

CURRICULUM VITAE

Personal Data:

Name: John H. J. Petrini
Date of Birth: May 30, 1960
Place of Birth: Detroit, MI
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Education:

1982 BA Kalamazoo College
Kalamazoo, MI
1988 Ph. D. University of Michigan Medical School
Ann Arbor, MI

Post-doctoral training:

1988-1989 Postdoctoral Associate, Fox Chase Cancer Center.
In the laboratory of Dr. M. J. Bosma
1989-1994 Postdoctoral Associate, Dana-Farber Cancer Institute,
Harvard Medical School. In the laboratory of Dr. David
T. Weaver.

Academic Appointments:

1994-1999 Assistant Professor, Department of Medical Genetics
University of Wisconsin Medical School
1999-2002 Associate Professor (with tenure), Department of Medical
Genetics, University of Wisconsin Medical School
2002-Present Member, Memorial Sloan Kettering Cancer Center
2002-Present Professor, Weill Graduate School of Medical Sciences at Cornell
University
2016-Present Chair, SKI Molecular Biology Program

Service:

2003-2014 Founding Organizer, Genome Integrity Discussion Group New
York Academy of Sciences
2006-2008 Adhoc member, MGB Study Section
2008-2012 Member, Cancer Etiology Study Section
2009-2012 Member, CPRIT Review Panel BR3
2009-2010 FASEB meeting on Genetic Recombination – Co Organizer
2011-2012 FASEB meeting on Genetic Recombination and Genome
Rearrangements – Organizer
2012-2013 Barcelona BioMed Conference on “The DNA damage response in
human disease” – Co Organizer

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| 2012-2024 | Member of Executive Committee, American-Italian Cancer Foundation Scientific Advisory Board |
| 2014-Present | Chair, External Advisory Board of the Basser Center at the University of Pennsylvania |
| 2014-Present | Member, CPRIT Review Panel BR3 |
| 2014-Present | SKI Committee on Appointments and Promotions |
| 2014-Present | Member, Executive Committee, MSKCC Center for Metastasis Research |
| 2014-Present | Director and Founder, MSKCC Functional Genomics Initiative |
| 2014-Present | Member, Data Usage Committee, Center for Molecular Oncology |
| 2015-2018 | Member, Executive Committee, MSKCC GMTEC Committee |
| 2016-2020 | Member, Executive Committee, MSKCC Immunogenomics and Personalized Oncology Platform |
| 2019-2023 | Member, Executive Committee, Basic Research Innovation Award |
| 2019-Present | Member, Executive Committee, American Association for Cancer Research |
| 2021 | Member, SAB MSKCC Pathology Department Committee |
| 2021 | Member, Faculty Recruitment Committee, SKI |
| 2021 | Internal Advisory Board for the Tow Center for Developmental Oncology |
| 2024 | Member, MH Research Data Governance Committee |
| 2024-Present | Member, ICRF Scientific Review Panel |

Editorial Boards

| | |
|--------------|---|
| 1999-2003 | Member of Editorial Board, Mutation Research |
| 1999-2002 | Member of Editorial Board, Molecular and Cellular Biology |
| 2005-2012 | Senior Editor, Molecular Cancer Research |
| 2009-2013 | Joint Editor-in-Chief, Genome Integrity |
| 2010-2018 | Board of Review Editors, Science |
| 2021-Present | Member of Editorial Board, NAR Cancer |

Awards and Fellowships:

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|-----------|---|
| 1993-1996 | Leukemia Society of America Special Fellowship |
| 1995-1997 | ACS Research Grant Recipient |
| 1995-1996 | Collaborative Research Award (UW Medical School) |
| 1996-1998 | Basil O'Connor Scholar of The March of Dimes Foundation |
| 1996-2000 | Milwaukee Foundation Shaw Scientist Award |
| 1999-2000 | Human Frontiers Research Grant Awardee |
| 2000-2001 | Radiation Research Society Michael Fry Award. |
| 2002-2006 | The Joel and Joan Smilow Initiative for Research in Genomic Integrity |

