

Curriculum Vitae

Anne Brunet, PhD

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Education

1992 BS Biology, Ecole Normale Supérieure, Paris, France
1992–1997 PhD, Dr Jacques Pouysségur's laboratory, University of Nice, France
1998–2003 Post-doctoral training, Dr Michael Greenberg's laboratory, Harvard Medical School, MA

Professional Experience

09/1992–12/1997 Graduate student, Jacques Pouysségur's laboratory, University of Nice, France
01/1998–12/2003 Post-doctoral fellow, Michael Greenberg's laboratory, Harvard Medical School, MA
02/2004–02/2011 Assistant Professor of Genetics, Stanford University, CA
02/2011–12/2014 Associate Professor of Genetics, Stanford University, CA
12/2014–present Professor of Genetics, Stanford University, CA
01/2011–present Co-director of the Paul F. Glenn Laboratories for the Biology of Aging at Stanford

Honors and Awards

1992 BS *summa cum laude*
1993–1997 Pre-doctoral fellowship, Ecole Normale Supérieure
1993 EMBO Short-Term Fellowship
1997 EMBO Long-Term Post-Doctoral Fellowship
1998–2000 Human Frontier Science Program Post-Doctoral Fellowship
2000 Medical Foundation Post-Doctoral Fellowship
2000–2002 Goldenson-Berenberg Post-Doctoral Fellowship, Harvard Medical School
2003 Radcliffe Institute for Advanced Studies Fellowship
2003 Lacaze-Policart Lacassagne Prize (French Academy of Science)
2005 Pfizer/AFAR Innovation in Aging Research Award
2005 Klingenstein Award in the Neurosciences
2005 Ellison Medical Foundation New Scholar Award (awarded)
2005 Damon Runyon Scholar Award (awarded)
2006 Sloan Research Fellowship
2006 Brain Tumor Foundation Award
2007 Glenn Award for Research in Biological Mechanisms of Aging
2007 McCormick Award for Women in Science
2008 California Institute of Regenerative Medicine New Faculty Award
2009 NARSAD Young Investigator Award
2009 Ellison Medical Foundation Senior Scholar Award
2010 Mentoring Award from the Stanford University Post-doctoral Association
2012 Vincent Cristofalo "Rising Star" Award in Aging Research
2012 NIH Director Pioneer Award

2014 Bennett J. Cohen Award for Research in Aging
2015 Michele and Timothy Barakett Endowed Professorship

Professional Service

Grant Application Review

2015-present Chair of NIH CMAD Study Section
2012-present Permanent member on NIH CMAD Study Section
2011-2013 Ellison Medical Foundation Review Board
2013 Special Emphasis Panel at NIH/NIA Intervention Program
2010, 2011, 2012 Ad hoc Reviewer for NIH Program Projects
2011 Ad hoc Reviewer on NIH CMAD Study Section
2007-present American Foundation for Aging Research Review
2007-present Radcliffe Institute for Advanced Studies Review

Editorial Boards

2013-present *Aging Cell*
2011-present *Aging*
2012-present *Longevity and Healthspan*
2011-present *Faculty of 1000*

Meeting Organization

2013 NIH Geroscience Summit – Epigenetics and aging session
2014 Cold Spring Harbor Laboratory Meeting – PTEN Pathway and Targets
2015 Les Treilles Foundation – Aging and metabolism
2015 International Society for Stem Cell Research committee
2016 Keystone Symposium – Epigenetics and Metabolic Regulation of Aging
2016 Cell Symposium – Metabolism and Aging
2016 Cold Spring Harbor Laboratory Meeting – PI3K/mTOR/PTEN Network

Invited Lectures

Talks at National or International Meetings

2004 Upstate Cell Signaling Symposium. Dundee, Scotland
2004 Cell Press Symposium, Aging and Human Disease Meeting. Italy
2004 Stowers Institute for Medical Research. Kansas City, MO
2005 Kavli Institute for Theoretical Physics Symposium, Networks in Growth, Death, and Aging. Santa Barbara, CA
2005 University of Texas South Western. Dallas, TX
2006 Cold Spring Harbor Meeting, PTEN pathways. Cold Spring Harbor, NY
2006 ASBMB meeting. San Francisco, CA
2006 CNIO Cancer Conference, PTEN and the AKT route. Madrid, Spain
2006 Gordon Conference, Phosphorylation and G-protein mediated signaling networks. Biddeford, Me
2006 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress. Kyoto, Japan
2006 Steiner Foundation Meeting. Brunnen, Switzerland
2006 Cold Spring Harbor Laboratory. Cold Spring Harbor, NY
2006 University of California Irvine. Irvine, CA
2006 University of California, San Diego. San Diego, CA
2007 Keystone Symposium, Cell Signaling and Proteomics. Steamboat Spring, CA

