# **Supplementary Material**

# John Atherton Young 1936–2004

Ian D. Rae<sup>A,\*</sup>

<sup>A</sup>School of Chemistry, University of Melbourne, Vic. 3010, Australia

\*Correspondence to: Email: <u>iandrae@bigpond.com</u>

FULL NAME John Atherton YOUNG

**BIRTH** Brisbane, Queensland, Australia, 18 April, 1936

HONOURS & Officer, Order of Australia

PRIZES 1994-2000 Research Prize of the Alexander von Humboldt Foundation,
Germany Honorary Fellow, Pharmaceutical Society of Australia

Germany Honorary Fellow, Pharmaceutical Society of Australia Honorary Life Member, Australian Physiological and Pharmacological Society Annual Orator and Gold Medallion, Menzies School of Health

Research, Darwin

#### **CITIZENSHIP**

Australian

# **EDUCATION AND TRAINING**

1943-49	Primary	Eagle Junction State School, Brisbane
1950-53	Secondary	Church of England Grammar School,
	•	Brisbane
1954-60	Tertiary	University of Queensland
1961	Professional	Royal Brisbane Hospital
1962-64	Doctoral	Kanematsu Memorial Institute, Sydney
		Hospital
1965-66	Post-Doctoral	Physiologisches Institut der freien Universität
		Rerlin

# ACADEMIC AND PROFESSIONAL QUALIFICATIONS

1954	Matriculated, University of Queensland, State Government Open
	Scholarship
1958	Bachelor of Science (University of Queensland), Honours I (School of
	Pathology)
1960	Bachelor of Medicine & Bachelor of Surgery (University of Queensland),
	Honours I
1961	University of Queensland Medal
1965	Doctor of Medicine (University of Queensland)
1973	Member, Royal Australasian College of Physicians
1975	Doctor of Science (University of Queensland)
1976	Fellow, Royal Australasian College of Physicians
1986	Fellow, Australian Academy of Science

#### PROFESSIONAL APPOINTMENTS

1961	Junior Resident Medical Officer, Royal Brisbane Hospital
1962-	Senior Research Officer, National Health and Medical Research Council of
64	Australia, Kanematsu Memorial Institute, Sydney Hospital
	CJ Martin Fellow, National Health and Medical Research Council of Australia,
1965-	Freie Universität Berlin
66	

1966-71	Senior Lecturer, Department of Physiology, University of
1972-75	Sydney Associate Professor, Department of Physiology, University of Sydney
1976-2001	Professor of Physiology, University of Sydney
1976-80, 85-89	Head, Department of Physiology, University of Sydney
1989-97 <sup>°</sup>	Dean, Faculty of Medicine, University of Sydney
1992-93	Interim Director, Kolling Institute for Medical Research
1993	Head of Academic Group C (Health Sciences), University of
	Sydney
1994-97	Pro-Vice-Chancellor (Health Sciences) (part time), University
	of Sydney
1007	Duo Vica Chancellon (Health Caionage) (full time) University

# H

Hospitals  1969-83 Consultant Renal Physiologist, Sydney Hospital 1985-Consultant Physiologist, Royal Prince Alfred Hospital 1990-Consultant Physiologist, Royal Prince Alfred Hospital 1990-Consultant Endocrinologist, Royal Prince Alfred Hospital 1994-Consultant Endocrinologist, Royal Prince Alfred Hospital 1994-Consultant Endocrinologist, Concord Repatriation General Hospital 1994-Consultant Gastroenterologist, Concord Repatriation General Hospital 1989-Sydney 1989-93, 96-97 1989-93, 96-97 1989-98 1990-98 1990-98 1990-98 1990-99 1990-99 1990-99 1990-99 1990-90 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-97 1990-98 1990-98 1990-99 1990-99 1990-91	1997-	Pro-Vice-Chancellor (Health Sciences) (full time), University of Sydney	
1969-83   Consultant Renal Physiologist, Sydney Hospital Consultant Physiologist, Royal Prince Alfred Hospital Consultant Physiologist, Royal Prince Alfred Hospital Consultant Endocrinologist, Royal Prince Alfred Hospital Consultant Endocrinologist, Royal Prince Alfred Hospital Consultant Gastroenterologist, Concord Repatriation General Hospital	HONORARY API	POINTMENTS	
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Member, National Health and Medical Research Council Member, Australian Army Malaria Research Advisory Board Chair, Menzies School of Health Research Board Deputy Chair, Menzies School of Health Research Board Chair, Medical and Dental Appointments Advisory Committee, Central Health Service Chair, Committee of Deans of Australian Medical Schools Member, Australian Medical Workforce Advisory Council Member, Australian Medical Council (Executive	1991-95	Member, Accreditation Committee, Australian Medical	
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	1996-97	Member, Australian Medical Council (Executive	

1999-Member, New South Wales Medical Board

2001-Director, CRC for Asthma

# Australian Academy of Science

1984-90 Member, National Committee for Physiology 1989-92 Member of Council

1991-98 Member, National Committee for Medicine 1998-2001 Vice President and Secretary (Biological)

Editori Editor, Proceedings of the Australian Physiological and alPharmacological Society Editorial Board, Australian Journal 1972of Experimental Biology and Medical Science Corresponding

75

Editor, Physiological Reviews Editor in Chief, International Review of Physiology, Gastrointestinal 1972-

Section

83 Field Editor, Pjliigers Archiv European Journal of

1978-Physiology Editorial Board, International Journal of Oral Biology Editorial Board, 83

Japanese Journal of Physiology 1980-

83

1981-

1999-

2000-

**Physiology** Gastwissenschaftler, Physiologisches Institut der freien

1965-66 Universität Berlin Gastwissenschaftler, Max Planck Institut für

1971 & Biophysik, Frankfurt

1972-75 Executive Member of Council, Australian Physiological and Pharmacological Society Chair, Gastrointestinal Commission,

1983-88 International Union of Physiological Sciences Chief Executive Officer, 1990-94 Australian Physiological and Pharmacological Society Member of 1992-94 Council, Federation of Asian and Oceanian Physiological Societies 1993-2001 Visiting External Examiner in Physiology, Chinese University of Hong 1994-98 Kong Member of Council, International Union of Physiological

1998- Sciences

1995-99 Vice President, Federation of Asian and Oceanian Physiological

Miscellane Societies President, Federation of Asian and Oceanian

ous Physiological Societies President, Australian Physiological and

1970-78 Pharmacological Society

1985-2000

1987- Member, Council of Musica Viva

Australia Governor, Foundation for

Classical Archaeology

Governor, Australian Archaeological Institute at Athens (Treasurer since 1999)

#### APPOINTMENTS AT THE UNIVERSITY OF SYDNEY

University

Senate
1978-81, 84-5,
88-9
1990-93
1980, 84-85,
Fellow of Senate (staff-elected)
Fellow of Senate (ministerial appointment) Senate Buildings and Grounds Committee Senate Finance and Planning Committee

88-93 and Planning Committee

1988-93

Academic Board Professorial 1975-76 Elected member Professorial member Deputy

1976-96 Chair

1978-80
1976-79
1978-80
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1978-80
Chair, Library
Committee Chair,
Admissions Committee
Chair, Matriculation

1978-80 Committee

1978-80 Chair, Orientation Week

Committee Chair, Cancer Research Committee Chair,

Faculty of Research Committee PhD Committee

1989-97

1978-89 Dean

1986-89 Sub-Dean (Academic Affairs)

Chair, Board of Postgraduate Studies

University Departments

1976-82 86-89 Head of Department of Physiology

1988-89 Head of Department of Histology and Embryology

The Sydney Association of University Teachers

1976-78 Member of Council

1977 President

#### **SOCIETY MEMBERSHIPS**

|--|

#### **Publications of Professor J.A. Young**

# **Original Monographs**

Young, J.A. & Van Lennep, E.W. (1978) *The Morphology of Salivary Glands*. London: Academic Press.

#### **Theses**

- Young, J.A. (1958) *The Effects of Certain Chemicals on the Developing Chick Embryo*. Brisbane: BSc(Hons) Thesis, University of Queensland.
- Young, J.A. (1960) The Effects of Propyl Thiouracil Induced Hypothyroidism on Developing Chick Embryo Bones. Brisbane: Essay, University of Queensland.
- Young, J.A. (1965) *Stop-Flow Studies and Amino Acid Transport in the Rat.* Brisbane: MD Thesis, University of Queensland.
- Young, J.A. (1974) *Transepithelial Transport*. Brisbane: DSc Thesis, University of Oueensland.

#### **Textbooks**

Young, J.A., Cook, D.I., Conigrave, A.D. & Murphy, C.R. (1991) *Gastrointestinal Physiology*. Sydney: Rainforest Publishing.

## **Edited Monographs**

- Case, R.M., Gamer, A., Tumberg, L.A. & Young, J.A. (1982) *Electrolyte and Water Transport Across Gastrointestinal Epithelia*. New York: Raven Press.
- Young, J.A. (1983) Gastrointestinal Physiology IV, International Review of Physiology, Volume 28. Balti- more: University Park Press.
- Case, R.M., Lingard, J.M. & Young, J.A. (1984) *Secretion: Mechanisms and Control.* Manchester: Manchester University Press.
- Wong, P.Y.D. & Young, J.A. (1988) *Exocrine Secretion*. Hong Kong: Hong Kong University Press.
- **1990** Wong, P.Y.D. & Young, J.A. (1990) *Exocrine Secretion II*. Hong Kong: !UPS Gastrointestinal Commission (ISES).
  - Young, J.A. & Wong, P.Y.D. (1990) *Epithelial Secretion of Water and Electrolytes*. Berlin: Springer-Verlag.
- Poronnik, P., Cook, D.I. & Young, J.A. (1994) *Studies in Honour of Karl Julius Ullrich. An Australian Symposium.* Sydney: Laboratory of Exocrine Physiology and Biophysics.

#### **Original Articles in Refereed Publications**

- **1964** Young, J.A. & Edwards, K.D.G. (1964) Stop-flow analysis of phenolsulphonphthalein excretion and visual localization of the site of maximal urine acidification in the rat nephron. *Australian Journal of Experimental Biology and Medical Science* 42: 539-542.
  - Young, J.A. & Edwards, K.D.G. (1964) Stop-flow analysis of renal tubular function in the rat undergoing osmotic diuresis due to creatinine loading. *Australian Journal of Experimental Biology and Medical Science* 42: 667-688.
  - Young, J.A. & Edwards, K.D.G. (1964) Studies on the absorption, metabolism and excretion of methyl- dopa and other catechols and their influence on amino acid transport in rats. *Journal of Pharmacol- ogy and Experimental Therapeutics* 145: I02-112.
- **1966** Young, J.A. & Edwards, K.D.G. (1966) Clearance and stop-flow studies on histidine and methyldopa transport by rat kidney. *American Journal of Physiology* 210: 667-675.
  - Young, J.A. & Edwards, K.D.G. (1966) Competition for transport between methyldopa and other amino acids in rat gut loops. *American Journal of Physiology* 210: 1130-1136.
  - Young, J.A. & Schögel, E. (1966) Micropuncture investigation of sodium and potassium excretion in rat submaxillary saliva. *Pjliigers Archiv European Journal of Physiology* 291: 85-98.
- **1967** Fromter, E., Young, J.A., Schogel, E. & Hamann, K.F. (1967) Resorption of sodium and secretion of potassium by the main excretory duct of the rat submaxillary gland. *Modern Problems in Pediatrics* 10: 118-124.
  - Young, J.A., Fromter, E., Schogel, E. & Hamann, K.F. (1967) A microperfusion investigation of sodium resorption and potassium secretion by the main excretory duct of the rat submaxillary gland. *Pfiiigers Archiv European Journal of Physiology* 295: 157-172.
- **1968** Young, J.A. (1968) Microperfusion investigation of chloride fluxes across the epithelium of the main excretory duct of the rat submaxillary gland. *Pfüigers Archiv European Journal of Physiology* 303: 366-374.
- **1969** Shagrin, J. & Young, J.A. (1969) A micropuncture investigation of the cation content and osmolality of colloid from single rat thyroid acini. *Pjliigers Archiv European Journal of Physiology* 307: 204-210.
- **1970** Cooke, H.J. & Young, J.A. (1970) Development of glomerular filtration rate and electrolyte and osmolal clearance in the late-embryonic and newly hatched chicken. *Pjliigers Archiv European Journal of Physiology* 318: 315-324.
  - Hayden, L.J., Shagrin, J.M. & Young, J.A. (1970) Micropuncture investigation of the anion content of col- loid from single rat thyroid follicles. A micromethod for the simultaneous determination of iodide and chloride in nanomole quantities. *Pfiiigers Archiv European Journal of Physiology* 321: 173-186.
  - Tuck, R.R., Setchell, B.P., Waites, G.M.H. & Young, J.A. (1970) The composition of fluid collected by micropuncture and catheterization from the seminiferous tubules and rete testis of rats. *Pfiiigers Archiv European Journal of Physiology* 318: 225-243.
  - Waites, G.M.H., Setchell, B.P., Tuck, R.R. & Young, J.A. (1970) The fluid in the seminiferous tubules and excurrent ducts of the testis of the rat and sheep. *Advances in Andrology* 1: 116-118.
  - Young, J.A., Hayden, L.J. & Shagrin, J.M. (1970) Micropuncture investigation of the effect of altered thy- roid function on the cation concentrations and equilibrium potentials in rat thyroid colloid. *Pfiiigers Archiv European Journal of Physiology* 321: 187-196.
  - Young, J.A., Martin, C.J., Asz, M. & Weber, F.D. (1970) A microperfusion investigation of bicarbonate secretion by the rat submaxillary gland. The action of a parasympathomimetic drug on electrolyte transport. *Pjliigers Archiv European Journal of Physiology* 319: 185-199.

