

## CURRICULUM VITAE

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### **Academic Positions:**

Professor	2004 - present
Associate Professor	2001 - 2004
Assistant Professor	1995 - 2001
Department of Biochemistry and Molecular Biology (formerly Department of Molecular Genetics, Microbiology and Immunology)	
Professor	2007-present
Department of Pediatrics Robert Wood Johnson Medical School, Rutgers, The State University of New Jersey	

### **Administrative Positions:**

Vice President for Research	2016-present
Associate Vice President for Research Administration	2013-2015
Rutgers, The State University of New Jersey	
Associate Dean	2007-2009
Senior Associate Dean	2009-2013
Graduate School of Biomedical Sciences at RWJMS Rutgers, The State University of New Jersey	
Interim Senior Associate Dean for Research	2010-2013
Robert Wood Johnson Medical School, Rutgers, The State University of New Jersey	
Assistant Dean for Medical Scientist Training	2005-2007
Robert Wood Johnson Medical School, Rutgers, The State University of New Jersey	
Director, RWJMS, Rutgers University, Princeton University M.D. Ph.D. Program	2005-2010
Executive Director, RWJMS DNA Synthesis and Sequencing Laboratory	1998- 2009

\*Prior to July 1, 2013, Robert Wood Johnson Medical School was part of the University of Medicine and Dentistry of New Jersey

### **Administrative Responsibilities: Vice President for Research**

- Responsible for the Offices of Research and Sponsored Programs, Grant and Contract Accounting, Corporate Contracts, Corporate Engagement, Research Development and Research Operations (Research IT, HR, finances and communications).
- Oversee a staff of 115 members with 6 direct reports.
- Responsible for the financial and HR operations of the entire Office of Research and Economic Development (ORED) with a staff of over 300 people and an operating budget of almost \$43,000,000.

- Rutgers University has 4 Chancellors and 3 major locations (New Brunswick, Newark and Camden) with state wide satellite sites and with \$658,123,000 in research expenditures (FY15) ranking 18<sup>th</sup> in public universities and 29<sup>th</sup> among all universities.
- Responsible in the absence of the Sr. Vice President for Research and Economic Development for senior leadership in research at Rutgers.
- Strategic partner with Associate Vice Presidents for Research Compliance, Research Commercialization, Economic Development and Research Advancement (animal programs).
- Works strategically with Rutgers State and Federal Relations staff and nationally via the ASBMB Political Affairs Advisory Committee on state and national research policies, funding priorities and programs.
- Helped develop key strategic research alliances with targeted corporations and saw increases of corporate research awards of 30% in FY15 and 28% in FY16.
- Federal support for research at Rutgers increased by 11 percent in both FY15 and FY16, the university's NIH funding rose 16 percent in FY16.

Major accomplishments:

- Served on the research and academic affairs committees to implement the integration of the medical sciences from the former the University of Medicine and Dentistry of New Jersey into Rutgers.
- Co-led Excellence in Research Administration era.rutgers.edu evaluation and overhaul of research operations at Rutgers University
- Co-led the implementation of a new Oracle cloud based financial system for Rutgers University.
- Oversaw implementation of Click Commerce Grant system Rutgers wide.
- Developed new budget models and metrics to support the Responsibility Center Management (RCM) budget proposal for ORED.
- Reorganized grant and contract accounting from the finance office to ORED.
- Recruited and continue to develop senior leadership in research administration at Rutgers.
- Established research metrics at Rutgers and aligned with all Rutgers reporting.

**Industrial Experience:**

BP America, Warrensville, OH, Chemist 1985 - 1987  
 Employed as a staff scientist for biofuel development via molecular genetic manipulation of plants and generation of microbes for bioremediation of copper mines.

