

CURRICULUM VITAE

Anne Brunet

Personal

Date and place of birth: November 8, 1971, Grenoble, France

Nationality: French

Position

Assistant Professor

Department of Genetics

Stanford University

300 Pasteur Drive, Always M336

Tel: 1 650 725 8042

Stanford, CA 94305, USA

Email: anne.brunet@stanford.edu

Education

1998-2003: Post-doctoral training, Harvard Medical School, Boston, USA

1997: PhD in Biology, Université de Nice, France

1992-1997: Graduate Student, Université de Nice, France.

1992: B. Sc. Mention Très Bien (summa cum laude), Université de Paris
Ecole Normale Supérieure de Paris.

1990-1992: Ecole Normale Supérieure of Paris, rue d'Ulm.

1988-1990: Classe préparatoire aux Grandes Ecoles

1988: Baccalauréat (high school diploma), Mathematics and Physics.

Research Experience

1998-2003: Post-doctoral fellow in Dr. Michael E. Greenberg's laboratory in Boston:
"Forkhead transcription factors of the FOXO subfamily: regulation by the PI3 kinase/Akt signaling pathway and role in cell death, cell cycle and the stress response".

1992-1997: Ph.D. student in Dr. Jacques Pouysségur's laboratory in Nice:
"Role and specificity of the MAP kinase modules in cell proliferation".

1993: Two-month training in Dr. Olaf Nielsen's laboratory, Institute of Molecular Biology, Copenhagen, Denmark: "Complementation of the MAP kinase cascade in yeast *Schizosaccharomyces pombe*".

1992: Summer senior student in Dr. Philippe Brûlet's laboratory, Pasteur Institute, Paris: "ES cell line isolation and characterisation of chimeric mice".

1991: Summer junior student in Dr. Jean Massoulié's laboratory, Ecole Normale Supérieure, Paris: "Cloning and site-directed mutagenesis of acetylcholinesterase structural sub-units".

Teaching and Mentoring Experience

2000-2003: Mentorship of Lora Sweeney, for her Senior Research Thesis. Harvard University.

2001-2002: Biochemistry Lecture to Medical and Graduate student (MD-PhD program) "Sphingolipids and apoptosis". Harvard Medical School.

1995-1997: Lectures and Laboratory courses in Molecular Biology. University of Nice.

Fellowships and Awards

2003 Prize from the French National Academy (La Caze-Policart Lacassagne)

2003: Radcliffe Institute for Advanced Studies at Harvard University Award

2000-2002: Goldenson-Berenberg Award at Harvard Medical School

2000: Medical Foundation Fellowship

1998-2000: Human Frontier long term fellowship.

1997: EMBO long term fellowship.

1993: EMBO short term fellowship

1993-1997: Ph.D. fellowship "Allocataire Moniteur Normalien"

List of Publications

Journals

Brunet, A., Sweeney, L.B., Sturgill, F.J., Chua, K.F., Greer, P.L., Lin, Y., Tran, H., Ross, S.E., Mostoslavsky, R., Cohen, H., Hu, L.S., Cheng, H-L., Jedrychowsky, M.,

Gygi, S.P., Sinclair, D.A., Alt, F.W., Greenberg M.E. (2004) Stress-Dependent Regulation of FOXO transcription factors by the SIRT1 Deacetylase *Science, in press.*

Tran, H.*, Brunet A.*, Grenier, J.M., Datta, S.R., Fornace Jr., A.J., DiStefano, P.S., Chiang, L.W., Greenberg M.E. (2002) DNA repair pathway stimulated by the Forkhead transcription factor FOXO3a (FKHRL1) through the GADD45 protein. *Science* 296:530-4. *: both authors have contributed equally to the work.

Brunet A.*, Kanai, F.* , Stehn, J.Xu, J.Sarbassova, D.Frangioni, J.V.Dala, S.N.DeCaprio, J.A.Greenberg, M.E. Yaffe, M.B. (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.

Brunet A., Park J., Tran H., Hu L.S., Hemmings B.A., Greenberg M.E. (2001) The protein kinase SGK mediates survival signals by phosphorylating the Forkhead transcription factor FKHRL1/FOXO3a. *Mol. Cell Biol.* 21:952-965.

Bonni A., Brunet A., West A.E., Datta S.R., Takasu M.A., Greenberg M.E. (1999) Cell survival promoted by the Ras-MAPK signaling pathway by transcription-dependent and transcription- independent mechanisms. *Science*, 286:1358-1362.

Brunet A., Bonni A., Zigmond M.J., Lin M.Z., Juo P., Hu L.S., Anderson M,J., Arden K.C., Blenis J., Greenberg M.E. (1999) Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor. *Cell* 96: 857-868.

Brunet A., Roux D., Lenormand P., Dowd S., Keyse S. and Pouysségur 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: 664-74.

Lenormand P., Brondello J-M., Brunet A. and Pouysségur 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.* 142:625-33.

Brondello J-M., Brunet A., Pouysségur J. and McKenzie F.R. (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.

Brunet A. and Pouysségur J. (1996) Identification of MAP kinase domains by redirecting stress signals into growth factor responses. *Science* 272: 1652-1655.

