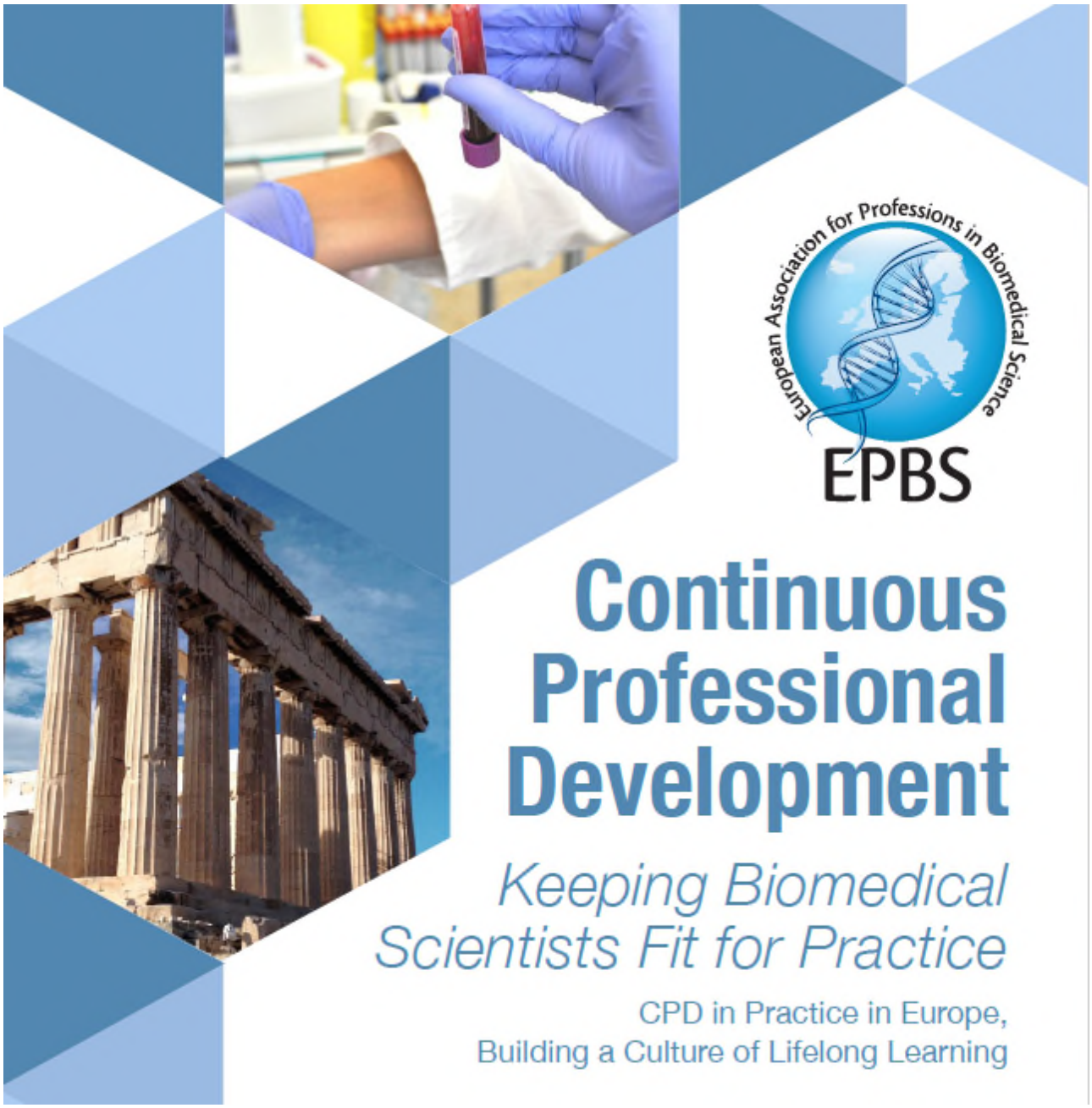
European Association for Professions in Biomedical Science



Continuous Professional Development

Keeping Biomedical Scientists Fit for Practice

CPD in Practice in Europe,
Building a Culture of Lifelong Learning

European Association for Professions in Biomedical Science
EPBS is an International Non-Profit Association (AISBL) registered under the Belgian law.
Place Jean Jacobs, 3
1000 Bruxelles (Belgium)

Scientific Committee

EPBS

Chair: Anne Berndt

Marie Culliton

Fernando Mendes

Gabriella Lillsunde-Larsson

Diana Nogueira

PETIE

Petros Papalexis

Dionysis Vourtsis

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Biomedical Science is a constantly changing profession. As Biomedical Scientists we must ensure that we remain up to date with advances in our chosen area of practice both to provide the best possible service and advice for our patients.

We are now in an era of 'lifelong learning'. Once formal education qualifications are attained we must then move to Continuous Professional Development (CPD). This involves both continued academic study and also self-directed learning; reading published work, reflecting on practice and sharing experiences and knowledge with colleagues.

The environment in which we work is also changing. Accreditation of laboratories dictates that we must provide evidence of our CPD. As a regulated profession, many holding licences to practice, the spectre of losing this licence exists. CPD forms part of the insurance against this.

I welcome you to come to our 3nd Conference in Athens, on 6th October to explore with colleagues, laboratory managers, educators and regulators how we can work together to ensure that CPD is configured to keep all Biomedical Scientists fit to practice and thus enhance patient care.

