




## Anne Brunet

Michele and Timothy Barakett Endowed Professor  
Genetics

 NIH Biosketch available Online

 Curriculum Vitae available Online

### Bio

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#### BIO

Dr. Brunet is interested in the molecular mechanisms of aging and longevity, with a particular emphasis on the nervous system. Her lab is interested in identifying pathways involved in delaying aging in response to external stimuli such as availability of nutrients and mates. She also seeks to understand the mechanisms that influence the rejuvenation of old stem cells. Finally, her lab has pioneered the naturally short-lived African killifish as a new model to explore the regulation of aging and age-related diseases.

#### ACADEMIC APPOINTMENTS

- Professor, Genetics
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Wu Tsai Human Performance Alliance
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

#### HONORS AND AWARDS

- Elected Member, American Academy of Arts and Sciences (2025)
- Pioneer Award, NIH Director's Fund (2025)
- NOMIS Award, NOMIS (2023)
- Lurie Prize in Biomedical Sciences, FNIH (2022)
- Transformative Research Award, NIH Directors' Fund (2018)
- Bennett J. Cohen Award for Research in Aging, University of Michigan (2014)
- Pioneer Award, NIH Director's Fund (2012)
- Vincent Cristofalo 'Rising Star in Aging Research' Award, American Federation for Aging Research (2012)
- Mentoring Award, Stanford University Post-doc Association (2010)
- New Investigator Award, NARSAD (2009)
- Senior Scholar Award, Ellison Medical Foundation (2009)
- Junior Investigator Award, California Institute for Regenerative Medicine (CIRM) (2008)
- Glenn Award, The Glenn Foundation for Medical Research (2007)
- Alfred P. Sloan Fellow, Sloan Foundation (2006)

- Innovation in Aging Research Award, Pfizer/American Association for Aging Research (2005)
- Klingenstein Fellow, The Esther A. & Joseph Klingenstein Fund (2005)

## PROFESSIONAL EDUCATION

- B.Sc., Ecole Normale Supérieure, Paris , Molecular Biology (1992)
- Ph.D., University of Nice, France , Cell Biology (1997)
- Postdoctoral fellow, Harvard Medical School , Neuroscience (2003)

## LINKS

- Brunet Lab Home Page: <https://web.stanford.edu/group/brunet/>
- Paul F. Glenn Laboratories for the Biology of Aging: <https://glenncenter.stanford.edu/>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Organismal aging is fascinating. At the root of many diseases (e.g. cardiovascular disease, cancer, and neurodegenerative diseases), aging is exceptionally complex and often defies conventional rules of biological processes.

To address this challenge, our lab has combined different organisms with the goal of uncovering new mechanisms that modulate aging. For example, we showed that chromatin modifiers impact lifespan, and we made the unexpected discovery that lifespan extension by chromatin modifiers could be inherited in a transgenerational manner. In mammals, we also identified the functional mechanisms that influence regenerative pools of stem cells, notably in the brain, with the goal of reverting features of brain aging and preventing cognitive decline.

We have pioneered the naturally short-lived African killifish as a transformative vertebrate model to study aging and longevity. By developing the genetic and genomic toolkit for this species – assembling its genome and developing a versatile CRISPR/Cas9 pipeline – we have transformed this organism into a powerful vertebrate model to study longevity. In recent years, we have used the killifish to identify previously unknown candidate genes and mechanisms underlying lifespan differences in vertebrates. We have also used the killifish to understand the molecular logic of “suspended animation” states, which allow long-term protection of organisms in nature.

## Teaching

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### COURSES

#### 2022-23

- Current Issues in Aging: GENE 221 (Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Meena Chakraborty, Connor Duffy, Yoo Jin Genie Jung, Cindy Lin, Siavash Moghadami, Thao Nguyen, Kit Vodehnal

#### Postdoctoral Faculty Sponsor

Felix Boos, Daniel Heinzer Avar, Blake Laham, Giulia Notarangelo, Nimrod Rappoport, Daniel Richard, Gina Wade

#### Doctoral Dissertation Advisor (AC)

Jacob Fyda, Oswaldo Martinez, Jeeyoon Na, Rahul Nagvekar, Angela Pogson, Jason Yang, Olivia Zhou

#### Doctoral Dissertation Co-Advisor (AC)

Brandon Ameglio

## GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Genetics (Phd Program)
- Neurosciences (Phd Program)

## Publications

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### PUBLICATIONS

- **Lifelong behavioral screen reveals an architecture of vertebrate aging.** *Science (New York, N.Y.)*  
Bedbrook, C. N., Nath, R. D., Zhang, L., Linderman, S. W., Brunet, A., Deisseroth, K.  
2026; 391 (6790): eaea9795
- **Multi-tissue transcriptomic aging atlas reveals predictive aging biomarkers in the killifish.** *Nature aging*  
Costa, E. K., Chen, J., Guldner, I. H., Mboning, L., Schmahl, N., Tsenter, A., Nagvekar, R., Wu, M. R., Moran-Losada, P., Bouchard, L. S., Wang, S., Singh, P. P., Pellegrini, et al  
2026
- **Targeting immune cells in the aged brain reveals that engineered cytokine IL-10 enhances neurogenesis and improves cognition.** *Immunity*  
Navarro Negredo, P., You, J., Hauptschein, M., Schroer, A. B., Richard, D. J., Abhiraman, G. C., Tsai, A. P., Sun, E. D., Notarangelo, G., Ramirez-Matias, J., Zhou, O. Y., Buckley, M. T., Malacon, et al  
2026
- **Life-long behavioral screen reveals an architecture of vertebrate aging.** *bioRxiv : the preprint server for biology*  
Bedbrook, C. N., Nath, R. D., Zhang, L., Linderman, S. W., Brunet, A., Deisseroth, K.  
2025
- **Multi-tissue transcriptomic aging atlas reveals predictive aging biomarkers in the killifish.** *bioRxiv : the preprint server for biology*  
Costa, E. K., Chen, J., Guldner, I. H., Mboning, L., Schmahl, N., Tsenter, A., Wu, M., Moran-Losada, P., Bouchard, L. S., Wang, S., Singh, P. P., Pellegrini, M., Brunet, et al  
2025
- **Spatial transcriptomic clocks reveal cell proximity effects in brain ageing.** *Nature*  
Sun, E. D., Zhou, O. Y., Hauptschein, M., Rappoport, N., Xu, L., Navarro Negredo, P., Liu, L., Rando, T. A., Zou, J., Brunet, A.  
2024
- **CRISPR-Cas9 screens reveal regulators of ageing in neural stem cells.** *Nature*  
Ruetz, T. J., Pogson, A. N., Kashiwagi, C. M., Gagnon, S. D., Morton, B., Sun, E. D., Na, J., Yeo, R. W., Leeman, D. S., Morgens, D. W., Tsui, C. K., Li, A., Bassik, et al  
2024
- **Tissue-specific landscape of protein aggregation and quality control in an aging vertebrate.** *Developmental cell*  
Chen, Y. R., Harel, I., Singh, P. P., Ziv, I., Moses, E., Goshtchevsky, U., Machado, B. E., Brunet, A., Jarosz, D. F.  
2024
- **Identification of protein aggregates in the aging vertebrate brain with prion-like and phase-separation properties.** *Cell reports*  
Harel, I., Chen, Y. R., Ziv, I., Singh, P. P., Heinzer, D., Navarro Negredo, P., Goshtchevsky, U., Wang, W., Astre, G., Moses, E., McKay, A., Machado, B. E., Hebestreit, et al  
2024: 112787
- **Evolution of diapause in the African turquoise killifish by remodeling the ancient gene regulatory landscape.** *Cell*  
Singh, P. P., Reeves, G. A., Contrepolis, K., Papsdorf, K., Miklas, J. W., Ellenberger, M., Hu, C. K., Snyder, M. P., Brunet, A.  
2024
- **Restoration of neuronal progenitors by partial reprogramming in the aged neurogenic niche.** *Nature aging*  
Xu, L., Ramirez-Matias, J., Hauptschein, M., Sun, E. D., Lunger, J. C., Buckley, M. T., Brunet, A.

