



## Sara L. (Sally) Tobin

Sr Research Scholar, Pediatrics - Center for Biomedical Ethics

 NIH Biosketch available Online

### Bio

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#### ACADEMIC APPOINTMENTS

- Sr Research Scholar, Pediatrics - Center for Biomedical Ethics

#### ADMINISTRATIVE APPOINTMENTS

- Research Ethicist, Clinical and Translational Education and Research, (2003- present)
- Principal, Twisted Ladder Media, Inc., (2000- present)

#### HONORS AND AWARDS

- Postdoctoral Fellow, Muscular Dystrophy Association (1978-1979)
- Postdoctoral Fellow, National Institutes of Health (1979-1981)
- Senior Postdoctoral Fellow, American Cancer Society, California Division (1981-1982)
- Visiting Professorship for Women Awardee, National Science Foundation (1993-1995)
- Study Section Member, Ad Hoc, National Institutes of Health: SBIR Program (1994-2001)
- Review Panelist, National Science Foundation: Advance Program, Institutional Transformation, STEM Program (2001-2004)
- Member, Committee of Visitors, National Science Foundation: Plant Genome Program (2004)

#### PROFESSIONAL EDUCATION

- M.S.W., University of Oklahoma , Social Work (1993)
- Ph.D., University of Washington , Developmental Biology/Genetics (1977)
- B.S., University of Washington , Zoology (Honors) (1968)

#### COMMUNITY AND INTERNATIONAL WORK

- Institutional Review Board

#### LINKS

- Biomedical Ethics Faculty: <http://scbe.stanford.edu/people/resumes/tobin.html>

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Tobin is a Senior Research Scholar at the Stanford Center for Biomedical Ethics. She obtained her Ph.D. in Developmental Biology from the University of Washington and did postdoctoral research in Genetics at the University of California, Berkeley and in Biochemistry at the University of California, San Francisco. She became a

faculty member at the University of Oklahoma College of Medicine in 1983 and moved to Stanford University in 1996. Her research contributions have been published in prestigious journals such as Cell, Nature, Genes & Development, Neuron, and Journal of Cell Biology.

## Projects

With her collaborator, graphic designer Ann Boughton, Tobin has completed the production of three educational multimedia CD-ROM discs about the genetic revolution in medical care sparked by the rapid advances in our knowledge about the human genome. An on-line version derived and updated from these CDs is pending release through Twisted Ladder Media, and is entitled: "The New Genetics: Medicine and the Human Genome. Molecular Concepts, Applications, and Ramifications." In addition, Tobin and Boughton have collaborated on educational websites on inherited risk of breast cancer and on hereditary colorectal cancer with the Stanford Cancer Genetics Clinic.

Tobin's current major research interests include an educational project funded by the National Science Foundation to create and evaluate innovative modules for undergraduates entitled, "The New Genetics: Electronic Tools for Educational Innovation." The modules are presented in on-line form as an electronic course and are accompanied by workbook exercises and problem sets. The content includes principles of genetics, molecular genetic technologies, applications in medicine, environmental biology, agriculture, and society, as well as implications. In addition, she is collaborating on two projects that are exploring the ramifications of using genetic information about addiction risk in the judicial system.

Tobin is a member of the Benchside Consultation Team for the Center for the Integration of Research on Genetics and Ethics, and she evaluates clinical protocols for ethical issues for the Clinical Translational Research Program.

## Publications

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### PUBLICATIONS

- **Customers or research participants?: Guidance for research practices in commercialization of personal genomics** *GENETICS IN MEDICINE*  
Tobin, S. L., Cho, M. K., Lee, S. S., Magnus, D. C., Allyse, M., Ormond, K. E., Garrison, N. A.  
2012; 14 (10): 833-835
- **Informational risk, institutional review, and autonomy in the proposed changes to the common rule.** *IRB*  
Allyse, M., Karkazis, K., Lee, S. S., Tobin, S. L., Greely, H. T., Cho, M. K., Magnus, D.  
2012; 34 (3): 17-19
- **Strangers at the Benchside: Research ethics consultation** *AMERICAN JOURNAL OF BIOETHICS*  
Cho, M. K., Tobin, S. L., Greely, H. T., McCormick, J., Boyce, A., Magnus, D.  
2008; 8 (3): 4-13
- **Research Ethics Consultation: The Stanford Experience** *IRB: Ethics and Human Research*  
Cho MK, Tobin SL, Greely HT, McCormick J, Boyce A, Magnus D  
2008; 30 (6)
- **Initiating ocular proteomics for cataloging bovine retinal proteins: Microanalytical techniques permit the identification of proteins derived from a novel photoreceptor preparation** *EXPERIMENTAL EYE RESEARCH*  
Nishizawa, Y., Komori, N., Usukura, J., Jackson, K. W., Tobin, S. L., Matsumoto, H.  
1999; 69 (2): 195-212
- **Defining dementia: Social and historical background of Alzheimer disease** *49th Annual Meeting of the American-Society-of-Human-Genetics*  
Fox, P. J., Kelly, S. E., Tobin, S. L.  
MARY ANN LIEBERT INC.1999: 13-19
- **The genetics of Alzheimer disease and the application of molecular tests** *49th Annual Meeting of the American-Society-of-Human-Genetics*  
Tobin, S. L., Chun, N., Powell, T. M., McConnell, L. M.

