”, NeuroRNA conference “RNA regulation in Brain Function and Disease”, 28-30.09.2022. Authors: Pol M*, Olcay A*, Kaluzna E, **Piwecka M.**
- Poster “*Identification of RNA-protein interactions in the mouse brain tissue*”, NeuroRNA conference “RNA regulation in Brain Function and Disease”, 28-30.09.2022. Authors: Sztachera M*, Kopera E, **Piwecka M.**

- Poster “*XRNAX as a method to study RNA interactome in the adult mouse brain*”, The International Conference of the Centenary of Natural Sciences Club of Adam Mickiewicz University, 20-21.11.2021. Authors: Sztachera M*, Kopera E, Olcay A, Przybył M, **Piwecka M.**
- Poster “*The analysis of expression and cell specificity of different non-coding RNAs in brain tumors*”, The International Conference of the Centenary of Natural Sciences Club of Adam Mickiewicz University, 20-21.11.2021, Poznań, Poland. Authors: Gwit M, **Piwecka M.**
- Poster “*Identification of circRNAs functions in the mouse brain by studying their interactions with proteins*”, Brain Conference on RNA Mechanisms and Brain Disease, organized by FENS and Lundbeck Foundation, 20-23.10.2021, Rungstedgaard, Denmark. Authors: Pietras M*, Olcay A, **Piwecka M.**
- Poster “*Analysis of Synapse-enriched Circular RNAs For Functional Analysis in Primary Cortical Neurons*”, FENS Regional Meeting (FRM), 25-27.08.2021, online. Authors: Olcay A*, Pietras M, Przybył M, **Piwecka M.**
- Poster “*Characterizing the expression and function of the circRNA Cdr1as and its regulatory network in mouse primary neurons*”, The 24th Annual Meeting of the RNA Society, 11-16. 06.2019, Krakow, Poland. Authors: Cerda-Jara CA*, **Piwecka M**, Matz G, Farsi Z, Woehler A, Kocks C, Rajewsky N.
- Poster “*Charcterizing the expression of the circRNA Cdr1as and its regulatory network*”, 11th Berlin Late Summer Meeting: Computational and Molecular Experimental Biology Meet, 25-27.10.2018, Berlin, Germany. Authors: Cerda-Jara CA*, **Piwecka M**, Boltengagen A, Kocks C, Rajewsky N.
- Poster “*Characterization of Cdr1as expression in the mouse brain*”, 10th Berlin Late Summer Meeting: Imaging gene regulation from DNA to RNA to protein, 8-10.06.2017, Berlin, Germany. Authors: Cerda-Jara CA*, **Piwecka M**, Rajewsky N.
- Poster “*Characterizing the expression and function of the circRNA Cdr1as in the mouse brain*”, Molecular Biosystems Conference, 23-26.07.2017, Puerto Varas, Chile. Authors: Cerda-Jara CA*, **Piwecka M**, Hernandez-Miranda L, Boltengagen A, Kocks C, Woehler A, Rajewsky N.
- Poster “*Bimodal action of temozolomide in brain tumor cells*”, Brain Tumor Meeting 2015, 28-29.05.2015, Berlin Germany. Authors: Barciszewska AM*, Głodowicz P, **Piwecka M**, Nowak S.
- Lecture (AM Barciszewska) „*Molecular targets for high grade glioma therapy*”, 26th Bilateral Symposium Poznan-Halle From Molecular Medicine to Public Health-Translational Research in Cardiovascular Medicine and Oncology, 23-25.10.2015, Halle, Germany. Authors: Barciszewska AM*, Rolle K, **Piwecka M**, Nowak S.

- Poster “*The epigenetic route of temozolomide action in brain tumor cells*”, 65th Annual Meeting of the German Society of Neurosurgery, 11-14.05.2014, Dresden, Germany. Authors: Barciszewska AM*, Nowak S, Wyszko E, **Piwecka M**, Barciszewska MZ.
- Poster „*Determining of the secondary structure of human brain-specific BC200 RNA*”, Polish Biochemical Society Meeting, 2-5.09.2013, Toruń, Poland. Authors: Sosińska P*, Rolle K, **Piwecka M**, Belter A, Barciszewski J, Barciszewska M. (Acta Pol. Bioch. Vol 60, sup. 1/2013).