2024

- **Chromatin accessibility dynamics of neurogenic niche cells reveal defects in neural stem cell adhesion and migration during aging.** *Nature aging*

Yeo, R. W., Zhou, O. Y., Zhong, B. L., Sun, E. D., Navarro Negredo, P., Nair, S., Sharmin, M., Ruetz, T. J., Wilson, M., Kundaje, A., Dunn, A. R., Brunet, A.

2023

- **Rapid and precise genome engineering in a naturally short-lived vertebrate.** *eLife*

Bedbrook, C. N., Nath, R. D., Nagvekar, R., Deisseroth, K., Brunet, A.

2023; 12

- **Lipid droplets and peroxisomes are co-regulated to drive lifespan extension in response to mono-unsaturated fatty acids.** *Nature cell biology*

Papsdorf, K., Miklas, J. W., Hosseini, A., Cabruja, M., Morrow, C. S., Savini, M., Yu, Y., Silva-Garcia, C. G., Haseley, N. R., Murphy, L. M., Yao, P., de Launoit, E., Dixon, et al

2023

- **The African Turquoise Killifish: A Scalable Vertebrate Model for Aging and Other Complex Phenotypes.** *Cold Spring Harbor protocols*

Boos, F., Chen, J., Brunet, A.

2023

- **Exercise reprograms the inflammatory landscape of multiple stem cell compartments during mammalian aging.** *Cell stem cell*

Liu, L., Kim, S., Buckley, M. T., Reyes, J. M., Kang, J., Tian, L., Wang, M., Lieu, A., Mao, M., Rodriguez-Mateo, C., Ishak, H. D., Jeong, M., Wu, et al

2023

- **Cell-type-specific aging clocks to quantify aging and rejuvenation in neurogenic regions of the brain.** *Nature aging*

Buckley, M. T., Sun, E. D., George, B. M., Liu, L., Schaum, N., Xu, L., Reyes, J. M., Goodell, M. A., Weissman, I. L., Wyss-Coray, T., Rando, T. A., Brunet, A.

2023; 3 (1): 121-137

- **An automated feeding system for the African killifish reveals effects of dietary restriction on lifespan and allows scalable assessment of associative learning.** *eLife*

McKay, A., Costa, E. K., Chen, J., Hu, C., Chen, X., Bedbrook, C. N., Khondker, R. C., Thielvoldt, M., Priya Singh, P., Wyss-Coray, T., Brunet, A.

2022; 11

- **Males induce premature demise of the opposite sex by multifaceted strategies.** *Nature aging*

Booth, L. N., Shi, C., Tantilert, C., Yeo, R. W., Miklas, J. W., Hebestreit, K., Hollenhorst, C. N., Maures, T. J., Buckley, M. T., Murphy, C. T., Brunet, A.

2022; 2 (9): 809-823

- **Ageing and rejuvenation of tissue stem cells and their niches.** *Nature reviews. Molecular cell biology*

Brunet, A., Goodell, M. A., Rando, T. A.

2022

- **Vertebrate diapause preserves organisms long term through Polycomb complex members.** *Science (New York, N.Y.)*

Hu, C., Wang, W., Brind'Amour, J., Singh, P. P., Reeves, G. A., Lorincz, M. C., Alvarado, A. S., Brunet, A.

2020; 367 (6480): 870-74

- **Turning back time with emerging rejuvenation strategies.** *Nature cell biology*

Mahmoudi, S., Xu, L., Brunet, A.

2019; 21 (1): 32-43

- **Heterogeneity in old fibroblasts is linked to variability in reprogramming and wound healing.** *Nature*

Mahmoudi, S. n., Mancini, E. n., Xu, L. n., Moore, A. n., Jahanbani, F. n., Hebestreit, K. n., Srinivasan, R. n., Li, X. n., Devarajan, K. n., Prélôt, L. n., Ang, C. E., Shibuya, Y. n., Benayoun, et al

2019; 574 (7779): 553-58

- **Single-cell analysis reveals T cell infiltration in old neurogenic niches.** *Nature*

Dulken, B. W., Buckley, M. T., Navarro Negredo, P. n., Saligramam, N. n., Cayrol, R. n., Leeman, D. S., George, B. M., Boutet, S. C., Hebestreit, K. n., Pluvinage, J. V., Wyss-Coray, T. n., Weissman, I. L., Vogel, et al

