CV

Identification data

Name, surname, titles	**Libor Grubhoffer, prof. RNDr., CSc., dr. h. c. mult.**
Name and address of employer	Biology Centre CAS, Branišovská 1160/31, 370 05 České Budějovice
Occupation, Functions	Director
Contact	Email: libor.grubhoffer@bc.cas.cz Tel: +420 387775050 https://www.bc.cas.cz/en/contacts/employee-list/contact/41-liborgrubhoffer/
Author identifiers	0000-0003-0885-1849 Researcher ID (RID) G-9762-2014
Professional specialization	Infectious Biology (Virology, Microbiology, Parasitology)

Education and academic qualifications

- 2001, Professor in Molecular and Cell Biology and Genetics, University of South Bohemia
- 1997, Associate Professor in Molecular and Cell Biology, University of South Bohemia
- 1987, CSc. (=Ph.D.), Scientific Postgraduate in Microbiology/Virology, Institute of Serums and Vaccines, n.p. and Institute of Microbiology, Czechoslovak Academy of Sciences, Prague
- 1982 RNDr. in Biochemistry, Faculty of Science, Charles University, Prague
- 1981, Graduate in chemistry, Faculty of Science, Charles University, Prague

Overview of employment

- 2017-: Director of the Biology Centre CAS in České Budějovice;
- 2012-2016: Rector of the University of South Bohemia in České Budějovice;
- 2004-2011: Dean of the Faculty of Biology of USB, since 1/8/2007 of the Faculty of Science of USB;
- 2007-2023: Guarantor of the cross-border Study Programme 'Biological Chemistry' of USB with Johannes KeplerUniversity, Linz,;
- 1994-2002: Director of the Institute of Parasitology CAS;
- 1991-: Academic staff/teacher, Faculty of Biology, since 1/8/2007 Faculty of Science, USB; teaching Biochemistry; Biochemistry of parasites; Virology; Medical Virology; Biochemistry; Glycobiochemistry;
- 1991-2022: Head of the Laboratory of Molecular Ecology of Vectors and Pathogens, Institute of Parasitology, since 1994 joint laboratory with the Faculty of Biology, Faculty of Science, USB, since 1/8/2007;
- 1987-: Researcher at the Institute of Parasitology of the Czechoslovak Academy of Sciences, since 2007 at the Biology Centre CAS;
- 1986-1993: Researcher at the Institute of Parasitology of the Czechoslovak Academy of Sciences in České Budějovice; Department of Natural Focuses of Diseases, Arbovirological Laboratory (until 1991);

- 1987-: Researcher at the Institute of Parasitology of the Czechoslovak Academy of Sciences, since 2007 at the Biology Centre CAS;
- 1983-1986: Researcher at the Institute of Serums and Vaccines in Prague and the Research Institute for Pharmacy and Biochemistry in Prague;
- 1982-1983: Researcher at the Research Institute of Organic Syntheses in Pardubice-Rybitví

Summary of research management experience

Leadership or management of organisational units:

- 1991-2022: Joint laboratory of molecular ecology of vectors and pathogens of the Institute of Parasitology CAS and the Faculty of Biology of the Faculty of Science of the USB; Head
- 1994-2002: Director of the Institute of Parasitology CAS
- 2004-2011: Faculty of Biology, USB, since 1/8/2007 Faculty of Science, USB, Dean
- 2012-2016: University of South Bohemia in České Budějovice; Rector
- 2017-: Czech Society for Biochemistry and Molecular Biology, Chairman
- 2017-: Biology Centre CAS in České Budějovice, Director of the Centre
- 2022-2024: Learned Society of the Czech Republic, President

Panel leadership/management, membership of expert and scientific boards:

- 2003-2014: Vice-Chairman/Member of the Committee for the Evaluation of Institutional Research Projects and Results of Institutes of the Czech Academy of Sciences in the field of Life Sciences and Chemistry
- 2004-2014: Czech Committee of the International Union of Biological Sciences (IUBS); Chairman
- 2004-2010: Council of the CAS Programme "Support for Targeted Research Projects"; member
- 2004-2010: Board of the CAS grant programme "Strengthening targeted research"; member of the Board
- 2005- : South Bohemia Agency for the Promotion of Innovative Entrepreneurship, o.p.s. (JAIP) and Chairman of the Supervisory Board, Vice-Chairman of the Board of Consultants of JAIP, until 2008); since 2009 member of the Board of Directors and the Board of Consultants;
- 2006-: L´Oréal-UNESCO Prize for Women in Science, permanent member of the jury;
- 2007-2011: Scientific Committee of ´EMBO Workshops on the Molecular and Population Biology of Mosquito and other Disease Vectors´ (Crete, Greece); Member;
- 2007-2022: Cross-border Bachelor and Master Degree Programme in Biological Chemistry, with double diploma (Bc./B.Sc. and Mgr./M.Sc.), USB together with Johannes Kepler University Linz, Austria, co-Founder and Guarantor/Coordinator, member of the Programme Board;
- 2010-2015: Roadmap of the Czech Republic's large infrastructures for research, development and innovation, member of the programme's Opposition Board (delegate of the Czech Rectors' Conference);
- 2011-2013: Coordinating Council of Experts (CCE) of the Council for Research, Experimental Development and Innovation for the formulation of priorities of oriented research "PRIORITIES 2030", (chairman Prof. R. Haňka), member of CCE and vice-chairman of panel 5 "Protection and promotion of human health";
- 2011-2013: The Czech Science Foundation (CSF = „GA ČR“) , evaluation panel P302 GACR (´Medical and Biological Sciences´); ember;
- 2014- : Czech Biotechnology Platform CEBIO, z.s. - Chairman of the Board;
- 2014-: Commission for Innovation of the South Bohemian Region, member;
- 2015-2019: Neuron Foundation for the Support of Science, member of the Scientific Council of the NF, guarantor of the field of Biology;
- 2016-: Czech Society for Cell Biology (CSBB), committee member;
- 2016-: Council of the National Accreditation Authority for Higher Education (NAAHE), member and rapporteur for the education area OV3: Biology, Ecology and Environment; OV13 Chemistry;

- 2016-: South Bohemian Theatre Foundation; Member
- 2017-: Czech Society for Biochemistry and Molecular Biology, z.s., chairman and member of the executive committees of the Federation of European Biochemical Societies (FEBS) and the International Union of Biochemistry and Molecular Biology (IUBMB);
- 2017-: Council of the Institute of Botany CAS; Member;
- 2017-: Supervisory Board of the Institute of Organic Chemistry and Biochemistry; Member;
- 2017-: Supervisory Board of the Hospice of St. Jana N. Neumann in Prachatice, Chairman
- 2020-: Council of the Institute of Global Change Research CAS; Member;
- 2021-2024: Agency for Medical Research of the Czech Republic, VES Programme, Subprogramme: 'The impact of the COVID-19 pandemic on the health situation in the Czech Republic', expert guarantor of area 5 - 'Immunological and virological studies';
- 2021-: Council for Cooperation with Universities, Academy of Sciences of the Czech Republic; member;
- 2021-: Expert Advisory Body, ERC.CZ Programme, Ministry of Education and Science of the Czech Republic, member;
- 2022-: FULBRIGHT CZ; Member of the Board;
- 2022 - 2025: National Institute of Virology and Bacteriology, NPO Exceles, LX22NPO5103; Consultant in Virology
- 2024-: ´czech2space´ Foundation; Member of the Board of Directors

Also a member of the scientific councils of Charles University; Comenius University in Bratislava; University of Chemical Technology in Prague; University of Pardubice; Tomas Bata University; University of South Bohemia in České Budějovice; Faculty of Science, Masaryk University; National Centre for Biomolecular Research, Masaryk University;

Membership of Editorial Boards:
Folia Parasitologica (1993-2012, associate editor); Journal of Applied Biomedicine (2017-:); Chemistry Letters (Prague, 2021-:)

Organisation and management of international schools and workshops:

- 1993-2015 ´BRAVO!' (Biomedical Research Abroad: Vistas open!), a joint educational project of the Institute of Parasitology (BC) of the CAS and the University of Arizona, Fogarty foundation, NIH (T37 TW00036-01, co-director/co-PI; PI: C. Bender); summer exchange visits of undergraduate and graduate students, academic staff; extended 5 times! (co-director/Co-PI; PI: C. Bender), (total of 15 students and young researchers/teachers reciprocated in 3-6 month stays in Tucson and České Budějovice; 2015: summer semester of 10 University of Arizona students in the laboratories of the Institute of Parasitology of the BC CAS, Fogarty Foundation, 3 months, coordinators: C. Bender, L. Grubhoffer, A. Zíková, J. Lukeš);
- 2001: 11th Summer School on Biology of Disease Vectors, České Budějovice, June/July 2001, McArthur Foundation, Howard Hughes, N.I.H., coordinator/organizer (with J. H. Law, University of Arizona, U.S.A.);
- 2005: International Summer School of Molecular Vector Biology, České Budějovice, June 2005, Ministry of Education, Youth and Sports, coordinator/main organizer;
- 2005-2006: Summer semesters for students from the University System of Georgia, U.S.A., Czech Budejovice, July 2005, July 2006; coordinator/organizer;
- 2008: ICTTD Bioinformatics Workshop, České Budějovice, June, 2008 (within the ICTTD-3 project, 6FP EU); coordinator/main organizer (together with J. Anderson, N.I.H. Bethesda, MD, USA);
- 2011: POSTICK Spring School on Tick Biology and Ecology, České Budějovice, May 2011, within the POSTICK project, EU FP7; coordinator/main organizer;

