# **BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2. Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.** 

| NAME   | POSITION TITL             | .E      |                |  |
|--|---------------------------|---------|----------------|--|
| Doan H. Nguyen, PhD  | Instructor                |         |                |  |
| EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.) |                           |         |                |  |
| INSTITUTION AND LOCATION   | DEGREE<br>(if applicable) | YEAR(s) | FIELD OF STUDY |  |

| INSTITUTION AND LOCATION                                      | DEGREE<br>(if applicable) | YEAR(s) | FIELD OF STUDY             |
|---|---------------------------|---------|----------------------------|
| University of Illinois-Urbana Champaign                       | BS                        | 1989    | Biology                    |
| LSU Medical Center School of Medicine, New Orleans, Louisiana | PhD                       | 1997    | Cell biology               |
| LSU Medical Center School of Medicine, New Orleans, Louisiana | Postdoc<br>Fellow         | 1998    | Lacrimal molecular biology |

# A. POSITIONS AND HONORS

## **Appointments**

| Jan 89 - July 89 | Research Assistant, Genetics, Department of Agriculture, University of Illinois, Urbana Champaign, IL.   |
|------------------|--|
| Sep 89 - Dec 91  | Peace Corps Volunteer, Education, U.S. Peace Corps, Nepal.   |
| Apr 92 - Dec 92  | Research Associate, Dept. of Ophthalmology, LSU Eye Center, LSU Medical Center School of Medicine, New Orleans, LA.  |
| Jan 92 - Dec 97  | Graduate Teaching Assistant, Department of Anatomy, LSU Medical Center School of Medicine, New Orleans, LA.  |
| Jan 98 - Apr 02  | Postdoctoral Fellow, Department of Ophthalmology, LSU Eye Center, LSU Medical Center School of Medicine, New Orleans, LA.                                    |
| Apr 02 - Jan 07  | Research Instructor, Department of Ophthalmology, LSU Eye Center, LSU Health Sciences Center, New Orleans, LA.   |
| Sep 05 – Present | Adjunct Assistant Professor, BioMMED, Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA.    |
| Jan 07 – Present | Instructor, Director of the Microarray and Bioinformatics Core, Department of Genetics and Gene Therapy Program, LSU Health Sciences Center, New Orleans, LA |

#### **Honors**

1993: NEI Travel Fellowship for ARVO1996: McKeen Lacrimal Travel Fellowship

1996: Sigma XI Award

1996: Guest Speaker - Lacrimal Gland and Tear Study Group Symposium

2000: Lacrimal Gland Young Investigator Travel Fellowship 2000: Employee of the Month, LSU Eye Center, New Orleans

## **Professional organizations**

Association for Research in Vision and Ophthalmology (ARVO) International Society for Computational Biology (ISCB)

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|                           |      |                                 |

MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Tear Film and Ocular Surface (TFOS)

