

Asim Kumar Bepari

MPharm, PhD (Neuroscience)
Assistant Professor, Department of Pharmaceutical Sciences
[North South University](#)
Email: asimbepari@gmail.com

Education:

- 2013** **PhD in Life Sciences**
Faculty of life Sciences, Kumamoto University, Japan
Supervisors: Professor Nobuaki Tamamaki, Professor Hirohide Takebayashi
Thesis title: Mapping neuronal activity in the mouse brain by analyzing immediate early gene expression.
- 2002** **Master of Pharmacy (Research)**
Department of Pharmacy, Jahangirnagar University, Dhaka, Bangladesh
Thesis title: Market status of antibacterial agents and in vitro quality studies of amoxicillin trihydrate and its marketed capsule preparations.
- 2000** **Bachelor of Pharmacy (Honors)**
Department of Pharmacy, Jahangirnagar University, Dhaka, Bangladesh

Research skills:

- Animal experiments**
- Maintenance of animal (mice and rats) colonies
 - Animal breeding
 - Handedness (Paw preference) test
 - Mating assay
 - Olfactory avoidance test
- Histology**
- Preparation of tissue sections
 - Immunohistochemical staining
 - In situ hybridization (Conventional and fluorescence)
- Molecular biology**
- Western Blot
 - PCR
 - Electrophoresis
 - Molecular cloning
 - DNA isolation and purification
- Cell and tissue culture**
- Mammalian cell culture
 - Primary neuronal cell culture
 - Slice culture
- Electroporation**
- In ovo electroporation for gene overexpression
- Epigenetics**
- Bisulfite sequencing for DNA methylation analysis

Research experience:

2015 to date Postdoctoral Researcher

Department of Neuroscience

University of Texas Southwestern Medical Centre Dallas, Texas, USA

Major duties:

- Designing and conducting experiments, data collection and analysis, literature review, preparation of laboratory progress report, supervision of graduate students, attending scientific seminar to present data, writing and publishing scientific articles.
- Research projects involves roles of Ephs and Ephrins in brain development, screening of drugs for the treatment of Alzheimer's disease and pain.

2013 to date Assistant Professor

Department of Pharmaceutical Sciences

School of Health and Life Sciences, North South University, Dhaka, Bangladesh

Major duties:

- Designing research projects, acquisition of data, data analysis, reporting research findings, supervision of undergraduate and graduate students, authoring scientific articles.
- Current research projects involve analysis of brain development in animal models; effects of stress on neural development; medicinal properties of plants.
- Conducting theory and laboratory classes of Human Physiology, Advanced Pharmaceutical Analysis and Inorganic Pharmacy courses, student counseling, and revision of academic curriculum.

2013 Postdoctoral Researcher

Division of Neurobiology and Anatomy

Graduate School of Medical and Dental Sciences, Niigata University, Niigata, Japan.

2009 to 2013 Doctoral Researcher

Department of Morphological Neural Science

Faculty of life sciences, Kumamoto University, Kumamoto, Japan.

2007 to 2009 Lecturer

Department of Pharmacy

School of Life Sciences, North South University, Dhaka, Bangladesh

2004 to 2006 Lecturer

Department of Pharmacy

Stamford University Bangladesh, Dhaka, Bangladesh

Awards:

2011 *Financial support for young scientists*, Global COE, Kumamoto University, Japan.

2011 *GCOE Travel Award for Young Scientists*, Global COE, Kumamoto University, Japan.

2011 *Global COE Jr. Research Associate*, Global COE, Kumamoto University, Japan

2009 to 2013 *Monbukagakusho Fellowship* for doctoral study, MEXT, Japan.

1996 to 2001 *Jahangirnagar University Undergraduate and Postgraduate Scholarship* for excellent academic results in B.Pharm (Honours) and M.Pharm.

Industry experience:

2002 to 2004 Executive

Division of International Marketing
The ACME Laboratories Limited, Dhaka, Bangladesh

- Coordinated international marketing operations of pharmaceutical finished products for countries like Australia, China, India, Sri Lanka, and Pakistan.
- Major duties involved identification and development of international markets for medical products, drafting business agreements, preparation of marketing plans, development of promotional materials, preparation of reports, participation in international meetings and exhibitions.

Memberships:

- 2015 to present** National Postdoctoral Association (NPA), USA.
- 2015 to present** Postdoctoral Association, UTSW, Texas, USA.
- 2009 to present** Member, Japan Neuroscience Society.
- 2001 to present** Registered Pharmacist (A-2147), Bangladesh Pharmacy Council.

Links to research profiles:

Google Scholar <http://scholar.google.com/citations?user=j1AdEygAAAAJ&hl=en>

ORCID 0000-0001-5656-1833, <http://orcid.org/0000-0001-5656-1833>

ResearcherID D-4001-2013, <http://www.researcherid.com/rid/D-4001-2013>

List of Publications:

Original research articles:

1. Horie, M., Watanabe, K., **Bepari, A. K.**, Nashimoto, J.-i., Araki, K., Sano, H., Chiken, S., Nambu, A., Ono, K., Ikenaka, K., Kakita, A., Yamamura, K.-i. and Takebayashi, H. (2014). Disruption of actin-binding domain-containing Dystonin protein causes dystonia musculorum in mice. *European Journal of Neuroscience*. doi: 10.1111/ejn.12711. [[Pubmed](#)]
2. **Bepari, A.K.**, Sano, H., Tamamaki, N., Nambu, A., Tanaka, K.F., and Takebayashi, H. (2012). Identification of optogenetically activated striatal medium spiny neurons by *Npas4* expression. *PLoS ONE* 7: e52783. [[Pubmed](#)]
3. **Bepari, A.K.**, Watanabe, K., Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2012). Visualization of Odor-induced Neuronal Activity by Immediate Early Gene Expression. *BMC Neuroscience* 13: 140. [[Pubmed](#)]

