

CURRICULUM VITAE

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Education

Princeton University, Princeton, NJ 1970-74 A.B. English
University of California, Berkeley, CA 1978-84 Ph.D. Zoology (sponsor: G. Steven Martin)

Relevant Professional Experience

Research Assistant, Comprehensive Health Labs, San Francisco, California, 1977-1978
Teaching Assistant, Cell Biology and Labs in Cell Biology, University of California, 1980-1983
Post-doctoral Fellow, sponsor: Howard M. Temin, McArdle Labs, Univ. Wisconsin, 1984-1987
Assistant and Associate Professor, Biology Department, Boston University, 1987-1999
Professor, Biology Department, Boston University, 1999-present
Biological Consultant, Center for Chemical Methodology & Library, 2002-2013
Director, Undergraduate Research Opportunities Program, Boston, 2007-2014
Professor, Program in Molecular Biology, Cell Biology & Biochemistry, BU, 2001-present
Chair, Biology Department, Boston University, 2016
Associate Chair, Biology Department, Boston University, 2016-17
Member, Genome Science Institute, Boston University, 2013-present
Adjunct Prof, Dept of Pharmacology & Experimental Therapeutics, BU Med, 2010-present
Member, Cancer Center of the BU-Boston Medical Center, 2016-present
Director, Program in Molecular Biology, Cell Biology & Biochemistry, 2019-present

Academic and Professional Awards and Honors

Cum laude, English Department, Princeton University, 1974
NIH Predoctoral training grants in molecular biology and cancer research,
University of California, 1978-83
Chancellor's Patent Fund Award for Research, University of California, 1981-82
Distinguished Teaching Assistant, Zoology Dept., University of California, 1981-82
Jane Coffin Childs post-doctoral fellow, 1984-1987
American Cancer Society Junior Faculty Research Award, 1989-91
American Cancer Society Faculty Research Award, 1992-96
Member, American Cancer Society Study Section in Molecular Biology and Genetics, 1991
and in Virology and Molecular Genetics, 1993
Member, NIH Special Study Section for Grant Reviews, July, 1992
Member, NIH Site visit for National Cancer Institute, December, 1994, 1997
Member, NIH Site visit for UC San Diego, October, 1996 and May, 1997
Member, NIH Study Section for Shared Instrumentation Grants, 1997, 1999
Member, NIH Study Section for Experimental Virology, 2003
Member, Beckman Foundation Scholars Advisory Committee, 2008-10, 2017-2019
Listed, Marquis *Who's Who in Science & Engineering in America*, 1993-present
Editorial Boards: *Gene Expression*; *Cancer Lett*; *Current Cancer Ther Rev*; *Genes & Cancer*
Metcalf Cup & Prize for Excellence in Teaching, Boston Univ, May 2009
Boston Univ Scholar/Teacher of the Year Award of the United Methodist Church, March 2014

Publications

1. Radke K, **T Gilmore**, GS Martin. 1980. Phosphorylation of a 36,000 molecular weight cellular polypeptide in Rous sarcoma virus-transformed fibroblasts. In, *Protein Phosphorylation and Bio-Regulation* (eds. G Thomas, E Podesta, and J Gordon), S Karger, Basel, Switzerland, pp 186-192
2. Radke K, **T Gilmore**, GS Martin. 1980. Transformation by Rous sarcoma virus: a cellular substrate for transformation-specific phosphorylation contains phosphotyrosine. *Cell* 21: 821-828
3. Pawson T, J Guyden, T-H Kung, K Radke, **T Gilmore**, GS Martin. 1980. A strain of Fujinami sarcoma virus which is temperature-sensitive in protein phosphorylation and cellular transformation. *Cell* 22: 767-775
4. **Gilmore T**, K Radke, GS Martin. 1982. Tyrosine phosphorylation of a 50K cellular polypeptide associated with the Rous sarcoma virus transforming protein, pp60^{S^{rc}}. *Molecular and Cellular Biology* 2: 199-206
5. **Gilmore T**, GS Martin. 1983. Phorbol ester and diacylglycerol induce protein phosphorylation at tyrosine. *Nature* 306: 487-490
6. Martin GS, K Radke, C Carter, P Moss, P Dehazya, **T Gilmore**. 1984. The role of protein phosphorylation at tyrosine in transformation and mitogenesis. From the Cold Spring Harbor Conference on Cell Proliferation and Cancer. *Journal of Cell Physiology Supplement* 3: 139-149
7. Moss P, K Radke, V Carter, J Young, **T Gilmore**, GS Martin. 1984. Cellular localization of the transforming protein of wild-type and temperature-sensitive Fujinami sarcoma virus. *Journal of Virology* 52: 557-565
8. **Gilmore T**, J DeClue, GS Martin. 1985. Tyrosine kinase activity associated with the v-*erbB* gene product. In, *The Cancer Cell* (eds. G Ferramisco, B Ozanne, and C Stiles) Volume 3: 25-32
9. **Gilmore TD**, J DeClue, GS Martin. 1985. Protein phosphorylation at tyrosine is induced by the v-*erbB* gene product in vivo and in vitro. *Cell* 40: 609-618
10. **Gilmore TD**, HM Temin. 1986. Different localization of the product of the v-*rel* oncogene in chicken fibroblasts and spleen cells correlates with transformation by REV-T. *Cell* 44: 791-800
11. Luk K-C, **T Gilmore**, A Panganiban. 1987. The spleen necrosis virus *int* gene product expressed in *Escherichia coli* has DNA binding activity and mediates *att* and U5-specific multimer formation *in vitro*. *Virology* 57: 127-136
12. **Gilmore TD**, HM Temin. 1988. v-*rel* oncoproteins in the nucleus and in the cytoplasm transform chicken spleen cells. *Journal of Virology* 62: 703-714
13. Capobianco A, DL Simmons, **TD Gilmore**. 1990. Cloning and expression of a chicken c-*rel* cDNA: unlike p59^{v-rel}, p68^{c-rel} is a cytoplasmic protein in chicken embryo fibroblasts. *Oncogene* 5: 257-266
14. Delwart EL, G Mosialos, **T Gilmore**. 1990. Retroviral envelope glycoproteins contain a "leucine zipper"-like repeat. *AIDS Research and Human Retroviruses* 6: 703-706
15. Kamens J, P Richardson, G Mosialos, R Brent, **TD Gilmore**. 1990. Oncogenic transformation by vRel requires an amino-terminal activation domain. *Molecular and Cellular Biology* 10: 2840-2847
16. **Gilmore TD**. 1990. NF- κ B, KBF1, *dorsal*, and *related matters*. *Cell* 62: 841-843
17. Dailey D, GL Schieven, MY Lim, **T Gilmore**, J Thorner, GS Martin. 1990. Novel yeast protein kinase (*YPK1* gene product) is a 40-kilodalton phosphotyrosyl protein associated with protein-tyrosine kinase activity. *Molecular and Cellular Biology* 10: 6244-6256
18. Richardson PM, **TD Gilmore**. 1991. vRel is an inactive member of the Rel family of transcriptional activating proteins. *Journal of Virology* 65: 3122-3130
19. **Gilmore TD**. 1991. Malignant transformation by mutant Rel proteins. *Trends in Genetics* 7: 318-322

20. Mosialos G, P Hamer, AJ Capobianco, R Laursen, **TD Gilmore**. 1991. A protein kinase A recognition sequence is structurally linked to transformation by p59^{V-rel} and cytoplasmic retention of p68^{C-rel}. *Molecular and Cellular Biology* 11: 5867-5877
21. Capobianco A, **TD Gilmore**. 1991. Repression of the chicken *c-rel* promoter by vRel in chicken embryo fibroblasts is not mediated through a consensus NF- κ B binding site. *Oncogene* 6: 2203-2210
22. Morin P, **TD Gilmore**. 1992. The C terminus of the NF- κ B p50 precursor protein and an I κ B isoform contain transcription activation domains. *Nucleic Acids Research* 20: 2453-2458
23. Capobianco AJ, D Chang, G Mosialos, **TD Gilmore**. 1992. p105, the NF- κ B p50 precursor, is one of the cellular proteins complexed with the v-Rel oncoprotein in transformed chicken spleen cells. *Journal of Virology* 66: 3758-3767
24. **Gilmore TD**. 1992. Role of *rel* family genes in normal and malignant lymphoid cell growth. *Cancer Surveys* 15: 69-87
25. Morin PJ, G Subramanian, **TD Gilmore**. 1992. *AAT1*, a gene encoding a mitochondrial aspartate aminotransferase in *Saccharomyces cerevisiae*. *Biochimica et Biophysica Acta* 1171: 211-214
26. Mosialos G, **TD Gilmore**. 1993. v-Rel and c-Rel are differentially affected by mutations at a consensus protein kinase recognition sequence. *Oncogene* 8: 721-730
27. Capobianco AJ, **TD Gilmore**. 1993. A conditional mutant of vRel containing sequences from the human estrogen receptor. *Virology* 193: 160-170
28. Morin PJ, GS Subramanian, **TD Gilmore**. 1993. GAL4-I κ B α and GAL4-I κ B γ activate transcription by different mechanisms. *Nucleic Acids Research* 21: 2157-2163
29. Sarkar S, **TD Gilmore**. 1993. Transformation by the vRel oncoprotein requires sequences carboxy-terminal to the Rel homology domain. *Oncogene* 8: 2245-2252
30. Sif S, AJ Capobianco, **TD Gilmore**. 1993. The v-Rel oncoprotein increases expression from Sp1 site-containing promoters in chicken embryo fibroblasts. *Oncogene* 8: 2501-2509
31. White DW, **TD Gilmore**. 1993. Temperature-sensitive transforming mutants of the *v-rel* oncogene. *Journal of Virology* 67: 6876-6881
32. Sif S, **TD Gilmore**. 1993. NF- κ B p100 is one of the high-molecular-weight proteins associated with the v-Rel oncoprotein in transformed chicken spleen cells. *Journal of Virology* 67: 7612-7617
33. **Gilmore TD**, PJ Morin. 1993. The I κ B proteins: members of a multifunctional family. *Trends in Genetics* 9: 427-433
34. Feinstein R, WK Bolton, JN Quinones, G Mosialos, S Sif, JL Huff, AJ Capobianco, **TD Gilmore**. 1994. Characterization of a chicken cDNA encoding the retinoblastoma gene product. *Biochimica et Biophysica Acta* 1218: 82-86
35. Sif S, **TD Gilmore**. 1994. Interaction of the v-Rel oncoprotein with cellular transcription factor Sp1. *Journal of Virology* 68: 7131-7138
36. White DW, A Roy, **TD Gilmore**. 1995. The v-Rel oncoprotein blocks apoptosis and proteolysis of I κ B- α in transformed chicken spleen cells. *Oncogene* 10: 857-868
37. **Gilmore TD**, DW White, S Sarkar, S Sif. 1995. Malignant transformation of cells by the v-Rel oncoprotein. In, *The DNA Provirus: Howard Temin's Scientific Legacy* (eds. GM Cooper, R Greenberg Temin and B Sugden), American Society for Microbiology, Washington DC, pp 109-128
38. Morin PJ, J Downs, AM Snodgrass, **TD Gilmore**. 1995. Genetic analysis of growth inhibition by GAL4-I κ B- α in *Saccharomyces cerevisiae*. *Cell Growth & Differentiation* 6: 789-798
39. **Gilmore TD**. 1995. Regulation of Rel transcription complexes. In, *Frontiers in Molecular Biology: Eukaryotic Gene Transcription* (ed. S Goodbourn), Oxford University Press, Oxford, England, pp 102-131

