

1.

Heat shock protein 27-mediated disruption of tau aggregation reduces intraneuronal tau inclusions and improves hippocampal plasticity

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2.

A Yeast-Based System to Characterize the Malarial Chaperone, PfHsp70-1

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3.

Characterization of the VirG autotransporter from *Yersinia pestis*

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4.

Can an autotransporter protein truly transport itself across a lipid bilayer?

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5.

Chaperone Therapeutics

Small Molecule Screen for Activators of the Heat Shock Response

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6.

A small asparagine-rich domain is sufficient for propagation of the [SWT⁺] prion in yeast

Emily Crow and Liming Li

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7.

Towards the Understanding of the Heat Shock Response in Metazoans

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8.

The Hsp82 molecular chaperone promotes a switch between unextendable and extendable telomere states.

DeZwaan DC, Toogun OA, Echtenkamp FJ, Freeman BC.

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9.

Global functional map of the yeast p23 cochaperone Sba1 reveals extensive nuclear molecular chaperone activities

Frank J. Echtenkamp¹, Elena Zelin¹, Ellinor Oxelmark¹, Joyce I. Woo¹, Michael J. Garabedian², Brenda Andrews³ and Brian C. Freeman¹

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10.

Expression of the Endoplasmic Reticulum Chaperones Grp94 and Bip is Mutually Regulated

Davide Eletto, Catherine Makerewich and Yair Argon, Division of Cell Pathology, Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia and University of Pennsylvania, Philadelphia, PA 19104, USA.

11.

Rad23 escapes degradation by the proteasome because it lacks an initiation region

Susan Fishbain, Sumit Prakash, and Andreas Matouschek

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12.

How does the farnesylation of Ydj1 aid in the functioning of the protein?

Elizabeth Flerchinger, Gary Flom and Jill Johnson.

Department of Microbiology, Molecular Biology and Biochemistry, University of Idaho, Moscow, ID 83844-3052

13.

Identification of compounds active as chemical chaperones *in vivo*

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14.

Development of a Cellular Assay for Testing FKBP52-Specific Inhibitors

Yenni A. García, Johanny Meneses De León and Marc B. Cox.

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15.

Defining the Chaperone Requirements for the Endoplasmic Reticulum-associated Degradation (ERAD) of Novel Substrates

Christopher J. Guerriero¹, Kunio Nakatsukasa², and Jeffrey L. Brodsky¹

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16.

Investigating the role of the Hsp70 chaperone system in the propagation of the yeast prion [SWI +].

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17.

Pseudomonas syringae HopI1 effector targets plant Hsp70 for virulence

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18.

Hsp90 Co-chaperone FKBP51 Regulates Tau and Polymerizes Microtubules

Umesh K. Jinwal¹, John Koren III¹, Sergiy I. Borysov¹, Andreas B. Schmid², Jose F. Abisambra¹, Laura J. Blair¹, Amelia G. Johnson¹, Jeffrey R. Jones¹, Cody Shults¹, John C. O'Leary III¹, Ying Jin¹, Vestal Grant¹, Johannes Buchner², Marc B. Cox³ and Chad A. Dickey¹

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19.

The Duality of Heat Shock Proteins in Tauopathies

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20.

Enhancing the degradation of α -synuclein oligomeric toxic species

Kiri Kilpatrick, Ahmed Kothawala, and Laura Segatori

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21.

Luciferase as a folding sensor for acute and chronic stress conditions

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22.

Modeling infectious proteins in *C. elegans*

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23.

Internal Initiation of Degradation for Protein Processing by the Proteasome

Daniel A. Kraut & Andreas Matouschek

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24.

YJR088C encodes a novel Hsp90 Cochaperone.

Tambudzai Kudze and Amie McClellan

Division of Natural Sciences and Mathematics, Bennington College, VT

25.

Hsp70 Promotes Degradation of Protein Kinases Upon Hsp90 Inhibition

Atin K. Mandal, Nadinath B. Nillegoda, Maria A. Theodoraki, Jason E. Gestwicki* and Avrom J. Caplan

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26.

Identification and Characterization of FKBP52-Specific Inhibitors for Treatment of Prostate Cancer

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27.

Developing a high-throughput assay to identify lead compounds to stabilize the Cystic Fibrosis Transmembrane Regulator Nucleotide Binding Domain.

Subhashchandra Naik & Mark T. Fisher,

Department of Biochemistry & Molecular Biology, University of Kansas Medical Center, Kansas City, KS

28.

