

FISH: A Practical Approach

This course consists of 4 modules/15 hours of study. Each module includes questions to be submitted to the instructor for review. A strong background in cytogenetics and/or molecular biology is recommended.

COURSE FEES:

BCSLs Members

\$195.00

Non-members

\$260.00



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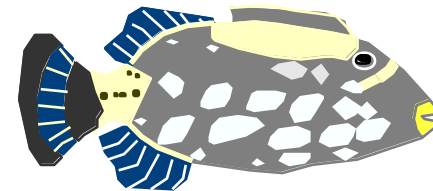
FISH: A Practical Approach

YEAR 2000

TOPICS INCLUDE:

Probe Classification and Preparation
The FISH Procedure
Visualization, Documentation and Interpretation
Advanced Techniques and Applications

www.bcsls.net - bcsls@telus.net



The BCSLS is pleased to present this UPDATED version of our popular correspondence course originally offered in 1996.

FISH: A Practical Approach

Course Instructor

Clara Jensen, BSc, RT (CG)

FISH is now used extensively in medical research and clinical cytogenetics to detect whole chromosomes, genes, or parts of genes. Techniques have been developed to utilize FISH on a variety of specimen types such as frozen or paraffin-embedded tissue sections, cytospin slides, cell smears, sections for electron microscopy, and cytogenetic preparations. FISH has added a new dimension to cytogenetics by allowing: 1) localization of a specific DNA sequence to a specific cell type, 2) the performance of retrospective studies, and 3) access to information on non-dividing cells.

Course Objectives

This correspondence course is offered by the BCSLS to provide you with:

Module 1

1. a working knowledge of commonly used probe types and their applications.
2. a basic understanding of the concepts and techniques of molecular biology involved in producing a FISH probe.

Module 2

1. an in depth understanding of the theory behind each step in a basic FISH procedure.
2. familiarity with the practical aspects of a basic FISH procedure including modifications for specific specimen types.
3. an ability to use 1 and 2 to troubleshoot specific problems.

Module 3

1. an understanding of the basic principles of fluorescence microscopy and photography.
2. an ability to choose appropriate microscope components for FISH.
3. knowledge of how to interpret FISH results and perform statistical analysis.
4. an ability to write FISH results in ISCN format.

Module 4

1. familiarity with advanced FISH techniques used in the clinical cytogenetics lab.
2. Familiarity with the procedures, potential and limitations of FISH based research techniques.

CSMLS CE Credits (15 hours) were awarded for the 1996 course. This updated version is now under review for professional enhancement (CE) credits.

This course was developed in 1996 by Clara Jensen and revised in November 2000 by Brenda Lomax, BC Research Institute of Children's & Women's Health (Vancouver, BC)