

## Curriculum Vitae

Anne Brunet, PhD

### Address

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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–present Associate 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 (University of Michigan)

## **Professional Service**

### **Grant Application Review**

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**

2011-present	Aging
2012-present	Longevity and Healthspan
2011-present	Faculty of 1000

### **Meeting Organization**

2013	NIH Geroscience Summit – Epigenetics and aging session (co-organizer with Shelley Berger)
2014	Cold Spring Harbor Laboratory Meeting – PTEN Pathway and Targets (co-organizer with Suzanne Baker, Lew Cantley, and Pier-Paolo Pandolfi)
2015	Les Treilles Foundation – Aging and metabolism (co-organizer with Linda Partridge)
2015	International Society for Stem Cell Research committee
2016	Keystone meeting on aging. Main organizer.

## **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
2005	Kavli Institute for Theoretical Physics Symposium, Networks in Growth, Death, and Aging. Santa Barbara, CA
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	20 <sup>th</sup> IUBMB International Congress of Biochemistry and Molecular Biology and 11 <sup>th</sup> FAOBMB Congress. Kyoto, Japan
2006	Steiner Foundation Meeting. Brunnen, Switzerland
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 4<sup>th</sup> 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

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, 38<sup>th</sup> Annual Meeting. Scottsdale, AZ

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

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

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

2011 Genome, Cancer & Ageing Symposium, 3<sup>rd</sup> 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 3<sup>rd</sup> Else Kröner-Fresenius Symposium on Molecular Mechanisms of Stem Cell Aging, Germany

2011 The 24<sup>th</sup> 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

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

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 25<sup>th</sup> 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 14<sup>th</sup> 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

2014 Keystone Meeting – Tumor metabolism, Whistler, Canada

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

2014 Keystone Meeting – Epigenetic Programming and Inheritance, Boston, MA

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

**Invited Talks at Institutes or Universities**

- 2004 Stowers Institute for Medical Research. Kansas City, MO
- 2005 University of Texas South Western. Dallas, TX
- 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
- 2008 University of Utah. Salt Lake City, UT
- 2008 Buck Institute for Age Research. Novato, CA
- 2008 Massachusetts General Hospital, Harvard Medical School. Boston, MA
- 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 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 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 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 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 Yale University, New Haven, CT
- 2014 Cornell University, Ithaca, NY
- 2014 University of Michigan, Ann Arbor, MI
- 2014 University of California at San Diego, San Diego, CA

## **Research Support**

### **Current Research Support**

- 2012-2017 Pioneer Award  
Sponsor: NIH Director's Fund  
Title: Transgenerational epigenetic inheritance of longevity  
Role: PI
- 2012-2015 Basic Biology Award  
Sponsor: CIRM  
Title: Energy metabolism and aging pathways in human stem cell reprogramming and differentiation  
Role: PI
- 2009-2014 NIH R01 AG031198  
Sponsor: NIH (NIA)  
Title: Molecular mechanisms underlying lifespan extension by dietary restriction  
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: PL (PI: Tom Rando)
- 2011-2016 NIH P01  
Sponsor: NIH  
Title: Effect of age and longevity genes on epigenomic mechanisms of reprogramming  
Role: co-PL with Joseph Wu (PI: Mike Snyder)

### **Past Research Support**

- 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?  
 Role: PI  
 2006-2008 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-PI 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: 42 (42 publications cited more than 42 times) – based on Google Scholar, 7/23/2014

Total number of citations: 22,951 – based on Google Scholar, 7/23/2014

### **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, Zigmond 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, Pouyssegur 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 $\alpha$ 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, Hurgu 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**.

H3K4me3 breadth is linked to cell identity and transcriptional consistency. **Cell** (2014) 158: 673-688.

### **Invited Reviews and Commentaries**

1. **Brunet A**, Brondello JM, L'Allemain G, Lenormand P, McKenzie F, Pagès G and Pouyssegur J (1995) MAP kinase module: role in the control of cell proliferation **C R Seances Soc Biol**, 189: 43-57
2. **Brunet A** (1998) Signal transduction from membrane to the nucleus: variation on common themes. **Bull Cancer**, 85: 527-537
3. Datta SR, **Brunet A** and Greenberg ME (1999) Cellular survival: a play in three Akts. **Genes Dev**, 13: 2905-2927.
4. **Brunet A**, Datta SR and Greenberg ME (2001) Transcription-dependent and -independent control of neuronal survival by the PI3K-Akt signaling pathway. **Curr Opin Neurobiol**, 11: 297-305.
5. Tran H, **Brunet A**, Griffith E, and Greenberg ME (2003) The Many Forks in FOXO's Road. **Sci STKE**, 172: RE5.
6. Greer EL, and **Brunet A** (2005) FOXO transcription factors at the interface between longevity and tumor suppression. **Oncogene**, 24:7410-7425.
7. Carter, ME, and **Brunet A** (2007) FOXO transcription factors. **Curr Biol**, 7: R113-114.
8. **Brunet A** and Rando T (2007) Aging: From stem to stern. **Nature**, 449: 288-289.
9. **Brunet A** (2007) Aging and cancer: killing two birds with one worm. **Nature Genetics**, 39: 1306-1307.
10. Greer EL and **Brunet A** (2008) FOXO transcription factors in ageing and cancer. **Acta Physiol**, 192: 19-28.
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