Culture Collection of the University of Gothenburg (CCUG) Research Laboratory

The CCUG (www.ccug.se) is an internationally-respected unit in the Department of Clinical Bacteriology, Sahlgrenska University Hospital. Since 1968, the CCUG has provided a repository of reference strains of bacteria, yeast and fungi to clinical and research laboratories and carries out typing and identification of strains isolated from clinical and other samples received from hospitals, academic and research institutes and from industry. The CCUG uses phenotypic, chemotaxonomic and state-of-the-art genotypic methodologies for strain typing. The CCUG is involved in research with the focus of activities two-fold: 1) development and optimisation of diagnostic tools for typing and identification of microorganisms; and 2) development and optimization of tools for assessing antibiotic resistance in bacteria. The evolution and transfer of antibiotic resistance is studied in clinical environments, as well as environmental ecosystems.

CCUG Research Laboratory members:

- Dr. Edward Moore, PhD  Microbiologist,  Principal Investigator
- Dr. Nahid Karami, PhD  Microbiologist,  Post-Doctoral Research Scientist
- Dr. Liselott Svensson, PhD  Microbiologist,  Post-Doctoral Research Scientist
- Christel Unosson, BS, MS  Molecular Biologist  Technical Assistant

Brief bibliography of Edward Moore (Principal Investigator):

University degree: BS in Biology and Biochemistry from the University of Houston, USA. Post-graduate degrees: MS in Biology (1984); and PhD in Microbiology (1990), University of Houston, advisors – Profs. Peter Jurtshuk, Jr. and George E. Fox; dissertation topic – the evolution of respiratory enzymes and correlation with ribosomal RNA and rRNA gene sequence analyses for elucidating phylogenetic relationships among nitrogen-fixing bacteria.

Positions after PhD: from 1990-1992, Post-Doctoral Fellow in the Division of Microbiology at the National Research Centre for Biotechnology (GBF) in Braunschweig, Germany; from 1992-1994, Research Scientist (BAT 2a), and from 1994-2000, Senior Research Scientist (BAT 1b), at the GBF, employing nucleic acid sequence analyses for assessing microbial diversity and population dynamics in various ecosystems; from 2000-2002, Research Officer (BBSRC Gr. 5) and from 2002-2005, Senior Research Officer (BBSRC Gr. 4), in the Microbial Diversity Initiative at the Macaulay Institute in Aberdeen, Scotland, UK; from 2004-present, Curator and Head of the CCUG; from 2005-present, (appointed April 16, 2005), Professor (Adjunct) of Bacteriology, Sahlgrenska Academy of the University of Gothenburg, Institute of Biomedicine, Department of Infectious Disease.

Recent and on-going research projects:

2009-2012: “Detecting evolutionary hot spots of antibiotic resistance in Europe (DARE)” (funded by the European Community COST Action TD803 Programme, Project No. COST 273/08);
2009-2011: “Microbial Diversity and Development of Antibiotic Resistance Associated with Industrial Wastewater Treatment” (funded by the Swedish International Development Agency (SIDA), Project No. SIDA-VR 254405107);
2009-2010: “Diagnoses of antibiotic resistance in clinically-relevant bacteria: a rapid and cost-effective method for identification and typing by using mass spectrometry” (funded by FOU-Västra Götalandsregion, Project No. VGFOUREG-30781);
2008-2010: “Extended-Spectrum β-Lactamase (ESBL) Bacteria: Identification, Epidemiology, Genetic Analysis and Control of their Proliferation within the Clinical Environment” (funded by Västra Gotalandsregionen ALF Programme, Project No. ALFGBG-11574);
2004-2005: “Genotypic Identification and Epidemiological Characterisation of Pseudomonas aeruginosa, Burkholderia cepacia and Stenotrophomonas maltophilia from Patients with Cystic Fibrosis” (Västra Gotalandsregionen ALF Programme, Project No. LUA-7296);
2003-2008: “The Double-Blind International Cooperative Study for the Identification of Pseudomonad Species” (Health Canada Agency, Contract No. 01-E-003);
2002-2006: “Innovative approaches to understand complex microbial communities for eco-engineering the degradation of herbicides in stressed agricultural soils” (European Community INCO-DC Programme, Project No. ICA4-CT-2002-10011).

Selected recent publications and presentations:


