

Information for contributors

Style

Papers should be as concise as possible, be written in English (spelling as in Oxford English Dictionary or Webster's Dictionary), and use SI units.

Submissions

Please enclose two copies of the text, one set of original illustrations and two sets of copy figures.

Text (including tables, references and figure legends)

The text must be typewritten, in double-spacing, with numbered pages. The *title page* must include the address(es) where the work was carried out, a *page heading* of up to 40 characters, and three or more *key words*. Where applicable, the present address and address for correspondence should also be given. A *Summary* must be the first section of the ms, stating as briefly as possible (typically 150–200 words) the results and conclusions of the work. Each *table* must be on a separate page. *Figure legends* must be in a single series at the end of the ms. *References* must be listed alphabetically. The titles of journals should be abbreviated according to the *World List of Scientific Periodicals*, 4th edn (1963), and should be presented as follows:

BRINES, M. L. AND GOULD, J. L. (1982). Skylight polarization patterns and animal orientation. *J. exp. Biol.* **96**, 69–91.

MAZIA, D. (1961). Mitosis and physiology of cell division. In *The Cell*, vol. 3 (ed. J. Brachet and A. E. Mirsky), pp. 77–412. New York, London: Academic Press.

Citations in the text are given in the following form: Jones and Smith (1960) or (Jones and Smith, 1960). Where there are more than two authors citations should be in the form (Jones *et al.* 1960). Where more than one paper by the same author(s) has been published in the same year they are cited as Jones (1960a), Jones (1960b) etc.

Illustrations

All line drawings and photographs should be *unlabelled*, with the author's name and the number of the figure written on the back. The figures should be numbered in the order in which they are to appear in the text. Authors should also submit two full sets of clearly labelled copies of illustrations.

Line drawings must be *no more than twice final size*. Maximum final size is 200×130 mm. Oscillographs should be made suitable for reproduction in the form of well-defined line drawings and should have a white background.

Do submit original line drawings on heavy white paper or as well-defined photographic copies.

Do not submit drawings on tracing or graph paper. Computer printouts may be accepted if the quality is sufficient to show the fine detail.

Do not use fine stippling or shading.

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Short communications

Must be original contributions to the literature and not preliminary reports. Methodological papers will only be accepted as *Short Communications*. All above instructions apply except that the communications must not exceed *four published pages* in length (including illustrations), no *Summary* is required, and line drawings must be at final size.

Proofsheets and offprints

Authors will receive one set of slip proofs for correction and return to the Editor. Authors will receive 200 complimentary copies of their papers: additional copies may be purchased at modest cost, and should be ordered when the proofs are returned to the Editor.

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PHYSICAL-CHEMICAL ASPECTS OF
WATER, SOLUTE, AND CELL EXCHANGE
IN THE MICROVASCULATURE

11-15 June, 1990

Plymouth State College (S)

D. Shepro, Chairperson

F. Curry, Vice Chairperson

The cell biology of the microvascular wall: I. Herman, F. Vargas, chairmen, A. Orlidge, discussion leader

D. Walker, "The tricellular region on endothelial tight junctions and the pathway of PMN emigration."

A. Gottlieb, "The structure-function of the F-actin cytoskeleton."

S. Albelda, "Endothelial cell-cell and cell-substratum adhesion receptors."

Transport and the blood-brain barrier: R. Gore, B. Duling, chairmen; R. Tilton, discussion leader

T. Raub, "Induction of the blood-brain barrier phenotype in cultured endothelia by astroglia."

R. Broadwell, "Pathways into, through and around the blood-brain barrier: interpreting transcytosis."

Endothelial postranslational metabolic regulation of transport: U. Ryan, D. N. Granger, chairmen; W.

Patton, discussion leader

M. E. Gerritsen, "P2-purinergeric receptor coupled signal transduction in microvascular endothelial cells."

A. B. Malik, "Regulation of endothelial barrier function by second messengers."

S.-P. Olesen, "Patch clamp analysis of endothelial ion channels."

Vascular cell communication: H. Granger, R. Prewit, chairmen; P. Davies, discussion leader

A. Dodge, "Microvascular endothelial cell and pericyte interactions related to motility."

D. M. Shasby, "Communication between the neutrophil and endothelium."

Modulation of transcapillary fluid transport: I. Sarelius, A. Taylor, chairmen; V. Tucker, discussion leader

M. Johnston, "Lymphatic pumping response to changes in transmural pressure and its modulation by erythrolyse/hemoglobin."

V. Huxley, "Influence of hormones on the dynamic regulation of microvascular exchange: results from *in situ* perfused capillaries."