Scientific research activities

Biochemistry and molecular biology of disease vectors; environmental microbiology and arbovirology: Ticks and tick-borne pathogens - agents of infectious diseases in humans and animals - tick-borne encephalitis virus (TBEV), Lyme disease spirochetes, protein-saccharide interactions in pathogen/parasite-host relationships at the molecular and cellular levels; glycosyltransferases; glycosylation in the mechanisms of pathogen transmission by ticks and other blood-sucking arthropods, the role of proteases and their inhibitors in the natural immunity of blood-sucking arthropods; structure-function properties of antigenic components of *Borrelia burgdorferi* s.l. and tick-borne encephalitis virus; virulence factors of pathogens; research and development of vaccines against ticks and tick-borne pathogens.

Basic scientometric indicators

- Number of publications: 171 (WoS); 257 (in total)
- Total number of citations excluding self-citations (WoS): > 4 000; H-index: 36
- Total number of citations excluding self-citations: > 6 000 (RG); H-index: 42
- Number of patents/utility models and other IPRs: 3 patents
- Patent No. 254637 Method of concentration and purification of parotitis virus
- Patent No. 274307 Method for the determination of the apple wrapper virus /Carpocapsa pomonella/
- Patent No. 276157 Hybridom 12/G5 producing a monoclonal antibody against tick-borne encephalitis virus

Publication activity for the last 5 years and the current year (2019-2023 and 2024)

Publications 2024-2019

- Alaverdyan J., Celina S., Jirků M., Golovchenko M**.**, Italiya J., Grubhoffer L., Rudenko N**.**, Cerny J. 2024: A first look at the relationship between large herbivore-induced landscape modifications and *Ixodes ricinus* tick abundance in rewilding sites. *Vector-Borne and Zoonotic Diseases* (in press) [IF = 1.8].
- Grubhoffer L., Rudenko N., Golovchenko M., Loginov D., Dyčka F., Provazník J., Beneš V., Global profiling of differential genes and proteins expression in alternative forms of Borrelia. (2024), Posters. FEBS Open Bio, 14: 92-516.DOI: 10.1002/2211-5463.13837
- Mašková H., Doudová L., Lieskovská J., Grubhoffer L., Štěrba J. (2024) Characterization of stem cell-derived langerhans-like cells: new model immune cells for tick-borne encephalitis virus infection studies, *Stem Cell Reviews and Reports* **20**: 1367-1369. DOI: 10.1007/s12015-024-10722-6
- Mazuecos L., Contreras M., Kasaija P.D., Manandhar P., Grąźlewska W., Guisantes-Batan E., Gomez-Alonso S., Deulofeu K., Fernandez-Moratalla I., Rajbhandari R.M., Sojka D., Grubhoffer L., Karmacharya D., Gortazar C., de la Fuente J. 2023: Natural *Clerodendrum-derived* tick repellent: learning from Nepali culture. *Experimental and Applied Acarology* 90: 83-98. [IF = 2.2]. DOI: 10.1007/s10493-023-00804-4
- Rudenko N., Golovchenko M., Horák A., Grubhoffer L., Mongodin E.F., Fraser C.M., Qiu W., Luft B.J., Morgan R.G., Casjens S.R., Schutzer S.E. 2023: Genomic confirmation of *Borrelia garinii* in the USA. *Emerging Infectious Diseases* 29: 1. [IF = 11.8]. DOI: 10.3201/eid2901.220930
- Grubhoffer L., Mašková H., Doudová L., Selinger M., Věchtová P., Štěrba J. 2022: Verification of markers for early stage of tick-borne encephalitis infection *in vitro* and *in vivo*. *Febs Open Bio* 12: 164-164 Supl. 1, Special Issue. [IF=2.792] Meeting Abstract.
- Hrnková J., Golovchenko M., Musa A.S., Needham T., Italiya J., Ceacero F., Kotrba R., Grubhoffer L., Rudenko N., Černý J. 2022: *Borrelia spirochetes* in European exotic farm animals. *Frontiers in Veterinary Science* 9: 996015. [IF=3.471]
- Selinger M., Novotný R., Sýs J., Roby J.A., Tykalová H., Ranjani G.S., Vancová M., Jaklová K., Kaufman F., Bloom M.E., Zdráhal Z., Grubhoffer L., Forwood J.K., Hrabal R., Rumlová M., Štěrba J. 2022: Tick-borne encephalitis virus capsid protein induces translational shut-off as revealed by its structural-biological analysis. *Journal of Biological Chemistry* 298: 102585. [IF = 4.8]. DOI: 10.1016/j.jbc.2022.102585

