

## BIOGRAPHICAL SKETCH

### HENNING ULRICH

Work address: Department of Biochemistry, Instituto de Química, Universidade de São Paulo; e-mail: henning@iq.usp.br; [http://www3.iq.usp.br/pessoas\\_view.php?idDocente=2](http://www3.iq.usp.br/pessoas_view.php?idDocente=2)

Actual position: Full Professor

#### 1. Expertise and actuation

- Recognized as world expert in purinergic signaling during neurogenesis and neurodegenerative and psychiatric diseases (Parkinson, Alzheimer, etc.).
- Discovery of neuroregenerative and neurodegenerative properties of kinin, acetylcholine and purinergic receptor activities
- Purinergic and kinin signaling in neuroinflammation and ageing
- Development and preclinical tests
- Disease modeling of neuronal diseases with developmental origin; iPS cells, transgene ES cells and modification with CRISPR-Cas9
- Calcium signaling and disease targeting; developmental neuroscience and behavior
- Animal models for neurodegenerative diseases; drug screening
- Aptamer discovery for tracking stem and cancer cells and targeting proteins of therapeutic interest
- Strategic planning of in vitro and preclinical experiments.
- Company consultation about market and product development

#### 2. Professional education and training:

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Time	Education	Institution
1982- 1984	Economy	University of Heidelberg
1984- 1991	Studies of Biology – Diploma	Universities of Hamburg and Kiel, Germany
1995	Advances studies in Molecular Biology	University of Hamburg
1995	Ph.D. in Biological Sciences	University of Hamburg
2007	Habilitation (Professor Livre-Docente)	University of São Paulo

#### Professional history:

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Time	Position	Institution
1995 -1996	Postdoctoral fellow	Center for Molecular Neuro-biology, University of Hamburg
1996 - 1999	Postdoctoral American Heart Association Fellow	Department of Molecular Biology & Genetics, Cornell University, Ithaca, NY
1999 - 2001	Postdoctoral fellow DAAD-FAPESP fellow	Institute of Chemistry, University of São Paulo Brazil
2001 - 2007	Assistant Professor	Biochemistry Dept., Institute of Chemistry, University of São Paulo
2007 – 2016	Associate Professor	Biochemistry Dept., Institute of Chemistry, University of São Paulo
Since 2016	Full Professor	Biochemistry Dept., Institute of Chemistry, University of São Paulo
Since 2017	Research Dean	Institute of Chemistry, Univ. of São Paulo
2003, 2005, 2007	Visiting Professor	Center for Molecular and Behavioral

Since 2014

Visiting Professor

Neuroscience, Universidad Central del  
Caribe, Bayamón, Puerto Rico  
Jozsef Stefan Institute, Ljubljana,  
Slovenia

## **2. Professional achievements, academic distinctions and awards**

### **Leadership at the university**

- Vice-dean of the Graduate Studies Program in Biochemistry, University of the São Paulo (2010-2012)
- Vice-dean of the Master Studies in Technics in Chemistry and Biochemistry, University of São Paulo (since 2016), University of the São Paulo (2010-2012)
- Dean (president) of Research Issues of the Institute of Chemistry, University of São Paulo (since 2017)

### **Leadership in scientific societies:**

- Founding member, Vice-President (2010-2012); President (2012-2018) Brazilian Society for Purinergic Signalling (Brazilian Purine Club)
- Councilor, -Part of Education and Innovation Committee of the International Society for Advancement of Cytometry (ISAC): Introducing state-of-the-art cytometry techniques in developing countries.
- Organizer and chairman of Brazilian and International Congresses of the Brazilian Purine Club: Purinergic signalling and therapeutic applications (2010 -2016). May 30-June 2, 2015 International Congress on Purinergic Signalling;
- Organizer and President of Purines 2018 (International Congress on Purinergic Signalling), Foz de Iguaçu
- Chairman of further congresses and symposia on stem cells, neural differentiation and purinergic signalling

### **Editor of scientific journal**

- Associate Editor Cytometry A, since 2007
- Academic Editor PLoS ONE, since 2009;
- Purinergic Signalling, since 2012.
- Section Editor Stem Cell Reviews and Reports, since 2015
- Editorial Board Neuropharmacology, since 2019

### **Premiums:**

- Fellowship for productivity in research awarded by the Brazilian government funding agency CNPq, level **1B** (until 2023).
- Sarkis Award 2015 (Principal International Purine meeting 2015)
- IX Award Octavio Frias de Oliveira in Oncology 2018: Manuscript "Ulrich et al. (Frontiers in Pharmacology)". Principle award in oncology in Brazil
- Developing Nation Award – IASLC 17th World Conference on Lung Cancer 2016.
- Best presented work – 11<sup>th</sup> World Congress on Neurology and Therapeutics, Madrid 2016
- American Heart Association fellow (1996-1999)
- Honored by Universidad da Frontera (Chile) and Federal University of Bahia (Brazil) for research development

### **Advisor and/or Consultant of companies and research institutions focused on translational research.**

- Intercientifica, Brazil (2011-2014): Substitution of antibodies by aptamers for Multiplex Luminex assays for detection of infectious diseases in newborns
- CO-BIK, Slovenia; Center of Excellence focused on aptamers as biosensoric agents (2010-2014);
- Specialized Neuroscience Research Program of the Universidad del Caribe (2005-2008); coral cembranoids as neuroprotective agents (2004 -2008)
- Pluricell, Brazil: Characterization of cardiomyocyte differentiation from human iPS cells
- TissueGnostics, Austria: Imaging solutions and analysis in development and neurodegeneration
- Biolinker (Slovenia and Brazil) Aptamers for cell production and purification of therapeutic relevant proteins

### **Company founding:**

- Clave Biotechnology (Brazil): Company specialized on aptamer production

## **3. Basic and Translational Current grant support (As coordinator)**

1. Thematic Project (FAPESP): “Stem cells: From kinin and purinergic receptors towards therapeutic applications (01/12/2012 – 28/02/2019).”
2. Joint grants CONICYT Chile – FAPESP Brazil - “Indole Alkaloid sub products of Maqui (*Aristotelia chilensis*) processing as food additives for Alzheimer's disease treatment (01/12/2018 - 30/11/2021)”.

#### **Completed projects (last three years) ( As coordinator)**

1. Grant CNPq “DECIT N °28/2014 – Regenerative medicine and cell therapy in neurodegenerative diseases: from in vitro differentiation to therapy in vivo (2014-2016)
2. Science without frontiers grant (CNPq 402468/2012-0) The Relevance of Kinin and Related Purinergic Signalling Pathways in Glioblastoma Cells upon Co-culturing with Human Mesenchymal Stem Cells. (01/12/2012– 30/11/2016)
3. Regular grant (Edital universal, CNPq 486294/2012-9). Purinergic and kinin receptor in stem cell differentiation (01/11/2012-31/10/2015).
4. Joint grant Brazil / Germany (FAPESP/BMBF ): “Aptamers for discovery of diagnostic markers and therapeutic inhibitors in infectious diseases (01/12/2012 – 28/02/2015).
5. Joint grant Brazil / Slovenia (CNPq): “Development of aptamers into analytic tools for the detection of tumor stem cells circulating in the patient plasma (08/08/2012– 07/08/2014).
6. Grant “Translational research in therapy (CNPq 467465/2014-2): “Stem cells: From kinin and purinergic receptors towards therapeutic applications in CNS disorders (01/12/2012– 31/11/2014).
7. Joint grant Brazil / Germany (FAPESP/BMBF): “Aptamers for discovery of diagnostic markers and therapeutic inhibitors in infectious diseases (01/12/2012 – 30/05/2015).

**4. Ongoing supervisions, with fellowships:** 8 postdocs, 4 doctoral students, 1 master student

#### **5. Quantitative indicators:**

- 1) Published books: 4
- 2) Published peer-reviewed papers: 181
- 3) Book chapters:30
- 4) Patents (conceded or solicited): 4
- 5) Doctoral theses supervised and defended: 22
- 6) Master theses supervised and defended: 6
- 7) Supervision of Post-docs concluded: 15
- 8) Supervision of undergraduates concluded: 23

**7. My Citations on Google Scholar: 181 articles and 4929 citations (H-factor: 39)**

**Research profile.** Henning Ulrich [http://scholar.google.com.br/citations?hl=pt-BR&user=gA\\_t84YAAAAJ&view\\_op=list\\_works&sortby=pubdate&cstart=0&pagesize=20](http://scholar.google.com.br/citations?hl=pt-BR&user=gA_t84YAAAAJ&view_op=list_works&sortby=pubdate&cstart=0&pagesize=20)

**Web of Science: Researcher ID:** <http://www.researcherid.com/rid/C-5245-2013>: 2976 citations (H-factor:31)

#### **6. Further information:**

- Associate / Section Editor: PLoS ONE, Stem Cell Reviews & Reports, Purinergic Signalling, Cytometry A, Editorial Board: Neuropharmacology, Journal of Caffeine and Adenosine Research
- Founding member of the Brazilian Purine Club: Vice President 2010-2013; President 2013-218; Council: since 2018
- Council and Education Committee of ISAC (International Society for Advancement of Society)
- Visiting professor / Teaching Committee in India, Hungary, Slovenia, Poland and Germany.
- Organization of flow cytometry classes and workshops in Cytometry and Stem Cells
- Chair-man of scientific Committee of International Congresses on Purines and Cytometry
- More than 250 abstracts presented at national and international congress. 150 invited lectures at universities and more than 100 invited lectures at national and international congresses.
- Ad-hoc reviewer of Brazilian, Chilean, US, Indian and European funding agencies. Reviewer for more than 100 international scientific journals.

## PUBLICATION LIST

Peer-reviewed publications (total of 181).