*presenting author.

3. Information on participation in organizational and scientific committees at national or international conferences, including the Applicant's function.

- Workshop EMBO „*Spatial Omics and complexities of human diseases: Resolve and Solve*”, 23-25.10.2024, Rome, Italy; member of the Scientific Advisory Board.
- NeuroRNA Conference “*RNA regulation in Brain Function and Disease*”; 28-30.09.2022, international online conference; member of the Organizing Committee, member of Scientific Committee, chairman of Session 1 and Session 2.
- *RNA Salon Poznan* within RNA Society action, 2020 - up to now; co-organizer of seminar series.
- Conference „*DNA – the Molecule of Life. The Diamond Jubilee of the Double Helix*”; 29.11.2013, IBCH PAS, Poznań; member of the Organizing Committee, chairman of one session.
- „*50th Anniversary of the Genetic Code*” (as part of the "Meetings with Science" series), 2011, IBCH PAS, Poznań, member of the Organizing Committee.

4. Information on participation in the works of research teams realizing projects financed through national and international competitions, including the projects which have been completed and projects in progress, and information on the function performed in the team.

A. Projects (PR) in progress

PR1. Principal Investigator - “*Functional implications of circular RNAs in neurons and the brain*”, no. 2018/30/E/NZ3/00624; NCN SONATA BIS, 11/2019-11/2024.

Dr. Piwecka is supervising two PhD candidates within this project – Marta Szatcherka, MSc and Ayca Olcay, MSc.

PR2. Principal Investigator – “*Cell-type-specific expression of non-coding RNAs in the pituitary gland and their role in the regulation of gene expression*”, no. 2020/37/B/NZ3/03633, NCN Opus, 01/2021-01/2025.

Dr. Piwecka is supervising one PhD candidate within this project, Julian Zacharjasza, MSc.

B. Projects (PR) completed

PR3. Principal Investigator - “*Deciphering networks of regulatory RNAs in the central nervous system*”, financed by the Polish National Agency for Academic Exchange, NAWA Polish Returns program, no. PPN/PPO/2019/1/00035/U/0001; 11/2019-11/2023.

PR4. Co-Principal Investigator - “*International conference on RNA regulation in brain function and disease*” (01/2022-03/2023), no. DNK/SP/514092/2021, project realized within a program „Excellent Science – Support for Scientific Conferences”, and financed by the Ministry of Education and Science in Poland.

PR5. Co-Investigator and Manager - “*Anti-miRNAs ribozymes as potential therapeutics for the treatment of brain tumors in humans*” (2009-2014), UDA-POIG.01.03.01-30-050/09-02, project co-financed by the European Union through the European Regional Development Fund under the Operational Programme Innovative Economy.

PR5. Co-Investigator - “*Searching for and analysis of noncoding RNAs specific for malignant brain tumors*” (2009-2013), nr 5955/B/P01/2010/38, MNiSW.

PR6. Co-Investigator - “*Therapeutic use of the intervention with RNA interference (iRNAi) in brain tumors - development of ACRY-RNA*”, (2009-2012), nr N N403 219637, MNiSW.

PR7. Principal Investigator – grant for PhD students “*Application of the phenomenon of RNA interference in the therapy of brain tumors*” (2010-2011), nr N N401 375939, MNiSW.

PR8. Co-Investigator - “*Intervention with interfering ribonucleic acid (iRNA) in neurosurgery. Development of a new type of RNA drugs*” (2005-2008), project no. PO5CO6429, MNiSW.

PR9. Principal Investigator – internal grant within IBCH PAS statutory funds for the development of young scientists or participants of doctoral studies (2014). Title of the project: “*microRNA involvement in the regulation of the expression of extracellular matrix proteins and the migration and invasiveness of cancer cells*”.

5. Membership in international or national organizations and scientific societies, including the functions performed by the applicant.

RNA Society, member (2018-2021, 2023 – until now)

Polish Biochemical Society, member (2009-2014)

Young European Biotech Network (YEBN), member (2004-2006)

6. Information on internships completed in scientific institutions, also abroad, including the place, time and duration of the internship and its character.