- Selinger M., Věchtová P., Tykalová H., Ošlejšková P., Rumlová M., Štěrba J., Grubhoffer L. 2022: Integrative RNA profiling of TBEV-infected neurons and astrocytes reveals potential pathogenic effectors. *Computational and Structural Biotechnology* 20: 2759-2777. [IF=6.155]
- Selinger M., Věchtová P., Tykalová H., Ošlejšková P., Rumlová M., Štěrba J., Grubhoffer L. 2022: The analysis of differential expression and interactions of host and virus derived RNAs in human primary neural cells reveals candidate effectors of TBEV-induced neuropathogenesis. *Febs Open Bio* 12: 164-164 Supl. 1, Special Issue. [IF=2.792] Meeting Abstract.
- de la Fuente J., Armas O., Sánchez-Rodríguez L., Gortázar C., Lukashev A.N., COVID-BCG Collaborative Working Group 2021 - Kotsyfakis M., Grubhoffer L.: Citizen science initiative points at childhood BCG vaccination as a risk factor for COVID-19. *Transboundary and Emerging Diseases* 6: 3114-3119. [IF=5.005]. DOI10.1111/tbed.14097
- Hejduk L., Rathner P., Strnad M., Grubhoffer L., Štěrba J., Rego R. O. M., Muller N. 2021: Resonance assignment and secondary structure of DbpA protein from the European species, *Borrelia afzelii*. *Biomolecular NMR Assignments* 15: 415-420 [IF = 0.9]. DOI: 10.1007/s12104-021-10039-2
- Hrnková J., Schneiderová I., Golovchenko M., Grubhoffer L., Rudenko N., Černý J. 2021: Role of zoo-housed animals in the ecology of ticks and tick-borne pathogens-a review. *Pathogens* 10: 210. [IF=3.492]. DOI: 10.3390/pathogens10020210
- Kotsarenko K., Věchtová P., Wimmerová M., Štěrba J., Grubhoffer L. 2021: Possible ways for manipulating the gene expression in *Ixodes ricinus* ticks. *FEBS Open Bio* 11: 141. [IF=2.693] *Meeting Abstract*
- Oh Y.J., Strnad M., Vancová M., Hain L., Salo J., Grubhoffer L., Nebesářová J., Hytoenen J., Hinterdorfer P., Rego R.O.M. 2021: Nanomechanical mechanisms of Borrelia interactions with extracellular matrix. European Biophysics *Journal with Biophysics Letters* 50: S59. [IF=1.733]
- Rusanov A.L., Kozhin P.M., Tikhonova O.V., Zgoda V.G., Loginov D.S., Chlastakova A., Selinger M., Sterba J., Grubhoffer L., Luzgina N.G. 2021: Proteome profiling of PMJ2-R and primary peritoneal macrophages. *International Journal of Molecular Sciences* 22: 6323 [IF=5.924]. DOI: 10.3390/ijms22126323.
- Štěrbová J., Kocová P., Pekárek L., Selinger M., Ondrus J., Grubhoffer L., Štěrba J. 2021: Click-on-Membrane for Detection of Metabolically Labelled Proteins and RNA. *Chemistry Letters* 115: 662-668. [IF=0.6].
- Strnad M., Oh Y.J., Vancová M., Hain L., Salo J., Grubhoffer L., Nebesářová J., Hytönen J., Hinterdorfer P., Rego R. O. M. 2021: Nanomechanical mechanisms of Lyme disease spirochete motility enhancement in extracellular matrix. *Communications Biology* 4: 268. [IF = 5.9]. DOI: 10.1038/s42003-021-01783-1
- Věchtová P., Füssy Z., Štěrba J., Grubhoffer L. 2021: Expression of glycan biosynthetic enzymes and glycan-binding proteins in *Ixodes ricinus* tick life stages. *FEBS Open Bio* 11: 498. [IF=2.693] *Meeting Abstract.*
- Cerny J., Lynn G., Hrnkova J., Golovchenko M., Rudenko N., Grubhoffer L. 2020: Management options for *Ixodes ricinus-associated* pathogens: a review of prevention strategies. *International Journal of Environmental Research and Public Health* 17: 1830 [IF=2.849]. DOI: 10.3390/ijerph17061830
- Helmová R., Hönig V., Tykalová H., Palus M., Bell-Sakyi L., Grubhoffer L. 2020: Tick-borne encephalitis virus adaptation in different host environments and existence of quasispecies. *Viruses* 12: 902. [IF=3.816]. DOI: 10.3390/v12080902
- Kaufman F., Dostálková A., Pekárek L., Thanh T.D., Kapisheva M., Hadravová R., Bednárová L., Novotný R., Křížová I., Černý J., Grubhoffer L., Ruml T., Hrabal R., Rumlová M. 2020: Characterization and *in vitro* assembly of tick-borne encephalitis virus C protein. *FEBS Letters* 594: 1989-2004 [IF=3.057]. DOI: 10.1002/1873-3468.13857
- Kotsarenko K., Věchtová P., Hammerová Z., Langová N., Malinovská L., Wimmerová M., Štěrba J., Grubhoffer L. 2020: Newly identified DNA methyltransferases of *Ixodes ricinus* ticks. *Ticks and Tick-borne Diseases* 11: 101348. [IF=2.749]. DOI: 10.1016/j.ttbdis.2019.101348
- Kotsarenko K., Věchtová P., Lieskovská J., Füssy Z., Cabral-de-Mello D.C., Rego R.O.M., Alberdi P., Collins M., Bell-Sakyi L., Štěrba J., Grubhoffer L. 2020: Karyotype changes in long-term cultured tick cell lines. *Scientific Reports* 10: 13443. [IF=3.998]. DOI: 10.1038/s41598-020-70330-5
- Lattová E., Straková P., Pokorná-Formanová P., Grubhoffer L., Bell-Sakyi L., Zdráhal Z., Palus M., Růžek D. 2020: Comprehensive N-glycosylation mapping of envelope glycoprotein from tick-borne encephalitis virus grown in human and tick cells. *Scientific Reports* 10: 13204. [IF=3.998]. DOI: 10.1038/s41598-020-70082-2
- Rusanov A.L., Stepanov A.A., Zgoda V.G., Kaysheva A.L., Selinger M., Mašková H., Loginov D., Štěrba J., Grubhoffer L., Luzgina N.G. 2020: Proteome dataset of mouse macrophage cell line infected with tick-borne encephalitis virus. *Data in Brief* 28: 105029. [IF=0]. DOI: 10.1016/j.dib.2019.105029