**Education:**

B. S. (1985), Chemistry, *magna cum laude*, The University of Akron, Akron, OH  
 Ph.D. (1991), Biochemistry, Case Western Reserve University, Cleveland, OH  
 William C. Merrick, Ph.D., advisor

Postdoctoral Fellow (1995), Molecular Genetics, Carnegie Mellon University, Pittsburgh PA  
 John L. Woolford Jr. Ph.D., advisor

**Honors & Awards:**

2017	Fellow, American Association for the Advancement of Science
2015	Case Western Reserve University ACES Distinguished Lectureship
2010	Theme organizer, ASBMB Annual Meeting
2009	Session chair, EMBL Protein Synthesis and Translational Control Meeting
2008	Co-organizer, Cold Spring Harbor Translational Control Meeting
2007	Co-organizer, AAMC GREAT Group MD-PhD Section Annual Meeting
2006	New Jersey Association for Biomedical Research Outstanding Mentor Award
2005	R. Walter Schlesinger Basic Science Mentoring Award
2004	Woman of the Year in Medicine, Somerset County, New Jersey
2003	Hedwig van Ameringen Executive Leadership in Academic Medicine Fellow
2002	Compact for Faculty Diversity Faculty Mentor of the Year

2001 Inducted UMDNJ Master Educator Guild  
 2001 Invited speaker and session chair, 66<sup>th</sup> Cold Spring Harbor Symposium: The Ribosome  
 2000 Session chair, Cold Spring Harbor Translational Control Meeting  
 2000-2005 N.S.F. Faculty Early Career Development Award Recipient  
 1996-1997 Cancer Institute of New Jersey, Junior Faculty Research Award  
 1992-1994 American Cancer Society Postdoctoral Fellowship  
 1989-1991 CWRU NIH Metabolism Graduate Training Grant Appointee  
 1989 N.S.F. Travel Grant to NATO Advanced Study Institute  
 1985 University of Akron Honor A Key  
 1980-1985 University of Akron Dean's List  
 1980 Robert L. Moffett Scholarship  
 1980-1985 Ohio Board of Regents Scholarship  
 1980-1985 Akron Rubber Group Scholarship of the American Chemical Society

**Appointments:** 1998-present Cancer Institute of New Jersey  
 1998-present NIH T32 AI07403 Virus-host Interactions in Eukaryotic Cells Training Grant  
 2001-2007 NIEHS Center of Excellence  
 2003-2007 Member, NIH Molecular Genetics C Study Section  
 2000-2002 Ad hoc reviewer NIH Physiological Chemistry Study Section  
 2004-2006 Executive Leadership in Academic Medicine (ELAM) Program for Women National Advisory Committee  
 2009-2013 Member, NIH ZGM BRT-9 (K99) Study Section, Chair 2010-2011, 2016  
 2009 Chair, NIH ZGM BRT-9 ARRA P-30 Study Section 2010  
 2010-2013 Chair ASBMB Membership Committee  
 2013-present Oak Ridge Associated University (ORAU) Rutgers Councilor  
 2015 Chair NIH NRT Special Emphasis Panel  
 2015-present Member ASBMB Public Affairs Advisory Committee  
 2017-present Member Oak Ridge Associated University Nomination Committee

**Professional Associations:** American Chemical Society  
 American Association for the Advancement of Science  
 American Society for Biochemistry and Molecular Biology

**Service and Leadership Positions:**

Chair, RWJMS Research Committee 2001 - 2005  
 Chair, RWJMS-Rutgers University Joint Core Facility Committee 2003 - 2006  
 Chair, RWJMS Laboratory Safety Committee 2002-2003  
 Scientific Council of the Cancer Institute of New Jersey 1998 - 2010  
 Directors Internal Advisory Committee of the NIEHS Center at RWJMS/Rutgers 2001-2007  
 Master Educator Guild Executive Committee 2002 - 2005  
 Organizer Cancer Institute of New Jersey Post-Transcriptional Control Focus Group 1999 – 2005  
 Co-Organizer RWJMS Rutgers University Yeast Group 1999 – 2010  
 RWJMS review committees for the Department of Biochemistry and Psychiatry  
 Member of numerous search committees, Dean RWJMS, Vice President for Academic Affairs UMDNJ, director Center for Advanced Biotechnology and Medicine, faculty searches  
 Chair of Surgery Search Committee RWJMS  
 UMDNJ Strategic Planning member 1998  
 RWJMS Strategic Planning Steering Committee 2001 – 2013  
 Executive Council, Robert Wood Johnson Medical School 2007-2013  
 Chair, Executive Council Graduate School of Biomedical Sciences at RWJMS 2007-2013  
 Appointment and Promotions Committee, Robert Wood Johnson Medical School 2007-2012