1. Hirsch MM, Deckmann I, Santos-Terra J, Staevie GZ, Fontes-Dutra M, Carello-Collar G, Körbes-Rockenbach M, Schwingel GB, Bauer-Negrini G, Rabelo B, Gonçalves MCB, Corrêa-Velloso J, Naaldijk Y, Castillo AR, Schneider T, Bambini-Junior V, Ulrich H, Gottfried C (2020) Effects of single-dose antipurinergic therapy on behavioral and molecular alterations in the valproic acid-induced animal model of autism. *Neuropharmacology* 2020. doi.org/10.1016/j.neuropharm.2019.107930
2. Arnaud-Sampaio VF, Rabelo ILA, Ulrich H, Lameu C (2019) The P2X7 Receptor in the Maintenance of Cancer Stem Cells, Chemoresistance and Metastasis. *Stem Cell Rev Rep*. 2019. doi: 10.1007/s12015-019-09936-w.
3. Viviani L, Piccirillo E, Ulrich H, Tavares do Amaral AT (2019). Virtual Screening Approach for the Identification of Hydroxamic Acids as Novel Human Ecto-5'-Nucleotidase Inhibitors. *J Chem Inf Model*. 2019. doi: 10.1021/acs.jcim.9b00884
4. Oliveira M, Botelho de Santana LL, Serafim JC, Santos AO, Quintino MP, Menezes Correia JT, Damasceno F, Sabino JR, Cardim Pires TR, Cerqueira Coelho PL, de Faria Lopes GP, Ulrich H, Costa SL, Cunha S (2019) Design, synthesis and cytotoxicity of the antitumor agent 1-azabicycles for chemoresistant glioblastoma cells. *Investigational New Drugs* 2019. doi: 10.1007/s10637-019-00877-2
5. Ulrich H, Resende RR (2019). Mechanisms of neural differentiation and integration. *Semin Cell Dev Biol*. 95:1-3
6. Linzke M, Yan SLR, Tárnok A, Ulrich H, Groves MR, Wrenger C (2019) Live and Let Dye: Visualizing the Cellular Compartments of the Malaria Parasite *Plasmodium falciparum*. *Cytometry A*. 2019. doi: 10.1002/cyto.a.23927.
7. Oliveira MN, Breznik B, Pillat MM, Pereira RL, Ulrich H., Lah TT (2019) Kinins in Glioblastoma Microenvironment. *Cancer Microenvironment* 12(2-3):77-9.
8. Nery AA, Pereira, R. L. ; Bassaneze V ; Nascimento IC ; Sherman, Lauren S. ; Rameshwar, Pranela ; Lameu C ; Ulrich H. (2019) Combination of Chemical and Neurotrophin Stimulation Modulates Neurotransmitter Receptor Expression and Activity in Transdifferentiating Human Adipose Stromal Cells. *Stem Cell Reviews and Reports*, 2019. doi: 10.1007/s12015-019-09915-1
9. Baldissarelli J, Mânica A, Pillat MM, Bagatini MD, Leal DBR, Abdalla FH, Morsch VM, Ulrich H, Bornemann CP, Chitolina Schetinger MR (2019). Increased cytokines production and oxidative stress are related with purinergic signaling and cell survival in post-thyroidectomy hypothyroidism. *Mol Cell Endocrinol*. 499:110594.
10. Bottari NB, Schetinger MRC, Pillat MM, Palma TV, Ulrich H, Alves MS, Morsch VM, Melazzo C, de Barros LD, Garcia JL, Da Silva AS (2020) Resveratrol as a Therapy to Restore Neurogliogenesis of Neural Progenitor Cells Infected by *Toxoplasma gondii*. *Molecular Neurobiology* 56, 2328-2338, 2019.
11. Alves JM, Martins AH, Lameu C, Glaser T, Boukli NM, Bassaneze V, Dariolli R, Nascimento IC, Martins PCM, de Souza HDN, Krieger JE, Casarini DE, Sales VM, Pesquero JB, Ulrich H. (2019) Kinin-B2 Receptor Activity in Skeletal Muscle Regeneration and Myoblast Differentiation. *Stem Cell Reviews and Reports* 15, 48-58, 2019.

12. Bottari NB, Pillat MM, Schetinger MRC, Reichert KP, Machado V, Assmann CE, Ulrich H, Dutra A, Morsch VM, Vidal T, Da Cruz IBM, Melazzo C, Da Silva AS (2019). Resveratrol-mediated reversal of changes in purinergic signaling and immune response induced by *Toxoplasma gondii* infection of neural progenitor cells. *Purinergic Signalling* 15 77-84.
13. Fracasso M, Bottari NB, da Silva AD, Grando TH, Pillat MM, Ulrich H, Vidal T, de Andrade CM, Monteiro SG, Nascimento LFN, Miletti LC, Schafer da Silva A (2019). Effects of resveratrol on the differentiation fate of neural progenitor cells of mouse embryos infected with *Trypanosoma cruzi*. *Microbial Pathogenesis* 132, 156-161, 2019.
14. Ratajczak MZ, Mack A, Bujko K, Domingues A, Pedziwiatr D, Kucia M, Ratajczak J, Ulrich H, Kucharska-Mazur J, Samochowiec J (2019). ATP-Nlrp3 Inflammasome-Complement Cascade Axis in Sterile Brain Inflammation in Psychiatric Patients and its Impact on Stem Cell Trafficking. *Stem Cell Reviews and Reports* 15, 1497-505.
15. Czechowska K, Lannigan J, Wang L, Arcidiacono J, Ashhurst TM, Barnard RM, Bauer S, Bispo C, Bonilla DL, Brinkman RR, Cabanski M, Chang HD, Chakrabarti L, Chojnowski G, Cotleur B, Degheidy H, Dela Cruz GV, Eck S, Elliott J, Errington R, Filby A, Gagnon D, Gardner R, Green C, Gregory M, Groves CJ, Hall C, Hammes F, Hedrick M, Hoffman R, Icha J, Ivaska J, Jenner DC, Jones D, Kerckhof FM, Kukat C, Lanham D, Leavesley S, Lee M, Lin-Gibson S, Litwin V, Liu Y, Molloy J, Moore JS, Müller S, Nedbal J, Niesner R, Nitta N, Ohlsson-Wilhelm B, Paul NE, Perfetto S, Portat Z, Props R, Radtke S, Rayanki R, Rieger A, Rogers S, Rubbens P, Salomon R, Schiemann M, Sharpe J, Sonder SU, Stewart JJ, Sun Y, Ulrich H, Van Isterdael G, Vitaliti A, van Vreden C, Weber M, Zimmermann J, Vacca G, Wallace P, Tárnok A (2019). Cyt-Geist: Current and Future Challenges in Cytometry: Reports of the CYTO 2018 Conference Workshops. *Cytometry A*. 95(6):598-644.
16. Reichert KP, Schetinger MRC, Pillat MM, Bottari NB, Palma TV, Gutierrez JM, Ulrich H, Andrade CM, Exley C, Morsch VMM (2019). Aluminum affects neural phenotype determination of embryonic neural progenitor cells. *Arch Toxicol*. 2019 93(9):2515-2524
17. Baptista MS, Alves MJM, Arantes GM, Armelin HA, Augusto O, Baldini RL, Basseres DS, Bechara EJH, Bruni-Cardoso A, Chaimovich H, Colepicolo Neto P, Colli W, Cuccovia IM, Da-Silva AM, Di Mascio P, Farah SC, Ferreira C, Forti FL, Giordano RJ, Gomes SL, Gueiros Filho FJ, Hoch NC, Hotta CT, Labriola L, Lameu C, Machini MT, Malnic B, Marana SR, Medeiros MHG, Meotti FC, Miyamoto S, Oliveira CC, Souza-Pinto NC, Reis EM, Ronsein GE, Salinas RK, Schechtman D, Schreier S, Setubal JC, Sogayar MC, Souza GM, Terra WR, Truzzi DR, Ulrich H, Verjovski-Almeida S, Winck FV, Zingales B, Kowaltowski AJ (2019). Where do we aspire to publish? A position paper on scientific communication in biochemistry and molecular biology. *Braz J Med Biol Res*. 2019;52(9):e8935.
18. Oliveira-Giacomelli A, Albino CM, Souza HDN, Correa-Velloso J, Santos AP, Baranova J, Ulrich H (2019). P2Y6 and P2X7 Receptor Antagonism Exerts Neuroprotective/ Neuroregenerative Effects in an Animal Model of Parkinson's Disease. *Frontiers in Cellular Neuroscience* 13, 476, 2019.
19. Cossarizza A, Chang HD, Radbruch A, Acs A, Adam D, Adam-Klages S, Agace WW, Aghaeepour N, Akdis M, Allez M, Almeida LN, Alvisi G, Anderson G, Andrä I, Annunziato F, Anselmo A, Bacher P, Baldari CT, Bari S, Barnaba V, Barros-Martins J, Battistini L, Bauer W, Baumgart S, Baumgarth N, ....., Ulrich H et al. (2019).