P. Vaupel, "Bulk flow of water in the interstitium of human tumor xenografts."

Fluorescent imaging of microvessels: A. Kamiya, K. Spring, chairmen; M. Oda, discussion leader

F. Fay, "Changes in ion and protein distribution underlying smooth muscle cell function."

F. Curry, "Calcium modulation of permeability in intact microvessels."

Pathology of microvascular diseases: J. Bassingthwaite, E. Rankin, chairmen; E. Svensjo, discussion

leader

J. E. Brush, Jr., "Microvascular angina in hypertensive patients."

H. B. Hechtman, "Inflammatory mediator of remote organ injury."

P. Vanhoutte, "Endothelium derived vasoactive factors."

Poster session: F. Curry, chairman

Tumor microvasculature: metastases, detection, treatment: P. Gullino, M. Intaglietta, chairmen;

L. Weiss, discussion leader

B. Zetter, "Chemotactic peptides that modulate tumor metastases."

D. Connolly, "Tumor vascular permeability factor."

R. Jain, "Transport of macromolecules and cells in tumor microcirculation."

Applications and further details from:

Dr Alexander M. Cruickshank, University of Rhode Island, Kingston, Rhode Island 02881-0801

GORDON RESEARCH CONFERENCES

CHEMICAL SENSES: TASTE AND SMELL

16-20 July, 1990

Plymouth State College (S)

B. P. Halpern, Chairperson

D. L. Hill, Vice Chairperson

P. Brunjes, discussion leader

P. C. P. Graziadei, "The olfactory system in neurobiological research: how we can study the nose to understand the brain."

P. S. Lasiter, "Peripheral interactions with central gustatory development."

D. Purves, "Postnatal generation of iterated units in the mammalian brain."

R. Norgren, discussion leader

M. Kalia, "Organization of the nucleus of the tractus solitarius: topography, connections and chemical neuroanatomy."

D. V. Smith, "Differential gustatory inputs to the solitary nucleus."

S. P. Travers, "Orosensory organization in the solitary nucleus."

B. W. Jafek, discussion leader

L. M. Bartoshuk, "Taste disorders: a window into taste mechanisms."

G. K. Beauchamp, "Clinical research and the functions of the chemical senses."

M. M. Mozell, "Human olfactory disorders: they can influence how we think about olfaction."

J. G. Hildebrand, discussion leader

J. Caprio, "Chemoreception of amino acids by aquatic organisms: are mechanisms similar?"

T. Eisner, "Chemical basis of sexual selection in insects."

R. J. O'Connell, "Direct and indirect gating of single channel currents in chemoreceptors."

G. H. Gold, discussion leader

J. A. DeSimone, "Mechanisms of chemosensory transduction: what can we learn from integrated and reductionist approaches?"

K. Kurihara, "Does cation influx through receptor membranes contribute to the receptor potentials in all animals?"

D. Lancet, "Do signal terminating enzymes contribute to chemosensory information processing?"

M. O'Mahoney, discussion leader

J. Atema, "Sampling the chemical environment with high spatial-temporal resolution: odor signals, receptor cells and behavior decisions."

H. T. Lawless, "Sensitivity, intensity, and temporal aspects of human chemosensory perception."

M. Meredith, discussion leader

J. E. Schwob, "Do biochemically defined subclasses of olfactory sensory neurons differ in their odorant selectivity?"

B. M. Slotnick, "Olfactory perception of rats with lesions of olfactory bulb areas associated with high 2-DG uptake."

W. B. Stewart, "Functional, anatomical and biochemical heterogeneity of glomeruli in the olfactory bulb."

G. M. Shepherd, discussion leader

M. Konishi, "Are visual or auditory models for CNS separation of peripherally combined intensity and quality inputs applicable to olfaction and taste?"

M. Halpern, discussion leader

C. D. Derby, "Simple and complex odorant mixtures and the spiny lobster: identification of relevant stimulus features and the importance of mixture interactions in olfactory discrimination."

R. P. Erickson, "The mind of the scientist: making research give the right answers."

J. R. Mason, "Ecological context: species differences in chemosensory capacity and application to animal damage control."

Applications and further details from:

Dr Alexander M. Cruickshank, University of Rhode Island, Kingston, Rhode Island 02881-0801

GORDON RESEARCH CONFERENCES
ION CHANNELS

6-10 August, 1990

Colby-Sawyer College (S)