2005-Present
2012-2022

Paul A. Marks Chair in Molecular Cell Biology
NIGMS MERIT Award

Student research preceptorships:

| | | |
|----------------------------|--------------|---------------------------------|
| Debra A. Bressan | 1994 to 1999 | UW Graduate student in Genetics |
| Richard S. Maser | 1994 to 2000 | UW Graduate student in Genetics |
| Junyu Lin | 1998 to 1999 | UW Graduate student in Genetics |
| Carla F. Bender | 1998 to 2002 | UW Graduate student in Genetics |
| Bret Williams | 1999 to 2005 | UW CMB Graduate student |
| Chantal Ly | 1999 to 2002 | UW CMB Graduate student |
| Santos Franco | 2001 to 2002 | UW CMB Graduate student |
| James Flemming | 2003 to 2004 | Cornell MCB Graduate student |
| Jan Theunissen | 2001 to 2005 | Cornell MCB Graduate student |
| Carrie Adelman | 2002 to 2008 | Cornell MCB Graduate student |
| Muge Akpinar | 2008 to 2010 | GSK Graduate student |
| Kendall Olsen | 2009 to 2010 | GSK Graduate student |
| Esther Sanchez de Leon Ley | 2017 to 2023 | Cornell BCMB Graduate Student |
| Hexiao Wang | 2017 to 2023 | Cornell BCMB Graduate Student |

Publications:

(⇒ Indicates shared senior authorship)

1. Szurek, P., **Petrini, J.H.** and Dunnick W. (1985). *Complete nucleotide sequence of the murine gamma 3 switch region and analysis of switch recombination sites in two gamma 3-expressing hybridomas.* J Immunol, **135**. 620-626.
2. **Petrini, J.H.**, Shell, B., Hummel, M., and Dunnick, W. (1987). *The immunoglobulin heavy chain switch: structural features of gamma 1 recombinant switch regions.* J Immunol, **138**. 1940-1946.
3. Carroll, A.M., Hardy, R.R., **Petrini, J.H.**, and Bosma, M.J. (1989). *T cell leakiness in scid mice.* Curr Top Microbiol Immunol, **152**. 117-123.
4. **Petrini, J.H.**, and Dunnick W.A. (1989). *Products and implied mechanism of H chain switch recombination.* J Immunol, **142**. 2932-2935.
5. **Petrini, J.H.**, Carroll A.M., and Bosma M.J. (1990). *T-cell receptor gene rearrangements in functional T-cell clones from severe combined immune deficient (scid) mice: reversion of the scid phenotype in individual lymphocyte progenitors.* Proc Natl Acad Sci U S A, **87**. 3450-3453.
6. Schultz, C., **Petrini, J.H.**, Collins, J., Claflin, J.L., Denis, K.A., Gearhart, P., Gritzmacher, C., Manser, T., Schulman, M., and Dunnick, W. (1990). *Patterns and extent of isotype-specificity in the murine H chain switch DNA rearrangement.* J Immunol, **144**. 363-370.
7. **Petrini, J.H.**, Huwiler K.G., and Weaver D.T. (1991). *A wild-type DNA ligase I gene is expressed in Bloom's syndrome cells.* Proc Natl Acad Sci U S A, **88**. 7615-7619.
8. Vivier, E., Rochet, N., Ackerly, M., **Petrini, J.H.**, Levine H., Daley J., and Anderson, P. (1992). *Signaling function of reconstituted CD16: zeta: gamma receptor complex isoforms.* Int Immunol, **4**. 1313-1323.