02/2015-10/2019 – postdoctoral work at *Systems Biology of Gene Regulatory Elements* group led by prof. Nikolaus Rajewsky, Berlin Institute for Medical Systems Biology (BIMSB), Max Delbrück Center for Molecular Medicine (MDC), Berlin, Germany.

11/2004 – a month-long internship under the supervision of Prof. Mathias Sprinzl at the Department of Biochemistry, University of Bayreuth, Germany (DAAD scholarship).

09/2003 – a month-long internship at the Department of Nuclear Medicine and Oncological Endocrinology, Oncology Center, Maria Skłodowska-Curie Institute - Gliwice Branch, Poland.

7. Information about courses and workshops in Poland and abroad.

A. Scientific training

- Course “*Introduction to synaptic transmission at the central synapse*”; organized by FENS (Federation of European Neuroscience Societies), 6.07.2018, Berlin, Germany.
- Advanced Course “*Advanced course: Non-coding RNA in brain plasticity and disease*”, organized by NSAS (Neuroscience School of Advanced Studies), 20-26.08.2016, Bressanone, Italy.
- Seminar „*SOLID Technology: Next –generation sequencing on the SOLID System: applications and data analysis*”, 18.11.2010, Life Technologies, Warsaw, Poland.
- FEBS Workshop „*Therapeutic Target In Cancer Cell Metabolism & Death*”, 23-26.10.2010, Capri, Italy.
- Workshop „*Next Generation Sequencing 2010 – global trends and the future of technology in Poland*”, 21.06.2010, Warsaw, Poland.
- Practical Course *Combined Practical & Lecture FEBS Course „Recombinant DNA Technology and Protein Expression*”, 8-14.09.2008, Bucharest, Romania.
- ICGEB Theoretical Course “*RNA Structure and Function*”, 7-10.04.2008, Trieste, Italy.

B. Professional training

- Workshop „*How to be a PI of a diverse team – workshop*” within *1st Women in Science Symposium* (online), 4-5.03.2021, organized by the International Institute of Molecular and Cell Biology in Warsaw.
- Advanced grant writing course, 6-7.09.2018, organized by the Max Delbrück Center for Molecular Medicine (MDC), Berlin, Germany.
- Course “*Software training & programming - R basics*”, 23-24.08.2018, organized by MDC (Max Delbrück Center for Molecular Medicine), Berlin, Germany.
- Course “*Transcardiac perfusion in mice*”, 17.02.2017, MDC, Berlin, Germany.
- GraphPad PRISM course, 6.11.2015, MDC, Berlin, Germany.
- LINUX course, 3-4.11.2015, MDC, Berlin, Germany.
- *Mouse Course* (06/2015), completed with a certificate authorizing the performance of experiments on live mice (safe capture of mice, sex determination, ear-marking and other

methods of marking mice, induction of anaesthesia, collection of blood from the tail, from the eye, intramuscular, subcutaneous and peritoneal injections), killing by dislocation of the medulla oblongata, collection of organs and tissues. Certificate issued on 6/07/2015. MDC, Berlin, Germany.

8. Information on scientific or artistic works reviewed, in particular those published in international journals.

Dr. Piwecka performed the peer-review of publications for multiple international scientific journals. In the recent 2019-2023 these were, among others:

Molecular Therapy - Nucleic Acids, Cell Press (IF 2022: 10.183)

Cancers, MDPI (IF 2022: 6.575)

Scientific Reports, Nature Publishing Group (IF 2022: 4.997)

Acta Biochimica Polonica, The Journal of the Polish Biochemical Society (IF 2022: 1.7)

Metabolic Brain Disease, Springer (IF: 3.6)

Postępy Biochemii (EN: *Advances in Biochemistry*), *open access* journal published by the Polish Biochemical Society

9. Information on participation in European or other international programs.

Dr. Piwecka has been a **co-author** and **co-investigator** in a project co-funded by UE European Regional Development Fund within Operational Programme 'Innovative Economy' under the Convergence Objective. Title of the project “*Anti-miRNAs ribozymes as potential therapeutics for the treatment of brain tumors in humans*”, 2009-2014, UDA-POIG.01.03.01-30-050/09-02. In addition to her scientific work in the project, the habilitation candidate participated in **administrative work**, mainly in reporting and supervision of the planned and targeted expenditure of financial resources within the project.