H. A. Lester, Chairperson

J. Nerbonne, Vice Chairperson

C. Miller, discussion leader

E. Hawrot, "The 3-D structure of a ligand binding site."

J. Richardson, "Ion channel proteins as 3-D structures."

S. Heinemann, discussion leader

R. C. Hardie, "Histamine-gated chloride channels: a novel 'fast' synaptic receptor."

K. Imoto, "Structure-function studies of the acetylcholine receptor channel by site-directed mutagenesis."

J. H. Steinbach, "Current-voltage relationships for nicotinic receptors."

C. Stevens, "Neuromodulation of glutamate receptor channel properties by phosphorylation."

W. Agnew, "Voltage-sensitive sodium channels: variations in structure, function and regulation."

R. Dunn, "Further mutational analysis of the rat brain sodium channels."

C. Armstrong, "Divalent cations and voltage-dependent gating."

R. Aldrich, discussion leader

R. Joho, "Brain potassium channels: genetic and biological diversity."

S. Nakanishi, "Structure and function of a possible epithelial potassium channel."

M. Tanouye, "Potassium channel structure and function."

K. L. Magleby, discussion leader

G. Augustine, "Clustering of calcium channels in nerve terminals."

E. Neher, "Calcium regulation in mast cells."

R. Zucker, "Roles of calcium and potential in transmitter release assessed with caged calcium compounds."

B. Hille, discussion leader

K. Campbell, "Properties of ryanodine and dihydropyridine receptors."

J. Hume, "Cl channels in heart."

B. Kaupp, "Structure and function of cGMP-gated channels."

Q. Al-Awqati, discussion leader

D. Eaton, "Regulation and expression of amiloride-sensitive Na channels."

L. Reuss, "Regulation of ion channels in epithelial cells."

M. Welsh, "Chloride transport by CF epithelia."

P. Adams, "From single channel to cell behavior."

D. DiFrancesco, "The hyperpolarization-activated current, i_f : properties and modulation by neurotransmitters."

J. Nerbonne, "Burst-firing in mammalian cortical neurons."

Applications and further details from:

Dr Alexander M. Cruickshank, University of Rhode Island, Kingston, Rhode Island 02881-0801

THE INTERNATIONAL SOCIETY OF NEUROENDOCRINOLOGY
(President : B. FLERKO)

organizes

**The 2nd INTERNATIONAL CONGRESS
of NEUROENDOCRINOLOGY**

to be held in
BORDEAUX - FRANCE
June 24-30 1990

Program organizing committee

Chairman : B. McEwen (USA)

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Scientific Program

The scientific program will consist of 4 plenary lectures and 16 symposia with invited speakers, free communications and poster sessions. The topics covered will include neuroimmunology, genomic control mechanisms, behavior, development, sub-cellular model systems, circadian rhythms, aging, comparative neuroendocrinology and clinical neuroendocrinology.

Local organizing Committee

Chairman : J.-D. Vincent

General Secretary: D. Poulain

Informations : 2nd International Congress of Neuroendocrinology

BORDEAUX CONGRES - 33300 Bordeaux-Lac - France

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with the
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Amphibian Metamorphosis

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SPECIAL SESSIONS

Biologists and the Media

The Process of Publishing Papers

Improving Visual Communications in Science:
Posters, Slide Presentations, and Quantitative Data Displays

SPECIAL EXHIBIT

Nature in the New World:
An Exhibition of Paintings and Photographs

Meeting Hosted by Trinity University and Univ. of Texas Health
Science Center, Thomas L. Koppenheffer and Mary K. Vaughan,
Co-Chairpersons of the Local Committee

For more information, contact:

Mary Adams-Wiley, Executive Officer, American Society of Zoologists,
104 Sirius Circle, Thousand Oaks, California 91360
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SAN ANTONIO 1990

The Journal of **Experimental Biology**

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The Journal of Experimental Biology

García, Grumbacher-Reinert, Bookman and Reuter on ion currents in Retzius cells	1
Mitchell, Smith, Albert and Whitehead on gustatory chemosensilla in <i>Sarcophaga</i>	19
Dudley on butterfly morphometrics and kinematics	35
Wolf on a locust flight steering muscle	55
Zange, Pörtner, Jans and Grieshaber on pH in a molluscan catch muscle	81
Zange, Grieshaber and Jans on regulation of intracellular pH	95
Picones and Aréchiga on crayfish photoreceptors	111
Aréchiga, Bañuelos, Frixione, Piconés and Rodríguez-Sosa on modulation of crayfish retinal sensitivity	123
Campbell and Jones on the permeability of euryhaline prawns	145
Machado, Ferreira, Ferreira and Fernandes on acid-base balance in <i>Anodonta</i> mantle	159
Pennyquick on bird wingbeat frequencies	171
Brezden and Gardner on calcium channels in snail muscle	187
Londrville and Sidell on ultrastructure of antarctic fish muscle	205
Goller and Esch on temperature dependence of flight muscles	221
Full, Zuccarello and Tullis on insect energetics	233
Dow and O'Donnell on alkalinization by <i>Manduca</i> midgut	247
Hainsworth, Fisher and Precup on energy processing in blowflies	257
Murchison and Larimer on dual motor output interneurons	269
Nilsson on neurotransmitters in anoxic carp	295
Harper and Blake on fast-start performance of trout and pike	321
Kaufmann on swimming energetics of fish larvae	343
Ando on ion transport across eel intestine	367
Ando and Subramanyam on bicarbonate transport across eel intestine	381
Dietz and Byrne on K ⁺ and Rb ⁺ uptake in bivalves	395
Pörtner on oxygen binding of squid haemocyanin	407
Chamberlin on ion transport across caterpillar midgut	425
Hays, Webb, French and Speakman on radar measurement of ventilation rate	443
Goldstein, Luer and Blum on cardiac taurine accumulation	449
Ahearn on proline transport by pyloric caeca	453
Wells and Weber on trout spleen	461
Chamberlin on luminal alkalinization by caterpillar midgut	467
Oami, Naitoh and Sibaoka on ion channels in <i>Noctiluca</i>	473

Information about the Journal

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