

Natural Sciences & Science Education Academic Group National Institute of Education

The Natural Sciences & Science Education Academic Group (NSSE AG) (<http://www.nie.edu.sg/academic-groups/natural-sciences-and-science-education>) conducts teaching and research in both science and science-education and comprises academic staff with backgrounds in chemistry, physics, biology, design & technology, and family/consumer sciences. It has facilities for research as well as carrying out pre-service and in-service work with teachers to support Singapore's schools and science educators.

The position is available from January 2012 onwards. The successful candidate will be offered a 3-year contract position in the first instance. The position is tenurable subject to the terms and conditions of the Nanyang Technological University (NTU). NIE is an autonomous institute of NTU.

The NSSE AG invites applications for the following positions :

Position 1 - Assistant/Associate Professor, Plant Molecular Genetics

Duties and Responsibilities

The appointee is expected to teach introductory and advanced courses in life sciences, in particular in the field of plant biology using molecular genetics approaches. These include courses at the Masters level in Plant molecular genetics as well as Cellular and molecular biology of plant development. In addition to undergraduate and graduate teaching, the position will also entail some course co-ordination, content upgrading of in-service teachers and provision of expert advice to schools on science projects. The appointed faculty member will also be expected to supervise teacher trainees in practicum attachments and mentor graduate students. He/she is required to conduct research and publish peer-reviewed papers within the broad area of molecular genetics. Interdisciplinary research will also be strongly welcomed. Academic staff members may be requested to serve on committees in the AG/NIE/NTU and offer consultancy and professional services to the Ministry of Education and other public education-related organizations.

Qualifications and Requirements

Applicants should have a doctoral degree in life sciences, specializing in molecular approaches to study genetic and developmental problems in plants, and must be committed to excellence in teaching and in communicating science to teachers and students in primary and secondary schools. Prior experience of teaching/research/postdoctoral experience in Asia, especially in multilingual and multicultural environments, is preferred but not essential.

Position 2 – Assistant/Associate Professor in Animal Molecular Physiology

Duties and Responsibilities

The successful candidate will be expected to teach undergraduate and graduate courses in life sciences, especially in the field of animal biology using molecular physiology approaches. Other duties include some course co-ordination, content upgrading for in-service teachers and provision of expert advice to schools on science projects. The incumbent will be expected to supervise teacher trainees in practicum attachments and mentor graduate students. He/she is required to conduct research and publish peer-reviewed papers within the broad area of animal molecular biology, although interdisciplinary research will be especially favoured. The appointee may be requested to serve on committees in the

AG/NIE/NTU and offer consultancy and professional services to the Ministry of Education and other public education-related organizations.

Qualifications and Requirements

The successful candidate should have a PhD in molecular physiology or molecular biology, preferably with experience in working with animals at the organismal level. He/she must be committed to excellence in teaching and in communicating science to teachers and students in primary and secondary schools. At the Assistant Professor rank, post-doctoral experience and/or prior experience of faculty teaching, study, or research in Asia, especially in multilingual and multicultural environments, are desirable. For the Associate Professor rank, the candidate should have a proven record of excellence in teaching.

Position 3 - Assistant/Associate Professor, Microbiology

Duties and Responsibilities

The appointee is expected to teach introductory and advanced courses in life sciences, in particular on microbiology in relation to microbial diversity and microbe-plant, microbe-water or microbe-soil interactions. These include courses at the Masters level in Plant pathology as well as Molecular plant-microbe interactions. In addition to undergraduate and graduate teaching, the position will also entail some course co-ordination, content upgrading of in-service teachers and provision of expert advice to schools on science projects. The appointed faculty member will also be expected to supervise teacher trainees in practicum attachments and mentor graduate students. He/she is required to conduct research and publish peer-reviewed papers within the broad area of microbiology. Interdisciplinary research will also be strongly welcomed. Academic staff members may be requested to serve on committees in the AG/NIE/NTU and offer consultancy and professional services to the Ministry of Education and other public education-related organizations.

Qualifications and Requirements

Applicants should have a doctoral degree in life sciences, specializing in ecological and molecular approaches to study microbial diversity and plant-microbe interactions, and must be committed to excellence in teaching and in communicating science to teachers and students in primary and secondary schools. Prior experience of teaching/research/postdoctoral experience in Asia, especially in multilingual and multicultural environments, is preferred but not essential.

Last date of application for the above 3 position is 31 December 2011 or until a successful candidate is found.

How to Apply

Preliminary communications can be directed to Assoc Prof Shirley Lim, Head of NSSE, at shirley.lim@nie.edu.sg, copied to Ms Rebecca Ho, at yenyen.ho@nie.edu.sg. Please refer to <http://www.nie.edu.sg/about-nie/careers/submit-application> for details of the application forms and procedures.