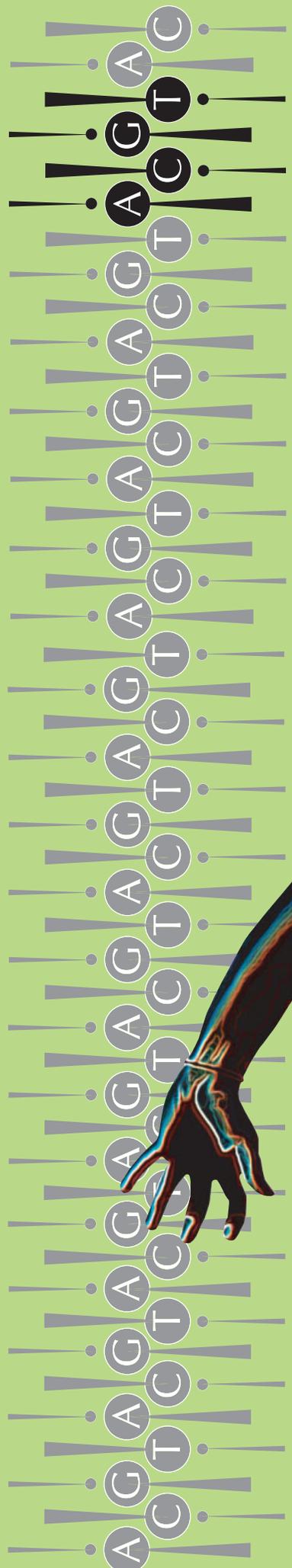


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Editor's Office:
(414) 456-8529

Publication FAX: (301) 634-7243

E-Mail: publicat@the-aps.org

Executive Director, Martin Frank, PhD (301) 634-7118

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Technology Development for Physiological Genomics

Physiological Genomics is soliciting manuscript submission that describe the development and/or use of novel technologies in physiological genomics research. It is well recognized that the application of innovative technology has been of major importance to advancements in this field. The early years of this journal coincided with the development of genome-wide techniques and the initial entry of physiologists into the discipline of genomics. The journal has historically published articles that deal with microarray analysis and has led the way in helping to define standards for experiments and publication of microarray results. *Physiological Genomics* is now interested in embracing the opportunities created by the emergence of new disciplines such as proteomics, metabolomics, next-generation sequencing, modeling, and systems approaches and desires to provide an outlet for studies that explore novel methodologies in these and other fields that will become part of the accepted toolbox of future physiologists.

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For any specific queries please contact the Editor-in-Chief, Andy Greene
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Physiological Genomics