Marie Culliton. MSc, MBA, FAMLS

President EPBS

	Session 1: CPD for Biomedical Scientists
09:00	Continuous Professional Development for Biomedical Scientists *Marie Culliton, President EPBS, Ireland*
09:20	EucoLABS: Developing an European Credit System for CPD *Ite Tytgat, Thomas More University, Belgium.*
09:40	Experiences in implementing the EucoLABS in Sweden *Gabriella Lillsunde-Larsson, IBL, Sweden*
	Session 2: CPD in Practice
10:30	CPD in Greece *Petros Papalexis PETIE, Greece*
10:45	CPD and Accreditation *Patricia Fernandes, AETEL, Spain*
11:00	CPD in Italy - 15 years of something mandatory for everyone *Fabio Como, SIPMeL, Italy*
11:30	CPD Through Academic Study *Steve Meaney, Dublin Institute of Technology, Ireland*
11:50	CPD in the Workplace: peer-to-peer learning *Diana Nogueira, STSS, Portugal*
12:10	CPD and Reflective Practice *Martina Jurs,dbio, Denmark*
	Session 3: CPD Team Players
14:00	CPD Without Borders *EPBS Members Experience*
14:20	The Role of the Manager / Employer in Promoting CPD *Michael Werenberg Mikkelsen, Aarhus University Hospital, Denmark*
14:40	The Role of a Professional Association in CPD: adding value to your CPD experience *Alan Wainwright, IBMS, UK*
15:00	CPD: Keeping Biomedical Scientists Fit to Practice *Michael Guthrie, Health and Care Professions Council, UK*
	Session 4: CPD Made Easy
16:00	CPD and E-Learning *Stefan Vermeulen, University College, Ghent, Belgium*
16:15	Hipon E-Learning Programme *Andreas C. Lazaris, School of Medicine, National and Kapodistrian University of Athens, Greece*
16:30	eMedicineImage *Dan Pelling, UKNEQAS, UK*
16:45	Electronic CPD Portfolio *Monica Fitzpatrick, ACSLM, Ireland*
	Round Table Discussion

Oral Presentations

Session 1: CPD for Biomedical Scientists

Chair: Anne Berndt, EPBS.

Continuous Professional Development for Biomedical Scientists
Marie Culliton, President EPBS, Ireland
EucoLABS: Developing an European Credit System for CPD
Ite Tytgat, Thomas More University, Belgium.
Experiences in implementing the EucoLABS in Sweden
Gabriella Lillsunde-Larsson, IBL, Sweden

Anne Berndt, EPBS, Sweden.

Anne Berndt is an advisor for biomedical scientists at Vårdförbundet (the Swedish Association of Health Professionals) located in Stockholm. She received her training as a biomedical scientist with a specialty in histopathology and cytology. Anne has worked as a cytotechnologist and biomedical scientist for about 11 years at different labs in Sweden and for 4 years abroad as a research technologist (Chicago and Zürich). In 2007, Anne received her Master's Degree in Quality Management and Leadership and the same year was given the opportunity to combine her interest in the profession and in people and work at the Swedish Institute for Biomedical Laboratory Science (IBL, the professional organization for biomedical scientists). Here Anne became involved in promoting the profession, both nationally and internationally. At Vårdförbundet she continue this work and is currently focused on the organization and awareness of continuous professional development and professional ethics.

Anne has been a member of the board of EPBS since 2012 and is now President Elect of the IFBLS.

Marie Culliton. M.Sc., M.B.A., F.A.C.S.L.M.,
President E.P.B.S. (Ireland)

Marie Culliton has been a delegate to the EPBS since 2001. She has been President of EPBS since 2004.

Marie Culliton entered the profession of Medical Science in 1973. She was

awarded the Diploma in Medical Laboratory Science (Microbiology) in 1978 and Fellowship of the Institute of Biomedical Science in 1980 specialising in Clinical Chemistry. CPD resulted in the award of MSc in Clinical Biochemistry from Trinity College in 1990 and the MBA in Health Services Management in from UCD and RCSI in 2001

Marie worked in the Endocrinology Laboratory at St Vincent's University Hospital where she had research interests in Congenital Adrenal Hyperplasia and Polycystic Ovarian Disease. In 2004 Marie was appointed Chief Medical Scientist/Laboratory Manager at the National Maternity Hospital, the largest maternity hospital in Europe. Current research interests are in the field of 1st trimester screening and fetal wellbeing.

Marie has been a member of the Council of The Academy of Clinical Science and Laboratory Medicine since 1985 and has completed 2 terms as its President. She is Deputy Chair of CORU the Registration Council for Allied Health Professionals

Marie is committed to working with member associations to ensure that Biomedical Scientists are recognised as key contributors to healthcare and to ensuring that they have the education and experience necessary to be leaders in Laboratory Medicine.

Continuous Professional Development for Biomedical Scientists

Marie Culliton EPBS

Mandatory Continuous Professional Development (CPD) for Biomedical Scientists is one of the policies of EPBS. This presentation will set the scene for the conference and consider the different activities contributing to CPD.

The presentation will conclude with a proposed role for EPBS in the future.

Ite Tytgat. Thomas More University, Belgium

Ite qualified from REGA Institute, KU Leuven in 1978 and received her licence to practice from UCL: Université Catholique de Louvain in 1980. She was awarded a diploma in pedagogy in 1985. Ite lectures students in Biomedical Science at Thomas More University in Belgium specialising in Clinical Chemistry Microbiology and Molecular Biology.

Ite is a member of the management body of BVLT/ABTL (Profession association of laboratory technicians)) and is Chief delegate from Belgium for EPBS

Ite was the coordinator of EUCOLABS: a Leonardo da Vinci partnership: A Road to a European credit system for Continuing Professional Development of Biomedical. Laboratory Scientists in Europe.

EucoLABS: Developing an European Credit System for CPD

Ite Tytgat

In order to provide first class clinical laboratory services it is necessary for a Biomedical Scientist to participate in Continuing Professional Development programmes in a mandatory fashion, thus giving professionals the possibility to keep up with new technologies in order to provide best practice for the sake of patients.

Whereas education is about to be harmonized in the various countries as a result of the Bologna Process, CPD is not regulated in every country and varies from well-organised and obligatory to voluntary or non-existing.

The EUCOLABS partnership considered lifelong learning and mandatory CPD programmes as vital for the professionals. Therefore the goal of this project was to develop European guidelines for CPD that could be implemented on a National level and build a road to a European credit system similar or identical to ECTS or ECVET in order to achieve lifelong learning and to move throughout Europe.

Firstly questionnaires about educational programmes were developed and secondly more information about existing CPD programmes and their accreditation was collected. The main objective of our partnership to update and reformat an existing European Professional Dossier in order to make it digitally available resulted in a first draft that can be used as an example.

