

<b>BIOGRAPHICAL SKETCH</b>			
<b>NAME:</b> AMIT SINGH		<b>POSITION TITLE:</b> ASSISTANT PROFESSOR	
<b>DATE OF BIRTH:</b> 05/31/1969		<b>CITIZENSHIP:</b> INDIAN	
<b>EDUCATION/TRAINING</b> <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
H.P. University, Shimla, India.	B.Sc.	1988	Botany, Zoology, Chemistry.
Devi Ahilya University, Indore, INDIA.	M.Sc	1990	Life Sciences
Devi Ahilya University, Indore, INDIA.	PhD	1995	Developmental and Molecular Genetics in <i>Drosophila melanogaster</i>
Title of PhD			Applications of Enhancer trap Technique in Study of <i>Drosophila</i> patterns.

**POSITIONS****Academic Positions:**

- 2007- To date** Assistant Professor, Department of Biology, University of Dayton, Dayton, Ohio, USA
- 2007- To date** Assistant Professor, Center for Tissue Regeneration and Engineering at Dayton (TREND), University of Dayton, Dayton, Ohio, USA.
- 2004- 2007** Instructor, Department of Cellular and Molecular Biology, Baylor College of Medicine, Houston, Texas, USA.
- 2002-2004** Post Doctoral Fellow, Department of Cellular and Molecular Biology, Baylor College of Medicine, Houston, Texas, USA.
- 1998- 2002** Post Doctoral Fellow, Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan.
- 1995-1998:** Research Associate, Microbiology and Cell Biology Department, Indian Institute of Science, Bangalore, India.

Principal Investigator: Amit Singh

**1990-1995:** Junior Research Fellow, Genetics Lab, School of Life Sciences, Indore, India.

### **Reviewer/ Editorial Positions**

**2008- To date** Academic Editor, PLOS One

**2008-2009** Invited as Ohio State Science Fair Judge for past two years .

**2006-2007** Member of grant review panel of Fight for Sight Inc., New York.

**2006- To date** Reviewer for journals:  
Development  
Genetics  
Developmental Dynamics,  
Genesis  
Int. J. Dev. Biology  
Organogenesis  
Technotome

### **HONORS**

**2005-2007** Fellow for Retina Research Foundation, Houston, Texas.

**2005-2006** Fellow of Fight for Sight Inc. Research Foundation, New York.

**2005- 2006** Fellow of Knights Templar Eye Foundation Inc. (Pediatric Ophthalmology Research grant Foundation), Schaumburg, Illinois.

**Mar. 2001** International Travel Award from Academia Sinica, Taipei, Taiwan (R.O.C) to give a talk at the 42<sup>nd</sup> Annual Drosophila Research Conference at Washington D.C., USA.

**Feb. 2000** International Travel Award from Academia Sinica, Taipei, Taiwan (R.O.C) to give a talk at the 41<sup>st</sup> Annual Drosophila Research Conference at Pittsburgh, USA.

**1998- 2002** Recipient of Academia Sinica Research Fellowship, Taipei, Taiwan to pursue research on early events in axial patterning of eye using *Drosophila* model.

**May 1996** Travel award from Institute of Advanced Studies, Hebrew University, Jerusalem, Israel to participate in VI<sup>th</sup> Summer School on "Developmental Switches."

- 1985- 1988** Recipient of Merit Scholarship from H.P. University, Shimla, India.
- 1988- 1990** Second position in the order of merit of Master's degree program of Life Sciences at Devi Ahilya University, Indore, (M.P.), India.
- Dec. 1989** Recipient of prestigious University Grants Commission (UGC) Research fellowship after qualifying the National Level test jointly conducted by CSIR and UGC, New Delhi, India.
- Feb. 1992** Recipient of Prof. S.R.V. Rao award for best scientific presentation at All India Cell Biology meeting at New Delhi, India.
- Jan. 1993** Recipient of Indian Society of Cell Biology (ISCB) best scientific presentation award at All India Cell Biology meeting at Varanasi, India.

