

PRESENT TITLE AND AFFILIATION

Associate Professor of Biology
MD & PhD in biology of neurosciences
Department of Biology
School of Sciences and Humanities
Nazarbayev University
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EDUCATION

1982-1987 : MD, Medicine in Xinjiang Medical University, Xinjiang, China
1992-1993 : Intensive professional training at Shanghai II Medical University, Shanghai; China
2001-2005 : Ph.D. in Biology of Neuroscience at INSERM (U413), the European Institute for Peptide Research (IFRMP 23, France).

EMPLOYMENT HISTORY

1987 - 1992 : Assistant Professor of Anatomy, Department of Human Anatomy, Xinjiang Medical University, China
1994 - 1999 : Associate Professor of Anatomy, Department of Human Anatomy, Xinjiang Medical University, China
1999 - 2000 : Visiting scholar in the Laboratory of Cellular and Molecular Neuroendocrinology of INSERM, Rouen, France (granted by China Scholarship Council)
2004 - 2005: Practical assistant of Biology at the University of Rouen, France
2005 - 2008: Postdoctoral training in Institute for Physiology, University of Rostock, Germany
2009 - 2014: Assistant Professor of Physiology in the Institute for Physiology, University of Rostock, Germany
2014 – 2015: Deputy Director General on Science, Innovation and Academic Issues, Center for life Sciences, Nazarbayev University, Kazakhstan.
2015 - 2016: Head of Institute of Bioengineering, Regenerative Medicine and Neurophysiology; Head of the Lab of neurophysiology and AI
National Laboratory Astana, Nazarbayev University, Kazakhstan
2016 - Present: Associate Professor, Department of Biology, School of Science and Technology, Nazarbayev University, Kazakhstan

RESEARCH INTERESTS — LIFE SCIENCES-BIOMEDICINE-NEUROSCIENCE

- 1. Regulation of neurotransmitter receptors and brain function in health and disease.**
 - To better understand the mechanisms of synaptic transmission and synaptic plasticity (LTP, LTD, and metaplasticity).
 - To investigate the role of glutamate receptors in learning and memory.
- 2. Understanding the mechanisms of aging and neurodegeneration**
 - To investigate the role of beta-amyloid on astrocyte and AD.

- To explore the impact of Reactive Oxygen Species (ROS) on aging and neurodegeneration

3. Development of new therapeutic strategies to neurological disorders

- To search for molecules to prevent and treat epilepsy, aging, and neurodegenerative disorders.

PROFESSIONAL AFFILIATION

Member of German Physiological Society (DPG; since 2007)
 Member of Society for Neuroscience (SfN; since 2008)
 Member of Alzheimer's disease association (since 2007)
 Reviewer of Neuroscience Letter (since 2011)
 Reviewer of Journal of Developmental Neuroscience (since 2010)
 Reviewer of Journal of the Neurological Sciences (since 2017)

HONORS AND AWARDS

- 1995: Agu Hesenov, **Tursonjan Tokay**, Gulnisa Kerem, Nurmamet Bagashar, Halima Abdukerim. Colored Human Anatomy Atlas (Chinese-Uygur language). Xinjiang People's publishing House, 1993. (*Won the fourth national outstanding science and technology book prize*)
- 1996: Wang Jinglan, **Tuerxunjiang**, Cui Jing. Correlation between handprint and body height of the Mongolian tuerhute tribe in heshuo county Xinjiang. 6th Congress of Xinjiang Anatomy Society, 25-28 July, 1996, Urumqi, China (Outstanding research award).
- 2007: L Müller, **T Tokay**, R Köhling and T Kirschstein. Alteration of synaptic plasticity in the epileptic CA1 region: relevance in cognitive dysfunction? *The 5th joint meeting of International League Against Epilepsy (ILAE)*. May16-19, 2007. 9, Basel, Switzerland, (Poster prize for excellent finding).
- 2013: Johannes Mayer, **Tursonjan Tokay**, Gesine Reichart, Saleh Ibrahim, Simone Baltrusch and Rüdiger Köhling. Altered ROS production and long-term potentiation are early event in conplastic mouse model with mutations in mitochondrial DNA. 92nd Annual Meeting of the German Physiological Society (DPG), March 02-05, 2013, Heidelberg, Germany. (Poster prize for excellent work).
- 2014: Mayer J., Reichart G., **Tokay T.**, Ibrahim S., Baltrusch S., Köhling R. Age-related changes in the mouse brain hippocampus. 93rd Annual Meeting of the German Physiological Society (DPG), March 13-15, 2014, Mainz, Germany (Poster prize for excellent work).