Gabriella Lillsunde-Larsson, IBL, Sweden.

I am a registered biomedical laboratory scientist, educated in Örebro, Sweden. After a few years working as a laboratory engineer mainly in synthetic DNA production, I joined the Department of Laboratory medicine at Örebro University Hospital in 2006. My professional laboratory experience is from molecular pathology, where I have worked both in everyday production and also with method development. We provide molecular testing for prognosis, diagnosis and treatment (predictive). I started my research interest in 2009 when I initiated my

masters' project on HPV genotyping in vulvar carcinoma. I continued my research in the area of HPV-induced cancers and completed my PhD thesis in December 2014. I currently hold a post-doc position in Örebro, focused on HPV research related to clinical cohorts. In addition, I am a staff member at the medical training program at Örebro University, Sweden. In May 2015 I was elected as board member in the Swedish Institute for Biomedical Laboratory Science (IBL).

Experiences in implementing the EucoLABS in Sweden

Gabriella Lillsunde-Larsson

In my talk "Experiences in implementing the EucoLABS in Sweden" I will discuss our experiences and reflections on the EucoLABS project as well as describe the past and current CPD situation in Sweden.

Session 2: CPD in Practice

Chair: Fernando Mendes, EPBS.

CPD in Greece
Petros Papalexis PETIE, Greece
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Discussion
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Diana Nogueira, STSS, Portugal
CPD and Reflective Practice
Martina Jürs,dbio, Denmark

Fernando Mendes, EPBS

Fernando Mendes started as Biomedical Scientist in 1994. He was awarded the Bachelor Degree in Clinical Analysis and Public Health in 1994 and with honour's degree in 2002. Further professional development resulted in the award of MSc in Molecular and Cellular Biology; he has a PhD in health Sciences from Faculty of Medicine of University Coimbra.

As Biomedical Scientist Fernando worked in the Transfusion Science for 14 years, changed career in 2008 when he became an Associate Professor at Coimbra Health School. He was the Academic Coordinator of ERASMUS for Biomedical Science, Coordinator of the Entrepreneurship and Innovation Club and one of the coordinators of the Health Tec Working Group from 2009 till 2013. He represented Coimbra Health Scholl at the Eucolabs project.

His main areas of research are: immunology, cancer, radiation, cell culture, transfusion medicine and blood bank having more than 40 papers published at national and international level.

He has been a member of the Board of Sciences and Health Technologies Union since 1999 and is currently serving as member for fourth term as coordinator of the International Relations.

Since 2001 he has been working actively within EPBS where he was the founder of the Student Forum in 2002, being Director from 2005 until 2010, since then he is the General Secretary.

Fernando is involved in the development of Biomedical Science Education, undergraduate and master level through MARBLE, and setting up the Academic Network of EPBS, working on a Vision for the profession, European Directives, POCT and CPD.

Petros Papalexis MD, BSc, MSc, PETIE, Greece

Education:

Medical Doctor, Medical School, Aristotle University of Thessaloniki, 2016.

Master of Science in the specialty «Environment and Health. Capacity building for Decision Making», Medical School, University of Athens, 2011. Master of Science in Molecular Medicine (specialization in Advanced Molecular Diagnostics), Medical School, University of Athens, 2009. Bachelor's degree with Honour in Medical Laboratory Technology, Faculty of Health and Caring Professions, Department of Medical Laboratories Technologists, Highest Technological Educational Institute of Athens (T.E.I.-Athens), Greece, 2005.

Professional Experience:

Medical Laboratory Technologist in Greek Military Hospitals, Microbiological- Biochemical laboratories. Member of the Research Programme of T.E.I.-Athens, Department of Medical Laboratories Technologists, with the following research field: "Molecular HPV typing, HPV association with cervical cancer, correlation with oncogenes and other diseases. Completed research". Doping Control Department, Olympic and Paralympic Games of Athens 2004. Highest Technological Educational Institute of Larissa (T.E.I.-Larissa), Laboratory Assistant of Clinical Chemistry, academic year: 2012-2013.

Professional Interests and Activities:

Molecular Biology, Immunology, Molecular Diagnostics, Hematology, Toxicology, Endocrinology, Molecular Oncology, Environment & Health, Virology, Clinical Chemistry, Blood collection, Lifelong learning, Teaching. Former Vice President & General Secretary of the Board of Directors, of the Panhellenic Association of Medical Laboratory Technologists (PETIE), from 2008 to 2016. I have been a delegate from Greece to the EPBS since 2015. Certified Reviewer of the Scientific Journal "Human and Experimental Toxicology". Author of 8 scientific publications.

CPD in Greece

Petros Papalexis, Greece

First of all we would like to mention that continuing professional development (CPD) and training in Greece is legislated, regulated, but not compulsory for any category of scientists-professionals. Instead, it is optional and is added to the personal file of each employee so that each certificate or diploma of Continuing Professional Education program or Vocational Education Training program

can be assessed together with all the other qualifications of each employee. This applies to every health professional in Greece.

Lifelong Learning (LLL) is considered a policy priority at European as well as at international level. It is strongly linked to a person's employment, prosperity and full participation in society. The law (Law Nr. 3879/2010) on Lifelong Learning that was voted by the Greek Parliament in September 2010, sets the basis for the planning and implementation of a **national holistic strategy on lifelong learning** and for the creation of the **Greek National Network of Lifelong Learning (NNLL)**, which encompasses all LLL governing bodies and LLL service providers operating under the auspices of different ministries.

Finishing the description of CPD framework in Greece, we would like to emphasize that all available e-Learning programs organized by Universities in our country, follow the ECVET system (European Credit System for Vocational Education and Training) and comply with the European Quality Assurance Reference Framework (EQAVET).

Patricia Fernandes, AETEL, Spain

Clinical Laboratory Technician Biomedical finished her studies in 1986 in Ramon y Cajal Institute of Valladolid. She started to work in 1987 in laboratory of Hematology (Hospital Rio Hortega in Valladolid). She completed an open competition exam, in 1990 in Zumarraga hospital (San Sebastián) where she worked until 1991 in emergency laboratory.