# **B. SELECTED PUBLICATIONS**

- **Nguyen DH**, Beuerman RW, Thompson HW, Tran H, DiLoreto DA. Growth factors and growth factor receptor RNA in human lacrimal gland. Cornea 16(2):192-297, 1997.
- Lu G, Beuerman RW, Zhao S, Sun G, **Nguyen DH**, Ma S, and Kline DG. Tumor necrosis factor alpha and interleukin-1 induce activation of MAP Kinase and SAP kinase in human neuroma fibroblasts. Neurochem. Int. 30(4/5):401-410,1997.
- Meneray MA, Bennett DJ, **Nguyen DH**, Beuerman RW: Effect of sensory denervation on the structure and physiologic responsiveness of rabbit lacrimal gland. Cornea 17:99-107, 1998.
- **Nguyen DH**, Beuerman RW, Halbert CL, Ma Q, Sun G: Characterization of immortalized rabbit lacrimal gland epithelial cells. In Vitro Cellular & Developmental Biology 35:198-204, 1999.
- Beuerman R, Palkama A, Reynaud J, **Nguyen D**, Kikuchi H, Kalia R: Three-dimensional structure of the lamina cribrosa of the living eye. In: Photon Migration, Optical Coherence Tomography, and Microscopy. Proceedings of the European Conferences on Biomedical Optics: Laser 2001 -- World of Photonics Conference on Lasers and Electro-optics in Europe. Munich, Germany, June 17-21, 2001. Andersson-Engels S, Kaschke MF (eds). Proc of SPIE Volume 4431, SPIE Press, Bellingham, WA, 2001, pp. 59-65.
- Kretschmer T, England JD, Happel LT, Liu ZP, Thouron CL, **Nguyen DH**, Beuerman RW, Kline DG: Ankyrin G and voltage gated sodium channels colocalize in human neuroma key proteins of membrane remodeling after axonal injury. Neurosci Lett 323:151-155, 2002.
- Toshida H, Nakata K, Hamano T, Nakamura M, **Nguyen D**, Beuerman RW: Effect of gefarnate on the ocular surface in squirrel monkeys. Cornea 21:292-299, 2002.
- Kretschmer T, **Nguyen DH**, Beuerman RW, Happel LT, England JD, Tiel RL, Kline DG. Painful neuromas: a potential role for a structural transmembrane protein, ankyrin G. Neurosurg. 2002; 97(6): 1424-31.
- Kretschmer T, Happel LT, England JD, **Nguyen DH**, Tiel RL, Beuerman RW, Kline DG: Clinical article accumulation of PN1 and PN3 sodium channels in painful human neuroma evidence from immunocytochemistry. Acta Neurochir (Wein) 144:803-810, 2002.
- **Nguyen DH**, Beuerman RW, DeWever B, Rosdy M. Three-dimensional construct of the human corneal epithelium for in vivo toxicology. Alternative Toxicology Methods 2003: 147-159.
- Awasthi D, Kutz SC, Beuerman RW, **Nguyen D**, Carey ME, Zeiller S: Early gene expression in the rat cortex after experimental traumatic brain injury and hypotension. Neurosci Lett 345(1):29-32, 2003.
- **Nguyen DH**, Toshida H, Schurr J, Beuerman RW. Microarray analysis of the rat lacrimal gland following the loss of parasympathetic control of secretion. Physiol Genomics 2004; 18(1): 108-118.
- Kretschmer T, **Nguyen DH**, Beuerman RW, Tiel RL, Kline DG. Elevated ankyrin G in a plexiform neurofibroma and neuromas associated with pain. J. Clin Neurosci 2004; 11(8): 886-9.

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- **Nguyen DH**, Beuerman RW, Meneray MA, Toshida H. Sensory denervation modulates eIF- $2\alpha$  kinase expression in the rabbit lacrimal gland. Curr Eye Res 2006; 31(4): 287-95.
- **Nguyen DH**, Valadamu V, Toshida H, Beuerman RW. Loss of parasympathetic innervation leads to sustained expression of pro-inflammatory genes in the rat lacrimal gland. Auton Neurosci 2006; 124(1-2): 81-9.
- Toshida H, **Nguyen DH**, Beuerman RW. Evaluation of novel dry eye model: pre-ganglionic parasympathetic denervation in rabbit. Invest Ophthalmol Vis Sci 2007; 48:4468-4475
- Toshida H, **Nguyen DH**, Beuerman RW, Murakami A. Neurologic evalution of acute lacrimomimetic effect of cyclosporine in an experimental rabbit dry eye model. Invest Ophthal Vis Sci 2009; 50: 2736-2741.
- Nguyen DH, Toshida H, Beuerman RW. Characterization of experimental dry eye in rats. submitted, BJO.
- Wang G, Gomez-Perez M, Viswanathan A, Raju SV, Painter RG, Byrne P, **Nguyen D**, Bagby G, Nelson S. Alcohol stimulates expression of glucocorticoid-induced leucine zipper (GIIZ): a mechanism for alcohol-associated anti-inflammation and immunosuppression, submitted, JBC.
- Nguyen DH, Toshida H. Gene network analysis of rat lacrimal gland aging. Submitted, Exp Gerontology.
- Ma Q, **Nguyen DH**. Ankyrin B and G in trigeminal ganglia and cornea following corneal wounding. submitted, Auton Neurosci.

#### C. RESEARCH SUPPORT

# **Ongoing Research Support**

NIH/NCCR 5P20RR016456-05 9/01/05-present

Title: Bioinformatics of the Lacrimal Gland: a Neural Connection of Dry Eye and Aging Major Goals: To demonstrate the age decline in the innervational influences of lacrimal gland endoplasmic reticulum integrity and to identify age-related change in gene expression patterns that may underlie the morphologic and functional alterations in order to better understand the molecular effects of aging on this system and how these changes may contribute to the pathogenesis of dry eye disease with age.

Role: Co-Investigator

Department of Defense Grant W81XWH-08-1-0676 (Subcontract to SUNO) 9/2/2008 – 9/1/2011 Title: Bioinformatics and biotechnology research initiatives: Global genome and transcriptome approaches to understanding the function of the small genome of *Mycoplasma genitalium*. This project is designed to assess the global genome and transcriptome differences among recently isolated *M. genitalium* clinical strains to better understand the pathogenesis of *M. genitalium* infection. Role: Co-Investigator.