RESEARCH ACTIVITY

1. "The effect of beta-amyloid peptides on endozepine biosynthesis in cultured rat astrocytes" (2002-2004), funded by grants from INSERM (U413), the European Institute for Peptide Research (IFRMP 23) and the Conseil Régional de Haute-Normandie. (Role: Investigator).
2. "The Role of hippocampal HCN channels on synaptic plasticity" 2005-2007) funded by German Research Council (DPG). (Role: Co-PI)
3. "The Role of D-serine-mediated synaptic transmission and NMDA receptor-dependent synaptic plasticity in the memory function and cognitive impairment in neurological diseases" (2006-2008), funded by German Federal Ministry for Education and Research (BMBF). (Role: Co-PI).
4. "Reactive Oxygen Species and the Dynamics of Aging. A Mitochondrial Multi-gene, Multi-organ Approach" (2011-2013), funded by German Federal Ministry for Education and Research (BMBF). (Role: Co-PI).
5. "Studying the mechanisms of magnetic stimulation induced synaptic plasticity" (2009), funded by intramural research funding (FORUN, University of Rostock). (Role: PI).
6. "Age-related changes of NMDA receptor subunits in the hippocampus" (2010), funded by intramural research funding (FORUN, University of Rostock). (Role: PI)
7. Kazakhstan Autism Spectrum Disorders Registry (2016-2018), funded by MES Kazakhstan (Role: Co-PI). In progress.

BOOK CHAPTERS

1. Agu Hashan, **Tursonjan Tokay**, Hailiman et al. Color Atlas of Human Anatomy, *Xinjiang People's Printing House*, 1993.
2. **Tursonjan**, Nurmaimaiti, Hailiman et al. Anatomy Terminology (Chinese-Uygur language). *Xinjiang Medical Publishing House*, 1994
3. Bai Naigang, Ying Rong, **Tursonjan**, Guan Huazhong et al. Concise Regional Anatomy, Xinjiang People's Printing House, 1995
4. Guan Huazhong, Ying Rong, **Tursonjan**, Bai Naigang et al. Concise Systemic Anatomy, *Xinjiang People's Printing House*, 1995
5. Hailiman, **Tursonjan** et al. Systemic Anatomy Reference Book (Q&A). *Xinjiang Science and Technology Printing House*, August, 1996.