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MARY ANN LIEBERT INC.1999: 37-45

- **Sonchus yellow net rhabdovirus nuclear viroplasm contains polymerase-associated proteins** *JOURNAL OF VIROLOGY*  
Martins, C. R., Johnson, J. A., Lawrence, D. M., Choi, T. J., Pisi, A. M., Tobin, S. L., Lapidus, D., Wagner, J. D., Ruzin, S., McDonald, K., Jackson, A. O.  
1998; 72 (7): 5669-5679
- **Phosrestide-1, a peptide derived from the Drosophila photoreceptor protein phosrestin I, is a potent substrate for Ca<sup>2+</sup>/calmodulin-dependent protein kinase II from rat brain** *COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY B-BIOCHEMISTRY & MOLECULAR BIOLOGY*  
Kahn, E. S., Kinumi, T., Tobin, S. L., Matsumoto, H.  
1998; 119 (4): 739-746
- **Phosrestin I undergoes the earliest light-induced phosphorylation by a calcium/calmodulin-dependent protein kinase in Drosophila photoreceptors** *Neuron*  
Matsumoto H, Kurien B, Takagi Y, Kahn E, Kinumi T, Komori N, Yamada T, Hayashi F, Isono K, Pak WL, Tobin SL  
1994; 12: 997
- **DEVELOPMENTAL EXPRESSION OF THE DROSOPHILA-MELANOGASTER CALMODULIN GENE** *INTERNATIONAL JOURNAL OF DEVELOPMENTAL BIOLOGY*  
HANSONPAINTON, O., Randolph, V., Saugstad, J. A., Oh, S. K., Tobin, S. L.  
1992; 36 (3): 343-351
- **TRANSCRIPTS OF INDIVIDUAL DROSOPHILA ACTIN GENES ARE DIFFERENTIALLY DISTRIBUTED DURING EMBRYOGENESIS** *DEVELOPMENTAL GENETICS*  
Tobin, S. L., Cook, P. J., Burn, T. C.  
1990; 11 (1): 15-26
- **ALTERATION BY HEAT-SHOCK AND IMMUNOLOGICAL CHARACTERIZATION OF DROSOPHILA SMALL NUCLEAR RIBONUCLEOPROTEINS** *JOURNAL OF CELL BIOLOGY*  
WRIGHTSANDOR, L. G., Reichlin, M., Tobin, S. L.  
1989; 108 (6): 2007-2016
- **TISSUE-SPECIFIC EXPRESSION OF THE 79B ACTIN GENE DURING DROSOPHILA DEVELOPMENT** *DEVELOPMENTAL BIOLOGY*  
COURCHESNESMITH, C. L., Tobin, S. L.  
1989; 133 (2): 313-321
- **ALTERNATIVE 5C-ACTIN TRANSCRIPTS ARE LOCALIZED IN DIFFERENT PATTERNS DURING DROSOPHILA EMBRYOGENESIS** *DEVELOPMENTAL BIOLOGY*  
Burn, T. C., Vigoreaux, J. O., Tobin, S. L.  
1989; 131 (2): 345-355
- **REGULATION OF LARVAL CUTICLE PROTEIN GENE-EXPRESSION IN DROSOPHILA-MELANOGASTER** *DEVELOPMENTAL GENETICS*  
Kimbrell, D. A., Tojo, S. J., Alexander, S., Brown, E. E., Tobin, S. L., Fristrom, J. W.  
1989; 10 (3): 198-209
- **STAGE-SPECIFIC SELECTION OF ALTERNATIVE TRANSCRIPTIONAL INITIATION SITES FROM THE 5C ACTIN GENE OF DROSOPHILA-MELANOGASTER** *GENES & DEVELOPMENT*  
Vigoreaux, J. O., Tobin, S. L.  
1987; 1 (10): 1161-1171
- **STRUCTURE AND EXPRESSION OF THE DROSOPHILA CALMODULIN GENE** *NUCLEIC ACIDS RESEARCH*  
Yamanaka, M. K., Saugstad, J. A., HANSONPAINTON, O., McCarthy, B. J., Tobin, S. L.  
1987; 15 (8): 3335-3348
- **In vitro transcription of Drosophila actin and 70,000-dalton heat shock protein genes.** *journal of biological chemistry*  
Nierman, W. C., Miller, A. E., Tobin, S. L., Ingolia, T. D., Sanchez, F., RDEST, U., ZULAUF, E., McCarthy, B. J.  
1983; 258 (20): 12618-12623
- **2 DROSOPHILA ACTIN GENES IN DETAIL - GENE STRUCTURE, PROTEIN-STRUCTURE AND TRANSCRIPTION DURING DEVELOPMENT** *JOURNAL OF MOLECULAR BIOLOGY*  
Sanchez, F., Tobin, S. L., RDEST, U., ZULAUF, E., McCarthy, B. J.  
1983; 163 (4): 533-551

- **INVITRO TRANSCRIPTION OF DROSOPHILA ACTIN AND 70,000-DALTON HEAT-SHOCK PROTEIN GENES** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Nierman, W. C., Miller, A. E., Tobin, S. L., Ingolia, T. D., Sanchez, F., RDEST, U., ZULAUF, E., McCarthy, B. J.  
1983; 258 (20): 2618-2623
- **DEVELOPMENTAL EXPRESSION OF A DROSOPHILA ACTIN GENE ENCODING ACTIN-I** *NATURE*  
ZULAUF, E., Sanchez, F., Tobin, S. L., RDEST, U., McCarthy, B. J.  
1981; 292 (5823): 556-558
- **MULTIPLE ACTIN-RELATED SEQUENCES IN THE DROSOPHILA-MELANOGASTER GENOME** *CELL*  
Tobin, S. L., ZULAUF, E., Sanchez, F., Craig, E. A., McCarthy, B. J.  
1980; 19 (1): 121-131