9. **Petrini, J.H.**, Donovan, J.W., Dimare, C., and Weaver, D.T. (1994). *Normal V(D)J coding junction formation in DNA ligase I deficiency syndromes*. J Immunol, **152**. 176-183.
10. **Petrini, J.H.**, Walsh, M.E., DiMare C., Chen, X.N., Korenberg, J.R. and Weaver, D.T. (1995). *Isolation and characterization of the human MRE11 homologue*. Genomics, **29**. 80-86.
11. **Petrini, J.H.**, Y. Xiao, and Weaver, D.T. (1995). *DNA ligase I mediates essential functions in mammalian cells*. Mol Cell Biol, **15**. 4303-4308.
12. Dolganov, G.M., Maser, R.S., Novikov, A., Tosto, L., Chong, S., Bressan, D.A., and **Petrini, J.H.**, (1996). *Human Rad50 is physically associated with human Mre11: identification of a conserved multiprotein complex implicated in recombinational DNA repair*. Mol Cell Biol, **16**. 4832-4841.
13. Maser, R.S., Monsen, K.J., Nelms, B.E., and **Petrini, J.H.** (1997). *Mre11 and hRad50 nuclear foci are induced during the normal cellular response to DNA double-strand breaks*. Mol Cell Biol, **17**. 6087-6096. PMID: PMC232458
14. **Petrini, J.H.**, Bressan, D.A. and Yao, M.S. (1997). *The RAD52 epistasis group in mammalian double strand break repair*. Semin Immunol, **9**. 181-188. PMID: 9200329
15. Bressan, D.A., Olivares, H.A., Nelms, B.E., and **Petrini, J.H.** (1998). *Alteration of N-terminal phosphoesterase signature motifs inactivates Saccharomyces cerevisiae Mre11*. Genetics, **150**. 591-600. PMID: PMC1460356
16. Carney, J.P., Maser R.S., Olivares, H., Davis, E.M., Le Beau, M., Yates JR 3rd, Hays, L., Morgan W.F., and **Petrini, J.H.** (1998). *The hMre11/hRad50 protein complex and Nijmegen breakage syndrome: linkage of double-strand break repair to the cellular DNA damage response*. Cell, **93**. 477-486.
17. Nelms, B.E., Maser, R.S., MacKay, J.F., Lagally M.G., and **Petrini, J.H.** (1998). *In situ visualization of DNA double-strand break repair in human fibroblasts*. Science, **280**. 590-592.
18. Bressan, D.A., Baxter, B.K. and **Petrini, J.H.** (1999). *The Mre11-Rad50-Xrs2 protein complex facilitates homologous recombination-based double-strand break repair in Saccharomyces cerevisiae*. Mol Cell Biol, **19**. 7681-7687.
19. Luo, G., Yao, M.S. Bender, C.F., Mills, M., Bladl, A.R., Bradley, A. and **Petrini, J.H.**, (1999). *Disruption of mRad50 causes embryonic stem cell lethality, abnormal embryonic development, and sensitivity to ionizing radiation*. Proc Natl Acad Sci U S A, **96**. 7376-7381.
20. **Petrini, J.H.** (1999). *The mammalian Mre11-Rad50-nbs1 protein complex: integration of functions in the cellular DNA-damage response*. Am J Hum Genet, **64**. 1264-1269.
21. ⇨ Stewart, G.S., Maser, R.S., Stankovic, T., Bressan, D.A., Kaplan, M.I., Jaspers, N.G., Raams, A., Byrd, P.J., **Petrini, J.H.**, and Taylor, A.M. (1999). *The DNA double-strand break repair gene hMRE11 is mutated in individuals with an ataxia-telangiectasia-like disorder*. Cell, **99**. 577-587.
22. Girard, P.M. Foray, N., Stumm, M., Waugh, A., Riballo, E., Maser, R.S., Phillips, W.P., **Petrini, J.H.**, Arlett, C.F., and Jeggo, P.A. (2000). *Radiosensitivity in Nijmegen Breakage Syndrome cells is attributable to a repair defect and not cell cycle checkpoint defects*. gir., **60**. 4881-4888.
23. Lim, D.S., Kim, S.T., Xu, B., Maser, R.S., Lin, J., **Petrini, J.H.**, and Kastan, M.B. (2000). *ATM phosphorylates p95/nbs1 in an S-phase checkpoint pathway*. Nature, **404**. 613-617.
24. **Petrini, J.H.** (2000). *When more is better*. Nat Genet, **26**. 257-258.