Rutgers/UMDNJ Research Integration Committee 2012-2013  
Rutgers/UMDNJ Academic and Educational Programs Integration Committee 2012-2013  
Internal Advisory Board of the Cancer Institute of New Jersey 2013-present  
Rutgers Policy Review Committee 2014-present  
Rutgers Corporate Relations Council 2014-present  
RWJMS LCME Steering Committee 2016-present

***Publications:***

1. Anthony, D. D., Kinzy, T. G. and Merrick, W. C. (1990) Affinity Labeling of Eukaryotic Initiation Factor 2 and Elongation Factor 1  $\alpha\beta\gamma$  with GTP Analogs, *Arch. Bioc. Biophys.*, **281**, 157-162. PMID: 2383020
2. Merrick, W. C., Dever, T. E., Kinzy, T. G., Conroy, S. C., Cavallius, J. and Owens, C. L., (1990) Characterization of Protein Synthesis Factors from Rabbit Reticulocytes, *Biochim. et Biophys. Acta*, **1050**, 235-240. PMID: 2207148
3. Kinzy, T. G. and Merrick, W. C., (1991) Characterization of a Limited Trypsin Digestion Form of Eukaryotic Elongation Factor 1 $\alpha$ , *J. Biol. Chem.*, **266**, 4099-4105. PMID: 1999404
4. Kinzy, T. G., Freeman, J.P., Johnson, A.E. and Merrick, W. C., (1992) A Model for the Aminoacyl-tRNA Binding Site of Eukaryotic Elongation Factor 1 $\alpha$ , *J. Biol. Chem.*, **267**, 1623-1632. PMID: 1730707
5. Wolff, E.C., Kinzy, T.G., Merrick, W.C. and Park, M.H., (1992) Two Isoforms of eIF-5A in Chick Embryo, *J. Biol. Chem.*, **267**, 6107-6113. PMID: 1556119
6. Hannig, E.M., Cigan, A.M., Freeman, B.A. and Kinzy, T.G., (1993) *GCD11*, a Negative Regulator of *GCN4* Expression, Encodes the  $\gamma$  Subunit of eIF-2 in Yeast, *Mol. Cell. Biol.*, **13**, 506-520. PMC358930
7. Wu, S., Gupta, S., Chatterjee, N., Hileman, R.E., Kinzy, T.G., Denslow, N.D., Merrick, W.C., Chakrabarti, D., Osterman, J.C. and Gupta, N.K. (1993) Cloning and Characterization of Complementary DNA Encoding the Eukaryotic Initiation Factor 2-associated 67-kDa Protein (p<sup>67</sup>), *J. Biol. Chem.*, **268**, 10796-10801. PMID: 8496145
8. Ray, M.K., Chakraborty, A., Datta, B., Chattopadhyay, A., Saha, D., Bose, A., Kinzy, T.G., Wu, S., Hileman, R.E., Merrick, W.C. and Gupta, N.K. (1993) Characteristics of the Eukaryotic Initiation Factor 2 Associated 67 kDa Polypeptide, *Biochemistry*, **32**, 5151-5159. PMID: 8098621
9. Gaspar, N.J., Kinzy, T.G., Scherer, B.J., Humbelin, M., Hershey, J.W.B. and Merrick, W.C. (1994) Translation Initiation Factor eIF-2: Cloning and Expression of the Human cDNA Encoding the  $\gamma$ -subunit, *J. Biol. Chem.* **269**, 3415-3422. PMID: 8106381
10. Kinzy, T.G., Ripmaster, T.L. and Woolford, J.L. (1994) Multiple Genes Encode the Translation Elongation Factor 1- $\gamma$  in *Saccharomyces cerevisiae*, *Nucleic Acids Res.* **22**, 2703-2707. PMID: 8041634
11. Kinzy, T.G. and Woolford, J.L.(1995) Increased Expression of *Saccharomyces cerevisiae* Translation Elongation Factor 1 $\alpha$  Bypasses the Lethality of a Null Allele Encoding EF-1 $\beta$ , *Genetics* **141**, 481-489. PMID: 8647386
12. Asano, K., Kinzy, T.G., Merrick, W.C. and Hershey, J.W.B. (1997) Conservation and Diversity of Eukaryotic Translation Initiation Factor eIF-3, *J. Biol. Chem.* **272**, 1101-1109. PMID: 8995409