From 1991 until 2000 worked at the Blood Bank Hospital Rio Hortega Valladolid.

In 2001, she joined the laboratory of Prenatal Diagnostics of the University hospital of Salamanca and since 2004 she works in the laboratory of Hematology/Morphology at the same hospital.

She has participated in scientific and technical sessions in Salamanca Hospital, and international meetings and in the days of the JIB.

She has participated as a consultant for Beckman Coulter in 2004. She has participated in international meetings: ASSITEB, EPBS. She has lectured in courses AETEL. She was appointed by the Ministry of Health in 2005 as a member of the Evaluation Committee, as an expert in Continuing Education, in activities aimed at Biomedical Scientists.

She is responsible for the continuing education of AETEL from 1992 until now.

She is Vice-President of AETEL since 1990.

CPD and Accreditation

Patricia Fernandes, Spain

Continuous Education is a non-formal education, necessary in the scientific and technical progress that is taking place in the health sciences, with an incidence direct in the organization and operation of the medical and health assistance, more and more complex and effective

The Public Administration has the responsibility of ensure the quality of the various activities of Continuous Training for HealthCare Professionals. By mutual agreement, they have decided that the best way to achieve this end is the establishment of voluntary accreditation schemes, whose value and efficiency will enhance how much wider is its configuration and its scope and both are open to the participation of all public administrations.

Educational model of AETEL is dynamic, flexible and based on skills development. It pursues the integral formation of the student by promoting the acquisition of knowledge, skills and attitudes to ensure their activities in autonomous and competent way.

Fabio Como, SIPMeL, Italy

I work in the Italian Public Health System since 1996 in different Laboratory Segments and today in Novi Ligure.

1992/93 Alessandria USSL 70
Certificate of qualification as Medical Laboratory Technologist.

2004/2005 Pescara University “G. D`Annunzio di Chieti”
Degree in "Biomedical laboratory techniques” (SNT 3)

2006-2007 Rome University "Unitelma"
Master “Management and coordination functions of the health professions”. Title: “The importance of training in the light of the national program of Continuing Medical Education. Experience within an inter-department: problems and solutions”.

2010-2011 University Piemonte Orientale A. Avogadro di Novara
Master “coordination and management activities for decentralized diagnostic and laboratory” Title: “the importance of education and communication in the management of a point of care by a multidisciplinary team of professionals".

I'm Regional First Counselor for SIPMeL Piemonte and “Trainer Manager” for this society.
Member of the Permanent National Commission on Education for the SIPMeL and in 2013 Deputy Chief Delegate at the EPBS, at the GGB held in Berlin on 18 and 19 October 2013.

Since June 2014 Italian Chief Delegate for EPBS.

CPD in Italy: 15 years of something mandatory for everyone

Fabio Como, Italy.

Act No. 229/1999: Article 16: Participation in continuing education activities is indispensable requirement for working as an operator of health system. This decision is based on the principle that health care quality of action depends not only by the acts of the doctors, but by all the decisions and actions of the various professionals involved.
To each training event is assigned a number of C.M.E. credits
How many credits? From 10 in 2002, to 150 per three-year cycle now.
Strengths: mandatory for all operators of Health, good training supply, switching from an education centered on credits to a scheduled training. In modern health care each professional has to acquire skills and not points.
Weaknesses
We have no Professional Register and too many difficulties in relationships between the individual and the system.
Too many difficulties to achieve 50 annual credits.
There are no incentives and/or penalties yet, even if incentive system is preferred, addressing professionals who understand the ethical and professional duty to dedicate sufficient time to their professional development.
We have to put operators in a position to update themselves, taking advantage of the new opportunities as web solutions and distance learning.

According to the Ministry of Health the target is to consider the patient at the center and he has the right to be treated by trained professionals, ready to face the constant changes of a constantly evolving sector, also due to the deep geopolitical changes of this years.

Dr Steve Meaney, Dublin Institute of Technology, Ireland.

Dr Steve Meaney is assistant head of the School of Biological Sciences, Dublin Institute of Technology, Ireland and Chair of the institute's research ethics committee. His initial training was in biomedical science and following an Erasmus exchange to Stockholm returned to carry out postgraduate studies. He received his PhD in Medical Biochemistry from the Karolinska Institute in Stockholm and holds an MSc in Applied E-learning. His scientific interests include sterol biochemistry, both basic biology and applications in how the production of non-cholesterol sterols is controlled and their levels can be modulated therapeutically, in particular by epigenetic mechanisms. His education interests are in the application of 'digital apprenticeship' approaches to facilitate scalability of the apprenticeship model in education.

Where Does Academia Fit Into Continuing Professional Development?

Dr Steve Meaney, Ireland

Traditionally academia has been seen to support attainment of entry level qualifications in biomedical laboratory science suitable to commence practice. Further formal study is also supported in academia, with many institutes offering postgraduate diplomas, masters-level qualifications or even PhDs. Attainment of these postgraduate qualifications provides a formal recognition and evidence of development. Importantly these are recognised by national and international quality processes (e.g. the European Credit Transfer System) and are thus highly mobile. There is undoubtedly a role for formal education in supporting continuing professional development in the biomedical laboratory. This presentation will highlight how this can occur and the value that such formal qualifications can bring to the individual and the workplace.

Diana Nogueira, STSS, Portugal

Diana holds a BSc in Clinical Analysis and Public Health and a MSc in Haematology and Immunohaematology from Porto. Diana has been working for 22 years in CHSJoão in several different contexts. Central lab of haematology within normal routine and HPLC Haemoglobinopathies . A 24/7 emergency schedule in a core lab. Direct contact with patients, in a weekly basis, drawing blood. And for several years responsible for management of BMS in my Lab.

CPD in the Workplace: peer-to-peer learning

Diana Nogueira, Portugal

Given the demands of the current job market, it is essential to adopt new concepts of flexibility and new competency profiles, to ensure that the professional growth and practice is updated.

