

The WorldFish Center, located on the island of Penang, Malaysia, is a world-class scientific research organization. Our mission is to reduce poverty and hunger by improving fisheries and aquaculture. We have 16 offices in 13 countries and engage in collaborative research with our

partners in more than 50 countries. The Center is a nonprofit organization and a member of the Consultative Group on International Agricultural Research (CGIAR).

Unique opportunities have arisen for gifted individuals to contribute to the mission of the Center and make a personal impact on the lives of millions of less fortunate people in developing countries around the world.

## POST DOCTORAL FELLOW

## **Key Responsibilities:**

- Developing and employing appropriate methodologies for surveying and assessment of within and between aquatic animal populations genetic diversity in relevant ecological systems;
- Expanding characterization (e.g. using state of the art molecular tools) and evaluation of relevant aquatic animal species to facilitate their conservation and use;
- Develop guidelines on risk assessment and management associated with the creation and dissemination of genetically improved aquatic animals;
- Employing knowledge of basic principles in germplasm management to design and conduct research on conservation of diverse aquatic animal species in-situ and ex-situ;
- Conducting genetic diversity and genetic erosion studies on cultured strains and threatened populations in order to understand the structure and dynamics of the diversity;
- Developing sustainable management strategies for under utilize species of potential importance for food and aquaculture and for the preservation of their genetic resources;
- Adapting and adopting CG-system wide initiatives on conservation of farmed aquatic animal genetic diversity;
- Developing or adapt mathematical models to predict risk under different circumstances;
- Building on the IGERT initiative, develop a global network of scientists working in this area;
- Performing statistical analysis of data from molecular genetics studies for the purpose of conservation genetics and the management of populations, using novel statistical approaches and software programs;

- Publishing research results in peer-reviewed journals, conference proceedings or other public media;
- Seeking innovative approaches that may help to integrate reproductive and molecular genetic information in practical risk assessment, genetic conservation and breeding programs;
- Handling requests from partner countries for genetically improved stock, including requests for GIFT from African countries, and provide guidelines on the utilization and management of improved aquatic animal strains;
- Developing proposals for new areas of research and for new species;
- Training the project staff from partner countries in risk assessment, conservation genetics, quantitative genetics and statistical analysis;
- Assisting with the management and monitoring of the performance of research assistants;
- Strengthening collaboration with existing partner countries and identify potential partners in genetic improvement programs; and
- Performing other duties as deemed necessary by the Principal Scientist and Discipline Director.

## Requirements:

- PhD in risk assessment, conservation genetics, animal breeding and genetics, or a related field with 3 years of research experience;
- Good record of publications in peer-reviewed journals;
- Earlier involvement with molecular genetics research;
- Research experience in both terrestrial and aquatic species, or with crops;
- Work experience in international projects;
- Good background in risk assessment methodology, conservation genetics and quantitative genetics and statistics;
- Practical experience in the design of sampling experiments for species and strain characterization and management of genetic resources for conservation purposes;
- Understanding about the requirements and conduct of genetic improvement programs;
- Effective communication of research findings;
- Ability to use a wide range of statistical and genetic packages;

- Skills in the development or in the adaptation of mathematical models to risk assessment;
- Ability to work in a multi-disciplinary team;
- Strong career commitment and interest in working with developing countries;
- Working with both Windows and Unix or Linux environments;
- Proficient use of statistical and genetic analysis software; and
- Familiar with molecular genetics laboratory facilities and related data for risk assessment, conservation genetics, and genetic improvement.

The WorldFish Center offers a competitive remuneration package, a non-discriminatory policy and provides an innovative work environment. Interested applicants are invited to submit a detailed resume that includes a cover letter, names and contacts (telephone, fax, and e-mail address) of three (3) professional referees who are familiar with the candidate's qualifications and work experience no later than 15 July 2008 to <a href="worldfish-hr@cgiar.org">worldfish-hr@cgiar.org</a>. This position will be based at the WorldFish's headquarters in Penang. Only short-listed candidates will be notified.