2019

- **Engulfment by brain macrophages in a short-lived vertebrate.** *bioRxiv : the preprint server for biology*  
Nagvekar, R., Pogson, A. N., Kalakuntla, P. R., Barr, H. J., Jaimes, A. M., Perry, S. V., Costa, E. K., Chen, J., Boos, F., Negrodo, P. N., Seeker, L. A., Jaggard, J. B., Barajas, et al  
2026
- **Toward actionable interventions in human aging (12th ARDD meeting, 2025).** *Aging*  
Dekan, A., Lore, S., Yoon, Y. E., Sjöholm, A., Tyshkovskiy, A., Terskikh, A., Cuervo, A. M., Georgievskaya, A., Heinz, A., Seluanov, A., Adams, A., Tsai, A. P., Murray, et al  
2026; 18 (1): 282-302
- **Molecular evolution of animal aging.** *The EMBO journal*  
Nussey, D. H., d'Adda di Fagagna, F., Bardin, A. J., Blau, H., Brunet, A., Bulavin, D. V., Guo, L., Hara, E., Junker, J. P., Gorbunova, V., Mittelbrunn, M., Rera, M., Reznick, et al  
2026
- **Past, present and future perspectives on the science of aging.** *Nature aging*  
Ambrosio, F., Artyomov, M. N., Austad, S. N., Barzilai, N., Belmonte, J. C., Belsky, D. W., Benayoun, B. A., Brunet, A., Dönertaş, H. M., Dubal, D. B., Fang, E. F., Feige, J. N., Fried, et al  
2026; 6 (1): 6-22
- **Age-related microbiome metabolites alter RNA splicing and chromatin accessibility in the brain.** *bioRxiv : the preprint server for biology*  
Chakraborty, M., Shi, S. M., Porter, I. E., Richard, D. J., Marinov, G. K., Moore, A. A., Blum, J. L., Natarajan, A., Jahng, J. W., Wu, J. C., Lu, S. X., Davidson, S. M., Greenleaf, et al  
2025
- **Plasma proteomics links brain and immune system aging with healthspan and longevity.** *Nature medicine*  
Oh, H. S., Le Guen, Y., Rappoport, N., Urey, D. Y., Farinas, A., Rutledge, J., Channappa, D., Wagner, A. D., Mormino, E., Brunet, A., Greicius, M. D., Wyss-Coray, T.  
2025
- **Hallmarks of stem cell aging.** *Cell stem cell*  
Rando, T. A., Brunet, A., Goodell, M. A.  
2025
- **Brain aging and rejuvenation at single-cell resolution.** *Neuron*  
Sun, E. D., Nagvekar, R., Pogson, A. N., Brunet, A.  
2025; 113 (1): 82-108
- **PARTIAL REPROGRAMMING OF THE AGING NEUROGENIC NICHE**  
Xu, L., Ramirez-Matias, J., Hauptschein, M., Sun, E., Lunger, J., Buckley, M., Brunet, A.  
OXFORD UNIV PRESS.2024: 268-269
- **Longevity biotechnology: bridging AI, biomarkers, geroscience and clinical applications for healthy longevity.** *Aging*  
Lyu, Y. X., Fu, Q., Wilczok, D., Ying, K., King, A., Antebi, A., Vojta, A., Stolzing, A., Moskalev, A., Georgievskaya, A., Maier, A. B., Olsen, A., Groth, et al  
2024; 16
- **Spatiotemporal transcriptomic profiling and modeling of mouse brain at single-cell resolution reveals cell proximity effects of aging and rejuvenation.** *bioRxiv : the preprint server for biology*  
Sun, E. D., Zhou, O. Y., Hauptschein, M., Rappoport, N., Xu, L., Navarro Negrodo, P., Liu, L., Rando, T. A., Zou, J., Brunet, A.  
2024
- **Plasma proteomics in the UK Biobank reveals youthful brains and immune systems promote healthspan and longevity.** *bioRxiv : the preprint server for biology*  
Oh, H. S., Le Guen, Y., Rappoport, N., Urey, D. Y., Rutledge, J., Brunet, A., Greicius, M. D., Wyss-Coray, T.  
2024
- **Hematologic DNMT3A reduction and high-fat diet synergize to promote weight gain and tissue inflammation.** *iScience*  
Reyes, J. M., Tovy, A., Zhang, L., Bortoletto, A. S., Rosas, C., Chen, C. W., Waldvogel, S. M., Guzman, A. G., Aguilar, R., Gupta, S., Liu, L., Buckley, M. T., Patel, et al  
2024; 27 (3): 109122

- **TISSUE: uncertainty-calibrated prediction of single-cell spatial transcriptomics improves downstream analyses.** *Nature methods*  
Sun, E. D., Ma, R., Navarro Negredo, P., Brunet, A., Zou, J.  
2024
- **The CRTC-1 transcriptional domain is required for COMPASS complex-mediated longevity in *C. elegans*.** *Nature aging*  
Silva-Garcia, C. G., Lascarez-Lagunas, L. I., Papsdorf, K., Heintz, C., Prabhakar, A., Morrow, C. S., Pajuelo Torres, L., Sharma, A., Liu, J., Colaiacovo, M. P., Brunet, A., Mair, W. B.  
2023
- **TISSUE: uncertainty-calibrated prediction of single-cell spatial transcriptomics improves downstream analyses.** *bioRxiv : the preprint server for biology*  
Sun, E. D., Ma, R., Navarro Negredo, P., Brunet, A., Zou, J.  
2023
- **Chromatin Accessibility Profiling and Data Analysis using ATAC-seq in *Nothobranchius furzeri*.** *Cold Spring Harbor protocols*  
Reeves, G. A., Singh, P. P., Brunet, A.  
2023
- **Seeing is believing: old clones die young.** *Nature aging*  
Zhou, O. Y., Brunet, A.  
2023; 3 (4): 371-373
- **Husbandry of the African Turquoise Killifish *Nothobranchius furzeri*.** *Cold Spring Harbor protocols*  
Nath, R. D., Bedbrook, C. N., Nagvekar, R., Brunet, A.  
2023
- **Life Span Assessment in the African Turquoise Killifish *Nothobranchius furzeri*.** *Cold Spring Harbor protocols*  
Bedbrook, C. N., Nath, R. D., Barajas, R., Brunet, A.  
2023
- **Breeding and Reproduction of the African Turquoise Killifish *Nothobranchius furzeri*.** *Cold Spring Harbor protocols*  
Chen, J., Khondker, R. C., Brunet, A.  
2023
- **Cell-type-specific aging clocks to quantify aging and rejuvenation in neurogenic regions of the brain** *NATURE AGING*  
Buckley, M. T., Sun, E. D. D., George, B. M., Liu, L., Schaum, N., Xu, L., Reyes, J. M., Goodell, M. A., Weissman, I. L., Wyss-Coray, T., Rando, T. A., Brunet, A.  
2023; 3 (1): 121-+
- **Exercise reprograms the inflammatory landscape of multiple stem cell compartments during mammalian aging** *Cell Stem Cell*  
Liu, L., Kim, S., Buckley, M., Reyes, J., Kang, J., Tian, L., Wang, M., Lieu, A., Mao, M., Mateo, C., Ishak, H., Jeong, M., Wu, et al  
2023; 30 (1-17)
- **Long life depends on open communication.** *Nature cell biology*  
Miklas, J. W., Brunet, A.  
2022
- **Unwanted help from T cells in the aging central nervous system.** *Nature aging*  
Negredo, P. N., Brunet, A.  
1800; 1 (4): 330-331
- **Aging and Rejuvenation of Neural Stem Cells and Their Niches.** *Cell stem cell*  
Navarro Negredo, P., Yeo, R. W., Brunet, A.  
2020
- **Old and new models for the study of human ageing.** *Nature reviews. Molecular cell biology*  
Brunet, A.  
2020
- **Support cells in the brain promote longevity.** *Science (New York, N.Y.)*