25. **Petrini, J.H.** (2000). *The Mre11 complex and ATM: collaborating to navigate S phase*. *Curr Opin Cell Biol*, **12**. 293-296.
26. Wu, X., **Petrini, J.H.**, Heine W.F., Weaver D.T., Livingston, D.M. and Chen, J. (2000). *Independence of R/M/N focus formation and the presence of intact BRCA1*. *Science*, **289**. 11.
27. Zhu, X.D., Kuster, B., Mann, M. **Petrini, J.H.**, and de Lange, T. (2000). *Cell-cycle-regulated association of RAD50/MRE11/NBS1 with TRF2 and human telomeres*. *Nat Genet*, **25**. 347-352.
28. **Petrini, J.H.** (2000). *S phase functions of the Mre11 complex*. *CSHSQB*, **65**. 405-411.
29. De Lange, T. and **Petrini, J.H.** (2001). *A new connection at human telomeres: association of the Mre11 complex with TRF2*. *CSHSQB*, **65**. 265-273.
30. Maser, R.S., Zinkel R., and **Petrini, J.H.** (2001). *An alternative mode of translation permits production of a variant NBS1 protein from the common Nijmegen breakage syndrome allele*. *Nat Genet*, **27**. 417-421.
31. Maser, R.S., Bressan D.A., and **Petrini, J.H.** (2001). *The Mre11-Rad50 Complex: Diverse Functions in the Cellular DNA Damage Response*, in *DNA Damage and Repair*, M.F. Hoekstra and J.A. Nickoloff, Editors. Humana Press: Totowa.
32. Mirzoeva, O.K. and **Petrini, J.H.** (2001). *DNA damage-dependent nuclear dynamics of the Mre11 complex*. *Mol Cell Biol*, **21**. 281-288.
33. ⇨Usui, T., Ogawa H., and **Petrini, J.H.** (2001). *A DNA damage response pathway controlled by Tel1 and the Mre11 complex*. *Mol Cell*, **7**. 1255-1266.
34. Maser, R.S., Mirzoeva, O.K., Wells, J., Olivares, H., Williams, B.R., Zinkel, R.A., Farnham, P.J., and **Petrini, J.H.** (2001). *The MRE11 complex and DNA replication: linkage to E2F and sites of DNA synthesis*. *Mol Cell Biol*, **21**. 6006-6016.
35. Lee, S. E., Bressan, D. A., **Petrini, J.H.**, and Haber, J. E. (2002). *Complementation between N-terminal Saccharomyces cerevisiae mre11 alleles in DNA repair and telomere length maintenance*. *DNA Repair*, **1**. 27-40.
36. Bender, C. F., Sikes M. L., Sullivan R., Huye L.E., Le Beau M. M., Roth D. B., Mirzoeva, O.K., Oltz E. M., and **Petrini, J.H.** (2002). *Cancer predisposition and hematopoietic failure in Rad50S/S mice*. *Genes Dev*, **16**. 2237-2251.
37. Williams, B. R., Mirzoeva, O. K., Morgan, W. F., Lin, J., Dunnick, W. and **Petrini, J.H.** (2002). *A murine model of Nijmegen breakage syndrome*. *Current Biology*, **12**. 648-653.
38. Falck, J., **Petrini, J.H.**, Williams, B. R., Lukas, J., and Bartek, J. (2002). *The DNA damage-dependent intra--S phase checkpoint is regulated by parallel pathways*. *Nat Genet*, **30**. 290-294.
39. ⇨Hopfner, K. P., Craig, L., Moncalian, G., Zinkel, R.A., Usui, T., Owen, B.A., Karcher, A., Henderson, B., Bodmer, J.L., McMurray, C.T., Carney, J. P., **Petrini, J.H.**, and Tainer, J. A. (2002). *The Rad50 molecular hook: a novel structure underlying Mre11 complex functions in DNA recombination and repair*. *Nature*, **418**. 562-566.
40. Mirzoeva, O. K. and **Petrini, J.H.** (2003). *DNA Replication-dependent nuclear dynamics of the Mre11 complex*. *Mol Can Res*, **1**. 207-218.
41. **Petrini, J.H.**, and Stracker T. H. (2003). *The cellular response to DNA double strand breaks: defining the sensors and mediators*. *Trends Cell Biology*, **13**. 458-462.
42. Theunissen, J-W. F., Kaplan, M. I., Hunt, P. A., Williams, B. R., Furguson, D. O., Alt, F. W., and **Petrini, J.H.** (2003). *Checkpoint failure and chromosomal instability without lymphomagenesis in Mre11^{ATLD1/ATLD1} mice*. *Mol Cell*, **12**. 1511-23.

