



# The FASEB Journal

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## UP FRONT

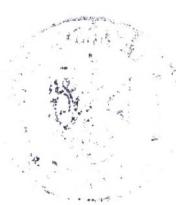
- Editorial: Intelligent design: Hooke and the lynxes** 1933-1935  
**The Bright Side of Life (Science): Bruce Cronstein's response to RFP for a "rigorous test of intelligent design"** 1936-1937  
**Life of Science: Howard Garrison et al report on the changing face of biomedical science in the U.S.** 1938-1942

## LIFE SCIENCES FORUM

- E. Evangelou, T. A. Trikalinos, and J. P. A. Ioannidis  
**Unavailability of online supplementary scientific information from articles published in major journals** 1943-1944

## RESEARCH COMMUNICATIONS

- L. Thon, H. Möhlig, S. Mathieu, A. Lange, E. Bulanova, S. Winoto-Morbach, S. Schütze, S. Bulfone-Paus, and D. Adam  
**Ceramide mediates caspase-independent programmed cell death** 1945-1956  
M. Hill, V. Pereira, C. Chauveau, R. Zagani, S. Remy, L. Tesson, D. Mazal, L. Ubillos, R. Brion, K. Ashgar, M. F. Mashreghi, K. Kotsch, J. Moffett, C. Doebis, M. Seifert, J. Boczkowski, E. Osinaga, and I. Anegón  
**Heme oxygenase-1 inhibits rat and human breast cancer cell proliferation: mutual cross inhibition with indoleamine 2,3-dioxygenase** 1957-1968  
H. Haase, J. Alvarez, D. Petzhold, A. Doller, J. Behlke, J. Erdmann, R. Hetzer, V. Regitz-Zagrosek, G. Vassort, and I. Morano  
**Ahnak is critical for cardiac Ca(v)1.2 calcium channel function and its β-adrenergic regulation** 1969-1977  
Z. Li, R. Zhao, X. Wu, Y. Sun, M. Yao, J. Li, Y. Xu, and J. Gu  
**Identification and characterization of a novel peptide ligand of epidermal growth factor receptor for targeted delivery of therapeutics** 1978-1985  
N. Wedhas, H. J. Klamut, C. Dogra, A. K. Srivastava, S. Mohan, and A. Kumar  
**Inhibition of mechanosensitive cation channels inhibits myogenic differentiation by suppressing the expression of myogenic regulatory factors and caspase-3 activity** 1986-1997  
P. S. Monraats, N. M. M. Pires, A. Schepers, W. R. P. Agema, L. S. M. Boesten, M. R. de Vries, A. H. Zwinderman, M. P. M. de Maat, P. A. F. M. Doevedans, R. J. de Winter, R. A. Tio, J. Waltenberger, L. M. 't Hart, R. R. Frants, P. H. A. Quax, B. J. M. van Vlijmen, L. M. Havekes, A. van der Laarse, E. E. van der Wall, and J. W. Jukema  
**Tumor necrosis factor-α plays an important role in restenosis development** 1998-2004



(continued)

## FJ EXPRESS SUMMARIES

(Full text available online at <http://www.fasebj.org>)