### **OTHER EXPERIENCE**

- May, 1996** Participated in workshop on FISH techniques at Indian Institute of Sciences (IISc), sponsored by Department of Biotechnology, India.

### **TEACHING EXPERIENCE**

- 1994-1995:** Instructor for the Genetics laboratory for M.Sc. (Life Science) and M.Sc. (Biotechnology) program of D.A. University, Indore, India.
- 1998- 2002:** Participated in Summer Student Training Program at Academia Sinica, Taiwan to train undergraduate students in genetics and development.
- 2004- 2007** Instructor for  
**(1)** "Imaginal disc development" laboratory part of the course for the Developmental Biology graduate program (MD/PhD and PhD) students with Dr. Kwang-Wook Choi.  
**(2)** Graduate student research orientation training in early eye development in *Drosophila* at Baylor College of Medicine, Houston.
- 2004- 2007** Participant of summer research training program for undergraduate students at Baylor College of Medicine, Houston, Texas.
- 2007-** Designed and taught **Bio-instrumentation course** for the graduate students of University of Dayton. The course is tailored to apprise the students with cutting edge experimental approaches in the field of bio-

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medical and organismal research in order to make the transition of these graduate students into the research program smooth.

**2008-** Designed and taught following courses:  
**(i) “Molecular genetic basis of neurodegenerative disorders & birth defects in humans”**. This course covers current understanding of molecular and cellular basis of human diseases like neurodegenerative disorders and birth defects.

**(ii) “Genetic basis of retinal development and Disease”**.

**2008-** Teach undergraduate students Cell Biology (Bio-440) and cell biology laboratory (Bio-440L). The rationale of this lab is to introduce undergraduate students to the new concepts and approaches in field of cell biology.

### **RESEARCH TRAINEE**

#### **Graduate students**

**2007-** Meghana Tare, Graduate student, Department of Biology, University of Dayton (UD), Dayton, OH.

**2009-** Oorvashi Roy Puli Gajendranath, Graduate Student, Department of Biology, University of Dayton (UD), Dayton, OH.

#### **Graduate Student Committee Member**

**2008-** Venkatesh Mutyam

**2008-** Muhammad E Shakerath

**2008-** Rital Bhavsar

**2008-** Matthew E Lunn

**2008-** Ryan Posagai

**2009-** Shilpi Varghese

#### **Undergraduate students research (Honors)**

**2007-** Sarah M Oros (Premed)

**2008-** Rohan M Modi (Premed/JAMS)

2008- Jaison N Nainaparampil (Premed/ Barry's Scholar)

2008- Christopher E Johns (Premed)

### **Undergraduate students research**

2007- 2009 Stephen L Sanker

2007-2008 Monica M Berkemier

2008- Sehrish E Khan

2009- Akash Shah

### **Summer Students Mentoring Program**

2002-2003 Jeeder Chan, University of Houston, Houston Texas.

2004 Xiao Shi, Biology Department, Duke University, Durham, NC

2004 Bibhash Mukhopadhyaya, Developmental Biology Program, Baylor College of Medicine, Houston, Texas.

2005 Krishanthan Vigneswaran, Department of Neuroscience, Vanderbilt University, Nashville, Tennessee.

2006-2007 Jake Hernandez, Houston, Texas.

2008- Sagar Patel, Centerville High School, Ohio

2009 Kush Patel, Univ. of Cincinnati, Cincinnati, Ohio

### **PROFESSIONAL MEMBERSHIPS**

2000- To date Genetics Society of America (GSA).

2005- To date Member of GENA (Geneticist Educator Networking Association) a Mentor Network of American Society of Human Genetics. The objective of the network is to bring geneticist to the classroom.

2008- To date Honorary Member of Beta Beta Beta Biological Honor Society, Theta Kappa Chapter of university of Dayton, Dayton, OH.