2007 American Association for Cancer Research Annual Meeting. Los Angeles, CA

2007 Xth International Symposium on Insulin Receptors and Insulin Action. Stockholm, Sweden

2007 The New York Academy of Science, The PI3K-PTEN-AKT-TOR Signaling Pathway in Cancer, Metabolism, and Aging. New-York, NY

2007 FASEB Summer Research Conference, Obesity, Energy Balance and Disease. Indian Wells, CA

2007 The 4th Key Symposium, The Biology of Ageing. Stockholm, Sweden

2007 Buck Institute Symposium, Nutrient Signaling and Aging. Novato, CA

2008 Keystone Symposium, Metabolic Pathways of Longevity. Copper Mountain, CO

2008 American Diabetes Association. San Francisco, CA

2008 International Symposium on Olfaction and Taste. San Francisco, CA

2008 California Institute of Regenerative Medicine Annual Meeting. San Francisco, CA

2008 Cold Spring Harbor Meeting on the Genetics of Aging. Cold Spring Harbor, NY

2008 Harvard/California meeting on Stem Cell Biology. Los Angeles, CA

2008 San Antonio Nathan Shock Aging Center Conference on Aging. Bandera, TX

2008 University of Utah. Salt Lake City, UT

2008 Buck Institute for Age Research. Novato, CA

2008 Massachusetts General Hospital, Harvard Medical School. Boston, 2009 Gordon Research Conference, Biology of Aging. Ventura, CA

2009 Gordon Research Conference, Signal Transduction within the Nucleus. Ventura, CA

2009 Keystone Symposium, PI3-kinase signaling in disease. Olympic Valley, CA

2009 Banbury Meeting, Molecular Biology of Sirtuins. The Banbury Center, NY

2009 Brown University '09 Colloquium. Brown University, RI

2009 American Aging Association, 38th Annual Meeting. Scottsdale, AZ

2009 CNIO Cancer Conference, The Energy of Cancer. Madrid, Spain

2009 Buck Institute Symposium, Systems Biology of Aging. Novato, CA

2008 Rockefeller Institute. New-York City, NY

2009 Gladstone Institute. San Francisco, CA

2009 Harvard Medical School, Department of Pathology. Boston, MA

2009 Duke University. Durham, NC

2009 University of Cologne, Germany

2010 Cellular Stress and Aging Symposium. University of North Carolina, NC

2010 Keystone Symposium, New Insights into Healthspan and Diseases of Aging. Tahoe City, CA

2010 Cold Spring Harbor Meeting, PTEN Pathways and Targets. Cold Spring Harbor, NY

2010 Signaling and Cellular Regulation Symposium, University of Boulder, CO

2010 Paul Glenn Symposium, Biology of Aging, Santa Barbara, CA

2010 Keynote Speaker, Signaling Quebec 2010, Canada

2010 Ellison Medical Foundation Annual Meeting, Woods Hole, MA

2010 Gordon Conference on Aging, Les Diablerets, Switzerland

2010 AMPK: Central Regulatory System in Metabolism & Growth, FASEB conference, Kyoto, Japan

2010 Cancer Metabolism, Barcelona Biomed Conference, Spain

2010 Symposium Nijmegen, The Netherlands

2010 Glenn Symposium, Salk Institute

2010 University of Strasbourg, France

2010 University of Utrecht, The Netherlands

2010 National Cancer Institute. Amsterdam, The Netherlands

2010 UC Irvine, CA

2010 Burnham Institute, CA

2010 Curie Institute, Paris, France

2010 University of Pennsylvania, Philadelphia, PA

2011 Genome, Cancer & Ageing Symposium, 3rd Monaco Age Oncology

2011 The forefront of therapeutic approaches to Neurodegeneration: Age modifiers, proteostasis, and stem cells, The Bahamas