MOST RELATED 10 PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Bolat Sultankulov, Dmitriy Berillo, Karina Sultankulova, **Tursonjan Tokay**, Arman Saparov. Progress in the Development of Chitosan-Based Biomaterials for Tissue Engineering and Regenerative Medicine. *Biomolecules* (accepted for Publication on Aug 23, 2019). (4.694 IF).
2. Reichart G, Mayer J, Zehm C, Kirschstein T, **Tokay T**, Lange F, Baltrusch S, Tiedge M, Fuellen G, Ibrahim S, Köhling R. Mitochondrial complex IV mutation increases ROS production and reduces lifespan in aged mice. *Acta Physiol (Oxf)*. 2019 Apr; 225(4):e13214. (5.9 IF)
3. Rehberg M, Kirschstein T, Guli X, Müller S, Rohde M, Franz D, **Tokay T**, Köhling R. Functional Metaplasticity of Hippocampal Schaffer Collateral-CA1 Synapses Is Reversed in Chronically Epileptic Rats. *Neural Plast*. 2017;2017:8087401. doi: 10.1155/2017/8087401. (2.367 IF)
4. Johannes Mayer, Gesine Reichart, **Tursonjan Tokay**, Falko Lange, Simone Baltrusch, Christian Junghanss, Olaf Wolkenhauer, Robert Jaster, Manfred Kunz, Markus Tiedge, Saleh Ibrahim, Georg Fuellen and Rüdiger Köhling. Reduced adolescent-age spatial learning ability associated with elevated juvenile-age superoxide levels in complex I mouse mutants. *PLoS One*. 2015 Apr 8;10(4):e0123863. doi: 10.1371/journal.pone.0123863. (3.534 IF).
5. Katharina Klatte, Timo Kirschstein, David Otte, Leonie Pothmann, Lorenz Müller, **Tursonjan Tokay**, Maria Kober, Mischa Uebachs, Andreas Zimmer and Heinz Beck. Impaired D-serine mediated co-transmission mediates cognitive dysfunction in epilepsy *Journal of Neuroscience*, 2013, 33(32):13066-80. (6.91 IF).
6. **Tokay T**, Müller L, Porath K, Köhling R, Kirschstein T. Enhanced NMDA receptor-dependent LTP in the epileptic CA1 area via upregulation of NR2B. *Neurobiol Disease*, 2013 Jan 8. doi: pii: S0969-9961(13)00002-8. 10.1016/j.nbd.2012.12.011. (shared first author; 5.62 IF).
7. **Tokay T**, Kirschstein T, Rohde M, Zschorlich V, Köhling R. NMDA receptor-dependent metaplasticity by high-frequency magnetic stimulation. *Neural Plast*. 2014;2014:684238. doi: 10.1155/2014/684238. (3.608 IF).
8. **Guli, X., Tokay, T.**, Rohde, M., Bender, R.A., Koehling, R., Kirschstein, T., ZD7288 Enhances Long-Term Depression at Early Postnatal Medial Perforant Path-Granule Cell Synapses, *Neural Plasticity*, (2012). (shared first author; 2.86 IF).
9. **Tursonjan Tokay**, Raya Hachem, Olfa Masmoudi-Kouki, Pierrick Gandolfo, Laurence Desrues, Jerome Leprince, Helene Castel, Mickael Diallo, Mohamed Amri, Hubert Vaudry, Marie-Christine Tonon, Beta-amyloid peptide stimulates endozepine release in cultured rat astrocytes through activation of N-formyl peptide receptors, *Glia*, 56 (2008) 1380-1389. (5.07 IF).
10. **Tursonjan Tokay**, Marco Rohde, Sabine Krabbe, Mirko Rehberg, Roland A Bender, Rüdiger Köhling, Timo Kirschstein, HCN1 channels constrain DHPG-induced LTD at hippocampal Schaffer collateral-CA1 synapses, *Learning & Memory*, 16 (2009) 769-776. (4.08 IF).

11. **Tursonjan Tokay**, Norman Holl, Timo Kirschstein, Volker Zschorlich, Rüdiger Köhling, High-frequency magnetic stimulation induces long-term potentiation in rat hippocampal slices, *Neuroscience Letters*, 461 (2009) 150-154. (2.03 IF).