40. White DW, GA Pitoc, **TD Gilmore**. 1996. Interaction of the v-Rel oncoprotein with NF- κ B and I κ B proteins: heterodimers of a transformation-defective v-Rel mutant and NF- κ B p52 are functional in vitro and in vivo. *Molecular and Cellular Biology* 16: 1169-1178
41. White DW, **TD Gilmore**. 1996. Bcl-2 and CrmA have different effects on transformation, apoptosis, and the stability of I κ B- α in chicken spleen cells transformed by temperature-sensitive v-Rel oncoproteins. *Oncogene* 13: 891-899
42. **Gilmore TD**, M Koedood, KA Piffat, DW White. 1996. Rel/NF- κ B/I κ B proteins and cancer. *Oncogene* 13: 1367-1378
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45. **Gilmore TD**. 1997. Clinically relevant findings. *Journal of Clinical Investigation* 100: 2935-2936
46. Sylla B, SC Hung, DM Davidson, E Hatzivassiliou, NL Malinin, D Wallach, **TD Gilmore**, E Kieff, G Mosialos. 1998. Epstein-Barr virus transforming protein latent infection membrane protein 1 activates transcription factor NF- κ B through a pathway that includes the NF- κ B-inducing kinase and the I κ B kinases IKK α and IKK β . *Proceedings of the National Academy of Sciences USA* 95: 10106-10111
47. Wang Y, JE Dooher, M Koedood Zhao, **TD Gilmore**. 1999. Characterization of mouse Trip6: a putative intracellular signaling protein. *Gene* 234: 403-409
48. Epinat J-C, **TD Gilmore**. 1999. In vitro-translated diphtheria toxin A chain inhibits translation in wheat germ extracts: analysis of biologically active, caspase-3-resistant diphtheria toxin mutants. *Biochimica et Biophysica Acta* 1472: 34-41
49. **Gilmore TD**. 1999. The Rel/NF- κ B signal transduction pathway: introduction. *Oncogene* 18: 6842-6844
50. Epinat J-C, **TD Gilmore**. 1999. A variety of agents can act at multiple levels to inhibit the Rel/NF- κ B signal transduction pathway. *Oncogene* 18: 6896-6909
51. Barkett M, **TD Gilmore**. 1999. Control of apoptosis by Rel/NF- κ B transcription factors. *Oncogene* 18: 6910-6924
52. **Gilmore TD**. 1999. Multiple mutations contribute to the oncogenicity of the retroviral oncoprotein v-Rel. *Oncogene* 18: 6925-6937
53. Koedood Zhao M, Y Wang, K Murphy, J Yi, MC Beckerle, **TD Gilmore**. 1999. LIM domain-containing protein Trip6 can act as a co-activator for the v-Rel transcription factor. *Gene Expression* 8: 207-217
54. Epinat J-C, D Kazandjian, DD Harkness, S Petros, J Dave, DW White, **TD Gilmore**. 2000. Mutant envelope residues confer a transactivation function onto N-terminal sequences of the v-Rel oncoprotein. *Oncogene* 19: 599-607
55. **Gilmore TD**, J-C Epinat, M Barkett. 2000. Misregulation of a signal transduction pathway: role of Rel/NF- κ B transcription factors in oncogenesis. In, *DNA Alterations in Cancer: Genetic and Epigenetic Changes* (ed. M Ehrlich), BioTechniques Books, Eaton Publishing, Natick, MA, USA, pp 121-136
56. Epinat J-C, EL Dvorin, **TD Gilmore**. 2000. Envelope-dependent transactivation by the retroviral oncoprotein v-Rel is required for efficient malignant transformation of chicken spleen cells. *Oncogene* 19: 3131-3137
57. Barkett M, JE Dooher, L Lemonnier, L Simmons, JN Scarpatti, Y Wang, **TD Gilmore**. 2001. Three mutations in the retroviral oncoprotein v-Rel render it resistant to cleavage by caspase-3. *Biochimica et Biophysica Acta* 1526: 25-36
58. Wang Y, **TD Gilmore**. 2001. LIM domain protein Trip6 has a conserved nuclear export signal, nuclear targeting sequences, and multiple transactivation domains. *Biochimica et Biophysica Acta* 1538: 260-272

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60. **Gilmore TD**, C Cormier, J Jean-Jacques, M-E Gapuzan. 2001. Malignant transformation of primary chicken spleen cells by human transcription factor c-Rel. *Oncogene* 20: 7098-7103
61. Li C, EA Pace, M-C Liang, E Lobkovsky, **TD Gilmore**, JA Porco Jr. 2001. Total synthesis of the NF- κ B inhibitor (-)-cycloepoxydon: utilization of tartrate-mediated nucleophilic epoxidation. *Journal of the American Chemical Society* 123: 11308-11309
62. **Gilmore TD**, M-E Gapuzan, D Kalaitzidis, D Starczynowski. 2002. Rel/NF- κ B/I κ B signal transduction in the generation and treatment of human cancer. *Cancer Letters* 181: 1-9
63. Kalaitzidis D, **TD Gilmore**. 2002. Genomic organization and expression of the *REL* proto-oncogene in the human B-cell lymphoma cell line RC-K8. *Genes, Chromosomes & Cancer* 34: 129-135
64. Gapuzan M-E, PV Yufit, **TD Gilmore**. 2002. Immortalized embryonic mouse fibroblasts lacking the RelA subunit of transcription factor NF- κ B have a malignantly transformed phenotype. *Oncogene* 21: 2484-2492
65. Li C, S Bardhan, EA Pace, M-C Liang, **TD Gilmore**, JA Porco Jr. 2002. Angiogenesis inhibitor epoxyquinol A: total synthesis and inhibition of transcription factor NF- κ B. *Organic Letters* 4: 3267-3270
66. Kalaitzidis D, RE Davis, A Rosenwald, LM Staudt, **TD Gilmore**. 2002. The human B-cell lymphoma cell line RC-K8 has multiple genetic alterations that dysregulate the Rel/NF- κ B signal transduction pathway. *Oncogene* 21: 8759-8768
67. **Gilmore TD**. 2003. The Rel/NF- κ B/I κ B signal transduction pathway and cancer. In, *Signal Transduction in Cancer* (ed. DA Frank), Kluwer Academic Publishers, Boston, MA, USA, pp 241-265
68. **Gilmore TD**, G Mosialos. 2003. Viruses as intruders in the Rel/NF- κ B signaling pathway. In, *Nuclear Factor- κ B: Regulation and Role in Disease* (ed. R Beyaert), Kluwer Academic Publishers, The Netherlands, pp 91-115
69. Wang Y, **TD Gilmore**. 2003. Zyxin and paxillin proteins: focal adhesion plaque LIM domain proteins go nuclear. *Biochimica et Biophysica Acta* 1593: 115-120
70. Liang M-C, S Bardhan, C Li, EA Pace, JA Porco Jr, **TD Gilmore**. 2003. Jesterone dimer, a synthetic derivative of the fungal metabolite jesterone, blocks activation of Nuclear Factor κ B by inhibiting the inhibitor of κ B kinase. *Molecular Pharmacology* 64: 123-131
71. Gapuzan M-ER, GA Pitoc, **TD Gilmore**. 2003. Mutations within a conserved protein kinase recognition sequence confer temperature-sensitive and partially defective activities onto mouse c-Rel. *Biochemical and Biophysical Research Communications* 307: 92-99
72. Starczynowski DT, JG Reynolds, **TD Gilmore**. 2003. Deletion of either C-terminal transactivation subdomain enhances the *in vitro* transforming activity of human transcription factor REL in chicken spleen cells. *Oncogene* 22: 6928-6936
73. **Gilmore TD**, J Jean-Jacques, R Richards, C Cormier, J Kim, D Kalaitzidis. 2003. Stable expression of the avian retroviral oncoprotein v-Rel in avian, mouse, and dog cell lines. *Virology* 316: 9-16
74. **Gilmore TD**, D Kalaitzidis, M-C Liang, DT Starczynowski. 2004. The c-Rel transcription factor and B-cell proliferation: a deal with the devil. *Oncogene* 23: 2275-2286
75. Kalatizidis D, J Ok, L Sulak II, DT Starczynowski, **TD Gilmore**. 2004. Characterization of a human REL-estrogen receptor fusion protein with a reverse conditional transforming activity in chicken spleen cells. *Oncogene* 23: 7580-7587
76. Kalaitzidis D, **TD Gilmore**. 2005. Transcription factor cross-talk: estrogen receptor and NF- κ B. *Trends in Endocrinology and Metabolism* 16: 46-52 (Featured cover photo)
77. Gapuzan M-ER, O Schmah, AD Pollock, A Hoffmann, **TD Gilmore**. 2005. Immortalized embryonic fibroblasts from NF- κ B RelA knockout mice show phenotypic heterogeneity and

maintain sensitivity to tumor necrosis factor α after transformation by v-Ras. *Oncogene* 24: 6574-6583

78. Starczynowski DT, JG Reynolds, **TD Gilmore**. 2005. Mutations of tumor necrosis factor α -responsive serine residues within the C-terminal transactivation domain of human transcription factor REL can enhance its *in vitro* transforming ability. *Oncogene* 24: 7355-7368

79. Liang M-C, S Bardhan, EA Pace, D Rosman, JA Beutler, JA Porco Jr, **TD Gilmore**. 2006. Inhibition of transcription factor NF- κ B signaling proteins IKK β and p65 through specific cysteine residues by epoxyquinone A monomer: correlation with its anti-cancer cell growth activity. *Biochemical Pharmacology* 71: 634-645

80. Perkins ND, **TD Gilmore**. 2006. Good cop, bad cop: the different faces of NF- κ B. *Cell Death and Differentiation* 13: 759-772

81. Liang M-C, S Bardhan, JA Porco Jr, **TD Gilmore**. 2006. The synthetic epoxyquinoids jesterone dimer and epoxyquinone A monomer induce apoptosis and inhibit REL (human c-Rel) DNA binding in an I κ B α -deficient diffuse large B-cell lymphoma cell line. *Cancer Letters* 241: 69-78

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83. Courtois G, **TD Gilmore**. 2006. Mutations in the NF- κ B signaling pathway: implications for human disease. *Oncogene* 25: 6831-6843

84. **Gilmore TD**, M Herscovitch. 2006. Inhibitors of NF- κ B signaling: 785 and counting. *Oncogene* 25: 6887-6899

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89. Leeman JR, MA Weniger, TF Barth, **TD Gilmore**. 2008. Deletion analysis and alternative splicing define a transactivation inhibitory domain in human oncoprotein REL. *Oncogene* 27: 6770-6781

90. Leeman JR, **TD Gilmore**. 2008. Alternative splicing in the NF- κ B signaling pathway. *Gene* 423: 97-107

91. Garbati MR, **TD Gilmore**. 2008. Ser484 and Ser494 in REL are the major sites of IKK phosphorylation in vitro: evidence that IKK does not directly enhance GAL4-REL transactivation. *Gene Expression* 14: 195-205