**SELECTED PEER-REVIEWED PUBLICATIONS (IN CHRONOLOGICAL ORDER).**

- 1.** Kango-Singh, M. and **Singh, A.\*** (2009). Regulation of Organ Size: Insights from the *Drosophila* Hippo signaling pathway. **Dev. Dynamics** 238(7):1627-37.  
[\* **Co-Corresponding Author**]
- 2.** **Singh, A.**, Kango-Singh, M., and Gopinathan, K.P. (2009). Patterning defects in silkworm embryos analysed through cuticle preparations. **Sericologia** 49 (1):113-117.  
[\* **Corresponding Author**]
- 3.** Tare, M. and **Singh, A.** (2009). A cell Biology laboratory exercise to study sub-cellular organelles in *Drosophila*. **D.I.S.** (91): 160-164.  
[\* **Corresponding Author**]
- 4.** Kango-Singh, M., Call, G. B., and **Singh, A.\***, (2008). Annual *Drosophila* meeting at San Diego 2008. **Dev. Dynamics** 237(11):3444-52.  
[\* **Corresponding Author**]
- 5.** Lim, J. Lee, O.K. Hsu, Y.-C, **Singh, A.** and Choi, K.-W. (2007b) *Drosophila* TRAP230/240 are essential coactivators for Atonal in retinal neurogenesis. **Dev. Biol.** 308(2): 322-330
- 6.** **Singh, A.**, Kango-Singh, M., Parthasarathy, R. and Gopinathan, K.P. (2007a). Larval legs of mulberry silkworm *Bombyx mori* are prototypes for the adult legs. **Genesis** 45 (4): 169-176  
[**Corresponding Author**]
- 7.** **Singh, A.** (2006b). Fly eye development in fly meeting at Houston. **Int. J. Dev. Biol.** 50: 659-663.  
[**Corresponding Author**]
- 8.** **Singh, A.**, Xiao, S. and Choi, K.-W. (2006a). Lobe and Serrate, are required for cell survival during early eye development in *Drosophila*. **Development** 133, 4771-4781.  
[**Co-Corresponding Author**]
- 9.** **Singh, A.**, Chan, J., Chern, J.J. and Choi, K.-W. (2005a). Genetic interaction of Lobe with its modifiers in dorsoventral patterning and growth of the *Drosophila* eye. **Genetics**. 171(1):169-83. Epub 2005 Jun 23. PMID: 15976174
- 10.** **Singh, A.**, Kango-Singh, M., Choi, K.-W. and Sun, Y.H. (2004). Dorso-ventral asymmetric functions of *teashirt* in *Drosophila* eye development depend on spatial cues provided by early DV patterning genes. **Mechanisms of Development** 121: 365-370. PMID: 15110046

- 11.** Singh, A., Choi, K.-W. (2003). Initial state of *Drosophila* eye before dorso-ventral specification is equivalent to ventral. **Development** 130: 6351-6360. PMID: 14623824
- 12.** Kango-Singh, M., Singh, A. and Sun, Y.H. (2003). Eyeless collaborates with Hedgehog and Decapentaplegic signaling in *Drosophila* eye induction. **Developmental Biology** 256 (1):49-60. PMID: 12654291
- 13.** Singh, A., Kango-Singh, M. and Sun, Y.H. (2002). Eye suppression, a novel function of *teashirt*, requires Wingless signaling. **Development** 129(18): 4271-80. PMID: 12183379
- 14.** Kango-Singh, M.\*, Singh, A.\* and Gopinathan, K.P. (2001). The wings of *Bombyx mori* develop from larval discs exhibiting an early differentiated state: a preliminary report. **Journal of Bioscience** 26(2), 167-177. PMID: 11426053  
**[Equal first author]**
- 15.** Singh, A. and Gopinathan, K.P. (1998). Confocal microscopy, a powerful tool for biological research. **Current Science** 74(10):841- 851.  
([http://www.ias.ac.in/j\\_archive/currsci/74/10/841-851/viewpage.html](http://www.ias.ac.in/j_archive/currsci/74/10/841-851/viewpage.html))
- 16.** Singh, A. and Gopinathan, K.P. (1997). Study of gene expression in whole mount silkworm embryos using heterologous *Drosophila* antibodies. **Current Science** 72 (2): 214-219. ([http://www.ias.ac.in/j\\_archive/currsci/72/3/214-218/viewpage.html](http://www.ias.ac.in/j_archive/currsci/72/3/214-218/viewpage.html))
- 17.** Bhojwani, J., Singh, A., Misquitta, L., Mishra, A. and Sinha, P. (1995). Search for *Drosophila* genes based on patterned expression of mini-*white* reporter gene in adult eyes. **Roux's Archives of Developmental Biology**, 205(3-4): 114-121. (<http://www.springerlink.com/content/k4267w753752444m/>)
- 18.** Singh, A. (1995). Enhancer Trap Technique: A Novel Tool for Identification and Developmental Characterization of Genes of *Drosophila*. **Current Science** 68: 517-525. ([http://www.ias.ac.in/j\\_archive/currsci/68/5/517-525/viewpage.html](http://www.ias.ac.in/j_archive/currsci/68/5/517-525/viewpage.html))
- 19.** Singh A., Kango, M. and Sinha, P. (1994). An improved method for chemical devitellinization of X-gal stained *Drosophila* embryos. **IJEB** 33, 150-152. PMID: 7538973