- **1971** Henning, R.D. & Young, J.A. (1971) Electrolyte transport in the seminiferous tubules of the rat studied by the stopped-flow microperfusion technique. *Experientia* 27: 1037-1039.
  - Martin, C.J. & Young, J.A. (1971) A microperfusion investigation of the effects of a sympathomimetic and a parasympathomimetic drug on water and electrolyte fluxes in the main duct of the rat submaxil- lary gland. *Pjiiigers Archiv European Journal of Physiology* 327: 303-323.
  - Martin, C.J. & Young, J.A. (I 971) Electrolyte concentrations in primary and final saliva of the rat sublin- gual gland studied by micropuncture and catheterization techniques. *Piliigers Archiv European Journal of Physiology* 324: 344-360.
  - Young, J.A. & Martin, C.J. (1971) The effect of a sympatho- and a parasympathomimetic drug on the electrolyte concentrations of primary and final saliva of the rat submaxillary gland. *Pjüigers Archiv European Journal of Physiology* 327: 285-302.
- **1972** Alexander, J.H., Van Lennep, E.W. & Young, J.A. (1972) Water and electrolyte secretion by the exorbital lacrimal gland of the rat studied by micropuncture and catheterization techniques. *Pjiiigers Archiv European Journal of Physiology* 337: 299-309.
- **1973** Alexander, J.H., Young, J.A. & Van Lennep, E.W. (1973) The ultrastructure of the duct system in the rat extraorbital lacrimal gland. *Zeitschrift far Zellforschung und Mikroskopische Anatomie* 144: 453-466.
  - Cooke, H. & Young, J.A. (1973) Amino acid transport in the developing chicken kidney. Australian Jour- nal of Experimental Biology and Medical Science 51: 199-207.
  - Field, M.J. & Young, J.A. (1973) Kinetics of Na transport in the rat submaxillary main duct perfused *in vitro*. *Pjliigers Archiv European Journal of Physiology* 345: 207-220.
  - Kaladelfos, G. & Young, J.A. (1973) Micropuncture and cannulation study of water and electrolyte excretion in the isotonic-secreting cat sublingual salivary gland. *Pjliigers Archiv European Journal of Physiology* 341: 143-154.
  - Lingard, J.M., Rumrich, G. & Young, J.A. (1973) Kinetics of L-histidine transport in the proximal con-volution of the rat nephron studied using stationary microperfusion techniques. *Pjliigers Archiv European Journal of Physiology* 342: 13-28.
  - Lingard, J.M., Rumrich, G. & Young, J.A. (1973) Reabsorption of L-glutamine and L-histidine from vari- ous regions of the rat proximal convolution studied by stationary microperfusion: evidence that the proximal convolution is not homogenous. *Pjliigers Archiv European Journal of Physiology* 342: 1-12.
  - Martin, C.J., Fromter, E., Gehler, B., Knauf, H. & Young, J.A. (1973) The effects of carbachol on water and electrolyte fluxes and transepithelial electrical potential differences of the rabbit submaxillary main duct perfused *in vitro*. *Pjiiigers Archiv European Journal ofPhysiology* 341: 131-142.
- **1974** Gyory, A.Z., Lingard, J.M. & Young, J.A. (1974) Relation between active sodium transport and distance along the proximal convolution of rat nephrons: evidence for homogeneity of sodium transport. *Pjiiigers Archiv European Journal of Physiology* 348: 205-210.
  - Kaladelfos, G. & Young, J.A. (1974) Water and electrolyte excretion in the cat submaxillary gland studied using micropuncture and duct cannulation techniques. *Australian Journal of Experimental Biology and Medical Science* 52: 67-79.
  - Lingard, J.M., Turner, B., Williams, D.B. & Young, J.A. (1974) Endogenous amino acid clearance by the rat kidney. *Australian Journal of Experimental Biology and Medical Science* 52: 687-695.
- **1975** Denniss, A.R. & Young, J.A. (1975) The action of neurotransmitter hormones and analogues and cyclic nucleotides and theophylline on electrolyte transport by the excretory duct of the rabbit mandibular gland. *Pjiiigers Archiv European Journal of Physiology* 357: 77-89.
  - Lingard, J.M., Gyory, A.Z. & Young, J.A. (I 975) Microperfusion study of the kinetics of reabsorption of cycloleucine in early and late segments of the proximal

convolution of the rat nephron. *Pjiiigers Archiv European Journal of Physiology* 357: 51-61.

Sewell, W.A. & Young, J.A. (1975) Secretion of electrolytes by the pancreas of the anaesthetized rat. *Jour- nal of Physiology* 252: 379-396.

- **1976** Healy, J.K., Fraser, P.A. & Young, J.A. (1976) Inhibition of sodium transport by angiotensin II in the main duct of the rabbit mandibular gland isolated and perfused *in vitro*. *Pjliigers Archiv European Journal of Physiology* 363: 69-73.
- **1977** Harris, P.J. & Young, J.A. (1977) Dose-dependent stimulation and inhibition of proximal tubular sodium reabsorption by angiotensin II in the rat kidney. *Pfliigers Archiv European Journal of Physiology*, 367: 295-297.
- **1978** Denniss, A.R., Schneyer, L.H., Sucanthapree, C. & Young, J.A. (1978) Action of adrenergic agonists on isolated excretory ducts of submandibular glands. *American Journal of Physiology* 235: F548-F556.
  - Denniss, A.R. & Young, J.A. (1978) Modification of salivary duct electrolyte transport in rat and rabbit by physalaemin, VIP, GIP and other enterohormones. *Pfliigers Archiv European Journal of Physiology*<sub>g y</sub> 376: 73-80.
  - Kitson, N., Van Lennep, E.W. & Young, J.A. (1978) Gap junctions in human sebaceous glands. *Cell and Tissue Research* 190: 115-121.
  - Lingard, J.M., Cook, D.I. & Young, J.A. (1978) A mathematical analysis of the role of passive diffusion in the renal absorption of amino acids and other organic compounds under free flow conditions. *Australian Journal of Experimental Biology and Medical Science* 56: 395-408.
  - Sewell, W.A. & Young, J.A. (1978) The effect of cycloheximide on cholecystokinin-evoked pancreatic juice of the anaesthetized rat. *Australian Journal of Experimental Biology and Medical Science* 56: 385-394.
- **1979** Coroneo, M.T., Denniss, A.R. & Young, J.A. (1979) The action ofphysalaemin on electrolyte excretion by the mandibular and sub lingual salivary glands of the rat. *Pjliigers Archiv European Journal of Physiology* 381: 223-230.
  - Van Lennep, E.W., Kennerson, A.R., Young, J.A. & Hales, J.R.S. (1979) Morphology, histochemistry and physiology of the major salivary glands in the echidna *Tachyglossus aculeatus* (Monotremata). *Journal of Morphology* 159: 205-220.
  - Young, J.A., Cook, D.I., Jones, G., McGirr, J. & Thompson, C. (1979) The effect of phenylephrine on excretion of fluid and electrolytes by the parotid and mandibular glands of the rat. *Australian Journal of Experimental Biology and Medical Science* 57: 555-562.
- **1980** Case, **R.M.,** Conigrave, A.D., Novak, I. & Young, J.A. (1980) Electrolytes and protein secretion by the perfused rabbit mandibular gland stimulated with acetylcholine or catecholamines. *Journal of Physiology* 300: 467-487.
  - Compton, J.S., Nelson, J., Wright, R.D. & Young, J.A. (1980) A micropuncture investigation of electrolyte transport in the parotid glands of sodium-replete and sodium-depleted sheep. *Journal of Physiology* 309: 429-446.

- Coroneo, M.T., Denniss, A.R., Maier, H. & Young, J.A. (1980) The action ofphysalaemin on electrolyte secretion by the mandibular and sublingual salivary glands of the rat. *Archiv für Klinische und Experimentelle Ohren-*, *Nasen-*, *und Kehlkopfheilkunde* 227: 670-674.
- Morris, B.J., De Zwart, R.T. & Young, J.A. (1980) Renin in mouse but not in rat submandibular glands. *Experientia* 36: 1333-1334.
- **1981** Case, R.M., Conigrave, A.D., Hunter, M., Novak, I., Thompson, C.H. & Young, J.A. (1981) Secretion of saliva by the rabbit mandibular gland *in vitro*: the role of anions. *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences* 296: 179-192.
  - Compton, J., Martinez, J.R., Martinez, A.M. & Young, J.A. (1981) Fluid and electrolyte secretion from the isolated, perfused submandibular and sublingual glands of the rat. *Archives of Oral Biology* 26: 555-561
- **1982** Case, R.M., Conigrave, A.D., Favaloro, E.J., Novak, I., Thompson, C.H. & Young, J.A. (1982) The role of buffer anions and protons in secretion by the rabbit mandibular salivary gland. *Journal of Physiology* 322: 273-286.
- **1983** Case, **R.M.**, Hunter, M., Novak, I. & Young, J.A. (1983) A comparison of the mechanisms of electrolyte secretion in pancreas and salivary glands. *Scandinavian Journal of Gastroenterology* 18 (Supplement 87): 57-67.
  - Cook, D.I. & Young, J.A. (1983) The numerical solution of epithelial transport models applied to Na/Cl cotransport in a secreting epithelium. *Scandinavian Journal of Gastroenterology* 18 (Supplement 87): 1-6.
  - Lingard, J.M. & Young, J.A. (1983) ,B-Adrenergic control of exocrine secretion by perfused rat pancreas *in vitro*. *American Journal of Physiology* 245: G690-G696.
- **1984** Case, R.M., Hunter, M., Novak, I. & Young, J.A. (1984) The anionic basis of fluid secretion by the rabbit mandibular gland. *Journal of Physiolog* <sub>y</sub> 349: 619-630.
  - Levine, R.A., Levine, G.D., Healey, A.P., Cook, D.I., Kuchel, P.W. & Young, J.A. (1984) Proton nuclear magnetic resonance spectroscopy of isolated rabbit fundic glands. *Biochimica et Biophysica Acta* 804: 324-330.
- **1985** Case, R.M., Cook, D.I., Hunter, M., Steward, M.C. & Young, J.A. (1985) Transepithelial transport of non- electrolytes in the rabbit mandibular salivary gland. *Journal o fMembrane Biology* 84: 239-248.
  - Schneider, G.T., Cook, D.I., Gage, P.W. & Young, J.A. (1985) Voltage-sensitive, high-conductance chloride channels in the luminal membrane of cultured pulmonary alveolar (type II) cells. *Pflugers Archiv European Journal of Physiology* 404: 354-357.
- **1986** Cook, D.I., Towner, S.P. & Young, J.A. (1986) Patch-clamp studies of cultured salivary cells. *Biomedical Research 1* (Supplement 2): 203-207.
  - Evans, L.A.R., Pirani, D., Cook, D.I. & Young, J.A. (1986) Intraepithelial current flow in rat pancreatic secretory epithelia. *Pflugers Archiv European Journal of Physiology* 407 (Supplement 2): S107-SI 11.
  - Murakami, M., Novak, I. & Young, J.A. (1986) Choline evokes fluid secretion by perfused rat mandibular gland without desensitization. *American Journal of Physiology* 251: G84-G89.
  - Novak, I. & Young, J.A. (1986) Two independent anion transport systems in rabbit mandibular salivary glands. *Pflugers Archiv European Journal of Physiology* 407: 649-656.
  - Seow, F.K.T., Lingard, J.M. & Young, J.A. (1986) The anionic basis of fluid secretion by rat pancreatic acini in vitro. *American Journal of Physiology* 250: G140-G148.
  - Young, J.A. & Cook, D.l. (1986) Secretion of salt and water by glandular epithelia.