13. Dinman, J.D. and Kinzy, T.G. (1997) Translational Misreading: Mutations in Translation Elongation Factor 1 $\alpha$  Differentially Affect Programmed Ribosomal Frameshifting and Drug Sensitivity, *RNA* **3**, 870-881. PMID: 9257646
14. Cui, Y., Dinman, J.D., Kinzy, T.G. and Peltz, S.W. (1998) The Mof2/Sui1 Protein is a General Monitor of Translational Fidelity, *Molecular and Cellular Biology*, **18**, 1506-1516. PMID: 9488467
15. Cui, Y., Gonzales, C.I., Kinzy, T.G., Dinman, J.D. and Peltz, S.W. (1999) Mutations in the Mof2/Sui1 Protein Affect Translation and Nonsense-Mediated mRNA Decay, *RNA* **5**, 794-804. PMID: 10376878
16. Carr-Schmid, A., Valente, L., Loik, V.I., Williams, T., Starita, L.M. and Kinzy, T.G. (1999) Mutations in Elongation Factor 1 $\beta$ , a Guanine Nucleotide Exchange Factor, Enhance Translational Fidelity, *Mol. Cell. Biol.* **19**, 5257-5266. PMID: 10409717
17. Carr-Schmid, A., Durko, N., Cavallius, J. Merrick, W.C. and Kinzy, T.G. (1999) Mutations in a GTP-Binding Motif of eEF1A Reduce Both Translational Fidelity and the Requirement For Nucleotide Exchange, *J. Biol. Chem.* **274**, 30297-30302. PMID: 10514524
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21. Munshi, R., Kandl, K.A., Carr-Schmid, A., Whitacre, J.L., Adams, A.E.M., and Kinzy, T.G. (2001) Overexpression of Translation Elongation Factor 1A Affects the Organization and Function of the Actin Cytoskeleton in Yeast, *Genetics* **157**: 1425-1436. PMID: 11290701
22. Andersen, G.R. Valente, L., Pedersen, L., Kinzy, T.G., and Nyborg, J. (2001) Crystal structure of the eEF1A:eEF1B $\alpha$ :GDP complex: an intermediate in nucleotide exchange, *Nature Struct. Biol.***8**: 531-534. PMID: 11373622
23. Ruiz-Echevarria, M.J., Munshi, R., Tomback, J., Kinzy, T.G., and Peltz, S.P. (2001) Characterization of a general stabilizer element that blocks deadenylation dependent mRNA decay, *J. Biol. Chem.* **276**: 30995-31003. PMID: 11423548
24. Carr-Schmid, E., Pfund, C., Craig, E.A., and Kinzy, T.G. (2002) Novel G-protein complex whose requirement is linked to the translational status of the cell, *Mol. Cell. Biol.* **22**, 2564-2574. PMID: 11909951
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33. Jan, E. Kinzy, T.G. and Sarnow, P. (2003) Divergent RNA element supports initiation, elongation and termination in protein biosynthesis, *Proc. Natl. Acad. Sci USA.*, **100**: 15410-15415. PMID: 14673072
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37. Copeland, H.L. and Kinzy, T.G. (2005) Development and evaluation of a peer-tutoring program for graduate students, *Biochem. Mol. Biol. Ed.* **33**:86-90.
38. Komar, A.A., Gross, S.R., Barth-Baus, D., Strachan, R., Hensold, J.O., Kinzy, T.G. and Merrick, W.C. (2005) Novel characteristics of the biological properties of the yeast *Saccharomyces cerevisiae* initiation factor eIF2A, *J. Biol. Chem.* **280**:15601-11. PMID: 15718232
39. Magazinnik, T., Anand, M., Sattlegger, E., Hinnebusch, A.G., and Kinzy, T.G (2005) Interplay between GCN2 and GCN4 expression, translation Elongation Factor 1 mutations, and translational fidelity in yeast. *Nuc. Acids Res.* **33**: 4584-4592. PMC1185573.
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41. Ortiz, P.A. and Kinzy, T.G. (2005) Dominant negative mutant phenotypes and the regulation of translation

elongation factor 2 levels in yeast. *Nuc. Acids Res.* **33**:5740-5748. PMC1253829.