- Strnad M., Grubhoffer L., Rego R.O.M. 2020: Novel targets and strategies to combat borreliosis. *Applied Microbiology and Biotechnology* 104: 1915-1925 [IF=3.530]. DOI: 10.1007/s00253-020-10375-8
- Vancová M., Bílý T., Šimo L., Touš J., Horodyský P., Růžek D., Novobilský A., Salát J., Strnad M., Sonenshine D., Grubhoffer L., Nebesářová J. 2020: Three-dimensional reconstruction of the feeding apparatus of the tick *Ixodes ricinus* (Acari: Ixodidae): a new insight into the mechanism of blood-feeding. *Scientific Reports* 10: 165. [IF=3.998]. DOI: 10.1038/s41598-019-56811-2
- Věchtová P., Fussy Z., Štěrba J., Erhart J., Beneš V., Grubhoffer L. 2020: Catalogue of stage-specifc transcripts in *Ixodes ricinus* and their potential functions during the tick life-cycle*. Parasites and Vectors* 13: 311. [IF = 3.2]. DOI: 10.1186/s13071-020-04173-4
- Zubrikova D., Wittmann M., Hönig V., Švec P., Víchová B., Essbauer S., Dobler G., Grubhoffer L., Pfister K. 2020: Prevalence of tick-borne encephalitis virus and *Borrelia burgdorferi* sensu lato in *Ixodes ricinus* ticks in Lower Bavaria and Upper Palatinate, Germany. *Ticks and Tick-borne Diseases* 11: 101375. [IF=2.749]. DOI: 10.1016/j.ttbdis.2020.101375
- Grubhoffer L., Selinger M., Tykalová H., Schnettler E., Štěrba J. 2019: Tick-borne encephalitis virus inhibits production of ribosomal RNA in human cells of neuronal origin. *Febs Open Bio* 9 Suppl. 1 Meeting Abstract P-10-008): 158-159.
- Hönig V., Švec P., Marek L., Mrkvička T., Zubriková D., Wittmann (Vörgerl) M., Masař O., Szturcová D., Růžek D., Pfister K., Grubhoffer L. 2019: Model of risk of exposure to Lyme borreliosis and tick-borne encephalitis virus-infected ticks in the border area of the Czech Republic (South Bohemia) and Germany (Lower Bavaria and Upper Palatinate). *International Journal of Environmental Research and Public Health* 16: 1173. [IF=2.468]. DOI: 10.3390/ijerph16071173
- Rego R. O. M., Trentelman J.J., Anguita J., Nijhof A., Sprong H., Klempa B., Hajdušek O., Tomás-Corázar J., Azagi T., Strnad M., Knorr S. , Šíma R., Jalovecká M., Havlíková S., Ličková M., Sláviková M., Kopáček P., Grubhoffer L., Hovius J. 2019: Counterattacking the tick bite: towards a rational design of anti-tick vaccines targeting pathogen transmission*. Parasites and Vectors* 12: 229 [IF = 3.2]. DOI: 10.1186/s13071-019-3468-x
- Selinger M., Tykalová H., Štěrba J., Věchtová P., Vavrušková Z., Lieskovská J., Kohl A., Schnettler E., Grubhoffer L. 2019: Tick-borne encephalitis virus inhibits rRNA synthesis and host protein production in human cells of neural origin. *Plos Neglected Tropical Diseases* 13: e0007745. [IF = 3.8]. DOI: 10.1371/journal.pntd.0007745
- Švec P., Hönig V., Zubriková D., Wittmann M., Pfister K., Grubhoffer L. 2019: The use of multi-criteria evaluation for the selection of study plots for monitoring of *I. ricinus* ticks - Example from Central Europe. *Ticks and Tick-borne Diseases* 10: 905-910 [IF=3.055]. DOI: 10.1016/j.ttbdis.2019.04.014
- Vancová M., Bílý T., Nebesářová J., Grubhoffer L., Bonnet S., Šimo L. 2019: Ultrastructural mapping of salivary gland innervation in the tick *Ixodes ricinus*. *Scientific Reports* 9: 6860. [IF = 4.6]. DOI: 10.1038/s41598-019-43284-6