Lavoie J.N., L'Allemand G., Brunet A., Müller R. and Pouysségur 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.

Pagès G., Stanley E.R., Le Gall M., Brunet A. and Pouysségur J. (1995) The mouse p44 mitogen-activated protein kinase (extracellular signal-regulated kinase 1) gene. *J. Biol. Chem.* 270: 26986-26992.

Brunet A., Pagès G. and Pouysségur J. (1994) Constitutively active mutants of MAP kinase kinase (MEK1) induce growth factor-relaxation and oncogenicity when expressed in fibroblasts. *Oncogene* 9: 3379-3387.

Brunet A.*, Pagès G.* and Pouysségur 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.

Pagès G.*, Brunet A.*, L'Allemand G. and Pouysségur 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.

Lenormand P., Sardet C., Pagès G., L'Allemand G., Brunet A. and Pouysségur J. (1994) Growth factors induce nuclear translocation of MAP kinases (p42^{mapk} and p44^{mapk}) but not their activator MAP kinase kinase (p45^{mapkk}) in fibroblasts. *J. Cell. Biol.* 122: 1079-1088.

Book chapters, Reviews

Brunet A., Tran H. and Greenberg M.E. The FOXO family of transcription factors: key targets of the PI3K-Akt pathway that regulate cell proliferation, survival and organismal aging. *Handbook of Cellular Signaling 2003*

Tran H., Brunet A., Griffith E., and Greenberg M.E. The Many Forks in FOXO's Road. *Science STKE*. 2003 Mar 4;2003(172):RE5.

Brunet A., Datta S.R. and Greenberg M.E. (2001) Transcription-dependent and -independent control of neuronal survival by the PI3K-Akt signaling pathway. *Curr. Opin. Neurobiol.* 11: 297-305.

Datta S.R., Brunet A. and Greenberg M.E. (1999) Cellular survival: a play in three Akts. *Genes & Dev.* 13: 2905-2927.

Brunet A. and Pouysségur J. (1997) Mammalian MAP kinase modules: how to transduce specific signals. *Essays Biochem.* 32:1-16.

Conferences

DBMS Workshop , Villars-de-Lans, France. January 26-28, 1994.

Poster presentation: "Chinese hamster MAP kinase kinase: cloning, functional expression and regulation".

Biology Society, Paris, France. November 23, 1994.

Invited speaker: "MAP kinases and cell cycle control".

Cancerology Forum, Paris, France. June 12-14, 1995.

Invited oral communications: "Expression of antisense of MAP kinase inhibits cell proliferation"

"A new oncogene in the Ras pathway: MAP kinase kinase".

Joint BBSRC/CNRS meeting, Villefranche-sur-mer, France. November 2-4, 1995.

Invited speaker: "Molecular determinants of specificity within the MAP kinase family".

Jacques Monod Conference, Aussois, France. September 8-12, 1996.

Invited oral communication: "Molecular determinants of specificity within the MAPK modules"

French Society of Neuroscience meeting, Bordeaux, France. May 25-28, 1997.

Invited speaker: "Specificity among MAP kinase modules"

Gordon Conference "Molecular and Genetic Basis of Cell Proliferation" Colby-Sawyer College, NH. July 4-8, 1999.

Poster presentation: "Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor."

Cold Spring Harbor Meeting "Programmed Cell Death": Cold Spring Harbor, NY September 29-October 3, 1999.

Invited oral communication: "Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor."

European meeting of Neuroscience, Brighton, United-Kingdom. June 25-28, 2000

Invited speaker: "Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor."

Signals in cell stress, survival and apoptosis meeting:, Turku, Finland. December, 7-8 2000.

Invited speaker: "Transcription dependent and independent survival mechanisms of the PKB/Akt and the Ras-MAPK signaling pathways"

Cold Spring Harbor Meeting "Programmed Cell Death": Cold Spring Harbor. November 9-13, 2001.

Invited oral communication: The Forkhead transcription factor FKHRL1 participates in the cellular response to oxidative stress

Keystone symposium "Genetics and genomics of cancer and senescence", Keystone, Co. January 22-26, 2002.

Poster presentation: The Forkhead transcription factor FKHRL1: a key component in the response to stress

International Signalling Symposium 'Signalling the Future', Liverpool, UK. September 4-6, 2002.

Invited speaker: "Signals controlling transcription and apoptosis"

Cold Spring Harbor Meeting "Molecular Genetics of Aging": Cold Spring Harbor. October 2-6, 2002.

Invited oral communication: "Mammalian forkhead transcription factors-Role in the stress response and longevity?"

FASEB Research Conference "Protein Kinases" SnowMass, CO July 22-29, 2003

Invited Speaker: "The Forkhead transcription factors in the control of apoptosis, resistance to stress, and organismal longevity"

Gordon Research Conference "Molecular Mechanisms of Hormone Action", New-Hampshire, July 27-31 2003

Invited Speaker: "The Forkhead transcription factors in the control of apoptosis, resistance to stress, and organismal longevity"

Arolla Woskshop 2003, "Growth control in development and disease", August 18-24, 2003, Arolla Switzerland

Invited Speaker: "The Forkhead transcription factors in the control of apoptosis, resistance to stress, and organismal longevity"