CURRICULUM VITAE

Kazuhito Toyooka, Ph.D.

Assistant Professor

CURRENT ADDRESS:

Work:
Drexel University College of Medicine
Department of Neurobiology and Anatomy
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EDUCATION:

04/1992 –04/1999	Osaka University, Japan	Ph.D.(05/99)	Immunology
04/1988 –03/1992	Shizuoka University, Japan	B.S.(03/92)	Developmental Biology

Postgraduate Training:

04/1999 – 08/2002	University of California, San Diego	Postdoctoral Fellow	Pediatrics

Employment History and Faculty Appointments:

09/2002 – 04/2003	Saitama Medical University	Research Associate	Cell Biology
05/2003 – 06/2003	Saitama Medical University	Senior Research Fellow	Cell Biology
07/2003 – 12/2006	Osaka City University	Lecturer	Cell Biology and Biochemistry
01/2007 – 11/2007	University of California, San Diego	Assistant Project Scientist	Pediatrics
12/2007 – 12/2012	University of California, San Francisco	Assistant Research Biologist	Pediatrics
01/2013 – Present	Drexel University College of medicine	Assistant Professor	Neurobiology and Anatomy

HONORS AND AWARDS:

2017	BeHEARD (Helping Empower and Accelerate Research Discoveries) Challenge Award	Rare Genomics Institute
2017	Cyagen Animal Model Award (CAMA)	Cyagen

Memberships and Offices in Professional Societies:

2016-Present	The American Society for Cell Biology
2004-Present	Society for Neuroscience

PROFESSIONAL COMMITTEES AND ADMINISTRATIVE SERVICE

1. INSTITUTIONAL

07/2013	Qualifying Exam Committee Member (Neuroscience Program)
07/2014	Qualifying Exam Committee Member (Neuroscience Program)
09/2014	Discovery Day Platform Presenter Selection Committee
01/2015	Grad student recruiting Committee Member (Neuroscience)
2013-2016	Research Day Judge, Drexel University
06/2015	Neuroscience Camp for High School Students 2015 (Students worked in my lab)
05/2018	Qualifying Exam Committee Member (Neuroscience Program)
01/2019	CURE grant reviewer and study section member
09/2015	Discovery Day Platform Presenter Selection Committee
2016-2018	Preliminary Exam Chair
2016-2018	Neuroscience Steering Committee Member
2013-Present	Discovery Day Judge, Drexel University
2013-present	MCBG Steering Committee Member
2013-present	MCBG Student Recruiting Committee Member

2. EXTERNAL

2016	Ad-hoc reviewer	Human Molecular Genetics
2016	Guest editor in a special issue	Brain Sciences
2016-Present	Editorial board member	Brain Sciences
2017	Ad-hoc reviewer	Developmental Dynamics
2017	Evaluation committee member	Brain Sciences Travel Awards

2017	Ad-hoc reviewer	Progress in Neuropsychopharmacology & Biological Psychiatry
2018	Ad-hoc reviewer	Cytogenic & Genome Research
2018-2019	Guest editor in a special issue	Brain Sciences
2018-2019	Guest editor in a special issue	Frontiers in Cell and developmental Biology
2018	Ad-hoc reviewer	npj Schizophrenia
2019	Ad-hoc reviewer	European Journal of Medical Genetics
2019	Ad-hoc reviewer	Scientific Reports
2019	Ad-hoc reviewer	Molecular Psychiatry
2020	Ad-hoc reviewer	Current Biology
2020	Ad-hoc reviewer	Trends in Pharmacological Sciences
2020-2021	Review editor	Frontiers in Cellular Neuroscience (Cellular Neurophysiology)
2021-present	Associate editor	Frontiers in Cellular Neuroscience (Cellular Neurophysiology)
2021	Ad-hoc reviewer	Nature Communication
2022	Grant proposal reviewer	FY22 NSF RECODE study section
2022	Ad-hoc reviewer	Seminars in Cell and developmental Biology
2022	Ad-hoc reviewer	Frontiers in Cellular Neuroscience
2022	Ad-hoc reviewer	Genes
2022-present	Guest editor	International Journal of Molecular Sciences, "Responsible Factors for Neuromorphogenesis in the Brain"
2022-present	Guest editor (Book)	Methods in Molecular Biology, “Neuronal Morphogenesis - Methods and Protocols”
2022	Grant proposal reviewer	New Jersey Governor’s Council for Medical Research and Treatment of Autism 2023
2022	Organizer	3rd International Electronic Conference on Brain Sciences
2022	Ad-hoc reviewer	Cells
2022	Ad-hoc reviewer	Journal of Autism and Developmental Disorders
2022-present	Guest editor	International Journal of Molecular Sciences, "Neurodevelopmental

		Disorders: From Molecular and Cellular Mechanism to Therapeutic Perspective"
2022	Ad-hoc reviewer	Frontiers in Molecular Neuroscience
2022	Ad-hoc reviewer	Biology
2023	Ad-hoc reviewer	Cell Reports
2023	Annual report reviewer	New Jersey Governor's Council for Medical Research and Treatment of Autism 2023