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43. Pittman, Y., Valente, L., Jeppesen, M.G., Andersen, G.R., Patel, S. and Kinzy, T.G. (2006) Mg<sup>2+</sup> and a key lysine residue modulate guanine nucleotide exchange by eukaryotic translation elongation factor 1B $\alpha$ . *J. Biol. Chem.* **281**:19457-19468. PMID: 16675455
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45. Ozturk, S., Vishnu, M.R., Olarewaju, O., Starita, L.M., Masison, D.C. and Kinzy, T.G. (2006) Bypass suppression of the translation elongation nucleotide exchange factor eEF1B $\alpha$ . *Genetics*, **174**:651-663. PMC1602096.
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47. Anand, M., Balar, B., Ulloque, R., Gross, S.R. and Kinzy, T.G. (2006) Domain and nucleotide dependence of the interaction between *Saccharomyces cerevisiae* translation elongation factors 3 and 1A. *J. Biol. Chem.* **281**:32318-32326. PMID: 16954224
48. Gross, S.R. and Kinzy, T.G. (2007) Improper Organization of the Actin Cytoskeleton Affects Protein Synthesis at Initiation. *Mol. Cell. Biol.* **27**: 1974-1989. PMC1820457.
49. Cai, Y.C., So, C.K., Nie, A.Y., Song, Y., Yang, G., Wang, L., Zhao, X., Kinzy, T.G., and Yang, C.S. (2007) Characterization of genetic alteration patterns in human esophageal squamous cell carcinoma using selected microsatellite markers spanning multiple loci. *Intern. J. Oncology.* **30**: 1059-67. PMID: 17390007
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51. Galkin, O., Bentley, A.A., Gupta, S., Compton, B., Mazumder, B., Kinzy, T.G., Merrick, W.C., Hatzoglou, M., Pestova, T.V., Hellen, C.U.T. And Komar, A.A. (2007) Roles of the negatively charged N-terminal extension of *Saccharomyces cerevisiae* ribosomal protein S5 revealed by characterization of a yeast strain containing human ribosomal protein S5. *RNA* **13**:2116-28. PMC2080588.
52. Gromadski, K.B., Schümmer, T., Strømgaard, A., Knudsen, C.R., Kinzy, T.G., and Rodnina, M.V. (2007) Kinetics of the Interactions between Yeast Elongation Factors 1A and 1B, Guanine Nucleotides, and Aminoacyl-tRNA. *J. Biol. Chem.* **282**:35629-37. PMC3269240
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Null Allele Strains Identifies a Larger Role For DNA Damage Verses Oxidative Stress Pathways in Reduced Growth in Selenium. *Molecular Nutrition and Food Research* **52**:1305-15 PMC2650619.

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***Book Chapters and Reviews:***