## **B. BOOK CHAPTERS**

- 20.** Singh, A., Lim, J., and Choi K.-W (2005b). Dorso-ventral boundary is required for organizing growth and planar polarity in the *Drosophila* eye. In "**Planar Cell Polarization during Development: Advances in Developmental Biology and Biochemistry**" (ed. M. Mlodzik) pp. 59-91, Elsevier Science & Technology Books.

21. Gopinathan, K.P., Joy, O., and **Singh, A.** (1998). In "Genome **Analysis in Eukaryotes: Developmental and evolutionary aspects** " (eds. R. M. Chatterjee and L. Sanchez) pp. 65-97, Springer-Verlag New York, Incorporated.

### **C. INVITED COMMENTARY & OTHERS**

22. **Singh, A.\***, Kango-Singh, M (2006a). Annual Drosophila meeting at Houston 2006. **Dev. Dynamics. (Published Online: 26 Jul 2006)** PMID: 16871634 [Corresponding Author]
23. **Singh, A.**, Kango, M. An improved devitellinization technique with a high yield of X-gal stained embryos. **D. I. S.** 1995 76:215.

### **D. MANUSCRIPT UNDER REVIEW**

24. **Singh, A. and** Tsonis, P.A. (2009). Focus on molecule: Six 3. **Experimental Eye Research**

### **MANUSCRIPTS IN PREPARATION FOR SUBMISSION :**

1. **Singh, A.**, Tare, M., Son , W., Vigneswaran, K., and Choi, K.W. (2009) .Ventral eye margin is defined by opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate*.
2. Tare, M., Oros, S.M., Modi, R.M., Nainaparampil, J., Roy, O., **Singh, A.** (2009). Role of axial patterning and growth during organogenesis: Drosophila eye model. (review)
3. Oros, S.M., Tare, M., **Singh, A.** (2009). A new function of dorsal eye selector pannier in suppression of retinal differentiation.

### **INVITED LECTURES AND PRESENTATIONS (LAST FOUR YEARS):**

1. Oros, S.M., and **Singh, A.** "Dorsal selector, pannier, interacts with the retinal determination gene network". **Ohio Miami Valley Neuroscience Day at Miami University June 5th, 2009.**
2. **Singh, A.** *Drosophila* eye model to study axial patterning and birth defects. Feb. 9th, 2009. Department of Biology, **Wright State University, Dayton, Ohio.**
3. **Singh, A.** *Drosophila* eye model to study axial patterning and birth defects. Jan.30<sup>th</sup>, 2009. **Miami University, Oxford, Ohio.**