PUBLIC SERVICE:

10/2016 Support of high school student's experiments Los Altos High School, CA

EDUCATIONAL ACTIVITIES:

1.COURSES (Taught)

Year	Program or School	Course title	audience	Role
08/2013-2015	Neuroscience I	Neurogenesis and neuronal differentiation	1st year graduate student (Neuroscience program)	Lecturer
08/2013-2014	Micronatomy, lecture	Cytoskeleton	Medical students	Lecturer
08/2013-2014	Micronatomy, lecture	Cell junction	Medical students	Lecturer
01/2013-2021	Core Curriculum II	Cell polarity	1st year graduate student (all programs)	Lecturer
02/2014-2022	Core Curriculum II	Development/Differentiation – Introduction and overview	1st year graduate student (all programs)	Lecturer
08/2013-present	Neuroscience I	Early events in neural development; pattern and positional information	1st year graduate student (Neuroscience program)	Lecturer
08/2013-present	Neuroscience II	Growth cones, migration, turning	2nd year graduate student (Neuroscience program)	Lecturer
09/2013-present	Neuroscience I	Neuronal migration	1st year graduate student (Neuroscience program)	Lecturer
08/2013-present	Micronatomy, Lab	Fundamental, Epithelium, gland,	Medical students	Instructor

Year	Program or School	Course title	audience	Role
		connective tissue, Integument, Muscle, Nerve, etc		
08/2022-present	Core Concepts in Biochemistry and Cell Biology	How to work with DNA – Transgenics	1st year graduate student (all programs)	Lecturer

2. MENTORING

Dates	Name	Program or School	Role	Current Position
2013	Thomas Sibert	Drexel University	Research Advisor	
01/2013-06/2016	Tomoka Wachi	Drexel University	Mentor	Physician in a hospital in Japan
01/2014-03/2017	Brett Cornell	Drexel University School of Medicine, Neuroscience Program	Mentor	Medical Writer at Boston Scientific
06/2016 – 08/2019	Trevor Smith	Drexel University School of Medicine	Mentor and supervision	
01/2017-04/2021	Sara Blazejewski	Drexel University School of Medicine, Neuroscience Program	Mentor	Researcher position in GlaxoSmithKline
09/2017-06/2022	Sarah Bennison	Drexel University School of Medicine, Neuroscience Program	Mentor	Postdoc researcher in University of Southern California, Dr. Pat Levitt lab
11/2018 - present	Xiaonan Liu	Drexel University School of Medicine, Pharmacology and Physiology	Mentor	Ph. D. candidate in my lab
06/2021-08/2021	Lozen Robinson	Drexe University	Mentor	STAR scholar, summer undergraduate student
05/2022-present	Cayla Andrews	Drexel University School of Medicine	Mentor	M.S. candidate in my lab
10/2022-present	Bijaya Manandhar	Drexe University	Mentor	Volunteer undergraduate student

Students Accomplishments:

Brett Cornell, PhD:

- Goldberger/Boyne/Levine Award for Student Excellence: 2016
- Received the second place for his poster presentation in the Outstanding Senior Graduate Student Poster in Discovery Day in Drexel University, 2016

- Published 6 manuscripts and four poster presentations under my mentorship

Sara Blazejewski, PhD:

- NIH F31 (06/2020-04/2021)
- Travel award: 2018 and 2019 in The American Society for Cell Biology (ASCB)/EMBO Annual meeting
- Travel award : Drexel Biomedical Sciences Graduate Student Association in 2020
- Selected for the platform presentation in Discovery Day in Drexel University, 2020
- Overall Finalist/College of Medicine Winner for the Drexel University Graduate College Outstanding Mentorship Award

Sarah Bennison, PhD

- NIH F31 (06/2021-present)
- Travel award: 2019 in The American Society for Cell Biology (ASCB)/EMBO Annual meeting
- Received an honorable mention for her poster presentation in the Outstanding Junior Graduate Student Poster in Discovery Day in Drexel University, 2018
- Received the second place for her poster presentation in the Outstanding Senior Graduate Student Poster in Discovery Day in Drexel University, 2020
- Received the first place for her oral platform presentation in Discovery Day in Drexel University, 2021
- 2022 Drexel University Research Excellence Award

Xiaonan Liu: 5th year PhD Candidate

- Received the third place for her poster presentation in the Outstanding Junior Graduate Student Poster in Discovery Day in Drexel University, 2018
- Travel award : Drexel Biomedical Sciences Graduate Student Association in 2020
- Two first author publications in Hum Mol Genet, 2021, and Brain Scciences, 2022.
- Received 2022-2023 Dean's Fellowship for Excellence in Collaborative or Themed Research