- Guidelines for the use of flow cytometry and cell sorting in immunological studies (second edition). Eur J Immunol. 2019 49:1457-1973.
20. Fracasso M, Bottari NB, da Silva AD, Grando TH, Pillat MM, Ulrich H, Palma TV, de Andrade CM, Monteiro SG, Nascimento LFN, Miletti LC, Schafer da Silva A (2019) Effects of resveratrol on the differentiation fate of neural progenitor cells of mouse embryos infected with *Trypanosoma cruzi*. Microb Pathog. 132:156-161
  21. Ribeiro DE, Glaser T, Oliveira-Giacomelli Á, Ulrich H (2019) Purinergic receptors in neurogenic processes. Brain Res Bull. 151:3-11.
  22. Glaser T, Arnaud Sampaio VF, Lameu C, Ulrich H (2019) Calcium signalling: A common target in neurological disorders and neurogenesis. Semin Cell Dev Biol. 95: 25-33
  23. Pelinson LP, Assmann C E., Palma TV, Cruz IB, Pillat MM, Manica A, Steffanello N, Weis GCC, Alves AO, Andrade CM, Ulrich H, Morsch VM, Schetinger MRC, Bagatini M (2019) Antiproliferative and apoptotic effects of caffeic acid on SK-Mel-28 human melanoma cancer cells. Molecular Biology Reports 46(2):2085-2092
  24. Viera MS, Goulart VAM, Parreira RC, Oliveira-Lima OC, Glaser-T, Naaldjik Y, Ferrer A, Savanur VH, Reyes PA, Sandiforo O, Rameshwar P; Ulrich H, Pinto MCX, Resende RR (2019). Decoding epigenetic cell signaling in neuronal differentiation. Semin Cell Dev Biol. 95: 12-24.
  25. Viera JM, Guiterres JM, Carvalho FB, Stefanello N, Oliveira L, Cardoso A, Morsch VM, Pillat MM, Ulrich H, Duarte MF, Schetinger MRC, Spanevello RM (2018) . Caffeine and high intensity exercise: Impact on purinergic and cholinergic signalling in lymphocytes and on cytokine levels. Biomedicine & Pharmacotherapy 108: 1731-1738
  26. Bagatini M, Bertolin K, Bridi A, Pelison LP, Bonadiman BS, Pillat MM, Gonçalves PBD, Ulrich H, Schetinger MRC, Morsch VM (2018) . 1 $\alpha$ , 25-dihydroxyvitamin D3 alters ectonucleotidase expression and activity in human cutaneous melanoma cells. Journal of Cellular Biochemistry 120(6):9992-10000.
  27. Teng Y, Wang L, Kabatas S, Ulrich H, Zafonte RD (2018) Cancer Stem Cells or Tumor Survival Cells? Stem Cells Dev. 27: 1466-1478.
  28. Viviani LG, Piccirillo E, Cheffer A, de Rezende L, Ulrich H, Carmona-Ribeiro AM, Amaral AT . Be Aware of Aggregators in the Search for Potential Human ecto-5'-Nucleotidase Inhibitors (2018) Molecules.;23(8). pii: E1876.
  29. da Silva AC, Semeano ATS, Dourado AHB, Ulrich H, Cordoba de Torresi SI (2018) Novel Conducting and Biodegradable Copolymers with Noncytotoxic Properties toward Embryonic Stem Cells. ACS Omega.;3(5):5593-5604.
  30. Vidic M, Smuc T, Janez N, Blank M, Accetto T, Mavri J, Nascimento IC, Nery AA, Ulrich H, Lah TT (2018). In Silico Selection Approach to Develop DNA Aptamers for a Stem-like Cell Subpopulation of Non-small Lung Cancer Adenocarcinoma Cell Line A549. Radiol Oncol. 52(2):152-159. Corresponding authors: Tamara T. Lah & Henning Ulrich.
  31. Pereira RL, Nascimento IC, Santos AP, Ogusuku IEY, Lameu C, Mayer G, Ulrich H (2018). Aptamers: novelty tools for cancer biology. Oncotarget. 1;9(42):26934-26953.
  32. França RT, Pillat MM, da Silva CB, Schafer AS, Dornelles GL, Costa MM, Chaves RO, de Andrade CM, Erhardt MM, Antoziazzi AQ, Ulrich H, da Silva AS, Lopes

- STDA (2018). Surface immunoglobulins of erythrocytes and platelets in dogs naturally infected by *Rangelia vitalii*. *Microb Pathog.* 121:245-251.
33. Kondaveeti S, Semeano ATS, Cornejo DR, Ulrich H, Petri DFS (2018) Magnetic hydrogels for levodopa release and cell stimulation triggered by external magnetic field. *Colloids Surf B Biointerfaces.* 167:415-424.
  34. Oliveira-Giacomelli Á, Naaldijk Y, Sardá-Arroyo L, Gonçalves MCB, Corrêa-Velloso J, Pillat MM, de Souza HDN, Ulrich H (2018) Purinergic Receptors in Neurological Diseases With Motor Symptoms: Targets for Therapy. *Front Pharmacol.* 9:325.
  35. de Almeida-Pereira L, Repossi MG, Magalhães CF, Azevedo RF, Corrêa-Velloso JDC, Ulrich H, Ventura ALM, Fragel-Madeira L (2018). P2Y12 but not P2Y13 Purinergic Receptor Controls Postnatal Rat Retinogenesis In Vivo. *Mol Neurobiol.* 55(11):8612-8624
  36. Frühauf-Perez PK, Temp FR, Pillat MM, Signor C, Wendel AL, Ulrich H, Mello CF, Rubin MA (2018). Spermine protects from LPS-induced memory deficit via BDNF and TrkB activation. *Neurobiol Learn Mem.* 149:135-143.
  37. Fernandes M, Valente SG, Sabongi RG, Gomes Dos Santos JB, Leite VM, Ulrich H, Nery AA, da Silva Fernandes MJ (2018). Bone marrow-derived mesenchymal stem cells versus adipose-derived mesenchymal stem cells for peripheral nerve regeneration. *Neural Regen Res.* 13(1):100-104.
  38. Oliveira MN, Pillat MM, Motaln H, Ulrich H, Lah TT (2018). Kinin-B1 Receptor Stimulation Promotes Invasion and is Involved in Cell-Cell Interaction of Co-Cultured Glioblastoma and Mesenchymal Stem Cells. *Sci Rep.* 8(1):1299. Corresponding authors: Tamara T. Lah & Henning Ulrich.
  39. Pinto Filho ST, Pillat MM, Rosa M, Dalmolin F, Ulrich H, Pippi F (2018) Expression patterns of mesenchymal stem cell -specific proteins in adipose tissue-derived cells: possible immunosuppressing agent in partial allograft for restoring the urinary bladder in rabbits. *Pesquisa Veterinaria Brasileira*, in press
  40. Viera MS, Santos AK, Vasconcellos R, Goulart VAM, Kihara AH, Ulrich H, Resende RR (2018). Neural stem cell differentiation to mature neurons: Mechanisms of regulation and biotechnological applications. *Biotechnology Advances*, 36(7):1946-1970. Corresponding authors: Rodrigo R. Resende & Henning Ulrich
  41. Rohani L, Johnson AA, Nagish P, Rancour DE, Ulrich H, Holland H (2018) . Molecular Cytogenetics and Quality Control: Clinical Guardians for Pluripotent Stem Cells. *Stem Cells Translational Medicine*, doi: 10.1002/sctm.18-0087.
  42. Ulrich H, Ratajczak MZ, Schneider G, Adinolfi E, Orioli E, Ferrazoli EG, Glaser T, Corrêa-Velloso J, Martins PCM, Coutinho F, Santos APJ, Pillat MM, Sack U, Lameu C (2018) Kinin and Purine Signaling Contributes to Neuroblastoma Metastasis. *Front Pharmacol.* 18;9:500.
  43. Gonçalves MCB, Corrêa-Velloso JC, Naaldijk YM, Cheffer A, Ulrich H (2018) Purinergic modulation of pathways associated to suicidal behavior. *Molecular Psychiatry*, 2018 Jun 11. doi: 10.1038/s41380-018-0088-3..
  44. Adamiak, M, Bujko, K, Cymer M, Plonka M, Glaser T, Kucia M, Ratajczak J, Ulrich H, Latif A, Ratajczak MZ (2018) . Novel evidence that extracellular nucleotides and purinergic signaling induce innate immunity-mediated mobilization of hematopoietic stem/progenitor cells. *Leukemia.* 2018 Mar 30. doi: 10.1038/s41375-018-0122-0.

45. Cheffer A, Castillo AR, Corrêa-Velloso JC, Gonçalves MCB, Naaldijk Y, Nascimento IC, Ulrich H (2018) Purinergic system in psychiatric diseases. *Molecular Psychiatry* 9:325.
46. Cossarizza A, Chang HD, Radbruch A, Akdis M, Andrä I, Annunziato F, Bacher P, Barnaba V, Battistini L, Bauer WM, Baumgart S, Becher B, Beisker W, Berek C, Blanco A, Borsellino G, Boulais PE, Brinkman RR, Büscher M, Busch DH, Bushnell TP, Cao X, Cavani A, Chattopadhyay PK, Cheng Q, Chow S, Clerici M, Cooke A, Cosma A, Cosmi L,....., Ulrich H et al. Guidelines for the use of flow cytometry and cell sorting in immunological studies. *Eur J Immunol.* 47(10):1584-1797
47. Bergamin LS, Figueiró F, Dietrich F, Manica FM, Filippi-Chiela EC, Mendes FB, Jandrey EHF, Lopes DV, Oliveira FH, Nascimento IC, Ulrich H, Battastini AMO (2017). Interference of ursolic acid treatment with glioma growth: An in vitro and in vivo study. *European Journal of Pharmacology* 811C (2017) pp. 268-275.
48. Corrêa-Velloso JC, Gonçalves MC, Naaldijk Y, Oliveira-Giacomelli Á, Pillat MM, Ulrich H (2017) Pathophysiology in the comorbidity of Bipolar Disorder and Alzheimer's Disease: pharmacological and stem cell approaches. *Prog Neuropsychopharmacol Biol Psychiatry.* 2018 Jan 3;80(Pt A):34-53.
49. Liang N, Trujillo CA, Negraes PD, Muotri AR, Lameu C, Ulrich H (2017) Stem cell contributions to neurological disease modeling and personalized medicine. *Prog Neuropsychopharmacol Biol Psychiatry.* pii: S0278-5846(17)30232-4.
50. Dati LM, Ulrich H, Real CC, Feng Zp, Sun HS, Britto LR (2017) Carvacrol promotes neuroprotection in the mouse hemiparkinsonian model. *Neuroscience* pii: S0306-4522(17)30336-6. doi: 10.1016/j.neuroscience.2017.05.013.
51. Martinez-Ramirez AS, Diaz-Munoz M, Battastini AM, Campos-Contreras AR, Bergamin L, Glaser T, Ulrich H, Vazquez-Cuevas F (2017) Cellular migration ability is modulated by extracellular purines in ovarian carcinoma SKOV-3 cells. *Journal of Cellular Biochemistry* doi: 10.1002/jcb.26104.
52. Ferrazoli EG, Souza HDN, Nascimento IC, Oliveira-Giacomelli A, Schwindt TT, Britto LRG, Ulrich H (2017) Brilliant Blue-G but not Fenofibrate Treatment Reverts Hemiparkinsonian Behavior and Restores Dopamine Levels in an Animal Model of Parkinson's Disease. *Cell Transplantation* 26, 669-677.
53. Signor C, Girardi BA, Wendel AL, Fruhauf PKS, Pillat MM, Ulrich H, Mello CF, Rubin MA (2017) Spermidine improves the persistence of reconsolidated fear memory and neural differentiation in vitro: involvement of BDNF. *Neurobiology of Learning and Memory.* 140, 82-91.
54. Baldissarelli J, Pillat MM, Schmatz R, Cardoso AM, Abdalla FH, de Oliveira JS, Polachini CRN, Casali E, Bornemann CP, Ulrich H, Morsch VM, Schetinger MRC (2017). Post-thyroidectomy hypothyroidism increases the expression and activity of ectonucleotidases in platelets: Possible involvement of reactive oxygen species. *Platelets* 1:1-10.
55. Takada SH, Ikebara JM, de Sousa E, Cardoso DS, Resende RR, Ulrich H, Rückl M, Rüdiger S, Kihara AH (2018) Determining the Roles of Inositol Trisphosphate Receptors in Neurodegeneration: Interdisciplinary Perspectives on a Complex Topic. *Mol Neurobiol.* 54(9):6870-6884
56. Doná F, Conceição IM, Ulrich H, Ribeiro EB; Freitas TA, Nencioni AL, da Silva Fernandes MJ (2016) Variations of ATP and its metabolites in the hippocampus of