4. **Singh, A.** *Drosophila* eye model to study axial patterning and birth defects. Jun 9-10<sup>th</sup>, 2008. **Mercer University School of Medicine, Macon, GA.**
5. **Singh, A.** *Drosophila* eye model to study birth defects. **Birth Defect Center, University of Louisville, Louisville, Kentucky.**
6. **Singh, A.** *Drosophila* eye model to study birth defects. **Midwestern University, Pomona California, Pomona, California.**
7. **Singh, A.** *Drosophila* eye model to study genetic basis of birth defect Aniridia. Jan. 12<sup>th</sup>, 2007, **University of Dayton, Ohio.**
8. **Singh, A.** *Drosophila* eye model to study birth defects. Jan. 12<sup>th</sup>, 2007 **AZCOM, Midwestern University, Phoenix, Arizona.**
9. **Singh, A.** *Drosophila* eye model to study axial patterning and birth defects. Dec. 8<sup>th</sup>, 2006, **Murray State University, Murray, Kentucky.**
10. **Singh, A.** *Drosophila* eye to study patterning, survival, and inheritable genetic disorders. **24<sup>th</sup> April 2006, Bascom Palmer Eye Institute, University of Miami, Miami, Florida.**
11. **Singh, A.** Identification of genes required for cell survival during early eye development. Platform presentation in **47<sup>th</sup> Annual Annual Drosophila Research Conference, Houston, USA, March 30<sup>th</sup> - April 3<sup>rd</sup>, 2006.**
12. **Singh, A.** *Drosophila* eye to study patterning, survival and inheritable genetic disorders. **Jan. 2006, Department of Biology, University of Miami, Coral Gables, Florida.**
13. **Singh, A.** Mechanism of ventral eye growth and development. **Dec. 2004 Developmental Biology Research Seminar Club, Baylor College of Medicine, Houston, Texas.**
14. **Singh, A.** Dorso-Ventral (DV) Patterning in *Drosophila* Eye. **Nov. 2004** Invited lecture at the **Houston Eye Club, Baylor College of Medicine, Houston, Texas.**
15. **Singh A.** Ventral is the Default State of *Drosophila* Eye. **Developmental Biology Research Seminar Club, Baylor College of Medicine, Houston, Texas.**
16. **Singh A.** Early Dorso-Ventral Patterning in *Drosophila* Eye: Is Ventral the Default State? **Research and Development Seminar Series at Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, Texas.**

**SELECTED CONFERENCE ABSTRACTS:**

1. Tare, M., Kango-Singh M., **Singh, A.** Opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate* define ventral eye margin of the developing eye field. **(Ohio Miami Valley Neuroscience Day Symposium at Miami University, Oxford, OH, June 5, 2009).**
2. Modi, R.M., Nainaparampil, J.J. and **Singh, A.** “Drosophila eye model to understand the genetic basis of Alzheimer's disease.” **(Ohio Miami Valley Neuroscience Day Symposium at Miami University, Oxford, OH, June 5, 2009).**
3. Gunasekara, G., Roy, P.G.O., Kango-Singh, M., and **Singh, A.** “A Drosophila model to study the role of the Notch ligand Serrate (Jagged-1) in growth and cancer.” **(Ohio Miami Valley Neuroscience Day Symposium at Miami University, Oxford, OH, June 5, 2009).**
4. Oros, S.M., **Singh, A.** “Dorsal selector, pannier, interacts with the retinal determination gene network”. **(University of Dayton Stander Symposium April 16, 2009).**
5. Gunasekara, G., Roy, P.G.O., Kango-Singh, M., and **Singh, A.** “A Drosophila model to study the role of the Notch ligand Serrate (Jagged-1) in growth and cancer.” **(University of Dayton Stander Symposium April 16, 2009).**
6. Nainaparampil, J.J., Modi, R.M., and **Singh, A.** “Drosophila eye model to understand the genetic basis of Alzheimer's disease.” **(University of Dayton Stander Symposium April 16, 2009).**
7. Tare, M., Kango-Singh, M. Cho, K.-O., Choi, K.-W., **Singh, A.** "Antagonistic interaction of *L* and *hth* to define ventral eye boundary is independent of the *exd* function". **(5<sup>0th</sup> Annual Drosophila Research Conference, Chicago. March 4-8<sup>th</sup>, 2009).**
8. Oros, S.M., **Singh, A.** “Dorsal selector, pannier, interacts with the retinal determination gene network”. **(50<sup>th</sup> Annual Drosophila Conference in Chicago March 4-8<sup>th</sup>, 2009).**\*  
**(Oros received (i) Beta Beta Beta Research Award from National Tri-Beta Office, (ii) University of Dayton Honors Program travel fellowship, (iii) University of Dayton Student Government Association conference grant to attend this meeting).**
9. Kango-Singh, M., Patel, K., Waits, K., Gunashekera, S. **Singh, A.** Investigating cell death induced by activation of Hippo signaling. **(50<sup>th</sup> Annual Drosophila Research Conference, Chicago. March 4-8, 2009).**
10. Son, W., **Singh, A.**, Choi, K.-W. and Cho, K.-O.. Growth of compartments in eye-antenna discs are differentially regulated by Hedgehog (Hh), Decapentaplegic