1. Gupta, N.K., Roy, A.L., Nag, M.K., Kinzy, T.G., MacMillan, S., Hileman, R.E., Dever, T.E., Wu, S., Merrick, W.C. and Hershey, J.W.B. (1990) New Insights Into an Old Problem: Ternary Complex (Met-tRNA<sub>f</sub>•eIF-2•GTP) Formation in Animal Cells in Post-Transcriptional Control of Gene Expression (J.E.G. McCarthy and M.F. Tuite, eds.) Springer-Verlag, Berlin, Germany, 521-526.
2. Merrick, W.C., Cavallius, J., Kinzy, T.G. and Zoll, W.L., (1993) Evolution of the EF-Tu Family in The Translational Apparatus (K. Nierhaus, ed.) Plenum Publishing Corp., New York.
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10. Dinman J.D. and Kinzy T.G. (2009) Expanding the ribosomal universe. *Structure*. 17:1547-1548, PMC2801869.
11. Kinzy, T.G. and Pan, Z.-Q. Mechanism and Physiological Roles of Protein Synthesis and Turnover *ASBMB Today* August::20-21.
12. Zagorski, N. and Kinzy, T.G. (Coordinating editor) (2010) Protein Synthesis. ASBMB 2010 Annual Meeting Compendium.
13. Mateyak M.K. and Kinzy T.G. (2010) eEF1A: Thinking outside the ribosome. *J Biol Chem*. 285:21209-21213, PMC2898402.
14. Sasikumar A.N., Perez, W.B. and Kinzy T.G. (2012) The Many Roles of the Eukaryotic Elongation Factor 1 Complex . *Wiley Interdisciplinary Reviews: RNA*, 3:543-55. PMC3374885.
15. Mateyak, M., Sasikumar, A.N., Dunaway, S., and Kinzy, T.G. (2016) The Unique Evolutionary Distribution of Eukaryotic Elongation Factor 3 in Evolution of the protein synthesis machinery and its regulation, Hernandez, G. and Jagus, R., Ed. Springer NY, NY. 313-326.
16. Dever, T.E., Kinzy, T.G. and Pavitt, G.D. (2016) Yeastbook: Mechanism and Regulation of Protein Synthesis in *Saccharomyces cerevisiae*. *Genetics* 203:65-107. PMC4858804
17. Mateyak M.K. and Kinzy T.G. (2017) Breaking the Silos of Protein Synthesis. *T.I.B.S. in press*.

**Book Review:**

1. Kinzy, T.G. (1997) The life of mRNA, *TIB Tech* **15**, 480.

**Web site annotation:**

1. Anand, M., Balar, B.A., Gross, S., Ortiz, P.A., Ozturk, S., Pittman, Y.R., Ulloque, R., Kinzy, T.G., (2005) The Reactome: Translation Elongation. <http://www.reactome.org/cgi-bin/frontpage>

**Current funding:**

**Federal:**

National Institutes of Health U01HD076428 (Tash) Role: P.I. of subcontract  
H2-Gamendazole Analogues As Reversible Non-Hormonal Male Contraceptive Agent  
ANNUAL/TOTAL DIRECT COSTS: \$29,768 / \$148,840  
PERIOD OF SUPPORT: 9/1/12 - 8/30/17

National Institutes of Health R01 GM57483 Role: P.I.  
Regulators of Translation Elongation Factor EF-1 $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$245,000 / \$980,000  
PERIOD OF SUPPORT: 8/1/98 – 7/31/2018

**Past funding:**

**Federal:**

National Institutes of Health S10 RR015951 Role: P.I.  
Automated DNA Analysis System  
ANNUAL/TOTAL DIRECT COSTS: \$130,000 / \$130,000  
PERIOD OF SUPPORT: 7/1/01 - 6/30/02

National Institutes of Health R01 GM62789 Role: P.I.  
Structure of Eukaryotic Translation Elongation Factor 1  
ANNUAL/TOTAL DIRECT COSTS: \$150,000 / \$600,000  
PERIOD OF SUPPORT: 6/1/01 - 5/31/06

National Institutes of Health R01 GM57483 Role: P.I.  
Regulators of Translation Elongation Factor EF-1 $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$98,000 / \$504,700  
PERIOD OF SUPPORT: 8/1/98 - 7/31/03

National Institutes of Health P30 CA72720 (Hait) Role: Resource Director  
Cancer Center Support Grant  
ANNUAL/TOTAL DIRECT COSTS *FOR RESOURCE*: \$86,394 / \$467,939  
PERIOD OF SUPPORT: 3/1/99 - 2/28/04

National Institutes of Health P30 ES05022 (Gallo) Role: Molecular Genetics Core Director  
Research in Environmental Health Sciences  
ANNUAL/TOTAL DIRECT COSTS *FOR CORE*: \$74,150 / \$150,000  
PERIOD OF SUPPORT: 4/1/01 - 3/31/03