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Physiological Genomics

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ACh	acetylcholine	IRMS	isotope ratio mass spectrometry
ACTH	adrenocorticotrophic hormone	JAK	Janus-activated kinase
ADP (CDP, GDP, IDP, UDP, XDP, TDP)	adenosine 5'-diphosphate (and similarly for cytidine, guanosine, inosine, uridine, xanthosine, thymidine)	JNK	c-Jun NH ₂ -terminal kinase
AM	acetoxymethyl ester	JNKK	JNK kinase
AMP, etc.	adenosine 5'-monophosphate, etc.	kb	kilobase(s)
ANG I, etc.	angiotensin I, etc.	K_m	equilibrium constant related to Michaelis-Menten kinetics (similarly, K_d , K_a , K_{eq} , K_s)
ANOVA	analysis of variance	LDL	low-density lipoprotein
ATP, etc.	adenosine 5'-triphosphate, etc.	LH	luteinizing hormone
ATPase, etc.	adenosine 5'-triphosphatase, etc.	LH-RH	luteinizing hormone-releasing hormone
AVP	arginine vasopressin	LPS	lipopolysaccharide
BAPTA	1,2-bis(2-aminophenoxy)ethane- <i>N,N,N',N'</i> -tetraacetic acid	MAb	monoclonal antibody
BCECF	2',7'-bis(2-carboxyethyl)-5(6)-carboxyfluorescein	MAPK	mitogen-activated protein kinase
bp	base pair(s)	MAPKK	MAP kinase kinase (also known as MEK or MKK)
BSA	bovine serum albumin	MAPKAPK	MAP kinase activated protein kinase
CaM	calmodulin	MEM	Eagle's minimum essential medium
CaMK	Ca ²⁺ /calmodulin-dependent kinase	MES	2-(<i>N</i> -morpholino)ethanesulfonic acid
CaMKK	CaMK kinase	MKP	MAP kinase phosphatase
cAMP, etc.	adenosine 3',5'-cyclic monophosphate, etc.	MOPS	3-(<i>N</i> -morpholino)propanesulfonic acid
CCCP	carbonyl cyanide <i>m</i> -chlorophenylhydrazone	MPO	myeloperoxidase
CCK	cholecystokinin	M_r	relative molecular mass (unitless)
cDNA	complementary DNA	MRI	magnetic resonance imaging
CFTR	cystic fibrosis transmembrane conductance regulator	MSH	melanocyte-stimulating hormone
CGRP	calcitonin gene-related peptide	NAD	nicotinamide adenine dinucleotide
CoA	coenzyme A (also, acyl-CoA)	NADH	reduced nicotinamide adenine dinucleotide
CRF	corticotropin-releasing factor	NADP	nicotinamide adenine dinucleotide phosphate
DDAVP	desmopressin	NF- κ B	nuclear factor- κ B
DEAE	diethylaminoethyl	NGF	nerve growth factor
DIDS	4,4'-diisothiocyanostilbene-2,2'-disulfonic acid	NMR	nuclear magnetic resonance
DMEM	Dulbecco's modified Eagle's medium	NSAID	nonsteroidal anti-inflammatory drug
DMSO	dimethyl sulfoxide	nt	nucleotide(s)
DNA	deoxyribonucleic acid	PAGE	polyacrylamide gel electrophoresis
DNase	deoxyribonuclease	PAH	<i>p</i> -aminohippuric acid
DOC	deoxycorticosterone	PBS	phosphate-buffered saline
DOCA	deoxycorticosterone acetate	PCNA	proliferating cell nuclear antigen
dpm	disintegrations per minute	PCR	polymerase chain reaction
DTNB	5,5'-dithiobis(2-nitrobenzoic acid)	PDGF	platelet-derived growth factor
DTT	dithiothreitol	PET	positron emission tomography
EC ₅₀	concentration giving half-maximal response	PG	prostaglandin (PGE ₁ , PGE ₂ , PGF ₂)
ECG	electrocardiogram	P _i	inorganic phosphate
ECM	extracellular matrix	PIPES	piperazine- <i>N,N'</i> -bis(2-ethanesulfonic acid)
EDTA	ethylenediaminetetraacetic acid	PKA	cAMP-dependent protein kinase
EEG	electroencephalogram	PKB, PKC	protein kinase B and C
EGF	epidermal growth factor	PLC	phospholipase C (similarly, PLA)
EGTA	ethylene glycol-bis(β -aminoethyl ether)- <i>N,N,N',N'</i> -tetraacetic acid	PMA	phorbol 12-myristate 13-acetate
EIPA	ethylisopropyl amiloride	PMSF	phenylmethylsulfonyl fluoride
ELISA	enzyme-linked immunosorbent assay	Po ₂	partial O ₂ pressure or O ₂ tension (similarly, PCO ₂)
EMSA	electrophoretic mobility shift assay	POPOP	1,4-bis[2-(5-phenyloxazolyl)]benzene
ERK	extracellular signal-regulated kinase	PPO	2,5-diphenyloxazole
FAD	flavin adenine dinucleotide	psi	pounds per square inch
FADH ₂	reduced flavin adenine dinucleotide	PTK	protein tyrosine kinase
FBS, FCS	fetal bovine/calf serum	RIA	radioimmunoassay
FCCP	carbonyl cyanide <i>p</i> -trifluoromethoxyphenylhydrazone	RNA	ribonucleic acid (also, mRNA, rRNA, tRNA)
FGF	fibroblast growth factor	RNase	ribonuclease
FITC	fluorescein isothiocyanate	rpm	revolutions per minute
FSH	follicle-stimulating hormone	RT	reverse transcriptase
GABA	γ -aminobutyric acid (also, "GABAergic")	SAPK	stress-activated protein kinase
GAP	growth-associated protein	SAPKK	stress-activated protein kinase kinase (also known as SKK)
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	SDS	sodium dodecyl sulfate
GC-MS	gas chromatography-mass spectrometry	SITS	4-acetamido-4'-isothiocyanostilbene-2,2'-disulfonic acid
GDP β S	guanosine 5'- <i>O</i> -(2-thiodiphosphate)	SSC	standard sodium citrate
GSH, GSSG	reduced and oxidized glutathione	SOD	superoxide dismutase
GTP γ S	guanosine 5'- <i>O</i> -(3-thiotriphosphate)	STAT	signal transducer and activator of transcription
GSK	glycogen synthetase kinase	TAME	<i>N</i> α - <i>p</i> -tosyl-L-arginine methyl ester
Hb	hemoglobin	TCA	trichloroacetic acid
HBSS	Hanks' balanced salt solution	TEAE	triethylaminoethyl
Hct	hematocrit	TES	<i>N</i> -tris(hydroxymethyl)methyl-2-aminoethanesulfonic acid
HDL	high-density lipoprotein	TLC	thin-layer chromatography
HEPES	<i>N</i> -2-hydroxyethylpiperazine- <i>N'</i> -2-ethanesulfonic acid	TNF	tumor necrosis factor
HETE	hydroxyeicosatetraenoic acid	TPA	12- <i>O</i> -tetradecanoylphorbol 13-acetate
HPLC	high-performance liquid chromatography	TPCK	<i>N</i> -tosyl-L-phenylalanine chloromethyl ketone
5-HT	5-hydroxytryptamine (serotonin)	TRH	thyrotropin releasing hormone
IBMX	3-isobutyl-1-methylxanthine	Tris	tris(hydroxymethyl)aminomethane
IC ₅₀	concentration giving half-maximal inhibition	TSH	thyroid-stimulating hormone
ICAM	intercellular adhesion molecule	TTX	tetrodotoxin
IFN	interferon	UV	ultraviolet
IGF-I, -II	insulin-like growth factor I and II	VCAM	vascular cell adhesion molecule
IgG, etc.	immunoglobulin G, etc.	VEGF	vascular endothelial growth factor
IKK	I κ B kinase	VIP	vasoactive intestinal peptide
IL-1	interleukin-1 (IL-2, etc.)	VLDL	very low-density lipoprotein
		V_{max}	maximum velocity or maximum rate of change or transition