- Y. Ohki, B. Heissig, Y. Sato, H. Akiyama, Z. Zhu, D. J. Hicklin, K. Shimada, H. Ogawa, H. Daida, K. Hattori, and A. Ohsaka  
**Granulocyte colony-stimulating factor promotes neovascularization by releasing vascular endothelial growth factor from neutrophils** 2005-2007
- W. J. M. Mulder, G. J. Strijkers, J. W. Habets, E. J. W. Bleeker, D. W. J. van der Schaft, G. Storm, G. A. Koning, A. W. Griffioen, and K. Nicolay  
**MR molecular imaging and fluorescence microscopy for identification of activated tumor endothelium using a bimodal lipidic nanoparticle** 2008-2010
- J. Zwerina, S. Tzima, S. Hayer, K. Redlich, O. Hoffmann, B. Hanslik-Schnabel, J. S. Smolen, G. Kollias, and G. Schett  
**Heme oxygenase 1 (HO-1) regulates osteoclastogenesis and bone resorption** 2011-2013
- D.-M. Huang, Y. Hung, B.-S. Ko, S.-C. Hsu, W.-H. Chen, C.-L. Chien, C.-P. Tsai, C.-T. Kuo, J.-C. Kang, C.-S. Yang, C.-Y. Mou, and Y.-C. Chen  
**Highly efficient cellular labeling of mesoporous nanoparticles in human mesenchymal stem cells: implication for stem cell tracking** 2014-2016
- A. De and S. S. Gambhir  
**Noninvasive imaging of protein–protein interactions from live cells and living subjects using bioluminescence resonance energy transfer** 2017-2019
- J. B. Boonyaratanaornkit, A. Cogoli, C.-F. Li, T. Schopper, P. Pippia, G. Galleri, M. A. Meloni, and M. Hughes-Fulford  
**Key gravity-sensitive signaling pathways drive T cell activation** 2020-2022
- H. Kato, J. Ishida, S. Imagawa, T. Saito, N. Suzuki, T. Matsuoka, T. Sugaya, K. Tanimoto, T. Yokoo, O. Ohneda, F. Sugiyama, K.-i. Yagami, T. Fujita, M. Yamamoto, M. Nangaku, and A. Fukamizu  
**Enhanced erythropoiesis mediated by activation of the renin-angiotensin system via angiotensin II type 1a receptor** 2023-2025
- E. Kilic, Ü. Kilic, J. Soliz, C. L. Bassetti, M. Gassmann, and D. M. Hermann  
**Brain-derived erythropoietin protects from focal cerebral ischemia by dual activation of ERK-1/-2 and Akt pathways** 2026-2028
- K. M. Hong, M. D. Burdick, R. J. Phillips, D. Heber, and R. M. Strieter  
**Characterization of human fibrocytes as circulating adipocyte progenitors and the formation of human adipose tissue in SCID mice** 2029-2031
- P. Iribarren, K. Chen, J. Hu, W. Gong, E. H. Cho, S. Lockett, B. Uranchimeg, and J. M. Wang  
**CpG-containing oligodeoxynucleotide promotes microglial cell uptake of amyloid  $\beta$  1-42 peptide by up-regulating the expression of the G-protein- coupled receptor mFPR2** 2032-2034
- J. Hoffmann Y. Feng, F. vom Hagen, A. Hillenbrand, J. Lin, R. Erber, P. Vajkoczy, E. Gourzoulidou, H. Waldmann, A. Giannis, H. Wolburg, M. Shani, V. Jaeger, H. A. Weich, K. T. Preissner, S. Hoffmann, U. Deutsch, and H.-P. Hammes  
**Endothelial survival factors and spatial completion, but not pericyte coverage of retinal capillaries determine vessel plasticity** 2035-2036
- R. M. Bell, A. C. Cave, S. Johar, D. J. Hearse, A. M. Shah, and M. J. Shattock  
**Pivotal role of NOX-2-containing NADPH oxidase in early ischemic preconditioning** 2037-2039
- C. Caspersen, N. Wang, J. Yao, A. Sosunov, X. Chen, J. W. Lustbader, H. W. Xu, D. Stern, G. McKhann, and S. D. Yan  
**Mitochondrial A $\beta$ : a potential focal point for neuronal metabolic dysfunction in Alzheimer's disease** 2040-2041
- S. Shukla, A. Mishra, P. Fu, G. T. MacLennan, M. I. Resnick, and S. Gupta  
**Up-regulation of insulin-like growth factor binding protein-3 by apigenin leads to growth inhibition and apoptosis of 22Rv1 xenograft in athymic nude mice** 2042-2044