The five most cited articles in impacted journals

- De la Fuente J., Antunes S., Bonnet S., Domingos A., Estrada-Peña A., Johnson N., Kocan K., Mansfield K., Nijhof A., Papa A., Rudenko N., Villar M., Alberdi P., Torina A., Ayllón N., Vancova M., Golovchenko M., Grubhoffer L., Caracappa S., Fooks A., Gortazar C., Rego R. O. M. 2017: Tick-pathogen interactions and vector competence: identification of molecular drivers for tick-borne diseases. *Frontiers in Cellular and Infection Microbiology* 7: 114 [IF = 5.7]. DOI: 10.3389/fcimb.2017.00114
- Rudenko N., Golovchenko M., Grubhoffer L., Oliver J. 2011: Updates on *Borrelia burgdorferi sensu lato* complex with respect to public health. *Ticks and Tick-Borne Diseases* 2: 123-128 [IF = 3.2]. DOI: 10.1016/j.ttbdis.2011.04.002
- Hajdusek O., Sojka D., Kopacek P., Buresova V., Franta Z., Sauman I., Winzerling J., Grubhoffer L. 2009: Knockdown of proteins involved in iron metabolism limits tick reproduction and development. *PNAS* 106: 1033-1038. [IF = 11.1]. DOI: 10.1073/pnas.0807961106
- Ahantarig A., Trinachartvanit W., Baimai V., Grubhoffer L. 2013: Hard ticks and their bacterial endosymbionts or would be pathogens). *Folia Microbiologica* 58: 419-428 [IF = 2.6]. DOI: 10.1007/s12223-013-0222-1
- Strnad M., Hönig V., Růžek D., Grubhoffer L., Rego R. O. M. 2017: Europe-wide meta-analysis of *Borrelia burgdorferi sensu lato* prevalence in questing *Ixodes ricinus* ticks. *Applied and Environmental Microbiology* 83: e00609-17 [IF = 4.4]. DOI: 10.1128/AEM.00609-17

Scientific prizes and awards, academic memberships

- 2003-2013: Adjunct Member of the James H. Oliver, Jr. Institute of Arthropodology and Parasitology at Georgia Southern University, Statesboro, GA, USA;
- 2006-2022: Cross-border study programme 'Biological Chemistry' with double diploma (B.Sc./B.Sc. and M.Sc./M.Sc.), Johannes Kepler University, Linz and University of South Bohemia in České Budějovice, guarantor/coordinator and board member;
- 2009: Laureate of the annual "LeConte Lecture Award", Georgia Southern University, Georgia, USA;
- 2009: Award of the Rector of the University of South Bohemia for the leadership of the Faculty of Science of the University of South Bohemia;
- 2009: Award of the Mayor of the Statutory City of České Budějovice for contribution to science and representation of the city;
- 2012: Cross Border Award 2012 for cross-border project of Biological Chemistry (BSc/MSc study programs with double/point degree at Johannes Keller University in Linz (Austria) and University of South Bohemia), together with prof. Norbert Müller (Linz, Austria); Award of Chambers of Commerce of South Bohemia and Upper Austria;
- 2015: Laureate of the annual lecture in honour of Josef Ludvík Fischer, Palacký University in Olomouc;
- 2015: Commemorative medal of Palacký University in Olomouc;
- 2015: Elected member of the Learned Society of the Czech Republic;
- 2015: Founding member of "The Comenius Academic Club", Highland Park, NJ, USA.;
- 2016: Honorary degree "Doctor of Science", University of Arizona, Tucson, AZ, U.S.A.;
- 2016-: Council of the National Accreditation Authority for Higher Education (NAAHE), member;
- 2016-: Czech Society for Cell Biology (CSBB), committee member;
- 2017-: Czech Society for Biochemistry and Molecular Biology, z.s., chairman and member of the executive committees of the Federation of European Biochemical Societies (FEBS) and the International Union of Biochemistry and Molecular Biology (IUBMB);
- 2017-: Council of the Institute of Botany CAS; Member;
- 2017: Supervisory Board of the Institute of Organic Chemistry and Biochemistry, v.v.i., member;

