



جامعة السودان للعلوم والتكنولوجيا
بالتعاون مع جامعة نيوكاسل



Sudan University of Science and Technology

In collaboration with

University of Newcastle upon Tyne (UK)

Presents a workshop entitled

**Actinobacteria as a source of novel natural products .
Isolation, molecular characterization and phylogenetic analysis**

March 28 to April 1, 2010

Venue: College of Medical Laboratory Science, Sudan University of Science and Technology,
West campus, El Mogran, Khartoum

Key Speakers

Prof. Michael Goodfellow

Dr. Mohammed E Hamid

Prof. Ahmed H Fahal

Key Benefits

Actinobacterial Diversity and Drug Discovery

Phylogenetic and Phenetic Classifications

PCR amplification of 16S rRNA genes

Real time PCR as a Rapid Diagnostic Method

Constructing trees for Classification and Identification

For registration and more information please contact Dr. M. M Elhassan

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Day 1: Sunday 28/3/2010		
0930.0900	Registration and Self Introduction	
0930.1000	A Welcome Address and Introduction to the Workshop	Dr. H A Saeed Dean, College of Med. Lab. Science, SUST
1000.1130	Lecture 1: Actinobacterial Diversity and Drug Discovery	Prof. M Goodfellow Univ. of Newcastle
1100.1130	Break	
1230.1430	Lecture 2: Selective Isolation of Actinobacteria	Prof. M Goodfellow Univ. of Newcastle
1230.1430	Lab. Sessions: Examination of colonies growing on selective isolation media	Prof. M Goodfellow Univ. of Newcastle
Day 2: Monday 29/3/2010		
0800.0930	Lecture 3: Phylogenetic and Phenetic Classifications of Actinobacteria	Prof. M Goodfellow Univ. of Newcastle
0930.1100	Lecture 4: Constructing Phylogenies	Dr. M Hamid King Khalid University
1100.1200	Break	
1300.1600	Lab. Sessions 1. Examination of selective isolation plates- selection of isolates for DNA extraction 2. DNA extraction and gel electrophoresis 3. PCR amplification of 16S rRNA genes and gel electrophoresis	Mrs. R. Brown Univ. of Newcastle
Day 3: Tuesday 30/3/2010		
0800.0930	Lecture 5: An Overview on Emerging ESBL in Sudan	Dr. H A Saeed Sudan University of Science and Technology
0930.1100	Lecture 6: Identification of Actinobacteria	Dr. M E Hamid King Khalid University
1100.1200	Break	
1200.1500	Lab. Sessions Conventional Methods of Identification	Dr. M E Hamid King Khalid University
Day 4: Wednesday 31/3/2010		
0800.0930	Lecture 7: Current Situation of Actinomycetoma in Sudan	Prof. A Fahal Univ. of Khartoum
0930.1100	Lecture 8: Introduction to real time PCR	Dr. M M Elhassan Sudan University of Science and Technology
1100.1200	Break	
1200.1600	Lab. Sessions Practical. Real time PCR as a Rapid Diagnostic Method	Dr. M M Elhassan Sudan University of Science and Technology
Day 5: Thursday 1/4/2010		
0800.0930	Lecture 9: Bergey's Manual of Systematic Bacteriology: Past, Present and Future	Prof. M Goodfellow Univ. of Newcastle
0930.1100	Lecture 10: Introduction to Constructing Phylogenies	Dr. M E Hamid King Khalid University
1100.1200	Break	
1200.1600	Lab. Sessions Computer Laboratory Constructing trees for Classification and Identification	Dr. M E Hamid King Khalid University
1600.1630	Break	
1200.1600	Closing Ceremony, Presentation of Certificates	

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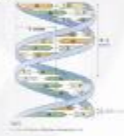
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adopted for the discovery of novel actinomycetes is to determine the extent of actinobacterial diversity in neglected habitats, such as the rhizosphere and deep sea muds, using both culture-based and molecular ecological

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Humodi A. Saeed, PhD, has more than 15 years experience in teaching both theory and practical microbiology. His research area is antimicrobial agents both discovery and monitoring and identification of prokaryotes, notably enterobacteria of clinical importance. He has published his research finding in national, regional and international journals.

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Mohammed E. Hamid, PhD, Graduated from Khartoum Univ. and got his PhD from Newcastle University (UK), has more than 50 publications

in high impact journals. His main research interest is *Mycobacteria*, *Nocardia* and other Clinically Significance Aerobic Actinomycetes. One of his (along with scientist from UK, Mexico and Sudan) main achievements is the discovery of *N. africana* as a causative agent of pulmonary infection, He is a member of Alexander von Humboldt Foundation (Germany). Ahmed H. Fahal, PhD, is a Consultant Surgeon at Soba University Hospital, Sudan. He is Director of the Mycetoma Research Centre, Soba University Hospital. He published his research in national, regional and international journals. He is the author of a book on mycetoma.

Mogahid M. El Hassan, PhD, is a microbiologist. His main academic interests are in molecular biology and proteomics of Actinobacteria with special reference to *Mycobacteria* and *Nocardia*. He has national and international contributions in this field through conferences and publications.

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Mrs. Roselyn Brown, for the past 12 years she has been extensively involved in managing the research project laboratories for the School of Biology in Newcastle University. Organizing and demonstrating in laboratory practical in the following three modules; Gene Technology, Microbial Diversity and Molecular Pharming and Microbiology. Her role as research laboratory manager involves supervising and teaching techniques to undergraduate and International Masters students during their research projects



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For more information, please contact the workshop coordinator Dr. Mogahid. We look forward to seeing you at the workshop