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S. Mazzola, M. Forni, M. Albertini, M. L. Bacci, A. Zannoni, F. Gentilini, M. Lavitrano, F. H. Bach, L. E. Otterbein, and M. G. Clement	
<b>Carbon monoxide pretreatment prevents respiratory derangement and ameliorates hyperacute endotoxic shock in pigs</b>	2045-2047
B. Muciaccia, F. Padula, E. Vicini, L. Gandini, A. Lenzi, and M. Stefanini	
<b>Beta-chemokine receptors 5 and 3 are expressed on the head region of human spermatozoon</b>	2048-2050
A. R. K. Kumarapeli, K. M. Horak, J. W. Glasford, J. Li, Q. Chen, J. Liu, H. Zheng, and X. Wang	
<b>A novel transgenic mouse model reveals deregulation of the ubiquitin-proteasome system in the heart by doxorubicin</b>	2051-2053
M. Sugano, K. Tsuchida, T. Hata, and N. Makino	
<b>RNA interference targeting SHP-1 attenuates myocardial infarction in rats</b>	2054-2056
C. Tschöpe, T. Walther, F. Escher, F. Spillmann, J. Du, C. Altmann, I. Schimke, M. Bader, C. F. Sanchez-Ferrer, H.-P. Schultheiss, and M. Noutsias	
<b>Transgenic activation of the kallikrein-kinin system inhibits intramyocardial inflammation, endothelial dysfunction and oxidative stress in experimental diabetic cardiomyopathy</b>	2057-2059
R. C. Cumming and D. Schubert	
<b>Amyloid-<math>\beta</math> induces disulfide bonding and aggregation of GAPDH in Alzheimer's disease</b>	2060-2062
S. J. R. Meex, C. J. H. van der Kallen, M. M. J. van Greevenbroek, P. M. H. Eurlings, M. El Hasnaoui, C. T. A. Evelo, P. J. Lindsey, J. J. F. P. Luiken, J. F. C. Glatz, and T. W. A. de Bruin	
<b>Up-regulation of CD36/FAT in preadipocytes in familial combined hyperlipidemia</b>	2063-2065
C. Tomás-Zapico, B. Caballero, V. Sierra, I. Vega-Naredo, Ó. Álvarez-García, D. Tolivia, M. J. Rodríguez-Colunga, and A. Coto-Montes	
<b>Survival mechanisms in a physiological oxidative stress model</b>	2066-2068
T. Takeda, M. Asahi, O. Yamaguchi, S. Hikoso, H. Nakayama, Y. Kusakari, M. Kawai, K. Hongo, Y. Higuchi, K. Kashiwase, T. Watanabe, M. Taniike, A. Nakai, K. Nishida, S. Kurihara, D. B. Donoviel, A. Bernstein, T. Tomita, T. Iwatsubo, M. Hori, and K. Otsu	
<b>Presenilin 2 regulates the systolic function of heart by modulating <math>Ca^{2+}</math> signaling</b>	2069-2071
R. J. Southgate, C. R. Bruce, A. L. Carey, G. R. Steinberg, K. Walder, R. Monks, M. J. Watt, J. A. Hawley, M. J. Birnbaum, and M. A. Febbraio	
<b>PGC-1<math>\alpha</math> gene expression is down-regulated by Akt mediated phosphorylation and nuclear exclusion of FoxO1 in insulin-stimulated skeletal muscle</b>	2072-2074
A. Mottola, S. Antoniotti, D. Lovisolo, and L. Munaron	
<b>Regulation of noncapacitative calcium entry by arachidonic acid and nitric oxide in endothelial cells</b>	2075-2077
T. Keiper, N. Al-Fakhri, E. Chavakis, A. N. Athanasopoulos, B. Isermann, S. Herzog, R. Saffrich, K. Hersemeyer, R. M. Bohle, J. Haendeler, K. T. Preissner, S. Santoso, and T. Chavakis	
<b>The role of junctional adhesion molecule-C (JAM-C) in oxidized LDL-mediated leukocyte recruitment</b>	2078-2080
Z. Zhao, L. Ho, J. Wang, W. Qin, E. D. Festa, C. Mobbs, P. Hof, A. Rocher, S. Masur, V. Haroutunian, and G. M. Pasinetti	
<b>Connective tissue growth factor (CTGF) expression in the brain is a downstream effector of insulin resistance- associated promotion of Alzheimer's disease <math>\beta</math>-amyloid neuropathology</b>	2081-2082
M. R. Basha, M. Murali, H. K. Siddiqi, K. Ghosal, O. K. Siddiqi, H. A. Lashuel, Y.-W. Ge, D. K. Lahiri, and N. H. Zawia	
<b>Lead (Pb) exposure and its effect on APP proteolysis and A<math>\beta</math> aggregation</b>	2083-2084
L. A. Wilson, A. Gemin, R. Espiritu, and G. Singh	
<b>ets-1 is transcriptionally up-regulated by <math>H_2O_2</math> via an antioxidant response element</b>	2085-2087

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## ERRATA

S. Umeda, M. Suzuki, H. Okamoto, F. Ono, A. Mizota, K. Terao, Y. Yoshikawa, Y. Tanaka, and T. Iwata

**Molecular composition of drusen and possible involvement of anti-retinal autoimmunity in two different forms of macular degeneration in cynomolgus monkey (*Macaca fascicularis*)**

2088

A. Paintlia, M. Paintlia, M. Khan, T. Vollmer, A. Singh, and I. Singh

**HMG-CoA reductase inhibitor augments survival and differentiation of oligodendrocyte progenitors in animal model of multiple sclerosis**

2088

**Cover Legend:** Discomedusae: Desmonema Annasethe Haeckel (Cnidaria: Scyphozoa). Ernst Haeckel (1834-1919) was the German scientist who coined the phrase "ontogeny recapitulates phylogeny" and the terms "Darwinism" and "ecology." On the day that Haeckel was informed that he had received the prestigious Cothenius Medal from the Berlin Academy, his wife of 18 months died suddenly of an undetermined fever. Haeckel was devastated. A year later, he wrote the following tribute to his beloved wife: "Mitrocoma Annae belong to the most charming of all the Medusae. It was first observed by me in April 1864 in the Bay of Villafranca (Villefranche) near Nice. Its tentacles hung like blonde hair ornaments of a princess. I named this species as a memorial to my unforgettable true wife, Anna Sethe. If I have succeeded, during my earthly pilgrimage in accomplishing something for natural science and humanity, I owe the greatest part to the ennobling influence of this gifted wife." In further tribute, Haeckel produced one of his most beautiful and renowned illustrations. (From an exhibition at the MBLWHOI library, curated by Ann Weissman <http://www.mblwholibrary.org/haeckel/wallcharts/discomedusae1.html>.)

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The last section of this month's journal is devoted to summaries of full-length research communications that appeared on the *FJ* website in October 2005. These author-prepared summaries highlight the most important features of the full-length manuscript and, unlike conventional abstracts, offer a limited amount of experimental data supplemented by a schematic diagram. Many readers will find it more convenient to scan these synopses before reading the entire article online. Subscribers to the journal can access the complete study by using the URL address printed near the top of the first page of each summary.