- 2018: Honorary degree "Doctor of Natural Sciences", Johann Kepler University Linz, Austria;
- 2020: Council of the Institute of Global Change Research CAS; Member;
- 2021: Medal of Merit awarded by the Mayor of České Budějovice.
- 2022: Honorary degree "Doctor honoris causa", University of Pardubice;
- 2022-: FULBRIGHT CZ, member of the board;

Member of the scientific boards of Charles University; Comenius University in Bratislava; University of Chemical Technology in Prague; University of Pardubice; Tomas Bata University; University of South Bohemia in České Budějovice; Faculty of Science, Masaryk University; National Centre for Biomolecular Research, Masaryk University;

Invited Lectures Abroad

Ticks and Tick-borne Pathogens Meetings (1999_Stará Lesná, Vysoké Tatry, Slovakia; 2005_Neuchatel, Switzerland; 2011_Zaragoza, Spain); International Congress of Entomology, 2004_Brisbane, Australia; International Congress of Acarology, 2006_ Amsterdam, Netherlands; Comenius Academic Club Conference, 2015_New York, USA; invited lectures at Free University Berlin, Germany (1995); University of Glasgow, UK (1998); Karel de Grote Hogeschool (3 years semester teaching of the subject ´Parasitology´ (Erasmus), Antwerp, Belgium; Georgia Southern University, Statesboro, GA, USA (2003; 2009); University of Neuchatel, Switzerland (2004); Metting SOVE (Society for Vector Ecology), Serres 2006, Greece; University of Giessen, Germany (2010); National Taiwan University/Agriculture Frans Meeting (2012); Armstrong Atlantic University, Savannah, GA, USA (2013);

Stays Abroad

- University of Uppsala (Sweden), Lab. Prof. K. Söderhäll, (post-doctoral stay, 4 months,1989);
- University of Arizona, Tucson (USA), Lab. Prof. M.A. Wells, (post-doctoral stay, 12 months,1992);
- University of Arizona, Tucson (USA), Lab. Prof. J. H. Law, (Invited researcher, 3 months,1995);
- University of Glasgow, (Scotland), Lab. Prof. I. Maudlin (Invited researcher, 1 month, 1997);
- Karel de Grote Hogeschool (semester teaching of the subject ´Parasitology´ (Invited profesor, Erasmus, 1999-2001);
- Georgia Southern University, Statesboro (USA), Lab. Prof. J. H. Oliver, Jr. (Invited profesor, NATO fellowship, 3 months, 2003);

Most important projects implemented (as principal investigator, co-investigator, key person)

- 1992-1995: FAO/IAEA technical project (6804/RB/TC, co-principal investigator)
- 1993-2007: A joint educational project of USB and University of Arizona 'BRAVO!' (Biomedical Research Abroad: Vistas open!), Fogarty foundation, NIH (T37 TW00036-01, co-principal investigator)
- 1996-2000: P-250', a grant project of the Ministry of Education and Science within the programme "Strengthening Research and Development at Universities" (VS 96066, investigator; team leader)
- 2003-2006: Joint research project with NRC-IBS Ottawa within ´S&T Cooperation/Canada and AV ČR ´Investigation of selected aspects of Lyme disease glycobiology (investigator/PI);
- 2004-2010: Integrated Consortium on Ticks and Tick-borne Diseases (ICTTD-3; 6th FP EU ´Coordination Action´ Project No. 510561; co-director/co-PI)
- 2006-2011: MŠMT - Research Centre ´Centre for Molecular Ecology of Vectors and Pathogens´ (LC06009, investigator);
- 2006-2007: Inpharmatica Ltd., London, UK - project on cDNA libraries of germline genes with potential therapeutic/biomedical applications, (Principal Investigator/PI);