- rats subjected to pilocarpine-induced temporal lobe epilepsy. *Purinergic Signalling* 12, 295-302.
57. Pinto MCX, Tonelli FMP, Viera ALG, Kihara AH, [Ulrich H](#), Resende RR (2016) Studying complex system: calcium oscillations as attractor of cell differentiation. *Integrative Biology* 8, 130-148.
  58. Pillat MM, Lameu C, Trujillo CA, Glaser T, Cappellari AR, Negraes PD, Battastini, AM ; Schwindt TT, Muotri AR, [Ulrich H](#) (2016) Bradykinin promotes neuron-generating division of neural progenitor cells via ERK activation. *Journal of Cell Science* 129, 3437-3448.
  59. Pillat MM, Oliveira M, Montaln H, Breznik B, Glaser T, Lah TT, [Ulrich H](#) (2016) Glioblastoma-mesenchymal stem cell communication modulates expression patterns of kinin receptors: Possible involvement of bradykinin in information flow. *Cytometry. Part A*, 89, 365-375.
  60. Oliveira Á, Illes P, [Ulrich H](#) (2016) Purinergic receptors in embryonic and adult neurogenesis. *Neuropharmacology* 104, 272-81.
  61. Naaldijk YM, Bittencourt MC, Sack U, [Ulrich H](#) (2016) Kinins and microglial responses in Bipolar Disorder: a neuroinflammation hypothesis. *Biological Chemistry* 397:283-96.
  62. Cruz LN, Wu Y, [Ulrich H](#), Craig AG, Garcia CR (2016) Tumor necrosis factor reduces Plasmodium falciparum growth and activates calcium signaling in human malaria parasite. *BBA - General Subjects* 1860, 1489-97.
  63. Paschon V, Takada SH, Ikebara JM, Sousa E, Raesossadati R, [Ulrich H](#), Kihara AH (2016). Interplay Between Exosomes, microRNAs and Toll-Like Receptors in Brain Disorders. *Molecular Neurobiology* 53, 2016-28.
  64. Silva CLC, Morandini AC, [Ulrich H](#), Ojcius DM, Coutinho-Silva R (2016) Purinergic signaling during Porphyromonas gingivalis infection. *Biomedical Journal* 39, 251-260.
  65. [Ulrich H](#) (2015) In vitro microniches for stem and progenitor cell differentiation and brain vasculature explored by flow cytometry. *Cytometry Part A*. 87, 895-896.
  66. Pinto MC, Kihara AH, Goulart VA, Tonelli FM, Gomes KN, [Ulrich H](#), Resende RR (2015) Calcium signaling and cell proliferation. *Cellular Signaling* 27, 2139-49.
  67. Nascimento IC, Glaser T, Nery AA, Pillat MM, Pesquero JB, [Ulrich H](#) (2015) Kinin-B1 and B2 Receptor Activity in Proliferation and Neural Phenotype Determination of Mouse Embryonic Stem Cells. *Cytometry Part A* 87, 989-1000.
  68. Oliveira SL, Trujillo CA, Negraes PD, [Ulrich H](#) (2015) Effects of ATP and NGF on Proliferation and Migration of Neural Precursor Cells. *Neurochemical Research* 40, 1849-1857.
  69. Delač M, Motaln H, [Ulrich H](#), Lah TT (2015) Aptamer for imaging and therapeutic targeting of brain tumor glioblastoma. *Cytometry Part A*, 87, 806-816.
  70. Pillat MM, Cheffer A, de Andrade CM, Morsch VM, Schetinger MR, [Ulrich H](#) (2015), Bradykinin-induced inhibition of proliferation rate during neurosphere differentiation: Consequence or cause of neuronal enrichment? *Cytometry Part A*, 87, 929-935.
  71. Glaser T, Bueno VB, Cornejo DR, Petri DF, [Ulrich H](#) (2015) Neuronal adhesion, proliferation and differentiation of embryonic stem cells on hybrid scaffolds made of xanthan and magnetite nanoparticles. *Biomedical Materials* 10, 045002.

72. Avelar GM, Glaser T, Leonard G, Richards TA, Ulrich H, Gomes SL (2015) A Cyclic GMP-Dependent K<sup>+</sup> Channel in the Blastocladiomycete Fungus *Blastocladiella emersonii*. *Eukaryotic Cell*, 14, 958-63.
73. Negraes PD, Trujillo CA; Pillat MM, Teng YT, Ulrich H (2015) Roles of kinins in the nervous system. *Cell Transplantation*, 24, 613-623.
74. Berríos VO, Boukli NM, Rodriguez JW, Negraes PD, Schwindt TT, Trujillo CA, Oliveira SL, Cubano LA, Ferchmin PA, Eterović VA, Ulrich H, Martins AH (2015) Paraoxon and Pyridostigmine Interfere with Neural Stem Cell Differentiation. *Neurochemical Research* 40, 2091-2101.
75. Silva TM, França GR, Ornelas IM, Loiola EC, Ulrich H, Ventura AL (2015) Involvement of nucleotides in glial growth following scratch injury in avian retinal cell monolayer cultures. *Purinergic Signaling* 11, 183-201.
76. Oelkrug C, Sack U, Boldt A, Nascimento IC, Ulrich H (2015) Fricke S. Antibody- and aptamer-strategies for GvHD prevention. *Journal of Cellular and Molecular Medicine* 19, 11-20.
77. Ulrich H, do Nascimento IC, Bocsi J, Tárnok A (2015) Immunomodulation in stem cell differentiation into neurons and brain repair. *Stem Cell Reviews* 11, 474-86.
78. Schneider G, Glaser T, Lameu C, Abdelbaset-Ismael A, Sellers ZP, Moniuszko M, Ulrich H, Ratajczak MZ (2015) Extracellular nucleotides as novel, underappreciated pro-metastatic factors that stimulate purinergic signaling in human lung cancer cells. *Molecular Cancer* 14, 201
79. Cappellari AR, Pillat MM, Souza HD, Dietrich F, Oliveira FH, Figueiró F, Abujamra AL, Roesler R, Lecka J, Sévigny J, Battastini AM, Ulrich H (2015) Ecto-5'-Nucleotidase Overexpression Reduces Tumor Growth in a Xenograph Medulloblastoma Model. *PLoS One* 10, e0140996.
80. Ortiz R, Ulrich H, Zarate CA Jr, Machado-Vieira R (2015). Purinergic system dysfunction in mood disorders: a key target for developing improved therapeutics. *Prog Neuropsychopharmacol Biol Psychiatry*.;57:117-31.
81. Ulrich H, Illes P (2014) P2X receptors in maintenance and differentiation of neural progenitor cells. *Neural Regeneration Research* 9, 2040-1.
82. Molina ES, Pillat MM, Moura-Neto V, Lah TT, Ulrich H (2014) Glioblastoma stem-like cells: approaches for isolation and characterization. *Journal of Cancer Stem Cell Research* 2:e1007.
83. Lee G, Maclean DM, Ulrich H, Zhao X, Aronowski J, Jayaraman V (2014) RNA Based Antagonist of NMDA Receptors. *ACS Chem Neuroscience* 5: 559-567.
84. Glaser T, de Oliveira SL, Cheffer A, Beco R, Martins P, Fornazari M, Lameu C, Junior HM, Coutinho-Silva R, Ulrich H (2014) Modulation of Mouse Embryonic Stem Cell Proliferation and Neural Differentiation by the P2X7 Receptor. *PLoS One*. 9(5):e96281.
85. Mencin N, Šmuc T, Vraničar M, Mavri J, Hren M, Galeša K, Krkoč P, Ulrich H, Šolar B (2014) Optimization of SELEX: Comparison of Different Methods for Monitoring the Progress of in vitro Selection of Aptamers. *Journal of Pharmaceutical and Biomedical Analysis*, 91C, 151-159.
86. Ulrich H, Bocsi J, Glaser T, Tárnok (2014) Cytometry in the brain: From Studying Differentiation towards Diagnostic Applications in Brain Disease and Regeneration therapy. *Cell Proliferation* 47, 12-9.