- Miklas, J. W., Brunet, A. n.  
2020; 367 (6476): 365–66
- **Differentiation Drives Widespread Rewiring of the Neural Stem Cell Chaperone Network.** *Molecular cell*  
Vonk, W. I., Rainbolt, T. K., Dolan, P. T., Webb, A. E., Brunet, A. n., Frydman, J. n.  
2020
  - **Personal aging markers and ageotypes revealed by deep longitudinal profiling.** *Nature medicine*  
Ahadi, S., Zhou, W., Schussler-Fiorenza Rose, S. M., Sailani, M. R., Contrepolis, K., Avina, M., Ashland, M., Brunet, A., Snyder, M.  
2020; 26 (1): 83–90
  - **Cell-Type-Specific Metabolic Profiling Achieved by Combining Desorption Electrospray Ionization Mass Spectrometry Imaging and Immunofluorescence Staining.** *Analytical chemistry*  
Yan, X. n., Zhao, X. n., Zhou, Z. n., McKay, A. n., Brunet, A. n., Zare, R. N.  
2020
  - **Changes in regeneration-responsive enhancers shape regenerative capacities in vertebrates.** *Science (New York, N.Y.)*  
Wang, W. n., Hu, C. K., Zeng, A. n., Alegre, D. n., Hu, D. n., Gotting, K. n., Ortega Granillo, A. n., Wang, Y. n., Robb, S. n., Schnittker, R. n., Zhang, S. n., Alegre, D. n., Li, et al  
2020; 369 (6508)
  - **Self-sperm induce resistance to the detrimental effects of sexual encounters with males in hermaphroditic nematodes.** *eLife*  
Booth, L. N., Maures, T. J., Yeo, R. W., Tantilert, C., Brunet, A.  
2019; 8
  - **Remodeling of epigenome and transcriptome landscapes with aging in mice reveals widespread induction of inflammatory responses** *GENOME RESEARCH*  
Benayoun, B. A., Pollina, E. A., Singh, P., Mahmoudi, S., Harel, I., Casey, K. M., Dulken, B. W., Kundaje, A., Brunet, A.  
2019; 29 (4): 697–709
  - **The Genetics of Aging: A Vertebrate Perspective.** *Cell*  
Singh, P. P., Demmitt, B. A., Nath, R. D., Brunet, A.  
2019; 177 (1): 200–220
  - **Cross-Platform Comparison of Untargeted and Targeted Lipidomics Approaches on Aging Mouse Plasma.** *Scientific reports*  
Contrepolis, K., Mahmoudi, S., Ubhi, B. K., Papsdorf, K., Hornburg, D., Brunet, A., Snyder, M.  
2018; 8 (1): 17747
  - **Linking Lipid Metabolism to Chromatin Regulation in Aging.** *Trends in cell biology*  
Papsdorf, K., Brunet, A.  
2018
  - **Loss of CaMKI function disrupts salt aversive learning in C. elegans.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*  
Lim, J. P., Fehlauer, H., Das, A., Saro, G., Glauser, D. A., Brunet, A., Goodman, M. B.  
2018
  - **The African turquoise killifish: A research organism to study vertebrate aging and diapause** *AGING CELL*  
Hu, C., Brunet, A.  
2018; 17 (3): e12757
  - **Lysosome activation clears aggregates and enhances quiescent neural stem cell activation during aging** *SCIENCE*  
Leeman, D. S., Hebestreit, K., Ruetz, T., Webb, A. E., McKay, A., Pollina, E. A., Dulken, B. W., Zhao, X., Yeo, R. W., Ho, T. T., Mahmoudi, S., Devarajan, K., Passegue, et al  
2018; 359 (6381): 1277–82
  - **The genome of Austrofundulus limnaeus offers insights into extreme vertebrate stress tolerance and embryonic development** *BMC GENOMICS*  
Wagner, J. T., Singh, P., Romney, A. L., Riggs, C. L., Minx, P., Woll, S. C., Roush, J., Warren, W. C., Brunet, A., Podrabsky, J. E.  
2018; 19: 155

- **Same path, different beginnings** *NATURE NEUROSCIENCE*  
Dulken, B. W., Brunet, A.  
2018; 21 (2): 159–60
- **Lysosome activation clears aggregates and enhances quiescent neural stem cell activation during aging** *Science*  
Leeman, D. S., Hebestreit, K., Ruetz, T., Webb, A. E., McKay, A., Pollina, E. A., Dulken, B. W., Zhao, X., Yeo, R. W., Ho, T. T., Mahmoudi, S., Devarajan, K., Passequé, et al  
2018: 1277-1283
- **Chromatin accessibility dynamics reveal novel functional enhancers in *C. elegans*** *GENOME RESEARCH*  
Daugherty, A. C., Yeo, R. W., Buenrostro, J. D., Greenleaf, W. J., Kundaje, A., Brunet, A.  
2017; 27 (12): 2096–2107
- **Progranulin, lysosomal regulation and neurodegenerative disease** *NATURE REVIEWS NEUROSCIENCE*  
Kao, A. W., McKay, A., Singh, P. P., Brunet, A., Huang, E. J.  
2017; 18 (6): 325-333
- **AMPK $\alpha$ 1-LDH pathway regulates muscle stem cell self-renewal by controlling metabolic homeostasis.** *EMBO journal*  
Theret, M., Gsaier, L., Schaffer, B., Juban, G., Ben Larbi, S., Weiss-Gayet, M., Bultot, L., Caterina, C., Foretz, M., Desplanches, D., Sanz, P., Zang, Z., Yang, et al  
2017
- **Mono-unsaturated fatty acids link H3K4me3 modifiers to *C. elegans* lifespan** *NATURE*  
Han, S., Schroeder, E. A., Silva-Garica, C. G., Hebestreit, K., Mair, W. B., Brunet, A.  
2017; 544 (7649): 185-?
- **Understanding and modeling aging**  
Brunet, A.  
FEDERATION AMER SOC EXP BIOL.2017
- **Interaction between epigenetic and metabolism in aging stem cells.** *Current opinion in cell biology*  
Brunet, A., Rando, T. A.  
2017; 45: 1-7
- **Single-Cell Transcriptomic Analysis Defines Heterogeneity and Transcriptional Dynamics in the Adult Neural Stem Cell Lineage.** *Cell reports*  
Dulken, B. W., Leeman, D. S., Boutet, S. C., Hebestreit, K., Brunet, A.  
2017; 18 (3): 777-790
- **Non-model model organisms.** *BMC biology*  
Russell, J. J., Theriot, J. A., Sood, P. n., Marshall, W. F., Landweber, L. F., Fritz-Laylin, L. n., Polka, J. K., Oliferenko, S. n., Gerbich, T. n., Gladfelder, A. n., Umen, J. n., Bezanilla, M. n., Lancaster, et al  
2017; 15 (1): 55
- **Dynamic landscape and regulation of RNA editing in mammals.** *Nature*  
Tan, M. H., Li, Q. n., Shanmugam, R. n., Piskol, R. n., Kohler, J. n., Young, A. N., Liu, K. I., Zhang, R. n., Ramaswami, G. n., Ariyoshi, K. n., Gupte, A. n., Keegan, L. P., George, et al  
2017; 550 (7675): 249–54
- **Bursts of Reprogramming: A Path to Extend Lifespan?** *CELL*  
Mahmoudi, S., Brunet, A.  
2016; 167 (7): 1672-1674
- **Efficient genome engineering approaches for the short-lived African turquoise killifish.** *Nature protocols*  
Harel, I., Valenzano, D. R., Brunet, A.  
2016; 11 (10): 2010-2028
- **Characterization of the direct targets of FOXO transcription factors throughout evolution.** *Aging cell*  
Webb, A. E., Kundaje, A., Brunet, A.  
2016; 15 (4): 673-685

