Scope of Journal
The Journal of Neurophysiology publishes original articles on the function of the nervous system. All levels of function are included, from the membrane and cell to systems and behavior. Experimental approaches include molecular neurobiology, cell culture and slice preparations, membrane physiology, developmental neurobiology, functional neuroanatomy, neurochemistry, neuropharmacology, systems electrophysiology, imaging and mapping techniques, and behavioral analysis. Experimental preparations may be invertebrate or vertebrate species, including humans. Theoretical studies are acceptable if they are tied closely to the interpretation of experimental data and elucidate principles of broad interest.

Authors are required to submit papers online at www.apscentral.org.

A Few Highly Cited Articles

Specific roles of AMPA receptor subunit GluR1 (GluA1) phosphorylation sites in regulating synaptic plasticity in the CA1 region of hippocampus. Lee HK, Takamiya K, He K, Song L, Huganir RL. J Neurophysiol. 2010 Jan;103(1):479-89.


CALL FOR NOMINATIONS

For the Editorship of

Physiology

Nominations are invited for the Editorship of Physiology to succeed W. Boron, who will complete his term as Editor on June 30, 2012. The Publications Committee plans to interview candidates in the Fall of 2011.

Applications should be received before August 15, 2011.

Nominations, accompanied by a curriculum vitae, should be sent to the Chair of the Publications Committee:

Hershel Raff, Ph.D.
American Physiological Society
9650 Rockville Pike
Bethesda, MD 20814-3991
Abbreviations

Listed below are abbreviations and their definitions. These may be used without definition in the APS Journals. See Information for Authors (www.the-aps.org/publications/journals/pub_quick.htm) for other abbreviations, symbols, and terminology.

ACCh  acetylcholine
AChT  adrenocorticotropic hormone
ADP (CDP),  adenosine 5'-diphosphate (and similarly for cytidine, guanosine, inosine, uridine, xanthosine, thymidine)
GDP, XDP,  ATP,  and similarly for adenosine 5'-triphosphate, etc.
AMP, etc.  acetylcholine
AMP, etc.  adenosine 5'-monophosphate, etc.
ANG I, etc.  angiotensin I, etc.
ANOVA  analysis of variance
ATPase, etc.  adenosine 5'-triphosphatase, etc.
AVP  arginine vasopressin
BAPTA  1,2-bis(2-aminophenoxy)ethane-N,N',N'',N'''-tetraacetic acid
BCECF  2.7'-bis(2-carboxyethyl)-5(6)-carboxyfluorescein
BP  base pair(s)
BSA  bovine serum albumin
CaMK  Ca2+/calmodulin-dependent kinase
CaMKK  CaMK kinase
cAMP, etc.  carbonyl cyanide m-chlorophenylhydrazone
CCCP  carbonyl cyanide N,N,N',N''-tetraacetic acid
CCK  cholecystokinin
cDNA  complementary DNA
cGMP  cyclic guanosine monophosphate
cGlu  glutamic acid
CoA  coenzyme A (also, acyl-CoA)
CoA  coenzyme A
CoA  coenzyme A
C-Re  corticotropin-releasing factor
DDE  desmopressin
DEAE  diethylaminoethyl
DIDS  4,4'-diisothiocyanostilbene-2,2'-disulfonic acid
DMEM  Dulbecco’s modified Eagle’s medium
DMSO  dimethyl sulfoxide
DNA  deoxyribonucleic acid
dNase  deoxyribonuclease
DOC  deoxy cortisolosterone
DOCA  deoxycorticosterone acetate
dpm  disintegrations per minute
DTNB  5,5'-dithiobis(2-nitrobenzoic acid)
ECo  concentration giving half-maximal response
EGC  electrocardiogram
ECM  extracellular matrix
EDTA  ethylenediaminetetraacetic acid
EFG  electroencephalogram
EGF  epidermal growth factor
EGTA  ethylene glycol-bis[β-aminoethyl ether]-N,N',N''-tetraacetic acid
EIP  endoperoxide
ELISA  enzyme-linked immunosorbent assay
EMSA  electrophoretic mobility shift assay
ERK  extracellular signal-regulated kinase
FAD  flavin adenine dinucleotide
FADH2  reduced flavin adenine dinucleotide
FBS  fetal bovine serum
FCS  fetal calf serum
FCCP  carbonyl cyanide p-trifluoromethoxyphenylhydrazone
FGF  fibroblast growth factor
FICU  fluorouracil 5-fluorouracil
FICU  glucocorticoid-induced uridine conjugate
FHL  follicle-stimulating hormone
GABA  γ-aminobutyric acid (also, “GABAergic”)
GAP  growth-associated protein
GAPDH  glyceraldehyde-3-phosphate dehydrogenase
GC-MS  gas chromatography-mass spectrometry
GDPS  guanosine 5'-O-(2-thiodiphosphate)
GSH  reduced and oxidized glutathione
GTP-s  guanosine 5'-O-(3-thiotriphosphate)
GSK  glycogen synthase kinase
Hb  hemoglobin
HBSS  Hanks’ balanced salt solution
Hct  hematocrit
HDLC  high-density lipoprotein
HEPES  N-2-hydroxyethylpiperazine-N'2-ethanesulfonic acid
HETE  hydroxyeicosatetraenoic acid
HPLC  high-performance liquid chromatography
5-HT  5-hydroxytryptamine (serotonin)
IMX  insulin-like growth factor I and II
ICa  concentration giving half-maximal inhibition
ICAM  intercellular adhesion molecule
IFN  interferon
IGF-I, II  insulin-like growth factor I and II
IgG, etc.  immunoglobulin G, etc.
IKK  IκB kinase
IL-1  interleukin-1 (IL-2, etc.)
The American Physiological Society (APS) provides leadership in the life sciences by promoting excellence and innovation in physiological research and education and by providing information to the scientific community and to the public.

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www.the-aps.org/awards
HYPOXIA THEME PAPERS

American Journal of Physiology-Cell Physiology Theme: Hypoxia (Editorial) (February 2011)
G. L. Semenza

Intracellular sensors for oxygen and oxidative stress: novel therapeutic targets (February 2011)
T. Miyata, S. Takizawa, and C. van Ypersele de Strihou

Hypoxia regulates cellular metabolism (March 2011)
W. W. Wheaton and N. S. Chandel

Hypoxia and neurotransmitter synthesis (April 2011)
G. K. Kumar

Hypoxia and ion channel function (May 2011)
L. A. Shimoda and J. Polak

Hypoxia and human genetics (June 2011)
D. Yoon, P. Ponka, and J. T. Prchal