87. Ulrich H, Tárnok A (2014) Flow cytometry detection of circulating tumor cells: Achievements and limitations as prognostic parameters. *Cytometry Part A* 85, 201-202
88. Sousa BR, Parreira RC, Fonseca EA, Amaya MJ, Tonelli FMP, Lacerda S M. S. N., Lalwani P, Santos AK, Gomes KN, Ulrich H, Kihara AH, Resende RR (2014) Human adult stem cells from diverse origins: an overview from multiparametric immunophenotyping to clinical applications. *Cytometry A* 85A, 43-77.
89. Oliveira SL, Pillat MM, Cheffer A, Lameu C, Schwindt TT, Ulrich H (2013). Functions of neurotrophins and growth factors in neurogenesis and brain repair. *Cytometry A* 83, 76-89.
90. Zimbres FM, Tárnok A, Ulrich H, Wrenger C. (2013) Aptamers: novel molecules as diagnostic markers in bacterial and viral infections? *Biomed Res Int.* 2013:731516. (H. Ulrich and C. Wrenger corresponding authors)
91. Morais KL, Ianzer D, Miranda JR, Melo RL, Guerreiro JR, Santos RA, Ulrich H, Lameu C (2013). Proline rich-oligopeptides: diverse mechanisms for antihypertensive action. *Peptides.* 48:124-33.
92. Cheffer A, Tárnok A, Ulrich H (2013) Cell cycle regulation during neurogenesis in the embryonic and adult brain. *Stem Cell Reviews* 9:794-805.
93. Nery AA, Magdesian MH, Trujillo CA, Sathler LB, Juliano MA, Juliano L, Ulrich H, Ferreira ST (2013) Rescue of amyloid-Beta-induced inhibition of nicotinic acetylcholine receptors by a peptide homologous to the nicotine binding domain of the alpha 7 subtype. *PLoS One.* 2013 Jul 22;8(7):e67194. (H. Ulrich and S.T. Ferreira corresponding authors)
94. Torres-Rivera W, Pérez D, Park KY, Carrasco M, Platt MO, Eterović VA, Ferchmin PA, Ulrich H, Martins AH (2013) Kinin-B2 receptor exerted neuroprotection after diisopropylfluorophosphate-induced neuronal damage. *Neuroscience* 247:273-9.
95. Braga MC, Nery AA, Ulrich H, Konno K, Sciani JM, Pimenta DC (2013)  $\alpha$ -RglB: A Novel Antagonist Peptide of Neuronal Acetylcholine Receptor Isolated from *Conus regius* Venom. *International Journal of Peptides* 2013:543028.
96. de Pascual R, Miranda-Ferreira R, Galvão KM, Lameu C, Ulrich H, Smaili SS, Jurkiewicz A, García AG, Gandía L (2013) Lower density of L-type and higher density of P/Q-type of calcium channels in chromaffin cells of hypertensive, compared with normotensive rats. *European Journal of Pharmacology* 706, 25-35.
97. Glaser T, Resende RR, Ulrich H (2013) Implications of purinergic receptor-mediated intracellular calcium transients in neural differentiation. *Cell Commun Signal.* 2013 11:12.
98. Gonçalves JC, Silveira AL, de Souza HD, Nery AA, Prado VF, Prado MA, Ulrich H, Araújo DA (2013) The monoterpene (-)-carvone: a novel agonist of TRPV1 channels. *Cytometry A* 83, 212-9. (Prado MA, Ulrich H, Araújo DA corresponding authors)
99. Donnenberg VS, Ulrich H (2013) Mesenchymal stem cells, therapy, and cytometry. *Cytometry A.* 83:8-10.
100. Donnenberg VS, Ulrich H, Tárnok A (2013) Cytometry in stem cell research and therapy. *Cytometry A* 83, 1-4

101. Oliveira SL, Pillat MM, Cheffer A, Lameu C, Schwindt TT, Ulrich H (2013) Functions of neurotrophins and growth factors in neurogenesis and brain repair. *Cytometry A*. 83, 76-89.
102. Nery AA, Nascimento IC, Glaser T, Bassaneze V, Krieger JE, Ulrich H (2013). Human mesenchymal stem cells: from immunophenotyping by flow cytometry to clinical applications. *Cytometry A*. 83:48-61.
103. Nunes-Alves, A.; Nery, A.A.; Ulrich, H (2013) Tobacco nitrosamine N-nitrososornicotine as inhibitor of neuronal nicotinic acetylcholine receptors. *Journal of Molecular Neuroscience* 49, 52-61.
104. Cappellari AR, Rockenbach L, Dietrich F, Clarimundo V, Glaser T, Braganhol E, Abujamra AL, Roesler R, Ulrich H, Battastini AM (2012). Characterization of ectonucleotidases in human medulloblastoma cell lines: ecto-5'NT/CD73 in metastasis as potential prognostic factor. *PLoS One*.7(10):e47468.
105. Herrera-Bravo J, Montiel-Eulefi E, Glaser T, Garces M, Leal P, Ulrich H (2013). La Translocación in vitro Citoplasma/Núcleo del Factor de Transcripción Embrionario OCT-4 en Células Perivasculares Propone a la Aorta Como un Nicho Quiescente de Células Madres Adultas. *International Journal of Morphology (Online)*, 31, 1430-1438.
106. Trujillo CA, Negraes PD, Schwindt TT, Lameu C, Carromeu C, Muotri AR, Pesquero JB, Cerqueira DM, Pillat MM, de Souza HD, Turaça LT, Abreu JG, Ulrich H (2012) Kinin-B2 receptor activity determines the differentiation fate of neural stem cells. *Journal of Biological Chemistry* 287, 44046-61.
107. Russo LC, Asega AF, Castro LM, Negraes PD, Cruz L, Gozzo FC, Ulrich H, Camargo AC, Rioli V, Ferro ES (2012) Natural intracellular peptides can modulate the interactions of mouse brain proteins and thimet oligopeptidase with 14-3-3 $\epsilon$  and calmodulin. *Proteomics*. 12, 2641-55.
108. Lameu C, Trujillo CA, Schwindt TT, Negraes PD, Pillat MM, Morais KL, Lebrun I, Ulrich H (2012) . Interactions between the NO-citrulline cycle and brain-derived neurotrophic factor in differentiation of neural stem cells. *Journal of Biological Chemistry* 287, 29690-70.
109. Ulrich H, Abbracchio MP, Burnstock G (2012) Extrinsic purinergic regulation of neural stem/progenitor cells: implications for CNS development and repair. *Stem Cell Reviews* 8, 755-67.
110. Cheffer A, Mustafa EV, T-do Amaral A, Ulrich H (2012) Lipophilicity as a determinant of binding of procaine analogs to rat  $\alpha 3\beta 4$  nicotinic acetylcholine receptor. *Journal of Neuroscience Research* 90, 1607-14.
111. Negraes, P.D.; Schwindt TT; Trujillo, C.A.; Ulrich, H. (2012). Neural differentiation of P19 carcinoma cells and: cell morphology, proliferation, viability and functionality. *Current Protocols in Stem Cell Biology*, Chapter 2:Unit 2D.9
112. Glaser, T ; Cappellari AR. ; Pillat MM. ; Iser IC. ; Wink MR ; Battastini AM; Ulrich H. (2012). Perspectives of purinergic signaling in stem cell differentiation and tissue differentiation. *Purinergic Signalling*, 8, 523-37.
113. Martins AHB. ; Alves, J. M.; Perez, D. ; Carrasco, M. ; Torres-Rivera, W. ; Eterovic, V. A. ; Ferchmin, P. A.; Ulrich, H (2012). Kinin-B2 receptor mediated neuroprotection after NMDA excitotoxicity is reversed in the presence of kinin-B1 receptor agonists. *Plos One* 7(2):e30755.

114. Yuahasi KK. ; Demais M. ; Tamajusuku, A.S.K. ; Lenz, G. ; Sogayar, M. C. ; Fornazari M; Lameu C ; Nascimento IC ; Glaser, T. ; Schwindt TT ; Negraes, P.D. ; Ulrich H (2012). Regulation of neurogenesis and gliogenesis of retinoic acid-induced P19 embryonal carcinoma cells by P2X2 and P2X7 receptors studied by RNA interference. *International Journal of Developmental Neuroscience* 30, 91-7.
115. Montiel-Eulefi E., Nery AA, Rodrigues LC, Sanchez R, Romero F, Ulrich H (2012). Neural differentiation of rat aorta pericyte cells. *Cytometry A*, 81, 959-964.
116. Pillat, M. M. ; Bauer, M.E. ; Penalva de Oliveira, A.C. ; Ulrich H. ; Casseb, J (2011). HTLV-1-Associated Myelopathy/Tropical Spastic Paraparesis (HAM/TSP): Still an Obscure Disease. *Central Nervous System Agents in Medicinal Chemistry* 11, 1-6.
117. Schuck DC ; Ribeiro R.Y. ; Nery A A ; Ulrich H; Garcia CR (2011). Flow Cytometry as a tool for analyzing changes in *Plasmodium falciparum* cell cycle following treatment with indol compounds. *Cytometry A*, 79, 959-964.
118. Marques da Silva, C ; Chaves, M.M. ; Chaves, S.P. ; Ribeiro Figliuolo, V. ; Meyer-Fernandes, J.R. ; Corte-Real, S. ; Lameu C ; Ulrich, H. ; Ojcius, D.M. ; Rossi-Bergmann, B. ; Coutinho-Silva, R. (2011). Infection with *Leishmania amazonensis* upregulates purinergic receptor expression and induces host-cell susceptibility to UTP mediated apoptosis. *Cellular Microbiology* 13, 1410-1428.
119. Fornazari M ; Nascimento IC ; Nery, A. A. ; Caldeira da Silva, C.C. ; Kowaltowski, A. J.; Ulrich, H. (2011) . Neuronal differentiation involves a shift from glucose oxidation to fermentation. *Journal of Bioenergetics and Biomembranes* 43, 531-539.
120. Benedetti G., Morais KLP, Guerreiro JR, Hoshida M, Oliveira M, Sass N, Ulrich H, Lameu C,. Camargo AC.M (2011). Anti-hypertensive peptide from *Bothrops jararaca* venom normalizes endothelium dysfunction involved in the emergence of preeclampsia. *PLoS ONE* 6, e23680.
121. Schwindt TT, Trujillo CA, Negraes, PD, Lameu C, Ulrich H (2011). Directed Differentiation of Neural Progenitors into Neurons is Accompanied by Altered Expression of P2X Purinergic Receptors. *Journal of Molecular Neuroscience* 44, 141-46.
122. Burnstock G ; Ulrich, H. (2011). Purinergic Signaling in Embryonic and Stem Cell Development. *Cellular and Molecular Life Sciences* 68, 369-94.
123. Cheffer A ; Ulrich, H. (2011) Mechanism of the rat alpha3, beta 4 nicotinic acetylcholine receptor by the Alzheimer therapeutic tacrine. *Biochemistry (Easton)*, 50:1763-70.
124. Morais, K.L.P. ; Hyashi, M. A. F. ; Bruni, FM ; Lopes-Ferreira M ; Camargo, A. C. M.; Ulrich, H. ; Lameu C (2011) . Bj-PRO-5a, a natural angiotensin-converting enzyme inhibitor, promotes vasodilatation mediated by both bradykinin B2 and M1 muscarinic acetylcholine receptors. *Biochemical Pharmacology*, 81, 736-742.
125. Negraes, P.D. ; Lameu C ; Hayashi, M. A. F. ; Melo R.L. ; Camargo, A. C. M. ; Ulrich, H. (2011) The snake venom Bj-PRO-7a is a muscarinic acetylcholine receptor agonist. *Cytometry A*, 79, 77-83.
126. Sartore RC, Almedia, FCL , Campos PB, Trujillo CA, Ramalho BSL, Negraes PD, Paulsen BS, Meletti T, Costa E., Chicaybam L, Bonamino MH, Ulrich H, Ulrich, H, Rehen SK. (2011). Retinoic acid-treated pluripotent stem cells undergoing neurogenesis present increased aneuploidy and micronuclei formation. *Plos One*, v. 6, p. e20667