(Dpp), and Wingless (Wg). **(50<sup>th</sup> Annual Drosophila Research Conference, Chicago. March 4-8, 2009).**

11. **Tare, M.**, Kango-Singh M., Singh A. Opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate* define ventral eye margin of the developing eye field. **(Sigma Xi poster symposium, 2008, University of Dayton).**
12. Oros, S.M., Berkemier, M. and **Singh, A.** *Drosophila* model to study genetic basis of birth defect in eye. **(Sigma Xi poster symposium, 2008, University of Dayton).**
13. Oros, S.M., Berkemier, M. and **Singh, A.** *Drosophila* model to study genetic basis of birth defect in eye. **(Ohio Miami Valley Chapter Society for Neuroscience, Wright State, May 16th, 2008).**
14. Tare, M. \*, Kango-Singh, M and **Singh A.** Opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate* define ventral eye margin of the developing eye field. **(Ohio Miami Valley Chapter Society for Neuroscience, Wright State, May 16th, 2008).**  
**\*Received the poster presentation award**
15. Oros, S.M., Berkemier, M. and Singh, A. *Drosophila* model to study genetic basis of birth defect in eye. **(Stander Symposium, University of Dayton, April, 2008).**
16. Tare, M., Kango-Singh, M and Singh A. (2008). Opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate* define ventral eye margin of the developing eye field. **(Stander Symposium, University of Dayton, April, 2008).**
17. **Singh, A.**, Tare, M., Son , W., Vigneswaran, K., and Choi, K.W. Ventral eye margin is defined by opposing interactions between *homothorax* and Notch pathway genes *Lobe* and *Serrate*. **(49<sup>th</sup> Annual Drosophila Research Conference, San Diego, USA, April, 2008).**
18. **Singh, A.**, Wook-Choi, K. Opposing interactions of homeodomain gene *homothorax* and Notch pathway genes *Lobe* and *Serrate* are required for ventral eye development. **(48<sup>th</sup> Annual Drosophila Research Conference, Philadelphia, USA, March, 2007).**
19. **Singh, A.**, Vigneswaran, K. and Choi, K.-W. Role of Dorso-ventral (DV) patterning genes in retinal determination and specification pathway in *Drosophila* eye, and in congenital eye defect Aniridia. **(47<sup>th</sup> Annual Drosophila Research Conference, Houston, Texas, USA, March, 2006).**
20. **Singh, A.** and Choi, K.W. Antagonistic interaction of ventral growth control genes with Wg signaling pathway and *homothorax* define the ventral margin of

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*Drosophila* eye. (46<sup>th</sup> Annual Fly meeting, San Diego, USA, March 30<sup>th</sup> - April 3<sup>rd</sup>, 2005).