2011 Gordon Conference, Oxidative Stress & Disease, Ventura, CA

2011 Gordon Conference, Signal Transduction within the nucleus, Ventura, CA

2011 Keynote Speaker at the Retreat for MD Anderson, TX

2011 French American Biotechnology Symposium, Approaches of Aging, San Francisco, CA

2011 3rd Else Kröner-Fresenius Symposium on Molecular Mechanisms of Stem Cell Aging, Germany

2011 The 24th Sigrid Juselius Symposium on post-translational modification networks as survival determinant, Espoo, Finland

2011 The Paul F. Glenn Symposium on Aging, Boston, MA

2011 FASEB Summer Research Conference, Epigenetics, Chromatin & Transcription, Snowmass, CO

2011 Gordon Conference, Epigenetics, Easton, MA

2011 Stem Cells in Development and Disease, Berlin, Germany

2011 Rostock Symposium on System Biology and Bioinformatics in Ageing Research, Rostock, Germany

2011 Symposium on Genetics of Aging and Life History, Pohang, Korea

2011 EMBO Molecular Medicine Conference on Molecular Insights for innovative therapies, Heidelberg, Germany

2011 Gladstone, UCSF, San Francisco, CA

2011 Stowers Institute for Medical Research, Kansas City, MO

2011 Washington University, St-Louis, MO

2011 University of Washington, Seattle, WA

2011 Harvard Medical School, Childrens Hospital, Boston, MA

2011 University of California, Berkeley, CA

2011 University of California, San Francisco, CA

2011 University of Southern California, Los Angeles, CA

2011 University of San Antonio, San Antonio, TX

2012 Keystone Symposium, Stem Cells, Squaw Valley, CA

2012 Keystone Symposium, Organ Regeneration, Breckenridge, CO

2012 Spector Prize lecture Symposium, Columbia University, NY

2012 Cell Press LabLinks meeting on Neural Stem Cells, San Francisco, CA

2012 ASBMB meeting, San Diego, CA

2012 AGE meeting, Fort Worth, TX

2012 Meeting Fondation Les Treilles, France

2012 Wilsede Meeting, Wildsede, Germany

2012 Cold Spring Harbor Meeting on the Genetic and Molecular mechanisms of aging, Cold Spring Harbor, NY

2012 9th Nestlé International Nutrition Symposium, Lausanne, Switzerland

2012 Keystone Symposia Aging and Disease of Aging, Tokyo, Japan

2012 Stem Cells and Metabolism Abcam, La Jolla, CA

2012 Weill Cornell Medical School, New-York, NY

2012 Sloan Kettering, New-York, NY

2012 Gurdon Institute, Cambridge, UK

2012 Babraham Institute, Cambridge, UK

2012 Joslin Diabetes Center, Boston, MA

2013 Council Meeting, NIA, Washington, DC

2013 Epigenetic Symposium, University of Pennsylvania, Philadelphia, PA

2013 Miami 2013 Winter Symposium, Miami, FL

2013 Keystone Symposia Stem Cell Regulation in Homeostasis and Disease, Banff, Canada

2013 Keystone Symposia Epigenetic Marks and Cancer, Santa Fe, NM

2013 NCI Symposium Epigenetics in Development, Bethesda, MD

2013 First Cologne Aging Conference, Cologne, Germany

2013 V Else Kröner-Fresenius Symposium Adult Stem Cell in Aging, Wartburg, Germany

2013 25th Pezcoller Symposium, Metabolism and Tumorigenesis, Trento, Italy

2013 Gordon Conference Developmental Biology, Lucca, Italy

2013 Ellison Medical Foundation Symposium, Woods Hole, MA

2013 Gordon Conference on Aging, Lucca, Italy

2013 14th Annual Skirball Symposium, Metabolism – from molecules to behavior, New-York, NY