43. Borde, V., Lin, W., Novikov, E., **Petrini, J.H.**, Lichten, M., and Nicolas, A. (2004). *Association of Mre11p with double strand break sites during yeast meiosis*. Mol Cell, **13**. 389-401.
44. **Petrini, J.H.** and Theunissen. J-W. F. (2004). *Double strand break metabolism and cancer susceptibility: Lessons from the Mre11 complex*. Cell Cycle, **3**. 541-542.
45. Stracker, T.H. Theunissen J-W. F. Morales, M. and **Petrini, J.H.** (2004). *The Mre11 complex and the metabolism of chromosome breaks: the importance of communicating and holding things together*. DNA Repair, **3**. 845-854.
46. Karlseder, J. Hoke, K. Mirzoeva, O. K. Bakkenist, C. Kastan, M. B. **Petrini, J.H.**, and de Lange T. (2004). *The telomeric protein TRF2 binds the ATM kinase and can inhibit the ATM dependent DNA damage response* PloS Biol, **2**. 1150-1156.
47. Shroff, R. Arbel-Eden, A. Pilch, D. Ira, G. Bonner, W. M. **Petrini, J.H.**, Haber, J. E. and Lichten, M. (2004). *Distribution and dynamics of chromatin modification induced by a defined DNA double strand break*. Current Biology, **14**. 1703-1711.
48. Wiltzius. Jed J. W., Hohl. Marcel, Fleming James C., **Petrini, J.H.** (2005). *The Rad50 hook domain is required for Mre11 complex functions in DNA repair, telomere maintenance and meiotic double strand break formation*. Nat Struct Mol Biol, **12**. 403-407.
49. Chiolo, I., Carotenuto, W., Maffioloetti, G., **Petrini, J.H.**, Foiani, M., and Liberi, G. (2005). *Srs2 and Sgs1 DNA helicases associate with Mre11 in different sub-complexes following checkpoint activation and CDK1-mediated Srs2 phosphorylation*. Mol Cell Biol, **25**. 5738-5751.
50. Levran, O., Attwooll, C., Henry, R.T., Milton, K.L., Neveling, K., Rio, P., Batish, S.D., Kalb, R., Velleuer, E., Barral, S., Ott, J., **Petrini, J.H.**, Schindler, D., Hanenberg, H., and Auerbach, A.D. (2005). *The BRCA1-interacting helicase BRIP1 is deficient in Fanconi anemia*. Nat Genet, **37**. 931-933.
51. Theunissen J-W. F., **Petrini, J.H.** (2005). *Methods for studying the cellular response to DNA damage: influence of the Mre11 complex on chromosome metabolism*. Methods Enzymol, **409**. 251-284.
52. Adelman, C., **Petrini, J.H.**, and Attwooll, C. (2005) *Modeling Disease in the Mouse: Lessons from DNA Damage Response and Cell Cycle Control Genes*. J Cell Biochem, **97**. 459-473.
53. Morales, M, Theunissen, JWF, Bender Kim, CF, Kitagawa, R, Kastan, M. B., **Petrini, J.H.** (2005). *The Rad50S allele promotes ATM-dependent DNA damage responses and suppresses ATM deficiency: Implications for the Mre11 complex as a DNA damage sensor*. Genes Dev, **19**. 3043-3054.
54. **Petrini, J.H.** (2005). *At the end, remodeling leads to eviction*. Nat Struct Mol Biol, **12**. 1028-1029.
55. Heikkinen K, Rapakko K, Karppinen SM, Erkkö H, Knuutila S, Lundan T, Mannermaa A, Borresen-Dale, AL, Borg A, Barkardottir RB, **Petrini, J.H.**, Winqvist R. (2006). *RAD50 and NBS1 are breast cancer susceptibility genes associated with genomic instability*. Carcinogenesis, **8**. 1593-1599. PMC3006189
56. Usui, T., **Petrini, J.H.**, (2007) *The S. cerevisiae 14-3-3 Proteins Bmh1 and Bmh2 Directly Influence the DNA Damage-Dependent Functions of Rad53*. Proc Natl Acad Sci, **104**. 2797-2802. PMC1797148
57. Krishna, S., Wagener, B., Liu, Hui Ping, Sterk, R., **Petrini, J.H.**, Nickoloff, J. (2007). *Mre11 and Ku regulation of double-strand break repair by gene conversion and break-induced replication* DNA Repair, **6**. 797-808. PMC1948817
58. Cherry, S.M., Adelman, C.A., Theunissen, J.W., Hassold, T.J., Hunt, P.A., **Petrini, J.H.** (2007) *The Mre11 Complex Influences DNA Repair, Synapsis, and Crossing Over in Murine Meiosis*. Curr Biol, **17**. 373-378. PMC1839861