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- Environmental Adaptations of Cardio-Respiratory Systems
- Putting Comparative Physiology to Work in the Field: Stable Isotopes as Tracers of Ecological Processes
- Genomics and Proteomics Approaches to Understanding Environmental Stress
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- Cytokines and the Use of Cytokine Directed Therapy
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Cell Interactions and Antigen Presentation

- Antigen Presentation and Dendritic Cell Function
- The Dendritic Cell and Transition from Innate to Adaptive Immunity

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- Obesity and Inflammation
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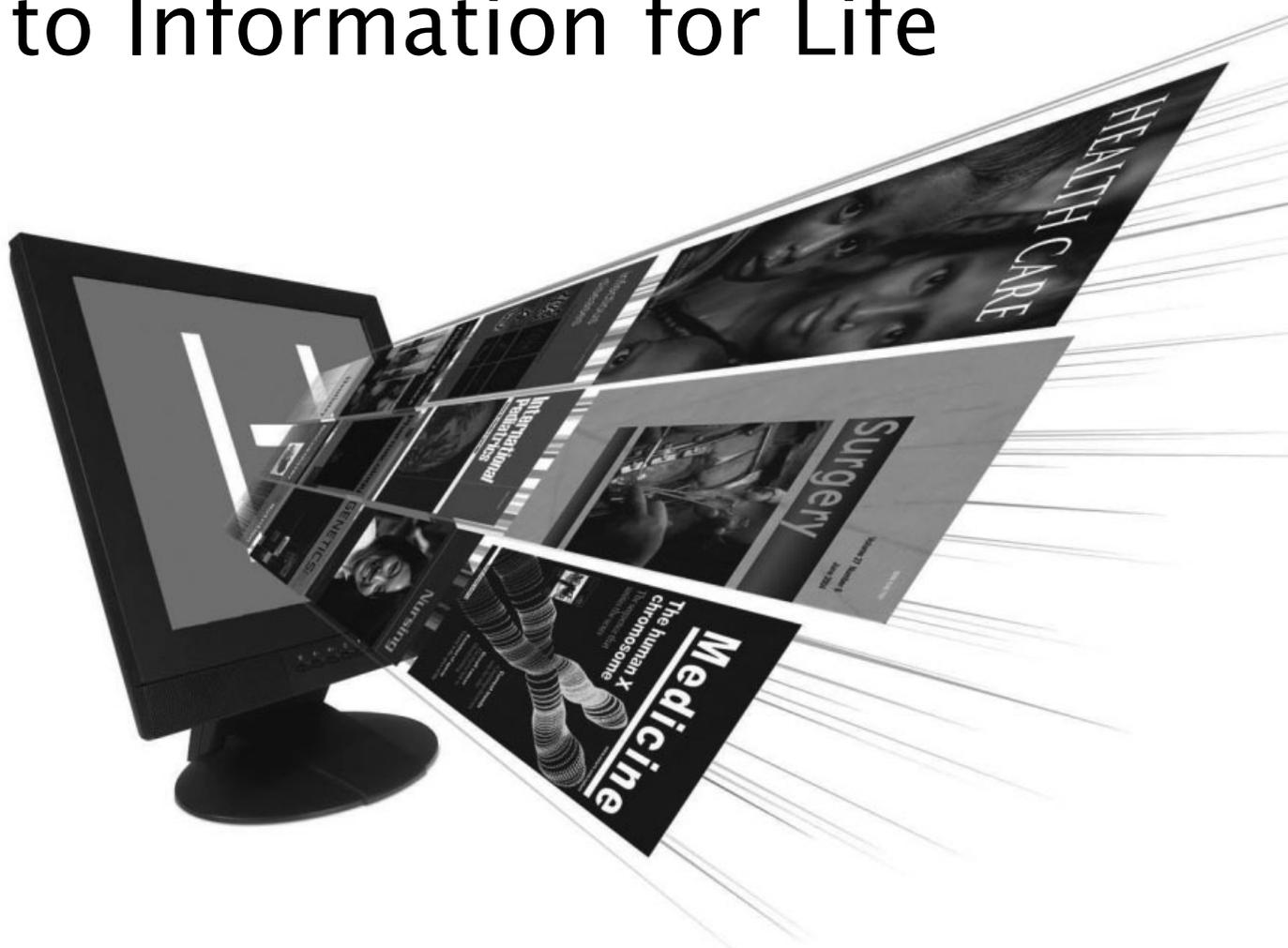
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