21. **Singh, A.** and Choi, K.W. Ventral is the Initial State of *Drosophila* eye before Dorso-ventral specification. (45<sup>th</sup> Annual Fly meeting, Washington D.C., USA, March 24<sup>th</sup>-29<sup>th</sup>, 2004).
22. **Singh, A.** and Choi, K.W. Role of *Lobe* in the Dorso-ventral patterning of the *Drosophila* eye. (44<sup>th</sup> Annual Fly meeting, Chicago Illinois, USA, March 5<sup>th</sup>-9<sup>th</sup>, 2003).
23. **Singh, A.**, Kango-Singh, M. and Sun Y.H. *teashirt* collaborates with WG to suppress ventral eye development. (42<sup>nd</sup> Annual Fly meeting, Washington D.C., USA, March, 2001).
24. Kango-Singh, M., **Singh, A.** and Sun, Y.H. Requirement of *hedgehog* (*hh*) for the induction of ectopic eyes by the *Drosophila* PAX6 gene *eyeless* (*ey*). (Platform presentation at the 42<sup>nd</sup> Annual Fly meeting held at Washington D.C., USA, March 23<sup>rd</sup>-26<sup>th</sup>, 2001).
25. **Singh, A.**, Singh-Kango, M., and Sun Y.H. Developmental interaction of *teashirt* (*tsh*) with the genes involved in eye development. (NHRI Conference on Developmental Biology, Aspire Learning Complex, Taiwan R.O.C., October 27-28<sup>th</sup>, 2000).
26. Kango-Singh, M., **Singh, A.** and Sun, Y.H. Requirement of *hedgehog* (*hh*) for the induction of ectopic eyes by the *Drosophila* PAX6 gene *eyeless* (*ey*). (NHRI Conference on Developmental Biology, Aspire Learning Complex, Taiwan, October 27-28<sup>th</sup>, 2000).
27. **Singh, A.**, Kango-Singh, M. and Sun, Y. H. Developmental interaction of *teashirt* (*tsh*) with genes involved in eye development of *Drosophila*. (Oral Presentation, 41<sup>st</sup> Annual Fly meeting held, Pittsburgh, USA, March 22<sup>nd</sup>-26<sup>th</sup>, 2000).
28. Kango-Singh, M., **Singh, A.** and Sun, Y.H. Spatial requirements for induction of ectopic eyes in *Drosophila*. (41<sup>st</sup> Annual Fly meeting, Pittsburgh, USA, March 22<sup>nd</sup>-26<sup>th</sup>, 2000).
29. Kango-Singh, M, **Singh, A.** and Sun, Y. H. Study of mechanism of *eyeless* (*ey*) function in imaginal disc development of *Drosophila*. (Institute of Molecular Biology (IMB) Retreat, Academia, Sinica, Taipei, Taiwan, R.O.C., Dec. 16<sup>th</sup>, 1999).
30. **Singh, A.** and Sun, Y. H. Developmental interaction of *teashirt* (*tsh*) with the genes involved in eye development. (NHRI Conference on Developmental Biology at Naloowan Resort, Woolie, Taipei, Taiwan, R.O.C. from Sept. 7<sup>th</sup>-9<sup>th</sup>, 1999).