2013 JB Little Symposium – Harvard School of Public Health, Boston, MA

2013 Advances in Geroscience: Impact on healthspan and chronic diseases, NIH, Bethesda, MD

2013 Abcam meeting – Chromatin Structure and function, Grand Cayman Island

2013 Cold Spring Harbor Laboratories, Cold Spring Harbor, NY

2013 Columbia University, NY

2013 MIT, Boston, MA

2013 Brandeis, Boston, MA

2013 Pasteur Institute, Paris, France

2013 Koshland Lecture, UC Berkeley, CA

2013 Albert Einstein College of Medicine, NY

2014 Keystone Meeting – Tumor metabolism, Whistler, Canada

2014 Cold Spring Harbor Meeting PTEN, Cold Spring Harbor, NY

2014 Keystone Meeting – Epigenetic Programming and Inheritance, MA

2014 Yale University, New Haven, CT

2014 Cornell University, Ithaca, NY

2014 Gordon Conference Meeting – Phosphorylation and G-protein mediated signaling network, Biddeford, ME

2014 Beatson International Cancer Conference, Scotland

2014 EMBL meeting metabolism, Heidelberg, Germany

2014 University of Michigan, Ann Arbor, MI

2014 University of California at San Diego, San Diego, CA

2014 University of Utah, Salt Lake City, UT

2015 Aging Symposium, Burnham Institute, San Diego, CA
 2015 World Economic Forum, Davos, Switzerland
 2015 Fusion Conference – Intervention in Aging, Cancun, Mexico
 2015 Gordon Conference – Stem Cells and Cancer, Ventura, CA
 2015 Les Treilles Symposium – Physiology, Les Treilles, France
 2015 EMBO Workshop on Developmental Circuits in Aging, Heraklion, Crete
 2015 Cold Spring Harbor Meeting, 21st Century Genetics – Genes at Work, NY
 2015 Les Treilles Symposium – The Role of Metabolism in Ageing and Ageing
 Related Disease, Les Treilles, France
 2015 Gordon Conference - Developmental Biology, South Hadley, MA
 2015 FASEB–Transcription, Chromatin, and Epigenetics, West Palm Beach, FL
 2015 Gordon Conference - Biology of Aging, Newry, ME
 2015 Cold Spring Harbor Meeting - Mitochondria and Cancer, NY
 2015 Cold Spring Harbor Asia - Molecular Basis of Aging and Disease, China
 2015 Janelia Conference – Behavioral Epigenetics, Ashburn, VA
 2015 Stanford Neuroscience Institute Symposium, Stanford, CA
 2015 ABCAM – Epigenetics, Obesity and Metabolism, Cambridge, UK
 2015 Jacques Monod Conference – Comparative Biology of Aging, France
 2015 UCSF, San Francisco, CA
 2015 University of Colorado, Aurora, CO
 2015 ABCAM – Chromatin: Structure and Function 2015, Grand Cayman
 Island
 2016 Stem Cell Symposium - Seattle, WA
 2016 Keystone Symposium – Noncoding RNAs in Health and Disease, NM
 2016 Keystone Symposium – Chromatin regulation in cancer, Whistler, Canada
 2016 Development Symposium – Chicago, CA
 2016 Baylor College of Medicine, Houston, TX
 2016 Rockefeller University, New-York, NY
 2016 Princeton University, Princeton, NJ
 2016 UT Southwestern, Dallas, TX
 2016 Stowers Institute for Medical Research, KS
 2016 Keystone Symposium – Epigenetic and Metabolic Regulation of Aging
 and Aging-related Diseases, Santa Fe, NM
 2016 Department of Cell Biology, Harvard Medical School, Boston, MA
 2016 ISSCR Stem Cell meeting, San Francisco, CA
 2016 Cell Symposium – Transcriptional Regulation in Development and
 Disease, Chicago, IL

Research Support

Current Research Support

2012-2017 Pioneer Award
 Sponsor: NIH Director's Fund
 Title: Transgenerational epigenetic inheritance of longevity
 Role: PI

2011-2016 NIH P01
 Sponsor: NIH
 Title: Effect of age and longevity genes on epigenomic mechanisms of
 reprogramming

Role: Co-Investigator with Joseph Wu (PI: Mike Snyder)

2015-2016 NIH R56
Sponsor: NIH
Title: Molecular Mechanisms Underlying Lifespan Extension by Environmental Stimuli
Role: PI

Submitted/Pending

2016-2021 NIH R01
Sponsor: NIH
Title: Link between epigenetic modifiers and fat metabolism for healthy aging
Role: PI