4. Watanabe, K., Takebayashi, H., **Bepari, A.K.**, Esumi, S., Yanagawa, Y., Tamamaki, N. (2011). Dpy19L1, a multi-transmembrane protein, regulates radial migration of glutamatergic neurons in the developing cerebral cortex. *Development* 138: 4979-4990. [[Pubmed](#)]
5. **Bepari, A.K.**, Mazumder, M.E.H., Chowdhury, S.S., and Saha, P. (2007). Evaluation of the Potency of Amoxicillin Trihydrate Active Ingredient Manufactured Locally in Bangladesh. *USTA1*: 55-59.
6. **Bepari, A.K.**, Mazumder, M.E.H., Chowdhury, S.S., and Saha, P. (2006). Comparative study of the quality of four amoxicillin capsule brands marketed in Bangladesh in terms of packaging features, potency and dissolution profile. *Bangladesh J. Life Sci.* 18: 91-96.

Conference papers (Abstracts):

1. **Bepari, A.K.**, Watanabe, K., Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2012). Sensitive detection of neuronal activity by immediate early gene expression. *Journal of Neurochemistry* 123, Suppl. 1, 128.
2. Watanabe, K., **Bepari, A.K.**, Takeda, N., Araki, K., and Takebayashi, H. (2012). Roles of Dpy19 family in development of the cerebral cortex. *Journal of Neurochemistry* 123, Suppl. 1, 49.
3. **Bepari, A.K.**, Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2011). Detection of activity dependent gene expression in olfactory circuit by in situ hybridization probe set. *Neuroscience Research* 71, Supplement, e153.
4. Watanabe, K., Takebayashi, H., **Bepari, A.K.**, Esumi, S., Yanagawa, Y., and Tamamaki, N. (2011). Dpy19L1, a multi-transmembrane protein, is required for radial migration of glutamatergic neurons in the developing neocortex. *Neuroscience Research* 71, Supplement, e230.

Conference papers (Posters):

1. **Bepari, A.K.**, Watanabe, K., Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2012). Sensitive detection of neuronal activity by immediate early gene expression. *The 11th Biennial Meeting of the Asian Pacific Society for Neurochemistry, The 55th Annual Meeting of the Japanese Society for Neurochemistry*. Kobe International Conference Center, 6-9-1 Minatojima-nakamachi, Chuo-Ku, Kobe, Japan. 2012.9.28-2012.10.02.
2. Takebayashi, H., **Bepari, A.K.**, Yamaguchi, M., and Tamamaki, N. (2011). Brain Response to environmental change: Odor-evoked induction of activity-dependent gene expression in mouse brain. *54th Annual Meeting of The Japanese Society for Neurochemistry*. Ishikawa, Japan. P2-11, 2011.9.26-28.
3. **Bepari, A.K.**, Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2011). Detection of activity dependent gene expression in olfactory circuit by in situ hybridization probe set. *The 34th Annual Meeting of the Japan Neuroscience Society –Neuroscience of the Mind–*. Pacifico Yokohama, 1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-0012, Japan. P2-j17, 2011.09.14-17.

4. Watanabe, K., Takebayashi, H., **Bepari, A.K.**, Esumi, S., Yanagawa, Y., and Tamamaki, N. (2011). Dpy19L1, a multi-transmembrane protein, is required for radial migration of glutamatergic neurons in the developing neocortex. *The 34th Annual Meeting of the Japan Neuroscience Society –Neuroscience of the Mind–*. Pacifico Yokohama, 1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-0012, Japan. P3-e07, 2011.09.14-17.
5. **Bepari, A.K.**, Yamaguchi, M., Tamamaki, N., and Takebayashi, H. (2011). Brain response to environmental change: Odor-evoked induction of activity-dependent gene expression in mouse brain. *KEY Forum in Developmental Biology and Regenerative Medicine*. 100th Anniversary Memorial Hall, Kumamoto University, Kumamoto, Japan. 1-26, 2011.09.8-9.
6. Watanabe, K., Takebayashi, H., **Bepari, A.K.**, Esumi, S., Yanagawa, Y., and Tamamaki, N. (2010). Novel transmembrane protein Gsg1 is essential for radial migration and dendrite formation of glutamatergic neurons in the Cerebral cortex. *THE 29th NAITO CONFERENCE ON GLIA WORLD- Dynamic Function of Glial Cells in the Brain*. Shonan Village, Hayama-machi Miuragun, Kanagawa, Japan. 2010.10.05-08.
7. **Bepari, A.K.**, Usui, N., Ikenaka, K., Tamamaki, N., and Takebayashi, H. (2010). Left-right brain asymmetry in mice. *2010 Global COE-IMEG Joint Summer Retreat Seminar in Aso*. Mt. Aso, Japan. 2010.09.09-10.
8. Takebayashi, H., **Bepari, A.K.**, Usui, N., Ikenaka, K., and Tamamaki, N. (2010). Analysis on brain left-right asymmetry. *Fourth Neural Development Seminar*. Okazaki, Japan 2010.03.19-20.