OTHER RELATED PUBLICATIONS IN PEER-REVIEWED JOURNALS

12. Han B, **Tokay T**, Zhang G, Sun P, Hou S. Eag1 K(+) Channel: Endogenous Regulation and Functions in Nervous System. *Oxid Med Cell Longev*, 2017, Review. (4.49 IF)
13. Mao XY, **Tokay T**, Zhou HH, Jin WL. Long-range and short-range tumor-stroma networks synergistically contribute to tumor-associated epilepsy. *Oncotarget*. 2016 Mar 7. doi: 10.18632/oncotarget.7962. (6.359 IF).
14. Guli X, **Tokay T**, Kirschstein T, Köhling R. Status Epilepticus Enhances Depotentiation after Fully Established LTP in an NMDAR-Dependent but GluN2B-Independent Manner. *Neural Plast*. 2016;2016:6592038. doi: 10.1155/2016/6592038.. (IF: 3.608 IF)
15. Würdemann T, Kersten M, **Tokay T**, Guli X, Kober M, Rohde M, Porath K, Sellmann T, Bien CG, Köhling R, Kirschstein T. Stereotactic injection of cerebrospinal fluid from anti-NMDA receptor encephalitis into rat dentate gyrus impairs NMDA receptor function. *Brain Res*. 2016. (IF: 2.843 IF).
16. André X. C. N. Valente^{1,2,3}, Altyнай Adilbayeva⁴, Tursonjan Tokay⁴, Albert A. Rizvanov³. The Universal Non-Neuronal Nature of Parkinson's Disease: A Theory. *Central Asian Journal of Global Health*, 2015, Volume 4, No. 1, DOI: 10.5195/cajgh.2015.232, <http://cajgh.pitt.edu>
17. T. Kirschstein, **T. Tokay**, M. Rohde, V. Zschorlich, R. Köhling. Repetitive magnetic stimulation (rMS) leads to NMDA receptor-dependent metaplasticity in hippocampal slices in vitro. *Clinical Neurophysiology*, Volume 126, Issue 8, August 2015, Pages e85–86 doi:10.1016/j.clinph.2015.04.117 (3.097 IF)
18. Dammann F, Kirschstein T, Guli X, Müller S, Porath K, Rohde M, **Tokay T**, Köhling R. Bidirectional shift of group III metabotropic glutamate receptor-mediated synaptic depression in the epileptic hippocampus. *Epilepsy Res*. 2018 Jan; 139:157-163. doi: 10.1016/j.eplepsyres.2017.12.002. (2.367 IF)
19. Müller L, Müller S, Sellmann T, Groeneweg L, **Tokay T**, Köhling R, Kirschstein T. Effects of oxygen insufflation during pilocarpine-induced status epilepticus on mortality, tissue damage and seizures. *Epilepsy Res*. 2014 Jan;108(1):90-7. (2.48 IF).
20. Yingqiu Xie, Sanzhar Naizabekovm; Zhanlin Chen; **Tursonjan Tokay**. The power of PTEN/AKT: molecular switch for tumor suppressor or oncogene. *Oncology Letters*, 2016, DOI: 10.3892/ol.2016.4636 (1.554 IF)
21. Mader F, Krause L, **Tokay T**, Hakenberg OW, Köhling R, Kirschstein T. P2Y receptor-mediated transient relaxation of rat longitudinal ileum preparations involves phospholipase C activation, intracellular Ca(2+) release and SK channel activation. *Acta Pharmacol Sin*. 2016 Mar 28. doi: 10.1038/aps.2015.137. (2.912 IF).
22. Tursynbay Y, Zhang J, Li Z, **Tokay T**, Zhumadilov Z, Wu D, Xie Y. Pim-1 kinase as cancer drug target: An update. *Biomed Rep*. 2016 Feb;4(2):140-146.
23. Xie Y, Istayeva S, Chen Z, **Tokay T**, Zhumadilov Z, Wu D, Hortelano G, Zhang J. nMET, a new target in recurrent cancer. *Curr Cancer Drug Targets*. 2016 Jan 4. (IF: 3.522 IF)
24. Marie Jarry, Mickaël Diallo, Céline Lecointre, Laurence Desrues, **Tursonjan Tokay**, David Chatenet, Jérôme Leprince, Oriana Rossi, Hubert Vaudry, Marie-Christine Tonon, Laurent Prézeau, Hélène Castel, Pierrick Gandolfo, The vasoactive peptides urotensin II and urotensin II-related peptide regulate astrocyte activity through common and distinct mechanisms: involvement in cell proliferation, *Biochemical Journal*, 428 (2010) 113-124. (4.65 IF).
25. Timo Kirschstein, Fabian Dammann, Jenny Klostermann, Mirko Rehberg, **Tursonjan Tokay**, Rudolf Schubert, Rüdiger Köhling, Dopamine induces contraction in the proximal, but relaxation in the distal rat isolated small intestine, *Neuroscience Letters*, 465 (2009) 21-26. (2.03 IF).