127. Nery AA, Resende RR, Martins AH, Trujillo CA, Eterovic VA, Ulrich H. (2010). Alpha7 nicotinic acetylcholine receptor expression and activity during neuronal differentiation. *J Mol Neurosci.* 41(3):329-39.
128. Lameu C, Hayashi MA, Guerreiro JR, Oliveira EF, Lebrun I, Pontieri V, Morais KL, Camargo AC, Ulrich H (2010). The central nervous system as target for antihypertensive actions of a proline-rich peptide from *Bothrops jararaca* venom. *Cytometry A* 77, 220-30.
129. Tárnok A, Ulrich H, Bocsi J (2010). Phenotypes of stem cells from diverse origin. *Cytometry A.* 77, 6-10.
130. Oliveira EF, Guerreiro JR, da Silva CA ; Benedetti GF ; Lebrun I. ; Ulrich H., Lameu C; Camargo ACM (2010) . Enhancement of the citrulline-nitric oxide cycle in astroglia cells by the proline-rich peptide-10c from *Bothrops jararaca* venom. *Brain Research* 1363, 11-19.
131. Lameu C ; Pontieri, V. ; Guerreiro, J. R. ; Oliveira E.F. ; da Silva CA ; Giglio JM ; Campos RR; Camargo, A. C. M. ; Ulrich H (2010) Brain nitric oxide production by a proline-rich decapeptide from *Bothrops jararaca* venom improves baroreflex sensitivity of spontaneously hypertensive rats. *Hypertension Research* 33, 1283-1288.
132. Shapiro HM ; Ulrich H (2010). Cytometry in malaria: From research tool to practical diagnostic approach? *Cytometry A.* 77, 500-501.
133. Majumder P, Gomes KN, Ulrich H (2009). Aptamers: from bench side research towards patented molecules with therapeutic applications. *Expert Opinion on Therapeutic Patents* 19, 1603-13.
134. Russo LC, Goni CN, Asega AF, Camargo ACM, Terra WR, Trujillo CA, Ulrich H, Glucksman MC, Scavone C, Ferro ES (2009). Interaction with calmodulin is important for the secretion of thimet oligopeptidase following stimulation. *The FEBS Journal* 276, 4358-71.
135. Ulrich H, Wrenger C. (2009). Disease-specific biomarker discovery by aptamers. *Cytometry. A,* 75:727-33.
136. Ferchmin PA, Pagan OR, Ulrich H, Szeto A.; Hann R. M.; Eterovic, V. A. (2009). Actions of octocoral and tobacco cembranoids on nicotinic receptors. *Toxicon,* 54:1174-82.
137. Nery AA, Wrenger C, Ulrich H (2009). Recognition of biomarkers and cell-specific molecular signatures: Aptamers as capture agents. *Journal of Separation Science,* 32:1523-30.
138. Doná F, Ulrich H, Persike DS, Conceição IM, Blini JP, Cavalheiro EA, Fernandes MJ. (2009). Alteration of purinergic P2X4 and P2X7 receptor expression in rats with temporal-lobe epilepsy induced by pilocarpine. *Epilepsy Res.* 83:157-67.
139. Adams V, Challen GA, Zuba-Surma E, Ulrich H, Vereb G, Tárnok A. (2009). Where new approaches can stem from: focus on stem cell identification. *Cytometry A* 75, 1-3.
140. Trujillo CA, Schwindt TT, Martins AH, Alves JM, Mello LE, Ulrich H (2009). Novel perspectives of neural stem cell differentiation: From neurotransmitters to therapeutics. *Cytometry A* 75, 38-53.

141. Marconi M, Sanchez R, Ulrich H\*, Romero F\* (2008). Potassium currents in mature bovine spermatozoa. *Systems Biology in Reproductive Medicine* 54, 231-9. \*Corresponding authors: Ulrich H and Romero F.
142. Resende RR, Britto LRG, Ulrich H (2008). Pharmacological properties of purinergic receptors and their effects on proliferation and induction of neuronal differentiation of P19 embryonal carcinoma cells. *International Journal of Developmental Neuroscience* 26, 763-77.
143. Nery AA, Trujillo CA, Lameu C, Konno K, Oliveira V, Camargo ACM, Ulrich H\*, Hayashi MAF\* (2008). A novel physiological property of snake bradykinin-potentiating peptides – reversion of MK-801 inhibition of nicotinic acetylcholine receptors. *Peptides* 29, 1708-15. \*Corresponding authors: Ulrich H and Hayashi MAF.
144. Faria M, Ulrich H (2008). Sugar boost-when ribose modifications improve oligonucleotide performance. *Current Opinion in Molecular Therapeutics*, 10,168-75.
145. Martins AH, Alves JM, Trujillo CA, Schwindt TT, Barnabé GF, Motta FLT, Guimarães AO, Casarini DE, Luiz Mello EA, Pesquero, JB, Ulrich H (2008). Kinin-B2 receptor expression and activity during differentiation of embryonic neurospheres. *Cytometry A* 73, 361-368.
146. Resende RR, Alves AS, Britto LRG, Ulrich H (2008). Role of acetylcholine receptors in proliferation and differentiation of P19 embryonal carcinoma cells. *Experimental Cell Research* 314, 1429-43.
147. Resende RR, Gomes KN, Adhikari, A, Britto LRG, Ulrich H (2008). Mechanism of acetylcholine-induced calcium signaling during neuronal differentiation of P19 embryonal carcinoma cells in vitro. *Cell Calcium*, 43,107-121.
148. Ulrich H, Akk G, Nery AA, Rodriguez AD, Trujillo CA, Eterovic VA (2008). Mode of cembranoid action on embryonic muscle acetylcholine receptor. *Journal of Neuroscience Research* 86, 93-107.
149. Majumder P, Trujillo CA, Lopes CG, Resende RR, Gomes KN, Yuahasi KK, Britto LRG, Ulrich H (2007). New insights of purinergic receptor signaling in neuronal differentiation, neuroprotection, and brain disorders. *Purinergic Signalling* 3, 317-331.
150. Trujillo CA, Nery AA, Alves JM, Martins AH, Ulrich H (2007) Anti-VEGF aptamer as a therapeutic agent in clinical ophthalmology trials. *Clinical Ophthalmology*, 1, 393-402.
151. Resende RR, Torres HAM, Yuahasi KK, Majumder P, Ulrich H (2007). Delivery systems of nucleic acids drugs for in vivo use. *Drug Target* 2, 183-186.
152. Trujillo CA, Majumder P, Gonzalez FA, Moaddel R, Ulrich H (2007). Immobilized P2X2 purinergic receptor stationary phase for chromatographic determination of pharmacological properties and drug screening. *Journal of Pharmaceutical and Biomedical Analysis*, 44:701-10.
153. Du M, Ulrich H, Zhao X, Aronowski J, Jayaraman V (2007). Water soluble RNA based antagonist of AMPA receptors. *Neuropharmacology* 53:242-51.
154. Resende RR, Majumder P, Gomes KN, Britto LRG, Ulrich H (2007) P19 embryonal carcinoma cells as in vitro model for studying purinergic receptor expression and modulation of N-methyl-D-aspartate-glutamate and acetylcholine receptors during neuronal differentiation. *Neuroscience* 146: 1169-81.

