

on understanding sex and differentiation at the molecular and cellular levels. Topics discussed in 14 chapters can be accordingly divided into three parts. Chapters 1–5 emphasize conceptualization of developmental processes, including the development of mortal somatic cells and immortal germ cells from a single fertilized egg. Chapters 6–10 reveal the functions influencing or regulating cellular behavior at the molecular level. Chapters 11–13 illustrate the detailed knowledge about processes controlling gene expression. Chapter 14 presents a brief conclusion and perspective.

In this book, it is clearly described that three fundamentally different molecular mechanisms, i.e. chemical, electrical, and macromolecular regulatory mechanisms, control cell physiology, sex, and differentiation. These are centered on the functions of morphogens and pheromones, transmembrane pro-

teins and protein complexes, and cell surface glycoproteins. The more interesting concept presented is the regulation of gene expression by intracellular and extracellular chemicals, mediated by ligand-binding proteins and five distinct “switch” mechanisms which are considered as controlling gene expression.

The authors stress meanwhile that “unity principle in biology” is possibly the most important concept for the modern-day biologist. The integration of the information concerning sex and differentiation into the evolutionary framework could be recognized through the chapters. Therefore it is well worth while for microbiologists, cell physiologists, developmental biologists, molecular biologists and geneticists to read this volume.

Li Yi-qin, Beijing

Announcement

The 20th International Conference on Animal Blood Groups and Biochemical Polymorphisms will be held in Espoo/Helsinki in Finland from 28 July to 1 August 1986

The scientific programme will consist of

Main sessions on 1. The nature and role of the major histocompatibility complex (MHC), 2. Protein polymorphisms, 3. Assessing immune competence in farm animals, 4. Marker genes in selection, 5. The implications of hypervariable DNA-regions for animal identification.

There will also be a Round Table discussion on “Future trends in animal genetics”.

Poster Sessions on MHC in farm animals, Protein polymorphisms, Immune competence, Relationships between marker

genes and production, Gene mapping and linkage, Blood groups in farm animals.

Workshops on BoLA. A full day workshop on Bovine Lymphocyte Antigens will be held on 27 July, ISABR Horse Comparison Test 1985, ISABR Cattle Comparison Test 1985.

Registration forms must reach the Organizing Committee (conference arrangements) in Finland before May 1, 1986.

Information: Prof. Jan Rendel, Swedish University of Agricultural Sciences, Department of Animal Breeding and Genetics, P.O. Box 7023, S-750 07 Uppsala, Sweden (scientific programme). Phone: 46 18 171000

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