- **FoxO3 regulates neuronal reprogramming of cells from postnatal and aging mice** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Ahlenius, H., Chanda, S., Webb, A. E., Yousif, I., Karmazin, J., Prusiner, S. B., Brunet, A., Suedhof, T. C., Wernig, M.  
2016; 113 (30): 8514-8519
- **The Aging Epigenome** *MOLECULAR CELL*  
Booth, L. N., Brunet, A.  
2016; 62 (5): 728-744
- **Deconstructing Dietary Restriction: A Case for Systems Approaches in Aging.** *Cell metabolism*  
Yeo, R., Brunet, A.  
2016; 23 (3): 395-396
- **AMPK: An Energy-Sensing Pathway with Multiple Inputs and Outputs** *TRENDS IN CELL BIOLOGY*  
Hardie, D. G., Schaffer, B. E., Brunet, A.  
2016; 26 (3): 190-201
- **The African Turquoise Killifish Genome Provides Insights into Evolution and Genetic Architecture of Lifespan** *CELL*  
Valenzano, D. R., Benayoun, B. A., Singh, P. P., Zhang, E., Etter, P. D., Hu, C., Clement-Ziza, M., Willemsen, D., Cui, R., Harel, I., Machado, B. E., Yee, M., Sharp, et al  
2015; 163 (6): 1539-1554
- **High telomerase is a hallmark of undifferentiated spermatogonia and is required for maintenance of male germline stem cells.** *Genes & development*  
Pech, M. F., Garbuzov, A., Hasegawa, K., Sukhwani, M., Zhang, R. J., Benayoun, B. A., Brockman, S. A., Lin, S., Brunet, A., Orwig, K. E., Artandi, S. E.  
2015; 29 (23): 2420-2434
- **Identification of AMPK Phosphorylation Sites Reveals a Network of Proteins Involved in Cell Invasion and Facilitates Large-Scale Substrate Prediction.** *Cell metabolism*  
Schaffer, B. E., Levin, R. S., Hertz, N. T., Maures, T. J., Schoof, M. L., Hollstein, P. E., Benayoun, B. A., Banko, M. R., Shaw, R. J., Shokat, K. M., Brunet, A.  
2015; 22 (5): 907-921
- **Lipid Profiles and Signals for Long Life** *TRENDS IN ENDOCRINOLOGY AND METABOLISM*  
Schroeder, E. A., Brunet, A.  
2015; 26 (11): 589-92
- **Epigenetic regulation of ageing: linking environmental inputs to genomic stability.** *Nature reviews. Molecular cell biology*  
Benayoun, B. A., Pollina, E. A., Brunet, A.  
2015; 16 (10): 593-610
- **A Fish in the Fountain of Youth** *CELL*  
Brunet, A.  
2015; 163 (1): 20
- **Shockingly Early: Chromatin-Mediated Loss of the Heat Shock Response.** *Molecular cell*  
Booth, L. N., Brunet, A.  
2015; 59 (4): 515-516
- **Encoding immortality: Transcriptional control of telomerase in stem cells in vivo**  
Pech, M., Garbuzov, A., Sukhwani, M., Benayoun, B., Lin, S., Brunet, A., Orwig, K., Artandi, S. E.  
AMER ASSOC CANCER RESEARCH.2015
- **AMP-Activated Protein Kinase Directly Phosphorylates and Destabilizes Hedgehog Pathway Transcription Factor GLI1 in Medulloblastoma.** *Cell reports*  
Li, Y., Luo, J., Mosley, Y. C., Hedrick, V. E., Paul, L. N., Chang, J., Zhang, G., Wang, Y., Banko, M. R., Brunet, A., Kuang, S., Wu, J., Chang, et al  
2015; 12 (4): 599-609
- **Stem Cell Aging and Sex: Are We Missing Something?** *Cell stem cell*  
Dulken, B., Brunet, A.

2015; 16 (6): 588-590

- **A platform for rapid exploration of aging and diseases in a naturally short-lived vertebrate.** *Cell*  
Harel, I., Benayoun, B. A., Machado, B., Singh, P. P., Hu, C., Pech, M. F., Valenzano, D. R., Zhang, E., Sharp, S. C., Artandi, S. E., Brunet, A.  
2015; 160 (5): 1013-1026
- **Inhibition of pluripotency networks by the rb tumor suppressor restricts reprogramming and tumorigenesis.** *Cell stem cell*  
Kareta, M. S., Gorges, L. L., Hafeez, S., Benayoun, B. A., Marro, S., Zmoos, A., Cecchini, M. J., Spacek, D., Batista, L. F., O'Brien, M., Ng, Y., Ang, C. E., Vaka, et al  
2015; 16 (1): 39-50
- **Cell biology. Lysosomal lipid lengthens life span.** *Science*  
Han, S., Brunet, A.  
2015; 347 (6217): 32-33
- **The African Turquoise Killifish: A Model for Exploring Vertebrate Aging and Diseases in the Fast Lane.** *Cold Spring Harbor symposia on quantitative biology*  
Harel, I., Brunet, A.  
2015; 80: 275-279
- **Geroscience: Linking Aging to Chronic Disease** *CELL*  
Kennedy, B. K., Berger, S. L., Brunet, A., Campisi, J., Cuervo, A., Epel, E. S., Franceschi, C., Lithgow, G. J., Morimoto, R. I., Pessin, J. E., Rando, T. A., Richardson, A., Schadt, et al  
2014; 159 (4): 708-12
- **H3K4me3 Breadth Is Linked to Cell Identity and Transcriptional Consistency.** *Cell*  
Benayoun, B. A., Pollina, E. A., Ucar, D., Mahmoudi, S., Karra, K., Wong, E. D., Devarajan, K., Daugherty, A. C., Kundaje, A. B., Mancini, E., Hitz, B. C., Gupta, R., Rando, et al  
2014; 158 (3): 673-688
- **Epigenetics of Aging and Aging-related Disease** *JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES*  
Brunet, A., Berger, S. L.  
2014; 69: S17-S20
- **FOXO3 Promotes Quiescence in Adult Muscle Stem Cells during the Process of Self-Renewal.** *Stem cell reports*  
Gopinath, S. D., Webb, A. E., Brunet, A., Rando, T. A.  
2014; 2 (4): 414-426
- **FOXO transcription factors: key regulators of cellular quality control** *TRENDS IN BIOCHEMICAL SCIENCES*  
Webb, A. E., Brunet, A.  
2014; 39 (4): 159-169
- **Males Shorten the Life Span of C. elegans Hermaphrodites via Secreted Compounds** *SCIENCE*  
Maures, T. J., Booth, L. N., Benayoun, B. A., Izrayelit, Y., Schroeder, F. C., Brunet, A.  
2014; 343 (6170): 541-544
- **Stem cells: Sex specificity in the blood.** *Nature*  
Leeman, D. S., Brunet, A.  
2014; 505 (7484): 488-490
- **Longevity Pathways in Mammalian Stem Cells** *ANNUAL REVIEW OF GERONTOLOGY AND GERIATRICS, VOL 34: GENETICS*  
Brunet, A., Mahmoudi, S., Mancini, E., Rafalski, V. A., Webb, A. E.  
edited by Sprott, R. L.  
2014; 34: 1-39
- **Hierarchical Mechanisms for Direct Reprogramming of Fibroblasts to Neurons** *CELL*  
Wapinski, O. L., Vierbuchen, T., Qu, K., Lee, Q. Y., Chanda, S., Fuentes, D. R., Giresi, P. G., Ng, Y. H., Marro, S., Neff, N. F., Drechsel, D., Martynoga, B., Castro, et al  
2013; 155 (3): 621-635

