

basal, resting, routine, low routine, and fasting metabolism by fish physiologists, and regarded as the approximate equivalent of basal metabolic rate (BMR), a term used by mammalian physiologists. Many aquatic animals are known to actively absorb dissolved amino acids and simple sugars; hence it may be difficult to force a gill-breathing fish to undertake complete fasting; secondly, obligate air-breathing fishes undertake routine breathing movements. For these reasons the term low-routine metabolic rate may be more appropriate for 'fishes'. With ref-

erence to anaerobiosis, Kutty (*Mar. Biol.*, 1972, 16, 126-133) presented a new concept of ammonia quotient relating the volume of  $\text{NH}_3$  excreted to volume of  $\text{O}_2$  uptake. When tilapia was forced to exercise continuously it drew some anaerobic energy throughout the exercise utilizing more protein. The sub-section on hypoxia and anaerobiosis should have included some of these ideas on ammonia quotient.

In general, aquaculture is rather a tropical occupation. But the author has chosen examples mostly from temperate fishes

(e.g. Tables 3.3, 7.1, etc.). In Table 15.1 *Anabas* is indicated as facultative air-breathing fish but it is an obligate breathing fish. Despite these, the book represents a good contribution and deserves to be placed in the libraries.

T. J. PANDIAN

*School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai 625 021, India*

## Training Course on 'Animal Models for Biomedical Research'

**Central Animal Facility, Indian Institute of Science, Bangalore**

A short-term training course on the above topic will be conducted in the Indian Institute of Science during July 1 to 15, 1996. This is sponsored by the Department of Biotechnology (DBT), New Delhi. The major focus of the course is to provide hands on training to limited (12-15) participants on animal handling, special surgical procedures (laparotomy/vasectomy) and special techniques required in animal biotechnology and transgenic technology. The techniques include handling of gametes, preparation of transgene construct, microinjection of transgene into cells, analysis of foreign DNA integration/expression and transfer of embryos to pseudopregnant recipients. Applications are invited from pre/post-doctoral and mid-career scientists working in universities, research institutions and R&D units. Please send a one-page resume describing qualification and experience, research interest and a statement as to how the participant proposes to make use of the training in his/her research programme. Candidates sponsored by their parent organizations will be preferred. There will be no registration fee for participants from public-funded institutions. The organizers will provide local hospitality. The deadline for receipt of application is 20 June 1996 and it should be sent to Dr P. B. Seshagiri, Centre for Reproductive Biology and Molecular Endocrinology, Indian Institute of Science, Bangalore 560 012. Phone: (080) 309-2687; Fax: (080) 334-1683; e-mail: polani@serc.iisc.ernet.in.