2016-2021 NIH P01
Sponsor: NIH
Title: Epigenetic regulation of stem cell aging
Role: PL

Past Research Support

2013-2016 Basic Biology Award
Sponsor: CIRM
Title: Energy metabolism and aging pathways in human stem cell reprogramming and differentiation
Role: PI

2011-2016 NIH P01
Sponsor: NIH (NIA)
Title of project: Mechanisms of neural stem cell regulation during aging
Title of core: Genomics and ultra high throughput sequencing
Role: Co-Investigator (PI: Tom Rando)

2005-2007 Pfizer/AFAR Innovation in Aging Research Award
Sponsor: Pfizer/American Foundation for Aging Research
Title: Role of FOXO Transcription Factors In Mammalian Longevity
Role: PI

2005-2008 Klingenstein Fellowship Award in Neuroscience
Sponsor: Klingenstein Fund
Title: Role of the FOXO Family of Forkhead Transcription Factors In the Nervous System
Role: PI

2006-2008 Fellowship Award Brain Tumor Society
Sponsor: Brain Tumor Society
Title: Defining the role of Foxo transcription factors and Sirt1 deacetylase in suppressing glioblastoma
Role: PI

2006-2008 Sloan Research Fellowship
Sponsor: Alfred P. Sloan Foundation
Title: Does the Nervous System Regulate Overall Longevity?

2006-2008 Role: PI
Investigator-initiated Research Grant
Sponsor: American Institute for Cancer Research
Title: AMPK: a mediator of caloric restriction's ability to suppress cancer
Role: PI

2007-2009 Paul Glenn Foundation Award
Sponsor: Paul Glenn Foundation
Role: PI

2007-2009 McCormick Award
Sponsor: McCormick Foundation
Title: Defining the interaction between FOXO and the tumor suppressor
p53 in cells and in mice
Role: PI

2008-2010 NIH R21 AG030464
Sponsor: NIH (NIA)
Title: An unbiased search for genes underlying longevity in a short-lived
fish model
Role: PI

2005-2010 NIH R01 AG026648
Sponsor: NIH (NIA)
Title: Forkhead transcription factors in the stress response
Role: PI

2009-2011 Investigator Award
Sponsor: NARSAD
Title: Role of FOXO6 in cognitive function and mood regulation during
aging
Role: PI

2012-2013 SINTN Seed Grant Funding
Title: Circuit-level understanding of age-dependent decline in
hippocampal memory
Role: Co-Investigator with Mark Schnitzer

2009-2013 Ellison Senior Scholar Award
Sponsor: Ellison Medical Foundation
Title: Role of Longevity Genes in Reprogramming Somatic Cells into
Pluripotent Stem Cells
Role: PI

2008-2013 California Institute of Regenerative Medicine New Faculty Award
Sponsor: CIRM
Title: Molecular mechanisms involved in adult neural stem cell
maintenance
Role: PI