- **FOXO3 Shares Common Targets with ASCL1 Genome-wide and Inhibits ASCL1-Dependent Neurogenesis.** *Cell reports*  
Webb, A. E., Pollina, E. A., Vierbuchen, T., Urbán, N., Ucar, D., Leeman, D. S., Martynoga, B., Sewak, M., Rando, T. A., Guillemot, F., Wernig, M., Brunet, A.  
2013; 4 (3): 477-491
- **Chromatin Modifications as Determinants of Muscle Stem Cell Quiescence and Chronological Aging** *CELL REPORTS*  
Liu, L., Cheung, T. H., Charville, G. W., Hurgo, B. M., Leavitt, T., Shih, J., Brunet, A., Rando, T. A.  
2013; 4 (1): 189-204
- **Expansion of oligodendrocyte progenitor cells following SIRT1 inactivation in the adult brain.** *Nature cell biology*  
Rafalski, V. A., Ho, P. P., Brett, J. O., Ucar, D., Dugas, J. C., Pollina, E. A., Chow, L. M., Ibrahim, A., Baker, S. J., Barres, B. A., Steinman, L., Brunet, A.  
2013; 15 (6): 614-624
- **FOXO flips the longevity SWITCH.** *Nature cell biology*  
Webb, A. E., Brunet, A.  
2013; 15 (5): 444-446
- **Bridging the transgenerational gap with epigenetic memory** *TRENDS IN GENETICS*  
Lim, J. P., Brunet, A.  
2013; 29 (3): 176-186
- **FoxO6 regulates memory consolidation and synaptic function** *GENES & DEVELOPMENT*  
Salih, D. A., Rashid, A. J., Colas, D., de la Torre-Ubieta, L., Zhu, R. P., Morgan, A. A., Santo, E. E., Ucar, D., Devarajan, K., Cole, C. J., Madison, D. V., Shamloo, M., Butte, et al  
2012; 26 (24): 2780-2801
- **Energy metabolism and energy-sensing pathways in mammalian embryonic and adult stem cell fate** *JOURNAL OF CELL SCIENCE*  
Rafalski, V. A., Mancini, E., Brunet, A.  
2012; 125 (23): 5597-5608
- **Aging and reprogramming: a two-way street** *CURRENT OPINION IN CELL BIOLOGY*  
Mahmoudi, S., Brunet, A.  
2012; 24 (6): 744-756
- **Methylation by Set9 modulates FoxO3 stability and transcriptional activity** *AGING-US*  
Calnan, D. R., Webb, A. E., White, J. L., Stowe, T. R., Goswami, T., Shi, X., Espejo, A., Bedford, M. T., Gozani, O., Gygi, S. P., Brunet, A.  
2012; 4 (7): 462-479
- **Unbiased identification of novel AMPK substrates by chemical genetics**  
Brunet, A.  
FEDERATION AMER SOC EXP BIOL.2012
- **Aging and the control of the insulin-FOXO signaling pathway** *M S-MEDECINE SCIENCES*  
Brunet, A.  
2012; 28 (3): 316-320
- **Histone methylation makes its mark on longevity** *TRENDS IN CELL BIOLOGY*  
Han, S., Brunet, A.  
2012; 22 (1): 42-49
- **Epigenetic memory of longevity in Caenorhabditis elegans.** *Worm*  
Benayoun, B. A., Brunet, A.  
2012; 1 (1): 77-81
- **Chemical Genetic Screen for AMPK alpha 2 Substrates Uncovers a Network of Proteins Involved in Mitosis** *MOLECULAR CELL*  
Banko, M. R., Allen, J. J., Schaffer, B. E., Wilker, E. W., Tsou, P., White, J. L., Villen, J., Wang, B., Kim, S. R., Sakamoto, K., Gygi, S. P., Cantley, L. C., Yaffe, et al  
2011; 44 (6): 878-892

- **Transposon-Mediated Transgenesis in the Short-Lived African Killifish *Nothobranchius furzeri*, a Vertebrate Model for Aging.** *G3 (Bethesda, Md.)*  
Valenzano, D. R., Sharp, S., Brunet, A.  
2011; 1 (7): 531-538
- **Transposon-Mediated Transgenesis in the Short-Lived African Killifish *Nothobranchius furzeri*, a Vertebrate Model for Aging** *G3-GENES GENOMES GENETICS*  
Valenzano, D. R., Sharp, S., Brunet, A.  
2011; 1 (7): 531-538
- **The H3K27 demethylase UTX-1 regulates *C. elegans* lifespan in a germline-independent, insulin-dependent manner** *AGING CELL*  
Maures, T. J., Greer, E. L., Hauswirth, A. G., Brunet, A.  
2011; 10 (6): 980-990
- **Transgenerational epigenetic inheritance of longevity in *Caenorhabditis elegans*** *NATURE*  
Greer, E. L., Maures, T. J., Ucar, D., Hauswirth, A. G., Mancini, E., Lim, J. P., Benayoun, B. A., Shi, Y., Brunet, A.  
2011; 479 (7373): 365-U204
- **The pro-longevity gene FoxO3 is a direct target of the p53 tumor suppressor** *ONCOGENE*  
Renault, V. M., Thekkat, P. U., Hoang, K. L., WHITE, J. L., Brady, C. A., Broz, D. K., Venturelli, O. S., Johnson, T. M., Oskoui, P. R., Xuan, Z., Santo, E. E., Zhang, M. Q., Vogel, et al  
2011; 30 (29): 3207-3221
- **Epigenetic regulation of aging stem cells** *ONCOGENE*  
Pollina, E. A., Brunet, A.  
2011; 30 (28): 3105-3126
- **MicroRNA programs in normal and aberrant stem and progenitor cells** *GENOME RESEARCH*  
Arnold, C. P., Tan, R., Zhou, B., Yue, S., Schaffert, S., Biggs, J. R., Doyonnas, R., Lo, M., Perry, J. M., Renault, V. M., Sacco, A., Somerville, T., Viatour, et al  
2011; 21 (5): 798-810
- **A CRTCa1 Link between Energy and Life Span** *CELL METABOLISM*  
Brunet, A.  
2011; 13 (4): 358-360
- **Energy metabolism in adult neural stem cell fate** *PROGRESS IN NEUROBIOLOGY*  
Rafalski, V. A., Brunet, A.  
2011; 93 (2): 182-203
- **The MicroRNA Cluster miR-106b similar to 25 Regulates Adult Neural Stem/Progenitor Cell Proliferation and Neuronal Differentiation** *AGING-US*  
Brett, J. O., Renault, V. M., Rafalski, V. A., Webb, A. E., Brunet, A.  
2011; 3 (2): 108-124
- **Members of the H3K4 trimethylation complex regulate lifespan in a germline-dependent manner in *C. elegans*** *NATURE*  
Greer, E. L., Maures, T. J., Hauswirth, A. G., Green, E. M., Leeman, D. S., Maro, G. S., Han, S., Banko, M. R., Gozani, O., Brunet, A.  
2010; 466 (7304): 383-U137
- **A FOXO-Pak1 transcriptional pathway controls neuronal polarity** *GENES & DEVELOPMENT*  
de la Torre-Ubieta, L., Gaudilliere, B., Yang, Y., Ikeuchi, Y., Yamada, T., DiBacco, S., Stegmuller, J., Schueller, U., Salih, D. A., Rowitch, D., Brunet, A., Bonni, A.  
2010; 24 (8): 799-813
- **Mapping Loci Associated With Tail Color and Sex Determination in the Short-Lived Fish *Nothobranchius furzeri*** *GENETICS*  
Valenzano, D. R., Kirschner, J., Kamber, R. A., Zhang, E., Weber, D., Cellerino, A., Englert, C., Platzer, M., Reichwald, K., Brunet, A.  
2009; 183 (4): 1385-1395
- **FoxO3 Regulates Neural Stem Cell Homeostasis** *CELL STEM CELL*  
Renault, V. M., Rafalski, V. A., Morgan, A. A., Salih, D. A., Brett, J. O., Webb, A. E., Villeda, S. A., Thekkat, P. U., Guillerey, C., Denko, N. C., Palmer, T. D., Buft, A. J., Brunet, et al