In this new culture of learning, the environment shifts from the traditional classroom to virtual one, in what is called Peer-to-peer computing. Here people interact by searching, learning and sharing information. But also nowadays, people learn more through their interactions with others, in fluid relations that result from shared interests and opportunities, for what is called Natural learning, combined with hands-on- exercise.

In this scenario all participants stand in equal ground of participation. The role of student and teacher is occasional, and shifting from one to another.

“Learning form others is neither new, nor revolutionary, it is in fact just been ignore.” (Jay Cross)

Martina Jürs, dbio, Denmark

Reg. Biomedical scientist and Diploma of Public Administration (Health Management). Martina is working as Vice President at the Association of Biomedical Laboratory Scientists (dbio). Previous positions are, Department manager in biochemistry, Shop Steward full time and BLS in microbiology and biochemistry.

The focus areas of the work as Vice-president of dbio are: The BLS profession’s competencies, The BLS profession’s identity, The BLS profession’s education. Further education for BLS (CPD), Research within the BLS profession, BLS professional ethics and BLS professional management.

CPD and Reflective Practice

Martina Jürs, Denmark

Reflective practice has become an accepted element of professional education and continuing professional development – to a degree that we hardly question the concept. According to research it is perhaps time to shed more light on the phenomenon and clarify its impact on learning outcomes. The presentation will address and exemplify three issues: Firstly, reflective practice as situated in the real-life practice of professionals; in Donald Schön's words the swampy lowland of professionals practice. Secondly, reflective practice as a social, collaborative activity; it takes place in a community of practice according to Etienne Wenger. Thirdly, systematic reflection as part of the job and the workplace culture; it makes sense when it is organised to solve real-life problems.

Session 3: CPD Team Players

Chair: Anneke Geurts, EPBS.

CPD Without Borders

EPBS Members Experience

The Role of the Manager / Employer in Promoting CPD

Michael Werenberg Mikkelsen, Aarhus Univ. Hospital, Denmark

The Role of a Professional Association in CPD: adding value to your CPD experience

Alan Wainwright, IBMS, UK

CPD: Keeping Biomedical Scientists Fit to Practice

Michael Guthrie, Health and Care Professions Council, UK

Anneke Geurts, The Netherlands

Anneke Geurts has been a delegate to EPBS since 2005 and has been treasurer of EPBS since October 2011. She works as Biomedical Laboratory Scientist at the Department of Laboratory Medicine of the Radboud University Medical Centre in Nijmegen, the Netherlands. The laboratory supports patient care with routinely and specialized based laboratory activities and comprehends the field of Clinical Chemistry, Haematology, Immunology, Genetics, Endocrinology and Metabolism. One day per week she is busy with work for the Works Council of Radboudumc.

Besides her scientific work (coauthor of more than 70 publications, member of the executive committee as treasurer of the PathoBiology Group of the European Organisation for Research and Treatment of Cancer (EORTC)), Anneke is involved in education of (bio)medical (laboratory) students and retraining and continuous professional development (CPD) of (bio)medical laboratory scientists and technologists in order to keep abreast with research and development within the specialties of laboratory medicine. Her topic on which she stakes is the recognition and registration of (bio) medical scientists in the Netherlands and in Europe in order to maintain the profession of laboratory scientist as dynamic, challenging and fascinating.

Michael Werenberg Mikkelsen, Aarhus University, Hospital, Denmark

Michael Werenberg Mikkelsen is the Head biomedical laboratory scientist and Head of Department at the Department of Nuclear Medicine & PET-Center at Aarhus University Hospital since 2012. With a background as both a biomedical laboratory scientist and Master of Science in biomedical engineering from Aarhus

University, Michael functions as manager for both the Departments biomedical laboratory scientist as well as manager of all non-medical scientist including medical physicists and radiochemists.
As Head of Department, Michael has been able to increase clinical activity by 37 % to 31.000 annual patient visits, peer reviewed academic output by 21 % to 97 annual publications whilst handling budget cutbacks of 13 %.

The Role of the Manager / Employer in Promoting CPD

Michael Werenberg Mikkelsen, Denmark

At the Department of Nuclear Medicine & PET-Center at Aarhus University Hospital, a systematic use of a continuous professional development (CPD) program is helping to increase academic output and handle the challenge of a growing number of clinical patient examinations under a diminishing budget.
The CPD program is not only targeting the laboratory skills of the Departments biomedical laboratory scientists, but is a integrative approach that also takes in consideration the employees ability to pass on their knowledge to co-workers and their ability to function in inter-professional collaborations with the other professional groups at the Department. For all professional groups there is a linkage between CPD and the individual's wage. As such, the CPD program is also a HRM-tool for the manager.
This integrative focus on CPD is the manager's key to handling the multifaceted challenges there is in the public health system in both Denmark and Europe as a whole.

Alan Wainwright, IBMS, UK

I am the Executive Head of Education at the Institute of Biomedical Science, a Chartered Scientist and registered with the Health Professions Council. During the sixteen years I have been on the senior management team at the Institute I have been instrumental in the development of the Institute's degree accreditation programme and have worked closely with universities in the UK and abroad who have had their biomedical science degree courses accredited. I also have extensive experience in the development of laboratory training programmes. In 2008 I was appointed as the executive lead for CPD.

I have been a registered biomedical scientist, since 1972, gaining my Fellowship examination in Histopathology in 1976. I achieved a second Fellowship in Immunology in 1984. I was promoted to

Operations Manager for Clinical Biochemistry in 1995 at the Royal London Hospital and went on to become the Pathology Business Manager in 1997 and Pathology Support Services Manager in 1999. Experience gained included staff and budget management, change management and project management.

I have recently been appointed to the Board of Directors for the International Federation of Biomedical Laboratory Scientists and look forward to using my experience to further the development of our profession.

The Role of a Professional Association in CPD: Adding Value to your CPD Experience

Alan Wainwright, IBMS, UK

Professional bodies almost exclusively define what CPD is and transform professional development as something that is just done, into institutionalised policies and programmes. They champion CPD and through their relationship with the practitioner may decide what counts as legitimate CPD and how to best provide support for the CPD cycle.

The Institute of Biomedical Science is the professional body for 20,000 members in the UK and abroad and has a well-established CPD scheme that encourages biomedical scientists to maintain, improve and extend their knowledge, skills and practice.

The Institute's CPD scheme offers members the chance to participate in a variety of structured activities and formally record their learning, leading to the award of a CPD Diploma. Since its creation in the 1990's the original concept of recognising CPD activities through the accumulation of credits has evolved in stages to a point today where there is a greater focus on learning outcomes and 'value-added' CPD.

This presentation will use the IBMS model as a basis for examining the role of professional associations in defining and supporting CPD, looking at the some of the misunderstandings and challenges that are inherent in demonstrating CPD as a meaningful activity.

Michael Guthrie, Health and Care Professions Council, UK

Michael Guthrie has been Director of Policy and Standards at the Health and Care Professions Council since 2009. Michael's responsibilities include setting and reviewing professional standards; working with key stakeholders including government to bring further professions into statutory regulation; commissioning research to better understand and improve regulation; and representing the HCPC on numerous working groups at national level. Michael holds an MSc in Public leadership and management from the University of Warwick.

CPD: Keeping Biomedical Scientists Fit to Practice

Michael Guthrie, Health and Care Professions Council, UK

The Health and Care Professions Council is the UK regulator of 16 health and care professions including biomedical scientists. This presentation will explore the role of the professional regulator in setting requirements for CPD and, reflecting on ongoing debates in the UK context, discuss how CPD is linked to continued fitness to practise.

Session 4: CPD Made Easy

Chair: Sonia Daadoucha Perroud, EPBS.

CPD and E-Learning
Stefan Vermeule,University College, Ghent, Belgium
Hipon E-Learning Programme
Andreas C. Lazaris, School of Medicine, National and Kapodistrian University of Athens, Greece
eMedicineImage
Dan Pelling, UKNEQAS, UK
Electronic CPD Portfolio
Monica Fitzpatrick, ACSLM, Ireland

Sonia Daadoucha-Perroud, EPBS, Switzerland

Sonia entered the profession of Biomedical Laboratory Scientist in 1990 at the District Hospital of the Glâne in the canton of Fribourg. She got her diploma of laboratory management in 2000 and became more active in her professional association (labmed), first as member (2001 to 2005), then as president of the French speaking section (2005 to 2009). Sonia has always been concerned with continuing professional development (CPD). Beside her collaboration on a survey regarding CPD during her management training, Sonia organised several French CPD courses. She is also concerned with quality, which formed the topic of her dissertation while undertaking her laboratory management diploma. As member of the editorial board of labmed journal, she is in charge of French and English scientific articles.

Sonia has collaborated as French speaking delegate in the production of the new Swiss BLS professional framework curriculum. Beside her work in the laboratory, she is now acting as a professional expert for the federal recognition of teaching programmes in French speaking Swiss BLS schools.

She has represented Switzerland as delegate to IFBLS from 2005 to 2008 and EPBS since 2005. Since her election at the position of director of the management body of EPBS in 2010, she is in charge of recruitment and worked closely with her colleagues on different issues such as finances.

She is delighted to continue serving EPBS to contribute to the recognition of Biomedical Scientists as full part of healthcare professionals and ensuring that they get the means to develop their competences.

Stefan Vermeulen, University College, Ghent, Belgium

Stefan Vermeulen was born in Ghent, 20/11/1967. He now lives in a rural area in Flanders called Parike. He became a master in Chemistry and biotechnology after which he became a doctor in medical sciences. As of 2004 he is a member of the University College Ghent. He authored or co-authored more than 50 publications (o.a. Cancer Research, Nature Genetics, American Journal of medical Genetics…), held over 30 oral scientific presentations (national and international). He authored or co-authored more than 80 abstracts and worked already on many research projects. The latest one deals with Phage therapy. He is technically skilled in molecular biology, immunochemical and biochemical technology, in vitro en in vivo testing en molecular cytogenetics. He has been an expert for the European Union for array CGH, has been a coordinator for The European Molecular Genetics Quality Network (EMQN), England and expert voor de Rijksdienst voor accreditation (RvA), The Netherlands. He has been involved in teaching at Ugent at the faculty of medicine and is currently a teacher at the university college Ghent. He is involved in the organisation of several CPD events. He formerly has been a lab manager, ELO coordinator for the electronic learning environment, coordinator of the education of biomedical sciences, Head of department Exact Sciences and is currently head of department of Biomedical Sciences at the university college Ghent and involved in building up and striving to excel in education, research and service provision.

CPD and E-learning

Stefan Vermeulen University College, Ghent, Belgium

As department in Biomedical Sciences at the university college of Ghent we strive to excel in education, research and service provision. The latter is practically entirely composed of CPD in conjunction with the professional organisation BVLT/ABTL in Belgium. In Belgium the profession of laboratory scientist or technician is from 2014 onwards regulated and protected by Royal Decree. With that protection naturally comes an obligation of lifelong learning. We started with distributing online content in clinical chemistry since legislation in Belgium requires CPD in the domains of the latter and also microbiology and haematology. It is not so much the availability of the content but the quality and selection of the content that should be controlled together with the online and inline testing and enrichment with learning paths. Several platforms to make content available already exist. However they all use proprietary architecture. There is a vast array of open source learning management systems (Zephyr, Blackboard, Chamilo, Dokeos, Moodle, Edmodo, SuccessFactors, skillsoft). All have their pro's and con's and attempts should focus on interoperability to reuse the built-up content. Several platforms exist for online or inline testing which are in need of automated

validation and feedback. Ideally CPD should consist of a three step process for a biomedical scientist. A general login should bring the client/scientist to all available CPD, on- and offline learning offerings, enabling the client to subscribe to selected events, processing and finalising them with online preferably inline comprehensible test environments. The system should then be able to crosstalk to a portfolio and validation system in order to demonstrate the required levels of expertise needed to remain a professional in the field. The portfolio should be able to be enriched by external methods, minimalizing interventions by the client. The validation system should if necessary be controlled by the governmental bodies in place. It should also have a custom feedback system suggesting a learning plan based on the already attained competences of the scientist.