10. Scientific cooperation - national and international.

Dr Flavia Syconi, Prof. Tarja Malm - Neuroinflammation Research Group, University of Eastern Finland (UEF), Kuopio, Finlandia. Regarding: investigation of circRNA *Cdr1as* and microRNA miR-7 in the context of inflammatory processes in the brain and ischemic stroke. 2018 - 2024.

Dr Cledi Cerda Jara, Prof. Nikolaus Rajewsky - MDC, Berlin, Germany. Regarding: the effect of circRNA *Cdr1as* on the physiology of cortical neurons. 2016 – present.

Dr Remigiusz Serwa - The International Institute of Molecular Mechanisms and Machines Polish Academy of Sciences, Warsaw, Poland. Regarding: proteomic analyses and RNA-protein interaction studies. 2020 - present.

Dr Luiza Stanaszek - NeuroRepair Department, Mossakowski Medical Research Institute, Polish Academy of Sciences, Warsaw, Poland. Regarding the study of RNA-protein interactions in a mouse model of dysmyelination. 2022 - present.

Dr Katarzyna Rolle, Prof. IBCH PAS in Poznan – currently concerning transcriptomic analyses of organoids derived from brain tumors of patients with GBM, previously – regarding functional studies of miRNA in human brain tumors. 2016 – present.

Dr Andranik Ivanov, Prof. Dr. Dieter Beule - The Core Unit Bioinformatics (CUBI), Berlin Institute of Health (BIH), Charité–Universitätsmedizin Berlin, Berlin, Germany. Regarding: (1) investigating circRNAs in the context of circadian rhythm regulation in the brain and pituitary gland; (2) analyzing spatial transcriptomics data. 2021 - present.

Dr Anne-Claire Compagnion, Prof. Rosa Chiara Paolicelli - Department of Biomedical Sciences, University of Lausanne, Lausanne, Switzerland. Study of circRNA in the context of circadian rhythm regulation in the brain. 2021- present.

Dr med. Norbert Wąsik, Prof. dr hab. med. Włodzimierz Liebert - Department and Clinic of Neurosurgery and Neurotraumatology, Medical University of Karol Marcinkowski in Poznań, Poland. Concerning the investigation of the function of non-coding RNAs in the regulation of gene expression at the RNA level in pituitary adenomas. 2022 – present.

Dr Michał Szcześniak – Institute of Human Biology and Evolution, Adam Mickiewicz University in Poznan, Poland. Concerning research on long non-coding RNAs in the pituitary gland. 2023 - present.

Dr Agnieszka Rybak-Wolf – Organoid Core Facility, Max Delbrück Center for Molecular Medicine, Berlin, Niemcy. Regarding the creation of choroid plexus organoids. 2023 - present.

Katarzyna Woźniak, Dr Krzysztof Brzeziński, Prof. IBCH PAS in Poznan – on the interactions of lncRNA *H19* with proteins and the study of the structures of these complexes. 2023 - present.

11. Supervision and mentoring.

A. Scientific supervision of students during the preparation of diplomas

Marta Sztachera - PhD student at the Poznań Doctoral School of Institutes of the Polish Academy of Sciences, assistant supervisor, from January 2020 to the present, PhD thesis in progress.

Ayca Olcay - PhD student at the Poznań Doctoral School of Institutes of the Polish Academy of Sciences, assistant supervisor, from February 2020 to February 2024, PhD thesis in progress.

Julian Zacharjasz – PhD student at the Poznań Doctoral School of Institutes of the Polish Academy of Sciences, assistant supervisor, from November 2021 – present, PhD thesis in progress.

Fatma Nur Bal - student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań; **Master's thesis** completed at ICHB PAN under the supervision of Dr. Monika Piwecka,

title: *Subcellular localization of non-coding RNAs in mouse primary astrocytes*; defense date: 12/2023.

Eliza Kopera – student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań; **Bachelor's thesis** carried out at ICHB PAN under the supervision of Dr. Monika Piwecka, title: *Application of the XRNAX method to study the RNA interactome in mouse neural tissue*; defense date: 07/2022.