92. **Gilmore TD**, ND Perkins, G Franzoso. 2009. Getting away from it all in Capri: The 2008 EMBO Workshop on NF- κ B. *Cell Death & Differentiation* 16: 651-654

93. Chin M, M Herscovitch, N Zhang, DJ Waxman, **TD Gilmore**. 2009. Overexpression of an activated version of the REL oncoprotein enhances the transformed state of the human B-lymphoma BJAB cell line and alters its gene expression profile. *Oncogene* 28: 2100-2111

94. Sullivan JC, FS Wolenski, AM Reitzel, N Traylor-Knowles, CE French, **TD Gilmore**, JR Finnerty. 2009. Two alleles encoding transcription factor NF- κ B in the sea anemone *Nematostella vectensis* are widely dispersed in nature and encode proteins with distinct activities. *PloS ONE* 4: e7311

95. **Gilmore TD**, RC Thompson, AC Faber. 2010. Cyclins D3 and E go hand in hand with Cdk4/6 in diffuse large B-cell lymphoma. *Cell Cycle* 14: 448-449

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97. Thompson RC*, M Herscovitch*, I Zhao, TJ Ford, **TD Gilmore**. 2011. NF- κ B down-regulates expression of the B-lymphoma marker CD10 through a miR-155/PU.1 pathway. *Journal of Biological Chemistry* 286: 1675-1682 (*co-first authors)
98. Garbati MR, RC Thompson, L Haery, **TD Gilmore**. 2011. A rearranged *EP300* gene in the human B-cell lymphoma cell line RC-K8 encodes a disabled transcriptional co-activator that contributes to cell growth and oncogenicity. *Cancer Letters* 302: 76-83
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100. **Gilmore TD**, M Garbati. 2011. Inhibition of NF- κ B signaling as a strategy in disease therapy. *Current Topics in Microbiology and Immunology* 349: 245-263
101. **Gilmore TD**, S Gerondakis. 2011. The c-Rel transcription factor in development and disease. *Genes & Cancer* 7: 685-711
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103. Yeo AT, JA Porco Jr, **TD Gilmore**. 2012. Bcl-X_L, but not Bcl-2, can protect human B-lymphoma cell lines from parthenolide-induced apoptosis. *Cancer Letters* 318: 53-60
104. **Gilmore TD**, FS Wolenski. 2012. Evolution of NF- κ B: where did it come from and why? *Immunological Reviews* 246: 14-35
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107. Stefanik DJ, FS Wolenski, **TD Gilmore**, JR Finnerty. 2013. Isolation of DNA, RNA and protein from the starlet sea anemone *Nematostella vectensis*. *Nature Protocols* 8: 892-899
108. Wolenski FS, MJ Layden, MQ Martindale, **TD Gilmore**, JR Finnerty. 2013. Characterizing the spatiotemporal expression of RNAs and proteins in the starlet sea anemone, *Nematostella vectensis*. *Nature Protocols* 8: 900-915
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110. **Gilmore TD**, AM Tarrant, JR Finnerty. 2013. A report from the second *Nematostella vectensis* research conference. *Development Genes and Evolution* 223: 207-211
111. Thompson RC, I Vardinogiannis, **TD Gilmore**. 2013. The sensitivity of diffuse large B-cell lymphoma cell lines to histone deacetylase inhibitor-induced apoptosis is modulated by BCL-2 family protein activity. *PLoS ONE* 8: e62822
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113. Cote S, **TD Gilmore***, R Schaffer, U Weber, R Bollom, MS Golden, K Glover, M Herscovitch, T Ennis, KN Allen, A Whitty*. 2013. Mutation of nonessential cysteines shows that the NF- κ B essential modulator (NEMO) forms a constitutive noncovalent dimer that binds I κ B kinase- β (IKK β) with high affinity. *Biochemistry* 52: 9141-9154 *Co-corresponding authors
114. Haery L, JG Lugo-Picó, RA Henry, AW Andrews, **TD Gilmore**. 2014. Histone acetyltransferase-deficient p300 mutants in diffuse large B-cell lymphoma have altered

transcriptional regulatory activities and are required for optimal cell growth. *Molecular Cancer* 13: 29

115. Zhou L, A Yeo, C Ballorano, U Weber, KN Allen*, **TD Gilmore***, A Whitty*. 2014. Disulfide-mediated stabilization of the I κ B kinase binding domain of NF- κ B essential modulator (NEMO). *Biochemistry* 53: 7929-7944 *Co-corresponding authors

116. **Gilmore TD***, C G  linas. 2015. Methods for assessing the in vitro transforming activity of NF- κ B transcription factor c-Rel and related proteins. *Methods in Molecular Biology* 1280: 427-446

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118. Finnerty JR, **TD Gilmore**. 2015. Methods for analyzing the evolutionary relationship of NF- κ B proteins using free, web-driven bioinformatics and phylogenetic tools. *Methods in Molecular Biology* 1280: 631-646

119. Tarrant AM, **TD Gilmore**, AM Reitzel, O Levy, U Technau, MQ Martindale. 2015. Current directions and future perspectives from the third *Nematostella* research conference. *Zoology* 118: 135-140

120. Yeo AT, S Chennamadhavuni, A Whitty, JA Porco Jr, **TD Gilmore**. 2015. Inhibition of oncogenic transcription factor REL by the natural product derivative calafianin monomer 101 induces proliferation arrest and apoptosis in human B-lymphoma cell lines. *Molecules* 20: 7474-7494

121. Haery L, RC Thompson, **TD Gilmore**. 2015. Histone acetyltransferases and histone deacetylases in B- and T-cell development, physiology and malignancy. *Genes & Cancer* 6: 184-213

122. Alshanbayeva A, A Thomas, M Tremblay, M Abbas, F Abdurrob, T Almojel, A Aparicio, D Asarpota, A Ayers, A Aziz, J Bishop, T Christie, MJM Chua, O Chung, N Dhar, A Diedrich, C Fortin, Q He, S Heerboth, R Hok, A Khedkar, S Kitchloo, C Lawlor, B Leonard, S Linderman, M Maloyan, L Miller, C Pak, A Pandita, I Park, N Patel, J Ramachandran, M Reynoso, Y Samaha, G Thole, J Turnbull, L Xia, J Zhu, C Navarro, **TD Gilmore**. 2015. N- and C-terminal non-conserved residues contribute to transactivation by a sea anemone (*Nematostella vectensis*) NF- κ B transcription factor. *BIOS* 86: 165-175

123. Haery L, S Mussakhan, DJ Waxman, **TD Gilmore**. 2016. Evidence for an oncogenic modifier role for mutant histone acetyltransferases in diffuse large B-cell lymphoma. *Leukemia & Lymphoma* 57: 2661-2771

124. Cotter KA, DA Nacci, D Champlin, AT Yeo, **TD Gilmore**, GV Callard. 2016. Adaptive significance of ER α splice variants in killifish (*Fundulus heteroclitus*) resident in an estrogenic environment. *Endocrinology* 157: 2294-2308

125. Williams LM, LE Fuess, JJ Brennan, KM Mansfield, E Salas-Rodriguez, J Welsh, J Awtry, S Banic, C Chacko, A Chezian, D Dowers, F Estrada, Y-H Hsieh, J Kang, W Li, Z Malchiodi, J Malinowski, S Matuszak, T McTigue IV, D Mueller, B Nguyen, M Nguyen, P Nguyen, S Nguyen, N Njoku, K Patel, W Pellegrini, T Pliakas, D Qadir, E Ryan, A Schiffer, A Thiel, SA Yunes, KE Spiliotis, JH Pinz  n C, LD Mydlarz, **TD Gilmore**. 2018. A conserved Toll-like receptor-to-NF- κ B signaling pathway in the endangered coral *Orbicella faveolata*. *Developmental & Comparative Immunology* 79: 128-136 (Selected as 1 of 10 Editor's Choice articles for the 14th Annual International Society of Developmental & Comparative Immunology Conference. <https://www.journals.elsevier.com/developmental-and-comparative-immunology/news/editors-choice-a-selection-of-articles-relevant>)

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127. Mansfield KM, NM Carter, L Nguyen, PA Cleves, A Alshanbayeva, LM Williams, A Penvose, JR Finnerty, VM Weis, T Siggers, **TD Gilmore**. 2017. Transcription factor NF- κ B is modulated by symbiotic status in a sea anemone model of cnidarian bleaching. *Scientific Reports* 7: 16025
128. Friedman L, **TD Gilmore**, JR Finnerty. 2018. Intraspecific variation in oxidative stress tolerance in a model cnidarian: differences in peroxide sensitivity between and within populations of *Nematostella vectensis*, *PLoS ONE* 13: e0188265
129. Brennan JJ, **TD Gilmore**. 2018. Evolutionary origins of Toll-like receptor signaling. *Molecular Biology & Evolution* 35: 1576-1587
130. Mansfield KM, **TD Gilmore**. 2019. Innate immunity and cnidarian-Symbiodiniaceae mutualism. *Developmental & Comparative Immunology* 90: 199-209
131. Shaffer R, AM DeMaria; L Kagermazova, Y Liu, M Babaei, S Caban-Penix, A Cervantes, S Jehle, L Makowski, **TD Gilmore***, A Whitty*, KN Allen*. 2019. A central conserved region of NEMO is required for IKK β -induced conformational change and signal propagation. *Biochemistry* 58: 2906-2920 (*Co-corresponding authors)
132. Babaei M*, YK Liu*, SM Wuerzberger-Davis, EZ McCaslin, CP DiRusso, A Yeo, L Kagermazova, S Miyamoto, **TD Gilmore**. 2019. CRISPR/Cas9-based editing of a sensitive transcriptional regulatory element to achieve cell type-specific knockdown of the NEMO scaffold protein. *PLoS ONE* 14:e0222588 (also preprint at *bioRxiv*, doi: <https://doi.org/10.1101/450320>) *co-first authors
133. Williams LM, MM Inge, KM Mansfield, A Rasmussen, J Afghani, M Agrba, C Albert, N Andersson, M Babaei, M Babaei, A Bagdasaryants, A Bonilla, A Browne, S Carpenter, T Chen, B Christie, A Cyr, K Dam, N Dulock, G Erdene, L Esau, S Esonwune, A Hanchate, X Huang, T Jennings, A Kasabwala, L Kehoe, R Kobayashi, M Lee, A LeVan, Y Liu, E Murphy, A Nambiar, M Olive, D Patel, F Pavesi, CA Petty, Y Samofalova, S Sanchez, C Stejskal, Y Tang, A Yap, JP Cleary, SA Yunes, T Siggers, **TD Gilmore**. 2020. Transcription factor NF- κ B in a basal metazoan, the sponge, has conserved and unique sequences, activities, and regulation. *Developmental & Comparative Immunology* 104: 103599 (preprint of this article at *bioRxiv* <http://biorxiv.org/cgi/content/short/691097v1>)
134. Mansfield KM, PA Cleves, E Van Vlack, NG Kriefall, BE Benson, DI Camacho, O Hemond, M Pedroza, T Siggers, JR Pringle, SW Davies*, **TD Gilmore***. 2019. Varied effects of algal symbionts on transcription factor NF- κ B in a sea anemone and a coral: possible roles in symbiosis and thermotolerance. (*Co-corresponding authors) *bioRxiv*, doi: <https://doi.org/10.1101/640177> (In review for submission)
135. Williams LM, **TD Gilmore**. 2020. Looking down on NF- κ B. *Molecular and Cellular Biology*, In preparation.
136. Cote S, S Chennamadhavuni, A Yeo, U Weber, JA Porco Jr, **TD Gilmore** & A Whitty. 2018. Use of a fluorescence anisotropy assay to identify inhibitors of the protein-protein interaction between I κ B kinase β (IKK β) and NF- κ B essential modulator (NEMO). *Biochemistry*, in preparation