Publications

H index: 50 – based on Google Scholar, 06/2016

Total number of citations: 27,405 – based on Google Scholar, 06/2016

Peer-Reviewed Journal Articles

1. Lenormand P, Sardet C, Pagès G, L'Allemain G, **Brunet A** and Pouyssegur J (1994) Growth factors induce nuclear translocation of MAP kinases (p42mapk and p44mapk) but not their activator MAP kinase kinase (p45mapkk) in fibroblasts. **J Cell Biol**, 122: 1079-1088.
2. Pagès G*, **Brunet A***, L'Allemain G and Pouyssegur J (1994) Constitutive mutant and putative regulatory serine phosphorylation site of mammalian MAP kinase kinase (MEK1). **EMBO J**, 13: 3003-3010. *: both authors have contributed equally to the work.
3. **Brunet A**, Pagès G and Pouyssegur J (1994) Constitutively active mutants of MAP kinase kinase (MEK1) induce growth factor-relaxation and oncogenicity when expressed in fibroblasts. **Oncogene**, 9: 3379-3387.
4. **Brunet A***, Pagès G* and Pouyssegur J (1994) Growth factor-stimulated MAP kinase induces rapid retrophosphorylation and inhibition of MAP kinase kinase (MEK1). **FEBS Lett**, 346: 299-303. *: both authors have contributed equally to the work.
5. Papin C, Eychène A, **Brunet A**, Pagès G, Pouyssegur J, Calothy G and Barnier JV (1995) B-Raf protein isoforms interact with and phosphorylate MEK-1 on serine residues 218 and 222. **Oncogene**, 10: 1647-1651.
6. Pagès G, Stanley ER, Le Gall M, **Brunet A** and Pouyssegur J (1995) The mouse p44 mitogen-activated protein kinase (extracellular signal-regulated kinase 1) gene. **J Biol Chem**, 270: 26986-26992.
7. **Brunet A** and Pouyssegur J (1996) Identification of MAP kinase domains by re-directing stress signals into growth factor responses. **Science**, 272: 1652-1655.
8. Lavoie JN, L'Allemain G, **Brunet A**, Müller R and Pouyssegur J (1996) Cyclin D1 expression is regulated positively by the p42/p44MAPK and negatively by the p38/HOG MAPK pathway. **J Biol Chem**, 271: 20608-20616.
9. Brondello JM, **Brunet A**, Pouyssegur J and McKenzie FR (1997) The dual specificity Mitogen-activated protein kinase phosphatase-1 and-2 are induced by the p42/p44MAPK cascade. **J Biol Chem**, 272: 1368-1376.
10. Briant L, Robert-Hebmann V, Sivan V, **Brunet A**, Pouyssegur J and Devaux C (1998) Involvement of extracellular signal-regulated kinase module in HIV-mediated CD4 signals controlling activation of nuclear factor-kappa B and AP-1 transcription factors. **J Immunol**, 160: 1875-1885.
11. Englaro W, Bertolotto C, Busca R, **Brunet A**, Pagès G, Ortonne J-P and Ballotti R (1998) Inhibition of the mitogen-activated protein kinase pathway triggers B16 melanoma cell differentiation. **J Biol Chem**, 273: 9966-9970.
12. Lenormand P, Brondello J-M, **Brunet A** and Pouyssegur J (1998) Growth factor-induced p42/p44 MAPK nuclear translocation and retention requires both MAPK activation and neosynthesis of nuclear anchored proteins. **J Cell Biol**, 142: 625-633.
13. **Brunet A**, Roux D, Lenormand P, Dowd S, Keyse S and Pouyssegur J (1999) Nuclear translocation of p42/p44 mitogen-activated protein kinase is required for growth factor-induced gene expression and cell cycle entry. **EMBO J**, 18: 664-674.
14. **Brunet A**, Bonni A, Zigmund MJ, Lin MZ, Juo P, Hu LS, Anderson MJ, Arden KC, Blenis J, Greenberg ME (1999) Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor. **Cell**, 96: 857-868.
15. Bonni A, **Brunet A**, West AE, Datta SR, Takasu MA, Greenberg ME (1999) Cell survival promoted by the Ras-MAPK signaling pathway by transcription-dependent and transcription-independent mechanisms. **Science**, 286: 1358-1362.
16. Nichols A, Camps M, Gillieron C, Chabert C, **Brunet A**, Wilsbacher J, Cobb M, Pouyssegur J, Shaw JP, Arkinstall S (2000) Substrate recognition domains within extracellular signal-

regulated kinase mediate binding and catalytic activation of mitogen-activated protein kinase phosphatase-3. **J Biol Chem**, 275: 24613-24621.