- Biomedical Research (Supplement 2): 165-176.
- 1987 Pirani, D., Evans, L.A.R., Cook, D.I. & Young, J.A. (1987) Intracellular pH in the rat mandibular salivary gland: the role of Na-H and CI-HCO<sub>3</sub> antiports in secretion. *Pjlugers Archiv European Journal of Physiology* 408: 178-184. Young, J.A., Cook, D.I., Evans, L.A.R. & Pirani, D. (1987) Effects of ion transport
  - Young, J.A., Cook, D.I., Evans, L.A.R. & Pirani, D. (1987) Effects of ion transport inhibition on rat mandibular gland secretion. *Journal of Dental Research* 66: 531-535.
- **1988** Cook, D.I., Day, M.L., Champion, M. & Young, J.A. (1988) Ca<sup>2 +</sup> not cyclic AMP mediates the fluid secre- tory response to isoproterenol in the rat mandibular salivary gland: whole-cell patch-clamp studies. *Pflugers Archiv European Journal of Physiology* 413: 67-76.
  - Poronnik, P., Cook, D.I. & Young, J.A. (1988) The use of Cytodex<sup>®</sup> microcarrier beads in patch-clamp studies on cultured epithelial cells. *Pflugers Archiv European Journal of Physiology* 413: 90-92.
- **1989** Cook, D.l. & Young, J.A. (1989) Effect of K<sup>+</sup> channels in the apical plasma membrane on epithelial secretion based on secondary active c1- transport. *Journal of Membrane Biology* 110: 139-146.
  - Novak, I. & Young, J.A. (1989) Acetate stimulates secretion in the rabbit mandibular gland. *Pflugers Archiv European Journal of Physiology* 414: 68-72.
- **1990** Cook, D.I., Poronnik, **P.** & Young, J.A. (1990) Characterisation of a 25 pS non-selective cation channel in a cultured epithelial cell line. *Journal of Membrane Biology* 114: 37-52.
  - Seow, K.T.F.P., Case, R.M. & Young, J.A. (1990) Pancreatic secretion by the anaesthetized rabbit in response to secretin, cholecystokinin and carbachol. *Pancreas* 6: 385-391.
- **1991** Poronnik, **P.,** Cook, D.I., Allen, D.G. & Young, J.A. (1991) Diphenylamine-2-carboxylate (DPC) reduces calcium influx in a mouse mandibular cell line (ST**885).** *Cell Calcium* 12: 441-447.
  - Wegman, E.A., Young, J.A. & Cook, D.I. (1991) A 23 pS Ca<sup>2+</sup>-activated K<sup>+</sup> channel in MCF-7 human breast carcinoma cells: an apparent correlation of channel incidence with the rate of cell proliferation. *Pfüigers Archiv European Journal of Physiology* 417: 562-570.
- **1992** Cook, D.I., Wegman, E.A., Ishikawa, T., Poronnik, P., Allen, D.G. & Young, J.A. (1992) Tetraethylammo- nium blocks muscarinically evoked secretion in the sheep parotid gland by a mechanism additional to its blockade of BK channels. *Pfiiigers Arch iv European Journal of Physiology* 420: 167-171.
  - Wegman, E.A., Ishikawa, T., Young, J.A. & Cook, D.I. (1992) Cation channels in the basolateral membrane of sheep parotid secretory cells. *American Journal of Physiology* 263: G786-G794.
- **1993** Conigrave, A.D., Poronnik, P., Komwatana, P., Delbridge, L., Young, J.A. & Cook, D.I. (1993) An inwardly rectifying K<sup>+</sup> channel in human adenomatous parathyroid cells. *Cell Calcium* 14: 517-523.
  - Dinudom, A., Poronnik, P., Allen, D.G., Young, J.A. & Cook, D.I. (1993) Control of intracellular Ca<sup>2</sup>+ by adrenergic and muscarinic agonists in mouse mandibular ducts and endpieces. *Cell Calcium* 14: 631-638.
  - Dinudom, A., Young, J.A. & Cook, D.I. (1993) Amiloride-sensitive Na<sup>+</sup> current in the granular duct cells of mouse mandibular glands. *Pfiiigers Archiv European Journal of Physiology* 423: 164-166.

- Dinudom, A., Young, J.A. & Cook, D.I. (1993) Na<sup>+</sup> and c1- conductances are controlled by cytosolic CJ- concentration in the intralobular duct cells of mouse mandibular glands. *Journal of Membrane Biol- ogy* 135: 289-295.
- Poronnik, P., Young, J.A. & Cook, D.I. (1993) Na<sup>+</sup>-H<sup>+</sup> exchange in sheep parotid endpieces. Apparent insensitivity to amiloride. *FEES Letters* 315: 307-312.
- **1994** Dinudom, A., Young, J.A. & Cook, D.I. (1994) Ion channels in the basolateral membrane of intralobular duct cells of mouse mandibular glands. *Pfiiigers Archiv European Journal of Physiology* 428: 202-208.
  - Hirono, C., Steward, M.C., Sangster, N., Poronnik, P., Young, J.A. & Cook, D.I. (1994) Developmental regulation and maintenance of inwardly and outwardly rectifying K<sup>+</sup> currents in sheep parotid secretory cells. *American Journal of Physiology* 267: G947-G953.
  - Komwatana, P., Conigrave, A.D., Delbridge, L., Young, J.A. & Cook, D.I. (1994) Intracellular Ca<sup>2</sup>+inactivates an outwardly rectifying K<sup>+</sup> current in human adenomatous parathyroid cells. *Pfiiigers Archiv European Journal of Physiology* 426: 320-327.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1994) Characterization of the chloride conductance in the granular duct cells of mouse mandibular glands. *Pfiiigers Archiv European Journal of Physiology* 428: 641-647.
- **1995** Dinudom, A., Komwatana, P., Young, J.A. & Cook, D.I. (1995) A forskolinactivated c1- current in mouse mandibular duct cells. *American Journal of Physiology* 268: G806-G812.
  - Dinudom, A., Komwatana, P., Young, J.A. & Cook, D.I. (1995) Control of the amiloride-sensitive Na<sup>+</sup> current in salivary ducts by intracellular anions is mediated by a G protein. *Journal of Physiology* 487: 549-555.
  - Hayashi, T., Hirono, C., Young, J.A. & Cook, D.I. (1995) The ACh-induced whole-cell currents in sheep parotid secretory cells. Do BK channels really carry the ACh-evoked whole-cell K<sup>+</sup> current?. *Journal of Membrane Biology* 144: 157-166.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1995) Osmotic sensitivity of the hyperpolarisa- tion-activated c1- current in mouse mandibular duct cells. *Cellular Physiology and Biochemistry* 5: 243-251.
    - **1996** Hayashi, T., Poronnik, P., Young, J.A. & Cook, D.I. (1996) The AChevoked, Ca<sup>2+</sup>-activated whole-cell **K**<sup>+</sup> current in mouse mandibular secretory cells. Whole-cell and fluorescence studies. *Journal of Membrane Biology* 152: 253-259.
  - Hayashi, T., Young, J.A. & Cook, D.I. (1996) The ACh-evoked, Ca<sup>2+</sup>-activated whole-cell **K**<sup>+</sup> current in mouse mandibular secretory cells. Single channel studies. *Journal of Membrane Biology* 151: 19-27.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1996) Control of the amiloridesensitive Na<sup>+</sup> cur- rent in salivary ducts by extracellular sodium. *Journal of Membrane Biology* 150: 133-141.
  - Komwatana, **P.,** Dinudom, A., Young, J.A. & Cook, D.I. (1996) Cytosolic Na<sup>+</sup> controls an epithelial Na<sup>+</sup> channel via the G0 guanine nucleotide-binding regulatory protein. *Proceedings of the National Academy of Sciences of the United States of America* 93: 8107-8111.
- **1997** Chaturapanich, G., Ishibashi, **H.,** Dinudom, A., Young, J.A. & Cook, D.I. (1997) **H**<sup>+</sup> transporters in the main excretory duct of the mouse mandibular salivary gland. *Journal of Physiology* 505: 583-598.

- **1998** Cook, D.I., Dinudom, A., Komwatana, P. & Young, J.A. (1998) Control of Na<sup>+</sup> transport in salivary duct epithelial cells by cytosolic c1- and Na<sup>+</sup>. *European Journal of Morphology* 36: 67-73.
  - Dinudom, A., Harvey, K.F., Komwatana, P., Young, J.A., Kumar, S. & Cook, D.I. (1998) Nedd4 mediates control of an epithelial Na<sup>+</sup> channel in salivary duct cells by cytosolic Na<sup>+</sup>. *Proceedings of the National Academy of Sciences of the United States of America* 95: 7169-7173.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1998) Activators of epithelial Na<sup>+</sup> channels inhibit cytosolic feedback control. Evidence for the existence of a G protein-coupled receptor for cytosolic Na<sup>+</sup>. *Journal of Membrane Biology* 162: 225-232.
- 1999 Ishibashi, H., Dinudom, A., Harvey, K.F., Kumar, S., Young, J.A. & Cook, D.I. (1999)

  Na<sup>+</sup>-H<sup>+</sup> exchange in salivary secretory cells is controlled by an intracellular Na<sup>+</sup> receptor. *Proceedings of the National Academy of Sciences of the United States of America* 96: 9949-9953.
- **2000** Kunzelmann, K., Beesley, A.H., King, N.J., Karupiah, G., Young, J.A. & Cook, D.I. (2000) Influenza virus inhibits amiloride-sensitive Na<sup>+</sup> channels in respiratory epithelia. *Proceedings of the National Academy of Sciences of the United States of America* 97: 10282-10287.
- **2001** Dinudom, A., Harvey, K.E., Komwatana, P., Jolliffe, C.N., Young, J.A., Kumar, S. & Cook, D.I. (2001) Roles of the carboxyl termini of *a* and r-subunits of epithelial Na<sup>+</sup> channels (ENaC) in regulating ENaC and mediating its inhibition by cytosolic Na<sup>+</sup>. *Journal of Biological Chemistry* 276: 13744-13749.
- 2004 Dinudom, A., Fotia, A.B., Lefkowitz, R.J., Young, J.A., Kumar, S. & Cook, D.I. (2004). The kinase Grk2 regulates Nedd4/Nedd4-2-dependent control of epithelial Na<sup>+</sup> channels. *Proceedings of the National Academy of Sciences of the United States of America* 101: 11886–11890.
  - Kunzelmann, K., König, J., Sun, J., Markovich, D., King, N. J., Karupiah, G, Young, J.A. & Cook, D.I. (2004) Acute effects of parainfluenza virus on epithelial electrolyte transport. *Journal of Biological Chemistry* 279: 48760–48766.

#### **Review Articles in Refereed Publications**

- **1971** Young, J.A. & Freedman, B.S. (1971) Renal tubular transport of amino acids. *Clinical Chemistry* **17:** 245-266.
- **1972** Schneyer, L.H., Young, J.A. & Schneyer, C.A. (1972) Salivary secretion of electrolytes. *Physiological Reviews* 52: 720-777.
- **1977** Young, J.A. & Van Lennep, E.W. (1977) Morphology and physiology of salivary myoepithelial cells. In R.K. Crane (ed): *International Review of Physiology, Gastrointestinal Physiology IL Volume 12*. Baltimore: University Park Press, pp. 105-125.
  - 1979 Van Lennep, E.W. & Young, J.A. (1979) Transport in salivary and salt glands. Part II: Salt glands. In G. Giebisch, D.C. Tosteson & H.H. Ussing (eds): *Membrane Transport in Biology Volume 4B: Transport Organs*. Berlin: Springer-Verlag, pp. 675-692.
    - Young, J.A. (1979) Salivary secretion of inorganic electrolytes. In R.K. Crane (ed): *International Review of Physiology, Gastrointestinal Physiology III, Volume* 19. Baltimore: University Park Press, pp. 1-58.
    - Young, J.A. & Van Lennep, E.W. (1979) Transport in salivary and salt glands. Part I: Salivary glands. In G. Giebisch, D.C. Tosteson & H.H. Ussing (ed): *Membrane Transport in Biology, Volume 4B Transport Organs*. Berlin: Springer-Verlag,