59. Stracker, T.H., Morales, M., Couto, S.S., Hussein, H., **Petrini, J.H.** (2007) *The C-terminus of Nbs1 is required for Mre11 complex dependent induction of apoptosis.* Nature, **447**. 218-223. PMC5994899
60. Kim, H., Vijayakumar, S., Reger, M., Harrison, J., Haber, J.E., Weil, C., **Petrini, J.H.** (2008) *Functional interactions between Sae2 and the Mre11 complex.* Genetics, **178**. 711-723. PMC2248341
61. Morales, M., Liu, Y., Laiakis, E. C., Morgan, W.F., Nimer, S. D., **Petrini, J.H.** (2008) *DNA damage signaling alters the behavior of primitive hematopoietic cells: A role for Mre11 complex-mediated repair of topoisomerase lesions.* Can Res, **68**. 2186-2193. PMC3950343
62. Adelman, C., **Petrini, J.H.** (2008) *ZIP4H (TEX11) Deficiency in the Mouse Impairs Meiotic Double Strand Break Repair and the Regulation of Crossing Over.* PLoS Genet, **4**. e1000042. PMC2267488
63. Stracker, T.H., Cuoto, S.S., Cardon-Cardo, C., Matos, T., **Petrini, J.H.** (2008) *Chk2 suppresses the oncogenic potential of DNA replication-associated DNA damage.* Mol Cell, **31**. 21-32. PMC2586815
64. Stracker, T.H., **Petrini, J.H.** (2008) *Working together and apart: the twisted relationship of the Mre11 complex and Chk2 in apoptosis and tumor suppression.* Cell Cycle, **23**. 3618-3621. PMC2994099
65. Stracker, T.H., Williams, B.R., Deriano, L., Theunissen, J.W., Adelman, C.A., Roth, D.B., and **Petrini, J.H.** (2009) *Artemis and NHEJ -independent influence of DNA-PKcs on chromosome stability.* Mol Cell Biol, **29**. 503-514. PMC2612508
66. Adelman, C., De, S., **Petrini, J.H.** (2009) *Rad50 is dispensable for the maintenance and viability of post-mitotic tissues.* Mol Cell Biol, **29**. 483-492. PMC2612516
67. Shull, Erin R. P., Lee, Youngsoo, Nakane, H., Stracker, T. H., Zhao, J., Russell, H. R., **Petrini, J.H.** and McKinnon, P. J. (2009). *Differential DNA damage signaling accounts for distinct neural apoptotic responses.* ATLD and NBS. Genes Dev, **23**. 171-80. PMC2648541
68. Usui, T., Foster, S. S., and **Petrini, J.H.** (2009) *Maintenance of the DNA damage checkpoint requires DNA damage-induced mediator protein oligomerization.* Mol Cell, **33**. 147-159. PMC2995296
69. Deriano, L., Stracker, T.H., Baker, A., **Petrini, J.H.**, Roth, D.B., (2009) *Roles for NBS1 in alternative and joining of V (D) J recombination intermediates.* Mol Cell, **34**. 13-25. PMC2704125
70. Adelman, C., **Petrini, J.H.** (2009) *Division Of Labor: DNA repair and the cell cycle specific functions of the Mre11 Complex.* Cell Cycle, **8**. 1-5. PMC3059805
71. Halberg, R., Waggoner, J., Rasmussen, K., White, A., Clipson, L., Prunuske, A., Bacher, J., Sullivan, R., Washington, M., Pitot, H., **Petrini, J. H.**, Albertson, D., Dove, W. (2009) *Long-lived Min Mice Develop Advanced Intestinal Cancers through a Genetically Conservative Pathway.* Can Res, **69**. 5768-75. PMC2775466
72. **Petrini, J.H.** (2009) *DNA Replication Reaches the Breaking Point.* Cell, **137**. 211-212. PMC392878
73. Stracker, TH, Usui, T., **Petrini, J.H.** (2009) *Taking the time to make important decisions: The checkpoint effector kinases Chk1 and Chk2 and the DNA damage response.* DNA Repair, **8**. 1047-1054. PMC2725228
74. Attwool, C. Akpinar, M., **Petrini, J.H.** (2009) *The Mre11 Complex and Response to Dysfunctional Telomeres.* Mol Cell Biol, **20**. 5540-51. PMC2756889
75. Brungmans, L., Verkaik, N., Kunen, M., Van Drunen, E., Williams, B., **Petrini, J.H.**, Kanaar, R., Essers, J., Van Gent, D. (2009) *NBS1 cooperates with homologous recombination to counteract chromosomes breakage during replication.* DNA Repair, **8**. 1363–1370. PMC2995292
76. Squatrito, M., Brennan, C.W., Helmey, K., Huse T., **Petrini, J.H.**, Holland, E. (2010) *Loss of ATM/Chk2/p53 pathway components accelerates tumor development and contributes to radiation resistance in gliomas.* Cancer Cell, **18**. 619-29. PMC3828087