155. Resende RR, Faria F, Ulrich H (2007). The contribution of nitric oxide and carbon monoxide to neuronal function and development. *Central Nervous System Agents in Medicinal Chemistry* 7: 85-96
156. Resende RR, Ulrich H, Faria F (2007). Is there a rational approach for increasing drug specificity? Considerations on CNS target choice and validation. *Recent Patents on CNS Drug Discovery* 2, 37-46.
157. da Silva RL, Resende RR, Ulrich H (2007). Alternative splicing of P2X6 receptors in developing mouse brain and during in vitro-neuronal differentiation. *Experimental Physiology* 92, 139-45
158. Ulrich H, Trujillo CA, Nery AA, Alves JM, Majumder P, Resende RR, Martins AH. (2006). DNA and RNA aptamers: from tools for basic research towards therapeutic applications. *Comb Chem High Throughput Screen.*9: 619-32.
159. Adhikari A., Penatti C.A.A., Resende RR, Ulrich H, Britto RG, Bechara E. (2006). 5-aminolevulinate and 4,5-dioxovalerate ions decrease GABAA receptor density in neuronal cells, synaptosomes and rat brain. *Brain Research* 1093, 95-104.
160. Ulrich H., Majumder P. (2006). Neurotransmitter receptor expression and activity during neuronal differentiation of embryonal carcinoma and stem cells: From basic research towards clinical applications. *Cell Proliferation* 39, 281-300.
161. Trujillo C.A., Nery A.A., Martins A.H., Majumder P., Gonzalez F.A., Ulrich H. (2006). Inhibition mechanism of the recombinant rat P2X2 receptor in glial cells by suramin and TNP-ATP. *Biochemistry* 62, 224-33.
162. Magdesian MH, Nery AA, Martins AHB, Juliano MA, Juliano Neto L, Ulrich H, Ferreira ST (2005). Peptide blockers of the inhibition of neuronal nicotinic acetylcholine receptors by Abeta. *Journal of Biological Chemistry* 280, 31085-90.
163. Martins AHB, Resende RR, Majumder P, Faria M., Casarini DE, Tárnok A, Colli W, Pesquero JB, Ulrich H (2005) Neuronal differentiation of P19 embryonal carcinoma cells modulates kinin B2 receptor gene expression and function. *Journal of Biological Chemistry* 280, 19576-19586
164. Ulrich H (2005) RNA and DNA aptamers as modulators of protein function. *Medical Chemistry*, 199-208.
165. Silber AM, Colli W, Ulrich H, Alves MJM, Pereira CA (2005). Amino acid metabolic routes in *Trypanosoma cruzi*: Possible therapeutic targets against Chagas' disease. *Current Drug Targets-Infectious Disorders* 5, 53-64.
166. Ulrich H and Tárnok A. Quantification of cell cycle distribution in Hydra by flow cytometry. *Cell Proliferation*. 38,63-75.
167. Majumder P, Faria M, Ulrich H (2005). Targeting DNA associated processes for cancer therapy by the use of SELEX and Anti-gene approaches – when selection meets rational design. *Medicinal Chemistry Reviews-Online* 2, 257-264.
168. Cui Y, Ulrich H, Hess GP (2004). Selection of 2'-fluoro-modified RNA aptamers for alleviation of cocaine and MK-801 inhibition of the nicotinic acetylcholine receptor. *J. Membrane Biol.* 202, 137-149.
169. Faria M, Giovannangeli C, Ulrich H (2004) DNA and RNA code-reading molecules as potential gene silencers in neurobiology-what are they and what are they good for? *Current Chemical Chemistry-Central Nervous System Agents* 4, 243-254.
170. Ulrich H, Martins AHB, Pesquero JB (2004). RNA and DNA aptamers in cytomics analysis. *Cytometry* 59 A, 220-231.



171. Hess GP, Gameiro AM, Schoenfeld RC, Chen Y, Ulrich H, Nye JA, Caroll FI, Ganem B (2003) Reversing the action of non-competitive inhibitors (MK-801 and cocaine) on a protein (nicotinic acetylcholine receptor) mediated reacted. *Biochemistry* 42, 6106-14.
172. Faria M, Ulrich H (2002). The use of synthetic oligonucleotides as protein inhibitors and anticode drugs in cancer therapy: accomplishments and limits. *Current Cancer Drug Targets* 2, 355-68.
173. Ulrich H, Magdesian MH, Alves MJM, Colli W (2002). In vitro selection of RNA aptamers that bind to cell surface receptors of *Trypanosoma cruzi* and inhibit cell invasion. *J. Biol. Chem.* 277, 20756-62.
174. Ulrich H, Gameiro AM (2001). Aptamers as tools to study dysfunction in the neuronal system. *Curr. Med. Chem. – Central Nervous System Agents* 1, 125-32.
175. Ulrich H, Alves MJM, Colli W (2001). RNA and DNA aptamers as potential tools to combat cell adhesion in disease. *Brazilian Journal of Medical and Biological Research* 34, 295-300.
176. Magdesian MH, Giordano R, Ulrich H, Juliano MA, Juliano L, Schumacher RI, Colli W, Alves MJM (2001). Infection by *Trypanosoma cruzi*: Identification of a parasite ligand and its host cell receptor. *Journal of Biological Chemistry* 276, 19382-9.
177. Tarnok A, and Ulrich H (2001). Characterization of the stress-induced calcium response in neuronal cell lines. *Cytometry* 43, 175-181.
178. Hess GP, Ulrich H., Breitingner HGB, Niu L., Gameiro A, Grewer C, Srivastava S, Ippolito JE, Lee S, Jayaraman V, Coombs S (2000). Mechanism-based discovery of ligands that prevent inhibition of the nicotinic acetylcholine receptor by cocaine and MK-801. *Proc. Natl. Acad. Sci. USA* 97, 13895-900.
179. Ulrich H, Ippolito JE, Pagán OR, Eterovic E, Hann R M, Shi H, Lis JT, Eldefrawi M E, Hess GP (1998). In vitro selection of RNA molecules that displace cocaine from the membrane-bound nicotinic acetylcholine receptor. *Proc. Natl. Acad. Sci. USA* 95, 14051-6.
180. Kayser, S. T., Ulrich, H., Schaller, H.C. (1998). Involvement of a Gardos-type potassium channel in head activator-induced mitosis of BON cells. *European Journal of Cell Biology* 76, 119-24.
181. Ulrich, H., Tarnok, A. and Schaller, H.C. (1996). Head-activator induced mitosis of NH15-CA2 cells requires calcium influx and hyperpolarization. *J. Physiol. (Paris)* 90, 85-94.
182. Christians, C., Neubauer, K.-H., Ulrich, H. (1992). Purification and characterization of the head-activator receptor from a multi-headed mutant of *Chlorohydra viridissima*. *FEBS Letters* 316, 141-6.

#### **Books (total of 4)**

1. Ulrich H, Ho PL, Faria M, Colli (2008) *Bases Moleculares da Biotecnologia (Molecular Bases of Biotechnology)*. Editora Roca Ltda, São Paulo, Brazil, ISBN 978-85-7241-759-4.
2. Ulrich H (2010) *Stem cells: Perspectives of Stem Cells - From tools for studying mechanisms of neuronal differentiation towards therapy*. Springer Science + Business Media, Dordrecht Heidelberg London New York, ISBN 9789048133741.

3. Resende R R, Ulrich H (2013) Trends in Stem Cell Proliferation and Cancer Research. 1. ed. Amsterdam; Heidelberg; New York: Springer Business Media, Dordrecht Heidelberg London New York, v. 1. 708p, 978-94-007-6210-7.
4. Ulrich H, Negraes PD (2016) Working with stem cells: A quick and approach of methodologies and applications. Springer International Publishing AG, Cham, ISBN 978-3-319-30580-6.

### **Book articles (total of 30)**

1. Andrejew R, Oliveira-Giacomelli A, Ribeiro DE, Godoy M, Granato A, Ulrich H (2019) Targeting Purinergic Signaling and Cell Therapy in Cardiovascular and Neurodegenerative Diseases. In: Mariusz Rataczak. (Ed.). Advances in Experimental Medicine and Biology. Stem Cells – Therapeutic Applications, pp. 275-354. ISBN 978-3-030-31205-3.
2. de Araújo FT, Semeano ATS, Oliveira-Giacomelli A, Gonçalves MCB, Ferrari MFR, Lygia da Veiga Pereira, Ulrich H (2018) Midbrain Dopaminergic Neurons Differentiated from Human-Induced Pluripotent Stem Cells. Methods in Molecular Biology. Methods in Molecular Biology, Vol. 1919, Marcel M. Daadi (Eds): Neural Stem Cells, 978-1-4939-9005-4, 336985\_1\_En, (8) 1ed.: Springer New York, 1919:97-118.
3. Conaty P, Sherman LS, Naaldijk Y, Ulrich H, Stolzing A, Rameshwar P (2018) Methods of Mesenchymal Stem Cell Homing to the Blood Brain Barrier. In: Shree Ram Singh; Pranela Rameshwar. (Org.). Methods in Molecular Biology. 1ed. Springer New York, 2018, v. 1842, pp. 81-91.
4. Glaser T, Corrêa-Velloso J, Oliveira Á, Teng YD, Ulrich H (2017) Dopaminergic and GABAergic neuron in vitro differentiation from embryonic stem cells. IN: "Stem Cell Technologies in Neuroscience" (Eds: Amit K. Srivastava, PhD, Evan Y. Snyder, MD, PhD, and Yang D. Teng PhD, MD; Springer Business, ISBN 978-1-4939-7024-7, pp. 45-53.
5. Corrêa-Velloso J, Nascimento I, Nery AA, Ulrich H (2016) CHAPTER 6: Impacts of the aptamer technology on diagnostics, biotechnology and therapy. In "Current Developments in Biotechnology and Bioengineering: Biotechnology in Human and Animal Health, edited by Vanete Thomaz-Soccol, Rodrigo Resende and Ashok Pandey, ISBN: 9780444636607, pp. 125-142.
6. Oliveira Á, Cruz Corrêa-Velloso J, Glaser T, Ulrich H (2016) Stem Cells: Principles and Applications. In "Working with Stem Cells – Quick and Easy Methodologies and Applications" (Priscilla Davidson Negraes and Henning Ulrich, eds.) Springer International Publishing AG, ISBN 978-3-319-30580-6, pp. 1-13.
7. Semeano AT, Glaser T, Ulrich H, Petri DFS (2016) Scaffolds for embryonic stem cell growth and differentiation. In "Working with Stem Cells – Quick and Easy Methodologies and Applications" (Priscilla Davidson Negraes and Henning Ulrich, eds.) Springer International Publishing AG, ISBN 978-3-319-30580-6, pp. 347-365
8. Sardá-Arroyo L, Schitine C, Xapelli SA, Ulrich H (2015) Mice post-natal subventricular zone neurospheres: derivation, culture, differentiation and applications. In "Working with Stem Cells – Quick and Easy Methodologies and Applications" (Priscilla Davidson Negraes and Henning Ulrich, eds.) Springer International Publishing AG, ISBN 978-3-319-30580-6, pp. 79-96