- pp. 563-674.
- **1980** Young, J.A., Case, R.M., Conigrave, A.D. & Novak, I. (1980) Transport of bicarbonate and other anions in salivary secretion. *Annals of the New York Academy of Sciences* 341: 172-190.
- **1981** Young, J.A. & Schneyer, C.A. (1981) Composition of saliva in mammalia. *Australian Journal of Exper mental Biology and Medical Science* **59:** 1-53.
- **1986** Van Lennep, E.W., Cook, D.I. & Young, J.A. (1986) Morphology and secretory mechanisms of salivary glands. In P. Desnuelle, H. Sjostrom & O. Noren (ed): *Molecular and Cellular Biology of Digestion, Chapter 24*. Amsterdam: Elsevier, pp. 435-456.
- 1987 Young, J.A., Cook, D.I., Van Lennep, E.W. & Roberts, M.L. (1987) Secretion by the major salivary glands. In L. Johnson, J. Christensen, M. Jackson, E. Jacobson & J. Walsh (ed): *Physiology of the Gastrointestinal Tract, Volume 2, 2nd Edition.* New York: Raven Press, pp. 773-815.
- **1988** Cook, D.I. & Young, J.A. (1988) Cystic fibrosis: a disorder of biological signal transduction. *Journal of Gastroenterology and Hepatology* **3:** 659-670.
- 1989 Cook, D.I. & Young, J.A. (1989) Fluid and electrolyte secretion by salivary glands. In J.G. Forte (ed): *Handbook of Physiology*. *The Gastrointestinal System. Salivary, Pancreatic, Gastric and Hepatobiliary Secretion.* (Section 6, Volume III). Bethesda: American Physiological Society, pp. 1-23.
- **1990** Cook, D.I. & Young, J.A. (1990) Cation channels and secretion. In J.A. Young & P.Y.D. Wong (ed): *Epithelial Secretion of Water and Electrolytes*. Heidelberg: Springer-Verlag, pp. 15-38.
- **1993** Cook, D.I. & Young, J.A. (1993) Epithelial secretion driven by anions other than chloride. *News in Physiological Sciences* **8:** 91-93.
- 1994 Cook, D.I., Van Lennep, E.W., Roberts, M.L. & Young, J.A. (1994) Secretion by the major salivary glands. In L. Johnson, J. Christensen, M. Jackson, E. Jacobson & J. Walsh (ed): *Physiology of the Gastrointestinal Tract, Volume 2, 3rd Edition.* New York: Raven Press, pp. 1061-1117.
- **2002** Cook, D.I. & Young, J.A. (2002) Towards a physiology of epithelial pathogens. *Pfliigers Archiv European Journal of Physiology*, 443: 339-343.
  - Cook, D.I., Dinudom, A., Komwatana, P., Kumar, S. & Young, J.A. (2002) Patch-clamp studies on epithelial sodium channels in salivary duct cells. *Cell Biochemistry and Biophysics* **36**: 105–1.
- **2004** Dinudom, A., Fotia, A.B., Lefkowitz, R.J., Young, J.A., Kumar, S. & Cook, D.I. (2004). The kinase Grk2 regulates Nedd4/Nedd4-2-dependent control of epithelial Na<sup>+</sup> channels. *Proceedings of the National Academy of Sciences of the United States of America* 101: 11886–11890.
  - Kunzelmann, K., König, J., Sun, J., Markovich, D., King, N. J., Karupiah, G, Young, J.A. & Cook, D.I. (2004) Acute effects of parainfluenza virus on epithelial electrolyte transport. *Journal of Biological Chemistry* 279: 48760–48766.

#### **Published Conference Papers**

**1963** Edwards, K.D.G., Young, J.A., Jeremy, D. & Neale, F.C. (1963) Clinical and chemical studies on methyl- dopa with reference to renal and hepatic function and amino

- acid metabolism in hypertensive human subjects and rats. *Proc. 4th World Congr. Cardiol.* **4:** 124-132.
- **1964** Young, J.A. (1964) The renal tubular handling of organic compounds and drugs studied by stop-flow analysis. *Bulletin of the Postgraduate Committee in Medicine of the University of Sydney* 20: 78-88.
- **1967** Young, J.A., Fromter, E., Schogel, E. & Hamann, K.F. (1967) Micropuncture and perfusion investigation of active sodium and potassium transport in the rat submaxillary gland. *Bulletin of the Postgraduate Committee in Medicine of the University of Sydney* 23: 181-198.
  - Young, J.A., Fromter, E., Schogel, E. & Hamann, K.F. (1967) Micropuncture and perfusion studies of fluid and electrolyte transport in the rat submaxillary gland. In L.H. Schneyer & C.A. Schneyer (eds): *Secretory Mechanisms of Salivary Glands*. New York: Academic Press, pp. 11-31.
- 1970 Schneyer, L.H., Mangos, J.A., Chernick, W.S., Botelho, S.Y., Brusilow, S.W., Lassiter, W.E., Martinez, J.R., Schneyer, C.A., Schwartz, A. & Young, J.A. (1970) Exocrine gland physiology basic mechanisms of transport. In S. Jakowska (ed): *Cystic Fibrosis and Related Human and Animal Diseases*. New York: Gordon & Breach, pp. 130--144.
- 1972 Martin, C.J., Fromter, E., Gehler, B., Knauf, H. & Young, J.A. (1972) Electrolyte transport in the excurrent duct system of the submaxillary gland. II. Microperfusion studies on the excretory ducts *in vivo* and *in vitro*. In N.G. Emmelin & Y. Zotterman (eds): *Oral Physiology*. Oxford: Pergamon, pp. 115-125.
  - Young, J.A. & Martin, C.J. (1972) Electrolyte transport in the excurrent duct system of the submaxillary gland. I. Studies on the intact gland. In N.G. Emmelin & Y. Zotterman (eds): *Oral Physiology*. Oxford: Pergamon, pp. 99-113.
- **1973** Young, J.A. (1973) Electrolyte transport by salivary epithelia. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 101-121.
- **1974** Martin, C.J., Denniss, A.R., Endre, Z.H. & Young, J.A. (1974) Mechanisms of action of neurotransmitters and their analogues on salivary duct electrolyte transport. In N.A. Thorn & O.H. Petersen (eds): *Secretory Mechanisms of Exocrine Glands (Benzon Symposium Number 7)*. Copenhagen: Munksgaard, pp. 549-569.
  - Young, J.A. & Field, M.J. (1974) The kinetics of Na transport in the isolated perfused rat submaxillary main duct. In N.A. Thorn & O.H. Petersen (eds): *Secretory Mechanisms of Exocrine Glands (Ben-zon Symposium Number 7)*. Copenhagen: Munksgaard, pp. 449-463.
- **1976** Young, J.A. & Lingard, J.M. (1976) Handling of neutral amino acids by the proximal tubule of the rat nephron. In S. Silbernagl, F. Lang & R. Greger (eds): *Amino Acid Transport and Uric Acid Trans- port*. Stuttgart: Thieme, pp. 86-95.
- **1980** Conigrave, A.D., Novak, I., Young, J.A. & Case, **R.M.** (1980) Secretory processes in the rabbit mandibular gland. I. The role of HCO<sub>3</sub> ions. In I. Schulz, G. Sachs, J.G. Forte & K.J. Ullrich (eds): *Hydrogen Ion Transport in Epithelia*. Amsterdam: Elsevier, pp. 243-250.
  - Cook, D.I. & Young, J.A. (1980) Computer simulation of salt and water transport in salivary ducts: prediction of concentration profiles along the lumen of an epithelial tubule having both luminal and cellular compartments. In A.D.C. Macknight & J. Leader (ed)s: *Epithelial Ion and Water Transport*. New York: Raven Press, pp. 221-234.
  - Novak, I., Conigrave, A.D., Case, R.M. & Young, J.A. (1980) Secretory processes in the rabbit mandibular gland. II. The role of H<sup>+</sup> ions. In I. Schulz, G. Sachs, J.G. Forte & K.J. Ullrich (eds): *Hydrogen Ion Transport in Epithelia*. Amsterdam: Elsevier, pp. 251-258.
- **1981** Cook, D.I. & Young, J.A. (1981) Solution of epithelial cell models for secretion and absorption using opti- mization routines. In T. Zelles (ed): *Saliva and Salivation (Advances in Physiological Science, Volume 28).* Oxford, Budapest: Pergamon,

- Akademiai Kiado, pp. 73-78.
- Denniss, A.R., Coroneo, M.T. & Young, J.A. (1981) Physalaemin action on salivary electrolyte transport. In T. Zelles (ed): *Saliva and Salivation (Advances in Physiological Science, Volume 28)*. Oxford, Budapest: Pergamon, Akademiai, pp. 47-52.
- Endre, Z.H. & Young, J.A. (1981) Electrolyte content of primary and final saliva of rabbit mandibular glands studied *in vivo*. In T. Zelles (ed): *Saliva and Salivation (Advances in Physiological Science, Volume 28)*. Oxford, Budapest: Pergamon, Akademiai Kiado, pp. 29-34.
- Young, J.A., Case, R.M., Conigrave, A.D., Novak, I. & Thompson, C.H. (1981) Secretory processes in the perfused rabbit mandibular gland. In T. Zelles (ed): Saliva and Salivation (Advances in Physiological Science, Volume 28). Oxford, Budapest: Pergamon, Akademiai Kiado, pp. 35-46.
- 1982 Hunter, M., Case, R.M., Steward, M.C. & Young, J.A. (1982) The permeability and reflection coefficients of the perfused rabbit mandibular salivary gland to non-electrolytes. In R.M. Case, A. Gamer, L.A. Tumberg & J.A. Young (eds): *Electrolyte and Water Transport Across Gastrointestinal Epithelia*. New York: Raven Press, pp. 21-32.
  - Hunter, M., Case, R.M. & Young, J.A. (I 982) The ionic dependence of secretion by the rabbit mandibular salivary gland. In R.M. Case, A. Gamer, L.A. Tumberg & J.A. Young (eds): *Electrolyte and Water Transport Across Gastrointestinal Epithelia*. New York: Raven Press, pp. 161-165.
  - Young, J.A. (1982) Is Na/Cl cotransport the basis of transepithelial transport in absorptive and secretory epithelia? In R.M. Case, A. Gamer, L.A. Tumberg & J.A. Young (eds): *Electrolyte and Water Transport Across Gastrointestinal Epithelia*. New York: Raven Press, pp. 181-198.
  - Young, J.A., Case, R.M., Conigrave, A.D., Hunter, M., Novak, I. & Thompson, C.H. (1982) Extracellular anions and salivary secretion. In D. Kaiser (ed): *Approaches to Cystic Fibrosis Research*. Heilbronn: Maizena Diilt GmbH, pp. 49-59.
  - Young, J.A., Chapman, B.E., Cook, D.I., Healey, A.P., Kuchel, P.W., Lingard, J.M., Nicol, M., Novak, I. & Seow, F. (1982) Salivary secretory mechanism: recent advances and concepts. In P.M. Quinton, J.R. Martinez & U. Hopfer (eds): *Fluid and Electrolyte Transport in Exocrine Glands in Cystic Fibrosis*. San Francisco: San Francisco Press, pp. 102-124.
- **1984** Lingard, J.M. & Young, J.A. (1984) Adrenergic secretomotor control of the rat pancreas. In R.M. Case, J.M. Lingard & J.A. Young (eds): *Secretion: Mechanisms and Control*. Manchester: Manchester University Press, pp. 271-276.
  - Novak, I., Dave, C. & Young, J.A. (1984) The anionic basis of secretion by rat and rabbit mandibular glands. In R.M. Case, J.M. Lingard & J.A. Young (eds): *Secretion: Mechanisms and Control*. Manchester: Manchester University Press, pp. 77-80.
  - Novak, I. & Young, J.A. (1984) The effect of transport inhibitors and anion replacement on salivary secre- tion. In R.M. Case, J.M. Lingard & J.A. Young (eds): Secretion: Mechanisms and Control. Manchester: Manchester University Press, pp. 81-87.
  - Seow, F. & Young, J.A. (1984) Anionic dependency of secretin-stimulated secretion by the isolated per- fused rat pancreas. In R.M. Case, J.M. Lingard & J.A. Young (ed): *Secretion: Mechanisms and Control*. Manchester: Manchester University Press, pp. 97-102.
  - Young, J.A. (1984) The role of bicarbonate and other anions in transepithelial transport. In R.M. Case, J.M. Lingard & J.A. Young (eds): *Secretion: Mechanisms and Control*. Manchester: Manchester University Press, pp. 27-45.
- 1985 Cook, D.I., Towner, S.P. & Young, J.A. (1985) Patch-clamp studies on cultured salivary cells. In H. Watari & M. Murakami (eds): *Epithelial Transport: Energetics, Mechanisms and Control (Jlth Seiriken Conference)*. Okazaki: National Institute for Physiological Sciences of Japan, pp. P8-5.
  - Young, J.A. & Cook, D.I. (1985) Cellular secretory mechanism in salivary glands. In H. Watari & M. Murakami (eds): *Epithelial Transport: Energetics*, *Mechanisms and Control (11th Seiriken Confe ence)*. Okazaki: National

- Institute for Physiological Sciences of Japan, pp. L3.
- **1986** Young, J.A. & Cook, D.I. (1986) Transepithelial secretion of salt and water. *Proceedings of the Australian Physiological and Pharmacological Society* **17:** 39-58.
- 1987 Young, J.A. (1987) Perspectives in physiological sciences in Australia. In C. Pholpramool & R. Sudsuang (eds): *Proceedings of the First Congress of the Asian and Oceanian Physiological Societies*. Bangkok: The Physiological Society (Thailand), pp. 23-27.
- Young, J.A. & Cook, D.I. (I 987) Secretion of fluid and electrolytes dependent on secondary active transport of anions. In C. Pholpramool & R. Sudsuang (eds):