Hsp70 inhibitor, methylene blue, rescues the cognitive deficiencies of mice overexpressing mutant P301L tau in a concentration dependent manner.

John C. O'Leary III, Umesh Jinwal, John Koren III, Jose F. Abisambra, Yoshinari Miyata, Laura Blair, Clara Kraft, Amelia G. Johnson, Lisa Lawson, Mindy Peters, Jason Gestwicki, Edwin J. Weeber, and Chad A. Dickey

29.

Development and Validation of a Yeast High-Throughput Screen for Inhibitors of A β ₄₂ Oligomerization

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30.

A Specific Regulatory Role of SGT α on the Maturation and Activation of the Glucocorticoid and Progesterone Receptors

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31.

New insights in Alzheimer's from studies of ADan and ABri aggregation and toxicity in C. elegans model

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32.

Passenger domain stability correlates with autotransporter secretion efficiency

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Science Hall, Notre Dame, IN, 46556

33.

Investigating the Role of Rare Codon Clusters in Protein Biogenesis

Ian Sander, Thomas F. Clarke IV, and Patricia L. Clark
University of Notre Dame

34.

The Conformation of Hsp70-bound Substrates: an NMR Study

Nese Kurt, Ashok Sekhar, Jea Hoo Kwon and Silvia Cavagnero
Department of Chemistry, University of Wisconsin Madison, Madison, WI

35.

An Early Role for Hsp70 in the Formation of Aggresomes

Matthew C. Smith, Susanne Wisen, Gladis Walter, and Jason E. Gestwicki
University of Michigan, Ann Arbor, MI

36.

The role of cap structures on β -helix aggregation properties

Jennifer L. Starner & Patricia L. Clark
Department of Chemistry and Biochemistry
University of Notre Dame

37.

**A Novel Synergistic Relationship between FKBP52 and β -Catenin with
Revolutionary Implications in Prostate Cancer Research**

Cheryl Storer, Marc B. Cox, and Heather Balsiger
Department of Biological Sciences, The University of Texas at El Paso, El Paso, TX

38.

**Dynamic Structural Changes of Hsp70 Throughout It's ATPase Cycle Revealed by
Electron Microscopy.**

Andrea D. Thompson, Steffen Bernard, Min Su, Georgios Skiniotis, Jason E. Gestwicki
University of Michigan, Ann Arbor, MI

39.

Co-translational folding increase GFP folding yield

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Indiana 46556, USA

40.

Towards a tissue-specific Hsp90 chaperone network in *C. elegans*

Patricija van Oosten-Hawle, Meghan Park and Richard I. Morimoto
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41.

Evaluating the role of microRNAs in proteostasis using *C. elegans*

Cindy Voisine, Catarina Silva, and Richard Morimoto

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42.

Functional Comparison of Human and *Danio rerio* FKBP52

Veronica L. Wells, Diondra C. Harris, Dr. Marc B. Cox

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43.

Examining the Influence of the Sulfur Assimilation Pathway on the Regulation of Yap1 Activity in *Saccharomyces cerevisiae*

Haley A. Brown and James D. West; Biochemistry and Molecular Biology Program; Departments of Biology and Chemistry; The College of Wooster; Wooster, OH 44691

44.

Overproduction Of Qn-Rich Proteins Destabilize The [Psi +] Prion

Zi Yang, Joo Y. Hong, Susan W. Liebman

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45.

Three-Dimensional Structure of the Anthrax Toxin Pore Inserted into Lipid Nanodiscs and Lipid Vesicles

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⁴Department of Chemistry & Biochemistry, University of Arizona, Tucson, AZ, 85721-0088

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Dihydropyrimidines and Myricetin: Allosteric Modulators of Hsp70s

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²Medicinal Chemistry, University of Michigan ³Department of Biological Chemistry, University of Michigan

47.

Effect of Radicol on Myotoxic Activity of Crotoxin and Bothrops Asper Phospholipase A2 Myotoxins.

¹ Debora C. Rodrigues, ¹ Lygia S. Gonçalves, ¹ Talita C. Conte, ² Igor L. Baptista, ² Anselmo S. Moriscot, ¹ Elen H. Miyabara., ¹ Departments of Anatomy and ² Cell and Developmental Biology, University of Sao Paulo, Sao Paulo, Brazil

48.

CWC23, AN ESSENTIAL J PROTEIN CRITICAL FOR PRE-mRNA SPLICING WITH A DISPENSABLE J DOMAIN

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