THESIS COMMITTEE

Dates	Name	Program or School	My Role	Current Position
05/2017-06/2017	Ankita Patil	Drexel University School of Medicine, Neuroscience Program	MS Committee Member	Ph.D. candidate in Neuroscience Program at Drexel University
05/2017-12/2017	Zarina Greenberg	University of South Australia	PhD Examiner	
04/2017-03/2019	Nina Latcheva	Drexel University Biology Department	PhD Thesis Committee member	Ph.D. candidate in Molecular and Cellular Biology and

Dates	Name	Program or School	My Role	Current Position
				Genetics Program
09/2018-06/2019	Teresa LuPone	Drexel University School of Medicine, Microbuiology and Immunology	MS Committee Member	MS Candidate in Microbiology and Immunology
04/2017-11/2022	Megan Radler	Drexel University Biology Department	Ph.D. Thesis Committee Member	Ph.-D. candidate in Biology Program
07/2017-07/2021	Ankita Patil	Drexel University School of Medicine, Neuroscience Program	PhD Thesis Committee member	Ph.D. candidate in Neuroscience Program
07/2019 - 01/2022	Teresa LuPone	Drexel University School of Medicine, Microbuiology and Immunology	PhD Thesis Committee member, but she changed the mentor, so thesis committee was closed.	Ph.D. Candidate in Microbiology and Immunology
09/2020 – 08/2021	Olivia Cipollini	Drexel University School of Medicine, Microbuiology and Immunology	MS Committee Member	MS Candidate in Microbiology and Immunology
06/2020 - Present	Shrobona Guha	Drexel University School of Medicine, Neuroscience Program	PhD Thesis Committee member	Ph.D. candidate in Neuroscience Program
08/2021 – 09/2022	Lisa Stukenborg	Drexel University School of Medicine, MCBG Program	MS Thesis Committee Chair	MS candidate in MCBG Program
10/2022-present	Neha Mohan	Drexel University School of Medicine, Pharmacology and Physiology Program	Qualifying Exam Committee Member	Ph. D. candidate in Pharmacology and Physiology Program
12/2022-present	Justin Do	Drexel University School of Medicine, Cancer Biology	MS Thesis Committee	MS candidate in Cancer Biology

SUPPORT

1. Present research support

PI: Kazuhito Toyooka 09/2016-07/2023
NIH R01
Role of 14-3-3epsilon in neurite initiation

PI: Kazuhito Toyooka 6/2020 – 5/2024
Commonwealth Universal Research Enhancement (CURE) 2020
Targeting AMPK in Autism Spectrum Disorder

PI: Peter Baas (Co-Investigator: Kazuhito Toyooka) 04/2021-03/2023
NIH R21AG068597
Role of Tau in Microtubule Stability in Adult Neurons

PI: Peter Baas (Co-Investigator: Kazuhito Toyooka) 06/2021-05//2025
Commonwealth Universal Research Enhancement (CURE) 2021
Role of Kinesin Family Member C1 in Neuronal Migration

2. Past research support

PI: Elias Spiliotis (Co-Investigator: Kazuhito Toyooka) 6/2020 – 6/2022
Commonwealth Universal Research Enhancement (CURE) 2020
Roles of the autism and schizophrenia risk kinase TAOK2 and its phospho-target SEPT7 in neuritogenesis

PI: Kazuhito Toyooka 08/2014-12/201
2014 Professional Enrichment and Growth (PEG) Grant
Drexel University College of Medicine
Analysis of genes associated with developmental brain disorders using novel genetic animal models

BIBLIOGRAPHY

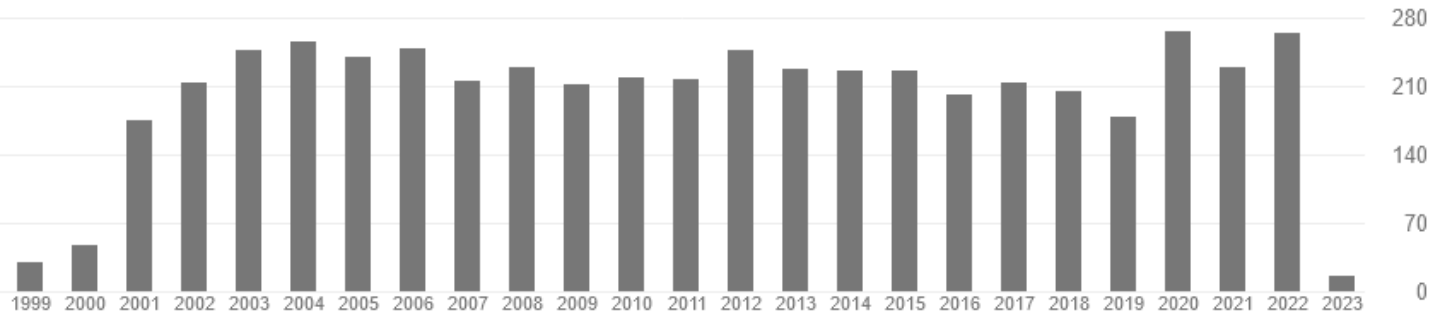
1. PUBLICATIONS

Complete List of Published Work in MyBibliography and Google Scholar:
https://www.ncbi.nlm.nih.gov/myncbi/16I9ouoEG3P/bibliography/public/

https://scholar.google.com/citations?hl=en&user=nF1ORg0AAAAJ&view_op=list_works&sortby=pubdate