  \*Proceedings of the First Congress of the Asian and Oceanian Physiological Societies.\* Bangkok: The Physiological Society (Thailand), pp. 59-66.
- **1988** Champion, M.P., Cook, D.I. & Young, J.A. (1988) Variability in response of rat mandibular secretory cells to autonomic agonists. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 47-48.
  - Cook, D.I., Champion, M.P. & Young, J.A. (1988) Patch-clamp studies on ,B-adrenergic stimulus-secretion coupling in rat mandibular gland endpiece cells. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 51-54.
  - Cook, D.I., Gard, G.B., Champion, M. & Young, J.A. (1988) Patch-clamp studies of the electrolyte secre- tory mechanism of rat mandibular gland cells stimulated with acetylcholine or isoproterenol. In N.A. Thom, M. Treiman, O.H. Petersen & J.H. Thaysen (ed): *Molecular Mechanisms in Secretion (25th Alfred Benzon Symposium 1987)*. Copenhagen: Munksgaard, pp. 131-151.
  - Poronnik, P., Cook, D.I. & Young, J.A. (1988) The use of Cytodex<sup>®</sup> beads in patch-clamp studies on cul-tured epithelial cells. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 145-147.
  - Wegman, E.A., Cook, D.I. & Young, J.A. (1988) Patch-clamp studies of K<sup>+</sup> channels in the MCF-7 breast carcinoma line and their regulation. In P.Y.D. Wong & J.A. Young (ed): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 207-209.
  - Wegman, E.A., Reid, A., Cook, D.I., Titchen, D.A. & Young, J.A. (1988) A large K<sup>+</sup> channel in the secretory cells of the sheep parotid gland: patch-clamp studies. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 211-214.
  - Young, J.A. & Cook, D.I. (1988) Secretion of fluid and electrolytes dependent on secondary active trans- port of anions. *Australian Societies for Experimental Biology Proceedings* 1: 9I- IOI.
  - Young, J.A., Gard, G.B., Champion, M.P. & Cook, D.I. (I 988) Patch-clamp studies on muscarinic stimulus-secretion coupling in rat mandibular gland endpiece cells. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion*. Hong Kong: Hong Kong University Press, pp. 219-222.
- **1990** Conigrave, A.D., Cook, D.I., Delbridge, L., Jones, A.O., Poronnik, P. & Young, J.A. (I 990) Ion channels in human and rat parathyroid cells. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion II*. Hong Kong: !UPS Gastrointestinal Commission (ISES), pp. 31-32.
  - Cook, D.I., Wegman, E.A., Ishikawa, T. & Young, J.A. (1990) Cation channels in the parotid and mandibular glands of the sheep. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion II*. Hong Kong: !UPS Gastrointestinal Commission (ISES), pp. 35-38.
  - Day, M.L., Pickering, S.J., Cook, D.I., Johnson, M.H. & Young, J.A. (1990) Changes in ion channel populations during development in early mouse embryos. In P.Y.D. Wong & J.A. Young (eds): *Exocrine Secretion II*. Hong Kong: !UPS Gastrointestinal Commission (ISES), pp. 47-50.
  - Dinudom, A., Cook, D.I. & Young, J.A. (1990) Ion channels in the basolateral membrane of isolated mouse mandibular ducts. In P.Y.D. Wong & J.A. Young (ed): *Exocrine Secretion II*. Hong Kong: !UPS Gastrointestinal Commission

- (!SES), pp. 51-52.
- Huang, S.J., Cook, D.I., Jones, A.O., Wong, P.Y.D. & Young, J.A. (1990) The Ca<sup>2+</sup> and voltage-sensitive potassium channels in the rat epididymis. In P.Y.D. Wong & J.A. Young (eds): Exocrine Secretion II. Hong Kong: !UPS Gastrointestinal Commission (!SES), pp. 65-68.
- Ishikawa, T., Cook, D.I. & Young, J.A. (1990) Ionic channels in the HSG human salivary gland cell line. In P.Y.D. Wong & J.A. Young (eds): Exocrine Secretion II. Hong Kong: !UPS Gastrointestinal Commission (!SES), pp. 73-74.
- Martin, D.K., Cook, D.I. & Young, J.A. (1990) A direct-reading device for measurement of patch-clamp micropipette diameters. In P.Y.D. Wong & J.A. Young (ed): Exocrine Secretion II. Hong Kong: !UPS Gastrointestinal Commission (ISES), pp. 85-86.
- Martin, D.K., Cook, D.I. & Young, J.A. (1990) Ca<sup>2+</sup>-activated c1- channels in rat mandibular endpiece cells. In P.Y.D. Wong & J.A. Young (eds): Exocrine Secretion II. Hong Kong: !UPS Gastrointestinal Commission (!SES), pp. 87-
- Poronnik, P., Cook, D.I., Allen, D.G. & Young, J.A. (1990) Diphenylamine-2carboxylate (DPC) blocks calcium influx in cultured mouse mandibular cells. In P.Y.D. Wong & J.A. Young (eds): Exocrine Secretion II. Hong Kong: IUPS Gastrointestinal Commission (ISES), pp. 113-114.
- Poronnik, P., Shahidi, S., Cook, D.I. & Young, J.A. (1990) Properties of a nonselective cation channel in cultured mouse mandibular cells. In P.Y.D. Wong & J.A. Young (ed): Exocrine Secretion II. Hong Kong: IUPS Gastrointestinal Commission (ISES), pp. 115-118.
- Wegman, E.A., Poronnik, P., Cook, D.I., Allen, D.G. & Young, J.A. (1990) Mechanism of inhibition of bethanechol evoked secretion from the sheep parotid gland by tetraethylammonium. In P.Y.D. Wong & J.A. Young (eds): Exocrine Secretion II. Hong Kong: IUPS Gastrointestinal Commission (ISES), pp. 129-132.
- 1991 Dinudom, A., Cook, D.I. & Young, J.A. (1991) Ion channels in salivary duct epithelium. In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): *Ionic* Basis and Energy Metabolism of Epithelial Transport. Okazaki: National Institute for Physiological Sciences, pp. 187-190.

  - Institute for Physiological Sciences, pp. 187-190.

    Ishikawa, T., Cook, D.I. & Young, J.A. (1991) Ion channels in a human salivary duct cell line (HSG). In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): *Ionic Basis and Energy Metabolism of Epithelial Transport*. Okazaki: National Institute for Physiological Sciences, pp. 185-186.

    Komwatana, P., Conigrave, A.D., Cook, D.I. & Young, J.A. (1991) Ion channels in rat parathyroid cells. In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): *Ionic Basis and Energy Metabolism of Epithelial Transport*. Okazaki: National Institute for Physiological Sciences, pp. 203-204.
  - Nakahari, T., Cook, D.I. & Young, J.A. (1991) Agonist-induced changes in cell membrane capacitance in rat mandibular acinar cells. In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): *Ionic Basis and Energy Metabolism of* Epithelial Transport. Hot Aspects from Exocrine Secretion. Okazaki: National Institute for Physiological Sciences, pp. 33-34.
  - Nakahari, T., Cook, D.I. & Young, J.A. (1991) Agonist-induced changes in cell membrane capacitance in rat mandibular acinar cells. In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): *Jonie Basis and Energy Metabolism of* Epithelial Transport. Okazaki: National Institute for Physiological Sciences, pp. 33-34.
  - Poronnik, P., Cook, D.I. & Young, J.A. (1991) Flufenamic acid causes release of calcium from intracellular stores. In M. Murakami, Y. Seo, A. Kuwahara & H. Watari (eds): Ionic Basis and Energy Metabolism of Epithelial Transport. Okazaki: National Institute for Physiological Sciences, pp. 183-184.

- 1992 Dinudom, A., Young, J.A. & Cook, D.I. (1992) Patch-clamp studies on granular intralobular ducts of mouse mandibular glands. In M. Murakami, Y. Seo & T. Ishikawa (eds): Salivary Secretion: Control and Mechanisms. Okazaki: National Institute for Physiological Sciences, pp. 101-104.
  - Young, J.A. & Cook, D.I. (1992) Twenty-eight years of exocrine secretion (1964-1993) A perspective from Sydney. In M. Murakami, Y. Seo & T. Ishikawa (eds): *Salivary Secretion: Control and Mechanisms*. Okazaki: National Institute for Physiological Sciences, pp. 1-4.
- 1993 Dinudom, A., Poronnik, P., Young, J.A. & Cook, D.I. (I 993) Patch-clamp and fura-2 studies on granular intralobular ducts in mouse mandibular glands. In H.H. Ussing, J. Fischbarg, O. Sten-Knudsen, E. Hviid-Larsen, N.W. Willumsen & J.H. Thaysen (eds): *Isotonic Transport in Leaky Epithelia* (Alfred Benzon Symposium Number 34). Copenhagen: Munksgaard, pp. 85-102.
- 1994 Dinudom, A., Komwatana, P., Young, J.A. & Cook, D.I. (1994) cAMP-regulated whole-cell c1- current in mouse mandibular granular duct cells. In P. Poronnik, D.I. Cook & J.A. Young (eds): Studies in Honour of Karl Julius Ullrich. An Australian Symposium. Sydney: Laboratory of Exocrine Physiology and Biophysics, pp. 113-116.
  - Hayashi, T., Hirono, C., Young, J.A. & Cook, D.I. (1994) Effects of K<sup>+</sup> channel blockers on acetylcholine- induced whole-cell currents in sheep parotid secretory cells. In P. Poronnik, D.I. Cook & J.A. Young (eds): *Studies in Honour of Karl Julius Ullrich. An Australian Symposium.* Sydney: Laboratory of Exocrine Physiology and Biophysics, pp. 109-112.
  - Laboratory of Exocrine Physiology and Biophysics, pp. 109-112.

    Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1994) Na<sup>+</sup> dependence of an amiloride-sensitive Na<sup>+</sup> conductance in mouse mandibular granular duct cells. In P. Poronnik, D.I. Cook & J.A. Young (eds): *Studies in Honour of Karl Julius Ullrich. An Australian Symposium.* Sydney: Laboratory of Exocrine Physiology and Biophysics, pp. 117-121.
- 1996 Chaturapanich, G., Dinudom, A., Young, J.A. & Cook, D.I. (1996) H<sup>+</sup> transport by the extralobular duct epithelium of the mouse mandibular salivary gland. In A. Dinudom & P. Komwatana (eds): *Studies in Honour of John Atherton Young. 60th Birthday Celebrations*. Sydney: University of Sydney, pp. 47-54.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1996) Regulation of amiloride-sensitive Na<sup>+</sup> channels of mouse salivary duct by intracellular Na<sup>+</sup>. In A. Dinudom & P. Komwatana (eds): *Studies in Honour of John Atherton Young. 60th Birthday Celebrations*. Sydney: Laboratory of Exocrine Physiology and Biophysics, pp. 155-159.

# **Textbook Chapters**

1991 Cook, D.I., Lingard, J.M., Wegman, E.A. & Young, J.A. (1991) Energy, nutrition and metabolism. In J.A. Young, D.I. Cook, A.D. Conigrave & C.R. Murphy (eds): *Gastrointestinal Physiology*. Sydney: Rainforest Publishing, pp. 13-44.

Young, J.A. & Cook, D.I. (1991) Gastrointestinal motility. In J.A. Young, D.I. Cook, A.D. Conigrave & C.R. Murphy (eds): *Gastrointestinal Physiology*. Sydney:

- Rainforest Publishing, pp. 45-80.
- Young, J.A., Cook, D.I., Van Lennep, E.W., Lingard, J.M. & Wegman, E.A. (1991) Secretion, digestion and absorption. In J.A. Young, D.I. Cook, A.D. Conigrave & C.R. Murphy (eds): *Gastrointestinal Physiology*. Sydney: Rainforest Publishing, pp. 81-174.
- **1994** Cook, D.I., Lingard, J.M., Wegman, E.A. & Young, J.A. (1994) Emahung, Energiehaushalt und Stof- fwechsel. In **R.** Klinke & S. Silbemagl (ed): *Lehrbuch der Physiologie.* Stuttgart: Georg Thieme Verlag, pp. 357-371.
  - Young, *I.A.*, Cook, D.I., Lingard, J.M., Van Lennep, E.W. & Wegman, E.A. (1994) Funktion des Magen- Darm-Trakts. In R. Klinke & S. Silbemagl (eds): *Lehrbuch der Physiologie*. Stuttgart: Georg Thieme Verlag, pp. 387-437.
- **1996** Conigrave, A.D. & Young, J.A. (1996) Function of the intestine. In **R.** Greger & U. Windhorst (ed): *Comprehensive Human Physiology, Volume 2*. Berlin: Springer-Verlag, pp. 1259-1287.
  - Cook, D.I. & Young, J.A. (1996) Function of the exocrine pancreas. In **R.** Greger & U. Windhorst (eds): *Comprehensive Human Physiology, Volume 2*. Berlin: Springer-Verlag, pp. 1327-1343.
  - Young, J.A. & Cook, D.I. (1996) The major salivary glands. In **R.** Greger & U. Windhorst (eds): *Comprehensive Human Physiology, Volume 2*. Berlin: Springer-Verlag, pp. 1309-1326.