National Science Foundation 9983565 Role: P.I.  
CAREER: Molecular interactions and nucleotide exchange mechanism of translation factor eEF1B $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$65,036 / \$321,594  
PERIOD OF SUPPORT: 9/1/00 - 8/30/06

National Institutes of Health P30 CA72720 (Hait) Role: Resource Director  
Cancer Center Support Grant  
ANNUAL/TOTAL DIRECT COSTS *FOR RESOURCE*: \$95,317 / \$470,000  
PERIOD OF SUPPORT: 3/1/04 - 2/28/09

National Institutes of Health R21 GM074180 Role: P.I.  
Development of selenomethionine resistant yeast  
ANNUAL/TOTAL DIRECT COSTS: \$125,000 / \$275,000  
PERIOD OF SUPPORT: 7/1/06 - 6/30/09

National Science Foundation 0516688 Role: P.I.  
Regulatory mechanisms in oxidative stress via the guanine nucleotide exchange complex translation  
Elongation Factor eEF1B $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$77,339 / \$212,217  
PERIOD OF SUPPORT: 12/1/05 - 11/30/09

National Institutes of Health P01 AI 057596 (Pestka) Role: Resource Director  
Role of mRNA decay in the immune system  
ANNUAL/TOTAL DIRECT COSTS *FOR CORE*: \$25,000 / \$150,000  
PERIOD OF SUPPORT: 7/15/04 - 6/30/09

National Science Foundation 0516688 *REU supplement* Role: P.I.  
Regulatory mechanisms in oxidative stress via the guanine nucleotide exchange complex translation  
Elongation Factor eEF1B $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$6,000  
PERIOD OF SUPPORT: 5/30/09-8/31/09

National Institutes of Health R01 GM57483-S1 (ARRA) Role: P.I.  
Regulators of Translation Elongation Factor EF-1 $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$120,000 / \$240,000  
PERIOD OF SUPPORT: 7/15/09 – 6/30/2011

National Institutes of Health R21 AI076245 Role: P.I.  
Mechanism of Translation Elongation Factor 2 Inhibition by Bacterial Toxins  
ANNUAL/TOTAL DIRECT COSTS: \$125,000 / \$275,000  
PERIOD OF SUPPORT: 4/1/09 - 3/31/11

National Institutes of Health U54 HD055763 (Tash) Role: P.I. of subcontract  
Interdisciplinary Center for Male Contraceptive Research and Drug Development  
ANNUAL/TOTAL DIRECT COSTS: \$62,242 / \$325,000  
PERIOD OF SUPPORT: 3/1/07 - 2/28/12

National Institutes of Health R01 GM57483 Role: P.I.  
Regulators of Translation Elongation Factor EF-1 $\alpha$   
ANNUAL/TOTAL DIRECT COSTS: \$243,000 / \$972,000  
PERIOD OF SUPPORT: 8/1/98 – 6/30/2013

National Institutes of Health EUREKA R01 GM094833 Role: Co-P.I.  
Expanding The Genetic Code In Yeast  
ANNUAL/TOTAL DIRECT COSTS: \$200,000 / \$800,000  
PERIOD OF SUPPORT: 9/1/10 – 8/31/2015

***International:***

Human Frontier Science Program RPG0067/2002-C Role: Co-P.I.  
Structural and Functional Studies of the Yeast Ribosome  
ANNUAL/TOTAL DIRECT COSTS: \$80,500 / \$241,500  
PERIOD OF SUPPORT: 6/1/02 - 5/31/06

***National:***

Pharmaceutical Research and Manufacturers of America Foundation, Inc Role: P.I.  
Effects of Mutations in EF-1 $\alpha$  on the Steps in Translation Elongation  
ANNUAL/TOTAL DIRECT COSTS: \$12,500 / \$25,000  
PERIOD OF SUPPORT: 1/1/97-12/31/98

National American Heart Association 9750444N Role: P.I.  
Regulation of Translation Elongation by Guanine Nucleotide Exchange  
ANNUAL/TOTAL DIRECT COSTS: \$50,000 / \$150,000  
PERIOD OF SUPPORT: 1/1/98 - 12/31/00