---

2009; 5 (5): 527-539

- **CANCER When restriction is good** *NATURE*  
Brunet, A.  
2009; 458 (7239): 713-714
- **Different dietary restriction regimens extend lifespan by both independent and overlapping genetic pathways in C-elegans** *AGING CELL*  
Greer, E. L., Brunet, A.  
2009; 8 (2): 113-127
- **AMP-activated Protein Kinase and FoxO Transcription Factors in Dietary Restriction-induced Longevity** *15th International Symposium on Olfaction and Taste*  
Greer, E. L., Banko, M. R., Brunet, A.  
WILEY-BLACKWELL.2009: 688-692
- **Foxo Transcription Factors: Central Sensors of Environmental Stimuli that Regulate Longevity** *15th International Symposium on Olfaction and Taste*  
Brunet, A., Greer, E. L., Banko, M. R.  
OXFORD UNIV PRESS.2008: S20-S20
- **The FoxO code** *ONCOGENE*  
Calnan, D. R., Brunet, A.  
2008; 27 (16): 2276-2288
- **FoxO transcription factors in the maintenance of cellular homeostasis during aging** *CURRENT OPINION IN CELL BIOLOGY*  
Salih, D. A., Brunet, A.  
2008; 20 (2): 126-136
- **Signaling networks in aging** *JOURNAL OF CELL SCIENCE*  
Greer, E. L., Brunet, A.  
2008; 121 (4): 407-412
- **FOXO transcription factors in ageing and cancer** *10th International Symposium on Insulin Receptors and Insulin Action*  
Greer, E. L., Brunet, A.  
WILEY-BLACKWELL.2008: 19-28
- **Ageing and cancer: killing two birds with one worm** *NATURE GENETICS*  
Brunet, A.  
2007; 39 (11): 1306-1307
- **The energy sensor AMP-activated protein kinase directly regulates the mammalian FOXO3 transcription factor** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Greer, E. L., Oskoui, P. R., Banko, M. R., Maniar, J. M., Gygi, M. P., Gygi, S. P., Brunet, A.  
2007; 282 (41): 30107-30119
- **An AMPK-FOXO pathway mediates longevity induced by a novel method of dietary restriction in C-elegans** *CURRENT BIOLOGY*  
Greer, E. L., Dowlatshahi, D., Banko, M. R., Villen, J., Hoang, K., Blanchard, D., Gygi, S. P., Brunet, A.  
2007; 17 (19): 1646-1656
- **Ageing - From stem to stern** *NATURE*  
Brunet, A., Rando, T. A.  
2007; 449 (7160): 288-?
- **FOXO transcription factors** *CURRENT BIOLOGY*  
Carter, M. E., Brunet, A.  
2007; 17 (4): R113-R114
- **FOXO transcription factors at the interface between longevity and tumor suppression** *ONCOGENE*  
Greer, E. L., Brunet, A.  
2005; 24 (50): 7410-7425

- **Stress-dependent regulation of FOXO transcription factors by the SIRT1 deacetylase** *SCIENCE*  
Brunet, A., Sweeney, L. B., Sturgill, J. F., Chua, K. F., Greer, P. L., Lin, Y. X., Tran, H., Ross, S. E., Mostoslavsky, R., Cohen, H. Y., Hu, L. S., Cheng, H. L., Jedrychowski, et al  
2004; 303 (5666): 2011-2015
- **PEA-15 binding to ERK1/2 MAPKs is required for its modulation of integrin activation** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Chou, F. L., Hill, J. M., Hsieh, J. C., Pouyssegur, J., Brunet, A., Glading, A., Uberall, F., Ramos, J. W., Werner, M. H., Ginsberg, M. H.  
2003; 278 (52): 52587-52597
- **The many forks in FOXO's road.** *Science's STKE : signal transduction knowledge environment*  
Tran, H., Brunet, A., Griffith, E. C., Greenberg, M. E.  
2003; 2003 (172): RE5-?
- **DNA repair pathway stimulated by the forkhead transcription factor FOXO3a through the Gadd45 protein** *SCIENCE*  
Tran, H., Brunet, A., Grenier, J. M., Datta, S. R., Fornace, A. J., DiStefano, P. S., Chiang, L. W., Greenberg, M. E.  
2002; 296 (5567): 530-534
- **14-3-3 transits to the nucleus and participates in dynamic nucleocytoplasmic transport** *JOURNAL OF CELL BIOLOGY*  
Brunet, A., Kanai, F., Stehn, J., Xu, J., Sarbassova, D., Frangioni, J. V., Dalal, S. N., DeCaprio, J. A., Greenberg, M. E., Yaffe, M. B.  
2002; 156 (5): 817-828
- **Transforming growth factor beta enhances epithelial cell survival via Akt-dependent regulation of FKHL1** *MOLECULAR BIOLOGY OF THE CELL*  
Shin, I., Bakin, A. V., Rodeck, U., Brunet, A., ARTEAGA, C. L.  
2001; 12 (11): 3328-3339
- **Transcription-dependent and -independent control of neuronal survival by the PI3K-Akt signaling pathway** *CURRENT OPINION IN NEUROBIOLOGY*  
Brunet, A., Datta, S. R., Greenberg, M. E.  
2001; 11 (3): 297-305
- **Protein kinase SGK mediates survival signals by phosphorylating the forkhead transcription factor FKHL1 (FOXO3a)** *MOLECULAR AND CELLULAR BIOLOGY*  
Brunet, A., Park, J., Tran, H., Hu, L. S., HEMMING, B. A., Greenberg, M. E.  
2001; 21 (3): 952-965
- **Substrate recognition domains within extracellular signal-regulated kinase mediate binding and catalytic activation of mitogen-activated protein kinase phosphatase-3** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Nichols, A., Camps, M., Gillieron, C., Chabert, C., Brunet, A., Wilsbacher, J., Cobb, M., Pouyssegur, J., Shaw, J. P., Arkinstall, S.  
2000; 275 (32): 24613-24621
- **Cellular survival: a play in three Akts** *GENES & DEVELOPMENT*  
Datta, S. R., Brunet, A., Greenberg, M. E.  
1999; 13 (22): 2905-2927
- **Cell survival promoted by the Ras-MAPK signaling pathway by transcription-dependent and -independent mechanisms** *SCIENCE*  
Bonni, A., Brunet, A., West, A. E., Datta, S. R., Takasu, M. A., Greenberg, M. E.  
1999; 286 (5443): 1358-1362
- **Akt promotes cell survival by phosphorylating and inhibiting a forkhead transcription factor** *CELL*  
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; 96 (6): 857-868
- **Nuclear translocation of p42/p44 mitogen-activated protein kinase is required for growth factor-induced gene expression and cell cycle entry** *EMBO JOURNAL*  
Brunet, A., Roux, D., Lenormand, P., Dowd, S., Keyse, S., Pouyssegur, J.  
1999; 18 (3): 664-674
- **Growth factor-induced p42/p44 MAPK nuclear translocation and retention requires both MAPK activation and neosynthesis of nuclear anchoring proteins** *JOURNAL OF CELL BIOLOGY*  
Lenormand, P., Brondello, J. M., Brunet, A., Pouyssegur, J.