Encyclopedia Articles

1. **Gilmore TD**. 2001. Rel. In, *Encyclopedia of Molecular Medicine*, Volume 3. John Wiley & Sons, New York, New York. pp 2752-2754
2. **Gilmore TD**. 2001. Rel. In, *Encyclopedic Reference of Cancer* (M Schwab, ed.) Springer-Verlag Publishers, Heidelberg, Germany. pp 761-764
3. **Gilmore TD**, YT Ip. 2003 (Version 3.0, updated 2009). Signal transduction pathways in development and immunity: NF κ B/Rel pathways. In, *Encyclopedia of Life Sciences*. John Wiley & Sons, Ltd., Chichester, UK. <http://www.els.net/> [Doi 10.1002/9780470015902.a0002332.pub3]

4. **Gilmore TD**. 2004 (Version 2, updated 2013). Nuclear Factor kappaB. In, *Encyclopedia of Biological Chemistry* (WJ Lennarz & JD Lane, eds.) Elsevier Press, Oxford, UK. Vol 3, pp 302-305.
5. **Gilmore TD**. 2008. Rel. In, *Encyclopedia of Cancer, 2nd Edition* (M Schwab, ed.) Springer-Verlag Publishers, Heidelberg, Germany.
6. **Gilmore TD**. 2011. Rel. In, *Encyclopedia of Cancer, 3rd Edition* (M Schwab, ed.) Springer-Verlag Publishers, Heidelberg, Germany.
7. **Gilmore TD**. 2013. Rel oncogene. In, *Brenner's Encyclopedia of Genetics, 2nd Edition* (S Maloy, K Hughes, eds) Elsevier, New York. Vol 6, pp 126-128.
8. **Gilmore TD***, TW Siggers, S Gerondakis*. 2016. NF-kappaB and the immune system. In, *Encyclopedia of Cell Biology* (RA Bradshaw, PD Stahl, eds) Waltham, MA, Volume 3: Functional Cell Biology pp 580-587 *Co-corresponding authors
9. **Gilmore TD**. 2017. Rel. In, *Encyclopedia of Cancer, 4th Edition* (M Schwab, ed.) Springer-Verlag Publishers, Heidelberg, Germany.

Published Letters to Editor

1. **Gilmore TD**. 1997. Don't overlook oncoprotein v-Rel. *Journal of NIH Research* 9(4):14-16.
2. White DW, **TD Gilmore**. 1997. Transcription factors, oncogenes, and apoptosis. *Science* (reviewed letter) 276:185.
3. **Gilmore TD**, DT Starczynowski, D Kalaitzidis. 2004. *RELevant* gene amplification in human B-cell lymphomas? *Blood* 103:3243. (refereed)

Patent

1. Gilmore et al. Oct 2, 2018. TISSUE-SPECIFIC CONTROL OF NEMO GENE EXPRESSION. Provisional Patent USSN 62/740,022.

Web Site

1. www.nf-kb.org or [.com](http://www.nf-kb.com). My lab maintains the most up-to-date and extensive web site with information on Rel/NF-κB transcription factors. This web site is frequently used by outside researchers and is updated several times per month.

Meeting Abstracts While at Boston University (206)

Invited Seminars

- Michigan State University, East Lansing, MI, May, 1988
- Boston University Medical School, Boston, MA, September, 1988
- Harvard University, Cambridge, MA, November, 1988
- Salk Institute, La Jolla, CA, May, 1989
- Boston University Biology Department 85th Anniversary Mini-Symposium, Boston, MA, November, 1989
- State University at Stony Brook, New York, November, 1989
- Transcription Group at Boston University Medical School, Boston, MA, February, 1990
- Rutgers Medical School, Piscataway, NJ, February, 1990
- Salem State Darwin Festival, Salem, MA February, 1990
- UCLA Department of Biological Chemistry, CA April, 1990
- Coopervand Symposium, Boston University Medical School, April, 1990
- La Jolla Cancer Research Institute, La Jolla, CA, October, 1990
- Worcester Research Institute, MA, November 7, 1990
- Boston University, Biology Department, Boston, MA, April 13, 1992
- Mount Desert Island Biological Laboratories, Maine, July 29, 1992
- Brandeis University, Medford, MA, August 5, 1992
- Howard Hughes Medical Institute, Bethesda, MD, November, 1992
- Brown University Medical School, Providence, RI, March 18, 1993
- Northwestern Medical School, Chicago, IL, May 12, 1993
- Bristol-Myers Squibb, Princeton, New Jersey, July 22, 1993
- Boston University Medical School, Biochemistry Department, Boston, MA, October 7, 1993
- Banbury Conference, Cold Spring Harbor, New York, October 27, 1993
- Systemix, Inc., Palo Alto, CA, February 16, 1994
- University of California at San Francisco, CA, February 17, 1994
- West Virginia Medical School, Morgantown, WV, February 23, 1994
- McArdle Laboratory Symposium on Cancer Research, Madison, WI, October 15, 1994
- Boston University Medical School, Immunology Department, Boston, MA, March 27, 1996
- Workshop on "NF- κ B Proteins - Their Role in Cell Growth, Differentiation and Development" Madrid, Spain, July 8-10, 1996
- Rhode Island College, Providence, RI, October 14, 1998
- Boston University Medical School, Hematology-Oncology Division, Boston, MA, June 3, 1999
- Vanderbilt University School of Medicine, Nashville, TN, November 30, 1999
- Keystone Symposium on "NF- κ B Regulation and Function: From Basic Research to Drug Development", Tahoe City, CA, February 25, 2000
- Hong Kong University, Hong Kong, PRC, March 21, 2000
- Penn State University Medical School, Hershey, PA, Nov. 9, 2000
- University of Massachusetts Medical School, Worcester, MA, November 15, 2000
- Tufts Medical School, Boston, MA, November 27, 2000
- International Symposium on "NF- κ B: Regulation, Gene Expression and Disease", Gent, Belgium, July 6, 2001
- AnorMED, Inc., Vancouver, British Columbia, September 10, 2001
- University of Cincinnati Medical School, October 16, 2001
- Massachusetts General Hospital Symposium on "NF- κ B and Host Defense: Genetics and Biochemistry", November 16, 2001
- Symposium for the Retirement of Dr Nancy Rice, National Cancer Institute, Frederick, MD, November 19, 2001
- Keystone Symposium on "NF- κ B: Bench to Bedside", Keystone, CO, February 28, 2002
- Boston University Med School, Hematology-Oncology Division, Boston, MA, May 23, 2002
- Boston College, Biology Department, Boston, MA, September 24, 2002
- Boston University Medical School, Pathology Department, Boston, MA, October 11, 2002

- University of Hong Kong, Hong Kong, PRC, November 15, 2002
- Boston Cancer Research Association, Boston, MA, November 20, 2002
- Karolinska Institute, Stockholm, Sweden, December 5, 2002
- Nobel Linus Pauling Biotech Symposium, Cambridge, MA, Oct. 11, 2003
- McArdle Laboratory, Univ. of Wisconsin, Madison, WI, Nov. 19, 2003
- Keystone Symposium on "NF- κ B: Biology and Pathology", Snowbird, Utah, Jan. 14, 2004
- TolerRx, Inc., Cambridge, MA, June 8, 2004
- National Institute on Aging, Baltimore, MD, October 28, 2004
- Genentech, Inc., South San Francisco, CA, July 12, 2005
- University of California, San Francisco, CA, July 13, 2005
- Synta Pharmaceuticals, Lexington, MA, July 21, 2005
- Salk Institute, La Jolla, CA, October 11, 2005
- Boston Area Immunology Symposium, Tufts Medical School, Boston, MA, Dec. 9, 2005
- Boston University Medical School, Pathology Dept, Boston, MA, February 17, 2006
- Keystone Symposium on "NF-kappaB: 20 Years on the Road from Biochemistry to Pathology", Banff, Canada, March 23, 2006
- Boston University Dental School, Oral Biology Dept, Boston, MA, November 7, 2006
- Cornell Medical School, Immunology Dept, New York, NY, Nov. 13, 2006
- University of Toledo Medical School, Toledo, OH, October 25, 2007
- Keystone Symposium on "NF-kappaB", Banff, Canada, February 16, 2008
- EMBO Workshop on "NF-kappaB", Capri, Italy, October 19, 2008
- Boston University Academy, All Academy Day, Boston, October 15, 2009
- 4th Northeast Alliance Science Day, University of Puerto Rico, Mayaguez, Feb. 10-12, 2010
- Boston University, Pharmacology Department, Boston, March 24, 2010
- First Annual Nematostella Meeting, Woods Hole Oceanographic Institution, Woods Hole, MA, June 27, 2011
- Cell Signaling Technology, Danvers, MA, November 3, 2011
- University of Massachusetts, Veterinary & Animal Sciences Department, Amherst, MA, April 18, 2012
- Keystone Symposium on "NF- κ B Signaling and Biology: Bench to Bedside", Whistler, BC, Canada, March 20, 2012
- Third Nematostella Research Conference, Eilat, Israel, December 5, 2013
- Keystone Symposium on "The NF- κ B System in Health and Disease", Keystone, CO February 27, 2014
- European NF-kappaB Subunit Workshop, Pitlochry, Scotland, October 6, 2014
- Woods Hole Oceanographic Institution, Woods Hole, MA, August 10, 2015
- Virginia Commonwealth University, Dental School, September 21, 2016
- 19th Annual Biomedical and Comparative Immunology Symposium, Miami, FL, March 31, 2017 (Plenary talk)
- Woods Hole Marine Biological Laboratory, Woods Hole, MA, July 25, 2017
- 15th Asian Conference on Transcription, Penang, Malaysia, August 1, 2017 (Keynote talk)
- UMass Medical School, Worcester, MA, February 7, 2018
- University of Cincinnati, Biology Department, Cincinnati, OH, May 17, 2018
- Aiptasia Workshop, Oregon State University, Corvallis, OR, July 21, 2018
- Cnidofest, Whitney Marine Labs, St Augustine, FL, September 8, 2018
- Boston University, Alumni Weekend, Lunch & Learn Seminar, September 21, 2018
- 4th Annual European NF-kappaB Subunit Workshop, Grasse, France, October 9, 2018 (Plenary Talk)
- Endowed Chair Ceremony, Cincinnati Childrens Hospital, August 27, 2019