Google scholar Scholarometer

	all	Since 2018
Citations	5,176	1,164
h-index	28	18
i10-index	41	27



1. *Tai, X.-G., Kita, Y., **Toyooka, K.,** Hamaoka, T. and Fujiwara, H. Thymic stroma-derived T-cell inhibitory factor (TSTIF) 2: TSTIF acts the antigen-presenting cell to inhibit antigen-stimulated T-cell proliferation. **Thymus**, 1993, 21:247-258. **IF: 0.800 (1999), # of Citation: 1**

2. *Iwata, H., Nagano, T., **Toyo-oka, K.,** Hirose, H., Hamaoka T. and Fujiwara, H. Suppression of Allograft Responses by Combining Alloantigen-Specific IV Presensitization with Suboptimal Doses of FK 506 or Rapamycin. **Transplant. Proc.**, 1994, 26:851-854. **IF:1.014 (2020), # of Citation: 0**

3. *Iwata, H., Nagano, T., **Toyo-oka, K.,** Hirose, H., Hamaoka, T. and Fujiwara, H. Suppression of allograft responses by combining alloantigen-specific i.v. pre-sensitization with suboptimal doses of rapamycin. **Int. Immunol.**, 1994, 6:93-99. **IF: 5.071 (2021), # of Citation: 8**

4. * Tai, X.-G., Yashiro, Y., Abe, R., **Toyooka, K.,** Wood, C. R., Morris, J., Long, A., Ono, S., Kobayashi, M., Hamaoka, t., Neben, S. and Fujiwara, H. A Role for CD9 Molecules in T Cell Activation. **J. Exp. Med.**, 1996, 184:753-758. **IF: 17.579 (2021), # of Citation: 106**

5. ***Toyooka, K.,**Maruo, S., Iwahori, T., Yamamoto, N., Tai, X.-G., Abe, R., Takahama, Y., Murakami, M., Uede, T., Hamaoka, T. and Fujiwara, H. CD28 co-stimulatory signals induce IL-2 receptor expression on antigen-stimulated virgin T cells by an IL-2-independent mechanism. **Int. Immunol.**, 1996, 8:159-169. **IF: 5.071 (2021), # of Citation: 22**

6. * Maruo, S., **Toyo-oka, K.,** Oh-hora, M., Tai, X.-G., Iwata, H., Takenaka, H., Yamada, S., Ono, S., Hamaoka, T., Kobayashi, M., Wysocka, M., Trinchieri, G. and Fujiwara, H. IL-12 Produced by Antigen-Presenting Cells Induces IL-2-Independent Proliferation of Helper Cell Clones. **J. Immunol.**, 1996, 156:1748-1755. **IF: 5.430 (2021), # of Citation: 68**

7. * **Toyo-oka, K.,**Tai, X.-G., Yashiro, Y., Ahn, H.-J., Abe, R., Hamaoka, T., Kobayashi, M., Neben, S. and Fujiwara, H. Synergy between CD28 and CD9 costimulation for naive T cell activation. **Immunol. Lett.**, 1997, 58:19-23. **IF: 4.230 (2021), # of Citation: 13**

8. *Tai, X.-G., **Toyooka, K.,** Yashiro, Y., Abe, R., Park, C.-S., Hamaoka, T., Kobayashi, M., Neben, S. and Fujiwara, H. CD9-Mediated Costimulation of TCR-Triggered Naive T Cells Lead to Activation Followed by Apoptosis. **J. Immunol.**, 1997, 159:3799-3807. **IF: 5.430 (2021), # of Citation: 58**

9. *Tai, X.-G., **Toyo-oka, K.,** Yamamoto, N., Yashiro, Y., Mu, J., Hamaoka, T. and Fujiwara, H. Expression of an Inducible Type of Nitric Oxide (NO) Synthase in the Thymus and Involvement of

NO in Deletion of TCR-Stimulated Double-Positive Thymocytes. **J. Immunol.**, 1997, 158:4696-4703. **IF: 5.430 (2021), # of Citation: 68**

10. * Tomura, M.; Nakatani, I.; Murachi, M.; Tai, X.-G., **Toyo-oka, K.,** Fujiwara, H. Supression of Allograft Responses Induced by Interleukin-6, Which Selectively Modulates Interferon-gBut Not Interleukin-2 Production. **Transplantation**, 1997, 64:757-763. **IF: 5.385 (2021), # of Citation: 14**