9. Gomes KN, Cheffer A, Resende RR, Ulrich H (2016) SELEX: Conceitos básicos e metodologia para o desenvolvimento de aptâmeros de RNA como ligantes de receptores de superfície celular. In: Biotecnologia aplicada à saúde: fundamentos e aplicações Vol. 3 (eds. Rodrigo Resende, Silvia Guatimosim, Marcus Vinicius Gomez, Carlos R. Soccol. Editora Blucher, ISBN: 9788521209676, pp. 15-72.
10. Ulrich H, Cheffer A, Zimbres FM, Tárnok A, Wrenger C (2016) Aptamers in Bacterial, Viral and Parasitic Diseases. In: Aptamers: Tools for Targeted Nanotherapy and Molecular Imaging (Rakesh N. Veedu, ed), PanStanford Publishing, ISBN 9789814669832, pp. 169-186.
11. Glaser T, Castillo ARG, Oliveira À, Ulrich H (2016) Intracellular Calcium Measurements for Functional Characterization of Neuronal Phenotypes. In: Embryonic Stem Cell Protocols (Volume 1341 of the series Methods in Molecular Biology), Springer, pp 245-255.
12. Nascimento IC, Nery AA, Bassaneze V, Krieger JE, Ulrich H (2016). Applications of Aptamers in Flow and Imaging Cytometry. In: Nucleic Acid Aptamers: Selection, Characterization, and Application. Volume 1380 of the series Methods in Molecular Biology, Springer pp 127-34.
13. Glaser T, Oliveira A, Sardà-Arroyo L, Ulrich H (2015) Growth and Neurotrophic Factor Receptors in Neural Differentiation and Phenotype Specification. In: Editor Jan Pruszek, Neural Surface Antigens, Springer Business, ISBN. 9780128007815, pp. 77-90.
14. Schwindt TT, Ferrazoli EG, Ulrich H (2014) Parkinson's Disease: Genetics, Mechanisms and Diagnosis. Young Perspectives for Old Diseases. 1ed.Oak Park, EUA: Bentham Science Publishers, ISBN 978-1-68108-003-1, pp. 155-176.
15. Nascimento IC, Ulrich H (2014) Basic studies for neural stem cells in the brain. In: Li-Ru Zhao; John H. Zhang. (Org.). Cellular Therapy for Stroke and CNS Injuries. 1ed.Dordrecht Heidelberg London NY: Springer Science + Business Media, ISBN 978-3-319-11481-1, pp. 3-16.
16. Pillat, M. M. ; Glaser, T. ; Schwindt TT ; Ulrich, H. (2013). An Introduction to Proliferation and Migration of Stem and Cancer Cells. In: Rodrigo Ribeiro Resende; Henning Ulrich. (Org.). Trends in Stem Cell Proliferation and Cancer Research. 1ed.Amsterdam: Springer Business, v. 1, ISBN 978-94-007-6210-7, p. 3-12.
17. Lameu C ; Ulrich, H. (2012) Applications of Snake Venom Proline-rich Oligopeptides (Bj-PROs) in Disease Conditions Resulting from Deficient Nitric Oxide Production. In: Hany El-Shemy. (Org.). Drug Discovery. 1ed.Rijeka, Croatia: INTECH, 2012, v.1, ISBN 978-85-64010-09-3 , p. 459-474.
18. Ulrich, H. ; Wrenger C. (2012) IDENTIFICATION OF APTAMERS AS SPECIFIC BINDERS AND MODULATORS OF CELL-SURFACE RECEPTOR ACTIVITY. In: Jürgen Moll; Richard Colombo. (Org.). Target Identification and Validation in Drug Discovery: Methods and Protocols (Methods in Molecular Biology). 1ed.New York: SPRINGER SCIENCE+BUSINESS MEDIA, LLC, 2012, v. 986, ISBN: 978-1-62703-310-7, p. 17-39.
19. Ulrich, H (2012) Purinergic receptors in stem cell biology. In: M.A. Hayat. (Org.). Stem Cells and Cancer Stem Cells. 1ed. Dordrecht, Heidelberg: Springer, 2012, ISBN 978-94-007-4798-2, v. 8, p. 267-274.

20. Wrenger C. ; Ulrich, H. (2011) Drug Discovery by Aptamers in Protozoan Infectious Diseases. In: Izet M. Kapetanovic. (Org.). Drug Discovery and Development - Present and Future. 1ed.Rijeka: InTech, 2011, ISBN 978-953-307-615-7, p. 379-390.
21. Cheffer A ; Trujillo, CA. ; Ulrich, H (2011). Bases neurais da memória humana (Neural bases of human memory). In: Helmut Galle; Rainer Schmidt. (Org.). A memória e as ciências humanas - Um conceito transdisciplinar em pesquisas atuais na Alemanha e no Brasil (Memory and human sciences – A transdisciplinar concept in Germany and Brazil). São Paulo: Humanitas, 2011, v. , p. 21-38.
22. K.K. Yuahasi, K.N. Gomes, M. Campos, A.A. Nery, A. Nunes Alves, C.A. Trujillo, H. Ulrich. Neurotransmitters as Main Players in the Neural Differentiation and Fate Determination Game. In: Perspectives of Stem Cells - From tools for studying mechanisms of neuronal differentiation towards therapy; (ed. Henning Ulrich); Springer Science and Business Media, Amsterdam. ISBN 9789048133741, pp. 115-134.
23. Hayashi MA, Nery AA, Camargo AC, Ulrich H (2008). Novel roles of highly specific natural inhibitors of the angiotensin-converting enzyme. Toxines et fonctions cholinergiques neuronales et non neuronales .Collection : Rencontres en toxicologie (SFET) E. BENOIT, F.GOUDEY-PERRIERE, P. MARCHOT, Denis SERVENT (eds.), Société Française pour l'Etude des Toxines, Paris, France, E-book, pp. 47-54.
24. Ulrich H, Trujillo C.A. (2008). Desenvolvimento de aptâmeros como inibidores específicos de proteínas envolvidas em doenças utilizando bibliotecas combinatórias de oligonucleotídeos (SELEX). Bases Moleculares da Biotecnologia (eds.H. Ulrich, W. Colli, P.L. Ho, M. Faria). Editora Roca Ltda., São Paulo, Brazil, ISBN 978-85-7241-759-4, pp. 37-54.
25. Ulrich H (2006). RNA Aptamers: From Basic Science Towards Therapy. In: Handbook of Experimental Pharmacology: RNA towards Medicine. V. Erdmann; J. Brosius; J. Barciszewski (eds.) Springer Verlag GmbH Berlin, Heidelberg, ISBN 3-540-27261-5, pp. 305-326.
26. Ulrich H, Martins, A.H.B., and Pesquero, J.B. (2005). RNA and DNA aptamers in cytomics analysis. In: Current Protocols in Cytometry, J. Paul Robinson (Managing Editor); Zbigniew Darzynkiewicz; William Hyun; Alberto Orfao; Peter Rabinovitch (eds.), John Wiley & Sons, Inc., Hoboken, New York. ISBN 0-555-02169-6. Unit 7.28, pp. 1 – 39.
27. Ulrich H (2005). Applications of RNA and DNA aptamers in basic science, diagnostics and therapy. In: Combinatorial Chemistry and Technologies: Methods and Applications, 2nd edition, Fassina, G., Miertus, S. (eds.), CRC Press, Taylor & Francis. ISBN 0824758374, pp. 505 – 521.
28. Ulrich H (2005). DNA and RNA aptamers as tools for target validation and drug development. In: Progress in Protein Research, F. Columbus, (ed.), Nova Science Publishers, Inc., Hauppauge, NY. ISBN 1594542783
29. Tarnok A, Ulrich H (1999). Detection and purification of rare responders by fixed-time flow cytometry. In: Flow Cytometry and Cell Sorting 2nd edition, Radbruch, A. (ed.), Springer Verlag, Berlin, New York. ISBN 3-540-65630, pp. 140-158.
30. Tarnok, A., and Ulrich H (2000). Detection and purification of rare responders by fixed-time flow cytometry. In: Purdue Cytometry CD-ROM Vol. 5, Robinson, P. (ed.), ISBN 1-890473-030-0

#### Patents (total of 4)

1. Pharmaceutical compositions secreted by venom glands from the snake *Bothrops jararaca*, EVASINS, their analogs, derivatives and derived products as modulators of acetylcholine receptor activity. Inventors: Mirian Akemi Furuie Hayashi, Antonio Carlos Martins de Camargo, Henning Ulrich, Rubén Dario Sinisterra Millán, Robson Augusto Souza dos Santos, Danielle Alves Ianzer, Raphael dos Reis Marioni. Cotitulares: Biolab Sanus Farmacêutica, FAPESP. Instituto Nacional de Propriedade Nacional, São Paulo, Brazil, No. 001395-11/02/04. International patent.
2. Aplicações de formulações de oligonucleotídeos quimicamente modificados como moduladores da atividade de receptores purinérgicos e aptâmeros B7 (Applications of formulations of chemically modified oligonucleotides as modulators of purinergic receptor activity and aptamer B7). Inventors: Henning Ulrich, Katia das Neves Gomes, Rodrigo Ribeiro Resende. Deposited by: USP, co-patent holder: FAPESP, Universidade de São João del Rei. Instituto Nacional de Propriedade Nacional, Rio de Janeiro, Brasil, No. de pedido 0000221105247117. Deposit on 05/07/2011.
3. Polinucleotídeos quimicamente modificados e processo de produção de polinucleotídeos quimicamente modificados (Chemical-modified polynucleotides and production of these .polynucleotides) INPI nº. BR 10 2013 021701-8. (deposit in 26/08/2013). Inventors: Henning Ulrich, Arthur A. Nery, Vinicius Bassaneze, José Eduardo Krieger. Deposit in E.U. and US in 2016.
4. Método de Identificação de Compostos com Potencial Atividade Antitumoral (Methods for the identification of compounds with anti-tumoral activity. INPI BR 10 2018 007166 1 Inventors: HENNING ULRICH; ANTONIA TAVARES DO AMARAL; ARQUIMEDES CHEFFER; LUCAS GASPARELLO VIVIANI