# **Communications to the Physiological Society (UK)**

- **1966** Schogel, E. & Young, J.A. (1966) Micropuncture and perfusion investigation of sodium and potassium transport in the rat submaxillary gland. *Journal of Physiology* **183**: 73-75P.
- **1974** Gyory, A.Z., Lingard, J.M. & Young, J.A. (1974) Proximal tubular inhomogeneity for neutral amino acids in the rat kidney. *Journal of Physiology* **241**: 126-127P.
- **1980** Case, R.M., Conigrave, A.D., Novak, I. & Young, J.A. (1980) Buffer secretion by the isolated perfused mandibular gland of the rabbit. *Journal of Physiology* **303**: 33P.
- **1981** Cook, D.I. & Young, J.A. (1981) Solution of epithelial transport models using optimization routines. *Journal of Physiology* **316:** 61-62P.
- 1982 Chapman, B.E., Cook, D.I., Gerrard, J., Healey, A.P., Kuchel, P.W. & Young, J.A. (1982) Proton nuclear magnetic resonance spectroscopy (NMR) of rat salivary gland endpieces. *Journal of Physiology* 330: 36P.
  - Gamble, J., Smaje, L.H. & Young, J.A. (1982) The effect of changed vascular pressures on salivation in the isolated rabbit submandibular gland. *Journal of Physiology* 334: 79-80P.
- **1983** Case, **R.M.**, Hunter, M., Potter, A.J., Steward, M.C. & Young, J.A. (1983) The perfused rabbit mandibular gland: a model for studying salivary secretory processes. *Journal of Physiology* 342: 1-2P.
  - Case, R.M., Hunter, M., Steward, M.C. & Young, J.A. (1983) Non-electrolyte

transport by the isolated rabbit mandibular salivary gland. *Journal of Physiology* 342: 83-84P.

#### **Communications to the Australian Physiological & Pharmacological Society**

- **1964** Young, J.A. & Edwards, K.D.C. (1964) The influence of 1- and d-methyldopa on the renal handling of exogenous histidine in the rat. *Proceedings of the Australian Physiological Society* 6th Meeting: 133-134.
- **1970** Hayden, L.J., Shagrin, J.M. & Young, J.A. (1970) Micropuncture study of the anion composition of the contents of single rat thyroid acini. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 36P.
  - Henning, R.D. & Young, J.A. (1970) Electrolyte transport in the seminiferous tubules of the rat studied by the stopped-flow microperfusion technique. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 39P-40P.
  - Martin, C.J. & Young, J.A. (1970) Studies on the excretion of bicarbonate in rat submaxillary gland. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 38P.
  - Martin, C.J. & Young, J.A. (1970) The effect of autonomic drugs on electrolyte transport and potential dif- ference across the main duct of the rat submaxillary gland. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 40P-41P.
  - Martin, C.J. & Young, J.A. (1970) Water and electrolyte secretion by the rat sublingual gland. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 15P-16P.
  - Young, J.A., Martin, C.J. & Weber, F.D. (1970) A stimulable bicarbonate secretory mechanism in the microperfused rat submaxillary main duct. *Proceedings of the Australian Physiological and Pharmacological Society* 1: 37P.
- **1972** Alexander, J.H. & Young, J.A. (1972) Formation of tears by the rat exorbital lacrimal gland. *Proceedings of the Australian Physiological and Pharmacological Society* 3: 18P-19P.
  - Endre, Z.H. & Young, J.A. (I 972) Potassium and bicarbonate secretion by the rabbit submaxillary gland. *Proceedings of the Australian Physiological and Pharmacological Society* 3: 160P.
  - Field, M.J. & Young, J.A. (1972) Sodium and potassium transport in the rat submaxillary main duct per- fused *in vitro*. *Proceedings of the Australian Physiological and Pharmacological Society* 3: 159P.
  - Kaladelfos, G. & Young, J.A. (1972) Electrolyte excretion by the cat submaxillary gland stimulated with carbachol or isoproterenol. *Proceedings of the Australian Physiological and Pharmacological Society* 3: 161P.
  - Kaladelfos, G. & Young, J.A. (1972) Sodium and potassium and chloride excretion in the isotonic-secreting cat sublingual gland. *Proceedings of the Australian Physiological and Pharmacological* Society 3: 52P-53P.
  - Lingard, J., Rumrich, G. & Young, J.A. (1972) Amino acid reabsorption in various sections of the proxi- mal convolution of the rat nephron. *Proceedings of the Australian Physiological and Pharmacological Society* 3: I06P-107P.
  - Lingard, J.M., Rumrich, G. & Young, J.A. (1972) A demonstration that the proximal convolution of the rat nephron is not homogeneous with respect to amino acid reabsorption using stationary microperfusion techniques. *Proceedings of the*

- Australian Physiological and Pharmacological Society 3: 57P-58P.
- Martin, C.J., Fromter, E., Gehler, B., Knauf, H. & Young, J.A. (I 972) The effect of carbachol on electrolyte transport and trans-epithelial potential differences in the rabbit submaxillary main duct perfused *in vitro*. *Proceedings of the Australian Physiological and Pharmacological Society* 3: 64P-65P.
- **1973** Denniss, A.R. & Young, J.A. (1973) Studies on the mechanism of action of carbachol and physalaemin on Na<sup>+</sup> transport by the perfused rabbit submaxillary main duct. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 45P.
  - Gyory, A.Z., Lingard, J.M. & Young, J.A. (1973) Kinetics of Na<sup>+</sup> reabsorption in rat proximal tubules perfused *in vivo*. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 52P-53P.
  - Roby, H.P., Van Lennep, E.W., Martin, C.J. & Young, J.A. (1973) Action of neurotransmitters and ana- logues on isotonic salt and water transport by guinea pig gall bladder. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 76P-77P.
  - Sewell, W. & Young, J.A. (1973) Studies on the effects of poly-L-lysine on electrolyte transport by rat sali- vary ducts. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 80P.
  - Williams, D., Turner, B., Lingard, J.M. & Young, J.A. (1973) Endogenous amino acid clearance in the rat. *Proceedings of the Australian Physiological and Pharmacological Society* 4: 91P.
- **1974** Denniss, A.R. & Young, J.A. (I 974) The mechanism of action of acetylcholine on transepithelial sodium transport by rabbit submaxillary main duct perfused *in vitro. Proceedings of the Australian Physiological and Pharmacological Society* 5: 189P-192P.
  - Grant, S.B.J., Endre, Z.H. & Young, J.A. (1974) Steady-state electrolyte concentrations and transepithelial electrical potential differences in the rabbit submaxillary main duct perfused *in vivo*. *Proceedings of the Australian Physiological and Pharmacological Society* 5: 206P-208P.
  - Gyory, A.Z., Lingard, J.M. & Young, J.A. (I 974) Cardiac glycoside inhibition of active sodium transport in rat proximal tubules: evidence for a multisite allosteric transport system. *Proceedings of the Australian Physiological and Pharmacological Society* 5: 208P-21 OP.
  - Lingard, J.M., Gyory, A.Z. & Young, J.A. (1974) Analysis of the reabsorptive characteristics of neutral amino acids in the proximal convolution of the rat kidney. *Proceedings of the Australian Physiological and Pharmacological Society* 5: 223P-225P.
  - Roby, H.P., Gyory, A.Z., Lingard, J.M. & Young, J.A. (1974) Micropuncture investigation of Na and CI transport by the proximal tubule studied in vitro in incubated slices of rat kidney cortex. *Proceedings of the Australian Physiological and Pharmacological Society* 5: 239P-242P.
  - Sewell, W.A. & Young, J.A. (1974) Secretion of fluids and electrolytes by the rat pancreas. *Proceedings of the Australian Physiological and Pharmacological Society* 5: 246P-248P.
- **1975** Compton, J.S., Denniss, A.R., Hung, P., Kennerson, A.R., Van Lennep, E.W. & Young, J.A. (1975) The effect of a sodium-deficient diet on the striated ducts of the rabbit mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* 6: 132P-I33P.
  - Coroneo, M., Kennerson, A., Sewell, W.A. & Young, J.A. (1975) Pancreatic electrolyte secretion during CCK stimulation and alterations induced by cycloheximide. *Proceedings of the Australian Physio-logical and Pharmacological Society* 6: 41P-42P.
  - Young, J.A., Lingard, J.M. & Pollack, A. (1975) Errors that can arise in kinetic constants when data are analysed by too simple a transport model. *Proceedings of the Australian Physiological and Pha macological Society* 6: 179P-I81 P.
- **1976** Compton, J.S. & Young, J.A. (1976) The concentration of Na<sup>+</sup> and K<sup>+</sup> in the primary and final saliva of sodium depleted lambs. *Proceedings of the Australian Physiological and Pharmacological Society* 7: 143P.

- Harris, P.J. & Young, J.A. (1976) A direct effect of angiotensin II on sodium reabsorption by the rat proxi- mal nephron. *Proceedings of the Australian Physiological and Pharmacological Society 1:* 15P.
- **1977** Case, **R.M.**, Conigrave, A.D. & Young, J.A. (1977) The isolated saline-perfused rabbit mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* **8:** 143P.
  - Cook, D.I. & Young, J.A. (1977) Dependence of K<sup>+</sup> secretion on luminal Na<sup>+</sup> concentration in the per- fused main duct of the mandibular gland of the rabbit. *Proceedings of the Australian Physiological and Pharmacological Society* **8:** 3P.
  - Kitson, C.N., Cameron, J.A.D., Gero, J.S., Watkins, F.N., Van Lennep, E.W. & Young, J.A. (1977) Com- puter aided reconstruction from serial histological sections. *Proceedings of the Australian Physiological and Pharmacological Society* **8:** 148P.
  - Lingard, J.M. & Young, J.A. (1977) The effect of hyperosmolar solutions on transepithelial cycloleucine transport in the rat kidney. *Proceedings of the Australian Physiological and Pharmacological Society* 8: IP.
- **1978** Conigrave, A.D., Novak, I., Case, R.M. & Young, J.A. (1978) The role of bicarbonate in the salivary secretory process. *Proceedings of the Australian Physiological and Pharmacological Society* 9: 115P.
- **1980** Cook, D.I. & Young, J.A. (1980) Solution of epithelial cell models for absorption by use of optimization routines. *Proceedings of the Australian Physiological and Pharmacological Society* **11:** 156P.
  - Lingard, J.M., Seow, F., Muller, M. & Young, J.A. (1980) The role of ,Breceptors in pancreatic secretion in the rat. *Proceedings of the Australian Physiological and Pharmacological Society* **11:** 141P.
  - Novak, I., Case, R.M., Conigrave, A.D. & Young, J.A. (1980) The role ofperfusate HC0<sub>3</sub> in secretion of fluid by the isolated perfused mandibular gland of the rabbit. *Proceedings of the Australian Physiological and Pharmacological Society* 11: 154P.
  - Seow, F., Lingard, J.M. & Young, J.A. (I 980) The effect of acetate replacement on rat pancreatic secretion.
    - Proceedings of the Australian Physiological and Pharmacological Society 11: 140P.
  - Thompson, C.H., Case, **R.M.**, Conigrave, A.O., Novak, I. & Young, J.A. (1980) The effects of replacing perfusate HCO<sub>3</sub> with lipid-soluble buffers and of changing perfusate pH on fluid secretion by the isolated perfused mandibular gland of the rabbit. *Proceedings of the Australian Physiological and Pharmacological Society* **11**: 155P.
- **1981** Favaloro, E.J. & Young, J.A. (1981) The effect of insulin and short-chain fatty acids on fluid secretion by the isolated rabbit mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* **12:** 126P.
  - Hunter, M., Case, R.M., Steward, M.C. & Young, J.A. (1981) The permeability and reflection coefficients of the isolated perfused rabbit mandibular gland to non-electrolytes. *Proceedings of the Australian Physiological and Pharmacological Society* **12:** 188P.
  - Society 12: 188P.
    Lingard, J.M., Miiller, M. & Young, J.A. (1981) The effect of phenylephrine on rat pancreatic secretion. Proceedings of the Australian Physiological and Pharmacological Society 12: 22P.
  - Lingard, J.M. & Young, J.A. (1981) Do variations in hydrostatic pressure affect pancreatic fluid output. *Proceedings of the Australian Physiological and Pharmacological Society* **12:** 85P.
  - Novak, I., Munro, K.E. & Young, J.A. (1981) Inulin permeability in the rat mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* **12:** 200P.
  - Seow, F., Lingard, J.M. & Young, J.A. (1981) The dual secretory mechanism of the rat pancreas. *Proceed-ings of the Australian Physiological and Pharmacological Society* **12:** 86P.
  - Thompson, C.H., Favaloro, E.J., Novak, I. & Young, J.A. (1981) The effect of acetate on fluid secretion from the isolated perfused rabbit mandibular gland.