Andreas C. Lazaris, School of Medicine, National and Kapodistrian University of Athens, Greece

Dr Andreas C. Lazaris is a pathologist with an 18-year continuous teaching experience at undergraduate and postgraduate levels in the 1st Department of Pathology of the Medical School of Athens National and Kapodistrian University in Greece. His contribution to medical education has been acknowledged at his election as a first rank Professor in Pathology at the Athens University Medical School. His scientific work includes every day practice in Diagnostic Pathology and his participation in 261 international scientific publications with approximately 4000 citations in international medical literature.

Hipon E-Learning Programme

Andreas C. Lazaris, Greece

In pathology training, one of the current, hardest and most important tasks is the conversion of the extensive amount of available data into medical experience. This challenge is linked with an innovative project entitled “ICT *e* modules on HistoPathology: a valuable online tool for students, researchers and professionals - HIPON” (www.hiponproject.eu) The project has resulted in a multi-language e-learning platform which aims to imprint professional experience in a way that medical students, researchers and professionals can develop their own necessary practical dexterities in the huge field of modern Pathology.

The basic concept underling HIPON's methodology is the introduction of experiential learning based on real cases. Experiential learning is a process through which students develop knowledge, skills, and values from direct experiences; the key element is the student, and knowledge is gained as a result of being personally involved in the pedagogical approach.

By implementing experiential learning, there is a move to a more student-centered view of learning. The educator's most important responsibility becomes to search out and construct meaningful educational experiences that allow students to solve real-world problems; the result is that any abstract, inert knowledge that students used to memorize from dusty textbooks comes alive as they participate in the practical application of knowledge.

HIPON provides an innovative platform, which introduces medical experience in diagnostic practical issues of Pathology. Experiential learning offers rich opportunities for learning for participants and teachers/facilitators. Choosing powerful activities that increase learner involvement, following the experiential learning cycle in reflecting, generalizing and applying learning, giving and receiving valuable feedback in the moment, greatly increase learning retention and the quality of learning for HIPON *e* platform users.

Dan Pelling, Imperial College Health care NHS Trust, UK

Dan started as a trainee MLSO in Haematology and Blood Transfusion in 1988, when life, and laboratory medicine, was much more simple. He began work at St Mary's NHS Trust in London in 1992 as a Biomedical Scientist. St Mary's NHS Trust, along with the Hammersmith Hospital, Charing Cross Hospital and Chelsea and Westminster Hospital became Imperial College Healthcare NHS Trust and as such, he can say that he has worked for Imperial College Healthcare NHS Trust for 24 years – on and off. In the mid '90s Dan came out of laboratory medicine, returned to university to study Forensic Medicine, Traumatology and Criminal law and subsequently worked with the police as an instructor at the National Crime Scene Training Centre. This eventually led to a short period where he entered teaching full time but ultimately, his roots brought him back to laboratory medicine. However, while Dan was working as a band 7 senior BMS his interest in forensic medicine saw him undertake a medical qualification through St George's Hospital in London, which along with his teaching experience has helped him develop a range of skills which he currently brings daily to his

role as Laboratory manager, back at St Mary's Hospital, London. Outside of work, Dan plays the guitar, ice skates, is a SCUBA diving instructor and a huge Ice Hockey fan.

eMedicineImage

Dan Pelling, UK

Movement of healthcare professionals between countries has never been easier as a result of many geographical, economic and educational borders being removed through a number of harmonisation processes. However, language can still present a considerable obstacle to many who wish to practise in a foreign country and undertaking continuous professional development in a foreign language may sometimes mean that the full benefit of the learning opportunity afforded by the exercises is not realised. e-MEDICINimage is an on-line CPD programme accessible from any IT platform which delivers a powerful educational tool in a language that best complements the learning style of the user. It is available for haematology, parasitology and mycology programmes in 9 languages and currently has had uptake across the world in 48 countries. The full power of technology helps deliver 21st century interactive case studies with which the participant engages by performing tasks, answering questions and submitting responses. The participants'' submissions are complemented by individualised personal feedback from language-specific tutors who are renowned experts on their fields. e-MEDICINimage is an international CPD tool developed by experts to help create the experts of tomorrow.

Monica Fitzpatrick, ACSLM, Ireland

Monica is the CPD Officer for 6 organisations in Ireland: The Academy of Clinical Science and Laboratory Medicine, Association of Clinical Biochemists in Ireland, Biomedical & Clinical Engineering Association of Ireland, Irish Academy of Audiology Irish Association of Orthoptists, Irish Play Therapy Association, and Phlebotomists Association of Ireland.

Electronic CPD Portfolio

Monica Fitzpatrick, ACSLM, Ireland

Continuous Professional Development (CPD) can be any activity where an individual learns new skills or enhances knowledge relevant to their professional role. That learning can take place in an informal or formal setting. By providing evidential reassurance of keeping abreast of changes and developments in our field, we are clearly demonstrating our fitness to practice as a Health Care Professional.

On-line CPD systems are becoming a popular medium for maintaining records in a safe and secure environment. The Academy CPD system has integrated sections where members can record their activities, book events and engage in Reflective Practice. Through Personal Development Planning (PDP) long and short term goals can be set and training needs can be identified and planned. This process facilitates the best possible outcome for Medical Scientists, the Laboratory and ultimately our Patients and Service Users. Evidence is Key

Poster Presentations

Austria

CPD in Austria – Reality & Outlook

Sylvia Handler, Birgit Luxbacher, Ute Seper
biomed austria – Österreichischer Berufsverband der Biomedizinischen AnalytikerInnen)

History of CPD in Austria
Biomedical scientists are legally required to pursue their profession according to the latest scientific standards and findings, including the use of state-of-the-art methods for their analyses. The extent, however, to which they are obliged to participate in further training and continuing education, is not explicitly determined by their professional law. In order to keep up with European standards of Continuing Professional Development, the Austrian Association of Higher Medico-Technical Professions (MTD-Austria), in cooperation with its seven member associations, has been seeking to develop and consequently legally implement an Austrian CPD directive.