Invited Meeting Participant

- Bristol Myers "Symposium on Cancer Research", December, 1987, Boston, MA
- Meeting on "Tyrosine Phosphorylation - The Second Decade", March, 1990, San Diego, CA
- Annual Meeting on Oncogenes, June, 1991, Frederick, MD. Chairman, Session on "Other Nuclear Oncogenes"
- Howard Hughes Medical Institute special meeting on "NF- κ B, Rel, and Dorsal: Structure and Function", November 9-11, 1992, Bethesda, MD
- Banbury Conference on " κ B Binding Proteins - Their Role in Development and Growth Control", October 25-28, 1993, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY
- Memorial Symposium for Howard M. Temin, Oct 15-17, 1994, Univ Wisconsin, Madison, WI
- Keystone Symposium on "Oncogenes: 20 Years Later", Jan 5-11, 1995, Keystone, Colorado
- Annual Meeting on Oncogenes, Frederick, MD. Chairman, Session on "Nuclear Oncogenes", June, 1996.
- Workshop on "NF- κ B/I κ B proteins - Their Role in Cell Growth, Differentiation and Development", July 8-10, 1996, Madrid, Spain
- Keystone Symposium on "NF- κ B Regulation and Function: From Basic Research to Drug Development", February 22-27, 2000, Tahoe City, CA
- 5th Annual Scientific Symposium of the Hong Kong Cancer Institute on "Oncology: From Molecules to Management", March 23-24, 2000, Hong Kong, PRC
- Beckman Symposium for Sponsored Undergraduate Research, July 27-29, 2000, Newport Beach, CA
- International Symposium on "NF- κ B: Regulation, Gene Expression and Disease", July 4-8, 2001, Gent, Belgium
- Mass General Hospital Center for the Study of Inflammatory Bowel Disease Symposium on "NF- κ B and Host Defense: Genetics and Biochemistry", Nov 15-17, 2001, Boston, MA
- Symposium for the Retirement of Dr Nancy Rice, National Cancer Institute, November 19, 2001, Frederick, MD
- Keystone Symposium on "NF- κ B: Bench to Bedside", Feb 25-March 3, 2002, Keystone, CO
- International Symposium on "Cell Signaling and Gene Transcription", November 15, 2002, Hong Kong, PRC
- Fourth "Nobel Linus Pauling Biotech Symposium", October 11, 2003, MIT, Cambridge, MA
- Keystone Symposium on "NF- κ B: Biology and Pathology", Jan 11-16, 2004, Snowbird, Utah
- Pfizer Undergraduate Sponsored Research Symposium, October 7-8, 2004, Groton, CT
- Boston Area Immunology Symposium (Session Chair), December 9, 2005, Boston, MA
- Keystone Symposium on "NF- κ B", February 12-17, 2008, Banff, Canada
- EMBO Workshop on "NF- κ B Signaling Pathway: from Development to Disease" (Session Chair), October 18-21, 2008, Capri, Italy
- Keystone Symposium on "NF- κ B", January 5-10, 2010, Santa Fe, New Mexico
- Biology Directorate NSF-REU PI meeting, Arlington, Virginia, April, 2010
- First Annual Nematostella Meeting, June 27, 2011, Woods Hole Oceanographic Institute, Woods Hole, MA
- Keystone Symposium on "NF- κ B Signaling and Biology: From Bench to Bedside" (Session Chair), March 18-23, 2008, Whistler, BC, Canada
- Biology Directorate NSF-REU PI meeting, Arlington, Virginia, April 12-14, 2012
- Second Nematostella Meeting (Co-organizer), Aug 27, 2012, Boston University, Boston, MA
- 6th Northeast Alliance Science Day, University of Puerto Rico, Mayaguez, Feb. 6-8, 2013
- Third Nematostella Meeting (Co-organizer), as part of the 8th International Conference on Coelenterate Biology, December 1-6, 2013, Eilat, Israel
- Keystone Symposium on "The NF- κ B System in Health and Disease" (Session Chair), February 23-28, 2014, Keystone, CO
- Biology Directorate NSF-REU PI meeting, Arlington, Virginia, April 10-12, 2014

- European NF-kappaB Subunit Workshop, Pitlochry, Scotland, October 6-8, 2014
- 8th Northeast Alliance Science Day, University of Puerto Rico, Mayaguez, March 19, 2015
- Keystone Symposium on "NF-kappaB and MAP Kinase Signaling in Inflammation", March 13-17, 2016, Whistler, BC, Canada
- Beckman Symposium for Sponsored Undergraduate Research, August 4-7, 2016, Irvine, CA,
- Biology Directorate NSF-REU PI meeting, Arlington, Virginia, March 30 – April 1, 2017
- 19th Annual Florida International University, Biomedical and Comparative Immunology Symposium, Miami, FL, March 30-31, 2017 (Plenary Speaker)
- 15th Asian Conference on Transcription, Penang, Malaysia, July 31-Aug 4, 2017 (Keynote Speaker)
- Meeting of the International Symbiosis Society, Oregon State University, Corvallis, OR, July 16-20, 2018
- Aiptasia EDGE Workshop, Oregon State University, Corvallis, OR, July 21-22, 2018
- Cnidofest, Whitney Marine Labs, St Augustine, FL, September 6-9, 2018
- 4th Annual European NF-kappaB Subunit Workshop, Grasse, France, October 8-10, 2018 (Keynote Speaker)
- SACNAS Meeting, Honolulu, HI, October 31 – November 3, 2019

Editorial Boards

- Editorial Board Member, *Gene Expression*, 1998-2016
- Editorial Board Member, *Cancer Letters*, 2001-2011
- Editorial Board Member, *Current Cancer Therapy Reviews*, 2004-present
- Editorial Board Member, *Genes & Cancer*, 2009-present

Past Funding

- NIH First Award, National Cancer Institute (CA047763) "Transformation of Cells by the v-rel Oncogene", 9/88-9/93. Total Award \$545,000 (\$315,000 direct, \$230,000 indirect).
- American Cancer Society Junior Faculty Research Award, "Transformation of Cells by the v-rel Oncogene", 1/89-12/91. \$90,500 (salary award only).
- NIH Training Grant for Predoctoral Training in Molecular Biophysics, 7/89-6/94 and 1994-99 (Lee Makowski and Kenneth Rothschild, PIs; I was simply a participating member on these grants).
- NIH Small Instrumentation Grant, 1989-1990. Total cost \$14,109.30. Thomas Gilmore, PI. This was an instrumentation grant for the purchase of a departmental Video Densitometer.
- Hubert H. Humphrey Cancer Research Center (American Cancer Society Institutional Research Grant), "Precise Definition of Sequences Necessary for Gene Activation by Rel and Dorsal Proteins in Yeast". \$6,000 for 1990 (one-year award).
- Boston University Bio-Medical Seed Grant, "Isolation and Characterization of Genes Related to the *rel* Oncogene". \$5000 for 5/91-3/92 (one-year award).
- American Cancer Society Faculty Research Award, "Transformation & Transcriptional Control by Rel Proteins", 1/92-12/96. \$205,000 (salary award only).
- Requested supplements to my FIRST AWARD: \$12,000 direct costs (~\$7000, indirect costs) to support A. Capobianco (1989-1990), and \$3000 (\$1767, indirect costs) to support summer salary of G. Subramanian (Summer, 1992).
- American Cancer Society, Massachusetts Division, "Novel Activities Associated with I κ B-like Sequences", 1/1/93 - 12/31/93. Total direct costs, \$30,435; indirect costs, \$4,565.
- National Leukemia Association, Inc., "Novel Activities Associated with I κ B-like Sequences", submitted 10/1/92 for period 3/1/93 - 12/31/93. Total costs, \$19,250. Funded, declined due to overlap with ACS-Mass grant.
- NIH Research Grant, R01 CA047763-06, National Cancer Institute, "Transformation of Cells by the v-rel Oncogene", 5/93 - 3/97. Total direct costs, \$354,403; indirect costs, ~\$220,000.
- Children's Leukemia Research Association, Inc. (formerly National Leukemia Association, Inc.), "Novel Activities Associated with I κ B-like Sequences", 1/1/94 - 12/31/94. Total costs, \$20,000.
- Council for Tobacco Research - USA, Inc., "Novel Activities of I κ B Proteins", 7/1/94 - 6/30/97. Total Costs, \$255,000 (Direct plus Indirect Costs).
- Biomedical Research Support Shared Instrumentation Grant, NIH, "Acquisition of a Molecular Imager", 04/01/96 - 03/31/97. Thomas D. Gilmore, PI, David Waxman, co-PI; this was a Multi-User grant that involved approximately 15 PI's from Biology, Chemistry and Physics; it was prepared and coordinated primarily by me. Direct Costs, \$65,000.
- NIH Research Grant, R01 CA047763-10, National Cancer Institute, "Transformation of Cells by the v-rel Oncogene", 08/01/97 - 07/31/00. Total Direct Costs, \$515,976; Indirect Costs, \$338,111.
- Council for Tobacco Research - USA, Inc., "Genetic and Biochemical Studies of Rel and I κ B Proteins in Yeast", 7/1/97-6/30/00. Total Costs, \$265,000.
- Provost's, Innovation Fund, "Caspase-Activated Molecules for Cancer Gene Therapy and Bio-Sensing", for period 06/01/99 - 05/31/00. Thomas D. Gilmore, PI. Total Costs, \$25,000.
- NIH, R01 CA047763-13, "Transformation of Cells by the v-rel Oncogene", for period 08/01/00 - 07/31/04. Thomas D. Gilmore, PI. Total Costs, \$1,086,642 (Total Direct Costs, \$675,000; Total Indirect Costs, \$411,642).
- NIH Center Grant, "Expanded Diversity Using Stereocontrolled Synthesis", for period 09/30/02 - 09/29/08. Total Costs, \$12,529,961 (\$8,278,920 DC; \$4,326,039 IDC). John Porco, Chemistry, PI; James Panek, Scott Schaus, John Snyder, co-PIs. I was the Director of the Biological Outreach Consortium related to this Center, and devote 10% effort to the project.

