

Curriculum vitae

Name and Surname: doc., RNDr. Radovan Fiala, CSc.

Email: radovan.fiala@ceitec.muni.cz

Phone number: 774 436 880

Permanent address: Oblá 403/35, Brno – Nový Lískovec, 634 00

Education

- Physical Chemistry, J. E. Purkyně University, Brno, RNDr. 1983
- Institute of Analytical Chemistry, ČSAV, CSc. 1991
- Associate professor, Masaryk University, Brno, 2009

Employment experience

- Assistant, Czechoslovak Academy of Science, Institute of Analytical Chemistry, 1984 - 1991
- Postdoctoral research scientist, Columbia University, Dept. of Biochemistry and Molecular Biophysics, New York, NY, 1991 - 1992
- Postdoctoral research fellow, Memorial Sloan-Kettering Cancer Center, New York, NY, 1992 - 1994
- Research Associate, Memorial Sloan-Kettering Cancer Center, New York, NY, 1994 - 1995
- Assistant Laboratory Member, Memorial Sloan-Kettering Cancer Center, New York, NY, 1996 - 1997.
- Scientific Researcher, Masaryk University, Brno, 1997 – 2009, Associate professor since 2009.

List of Key Projects

- TAČR DELTA 2: Targeting the Androgen Receptor – Development of Binding Molecules for Prostate Cancer Treatment and Enhancement of the NMR-AI Platform for More Efficient Drug Design, 2024-2025 (Co-investigator of the project)
- Remote NMR (R-NMR): Moving NMR infrastructures to remote access capabilities (coordinator at MU)
- CIISB - the Czech Infrastructure for Integrative Structural Biology
- European Research Infrastructure Consortium INSTRUCT ERIC
- iNEXT-Discovery: Infrastructure for transnational access and discovery in integrated structural biology

List of Recent Publications

- Dubsky, J., Omelka, L., Pilar, J., Tarábek, J., Klima, J., Horacek, M., Stopka, P., Jirsa, M., Fiala, R., Zoppellaro, G., Badura, Z., Dadok, J., Neugebauer, P. ESR in the Czech Republic, its Historical Overview, Current Status, and Future, *Applied Magnetic Resonance* 2024, **55**, 1047–1064.
- Gonzalez-Olvera, J. C., Fiala, R., Pless, R. C. Protonation of Guanine:5-Methylcytosine and Guanine:Cytosine Base Pairs in Duplex Oligodeoxyribonucleotides. *ChemistrySelect*. Wiley Online Library, 2022, roč. 7, č. 30, s. 202200835-202200846. ISSN 2365-6549. doi:10.1002/slct.202200835.

- Lenarčič Živković, M., Gajarský, M., Beková, K., Stadlbauer, P., Vicherek, L., Petrova, M., Fiala, R., Rosenberg, I., Šponer, J., Plavec, J., Trantírek, L. Insight into Formation Propensity of Pseudocircular DNA G-Hairpins. *Nucleic Acids Research*. Oxford: Oxford University Press, 2021, roč. 49, č. 4, s. 2317-2332. issn 0305-1048. doi:10.1093/nar/gkab029.
- Novotný, A., Novotný, J., Kejnovská, I., Vorlíčková, M., Fiala, R., Marek, R. Revealing Structural Peculiarities of Homopurine G_n Repetition Stuck By I-Motif Clip. *Nucleic Acids Research*. Oxford: Oxford University Press, 2021, roč. 49, č. 20, s. 11425-11437. issn 0305-1048. doi:10.1093/nar/gkab915.

List of Significant Publications

- Krafčíková, M., Dzatko, S., Caron, C., Granzhan, A., Fiala, R., Loja, T., Teulade-Fichou, M.-P., Fessl, T., Hansel-Hertsch, R., Mergny, J.-L., Foldynova-Trantírková, S., Trantírek, L. Monitoring DNA-Ligand Interactions in Living Human Cells Using NMR Spectroscopy. *J. Am. Chem. Soc.*, 2019, **141**, 13281–13285.
- Dzatko, S., Krafčíková, M., Hänsel-Hertsch, R., Fessl, T., Fiala, R., Loja, T., Krafčík, D., Mergny, J.-L., Foldynova-Trantírková, S., Trantírek, L. Evaluation of stability of DNA i-motifs in the nuclei of living mammalian cells. *Angew. Chem. Int. Ed.* 2018, **57**, 2165–2169.
- Fiala, R., Czernek, J., Sklenář, V. Transverse relaxation optimized triple-resonance NMR experiments for nucleic acids. *J. Biomol. NMR* 2000, **16**, 291-302.
- Akke, M., Fiala, R., Jiang, F., Patel, D., Palmer, A. Base dynamics in a UUCG tetraloop RNA hairpin characterized by ¹⁵N spin relaxation: Correlations with structure and stability. *RNA* 1997, **3**, 702-709.