31. **Singh, A.** and Sun, Y. H. Screen for modifier mutation of *homothorax (hth)*. **(VII<sup>th</sup> Symposium on Recent Advances in Cellular and Molecular Biology held at Kenting, Taiwan from Jan. 30<sup>th</sup> - Feb. 1<sup>st</sup>, 1999).**
32. Kango Singh, M., **Singh, A.**, Pillai, B. and Gopinathan, K.P. (1997). Role of patterning genes during adult appendages morphogenesis in silkworm. **(IV<sup>th</sup> International workshop on Mol. Biology & Genetics of Lepidoptera held at Crete, Greece from Aug. 24 –30<sup>th</sup>, 1997).**
33. **Singh, A.**, Kango-Singh, M. and Gopinathan, K.P. (1997) Developmental evolution of patterning mechanisms in morphogenesis of adult appendages of silkworm, *Bombyx mori*. **(IV<sup>th</sup> International workshop on Mol. Biology & Genetics of Lepidoptera held at Crete, Greece from Aug 24-30<sup>th</sup>, 1997).**
34. Gopinathan, K.P., Joy, O. and **Singh, A.** - "Approaches to developing Transgenesis in silkworm, *Bombyx mori*." **(Symposia and Workshop on Animal Models for Biomedical Research, IISc, Bangalore, July 1-15<sup>th</sup>, 1996).**
35. **Singh, A.**, Kango-Singh, M. and Gopinathan, K.P. - "Pattern generation in Mulberry Silkworm, *Bombyx mori*." **(International Symposium on Present and Future of Major Aspects of Modern Biology, National Centre for Biological Sciences, TIFR, Bangalore, October 14 –18<sup>th</sup>, 1996).**
36. **Singh, A.**, Kango-Singh, M. and Gopinathan, K.P.- "The Silkworm, A model for the study of Pattern Formation." **(65<sup>th</sup> Annual Meeting of the Society of Biological Chemists (SBC) India, Indian Institute of Science (IISc), Bangalore, November 20 –23<sup>rd</sup>, 1996).**
37. **Singh, A.**, Kango-Singh, M. and Gopinathan, K.P.- Development of wing appendages in silkworm results from a pre-patterned wing housed in larva and the role of pattern controlling genes in wing development. **(VI<sup>th</sup> Spring School on "Developmental Switches" held at Institute of Advanced Studies, Hebrew University, Israel).**
38. Sinha, P., Bhojwani, J., **Singh, A.**, Misquitta, L., Mishra, A.-"Search for *Drosophila* genes based on patterned expression of mini-*white* reporter gene in adult eyes." **(Drosophila Meeting, Drosophila Stock Center, Mysore, India, 1995.)**
39. **Singh, A.** and Sinha, P.-"Role of *cubitus-interruptus Dominant*, segment polarity gene in the generation of pattern during *Drosophila* development. **(Chromosome Symposia, Banaras Hindu University, Varanasi, India, Jan. 13-15<sup>th</sup>, 1995).**
40. **Singh, A.** and Sinha, P.-"A novel aspect of the role of *cubitus interruptus Dominant* segment polarity gene in pattern generation. **(XVII<sup>th</sup>, All India Cell Biology Conference and Symposia, Indore, India, 1994).**

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41. **Singh, A.**, Bhojwani, J., Misquitta, L. and Sinha, P. "Interaction of *new sector (nst)* a novel insertion at *engrailed* locus with segment polarity, segmentation and homeotic genes". **(XVI<sup>th</sup> All India Cell Biology Conference and Symposia, B.H.U., Varanasi, 1993).** \* This presentation received the **Indian Society for Cell Biology (ISCB) award for Best Poster.**
42. Misquitta, L., Bhojwani, J., **Singh, A.**, Mishra-Sinha, A. and Sinha, P. "Genetic identification and developmental analysis of *toothless*- a novel gene regulating head development." **(XVI<sup>th</sup> All India Cell Biology Conference and Symposia, B.H.U., Varanasi, 1993).**
43. **Singh, A.** and Sinha, P. "The embryonic phenotype of *new sector (nst)*, a segment polarity gene of *Drosophila*. **(Drosophila Meeting, Drosophila Stock Center, University of Mysore, Mysore, India, 1993).**
44. Bhojwani, J., **Singh, A.**, Kango, M. and Sinha, P., - "Compartmentation during *Drosophila* development and the role of *new sector (nst)*, a segment polarity gene. **(Cellular and Molecular Aspects of Developmental Regulation, International Symposium from Nov. 27<sup>th</sup> -Dec 1<sup>st</sup>, 1993 organized by Indian Society of Developmental Biologists, Department of Zoology, Pune, India).**
45. **Singh, A.**, Bhojwani, J., Misquitta, L. and Sinha, P. -" Identification and developmental characterization of *new sector (nst)* a gene regulating development of compartment during *Drosophila* development. **(XV<sup>th</sup> All India Cell biology Conference and Symposia, New Delhi, India, 1992).** \* This presentation received the **Prof. S. R. V. Rao Prize for Best poster.**
46. **Singh, A.**, Bhojwani, J., Misquitta, L. and Sinha, P.-" Identification of *teashirt*, a homeotic gene." **(XV<sup>th</sup> All India Cell Biology Conference and Symposia, New Delhi, India, 1992).**
47. Misquitta, L., Bhojwani, J., **Singh, A.**, Mishra-Sinha, A. and Sinha, P.-" Identification of a novel set of enhancer elements regulating the pattern development in *Drosophila* by a P *lacZ* vector." **(XII<sup>th</sup> European Drosophila Research Conference at Mainz, Germany, 1991).**