- NIH HD007387, "Graduate Training Grant in Endocrine Mechanisms in Reproduction", 09/01/03 - 08/31/08. (Ian Callard, PI; I was a participating member on this grant). Total Costs, \$1,083,462 (DC, \$1,050,092; IDC, \$33,370).
- NSF, REU-Site Project, "Chemistry Research Addressing Biological Problems", for period 06/01/07 - 05/31/10. John Snyder (Chemistry Dept), PI. I was one of 10 participating mentors. Total Costs, \$692,978 (Direct Costs, \$619,857; Indirect Costs, \$73,121).
- NIH, R01 CA047763-17, "Transformation of Cells by the REL Oncogene", for period 08/01/04 - 05/31/10. Thomas D. Gilmore, PI. Total Costs, \$1,629,000 (Total Direct Costs, \$1,014,000; Total Indirect Costs, \$615,000).
- NIH, R01 CA047763 Administrative Supplement for "Transformation of Cells by the REL Oncogene" (ARRA: NOT-OD-09-056) for period 07/01/09 - 05/31/11. Thomas D. Gilmore, PI. Total Costs, \$130,683.
- Arnold & Mabel Beckman Foundation, "2008 Beckman Scholars Program", for period 06/01/2008 - 08/31/2011. Thomas D Gilmore, PI. Total Costs 115,800.
- NSF, "NEAGEP Summative Evaluation: Identifying Effective Strategies for Paving the Pathway to the Professoriate", for period 06/01/11 - 05/31/12. James Staros (Umass-Amherst), PI. Total Costs, \$150,000. Thomas D Gilmore, PI of BU subcontract, \$4478 subcontract costs.
- NSF, HRD-0450339, Northeast Alliance for Graduate Education & the Professoriate, "No Longer a Dream Deferred: Greater Minority STEM Participation Through Academic and Institutional Change" for period 2005-2013. This grant was administered through the University Massachusetts Amherst (Sandy Peterson, PI). Thomas Gilmore, PI for Boston University component. Final year Direct Costs (BU only), \$151,915.
- Addgene/LabLife, Research Sharing Grant, "Upgrade to www.nf-kb.org", for period 09/01/10 - 08/31/11. Thomas D Gilmore, PI. Total Costs, \$5,000.
- NSF, REU-Site Project, "REU Site: Expanding Minority Research Opportunities in Cross-Disciplinary Biology", for period 03/01/2009 - 02/28/2013. Thomas Gilmore, PI. Total Costs, \$368,752 (Direct Costs, \$323,752; Indirect Costs, \$45,000).
- NSF, "LiT: Rel Homology Domain Signal Transduction Pathways in the Sea Anemone *Nematostella vectensis*", for period 07/15/2009-06/30/2014. Thomas Gilmore, John Finnerty, co-PIs. Total Costs, \$573,015.
- NIH, R01, "Design of Macrocyclic Inhibitors of the NEMO/IKK α /IKK β Protein-Protein Interaction", for period 07/01/10 - 06/30/14. Adrian Whitty, PI; Co-investigators: Sandor Vajda, Thomas Gilmore, John Porco, Karen Allen. Total Costs, \$2,000,000 (Total Direct Costs, \$1,275,000; Total Indirect Costs, \$725,000).
- Arnold & Mabel Beckman Foundation, "2011 Beckman Scholars Program", for period 06/01/2011 - 08/31/2014. Thomas D Gilmore, PI. Total Costs \$115,800.
- NIH P50, "Complex Chemotypes: Discovery, Methodology, and Library Expansion", for period 09/01/2008-08/31/2014. John Porco, PI; James Panek, Scott Schaus, John Snyder, co-PIs. I am a Faculty Associate for Biological Outreach on this proposal (5% effort). Total Costs, \$11,654,849 (Direct Costs, \$7,299,762; Indirect Costs, \$4,355,087).
- Boston University Genome Science Institute, "A Method for the Comprehensive Analysis of Changes in Transcription Factor Activity", for period 6/01/2015 – 5/31/2016. Trevor Siggers, Thomas Gilmore, co-PIs. Total Costs, \$20,000.
- NSF, "REU Site: Fundamental Research in Chemistry Addressing Problems in Biology", for period 02/01/13 - 01/31/16. John Snyder, PI. Thomas D. Gilmore, Senior Personnel. Total Costs, \$419,636.
- NSF, 1262934, "REU Site: Interplay Between Genes and the Environment", for period 03/01/13 - 02/28/17. Thomas D. Gilmore, PI. Total Costs, \$476,067 (DC, \$421,855; IDC, \$54,212).
- Arnold & Mabel Beckman Foundation, "2014 Beckman Scholars Program", for period 06/01/2014 - 08/31/2017. Thomas D Gilmore, PI. Total Costs \$115,800.

- NSF, ROA Supplement to IOS-1354935, "NF-kappaB in Cnidarian Development", for period 09/01/17 - 12/31/17. Thomas D. Gilmore, PI; Trevor Siggers, Judith Humphries (Lawrence University), co-PIs. Total Costs \$25,000.

Current Funding

- NSF, CHE-1156666, "REU Site: Fundamental Research in Chemistry Addressing Biological Problems". Linda Doerrer, Co-PI. Gilmore, participating faculty. 05/01/2016 – 04/30/2019. \$315,000 total cost.

- NSF, IOS-1354935, "NF-kappaB in Cnidarian Development", for period 09/01/14 - 08/31/19. Thomas D. Gilmore, PI; John R. Finnerty & Trevor Siggers, co-PIs. Total Costs \$870,000 (DC, \$531,460; IDC, \$338,540).

- NSF IOS-1557804, "Glycan Recognition and the Role of Innate Immunity in Cnidarian-dinoflagellate Symbioses", for period 01/15/16 - 01/14/19. Virginia Weis, PI; Thomas Gilmore, Sandra Loesgen, co-PIs. Total Costs \$583,279.

- NIH R01, GM117350, "Molecular Mechanism of the NFkappaB Essential Modulator in Human Immunodeficiencies", for period 07/01/16 - 06/30/20. Adrian Whitty, PI; Thomas Gilmore, Karen Allen, co-Investigators. Total Costs \$1,369,200 (DC, \$840,000; IDC, \$529,200).

- Arnold & Mabel Beckman Foundation, "2017 Beckman Scholars Program", for period 06/01/2017 - 08/31/2020. Thomas D Gilmore, PI. Total Costs \$156,000.

- NSF, BIO-1659605, "REU Site: Control of Gene Expression for Biological Effect", for period 02/01/17 - 01/31/21. Thomas D. Gilmore, PI. Total Costs \$477,763 (DC, 432,480; IDC, 45,283).

- NSF, "Transcription Factors in Cnidarian Immunity, Symbiosis, and Bleaching", for period 03/01/20 - 02/29/24. Thomas Gilmore, PI; Sarah Davies, co-PI. Total Costs \$920,972 (DC, \$558,165; IDC, \$362,807).

Pending and Planned Grants

- NSF, "Transcription Factors in Cnidarian Immunity, Symbiosis, and Bleaching", for period 03/01/20 - 02/29/24. Thomas Gilmore, PI; Sarah Davies, co-PI. Total Costs \$920,972 (DC, \$558,165; IDC, \$362,807).

Departmental and University Committees

Departmental Committees: Seminar (1989-1995, 1997-98); Graduate Student (1988-98); Belamarich Award (1991-92, 2013); Search for Administrative Assistants (1995-96); Administrator of Departmental French Exams (1988-2005); Faculty Search (1992-93; 1997-98; 2000-01 [Committee Chairman]; 2005; 2006); Chairman's Advisory (1998-2000); Turner Award Committee (2003); Research & Honors (1990-1993; 2003-present [Committee Chair 2018]); Associate Chair, Cell & Molecular Biology Group (2007-08, 2016-17); Computer (2006-16); Appointments, Promotion & Tenure (2011-12, 2016-18); Alumni Awards Committee (2018)

College and University Committees: Patent Policy (1990-1994); Hubert Humphrey Cancer Research and Biomedical Seed Grant Review (1989-2003); Member, Boston University Cancer Center (2007-present); Biology Department Chairman Search (1996-97); College of Arts & Sciences Appointments, Promotion & Tenure (1996-98; 2004); Biochemistry & Molecular Biology Program (2000-present); Institutional Animal Care & Use (2003-06); Conflict of Interest (2003-06); Co-Director, Biological Consortium of Center for Chemical Methodology & Library Development (2002-14); Member, Undergraduate Research Opportunities Program (2003-06); Director, Undergraduate Research Opportunities Program (2007-14); Metcalf Prize Selection Committee (2009-2010); Case-Melville Scholarship (2011); University Appointments, Promotion & Tenure (2015-17); Hartwell Foundation Grants Review (2016); Peter Paul Grant Reviews (2016); Post-doctoral Seed Grant Reviews (2016); BU Clinical and Translational Science Institute Grant Reviews (2016, 2018); Provost's Graduate Student Professional Development Task Force (2017-18); Provost's Advisory Committee on RCR training (2017); Smith Family Award Grant Review (2018)

Professional Peer Review Committees and Activities

1. Reviewer of Grants for American Cancer Society Institutional Award to Boston University, 1989-2002.
2. Member, NIH site visits for program project grants at Salk Institute, La Jolla, CA. October 17-19, 1990 and October 18-20, 2000.
3. *Ad hoc* reviewer for grants to the following agencies: March of Dimes Society, 1990; the Canadian Cancer Society, 1991; the John Sealy Memorial Endowment Fund, 1992; the Philip Morris External Research Program, 2002-04; Cancer Research UK, 2002-2004; the Ohio Cancer Research Associates, 2003, 2015, 2018; Erwin Schrödinger Prize (Germany), 2003; American Institute of Biological Sciences and the US Army Research and Material Command, 2003; Research Grants Council of Hong Kong, 2004, 2006; New Jersey Commission on Cancer Research, 2006-09; Yale Skin Diseases Research Core Center, 2006; National Medical Research Council of Singapore, 2008; Nanyang Assistant Professorship Award, Singapore, 2008; Hunter College SCORE program, 2009-10; PSC-CUNY Grant Program, 2012; Italian Association for Cancer Research, 2003, 2007-18; Research Councils of UK, 2016; Israel Science Foundation, 2018; Killam Prize (Canada), 2019; BSF United States – Israel Binational Science Foundation, 2020.
4. Member, American Cancer Society Study Sections: Molecular Biology & Genetics, 1991; and Virology & Molecular Genetics, 1993.
5. Reviewer of Grants for Boston University Biomedical Seed Grants, 1990-1993.
6. Member, NIH Special Study Section for Review of Research Grants on "Domestic Animal Models for Retrovirus-Associated Human Cancers", July 26-27, 1992.
7. Member, NIH site visit for program project grants at the National Cancer Institute, Frederick, Maryland, December 8-9, 1994, and December 11-12, 1997.
8. *Ad hoc* Reviewer for Research Grants submitted to the National Science Foundation in 1995, 1996, 1997, 1998, 2003; and for NIH Grants, November 2001 and November 2008.
9. Member, NIH site visit for program project grant at the University of California at San Diego, October 16-18, 1996.