77. Stracker, T.H., **Petrini, J.H.** (2011) *The MRE11 Complex: Starting from the ends*. Nat Rev Mol Cell Biol, **12**. 90-103. PMC3905242
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79. Foster, S., Balestrini, A., **Petrini, J.H.** (2011) *Functional interplay of the Mre11 nuclease and Ku in the response to replication-associated DNA damage*, Mol Cell Biol, **31**. 4379-4389 PMC3209331
80. Foster, S., De, S., Johnson, L.K., **Petrini, J.H.**, Stracker, T.H., (2012) *Cell cycle and DNA repair pathway specific effects of apoptosis on tumor suppression*. Proc Natl Acad Sci, **109**. 9953-9958 PMC3382548
81. Lovejoy, C., Li, W., Reisenweber, S., Thongthip, S., Bruno, J., De Lange, T., De, S., **Petrini, J.H.**, Sung, P.A., Jasin, M., Rosenbluh, J., Zwang, Y., Weir, B.A., Hatton, C., Ivanova, E., Macconaoil, L., Hanna, M., Hahn, W.C., Lue, N.F., Reddel, R.R., Jiao, Y., Kinzler, K., Vogelstein, B., Papadopoulos, N., Meeker, A.K., (2012) *Loss of ATRX, Genome Instability, and an Altered DNA Damage Response are Hallmarks of the Alternative Lengthening of Telomeres Pathway*. PLoS Genet, **7**. PMC3400581
82. Tittel-Elmer, M., Lengronne, A., Davidson, M., Bascal, J., Francois, P., Hohl, M., **Petrini, J.H.**, Pasero, P., Cobb, J. (2012) *Cohesin association to replication sites depends on Rad50 and promotes fork restart*. Mol Cell, **48**. 98-108. PMC3904740
83. Wohbold, L., Merrick, K., De, S., Amat, R., Kim, J., Larochele, S., Allen, J., Zhang, C., Shokat, K., **Petrini, J.H.**, Fisher, R. (2012) *Chemical genetics reveals a specific requirement for Cdk2 activity in the DNA damage response and identifies Nbs1 as a Cdk2 substrate in human cells*. PLoS Genet, **8**. PMC3426557
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