26. Timo Kirschstein, Mirko Rehberg, Rika Bajorat, **Tursonjan Tokay**, Katrin Porath, Rüdiger Köhling, High K⁺-induced contraction requires depolarization-induced Ca²⁺ release from internal stores in rat gut smooth muscle, *Acta Pharmacologica Sinica*, 30 (2009) 1123-1131. (2.35 IF).
27. Mueller, L., Tokay, T., Rueschenschmidt, C., Chen, J., Becker, A., Koehling, R., Beck, H., Kirschstein, T., Alteration of synaptic plasticity in the epileptic CA1 region: Relevance in cognitive dysfunction? *Epilepsia*, 48 (2007) 53-54. (Abstract form; 3.909 IF).
28. Rehberg, M., **Tokay, T.**, Rohde, M., Kirschstein, T., Koehling, R., Long-Term Potentiation and Spatial Learning in Aged Rats with Chronic Temporal Lobe Epilepsy, *Epilepsia*, 50 (2009) 43. (Abstract form; 3.909 IF).
29. Judith Rohde, Timo Kirschstein, Wiebke Wilkars, Lorenz Müller, **Tursonjan Tokay**, Katrin Porath, Roland A Bender, Rüdiger Köhling. Upregulation of presynaptic mGluR2, but not mGluR3 in the epileptic medial perforant path, *Neuropharmacology*, 62 (2012) 1867-1873. (4.11 IF).
30. Marco Rohde, **Tursonjan Tokay**, Rüdiger Köhling, Timo Kirschstein., GABA(A) receptor inhibition does not affect mGluR-dependent LTD at hippocampal Schaffer collateral-CA1 synapses, *Neuroscience Letters*, 467 (2009) 20-25. (2.03 IF).
31. **Tursonjan Tokay**, Olfa Masmoudi, Pierrick Gandolfo, Jérôme Leprince, Georges Pelletier, Hubert Vaudry, Marie-Christine Tonon. Beta-amyloid peptides stimulate endozepine biosynthesis in cultured rat astrocytes. *J Neurochem.* 2005 Aug; 94(3):607-16(2005). (3.97 IF).
32. Olfa Masmoudi, Pierrick Gandolfo, **Tursonjan Tokay**, Jérôme Leprince, Aurélie Ravni, Hubert Vaudry and Marie-Christine Tonon. Somatostatin down-regulates the expression and release of endozepines from cultured rat astrocytes via distinct receptor subtype, *J. Neurochem* 2005 Aug;94(3):561-71. (3.97 IF).

SCIENTIFIC CONGRESS

1. Galymzhan Kuatbay and **Tursonjan Tokay**. Brain Death. 2nd International Conference on Central Nervous System Disorders and Therapeutics, December 05-07, 2016 Dubai, UAE.
2. **T. Tokay**, L. Mueller, Y. Xie, T. Kirschstein, H. Beck and R. Koehling. D-serine improves learning and memory in epileptic animals. 4th International Scientific Conference on “Regenerative Medicine & Healthy Aging”, May 11-12, 2016, Astana, Kazakhstan.
3. Y. Xie, Sh. Istayeva, **T. Tokay**, Zh. Zhumadilov, Zh. Chen. c-MET signaling as a promise of targeted therapy in glioblastoma. 4th International Scientific Conference on “Regenerative Medicine & Healthy Aging”, May 11-12, 2016, Astana, Kazakhstan.
4. Mayer J., Reichart G., **Tokay T.**, Ibrahim S., Baltrusch S., Köhling R. Age-related changes in the mouse brain hippocampus. 93rd Annual Meeting of the German Physiological Society (DPG), March 13-15, 2014, Mainz, Germany.
5. Johannes Mayer, **Tursonjan Tokay**, Gesine Reichart, , Saleh Ibrahim, Simone Baltrusch and Rüdiger Köhling. Altered ROS production and long-term potentiation are early event in conplastic mouse model with mutations in mitochondrial DNA. 92nd Annual Meeting of the German Physiological Society (DPG), March 02-05, 2013, Heidelberg, Germany. (Poster prize)
6. **Tursonjan Tokay**¹, Gesine Reichart¹, Johannes Mayer¹, Saleh Ibrahim², Simone Baltrusch³ and Rüdiger Köhling¹. Differential influence of respiratory chain dysfunction on cognitive functions during development (poster). Annual Meeting of the German Physiological Society, March 22-25, 2012, Dresden, Germany.
7. **Tursonjan Tokay** ¹, Mirko, Rehberg.¹, Marco, Rohde¹, Kathrin, Porath ¹, Timo, Kirschstein ¹, Rüdiger, Köhling. Increased NR2B/NR2A ratio in hippocampus of spatial learning-impaired aged rats (poster). 91st Annual Meeting of the German Physiological Society, March 22-25, 2012, Dresden, Germany.