10. Member, NIH Study Section for Shared Instrumentation Grants, October, 1997 and October, 1999.
11. Member, NIH Study Section in Experimental Virology, June 11-13, 2003.
12. Member, NSF S-STEM Study Panel, May, 2017 and August, 2019.
13. Member, NSF Study Panel for Postdoctoral Research Fellowships in Biology, Jan, 2020.
14. Member, NSF Study Panel for Research Proposals in Biology, March, 2020
16. *Ad hoc* reviewer of PI programs at the National Cancer Institute, October, 1998 and June, 2006; and at the National Institute for Allergy & Infectious Diseases, June 2011.
16. Member, New Jersey Commission on Cancer Research, Post-doctoral Review Panel, October, 2009.
17. Biotechnology Consultant: Ariad Pharmaceuticals, 2002-04; Synta Pharmaceuticals, 2005-06; Ono Pharmaceuticals, 2009-10; Cell Signaling, 2008-present; Carmot Pharmaceuticals, 2012-present.
18. Beckman Foundation Scholars Program Grant Review Advisory Committee, 2008-10, 2017; Beckman Foundation Postdoctoral Review Committee, 2016; Beckman Foundation Young Investigator Review Committees 2018-19.
19. External reviewer of Academic Programs: Biology Degree Program at University of Balamand in Dubai, 2017; Biology PhD Degree Program at University of Massachusetts-Lowell, 2018; Biology Department at Lawrence University, 2018; PhD program in Cell & Molecular Biology at the United Arab Emirates University in Al Ain, UAE, 2019.
20. While at Boston University, I have served as an *ad hoc* reviewer for articles for the following journals: *Oncogene* (94 articles), *Molecular and Cellular Biology* (50), *Journal of Virology* (34), *Journal of Cell Science* (22), *Proceedings of the National Academy of Sciences USA* (22), *Cancer Letters* (12), *Journal of Biological Chemistry* (8), *Gene Expression* (6), *Journal of Clinical Investigation* (9), *Cancer Research* (7), *Biochimica et Biophysica Acta* (5), *The EMBO Journal* (4), *Journal of Immunology* (7), *Blood* (7), *Nature Communications* (7), *International Journal of Cancer* (6), *Journal of Cellular Biochemistry* (4), *PLoS ONE* (4), *Science Signaling* (4), *International Journal of Biochemistry and Cell Biology* (3), *FEBS Letters* (3), *Oncotarget* (3), *Leukemia* (2), *Molecular Biology of the Cell* (3), *Virology* (2), *Cell Growth & Differentiation* (2), *Trends in Biochemical Sciences* (2), *Applied Immunohistochemistry & Molecular Morphology* (2), *Current Cancer Therapy Reviews* (2), *Genetic Analysis* (2), *BioEssays* (2), *Developmental & Comparative Immunology* (3), *Journal of Molecular Biology* (2), *Expert Opinion on Therapeutic Targets* (2), *Trends in Cell Biology* (2), *Genes & Cancer* (2), *Nucleic Acids Research* (2), *Molecules* (2), *PLoS Genetics* (2), *Nature* (1), *Scientific Reports* (1), *Nature Structure & Molecular Biology* (1), *Nature Reviews Drug Discovery* (1), *Science* (1), *Cancer Cell* (1), *Cell Reports* (2), *Molecular Cell* (1), *Genes & Development* (1), *Biochemical Journal* (1), *Biomedicine & Pharmacotherapy* (1), *Biophysical Journal* (1), *Endocrinology* (1), *Gene* (1), *Chemical Biology* (1), *Cell Cycle* (1), *Molecular Pharmacology* (1), *Leukemia and Lymphoma* (1), *Molecular Systems Biology* (1), *Genome Research* (1), *Journal of Pathology* (1), *PLoS Biology* (1), *BioTechniques* (1), *British Journal of Cancer* (1), *European Journal of Cancer* (1), *Oncogene Research* (1), *International Journal of Medical Sciences* (1), *Journal of Neuroscience* (1), *Cancer Gene Therapy* (1), *Current Cancer Drug Targets* (1), *Retrovirology* (1), *The New Biologist* (1), *Biochemical Pharmacology* (1), *Molecular Cancer Therapeutics* (1), *Journal of Molecular Medicine* (1), *IUBMB Life* (1), *iScience* (2), *Clinical Cancer Research* (1), *Cellular and Molecular Life Sciences* (1), *Future Medicinal Chemistry* (1), *Experimental Cell Research* (1), *Expert Review of Molecular Diagnostics* (1), *European Journal of Pharmacology* (1), *Journal of Histochemistry & Cytochemistry* (1), *Journal of Biochemical and Biophysical Methods* (1), and *The Oncogene Factsbook* (1).

Courses taught at Boston University

BI553 Molecular Biology II; Sp 1988-1999. This is a lecture course where I gave either 14

lectures (when co-taught) or 28 lectures (when fully taught by me).

BI583/584 Progress in Cell & Molecular Biology (co-taught);

Fall/Sp 1988-2005, 2009-present. This is a year-long graduate student seminar series. I organized this course, coordinate student speakers, and determine grades.

BI584 Seminar on Viral and Cellular Oncogenes; Spring, 1988. This was a graduate student seminar course taught by me. I gave three lectures in the course and arranged student topics and papers for other discussion sections.

BI421/621 Virology; Fall 1988. This was a lecture course completely developed and taught by me, I gave 26 lectures in this course.

BI582 Seminar in the Molecular Mechanisms of Carcinogenesis; Spring, 1998. Advanced seminar course. I gave 4 lectures in this course and arranged student and guest presentations.

BI497-498 Honors Seminar in Biology; 2018-19. Advanced seminar in writing and presentation for students doing Honors research in Biology.

BB522 Molecular Biology Laboratory; Spring, 2001-present. Undergraduate Laboratory in Molecular Biology. 29 lectures/labs.

BI576 Carcinogenesis. Spring, 2011-present. Lecture course, co-taught with Dr Kim McCall or Dr. John Tullai in some years.

BI581 Grant Writing Seminar. Fall, 2015, 2019. Seminar in grant writing for grad students.

Students and Post-Doctoral Fellows Supervised

Post-doctoral Fellows (2)

1. **Dr. Marieke Koedood Zhao**, 1995-1998 (supported by Fellowship from the Lymphoma Research Foundation). 1998-2004, Staff Scientist and Principal Research Scientist, Wyeth BioPharma, Andover, MA. 2008-2016, Principal Scientist, ImmunoGen, Waltham, MA. 2016-17, Consultant, MKZhao Consulting, Boston, MA. 2017-present, Associate Director Cell Line Development, Mersana Therapeutics, Cambridge, MA.

2. **Dr. Jean-Charles Epinat**, 1997-1999 (supported by a Fellowship from the World Health Organization). 1999-present, Collectis, Inc., Paris, France, currently Chief Technical Officer,

PhD Students (26)

1. **Paul Richardson**, 1987-1991, PhD. Post-doctoral fellow at Harvard Medical School with Dr. Leonard Zon, 1991-93; Senior Scientist at Leukosite, Inc., Boston, MA, 1993-95; Senior Scientist at Alphagen, Woburn, MA 1996; Production Manager, MIT Center for Genome Research, 1996-98; Senior Research Scientist then Head R&D, Lawrence Livermore Genome Center, 1998-2008; Vice President Research & Development, Progrentech, 2008-10; PR Consulting LLC, 2010-13; CEO, MicroTrek Inc., 2013-present.

2. **George Mosialos**, 1988-1993, PhD. Leukemia Society of America post-doctoral fellow at Harvard Medical School with Dr. Elliott Kieff, 1993-1996; Instructor at Harvard Medical School, 1996-1999; Assistant Professor at Harvard Medical School, 1999; Principal Investigator, Alexander Fleming Research Institute, Athens, Greece, 1999-2003; Professor, University of Thessaloniki, Greece, 2003-present.

3. **Anthony Capobianco**, 1988-1993, PhD. Post-doctoral fellow at University of California at San Francisco with Dr. J. Michael Bishop, 1993-98; Assistant Professor at the University of Cincinnati College of Medicine, 1998-2003; Associate Professor, Wistar Institute, 2003-08. Professor and Director, Program in Molecular Oncology, University of Miami Medical School, 2008-present.

4. **Patrice Morin**, 1990-1994, PhD. Post-doctoral fellow (1994-97) and Faculty Research Associate (1997) at Johns Hopkins Medical School with Dr. Bert Vogelstein; Senior Investigator and Chief of Cancer Genomics & Signaling Section, National Institute of Aging, Baltimore, MD, 1998-2012; Director of Grants Programs, American Association of Cancer Research, 2012-16; Executive Director Strategic Alliances, Abramson Cancer Center, Univ of Pennsylvania, 2016-present.

- 5. Sugata Sarkar**, 1988-1994, PhD. Post-doctoral fellow at Ariad Pharmaceuticals (1994-97) and Harvard Medical School (1997-99) with Dr. Joan Brugge; Intern, Office of Technology Licensing, Children's Hospital of Harvard Medical School, 1999-00; Biotechnology Patent and Licensing consultant in Germany, 2000-present.
- 6. Saïd Sif**, 1991-1995, PhD. Post-doctoral fellow at Massachusetts General Hospital with Dr. Robert Kingston (1995-00); Assistant/Associate Professor, Ohio State Medical School, 2000-14; Associate Professor, Qatar University, 2014-present.
- 7. David White**, 1993-1996, PhD. Post-doctoral fellow at Millennium Pharmaceuticals, Cambridge, MA with Dr. Louis Tartaglia, 1996-98; Senior Research Scientist, Millennium Pharmaceuticals, Cambridge, MA, 1998-2004; Director of Molecular & Cellular Pharmacology Research, Gene Logic, Inc., Cambridge, MA 2004-08; Vice President, Agios Pharmaceuticals, 2008-09; Senior Consultant, WDW Bio-Pharmaceuticals, 2009-10; Consultant, ThirdRock Ventures, Boston, MA 2010-11; Vice President of Metabolic Disease, Ember Therapeutics, Watertown, MA 2012-15; Vice President, Evelo Therapeutics, Cambridge, MA 2015-16; Professional Consultant, 5AM Ventures, 2016-present.
- 8. Margaret Barkett**, 1995-2000, PhD. Post-doctoral fellow at Boston University with Dr. Kimberly McCall, 2000-2003. Intern, MIT Technology Licensing Office, 2008-2009; Technology Licensing Associate, Nationwide Childrens Hospital, Columbus, OH 2010-present.
- 9. Kathryn Piffat**, 1993-2001, PhD. Industrial Patent Attorney at Edwards, Angell, Palmer & Dodge, 2002-11; at Edwards, & Wildman, 2011-13; Instructor, Boston University School of Law, 2013-15; Patent Law Attorney, Pearl Cohen, Boston, 2016-present.
- 10. Yuan Wang**, 1997-2002, PhD. Post-doctoral fellow at Children's Hospital of Harvard Medical School, Boston, MA with Dr. George Daley, 2002-06; Research Fellow, NIEHS, North Carolina, 2006-09; Principal Investigator, Institute of Biomedical Sciences, East China Normal University, Shanghai, 2009-present; Assistant Professor, Michigan State University, 2017-present.
- 11. Maria-Emily Gapuzan**, 1996-2003, PhD. Research Associate III, Cedars-Sinai Medical Center, Los Angeles, CA, 2003-05. JD, 2007, California Western School of Law. Project Director, EduStream/San Bernadino Community College District, 2009. Lab Manager: San Diego State University, 2010-present.
- 12. Daniel Starczynowski**, 2000-2005, PhD. Post-doctoral Fellow at the British Columbia Cancer Research Centre with Dr. Aly Karsan, 2005-10. Assistant/Associate/Full Professor, Children's Hospital-University of Cincinnati Medical School, 2010-present.
- 13. Demetrios Kalaitzidis**, 2000-2005, PhD. Post-doctoral Fellow at Harvard Medical School/Beth Israel Hospital with Dr. Benjamin Neel, 2006-2009; with Dr Gary Galliland, Harvard Medical School, 2008-2009; with Dr Scott Armstrong, Harvard Medical School, 2009-11. Instructor, Harvard Medical School, 2011-15; Associate Director, CRISPR Therapeutics, Cambridge, MA, 2015-present.
- 14. Mei-Chih Liang**, 2000-2005, PhD. Post-doctoral Fellow at the Dana Farber Cancer Research Center with Dr. Kwok-kin Wong, 2006-2010. Associate Professor, National Chiao Tung University, Taiwan, 2010-present.
- 15. Joshua Leeman**, 2002-2008, PhD. Scientist II, currently Associate Director of Business Development, Vertex Pharmaceuticals, Cambridge, MA 2008-18; Senior Director and Head of Search & Evaluation, uniQure, Lexington, MA, 2018-present.
- 16. Melanie Herscovitch**, 2005-2009, PhD. Operation Scientist and Associate Director of Marketing and Communications, Addgene, Cambridge, MA, 2009-12. Associate Director of Communications, Canadian Cancer Society, 2012-13; Regional Account Manager, Cellectis, Cambridge, MA 2013-14; Beckman Coulter Genomics, Sales Consultant, Danvers, MA 2014-16; Clinical Accounts Manager, Genomics, Agilent Technologies, 2016-present.
- 17. Michael Garbati**, 2002-2009, PhD. Post-doctoral Fellow, Boston University, 2009-10. Post-doctoral Fellow at the Portland Veterans Hospital with Dr Grover Bagby, 2010-17; Scientist, Active Motif, San Diego, CA, 2017-present.