11. * **Toyooka, K.,**Tai, X.-G., Park, C.-S., Yashiro, Y., Hamaoka, T.and Fujiwara, H. A caspase inhibitor protects thymocytes from diverse signal-mediated apoptosis but not clonal deletion in fetal thymus organ culture. **Immunol. Lett.**, 1998, 63:83-89. **IF: 4.230 (2021), # of Citation: 10**

12. * Park, C.-S., Yashiro, Y., Tai, X.-G., **Toyo-oka, K.,** Hamaoka, T., Yagita, H., Okumura, K., Neben, S. and Fujiwara, H. Differential Involvement of a Fas-CPP32-Like Protease Pathway in Apoptosis of TCR/CD9-Costimulated, Naive T Cells and TCR-Restimulated, Activated T Cells.**J. Immunol.**, 1998, 160:5790-5796. **IF: 5.430 (2021), # of Citation: 12**

13. * Yashiro, Y., Tai, X.-G., **Toyo-oka, K.,** Park, C.-S., Abe, R., Hamaoka, T., Kobayashi, M., Neben, S. and Fujiwara, H. A fundamental difference in the capacity to induce proliferation of naïve T cell between CD28 and other costimulatory molecules. **Eur. J. Immunol.**, 1998, 28: 926-935. **IF: 6.688 (2021), # of Citation: 77**

14. ***Toyo-oka, K.,**Yashiro-Ohtani, Y., Park, C.-S., Tai, X.-G., Miyake, K., Hamaoka, T. and Fujiwara, H. Association of a tetraspanin CD9 with CD5 on the T cell surface: role of particular transmembrane domains in the association. **Int. Immunol.**, 1999, 11:2043-2052. **IF: 5.071 (2021), # of Citation: 58**

15. *Yashiro-Ohtani, Y., Zhou, X.-Y.,**Toyo-oka, K.,** Tai, X.-G., Park, C.-S., Hamaoka, T., Abe, R., Miyake, K. and Fujiwara, H. Non-CD28 Costimulatory Molecules Present in T Cell Rafts Induce T Cell Costimulation by Enhancing the Association of TCR with Rafts. **J. Immunol.**, 2000, 164:1251-1259. **IF: 5.430 (2021), # of Citation: 211**

16. *Zhou, X.-Y.,Yashiro-Ohtani, Y., **Toyo-oka, K.,** Park, C.-S., Tai, X.-G., Hamaoka, T. and Fujiwara, H. CD5 Costimulation Up-Regulates the Signaling to Extracellular Signal-Regulated Kinase Activation in $CD4^+CD8^+$ Thymocytes and Supports Their Differentiation to the CD4 Lineage. **J. Immunol.**, 2000, 164:1260-1268. **IF: 5.430 (2021), # of Citation: 30**

17. *The RIKEN Genome Exploration Research Group Phase II Team and the FANTOM Consortium. Functional annotation of full-length mouse cDNA collection. **Nature**. 2001, 409:685-690. (85th out of 95 authors). **IF: 69.504 (2021), # of Citation: 872**

18. * Merscher, S., Funke, B, Epstein, J. A., Heyer, J., Puech, A., Lu, M. M., Xavier, R. J., Demay, M. B., Russell, R. G., Factor, S., **Toyooka, K.,** Jore, B. S., Lopez, M., Pandita, R. K., Lia, M., Carrion, D., Xu, H., Schorle, H., Kobler, J. B., Scambler, P., Wynshaw-Boris, A., Skoultchi, A. I., Morrow, B. E. and Kucherlapati1, R. *Tbx1* is Responsible for Cardiovascular Defects in Velo-Cardio-Facial/DiGeorge Syndrome. **Cell**, 2001, 104:619-629. **IF: 65.988 (2021), # of Citation: 1009**

19. *Park, C.-S., Yang, Y.-F., Zhou, X.-Y., **Toyooka, K.,** Yashiro-Ohtani, Y., Park, W.-R., Tomura, M., Tai, X.-G., Hamaoka, T. and Fujiwara, H. Reversible CD8 expression induced by common cytokine receptor gchain-dependent cytokines in a cloned $CD4^+$ T_h1 cell line. **Int. Immunol.**, 2002, 14:259-266. IF: 5.071 (2021), # of Citation: 3

20. *Cardoso, C., Leventer, R. J., Ward, H. L.,**Toyo-oka, K.,** Chung, J., Gross, A., Martin, C. L., Allanson, J., Pilz, D. T., Olney, A. H., Mutchinick, O. M., Hirotsune, S., Wynshaw-Boris, A., Dobyns, W. B. and Ledbetter, D. H. Refinement of a 400-kb Critical Region Allows Genotypic Differentiation between Isolated Lissencephaly, Miller-Dieker Syndrome, and Other Phenotypes Secondary to Deletions of 17p13.3. **Am. J. Hum. Genet.**, 2003, 72:918-930. **IF: 11.043 (2021), # of Citation: 267**