8. Guli Xiati 1, **Tursonjan Tokay** 1, Marco, Rohde 1, Roland Bender 2, Rüdiger, Köhling, Timo, Kirschstein 1. HCN channels constrain long-term depression at medial perforant path–granule cell synapses of early postnatal rats (poster). Annual Meeting of the German Physiological Society, March 22-25, 2012, Dresden, Germany.
9. Judith, Rohde, Timo, Kirschstein, **Tursonjan, Tokay**, Lorenz, Müller, Roland, Bender, Rüdiger Köhling. The metabotropic glutamate receptor mGluR2, but not mGluR3 is upregulated in the medial perforant path of pilocarpine-treated chronically epileptic rats (Oral). Annual Meeting of the German Physiological Society, March 22-25, 2012, Dresden, Germany.
10. **Tursonjan Tokay**, Timo Kirschstein, Volker Zschorlich, Roediger Koehling. Mechanisms of Magnetic Stimulation-Induced Synaptic Plasticity in Rat Hippocampus. FORUN Congress 2010, Rostock, Germany.
11. **Tursonjan Tokay**, Norman Holl, Timo Kirschstein, Volker Zschorlich, Roediger Koehling. High frequency magnetic stimulation induces long-term potentiation in rat hippocampal slices. 8th German National Neuroscience Meeting, March-25-29, 2009, Goettingen, Germany
12. **T. Tokay**, Role of D-serine in epilepsy. 88th National Physiological Congress (DPG 2009), March 22-25, Giessen, Germany (Invited speaker)
13. M. Rehberg, **T. Tokay**, M. Rohde, T. Kirschstein, R. Köhling, Spatial learning and long-term potentiation in aged chronically epileptic rats. 88th National Physiological Congress (DPG 2009), Giessen, Germany
14. M. Rohde, **T. Tokay**, R. Köhling, T. Kirschstein, Inhibitory interneurons are not required for metabotropic glutamate receptor-dependent LTD in the hippocampal CA1 region. 88th National Physiological Congress (DPG 2009), Giessen, Germany
15. Timo Kirschstein, **Tursonjan Tokay**, Roediger Koehling. 32nd International meeting of Society for Neurosciences. November 14-19, 2008, Washington, USA
16. **Tursonjan Tokay**, Norman Holl, Timo Kirschstein, Volker Zschorlich, Roediger Koehling. Magnetic stimulation induces long-term potentiation in rat hippocampal slices. 87th National Physiological Congress, 02-05 March, 2008 Cologne, Germany
17. Lorenz Müller, **Tursonjan Tokay**, Roediger Köhling and Timo Kirschstein. CA1 region synaptic plasticity changes in epilepsy: Relevance for the cognitive dysfunction. The 5th joint meeting of International League Against Epilepsy (ILAE), May 16-19, 2007, Basel, Switzerland
18. **T. Tokay**, M. Rohde, K. Sabine, T. Kirschstein, R. Role of HCN channels in synaptic plasticity. XII Treffen der Ostseephysiologen, 11-12 Mai, 2007, Kiel, Germany. (Invited speaker).
19. **T. Tokay**, K. Sabine, T. Kirschstein, R. Hyperpolarization-activated Cation Channels Presynaptically influences Synaptic Transmission and mGluR-dependent LTD in Rat Hippocampal CA1 Region. 7th National Neuroscience Congress, 29th March-1st April, 2006, Goettingen, Germany
20. K. Timo, **T. Tokay**, M. Rohde, R. Köhling. Presynaptic HCN channels modulate NMDA receptor-dependent synaptic plasticity in immature rat medial perforant path. 7th National Neuroscience Congress, 29th March-1st April, 2007, Goettingen, Germany
21. M. Rohde, **T. Tokay**, R. Köhling, T. Kirschstein. Role of HCN Ion Channels in mGluR-dependent LTD. 86th National Physiological Congress, 25-28 March, 2006 Hannover, Germany
22. Lorenz Müller, **Tursonjan Tokay**, Roediger Köhling and Timo Kirschstein. Enhancement of NMDA receptor-dependent LTP in CA1 region in epileptic rats. 86th National Physiological Congress, 25-28 March, 2007 Hannover, Germany
23. Miachael, Dialo, **Tokay T**, Leprince J, Vaudry H, Tonon MC and Gandolfo P. Roles of Urotensin II and Urotensin II-related peptide in the control of astrocyte proliferation and post-ischemic angiogenesis. 8th National Congress of LARC-Neurosciences, 14-16 September, 2005, Amien, France

