Federal funding for medical research

To the editor: The Canadian College of Medical Geneticists (CCMG) is a newly incorporated body concerned with the establishment and maintenance of health care standards in the field of medical genetics. The importance of genetically determined diseases of childhood has been well documented by recent Canadian studies. In addition, the importance of genetic factors and late-onset adult disease is receiving increasing attention. In particular, the concept of gene-determined, high-risk subpopulations is important in long-range health planning. Marc Lalonde, minister of national health and welfare, in his publication "A New Perspective on the Health of Canadians", mentions the importance of an awareness of genetic factors in determining such disease risks. As has been the case in the past, the solution of many problems in this field and the practical application of genetic knowledge can only come from active research programs undertaken in Canada. As professionals concerned with the direct application of knowledge generated by Canadian research, the members of CCMG are deeply disturbed about the implication for future services of recent decisions in the Medical Research Council (MRC) necessitated by government cutbacks of funding at all levels of research, including the biologic, nonbiologic and social sciences.

The decision to hold the MRC at its current level of $48.4 million, when it was budgeted for $55 million during 1976-77, represents a major cutback in medical research of all types in Canada. This is even more drastic in light of the fact that overall government activities are budgeted to allow for a 15% increase over the same period. The actions in MRC necessitated by this budget decision will adversely affect existing research, plans for new research, research training and communications in research in Canada.

As professionals concerned with genetic services to the Canadian population, we regret that Canadians at all levels will ultimately suffer from these short-sighted budgetary decisions.

JAMES R. MILLER, PH D
President
Canadian College of Medical Geneticists
and department of medical genetics
University of British Columbia
Vancouver, BC

Ampicillin-resistant Hemophilus sp.

To the editor: We wish to report the isolation of two strains of ampicillin-resistant *Hemophilus* sp. *H. parainfluenzae* was isolated from blood cultures of a 4-year-old hydrocephalic child admitted to hospital with a diagnosis of pneumonia, and *H. hemolyticus* was isolated from a sputum culture in an 8-year-old boy after resolution of a lung abscess.

The gram-negative coccobacillary organisms were characterized by conventional techniques[1] according to growth factor requirements and the presence or absence of hemolysis. Beta-lactamase production was determined by the spot test described by Fleming and Markowsky,[2] in which the production of aminopenicilloic acid from ampicillin by β-lactamase is detected with an iodometric assay using bond paper as the starch source and iodine vapour from crystals to develop the reaction mixture. When penicilloic acid is produced in the paper moistened with ampicillin solution the blue-black starch–iodine complex becomes decolourized, allowing a rapid, striking assay for β-lactamase activity. The minimum inhibitory concentration (MIC) of ampicillin was determined by means of a multipoint inoculator agar dilution technique and Mueller-Hinton medium plus Supplement C (Difco).[3] The MIC for *H. parainfluenzae* was 200 μg/ml of ampicillin and for *H. hemolyticus*, 25 μg/ml of ampicillin.

Clinically important *Hemophilus* strains other than *H. influenzae* have only been reported in a few studies[4,5] and little is known of the true significance of these organisms or their interspecific relationships with *H. influenzae*. Ampicillin-resistant strains of *H. influenzae*, both nontypable and type b, have been described in widely separate geographic areas of North America.[6] These strains carry plasmid DNA[7] and transfer resistance by cell-to-cell contact.[8] There is no reason to believe that interspecific transfer of the resistance determinants cannot occur or has not already occurred in vivo.

DAVID J. GROVES, PH D
C. ADENIYI-JONES, MB, CH B, FRCP[C]
Department of laboratory medicine
St. Joseph's Hospital
Hamilton, ON

References

1. YOUNG V: Haemophilus, in *Manual of Clinical Microbiology*, 2nd ed, LENNETTE EH, SPAULDING EH, TRUANT JP (eds), Washington, American Society for Microbiology, 1974, p 302
2. FLEMING PC, MARKOWSKY B: Recent emergence of ampicillin-resistant strains of *H. influenzae* type B and their rapid detection by an iodiometric method (abstr). *Can J Public Health* 66: 40, 1975
3. JORGENSEN JH, JONES PM: Simplified medium for ampicillin sensitivity testing of *Haemophilus influenzae*. *Antimicrob Agents Chemother* 7: 186, 1975
4. HABLE K, LOGAN G, WASHINGTON J: Three *Hemophilus* species; pathogenic activity. *Am J Dis Child* 121: 35, 1971
5. DAHLGEN J, TALLY FP, BROTHERS G, et al: *Haemophilus parainfluenzae* endocarditis. *Am J Clin Pathol* 62: 607, 1974
6. Current trends in ampicillin-resistant *Haemophilus influenzae*. *Morb Mortal Wkly Rep* 24: 205, 1975
7. ELWELL LP, DE GRAFF J, SEIBERT D, et al: Plasmid-linked ampicillin resistance in *Haemophilus influenzae* type b. *Infect Immun* 12: 404, 1975
8. THORNE GM, FARRAR WE JR: Transfer of ampicillin resistance between strains of *Haemophilus influenzae* type B. *J Infect Dis* 132: 276, 1975

Contributions to the Correspondence section are welcomed and if considered suitable will be published as space permits. They should be typewritten *double spaced* and should not exceed 1½ pages in length.