Maria Gwit – student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań; **Bachelor's thesis** carried out at ICHB PAN under the supervision of Dr. Monika Piwecka: *Analysis of expression and cell-type specificity of selected non-coding RNAs in human brain tumors*; defense date: 07/2021.

Alicja Rabiasz – student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań; **Master's thesis** completed at ICHB PAN under the supervision of Dr. Monika Piwecka, title: *The role of microRNA in the regulation of extracellular matrix protein expression in brain tumors*; defense date: 06/2015.

B. Scientific supervision of students during inter- and scholarships

Marika Zawieja – internship, 07-08.2024. Student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Darya Yakimchyk – internship, 07-08.2024. Student of Biology, specialization: Molecular and Experimental Biology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Artsiom Vashkevich - internship, 07-08.2024. Student of Biology, specialization: Molecular and Experimental Biology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Krzysztof Cygan – internship, 02/2024-05/2024. Student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Maciej Brzozowski – scholarship, 05/2023 – 09/2023. Student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Adam Borys – internship, 08/2023. Student of Biotechnology at the Intercollegiate Faculty of Biotechnology UG&MUG from Gdańsk.

Mayur Pol – internship, 11/2021-06/2023. Graduate of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Michał Smuszkiewicz – internship, 07-09/2021. Student of the Poznań University of Medical Sciences, major: medical analytics.

Eliza Kopera - internship, 08/2021. Student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Maria Gwit – internship, 08-09/2020. Student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań.

Cledi Cerda Jara – PhD candidate at the Humboldt-Universität in Berlin, scientific supervision during the performance of the doctoral thesis at the Max Delbrück Center for Molecular Medicine, Berlin Institute for Medical Systems Biology (2016-2019), major supervisor: prof. Nikolaus Rajewsky.

Caroline Aufgebauer – scholarship, 06-08/2019. Student from the *University of North Carolina at Chapel Hill*. She completed a research internship in the group of Prof. N. Rajewsky, MDC in Berlin under the direct scientific supervision of habilitation candidate, Dr. Monika Piwecka.

Martina Maccino – scholarship, 07-09/2016. Student from *La Sapienza* University in Rome. She completed a research internship in the group of Prof. N. Rajewsky, MDC in Berlin under the direct scientific supervision of habilitation candidate, Dr. Monika Piwecka.

Magdalena Grunt – student of Experimental Biology at the Faculty of Biology of Adam Mickiewicz University in Poznań, mentoring and scientific supervision during the preparation of the Master's thesis in ICHB PAN (2011-2012).

Magdalena Kozłowicz – student of Biotechnology at the Faculty of Biology, Adam Mickiewicz University in Poznań, mentoring and scientific supervision during the preparation of the master's thesis at ICHB PAN (2008-2009), major supervisor: prof. dr hab. Jan Barciszewski.

12. Membership in editorial committees and scientific boards of journals, including the functions performed by the applicant (e.g. editor-in-chief, chairman of scientific board etc.).

12/2021 - 05/2023 **Guest Editor** and **Topic Editor** in the journal *Frontiers in Molecular Neuroscience* (IF = 5.8; ISSN: 16625099, publisher: Frontiers Media S.A., Switzerland).

In particular, together with co-editors Dr. Catia Andreassi (University College London, UK) and Dr. Raphaëlle Luisier (Idiap Research Institute, Switzerland), the habilitation applicant was responsible for editing the collection of articles that we entitled: “*RNA at a Breaking Point? Cytoplasmic Cleavage and other Post-Transcriptional RNA Processing in Neurodevelopment and Disease*”. The collection included 18 scientific articles, including 9 original research papers, 1 Opinion paper, 3 mini-reviews, 4 review papers, 1 editorial article. The collection of these articles was also published as an e-Book.

All articles in the collection are published in Open Access format and are available for preview on *Frontiers in Molecular Neuroscience* website or on the collection website „*RNA at a Breaking Point? Cytoplasmic Cleavage and other Post-Transcriptional RNA Processing in Neurodevelopment and Disease*” under the link:

<https://www.frontiersin.org/research-topics/30809/rna-at-a-breaking-point-cytoplasmic-cleavage-and-other-post-transcriptional-rna-processing-in-neurodevelopment-and-disease#overview>

13. Information on membership in the teams assessing applications for financing of research projects, applications for scientific awards, applications in other competitions of scientific or didactic character.

