



**UNIVERSITÀ
DEGLI STUDI
DI PADOVA**

**SCUOLA DI DOTTORATO
IN BIOSCIENZE E BIOTECNOLOGIE
INDIRIZZO DI
BIOLOGIA EVOLUZIONISTICA**

SHORT COURSE ON ASCIDIAN BIOLOGY, WITH PARTICULAR REFERENCE TO COLONIAL ASCIDIANS

Prof. Kazuo Kawamura, University of Kochi, Japan

Dipartimento di Biologia, Università di Padova, 22-24 Novembre, 2010

dalle 9,30 alle 12,30

Aula B, Il piano la est (didattica)

Main topics:

- The biology of colonial ascidians with a short history of Japanese compound ascidiologists.
- Conflict between differentiation and dedifferentiation: Instructive signals regulating asexual reproduction and regeneration in ascidians.
- Senescence and rejuvenation: Possible mechanism of reset of ascidian ageing.

Monday, November 22:

Chapter 1: Pedigree of Japanese Colonial Ascidiologists

Chapter 2: Outline of Asexual Reproduction in Ascidians

Tuesday, November 23

Chapter 3: Role of retinoic acid in transdifferentiation

Chapter 4: Homeostatic Growth Regulation in Ascidians

Wednesday, November 24

Chapter 5: Role of stem cells in sexual and asexual reproduction in ascidians

Chapter 6: Senescence and Rejuvenation of Colonial Ascidians