21. ***Toyo-oka, K.,** Shionoya, A., Gambello, M. J., Cardoso,C., Leventer, R., Ward, H. L., Ayala, R., Tsai, L.-H., Dobyns, W., Ledbetter, D., Hirotsune, S. and Wynshaw-Boris, A. 14-3-3e is important for neuronal migration via binding of NUDEL : a molecular explanation for Miller-Dieker syndrome. **Nat. Genet.**, 2003, 34:274-285. **IF: 41.376 (2021), # of Citation:416**

22. Yingling, J., **Toyo-oka, K.,** and Wynshaw-Boris, A.. Miller- Dieker Syndrome: Analysis of a Human Contiguous Gene Syndrome in the Mouse. **Am. J. Hum. Genet.**, 2003, 73(3):475-488. **IF: 11.043 (2021), # of Citation: 41**

23. *Hurlin, P. J., Zhou, Z.-Q., **Toyo-oka, K.,**Ota, S., Walker, W. L., Hirotsune, S. and Wynshaw-Boris, A. Deletion of Mnt leads to disrupted cell cycle control and tumorigenesis. **EMBO J.**, 2003, 22:4584-4596. **IF: 13.783 (2021), # of Citation: 110**

23. *Hurlin, P. J., Zhou, Z.-Q., **Toyo-oka, K.,**Ota, S., Walker, W. L., Hirotsune, S. and Wynshaw-Boris, A. Evidence of Mnt-Myc Antagonism Revealed by Mnt Gene Deletion. **Cell Cycle**, 2004, 3:97-99. **IF: 5.173 (2021), # of Citation: 18**

25. ***Toyo-oka, K.,**Hirotsune, S.,Gambello,M. J., Zhou, Z.-Q., Olson, L., Rosenfeld, M. G., Eisenman, R., Hurlin, P. J. and Wynshaw-Boris, A. Loss of the Max-interacting protein Mnt in mice results in decreased viability, defective embryonic growth and craniofacial defects:relevance to Miller-Dieker syndrome. **Hum. Mol. Genet.**, 2004, 13:1057-1067. **IF: 5.121 (2021), # of Citation: 62**

26. *Sasaki, S., Mori, D., **Toyo-oka, D.,** Chen, A., Garrett-Beal, L., Muramatsu, M., Miyagawa, S., Hiraiwa N., Yoshiki, A., Wynshaw-Boris, A., and Hirotsune, A. Complete Loss of Ndel1 Results in Neuronal Migration Defects and Early Embryonic Lethality. **Mol. Cell. Biol.**, 2005, 25:7812-7827. **IF: 5.094 (2021), # of Citation: 184**

27. ***Toyo-oka, K.,**Sasaki, S.,Yano, Y., Mori, D., Kobayashi, T., Toyoshima, Y. Y., Tokuoka, S. M., Ishii, S., Shimizu, T., Muramatsu, M., Hiraiwa, N., Yoshiki, A., Wynshaw-Boris, A. and Hirotsune, S. Recruitment of katanin P60 by phosphorylated NDEL1, an LIS1 interacting protein, is essential for mitotic cell division and neuronal migration. **Hum. Mol. Genet.**, 2005, 14: 3113-3128. **IF: 5.121 (2021), # of Citation: 124**

28. ***Toyo-oka, K.,**Bowen,T. J., Hirotsune, S., Li, Z.,Jain, S., Ota, S., Lozach, L. E., Bassett, I. G., Lozach, J., Rosenfeld, M. G., Glass, C. K., Eisenman, R., Ren, B., Hurlin, P. J. and Wynshaw-Boris, A. Mnt-Deficient Mammary Glands Exhibit Impaired Involution and Tumors with Characteristics of Myc Overexpression. **Cancer Res.**, 2006, 66: 5565-5573. **IF: 13.312 (2021), # of Citation: 39**

29. *Mori, D., Yano, Y., **Toyo-oka, K.,** Yoshida, N., Yamada, M., Muramatsu, M., Zhang, D., Saya, H., Toyoshima, Y. Y., Kinoshita, K., Wynshaw-Boris, A. and Hirotsune, S. NDEL1 Phosphorylation by Aurora-A Kinase Is Essential for Centrosomal Maturation, Separation, and TACC3 recruitment. **Mol. Cell. Biol.**, 2007, 27: 352-367. **IF: 5.094 (2021), # of Citation: 173**

30. *__Toyo-oka, K.,__Yano, Y., Shiota, M., Iwao, H., Hiraiwa, N., Muramatsu, M., Yoshiki, A. and Hirotsune, S. Protein Phosphatase4 catalytic subunit (PP4c) regulates CDK1 activity and organization of microtubules through dephosphorylation of NDEL1, **J. Cell Biol.**, 2008, 180: 1133-1147. **IF: 8.077 (2021), # of Citation: 84**

31. *Yingling, J., Youn, Y. H., Darling, D., __Toyo-oka, K.,__Pramparo, T., Hirotsune, S. and Wynshaw-Boris, A. Neuroepithelial Stem Cell Proliferation requires LIS1 for Precise Spindle Orientation and Symmetric Division. **Cell**, 2008, 132: 474-486. **IF: 65.988 (2021), # of Citation: 283**