24. Miachael, Dialo, **Tokay T**, Leprince J, Vaudry H, Tonon MC and Gandolfo P. Beta-Amyloid Stimulates Endozepine Release in Cultured Astrocytes Through Activation of Formyl Peptide Receptors. National Congress of Science and Technology, 20-23 August 2005, Urumqi, China
25. Miachael, Dialo, **Tokay T**, Leprince J, Vaudry H, Tonon MC and Gandolfo P. Rat cortical astrocytes express specific and fuctional binding sites for urotensin II and urotensin-related peptide. 7th National Congress of Neurosciences Society, 17-20 May, 2005, Lille, France
26. **Tokay T**, Miachael, Dialo, Leprince J, Vaudry H, Tonon MC. and Gandolfo P Interaction of A β peptide with Urotensin II. Week for the Brain 2004, 15-17 December, 2004, Rouen, France
27. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Implication of formyl peptide receptors in the stimulatory effect of the β -amyloid peptide on endozepine release. 8th National Congress of LARC-Neurosciences, 15-17 October, 2004, Paris, France
28. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Formyl peptide receptors involve in the A β -induced endozepine production from astrocytes. 10th Assembly Day of European Institute for Peptide Research, 18 July, 2004, Dieppe, France
29. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Stimulatory effect of β A peptide on endozepine release from cultured astrocytes involve in the activation of formyl peptide receptors. 32nd International Colloquia of Neuroendocrinology Society, 15-18 September, 2004, Montpellier, France
30. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. The A β peptide stimulates endozepine release from cultured rat astrocytes via activation of the formyl peptide receptors. Assembly Day of Doctoral School, 19 March, 2004, Caen, France
31. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Effect of the A β peptide on the endozepine release from rat astrocytes. 6th International Colloquia of Neuroscience Society, 13-16 May, 2003, Rouen, France
32. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Effect of the A β peptide on the endozepine production from cultured rat astrocytes. 9th Assembly Day of European Institute for Peptide Research, 6 July, 2003, le Havre, France
33. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. The peptide A β 25-35 stimulates the production of endozepines from cultured astrocytes. 6th National Congress of LARC-Neurosciences, 16-18 October, 2002, Rouen, France
34. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. The effect of the peptide A β 25-35 on the endozepine production from primary cultured rat astrocytes. Assembly Day of Doctoral School, 21 March, 2002, Caen, France
35. **Tokay T**, Masmoudi O, Gandolfo P, Leprince J, Vaudry H, Tonon MC. The bete-amyloid peptide induces endozepine production from primary cultured rat astrocytes. 5th National Congress of LARC-Neurosciences, 18-19 October, 2001, Mont-Saint-Aignan, France
36. Masmoudi O, **Tokay T**, Gandolfo P, Leprince J, Vaudry H, Tonon MC. Somatostatin down-regulates the expression and release of endozepines from cultured rat astrocytes, 5th International Colloquia of Neuroscience Society, 15-17 September, 2001, Koln, France
37. Wang Jinglan, Tuerxunjiang, Cui Jing. Correlation between handprint and body height of the Mongolian tuerhute tribe in heshuo county Xinjiang. 6th Congress of Xinjiang Anatomy Society, 25-28 July, 1996, Urumqi, China

RESEARCH SKILLS

Hold advanced level training in research methods and analytical techniques, skilled in defining research objectives and methods, analyzing problems and alternative solutions and formulating recommendations. Here some technical skills:

- Brain cell culture (neuron and glia)

- Radioimmunoassay (RIA)
- Cell protein measurement
- Intercellular second messenger measurement
 - AMPc
 - Pholyphosphoinositides (PIP and IP₃)
- Fluorescent cell survival test
- Peptide separating by liquid chromatography
- RT-PCR
- Cytokine measurement (ELISA kit)
- Establishing rodent epilepsy model
- Electrophysiological measurements (Intracellular recordings)
- Brain slicing
- Brain Sterotaxic injection
- Morris water maze (MWM)

LANGUAGE SKILLS

1. Kazakh : fluent conversation, good reading and writing
2. English : fluent conversation, excellent reading and writing
4. Chinese : fluent conversation, excellent reading and writing
5. German: good conversation, reading.
6. French : good conversation, reading and writing