- 1998; 142 (3): 625-633
- **Signal transduction pathways from the membrane to the nucleus: variations on common themes** *BULLETIN DU CANCER*  
Brunet, A.  
1998; 85 (6): 527-537
  - **Inhibition of the mitogen-activated protein kinase pathway triggers B16 melanoma cell differentiation** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Englaro, W., Bertolotto, C., Busca, R., Brunet, A., Pages, G., Ortonne, J. P., Ballotti, R.  
1998; 273 (16): 9966-9970
  - **Involvement of extracellular signal-regulated kinase module in HIV-mediated CD4 signals controlling activation of nuclear factor-kappa B and AP-1 transcription factors** *JOURNAL OF IMMUNOLOGY*  
Briant, L., Robert-Hebmann, V., Sivan, V., Brunet, A., Pouyssegur, J., Devaux, C.  
1998; 160 (4): 1875-1885
  - **The dual specificity mitogen-activated protein kinase phosphatase-1 and -2 are induced by the p42/p44(MAPK) cascade** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Brondello, J. M., Brunet, A., Pouyssegur, J., McKenzie, F. R.  
1997; 272 (2): 1368-1376
  - **Mammalian MAP kinase modules: how to transduce specific signals** *ESSAYS IN BIOCHEMISTRY, VOL 32, 1997*  
Brunet, A., Pouyssegur, J.  
1997; 32: 1-16
  - **Cyclin D1 expression is regulated positively by the p42/p44(MAPK) and negatively by the p38/HOG(MAPK) pathway** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Lavoie, J. N., LALLEMAIN, G., Brunet, A., Muller, R., Pouyssegur, J.  
1996; 271 (34): 20608-20616
  - **Identification of MAP kinase domains by redirecting stress signals into growth factor responses** *SCIENCE*  
Brunet, A., Pouyssegur, J.  
1996; 272 (5268): 1652-1655
  - **THE MOUSE P44 MITOGEN-ACTIVATED PROTEIN-KINASE (EXTRACELLULAR SIGNAL-REGULATED KINASE-1) GENE - GENOMIC ORGANIZATION AND STRUCTURE OF THE 5'-FLANKING REGULATORY REGION** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Pages, G., Stanley, E. R., Le Gall, M., Brunet, A., Pouyssegur, J.  
1995; 270 (45): 26986-26992
  - **B-RAF PROTEIN ISOFORMS INTERACT WITH AND PHOSPHORYLATE MEK-1 ON SERINE RESIDUE-218 AND RESIDUE-222** *ONCOGENE*  
Papin, C., Eychene, A., Brunet, A., Pages, G., Pouyssegur, J., Calothy, G., Barnier, J. V.  
1995; 10 (8): 1647-1651
  - **[MAP kinase module: role in the control of cell proliferation].** *Comptes rendus des séances de la Société de biologie et de ses filiales*  
Brunet, A., Brondello, J. M., L'Allemain, G., Lenormand, P., McKenzie, F., Pagès, G., Pouyssegur, J.  
1995; 189 (1): 43-57
  - **CONSTITUTIVELY ACTIVE MUTANTS OF MAP KINASE KINASE (MEK1) INDUCE GROWTH FACTOR-RELAXATION AND ONCOGENICITY WHEN EXPRESSED IN FIBROBLASTS** *ONCOGENE*  
Brunet, A., Pages, G., Pouyssegur, J.  
1994; 9 (11): 3379-3387
  - **CONSTITUTIVE MUTANT AND PUTATIVE REGULATORY SERINE PHOSPHORYLATION SITE OF MAMMALIAN MAP KINASE KINASE (MEK1)** *EMBO JOURNAL*  
Pages, G., Brunet, A., LALLEMAIN, G., Pouyssegur, J.  
1994; 13 (13): 3003-3010
  - **GROWTH FACTOR-STIMULATED MAP KINASE INDUCES RAPID RETROPHOSPHORYLATION AND INHIBITION OF MAP KINASE KINASE (MEK1)** *FEBS LETTERS*  
Brunet, A., Pages, G., Pouyssegur, J.  
1994; 346 (2-3): 299-303

- **GROWTH-FACTORS INDUCE NUCLEAR TRANSLOCATION OF MAP KINASES (P42(MAPK) AND P44(MAPK)) BUT NOT OF THEIR ACTIVATOR MAP KINASE KINASE (P45(MAPKK)) IN FIBROBLASTS** *JOURNAL OF CELL BIOLOGY*  
Lenormand, P., Sardet, C., Pages, G., LALLEMAIN, G., Brunet, A., Pouyssegur, J.  
1993; 122 (5): 1079-1088
- **MAP KINASE CASCADE - AN ESSENTIAL SIGNALING ROUTE THAT CONTROLS CELL-PROLIFERATION** *3rd International Conference on Negative Regulation of Hematopoiesis*  
Pouyssegur, J., Brunet, A., CHAMBARD, J. C., LALLEMAIN, G., Lenormand, P., Pages, G.  
EDITIONS INSERM.1993: 55-63
- **MAP KINASE CASCADE AND THE CONTROL OF CELL-PROLIFERATION** *INTERNATIONAL CONF ON CANCER : BIOLOGICAL MECHANISMS AND CLINICAL APPLICATIONS*  
Pages, G., Brunet, A., CHAMBARD, J. C., LALLEMAIN, G., Lenormand, P., Pouyssegur, J.  
BIRKHAUSER VERLAG.1993: 153-164