



Universidade do Minho  
Escola de Engenharia

## Semana da Escola de Engenharia October 24 - 27, 2011

### Micoteca da Universidade do Minho (MUM) – Implementation of a Quality Management System based on ISO 9001:2008

Marta F. Simões<sup>1</sup>, Anabela Martins<sup>2</sup>, Nicolina Dias<sup>1,3</sup>, Cledir Santos<sup>1</sup> and Nelson Lima<sup>1</sup>  
<sup>1</sup> IBB - Institute for Biotechnology and Bioengineering, Centre for Biological Engineering, University of Minho, Gualtar, 4710-057 Braga, Portugal  
<sup>2</sup>GESQAF-Consultoria, Auditoria e Formação, Braga, Portugal  
<sup>3</sup>CITS, Centro de Investigação de Tecnologias da Saúde, Paredes, Portugal  
 mfilipa@deb.uminho.pt

#### KEYWORDS

Quality Management System (QMS), Certification, ISO 9001:2008.

#### ABSTRACT

Micoteca da Universidade do Minho (MUM, www.micoteca.deb.uminho.pt) is a filamentous fungi culture collection established in May 1996 by the Universidade do Minho Rectorate, hosted by the Biological Engineering Centre, which is a centre of excellence integrated in the Institute for Biotechnology and Bioengineering (IBB, www.ibb.pt). In order to keep its high standards MUM has implemented a Quality Management System (QMS) based on the normative reference NP EN ISO 9001:2008 and the OECD Best Practices, 2007.

#### INTRODUCTION

The mission of MUM is to provide the highest quality services to our customers, collecting, maintaining and supplying fungal strains and their associated information for teaching and research in biotechnology and life sciences. MUM intends to be a centre of knowledge, information and training in mycology, operating at a global level and under national and international regulations.

MUM has defined three processes, those being: Material Reception Process (MRP), Material Preservation Process (MPP) and Material Supply Process (MSP). MUM has also developed a documental base for all the QMS including proceedings, standard operating procedures (SOPs),

forms, as well as quality objectives and goals for a continuous improvement.

#### IMPLEMENTATION

To implement the QMS, MUM established and followed a defined schedule (Table 1). The implementation of the QMS occurred for almost one year during which three main steps were developed. The first step was the planning of the QMS, followed by the design of the system and documental development and the third step was the implementation of the QMS with the achievement of the certification in May 2011. From this date on MUM will keep on performing a QMS revision and pursuing a continuous improvement.

Table 1: Schedule for the implementation of the QMS.

IMPLEMENTATION STEPS		2010					2011						
		J	A	S	O	N	D	J	F	M	A	M	...
PLANNING	WORK TEAM AND TASKS TEAMS DEFINITION	■											
	SCHEDULE DEFINITION	■											
	QUALITY POLICY AND QUALITY OBJECTIVES DEFINITION	■											
SYSTEM DESIGN AND DOCUMENTATION	BUILDING SYSTEM STRUCTURE	PROCESS DOCUMENTATION AND CONTROL	■	■	■	■							
		RESOURCE MANAGEMENT	■	■	■	■	■						
		SYSTEM PLANNING	■	■	■	■	■						
		INTERNAL AND CUSTOMER COMMUNICATION	■	■	■	■	■						
SYSTEM IMPLEMENTATION	ANALYSIS AND APPROVAL OF DOCUMENTS	■	■	■	■	■							
	RECORDING THE SYSTEM	■	■	■	■	■	■	■	■	■	■	■	■
	INTERNAL AUDITS							■	■	■	■	■	■
	SYSTEM REVISION AND CONTINUOUS IMPROVEMENT										■	■	■

MUM has reached a new step in its existence, besides celebrating 15 years of operation; MUM QMS team attained all the necessary conditions for the Certification of the implemented QMS and MUM has obtained the certificate of ISO 9001:2008 for the Deposit, Preservation and Supply of Filamentous



Universidade do Minho  
Escola de Engenharia

## Semana da Escola de Engenharia October 24 - 27, 2011

Fungi from the independent assessment agency (Portuguese Association for Certification - APCER with the International Certification Network - IQNet). Of the 590 culture collections from 68 countries registered in the World Federation of Culture Collections, MUM is the 1<sup>st</sup> Portuguese and the 23<sup>rd</sup> culture collection in the world to obtain this important qualification.

### CONCLUSIONS

The new obtained certificate will enhance further the reputation of MUM as a culture collection that pursues the goals of excellence and leadership implicit in these new and exacting standards. Additionally, MUM will become an even more relevant partner of the Global Biological Resource Centre Network ([www.gbrcn.org](http://www.gbrcn.org)) and European Consortium of Microbial Resources Centres ([www.embarc.eu](http://www.embarc.eu)) projects. MUM is fully committed to the (a) recently-published OECD best practices guidelines relating to quality management for Biological Resource Centres, and (b) Microbial Resource Research Infrastructure (MIRRI) project. MIRRI proposes an European infrastructure for microbial culture collections as described in the European Strategy Forum on Research Infrastructures - ESFRI "Road Map" which was unanimously approved by the 27 participating European Union countries.

### REFERENCES

NP EN ISO 9001:2008.

OECD Best Practice Guidelines for Biological Resource Centres (2007) - [http://www.oecd.org/document/36/0,3343,en\\_2649\\_34537\\_38777060\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/36/0,3343,en_2649_34537_38777060_1_1_1_1,00.html).

### Acknowledgements

The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7, 2007-2013), Research Infrastructures action, under the grant agreement No. FP7-228310 (EMbaRC project). M.F. Simões is supported by the Portuguese FCT grant SFRH/BD/64260/2009.

### AUTHORS' BIOGRAPHIES

**Marta Filipa Simões** graduated in Biotechnological Engineering, has a Master degree in Clinical Microbiology and is now a PhD student in Biological and Chemical Engineering at Minho University and his developing her work in the facilities of Micoteca da Universidade do Minho (MUM). Her e-mail address is: [mfilipa@deb.uminho.pt](mailto:mfilipa@deb.uminho.pt).