- *Proceedings of the Australian Physiological and Pharmacological Society* **12:** 125P.
- 1982 Cook, D.I., Chapman, B.E., Gerrard, J., Healey, A.P., Kuchel, P.W. & Young, J.A. (1982) Proton nuclear magnetic resonance spectroscopy (NMR) of mammalian salivary glands. *Proceedings of the Australian Physiological and Pharmacological Society* 13: 105P
  - Novak, I. & Young, J.A. (1982) Is salivary secretion dependent on a double Na/H, Cl/OH countertransport system?. *Proceedings of the Australian Physiological and Pharmacological Society* 13: 107P.
- 1984 Cope, LC., Kuchel, P.W. & Young, J.A. (1984) Water permeability of rat mandibular glands measured using NMR H NMR spectroscopy. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 197P.
  - Evans, L.A.R. & Young, J.A. (1984) The effect of barium ions on rat pancreatic and mandibular salivary secretion. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 175P.
  - Novak, I. & Young, J.A. (1984) The anionic basis of salivary secretion by the rabbit mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 174P.
  - Seow, F., Christie, J.A. & Young, J.A. (1984) Effect of "loop" diuretics on rat pancreatic acinar secretion. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 158P.
  - Seow, F., Pirani, D.C. & Young, J.A. (1984) Effect of replacement of extracellular chloride with isethion- ate on rat pancreatic acinar secretion. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 157P.
  - Seow, F. & Young, J.A. (I 984) The secretory mechanism of rat pancreatic acini. *Proceedings of the Australian Physiological and Pharmacological Society* 15: 159P.
- 1985 Chik, K.K., Evans, L.A.R., Pirani, D. & Young, J.A. (1985) The effect of potassium channel blockade by TEA or decamethonium on secretion by the isolated perfused rat mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* 16: 26P.
  - Evans, L.A.R. & Young, J.A. (1985) The effect of transport blockers on pancreatic ductal secretion. *Proceedings of the Australian Physiological and Pharmacological Society* 16: 98P.
  - Gard, G., Christie, J.A., Cook, D.I. & Young, J.A. (1985) The action of loop diuretics on the submandibu- lar anion self-exchange antiport. *Proceedings of the Australian Physiological and Pharmacological Society* 16: 25P.
  - Pirani, D.C. & Young, J.A. (1985) Intracellular pH in the isolated perfused rat mandibular gland, at rest and during stimulation with acetylcholine. *Proceedings of the Australian Physiological and Pharmacological Society* 16: 99P.
- **1986** Gard, G.B., Cook, D.I. & Young, J.A. (1986) Acetylcholine-induced ion currents in isolated secretory cells of rat mandibular salivary glands. *Proceedings of the Australian Physiological and Pharmacological Society* 17: 127P.
  - Seow, F. & Young, J.A. (1986) Cholecystokinin evokes secretion of a bicarbonate-rich juice by the rabbit pancreas. *Proceedings of the Australian Physiological and Pharmacological Society* 17: 199P.
  - Towner, S.P., Cook, D.I., Van Lennep, E.W. & Young, J.A. (1986) Morphological characterization of a salivary secretory cell line (ST<sub>888</sub>). *Proceedings of the Australian Physiological and Pharmacological Society* 17: 200P.
- **1987** Cook, D.I., Gard, G.B. & Young, J.A. (1987) The ion-selectivity of the anion conductance in stimulated endpiece cells from rat mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* **18**: 90P.
  - Cook, D.I. & Young, J.A. (1987) A non-hydrolysable analogue of GTP activates K<sup>+</sup> and er currents in rat mandibular endpiece cells. *Proceedings of the Australian Physiological and Pharmacological Society* 18: 89P.
- **1988** Champion, M.P., Cook, D.I. & Young, J.A: (1988) Variability in response of rat mandibular endpiece cells to autonomic agonists. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 21P.

Day, M.L., Cook, D.I. & Young, J.A. (1988) The measurement of the number of potassium channels in single rat mandibular cells by ensemble noise analysis. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 135P.

- Jones, A.O., Conigr<sub>r</sub>ave, A.D., Cook, D.I. & Young, J.A. (1988) Bovine parathyroid cells have three dis- tinct potassium channels. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 189P.
- Poronnik, P., Cook, D.I. & Young, J.A. (I 988) Properties of a non-selective cation channel in cultured mouse mandibular cells. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 140P.
- Wegman, E.A., Cook, D.I. & Young, J.A. (1988) Down-regulation of the activity of a small K<sup>+</sup>-selective ion channel in a transporting epithelial mono layer. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 136P.
- Wegman, E.A., Cook, D.I. & Young, J.A. (I 988) Regulation of ion channel activity by cell density in the human MCF-7 carcinoma line. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 20P.
- Wegman, E.A., Reid, A.M., Cook, D.I., Titchen, D.A. & Young, J.A. (1988) Potassium channels in secretory cells of the sheep parotid and mandibular glands. *Proceedings of the Australian Physiological and Pharmacological Society* 19: 177P.
- **1989** Huang, S.J., Cook, D.I., Wong, P.Y.D. & Young, J.A. (1989) Patch-clamp studies of apical membranes of cultured rat epididymal cells. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 149P.
  - Martin, D.K., Cook, D.I. & Young, J.A. (1989) A direct-reading device for measurement ofmicropipette diameters. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 171P.
  - Martin, D.K., Cook, D.I. & Young, J.A. (1989) Chloride channels in rat mandibular endpiece cells are directly controlled by a G protein. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 62P.
  - Poronnik, P., Cook, D.I. & Young, J.A. (1989) Further characterization of the 25 pS Ca<sup>2+</sup>-activated non- selective cation channels in cultured mouse mandibular gland cells. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 63P.
  - Shahidi, S., Poronnik, P., Cook, D.I. & Young, J.A. (1989) Permeation properties of a non-selective cation channel in cultured mouse mandibular cells. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 148P.
  - Wegman, E.A., Cook, D.I., Reid, A.M., Titchen, D.A. & Young, J.A. (1989) K<sup>+</sup> channels and spontaneous secretion in sheep salivary glands. *Proceedings of the Australian Physiological and Pharmacological Society* 20: 154P.
- **1990** Conigrave, A.D., Poronnik, P., Cook, D.I., Delbridge, L. & Young, J.A. (1990) Patch-clamp studies of cation channels in the human parathyroid. *Proceedings of the Australian Physiological and Pharmacological Society* 21: 17P.
  - Day, M.L., Cook, D.I. & Young, J.A. (I 990) Inward calcium currents during early stages of embryo development. *Proceedings of the Australian Physiological and Pharmacological Society* 21: 21P.
  - Pharmacological Society 21: 21P.
    Poronnik, P., Cook, D.I. & Young, J.A. (1990) Calcium permeation in ST<sub>885</sub> cells.
    Studies with fura-2. Proceedings of the Australian Physiological and Pharmacological Society 21: 20P.
  - Poronnik, P., Cook, D.I. & Young, J.A. (1990) Is the current-voltage relationship of the 25 pS non-selective cation channel linear?. *Proceedings of the Australian Physiological and Pharmacological Society* 21: 57P.
  - Wegman, E.A., Cook, D.I., reid, A.M., Titchen, D.A. & Young, J.A. (1990) A 14 pS non-selective cation channel in secretory cells of the sheep mandibular gland. *Proceedings of the Australian Physiological and Pharmacological Society* 21: ISP.
- **1991** Conigrave, A.D., Cook, D.I., Delbridge, L. & Young, J.A. (I 99 I) Differential responses to inhibitory multivalent cations in human parathyroid cells. *Proceedings of the Australian Physiological and Pharmacological Society* 22: 82P.
  - Dinudom, A., Cook, D.I. & Young, J.A. (1991) Ion channels in isolated mouse mandibular ducts. *Proceedings of the Australian Physiological and*

- Pharmacological Society 22: 134P.
- Dinudom, A., Poronnik, P., Cook, D.I. & Young, J.A. (199 I) Effects of agonists on cytosolic calcium concentration in isolated mouse mandibular ducts. Proceedings of
- the Australian Physiological and Pharmacological Society 22: 135P. Ishikawa, T., Cook, D.I. & Young, J.A. (1991) An inwardly rectifying K<sup>+</sup> channel in sheep parotid cells. *Proceedings of the Australian Physiological and Pharmacological Society* 22: 138P.

  Komwatana, P., Conigrave, A.D., Cook, D.I. & Young, J.A. (1991) Ion channels in rat parathyroid cells. *Proceedings of the Australian Physiological and*
- Pharmacological Society 22: 136P.
- Ward, M.C., Poronnik, P., Young, J.A. & Cook, D.I. (1991) Intracellular calcium release by the non-selective cation channel blocker flufenamic acid. *Proceedings of the* Australian Physiological and Pharmacological Society 22: 81P.
- 1992 Dinudom, A., Cook, D.I. & Young, J.A. (1992) Sodium and chloride conductances in mouse mandibular granulated duct cells. Proceedings of the Australian Physiological and Pharmacological Society 23: I !OP.
  - Hirono, C., Cook, D.I. & Young, J.A. (1992) Norepinephrine-induced membrane capacitance increase in rat submandibular granulated duct cells. *Proceedings of* the Australian Physiological and Pharmacological Society 23: 21 SP.
  - Poronnik, P., Young, J.A. & Cook, D.I. (1992) Na-H exchange in sheep parotid endpieces - studies with BCECF. Proceedings of the Australian Physiological and Pharmacological Society 23: 212P.
- 1993 Dinudom, A., Komwatana, P., Young, J.A. & Cook, D.I. (1993) Properties of the chloride conductance in mouse mandibular intralobular duct cells. *Proceedings* of the Australian Physiological and Pharmacological Society 24: 198P.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1993) Effects of c1- channel blockers on whole- cell c1- conductance of mouse mandibular intralobular duct cells. Proceedings of the Australian Physiological and Pharmacological Society 24: 197P.
- 1994 Dinudom, A., Komwatana, P., Young, J.A. & Cook, D.I. (1994) cAMP-regulated whole-cell c1- current in mouse mandibular granular duct cells. *Proceedings of* the Australian Physiological and Pharmacological Society 25: 195P.
  - Hayashi, T., Hirono, C., Young, J.A. & Cook, D.I. (I 994) Blocker study of acetylcholine-induced K<sup>+</sup> con- ductance in sheep parotid secretory cells. Proceedings of the Australian Physiological and Pharmacological Society 25:
  - Hirono, C., Sangster, N., Steward, M.C., Poronnik, P., Young, J.A. & Cook, D.I. (1994) Developmental regulation and maintenance of potassium channels in sheep parotid secretory cells. Proceedings of the Australian Physiological and Pharmacological Society 25: 18P.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1994) Na<sup>+</sup> dependence of an amiloride- inhibitable Na<sup>+</sup> conductance in mouse mandibular granular duct cells. *Proceedings of the Australian Physiological and Pharmacological* Society 25: 196P.
  - Komwatana, P., Dinudom, A., Young, J.A. & Cook, D.I. (1994) Osmolality sensitivity of the hyperpolar- ization-activated c1- current in mouse mandibular duct cells. *Proceedings of the Australian Physiological and Pharmacological Society* 25: 141P.
- 1998 Cook, D.I., Young, J.A., O'Mullane, L.M. & Poronnik, P. (1998) The use of replication-deficient aden- oviruses to dissect signal transduction systems. Proceedings of the Australian Physiological and Pharmacological Society
  - Dinudom, A., Harvey, K.F., Komwatana, P., Young, J.A., Kumar, S. & Cook, D.I. (1998) Nedd4 mediates control of an epithelial Na<sup>+</sup> channel by cytosolic Na<sup>+</sup>. Proceedings of the Australian Physiological and Pharmacological Society 29: 52P.

#### **Communications to the Australian Society for Medical Research**

- **1962** Young, J.A. & Edwards, K.D.G. (1962) The excretion of methyldopa, metabolites, natural amino acids and catecholamines in rats and humans. *Proceedings of the Australian Society for Medical Research* 1: 53.
- **1963** Young, J.A. & Edwards, K.D.G. (1963) Stop-flow analysis of renal tubular function adapted to the rat. *Proceedings of the Australian Society for Medical Research* 1: 83.
- **1964** Young, J.A. & Edwards, K.D.G. (1964) The effect of D- and L-methyldopa on the uptake of histidine by isolated small intestinal loops of the rat. *Proceedings of the Australian Society forMedical Research* 1: 96-97.
- **1973** Denniss, A.R. & Young, J.A. (1973) The action of cholinergic agents on salivary duct electrolyte transport. *Proceedings of the Australian Society for Medical Research* 3: 166P.
  - Lingard, J.M., Gyory, A.Z. & Young, J.A. (1973) Inhomogeneity of proximal tubular reabsorption of cycloleucine in the rat kidney. *Proceedings of the Australian Society for Medical Research* 3: 176P.