32. *Ikeda, M., Hikita, T., Taya, S., Uraguchi-Asaki, J., __Toyo-oka,__K., Wynshaw-Boris, A., Ujike, H., Inada, T., Takao, K., Miyakawa, T., Osaki, N., Kaibuchi, K. and Iwata, N. Identification of *YWHAE*, a gene encoding 14-3-3epsilon, as a possible susceptibility gene for schizophrenia. **Hum. Mol. Genet.**, 2008, 17: 3212-3222. **IF: 5.121 (2021), # of Citation: 118**

33. *Cheah, P.-S., Ramshaw,H. S.,Thomas, P. Q., __Toyo-oka,K.,__Martin, S., Coyle,P., Guthridge,M. A.,Stomski,F.,Maarten van den Buuse, Wynshaw-Boris,A., Lopez, A. F.andSchwarz, Q. P. Neurodevelopmental defects and neuropsychiatric behaviour arise from *14-3-3z* deficiency. ***Mol. Psychiatr.*** 2012, 17(4): 451-466. **IF: 13.437 (2021), # of Citation: 107**

34. *__Kazuhito Toyo-oka,__ Tomoka Wachi, Robert F. Hunt, Scott C. Baraban, ShinichiroTaya, Hayley Ramshaw, Kozo Kaibuchi, Quenten P. Schwarz, Angel F. Lopez and Anthony Wynshaw-Boris, 14-3-3epsilon and zeta Regulate Neurogenesis and Differentiation of Neuronal Progenitor Cells in the Developing Brain. ***J Neurosci*.,** 2014, 34(36):12168-12181. **IF: 6.709 (2021), # of Citation: 111**

35. Wachi, T. and __Toyo-oka, K.__ Novel Functions of 14-3-3 Proteins in Neurogenesis and Neuronal Differentiation In Vivo. **Ther Targets Neurol Dis**, 2015, 2(1): doi: 10.14800/ttnd.500. **IF: N/A, # of Citation: 1**

36. *Wachi T, Cornell B, Marshall C, Zhukarev V, Baas PW, __Toyo-Oka K.__ Ablation of the 14-3-3gamma Protein Results in Neuronal Migration Delay and Morphological Defects in the Developing Cerebral Cortex. ***Dev Neurobio*l**. 2016, 76 (6): 600-614. doi: 10.1002/dneu.22335. [Epub ahead of print] **IF: 3.102 (2021), # of Citation: 28**

37. *Cornel, B. and __Toyo-oka, K.__, Deficiency of 14-3-3ε and 14-3-3ζ by the Wnt1 promoter-driven Cre recombinase results in pigmentation defects. ***BMC Res Notes***, 2016, 9(1);180-185. **IF: N/A, # of Citation: 10**

38. *Cornell, B., Wachi, T., Zhukarev, V. and __Toyo-oka, K.__, Overexpression of the 14-3-3Gamma Protein in Embryonic Mice Results in Neuronal Migration Delay in the Developing Cerebral Cortex. ***Neurosci Lett***, 2016, 628; 40-46. **IF: 3.197 (2021), # of Citation: 21**

39. *Cornell, B., Wachi, T., Zhukarev, V. and __Toyo-oka, K.__, Regulation of neuronal morphogenesis by 14-3-3epsilon (Ywhae) via the microtubule binding protein, doublecortin. ***Hum Mole Genet***, 2016, 25; 4405-4418. IF: 5.121 (2021), **# of Citation: 46**

40. *Wachi, T., Cornell, B. and __Toyo-oka, K.__ Complete ablation of the 14-3-3epsilon protein results in multiple defects in neuropsychiatric behaviors. ***Behav Brain Res***, 2017, 319: 31-36. **IF: 3.352 (2021), # of Citation: 22**

41. *Cornell, B. and **Toyo-oka, K.**, 14-3-3 proteins in brain development: neurogenesis, neuronal migration and neuromorphogenesis. ***Front. Mol. Neurosci.***, 2017, 10:318. 12 October 2017, doi: 10.3389/fnmol.2017.00318. **IF: 6.261 (2021), # of Citation: 99**

42. *Blazejewski, S.M., Bennison, S. A., Smith, T. H. and **Toyo-Oka, K.** Neurodevelopmental Genetic Diseases Associated with Microdeletions and Microduplications of Chromosome 17p13.3. ***Front. Genet.***, 2018, 9:80. doi: 10.3389/fgene.2018.00080. **IF: 4.772 (2021), # of Citation: 50**

43. *Deng, Y., Jiang, B., Rankin, C. L., **Toyo-oka, K.**, Richter, M. L., Maupin-Furlow, J. A. and Moskovitz, J. Methionine sulfoxide reductase A (MsrA) mediates the ubiquitination of 14-3-3 protein isotypes in brain. ***Free Radical Bio. Med*.,** 2018, 129:600, https://doi.org/10.1016/j.freeradbiomed.2018.08.002. **IF: 8.101 (2021), # of Citation: 11**

