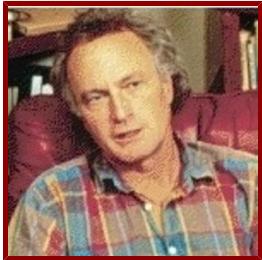


# Stanford

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## Stuart Thompson

Professor of Biology (Hopkins Marine Station)

### Bio

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#### ACADEMIC APPOINTMENTS

- Professor, Biology
- Professor, Hopkins Marine Station
- Member, Wu Tsai Neurosciences Institute

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Neurobiology, signal transduction

### Teaching

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#### COURSES

##### 2023-24

- Sensory Ecology of Marine Animals: BIO 12N, OCEANS 12N (Aut)

##### 2022-23

- Frontiers in Marine Biology: OCEANS 3 (Aut)
- Natural History, Marine Biology, and Research: BIO 10SC (Sum)
- Sensory Ecology of Marine Animals: BIO 12N (Aut)

##### 2021-22

- Frontiers in Marine Biology: BIO 3 (Aut)
- Natural History, Marine Biology, and Research: BIO 10SC (Sum)
- Sensory Ecology of Marine Animals: BIO 12N (Aut)

##### 2020-21

- Frontiers in Marine Biology: BIO 3 (Aut, Spr)
- Sensory Ecology of Marine Animals: BIO 12N (Aut)

#### STANFORD ADVISEES

##### Master's Program Advisor

Julia DiCicco

## GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (Phd Program)

## Publications

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### PUBLICATIONS

- **Temperature effects on low-light vision in juvenile rockfish (Genus *Sebastes*) and consequences for habitat utilization** *JOURNAL OF COMPARATIVE PHYSIOLOGY A-NEUROETHOLOGY SENSORY NEURAL AND BEHAVIORAL PHYSIOLOGY*  
Reilly, C. R., Thompson, S. H.  
2007; 193 (9): 943-953
- **The spectral sensitivity of the lens eyes of a box jellyfish, *Tripedalia cystophora* (Conant)** *JOURNAL OF EXPERIMENTAL BIOLOGY*  
Coates, M. M., Garm, A., Theobald, J. C., Thompson, S. H., Nilsson, D.  
2006; 209 (19): 3758-3765
- **Central pattern generator for swimming in *Melibe*** *JOURNAL OF EXPERIMENTAL BIOLOGY*  
Thompson, S., Watson, W. H.  
2005; 208 (7): 1347-1361
- **Some precautions in using chelators to buffer metals in biological solutions** *CELL CALCIUM*  
Patton, C., Thompson, S., Epel, D.  
2004; 35 (5): 427-431
- **NO is necessary and sufficient for egg activation at fertilization** *NATURE*  
Kuo, R. K., Baxter, G. T., Thompson, S. H., Stricker, S. A., Patton, C., Bonaventura, J., Epel, D.  
2000; 406 (6796): 633-636
- **Cholinergic modulation of the Ca<sup>2+</sup> response to bradykinin in neuroblastoma cells** *AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY*  
Coggan, J. S., Thompson, S. H.  
1997; 273 (2): C612-C617
- **Cyclic GMP-gated channels in a sympathetic neuron cell line** *JOURNAL OF GENERAL PHYSIOLOGY*  
Thompson, S. H.  
1997; 110 (2): 155-164
- **Activation of the nitric oxide cGMP pathway is required for refilling intracellular Ca<sup>2+</sup> stores in a sympathetic neuron cell line** *CELL CALCIUM*  
Harrington, M. A., Thompson, S. H.  
1996; 19 (5): 399-407
- **The nitric oxide/cGMP pathway couples muscarinic receptors to the activation of Ca<sup>2+</sup> influx** *JOURNAL OF NEUROSCIENCE*  
Mathes, C., Thompson, S. H.  
1996; 16 (5): 1702-1709
- **THE RELATIONSHIP BETWEEN DEPLETION OF INTRACELLULAR CA<sup>2+</sup> STORES AND ACTIVATION OF CA<sup>2+</sup> CURRENT BY MUSCARINIC RECEPTORS IN NEUROBLASTOMA-CELLS** *JOURNAL OF GENERAL PHYSIOLOGY*  
Mathes, C., Thompson, S. H.  
1995; 106 (5): 975-993
- **Local positive feedback by calcium in the propagation of intracellular calcium waves** *BIOPHYSICAL JOURNAL*  
Wang, S. S., Thompson, S. H.  
1995; 69 (5): 1683-1697
- **INTRACELLULAR CALCIUM SIGNALS IN RESPONSE TO BRADYKININ IN INDIVIDUAL NEUROBLASTOMA-CELLS** *AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY*  
Coggan, J. S., Thompson, S. H.  
1995; 269 (4): C841-C848
- **CALCIUM REQUIREMENT FOR CGMP PRODUCTION DURING MUSCARINIC ACTIVATION OF N1E-115 NEUROBLASTOMA-CELLS** *AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY*