Charles E. and Joy C. Pettinos Foundation Role: P.I.  
DNA Sequencing Equipment  
ANNUAL/TOTAL DIRECT COSTS: \$4,000 / \$4,000  
PERIOD OF SUPPORT: 6/18/99 - 5/31/00

***Regional:***

New Jersey Commission for Cancer Research Role: P.I.  
In vivo effects of the PTI-1 human prostatic tumor-promoting factor  
ANNUAL/TOTAL DIRECT COSTS: \$40,000 / \$80,000  
PERIOD OF SUPPORT: 7/1/97 - 6/30/99

NJ Affiliate of the American Heart Association NJ-97-GS-03 Role: P.I.  
Consequences of alterations in the guanine nucleotide exchange step of translation elongation  
ANNUAL/TOTAL DIRECT COSTS: \$30,000 / \$60,000  
PERIOD OF SUPPORT: 10/1/97 - 9/30/99

New Jersey Health Foundation Role: P.I.  
Development of a novel target for anti-fungal drug development  
ANNUAL/TOTAL DIRECT COSTS: \$35,000 / \$35,000  
PERIOD OF SUPPORT: 12/16/14 - 12/15/15

**Industrial:**

Merck and Co. Role: P.I.  
Mutations in Eukaryotic Translation Elongation Factor 1A (eEF1A) that Alter Resistance to Preussin.  
ANNUAL/TOTAL DIRECT COSTS: \$18,518 / \$37,036  
PERIOD OF SUPPORT: 12/01/99-11/30/01

**Institutional:**

Foundation of UMDNJ Role: P.I.  
Roles of the Multiple Forms of Translation Elongation Factor 1 $\gamma$   
TOTAL DIRECT COSTS: \$25,000  
PERIOD OF SUPPORT: 7/1/96 - 6/30/97

American Cancer Society Junior Faculty Research Award/ Caner Institute of NJ Role: P.I.  
Analysis of the human prostatic carcinoma oncogene PTI-1 in yeast  
TOTAL DIRECT COSTS: \$15,000  
PERIOD OF SUPPORT: 8/1/96-7/31/97

NIEHS Center of Excellence Exploratory Research Grant Role: P.I.  
The Role of Translation Elongation Factor 1 $\gamma$  in the Oxidative Stress Response  
TOTAL DIRECT COSTS: \$8,000  
PERIOD OF SUPPORT: 5/15/97 - 4/30/98

Foundation of UMDNJ Role: P.I.  
Effects of Mutations in Yeast Translation Elongation Factor 1 $\alpha$   
TOTAL DIRECT COSTS: \$25,000  
PERIOD OF SUPPORT: 7/1/97 - 6/30/98

NIEHS Center of Excellence Exploratory Research Grant Role: P.I.  
Link Between the Translation Elongation Factor, eEF1B $\gamma$  and Gene Expression in  
the Stress Response Pathway  
TOTAL DIRECT COSTS: \$15,000  
PERIOD OF SUPPORT: 5/15/01- 4/30/02

NIEHS Center of Excellence Exploratory Research Grant Role: Co-P.I.  
Identification of molecular markers for selenium toxicity  
TOTAL DIRECT COSTS: \$20,000  
PERIOD OF SUPPORT: 5/15/02 - 4/30/03

NIEHS Center of Excellence Exploratory Research Grant Role: Co-P.I.  
Research Experience for Teachers at the NIEHS Center

TOTAL DIRECT COSTS: \$19,000  
PERIOD OF SUPPORT: 5/15/04 - 4/30/05

Foundation of UMDNJ  
Unique Aspects of Eukaryotic Translation Elongation Factors  
TOTAL DIRECT COSTS: \$30,000  
PERIOD OF SUPPORT: 7/1/06 - 6/30/08

Role: P.I.

Healthcare Foundation of New Jersey  
Regulators of Translation Elongation Factor EF-1 $\alpha$   
TOTAL DIRECT COSTS: \$40,000  
PERIOD OF SUPPORT: 4/1/13 - 3/31/14

Role: P.I.