- The habilitation candidate was a reviewer of grant applications for the National Science Centre (NCN) in 2021-2022. NCN is the main funding agency for basic research in Poland.
- The habilitation candidate was a reviewer of grant applications for Czech Science Foundation (www.gacr.cz/en), the main funding agency for basic research in Czech Republic (2024).

14. Awards and distinctions.

- 2023: Eclipse BioInnovation 2023 Matching Funds Award (SanDiego, CA, USA).
- 2020: Poland Intelligent Development Award in the category "*Scientist of the Future*".
- 2016: the best research publication in 2015 at the Institute of Bioorganic Chemistry of the Polish Academy of Sciences, concerning publication **P1** (Piwecka *et al.*, Molecular Oncology, 2015).
- 2010/2011: scholarship awarded by the Voivodeship Labor Office as part of the "Scholarship support for doctoral students in fields considered strategic from the point of view of the development of Wielkopolska".
- 2006-2009: Scholarship of the President of the Polish Academy of Sciences.

III. INFORMATION ON COOPERATION WITH SOCIAL AND ECONOMIC ENVIRONMENT

1. Obtaining the right of industrial property, including the national or international patents granted.

The Applicant was a co-author of the following international patents:

- European Patent, Patent No. EP2978847 B1; Date of publication: 15.02.2017.

HAMMERHEAD RIBOZYMES TARGETING MIR-21

Inventors: NASKRET-BARCISZEWSKA, Mirosława (PL); BELTER, Agnieszka (PL); ROLLE, Katarzyna (PL); **PIWECKA, Monika** (PL); SOSINSKA, Patrycja (PL); FEDORUK-WYSZOMIRSKA, Agnieszka (PL).

- United States Patent, Patent No.: US 8,404,660 B2; Date of Patent: Mar. 26, 2013.

METHOD OF OBTAINING OF 4-N-FURFURYL CYTOSINE AND/OR ITS DERIVATIVES,
AN ANTI-AGING COMPOSITION AND USE OF 4-N-FURFURYL CYTOSINE AND/OR ITS
DERIVATIVES IN THE MANUFACTURE OF ANTI-AGING COMPOSITION

Inventors: Jan Barclszewski, Poznan (PL); Wojciech T. Markiewicz, Poznan (PL); Eliza Wyszko, Poznan (PL); Maria Markiewicz, Poznan (PL); **Monika Nowak, Kostrzyn (PL)**; Katarzyna Rolle, Kamionki (PL); Ewelina Adamska, Kamien Pomorski (PL); Marcin K. Chmielewski, Poznan (PL).

IV. SCIENTOMETRIC INFORMATION

1. Information on the *Impact Factor* (acc. *Web of Science Core Collection*) from the year preceding publications

Total *Impact Factor* = **166.461**

Total *Impact Factor* of **the habilitation achievement** = **92.578**

2. Information on the number of citations excluding self-citations (acc. to *Web of Science Core Collection*, record from 16/08/2024).

Total number of citations = **1244**

Total number of citations from **the habilitation achievement** = **1035**

3. Information about the Hirsch index.

Hirsch Index (acc. to *Web of Science Core Collection*, record from 16/08/2024) = **10**

4. Information on the number of MNiSW points.

Total number of MNiSW points from the year preceding the publication = **1665**

Total number of MNiSW points according to the newest list published 05/01/2024 = **2620**

Total number of MNiSW points from the year preceding the publications enclosed to **the habilitation achievement** = **390**

Total number of MNiSW points of the publications enclosed to **the habilitation achievement** (according to the newest list published 05/01/2024) = **640**

5. Profiles in bibliographic databases

ORCID	https://orcid.org/0000-0003-4104-6577
ResearchGate	https://www.researchgate.net/profile/Monika-Piwecka
Google Scholar	https://scholar.google.com/citations?hl=en&user=VkSbbY0AAAAJ
Web of Science Researcher ID	HTM-5056-2023



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(Applicant's signature)