- Thompson, S. H., Mathes, C., Alousi, A. A.  
1995; 269 (4): C979-C985
- **THE LIFETIME OF INOSITOL 1,4,5-TRISPHOSPHATE IN SINGLE CELLS *JOURNAL OF GENERAL PHYSIOLOGY***  
Wang, S. S., Alousi, A. A., Thompson, S. H.  
1995; 105 (1): 149-171
  - **FACILITATION OF CALCIUM-DEPENDENT POTASSIUM CURRENT *JOURNAL OF NEUROSCIENCE***  
Thompson, S. H.  
1994; 14 (12): 7713-7725
  - **CALCIUM CURRENT ACTIVATED BY MUSCARINIC RECEPTORS AND THAPSIGARGIN IN NEURONAL CELLS *JOURNAL OF GENERAL PHYSIOLOGY***  
Mathes, C., Thompson, S. H.  
1994; 104 (1): 107-121
  - **THE AMINOGLYCOSIDE G418 SUPPRESSES MUSCARINIC RECEPTOR-ACTIVATED CALCIUM-RELEASE IN STABLY TRANSFECTED MURINE NIE-115 NEUROBLASTOMA-CELLS *NEUROSCIENCE LETTERS***  
Coggan, J. S., Kovacs, I., Thompson, S. H.  
1994; 170 (2): 247-250
  - **MEMBRANE TOXICITY OF THE PROTEIN-KINASE-C INHIBITOR CALPHOSTIN-A BY A FREE-RADICAL MECHANISM *NEUROSCIENCE LETTERS***  
Wang, S. S., Mathes, C., Thompson, S. H.  
1993; 157 (1): 25-28
  - **MEMBRANE TOXICITY OF THE PROTEIN-KINASE-C INHIBITOR CALPHOSTIN-A BY A FREE-RADICAL MECHANISM *NEUROSCIENCE LETTERS***  
Wang, S. S., Mathes, C., Thompson, S. H.  
1993; 156 (1-2): 145-148
  - **A-TYPE POTASSIUM CHANNEL CLUSTERS REVEALED USING A NEW STATISTICAL-ANALYSIS OF LOOSE PATCH DATA *BIOPHYSICAL JOURNAL***  
Wang, S. S., Thompson, S.  
1992; 63 (4): 1018-1025
  - **INTRACELLULAR CALCIUM RELEASE IN NIE-115 NEUROBLASTOMA-CELLS IS MEDIATED BY THE M1 MUSCARINIC RECEPTOR SUBTYPE AND IS ANTAGONIZED BY MCN-A-343 *BRAIN RESEARCH***  
Mathes, C., Wang, S. S., Vargas, H. M., Thompson, S. H.  
1992; 585 (1-2): 307-310
  - **CLUSTERED DISTRIBUTION AND VARIABILITY IN KINETICS OF TRANSIENT-K CHANNELS IN MOLLUSCAN NEURON CELL-BODIES *JOURNAL OF NEUROSCIENCE***  
Premack, B. A., Thompson, S., COOMBESHAHN, J.  
1989; 9 (11): 4089-4099
  - **MEASUREMENT OF NONUNIFORM CURRENT DENSITIES AND CURRENT KINETICS IN APLYSIA NEURONS USING A LARGE PATCH METHOD *BIOPHYSICAL JOURNAL***  
Johnson, J. W., Thompson, S.  
1989; 55 (2): 299-308
  - **INWARD RECTIFICATION IN RESPONSE TO FMRFAMIDE IN APLYSIA NEURON-L2 - SUMMATION WITH TRANSIENT K-CURRENT *JOURNAL OF NEUROSCIENCE***  
Thompson, S., Ruben, P.  
1988; 8 (9): 3200-3207
  - **SPATIAL-DISTRIBUTION OF CA CURRENTS IN MOLLUSCAN NEURON CELL-BODIES AND REGIONAL DIFFERENCES IN THE STRENGTH OF INACTIVATION *JOURNAL OF NEUROSCIENCE***  
Thompson, S., Coombs, J.  
1988; 8 (6): 1929-1939