17. **Brunet A**, Park J, Tran H, Hu LS, Hemmings BA, Greenberg ME (2001) The protein kinase SGK mediates survival signals by phosphorylating the Forkhead transcription factor FKHL1/FOXO3a. **Mol Cell Biol**, 21: 952-965.
18. Shin I, Bakin, AV, Rodeck, U, **Brunet A**, Arteaga CL (2001) Transforming growth factor beta enhances epithelial cell survival via Akt-dependent regulation of FKHL1. **Mol Biol Cell**, 12: 3328-3339.
19. **Brunet A***, Kanai F*, Stehn J, Xu J, Sarbassova D, Frangioni D, Dala JV, DeCaprio JA, Greenberg ME and Yaffe MB (2002) 14-3-3 Transits to the Nucleus and Actively Participates in Dynamic Nucleo-Cytoplasmic Transport. **J Cell Biol**, 156: 817-828 *: both authors have contributed equally to the work.
20. Tran H*, **Brunet A***, Grenier JM, Datta SR, Fornace Jr AJ, DiStefano PS, Chiang LW and Greenberg ME (2002). DNA repair pathway stimulated by the Forkhead transcription factor FOXO3a (FKHL1) through the GADD45 protein. **Science**, 296: 530-534. *both authors have contributed equally to the work.
21. Chou FL, Hill JM, Hsieh JC, Pouysségur J, **Brunet A**, Glading A, Uberall F, Ramos JW, Werner MH and Ginsberg MH (2003) PEA-15 binding to ERK1/2 MAP kinases is required for its modulation of integrin activation. **J Biol Chem**, 278: 52587-52597.
22. **Brunet A**, Sweeney LB, Sturgill FJ, Chua KF, Greer PL, Lin Y, Tran H, Ross SE, Mostoslavsky R, Cohen H, Hu LS, Cheng H-L, Jedrychowsky M, Gygi SP, Sinclair DA, Alt FW, Greenberg ME (2004) Stress-Dependent Regulation of FOXO transcription factors by the SIRT1 Deacetylase. **Science**, 303: 2011-2015.
23. Greer EL, Dowlatshahi D, Banko MR, Hoang K, Blanchard D, and **Brunet A** (2007) An AMPK FOXO pathway mediates the extension of lifespan induced by a novel method of dietary restriction in *C. elegans*. **Curr Biol**, 17: 1646-1656.
24. Greer EL, Oskoui PR, Banko MR, Maniar JM, Gygi MP, Gygi SP, and **Brunet A** (2007) The energy sensor AMP-activated protein kinase directly regulates the mammalian FOXO3 transcription factor. **J Biol Chem**, 282: 30107-30119.
25. Greer EL and **Brunet A** (2009) Different dietary restriction regimens extend lifespan by both independent and overlapping genetic pathways in *C. elegans*. **Aging Cell**, 8: 113-127.
26. Renault VM, Rafalski VA, Morgan AA, Salih DAM, Brett JO, Webb AE, Villeda SA, Thekkat PU, Guillerey C, Denko NC, Palmer TD, Butte AJ, and **Brunet A** (2009) FoxO3 regulates neural stem cell homeostasis. **Cell Stem Cell**, 5: 527-539.
27. Valenzano DR, Kirschner J, Kamber RA, Zhang E, Weber D, Cellerino A, Englert C, Platzer M, Reichwald K and **Brunet A** (2009) Mapping loci associated with tail color and sex determination in the short-lived fish *Nothobranchius furzeri*. **Genetics**, 183: 1385-1395.
28. de la Torre-Ubieta L, Gaudillière B, Yang Y, Ikeuchi Y, Yamada T, DiBacco S, Stegmüller J, Schüller U, Salih DA, Rowitch D, **Brunet A** and Bonni A (2010) A FOXO-Pak1 transcriptional pathway controls neuronal polarity. **Genes & Dev.**, 8: 799-813.
29. Greer EL, Maures TJ, Hauswirth AG, Green EM, Leeman DS, Maro, GS, Han S, Banko MR, Gozani O and **Brunet A** (2010) Members of the H3K4 trimethylation complex regulate lifespan in a germline-dependent manner in *C. elegans*. **Nature**, 466: 383-387.
30. Renault VM, Thekkat PU, Hoang KL, White JL, Brady CA, Kenzelmann Broz D, Venturelli OS, Johnson TM, Oskoui PR, Xuan Z, Santo EE, Zhang MQ, Vogel H, Attardi LD, **Brunet A** (2011) The pro-longevity gene FoxO3 is a target of the p53 tumor suppressor. **Oncogene**, 30: 3207-3221.