#### **Communications to Other Societies**

- **1963** Edwards, K.D.G. & Young, J.A. (1963) Effects ofmethyldopa, bromsulphalein and other organic acids on amino acid metabolism. *Proceedings of the Australian Association of Clinical Biochemists* 1: 43-46.
- **1964** Young, J.A., Reid, J. & Edwards, K.D.G. (1964) Separation and quantitation of amino acids using high voltage paper-electrophoresis. *Proceedings of the Australian Association of Clinical Biochemists* 1b: 95-100.
- **1966** Young, J.A., Fromter, E. & Schogel, E. (1966) Electrolyte fluxes and potential differences in the main excretory duct of the rat submaxillary gland. *Pftiigers Archiv European Journal of Physiology* 289: 81R.
- 1967 Young, J.A., Fromter, E., Schogel, E. & Hamann, K.F. (1967) Microperfusion study of cation fluxes and potential differences (PDs) across the epithelium of the main duct of the rat submaxillary gland. *Australian Journal of Experimental Biology and Medical Science* 45: 35P.
- **1968** Cooke, H.J. & Young, J.A. (1968) Clearance and microperfusion study of EDTA-51Cr excretion by rat kid-ney. *Australian Journal of Experimental Biology and Medical Science* 46: 13P.
  - Shagrin, J. & Young, J.A. (1968) Micropuncture study of composition of colloid in rat thyroid acini. *Australian Journal of Experimental Biology and Medical Science* 46: 16P-17P.
  - Young, J.A. (1968) Microperfusion investigation of anion transport across main duct epithelium of rat sub-maxillary gland. *Australian Journal of Experimental Biology and Medical Science* 46: 16P.
  - Young, J.A. & Shagrin, J. (1968) Nanolitre micromethods in biological research: determination of sodium, potassium and melting point. *Proceedings of the Australian Association of Clinical Biochemists* 1: 333-336.

- **1969** Cooke, H.J. & Young, J.A. (1969) Development of renal function in the late embryonic and postembryonic chicken. *Australian Journal of Experimental Biology and Medical Science* 47: 6P-7P.
  - Freedman, B.S. & Young, J.A. (1969) Microperfusion study of L-histidine transport by the rat nephron. *Australian Journal of Experimental Biology and Medical Science* 47: IOP-1 IP.
  - Hayden, L.J. & Young, J.A. (1969) Simultaneous determination of picomole quantities of chloride and iodide using an electrometric coulombometric titration procedure. *Australian Journal of Experimental Biology and Medical Science* 47: 14P-15P.
  - Shagrin, J. & Young, J.A. (1969) The effect of alteration of dietary iodide intake on the cation content of single rat thyroid follicles. *Australian Journal of Experimental Biology and Medical Science* 47: P25.
  - Tuck, R.R., Waites, G.M.H., Young, J.A. & Setchell, B.P. (1969) Composition of fluid secreted by the seminiferous tubules of the rat collected by catheterization and micropuncture techniques. *Australian Journal of Experimental Biology and Medical Science* 46: 32P-33P.
  - Van Lennep, E.W. & Young, J.A. (1969) Histochemical demonstration of iodide pathway in rat thyroid glands. *Australian Journal of Experimental Biology and Medical Science* 47: 33P.
  - Young, J.A., Asz, M. & Weber, F.D. (1969) Microperfusion investigation of bicarbonate transport across main duct epithelium of rat submaxillary gland. *Australian Journal of Experimental Biology and Medical Science* 47: 36P.
  - Young, J.A., Cooke, H. & Freedman, B. (1969) Clearance and microperfusion studies of EDTA-51Cr excretion by rat kidney. *Proc. 4th Int. Congr. Nephrol. Washington 1966* 1: 296.
- 1971 Young, J.A. & Martin, C.J. (1971) Water and electrolyte excretion in exocrine glands studied by micropuncture and microperfusion techniques.

  \*Proceedings of the International Union of Physiological Sciences 8: 122-123.
- **1972** Knauf, **H.**, Gehler, B., Martin, C.J. & Young, J.A. (1972) On the mechanism of action of carbachol on Na<sup>+</sup> transport in rabbit submaxi!lary duct perfused *in vitro*. *Pfiiigers Archiv European Journal of Physiology* 335: 60R.
- **1973** Lingard, J.M., Rumrich, G. & Young, J.A. (1973) Kinetics of histidine transport by proximal convolution of rat kidney studied by stationary microperfusion and simultaneous perfusion of the peritubular capillary circulation. *Nephron* 10: 365P.
- **1975** Roby, H.P., Young, J.A., Lingard, J.M. & Gyory, A.Z. (1975) Micropuncture study of Na and Cl transport by proximal tubules *in vitro* in incubated slices of rat kidney cortex. *Proc. 6th Int. Congr. Nephrol. Florence* 1975 1: 230.
- **1977** Compton, J.S. & Young, J.A. (1977) Effect of steroids on rabbit mandibular saliva. *Clinical and Experimental Pharmacology and Physiology* 4: 479P-480P.
  - Denniss, A.R. & Young, J.A. (1977) Action of gastrointestinal hormones on sodium transport across salivary duct epithelium. *Clinical and Experimental Pharmacology and Physiology* 4: 480P.

- Lingard, J.M., Cook, D.I. & Young, J.A. (1977) The role of passive diffusion in renal reabsorption of amino acids under free-flow conditions.

  Proceedings of the International Union of Physiological Sciences 12: 229.
- **1980** Cook, D.I. & Young, J.A. (1980) Prediction of concentration profiles along a tubular epithelium with both luminal and cellular compartments using the 'spiral' algorithm linked with Runge-Kutta numerical integration. *Renal Physiology* 2: 154P.

# **Original Non-Scientific Monographs**

- **1984** Young, J.A., Sefton, A.J. & Webb, N. (1984) *The Centenary Book of the Faculty of Medicine of the Uni-versity of Sydney*. Sydney: Sydney University Press.
- 1987 Young, J.A. (1987) Jane Bardsley's Outback Letterbook. Across the Years 1896-1936. Sydney: Angus & Robertson.

#### **Original Non-Scientific Articles**

- **1988** Young, J.A. (1988) Henry Priestley (1884-1961). In G. Serie & C. Cunneen (ed): *Australian Dictionary of Biography, Volume 11 (1891-1939)*. Melbourne: Melbourne University Press, pp. 294-295.
  - Young, J.A. (1988) Robert Scot Skirving (1859-1956). In G. Serie & C. Cunneen (ed): *Australian Dictionary of Biography, Volume 11 (1891-1939).* Melbourne: Melbourne University Press, pp. 626-627.
- **1990** Young, J.A. (1990) Thomas Peter Anderson Stuart (1856-1922). In G. Serie & C. Cunneen (ed): *Australian Dictionary of Biography, Volume 12 (1891-1939)*. Melbourne: Melbourne University Press, pp. 130-132.
- **1991** Young, J.A. (1991) Virtuoso biography. Review of *James Edward Neild: Victorian Virtuoso*, by Harold Love. *Meta Science* 1: 119-120.
- **2000** Young, J.A. (2000) Book Review: 'Pansy': A life of Roy Douglas Wright by Peter McPhee (Melbourne University Press, 1999, ISBN 0 522 84626 2). *Medical Journal of Australia* electronic: http://www.mja.com.au/public/bookroom/2000/pansy/pansy.html.
  - Young, J.A. (2000) Menzies School of Health Research, Darwin Annual Oration 2000. Sydney: University of Sydney.
- **2002** Young, J.A. (2002) The History of the Medical Curriculum at the University of Sydney. An Occasional address to the Faculty of Medicine Graduation Ceremony, 10 May 2002. Sydney: University of Sydney.

#### **Invited Lectures**

#### **Invited Participation in International Scientific Meetings**

# **International Union of Physiological Sciences**

1971	Munich	Lecture
1974	Paris	Symposium Lecture
1980	Budapest	Symposium Chair
1983	Sydney	Symposium Chair
1986	Vancouver	Symposium Chair
1989	Helsinki	Symposium Chair
1997	St Petersburg	Symposium Chair
2001	Christchurch	Symposium Chair and
		LecturE

1991 Prague Symposium Lecture

# **GAP Conferences of the National Cystic Fibrosis Foundation of America**

1968	New York	Symposium
		Lecture
1982	San Diego	Lecture

# Conferences of the National Physiological Institute of

Japan

1985	Okazaki	Lecture
1988	Okazaki	Lecture
1991	Okazaki	Lecture
1992	Okazaki	Lecture
1996	Okazaki	Chair

# Wenner-Gren Centre Symposium

Stockholm Lecture

# Alfred Benzon Foundation Symposia (Royal Danish Academy of Science)

1973	Copenhagen	Lecture
1987	Copenhagen	Lecture
1992	Copenhagen	Session Chair

Session Chair &

Lecture

# **New York Academy of Science Symposium**

1979 New York Lecture

# **Royal Society Discussion Meeting**

1981 London Lecture

#### 10th International Conference on Oral Biology

1986 Amsterdam Lecture

# Nephrologische Gesellschaft

1975 **Basel** Lecture

# Congresses of the Federation of Asian and Oceanic Physiological Societies

1987	Bangkok	Lecture
1990	New Delhi	Symposium
		Ćhair
1994	Shanghai	Symposium
		Chair
1000	Drichono	Dlanamy I agts

Plenary Lecture 1998 Brisbane

2 **Invited Lectures** 

#### **International Symposia on Exocrine Secretion (ISES)**

1966	Birmingham, Alabama (2nd	Lectur
1981	ISES) Szekersfehervar (5th ISES)	e Lectur
1982	Manchester (6th ISES)	e Lectur
1984	Camden (NSW) (7th ISES)	e Lectur
1988	Hong Kong (8th ISES)	e Lectur
1990	Leura (NSW) (9th ISES)	e Lectur
1770	Leura (145 W) (901 ISES)	Lectui

International Symposia on Epithelial Transport, Otago University

1979	Dunedin	Lecture
1990	Dunedin	Lecture

9th World Congress of

**Gastroenterology** 1990 Sydney Lecture

# WHO - Japan Medical Education Foundation International Conference on Medical Education

1992 Tokyo Lecture

Festschrift K.J. Ullrich, 60er Geburtstag - Max Planck Institute für Biophysik

1985 Frankfurt Lecture

Festschrift K.J. Ullrich, Emeritierung - Physiologisches Institut der Universitiit Freiburg

1993 Freiburg Lecture

# 73rd Meeting of the International Association for Dental Research

1990 Singapore Lecture

Festschrift E. Frömter, 60er Geburtstag - J. W. Goethe Universitiit

1995 Frankfurt Session Chair

# Research Students, Post-Doctoral Students and Senior Collaborators

H.J. Cooke	J.M. Lingard	F.T.P. Seow	I. Novak
L.A.R. Evans	E.A. Wegman	A. Dinudom	P. Poronnik

#### **PhD Students**

MSc Students	A.R.	M.T. Coroneo	J. Compton
C.J. Martin C.H. Thompson	Denniss D.I. Cook	A.D. Conigrave	

# BSc(Med) and BSc(Dent) Students

DSC(Med) and DSC(Dent) Students					
J. Shagrin	R.R. Tuck	C.J. Martint	S.B. Freedman		
J.	M.J. Field	R. Henning	G. Kaladelfos		
Alexander	Z.H. Endre	W.A. Sewellt	M.T. Coroneo		
A.R.	C.H.	A.D.	J. Compton		
Denniss	Thompson	Conigrave	G. Gard		
A. Jones	J. Gerrard	C. Dave			
D.I. Cook	S. Shahidi	L. Gomes			
H. Roby					

BSc(Hons) Students	D.	P.	J. Coatsworth
L.J. Hayden	<del>Pirani</del>	Samuels	
M. Day			
<b>German</b> <i>Doctoranten</i> E. Schögel	K.F. Hamann	<i>**</i>	

### **Post-Doctoral Research Fellows**

		C Dymmich	B. Gebler
P.J. Harris	P. Fraser	G. Rummen	B. Gebiei
1 .J. 11a1118	1 . 1 lasei	D	D. Martin
M. Murakami	Т	Γ.	D. Martin
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Ishikawa		Koniwatana	
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#### **Senior Collaborators**

R.M. Case (UK)

P.Y.D. Wong (Hong Kong)

# Young's students and post-doctoral fellows who subsequently became full professors

Christopher J Martin: Professor of Surgery (Sydney)

A. Robert Denniss: Professor of Medicine (Cardiology, Sydney) Benedict S Freedman: Professor of Medicine (Cardiology, Sydney) Zoltan Endre: Professor of Medicine (Renal Medicine, Queensland) Michael J Field: Professor of Medicine (Renal Medicine, Sydney)

Peter J Harris: Professor of Physiology (Melbourne) William A Sewell: Professor of Immunology (UNSW) Minas Coroneo: Professor of Ophthalmology (UNSW) Ivana Novak: Professor of Physiology (Copenhagen) David Cook: Professor of Physiology (Sydney)

Arthur Conigrave: Professor of Biochemistry, Dean of Medicine (Sydney)

Campbell Thompson: Professor of Medicine (Adelaide)

E. Frömter (Germany) M.C. Steward (UK)