18. Francis Wolenski, 2006-2012, PhD. Post-doctoral Fellow, Boston University 2012. Post-doctoral Fellow, Millennium Pharmaceuticals, 2012-14; Scientist, Millennium/Takeda Pharmaceuticals, 2014-present.

19. Emily Pace, 2007-2012, PhD. Scientist, Merrimack Pharmaceuticals, Cambridge, MA, 2012-14. Translational Scientist, Celgene, 2015-18; Biologist, Applied BioMath, 2018-present.

20. Ryan Thompson, 2008-13, PhD. Contract Scientist, Infinity Pharmaceuticals, Cambridge, MA, 2013. Associate Scientist, Agios Pharmaceuticals, Cambridge, MA 2013-14; Senior Project Manager, LGC Genomics, Manchester, NH, 2015-17; Senior Project Manager, Abcam, Cambridge, MA 2017-present.

21. Leila Haery, 2009-15, PhD. Post-doctoral Faculty Fellow, Boston University, 2015-16. Scientist II, Addgene, Watertown, MA, 2016-19; Investigator, Project Lead, Novartis Research Institute, 2019-present.

22. Joseph Brennan, 2014-18, PhD. Post-doc, Pfizer Pharmaceuticals, Cambridge, MA, 2018-present.

23. Katelyn Mansfield, 2014-19, PhD Candidate. Scientist, Biogen, Cambridge, MA, 2019-present.

24. Leah Williams, BS, Wheaton College, 2013. 2016-present, PhD Candidate, in progress

25. Chris DiRusso, BS, St. Mary College, 2013. 2017-present, PhD Candidate, in progress

26. Joshua Aguirre Carrion, BS, UMass Boston, 2016. 2017-present, PhD Candidate, in progress

Masters Students (41)

Helen Yeon, Library Research Paper Masters, 1990; **Blanca Gomendio**, Library Research Paper Masters, 1990; **Lu-Ann Pozzi**, Research Thesis Masters, 1990 (at Harvard Med School); **Kathryn Piffat**, Library Research Paper Masters, 1992; **John Childs**, Library Research Paper Masters, 1992; **Lori Zieran**, Library Research Paper Masters, 1993; **Adrian Codel**, Library Research Paper Masters, 1994; **Jacqueline DePaulo**, Library Research Paper Masters, 1995; **Jessica Downs**, Research Thesis Masters, 1995; **Eric Walsh**, Library Research Paper Masters, 1996; **Paula Acierno**, Library Research Paper Masters, 1996; **Amal Al-Garawi**, Library Research Paper Masters, 1996; **Tracey Budzinski**, Library Research Paper Masters, 1996; **Rami Najjar**, Library Research Paper Masters, 1996; **Heng-Hsui Hsu**, Library Research Paper Masters, 1997; **Sophie Shen**, Library Research Paper Masters, 1997; **Stacey May**, Library Research Paper Masters, 1997; **Thomas Brown**, Library Research Paper Masters, 1998; **Daniel Harkness**, Research Masters, 1998; **Viradeth Phiuphonphan**, Library Research Paper Masters, 1999; **Soheun Choo**, Library Research Paper Masters, 1999; **Danielle Ablamsky**, Research Masters, 2001; **Jennifer Scarpati**, Library Research Paper Masters, 2002; **Anthony Faber**, Library Research Paper Masters, 2003; **Joseph Reynolds**, Research Masters, 2003; **John Ok**, Research Masters, 2003; **Tina Marfatia**, Research Masters, 2003; **Sheila Yong**, Research Masters, 2005; **Ashley Pollock**, Research Masters, 2005; **Vincent DiGiacomo**, Research Masters, 2006; **Courtney French**, Research Masters, 2007; **Vanessa Chiu**, Research Masters, 2007; **Alexis Clough**, Research Masters, 2009; **Ian Zhao**, Research Masters, 2010; **Ahalya Kodali**, Research Masters, 2010; **Melanie Baird**, Research Masters, 2010; **Alan Yeo**, Research Masters, 2011; **Bhaven Mehta**, Research Masters, 2012; **Ashley Power**, Research Masters, 2013; **Michael Gardner**, 2013-14; **Marinaliz Reynoso**, 2014-15

Undergraduate Research Students (101)

Joyce Tay, Honors Research, 1989; **Alfredo Sabbaj**, Directed Research, 1989; **Adrienne Denny**, Directed Research, 1990; **J Dawn Conklin**, Honors Research, 1991; **David Chang**, Honors Research, 1992; **Gita Subramanian**, Directed Research and Honors Research, 1992-93; **Joanne Quiñones**, Honors Research, 1993; **Rashel Feinstein**, Honors Research (Hughes Fellowship), 1993-94; **Marc Suárez**, Summer Research (NSF Fellowship), 1993;

Ahmed Suliman, Summer Research (NSF Fellowship), 1993; **Peter Crompton**, Honors Research (Hughes Fellowship), 1994-95; **Pamela Wright**, Summer Research (NSF fellowship), 1994; **Jasmine Dave**, Honors Research (Hughes Fellowship), 1995-96; **Sidong Huang**, Honors Research (Hughes Fellowship), 1995-96; **Steven Petros**, Honors Research (Hughes Fellowship), 1996-97; **Karen Lee**, Summer Research (NSF Fellowship), 1996; **Julia Dooher**, Summer Research (NSF Fellowship), 1997; **Dickran Kazandjian**, Honors Research (NSF and Hughes Fellowships), 1997-99; **Kerry Murphy**, Honors Research (Hughes Fellowship), 1997-98; **LaVone Simmons**, Summer Research (NSF Fellowship), 1998; **Lori Lemonnier**, Honors Research, 1998-99; **Evan Dvorin**, Honors Research (Hughes Fellowship), 1999-00; **Pavel Yufit**, Honors Research (NSF Fellowship), 1999-00; **Catherine Cormier**, Honors Research (Beckman Scholar), 1999-01; **Beevash Ray**, Summer Research (NSF Fellowship), 2000; **Troy Holder**, Summer Research (Minority Undergraduate Research Fellowship), 2000, 2001; **Baron Ziegler**, Honors Research, 2000-01; **Tammy Holm**, Honors Research, 2000-01; **Allison Gerber**, Directed Research, 2000; **Emily Pace**, Directed Research, 2000-02; **Juhee Kim**, Summer Research (NIH Research Fellowship), 2001, Directed Research, 2002; **Sarika Das**, Summer Research (NSF Fellowship), 2001; **Benedicte Rabier**, Summer Research (French Fellowship), 2001; **Meghan Porter-Mahoney**, Summer Research, 2001; **John Ok**, Directed Research, 2002-03; **Rebecca Richards**, Summer Research (NSF Fellowship), 2002; **Konrad Kulikowski**, Summer Research (NIH Fellowship), 2002; **Vineet Prabhu**, Summer Research, 2002, 2003; Directed Research, 2002-03; Honors Research, 2003-04; **Diana Rosman**, Directed Research, 2002-03; **Tina Marfatia**, Directed Research, 2003; **Joseph Khabbaza**, Summer Research (NIH Fellowship), 2003; **David Gorkin**, Summer Research and Honors Research, 2003-04; **Ashley Pollock**, Summer Research and Directed Research, 2003-04; **Shelia Yong**, Summer Research and Honors Research, 2003-04; **Darcy Hutchinson**, Directed Research, 2004-05; **Angela Pardee**, Directed Research, 2004-05; **William Comb**, Directed Research, 2005-06; **Jonathan Africa**, Honors Research, 2005-06; **Kate Coleman**, Directed Research, 2006-07; **Haley Goucher**, Directed Research, 2006-07; **Nasen Zhang**, Honors Research, 2006-07; **Kristina Costa**, PROSTARS Summer Research, 2007; **Brinda Armstead**, Summer Research, 2007; **Melissa Chin**, Beckman Scholar, 2006-08; **Tom Ennis**, Honors Research, 2007-08; **Erica Dresselhaus**, 2007-08, Honors Research; **Anu Hazra**, Directed Research, 2007-08, **Moritz Brueggemann**, NSF-Summer Research, 2008; **Rosimar Zargoza-Rivera**, NSF-Summer Research, 2008; **Brendan Horton**, 2008-09, Honors Research; **Natasha Gill**, Directed Research, 2008-09; **Tyler Ford**, Beckman Scholar, 2008-10; **Ning Jiang**, Directed Research, 2009-10; **Gökçen Alco**, PROSTARS NSF Summer Research, 2009; **Siloe Alvarado**, NSF-Summer Research, 2009; **Alan Yeo**, Directed Studies, 2009-11; **Nicole Repina**, Summer Research and Directed Research, 2010-11; **Kevin Vargas Feliciano**, NSF-Summer Research, 2010; **Kate Zulauf**, Directed Research, 2010-11; **Kimberley Glover**, Summer and Directed Research, 2010-12; **Ashley Power**, Work Study and Summer Research 2010-12; **Mike Patlajan**, Directed Research 2011; **Kenny Moreno**, PROSTARS Summer Research, 2011; **Julian Lugo-Pico**, NSF Summer Research, 2011; **Maria Liberti**, NSF Summer Research, 2012; **Iosif Vardinogiannis**, Summer Research, 2012; **Urs Weber**, 2012-14; **Amy Acevedo**, NSF-Summer Research, 2013; **Marinaliz Reynoso**, Summer and Directed Studies 2013-14; **Audrey Lambert**, Beckman Scholar, 2013-15; **Nicole Carter**, Directed Research, 2014-15; Beckman Scholar 2015-17; **Anara Alshanbayeva**, Directed Research, 2014-15; **Suhaily Penix**, NSF Summer Research, 2014-15; **Larisa Kagermazova**, Directed Research, 2015-16 ; **Sultan Mussakhan**, Kazakh Summer Fellowship, 2015; **Amber Thiel**, Summer and Fall Research, 2015; **Jonathan Messerschmidt**, Directed Studies, Beckman Scholar, 2015-18; **Milad Babaei**, Summer and Directed Research, 2016-18; **Eric Salas Rodriguez**, NSF Summer Research, 2016; **Yuekun Liu**, Summer and Academic Research 2016- ; **Monique Pedroza**, NSF Summer Research, 2017; **Emily Van Vlack**, Directed Research, 2017-; **Joshua Tingson**, NSF Summer Research, 2018; **Alexia Kotorov**, Summer Research, 2018;

Michelle Inge, Summer and Academic year Research, 2018-; **Ethan McCaslin**, Directed Research, 2018-present; **Jason Samaroo**, NSF Summer Research, 2019; **Ebubechi Adindu**, NSF Summer Research, 2019; **Sainetra Sridhar**, Summer and Academic year, 2019-; **Danielle Tong**, Academic year research, 2019-; **Alexandra Luther**, Academic year reseach, 2019-

High School Research Students (13)

Alison Snodgras, **Lawrence Sulak**, **Daniel Aaron**, **Sameer Patel**, **Donald Lei**, **Geetha Gowda**, **Julie Welsh**, **Karen Ruiz Moreno**, **Anna Rasmussen**, **Anvitha Addanki**, **Shannon Chang**