31. Brett JO, Renault VM, Rafalski VA, Webb AE and **Brunet A** (2011) The microRNA cluster miR-106b~25 regulates adult neural stem and progenitor cell proliferation and neuronal differentiation. **Aging**, 3: 108-124.
32. Arnold CP, Tan R, Zhou B, Yue SB, Schaffert S, Biggs JR, Doyonnas R, Lo MC, Perry JM, Renault VM, Sacco A, Somervaille T, Viatour P, **Brunet A**, Cleary ML, Li L, Sage J, Zhang DE, Blau HM, Chen C, and Chen CZ. (2011) MicroRNA programs in normal and aberrant stem and progenitor cells. **Genome Res.**, 21: 798-810.
33. Maures TJ, Greer EL, Hauswirth AG, and **Brunet A** (2011). H3K27 demethylase UTX-1 regulates *C. elegans* lifespan in a germline-independent, insulin-dependent, manner. **Aging Cell**, 10: 980-990.
34. Greer EL, Maures TJ, Ucar D, Hauswirth AG, Mancini E, Lim JP, Benayoun BA, Shi Y and **Brunet A** (2011) Transgenerational epigenetic inheritance of longevity in *Caenorhabditis elegans*. **Nature (Article)**, 479: 365-371.
35. Banko MR, Allen JJ, Schaffer BE, Wilker EW, Tsou P, White JL, Villen J, Wang B, Kim SR, Sakamoto K, Gygi SP, Cantley LC, Yaffe MB, Shokat KM and **Brunet A** (2011) Chemical genetic screen for AMPK α 2 substrates uncovers a network of proteins involved in mitosis. **Mol. Cell**, 44:878-892.
36. Valenzano DR, Sharp S and **Brunet A** (2011) Transposon-mediated transgenesis in the short-lived African killifish *Nothobranchius furzeri*, a vertebrate model for aging. **G3, Genes Genome Genetics**, 1: 531-538. **Cover article.**
37. Calnan DR, Webb AE, White JL, Stowe TR, Goswami T, Shi X, Espejo A, Bedford MT, Gozani O, Gygi SP, and **Brunet A** (2012) Methylation by Set9 modulates FoxO3 stability and transcriptional activity. **Aging**, 4: 462-79.
38. Salih DA, Rashid AJ, Colas D, de la Torre-Ubieta L, Zhu RP, Morgan, AA, Santo EE, Cole CJ, Madison DV, Shamloo M, Butte AJ, Bonni A, Josselyn SA and **Brunet A** (2012) FoxO6 regulates memory consolidation and synaptic function. **Genes & Dev.** 26: 2780-801.
39. Rafalski VA, Ho PO, Brett JO, Ucar D, Dugas JC, Pollina EA, Chow LML, Ibrahim A, Baker SJ, Barres BA, Steinman L, and **Brunet A** (2013) Expansion of oligodendrocyte progenitor cells upon SIRT1 inactivation in the adult brain. **Nat Cell Biol** 15: 614-624. **Full article.**
40. Liu L, Cheung TH, Charville GW, Hurgo BM, Leavitt T, Shih J, **Brunet A**, and Rando TA (2013) Chromatin Modifications as Determinants of Muscle Stem Cell Quiescence and Chronological Aging. **Cell Rep** 4: 189-204.
41. Webb AE, Pollina EA, Vierbuchen T, Urban N, Ucar D, Leeman D, Sewak M, Rando TA, Guillemot F, Wernig M, and **Brunet A** (2013) Genome-wide interaction between the pro-longevity factor FOXO3 and the neuronal determinant ASCL1 in adult neural stem/progenitor cells. **Cell Rep** 4: 477-491.
42. Wapinski OL, Vierbuchen T, Qu K, Lee QY, Chanda S, Fuentes DR, Giresi PG, Ng YH, Marro S, Neff NF, Drechsel D, Martynoga B, Castro DS, Webb AE, Südhof TC, **Brunet A**, Guillemot F, Chang HY, Wernig M (2013) Hierarchical mechanisms for direct reprogramming of fibroblasts to neurons. **Cell**, 155:621-635.
43. Maures TJ, Booth LN, Benayoun BA and **Brunet A** (2014) Males shorten the life span of *C. elegans* hermaphrodites via secreted compounds. **Science** 343:541-544.
44. Gopinath SD, Webb AE, **Brunet A** and Rando TA (2014) FOXO3 promotes quiescence in adult muscle stem cells during the process of self-renewal. **Stem Cell Reports**. 2: 414-426.
45. Benayoun BA, Pollina EA, Ucar D, Mahmoudi S, Karra K, Wong E, Devarajan K, Daugherty AC, Kundaje A, Mancini E, Rando TA, Snyder MP, Baker JC, Cherry M and **Brunet A**.

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