44. *Bennison, S.A., Blazejewski, S.M., Liu, X. and **Toyo-oka, K.**, Protein kinases: master regulators of neuritogenesis and therapeutic targets for axon regeneration, ***Cell. Mol. Life Sci.***, 2020, 77:1511-1530, doi.org/10.1007/S00018-019-03336-6**. IF: 9.234 (2021), # of Citation: 17**

45. *Liu, X., Blazejewski, S.M., Bennison, S.A. and **Toyo-oka, K.**, Glutathione S-transferase Pi (Gstp) Proteins Regulate Neuritogenesis in the Developing Cerebral Cortex, ***Hum. Mol. Genet,*** 2021, 30(1):30-45. **IF: 5.121 (2021), # of Citation: 6**

46. *Blazejewski, S.M., Bennison, S.A., Liu, X. and **Toyo-oka, K.**, High-Throughput Kinase Inhibitor Screening Reveals Roles for Aurora and Nuak Kinases in Neurite Initiation and Dendritic Branching, ***Sci Rep,*** 2021, 11(1):8156. **IF: 4.997 (2021), # of Citation: 6**

47. *Fu, W., Hu, W., Yi, Y.-S., Hettinghouse, A., Sun, G., Bi, Y., He, W., Zhang, L., Gao, G., Liu, J., **Toyo-oka, K.,** Xiao, G., Solit, D.B., Loke, P., and Liu, C.-J. TNFR2/14-3-3ε signaling complex instructs macrophage plasticity in inflammation and autoimmunity. ***J. Clin. Invest.*** 2021, 131(16):e144016. **IF: 19.477 (2021), # of Citation: 14**

48. *Blazejewski, S.M., Bennison, S.A., Ha, N., Liu, X., Smith, T.H., Dougherty, K. J., and **Toyo-oka, K.**, Rpsa signaling regulates cortical neuronal morphogenesis via its ligand, PEDF, and plasma membrane interaction partner, Itga6. ***Cereb. Cortex*****,** 2022, 32 (4), 770-795. **IF: 4.861 (2021), # of Citation: 4**

49. *Liu, X., Bennison, S.A., Robinson, L., and **Toyo-oka, K.** Responsible Genes for Neuronal Migration in the Chromosome 17p13.3: Beyond Pafah1b1(Lis1), Crk and Ywhae(14-3-3ε), ***Brain Sci.*** 2022, *12*(1), 56. **IF: 3.333 (2021), # of Citation: 3**

50. *Muralidharan, H., Guha, S., Madugula, K., Patil, A., Bennison, S.A., Sun, X., **Toyo-oka, K**., and Baas, A., KIFC1 regulates the trajectory of neuronal migration. ***J Neurosci.***, 2022, 41(11): 2149-2165. **IF: 6.709 (2021), # of Citation: 3**

51. *Radler, M.R., Liu, X., Peng, M., Doyle, B., **Toyo-Oka**, K., and Spiliotis,E.T., Pyramidal neuron morphogenesis requires a septin network that stabilizes filopodia and suppresses lamellipodia during neurite initiation, ***Curr. Biol.***, 2022, in press. https://doi.org/10.1016/j.cub.2022.11.043 **IF: 10.900 (2021), # of Citation: 0**

52. *Bennison S.A., Liu X., and **Toyo-oka K.**, Nuak kinase signaling in development and disease of the central nervous system. ***Cell. Signal.,*** 202, 100:110472, doi: 10.1016/j.cellsig.2022.110472. **IF: 4.850 (2021), # of Citation: 0**

53. *Bennison S.A., Blazejewski, S.M., Liu X., Hacohen-Kleiman G., Sragovich S., Zoidou S., Touloumi O., Grigoriadis N., Gozes I. and **Toyo-oka K.**, The cytoplasmic localization of ADNP through 14-3-3 promotes sex-dependent neuronal morphogenesis, cortical connectivity, and calcium signaling, ***Mol. Psychiatry.***, 2023, published: January 11, 2023. doi: 10.1038/s41380-022-01939-3 **IF: 13.437 (2021), # of Citation: 0**

INVITED PRESENTATIONS

2013	Nagoya University, Japan	Speaker
01/2014	CHOP - Drexel - Hebrew University Symposium	Speaker
03/2016	Case Western Reserve University	Speaker
11/2017	World gene Convention 2017, Macau, China	Chair and Speaker
12/2017	ASCB(American Society for Cell Biology) | EMBO 2017	Chair and Speaker
05/2018	Neuroscience Retreat and Research Day	Speaker
11/2020	1st International Electronic Conference on Brain Sciences	Speaker & Organizer
12/2020	Cell and Experimental Biology (CEB-2020)	Speaker
11/2021	European Society of Medicine (ESMED) Annual Congress	Speaker
8/2022	European Society of Medicine (ESMED) General Assembly Meeting	Speaker