- 2007-2008: EUREKA project together with Dynex CZ, s.r.o.; (development of laboratory diagnostics of Lyme disease using ´smart´ PCR technique), (investigator/PI);
- 2009-2011: EU - Operational Programme for Cross-Border Cooperation Objective-3; 'Ticks and tick-borne diseases in the conditions of the South Bohemian Region and Bavaria', together with Ludwig-Maxmilians University Munich, (investigator/PI)
- 2010-2013: ´POSTICK´ under Marie Curie Programme, FP7 EU _ Education of PhD students/´early stage researchers´, (Principal Investigator/PI, ID: 238511, 7 partners from 3 EU countries; Coordinator: L.M.C. L.M.L. Passos);
- 2011-2016: International project ANTIGONE (ANTIcipating the Global Onset of Novel Epidemics), 7FP EU; (project no. 278976), (PI/PI, 14 partners from 7 EU countries; Coordinator: T. Kuiken, Erasmus University, Rotterdam, The Netherlands) ;
- 2014-2018: International project ANTIDotE (Anti-tick Vaccines to Present Tick-borne Diseases in Europe), FP7 EU; (Project No. 602272), (PI/PI, 7 partners from 5 EU countries, Coordinator: J. WR Hovius, Academic Medical Centre (AMC), University of Amsterdam, Amsterdam, The Netherlands);
- 2016-2018: Large Research Infrastructure Projects MSMT-1000/2016 C4SYS Center for Systems Biology, MSMT;
- 2019-2022: National Centre of Competence for Materials, Advanced Technologies, Coatings and their Applications, TA ČR, NCK I TN01000038, Principal Investigator Institute of Physics CAS;
- 2022 - 2025: National Institute of Virology and Bacteriology, NPO Exceles, LX22NPO5103, Principal Investigator Institute of Organic Chemistry and Biochemistry CAS;
- 2023-2028: National Centre of Competence for Materials, Advanced Technologies, Coatings and their Applications, TA CR, NCK II, TN02000069, Principal Investigator Institute of Physics CAS;
- 2025- 2028: Project Biology of hyaluronic acid, MŠMT, OP JAK, CZ.02.01.01/00/23_020/0008499, partners Contipro a.s., University of South Bohemia in České Budějovice (Faculty of Science, JU).

Solver/PI

- 10x GA CR; 5x GA CAS CR; 1x IGA MZd (co-principal investigator); 1x NAZVA MZe; 4x FRVŠ; 1x CONTACT; 2x AKTION; 2x Inter-Action; MOEYS OP JAK;
- Co-PI of Centre on Molecular Ecology of Vectors and Pathogens, of 10 international projects (IAAE; BRAVO! Fogarty Foundation/N.I.H.; S&T Cooperation/NRC Canada and CAS; ICTTD-3, INCO-Programme, FP6 EU; of **6** international grants and consortia (Interreg/"Ziel-3"; FP7 EU - PEOPLE-ITN-(Marie Curie); FP7 EU-HEALTH-2011-two-stage; *FP7 EU-HEALTH-2013.2.3.4-1;C4SYS (ESFRI);* INTER-EXCELLENCE Program;

International grants received

- 2003-2006: Joint research project with NRC-IBS Ottawa within ´S&T Cooperation/Canada and AV ČR ´Investigation of selected aspects of Lyme disease glycobiology (investigator/PI);
- 2004-2010: Integrated Consortium on Ticks and Tick-borne Diseases (ICTTD-3; 6th FP EU ´Coordination Action´ Project No. 510561; co-director/co-PI)
- 2006-2007: Inpharmatica Ltd., London, UK - project on cDNA libraries of germline genes with potential therapeutic/biomedical applications, (investigator/PI);
- 2009-2011: EU - Operational Programme for Cross-Border Cooperation, Interreg Objective-3; ´Licks and tick-borne diseases in the conditions of the South Bohemian Region and Bavaria´, together with Ludwig-Maxmilians University Munich, (investigator/PI)
- 2010-2013: ´POSTICK´ under Marie Curie Programme, FP7 EU _ Education of PhD students/´early stage researchers´, (Principal Investigator/PI, ID: 238511, 7 partners from 3 EU countries; Coordinator: L.M.C. L.M.L. Passos);
- 2011-2016: International project ANTIGONE (ANTIcipating the Global Onset of Novel Epidemics), 7FP EU; (project no. 278976), (PI/PI, 14 partners from 7 EU countries; Coordinator: T. Kuiken, Erasmus University, Rotterdam, The Netherlands);
- 2014-2018: International project ANTIDotE (Anti-tick Vaccines to Present Tick-borne Diseases in Europe), FP7 EU; (Project No. 602272), (PI/PI, 7 partners from 5 EU countries, Coordinator: J. WR Hovius, Academic Medical Centre (AMC), University of Amsterdam, Amsterdam, The Netherlands);

Application results and collaboration with the application community for the last 5 years and the current year (2019-2023 and 2024)

- Pandemic covid-19: for BC, coordination of cooperation with the Institute of Physics CAS (Dr. H. Lisalová) on the development of a chip for rapid diagnosis of SAR-CoV-2 virus; coordination of cooperation with CARDAM on testing of protective masks from 3D printing in the operation of the virology laboratory in BSL-3 mode;
- Pandemic covid -19: for BC, coordination of cooperation with DYNEX CZ (Ing. Z. Hanzlíková) on the development of rapid point-of-care diagnostics of SARS-CoV-2 virus based on isothermal PCR (LAMP);
- Chairman of the Council for Commercialization of the Biology Centre CAS;
- Member of the Council for Commercialization of the University of South Bohemia in České Budějovice
- Member of the Innovation Commission of the South Bohemia Region;
- Chairman of the Supervisory Board of the South Bohemian Agency for the Promotion of Innovative Entrepreneurship, o.p.s. (JAIP).