Achievements for Austrian Biomedical Scientists in CPD
In 2011 a general CPD directive (MTD-CPD-Richtlinie) was published for the first time and consequently adapted for biomedical scientists and other higher medico-technical professions. In 2013 the first biomedical scientists received their CPD certificates proving the development of their professional skills after finishing their basic training at school, academy or university level.

CPD Reality and Facts in Austria
Although the CPD directive is not mandatory, 63 biomedical scientists, by collecting 100 CPD points in three years, have received their CPD certificates since the official launch of the directive in 2013.

Challenges and Outlook for CPD in Austria
We have to keep on promoting our profession and trying to anchor the CPD directive in our professional law. Austrian politics and public health institutions partly still have to be convinced of the importance of Continuing Professional Development for health professionals to ensure sustainable, state-of-the-art health services for patients and clients.

Conclusion
The key to successfully maintaining CPD in Austria is to continuously adapt the CPD directive, strengthen the professional ethics of biomedical scientists and other health professionals and make them aware of the importance of documenting lifelong learning.

Literature

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Estonia

CPD for Biomedical Scientists in Estonia

P. Mee[1], M. Remm[2]
[1]Tartu University Hospital [2]Tartu Health Care College

Continuous professional development (CPD) is of the utmost importance to a professional biomedical laboratory scientist. Association of Estonian Biomedical Laboratory Scientists (trademark - ***E****esti*

B**ioanalüütikute **Ü**hing, **EBÜ) is a non-profit organization, which connects Estonian biomedical scientists, biomedical science students and lectors. Main functions of association are:

- ✓ sustaining the profession of biomedical scientist;
- ✓ the main objective is to organize continuous professional development of biomedical laboratory scientists; etc..

In Estonia there is no mandatory CPD program for biomedical scientists. Although indicatively health care workers need to go through 40 hours per year professional training. EBÜ has offered specific trainings from 1992. All participants will receive a certificate of participating the. The training methods are:

- ✓ lecture, including small group tutorials;
- ✓ observance of demonstrations (live or video);
- ✓ practice under supervision;
- ✓ testing or identification of specially provided samples.

Continuing education for practicing biomedical scientists is also offered by the Biomedical Science Curriculum of Tartu Health Care College. Continuing education courses have taken place for 5 years, being designed for biomedical scientists, their aim is teaching competent collaboration partners. College has offered those courses in different towns in Estonia, the courses themes are:

- ✓ supervising the practical training of biomedical science students;
- ✓ course of tutoring and reviewing the diploma paper of biomedical scientists.

The first includes the process of learning and supervising in the context of practical training, factors of learning environment and their design etc. The second is mainly dedicated to developing the skill of reviewing, but deals also with tutoring.

Ireland

Continuous Professional Development: Keeping Track of Activity

Marie Culliton, Monica Fitzpatrick, Pauric Reilly, Margo Mitchell, Irene Regan
The Academy of Clinical Science and Laboratory Medicine, Dublin, Ireland.,

Participation in Life Long Learning and Continuous Professional Development (CPD) is becoming the norm for Biomedical Scientists. Evidence of activity is required to satisfy employers, regulators and accrediting bodies. Maintenance of records, on an ongoing basis, presents a challenge for busy Biomedical Scientists.

The Academy of Clinical Science and Laboratory Medicine has been promoting and supporting CPD for its members for over 20 years.

The Academy of Clinical Science and Laboratory Medicine has purchased and customised a CPD system for its members. This system permits maintenance of the record of qualifications, professional competences and certificates of meeting attendance. The system facilitates personal development planning and reflective practice allowing the Biomedical Scientist to link their CPD to their development plan. Information can be captured on customised reports for preparing Curriculum vitae, performance appraisal or to satisfy the requirements of the regulator

This CPD record management system is a valuable tool for both the Academy and its members.

Norway

Challenges and achievements in implementing a Specialist Certification Programme for Biomedical Laboratory Scientists in Norway

Vibeke Furuly, Marie Nora Roald
NITO The Norwegian Institute of Biomedical Science, Oslo, Norway

Background:
To obtain the title Biomedical Laboratory Scientist with Specialist Certification, the applicant must be authorized as a BLS in Norway and be a member of the Norwegian Institute of Biomedical Science (BFI), in addition to submitting documentation that he/she has completed the following requirements; specialized practice, further education, upgrading, given written and oral presentations and written a paper within his/her chosen field.
Certification must be renewed every five years. Renewal is less extensive and is intended to ensure that the candidate remains á jour within his or her chosen field.

Challenges:

- Spread information about the Specialist Programme.
- Make all Laboratory managers believe in and support the Specialist Programme.
- Motivate BLS to go for the extra effort required to obtain Specialist Certification.
- Relevant further education and upgrading courses must be available.

Achievements:

- 18 BLS' with Specialist Diplomas, of these, four have reached their first five-year limit, and all have renewed their Specialist Diplomas.
- BLS' with Specialist Diplomas have achieved salary raise and/or new positions within their fields.

- BLS' with Specialist Diplomas are pursued as consultants and speakers.

Conclusion:

Has the Specialist Programme succeeded? Yes, but there is still a way to go for the Specialist Programme to be recognized as a supplement to academic Master degrees, motivate future BLS to apply for the Specialist Certification and make all laboratory managers embrace the Specialist Programme.

Portugal

Continuous Professional Development in Portugal - State of Art -

Lucília Vicente[1,2], Diana Nogueira[1,3], Paulo Polónio[1,4], Almerindo Rego[1] and Fernando Mendes[1,5]

1 – Sindicato Nacional dos Técnicos Superiores de Saúde na Área do Diagnóstico e Terapêutica, Porto, Portugal; 2 – Laboratório de Patologia Clínica, Unidade de Portimão, Centro Hospitalar do Algarve, Faro, Portugal; 3 – Laboratório de Patologia Clínica, Hospital de S. João Porto. Porto, Portugal; 4- Laboratório de Medicina Laboratorial, Hospital Distrital da Figueira da Foz, E.P.E., Figueira da Foz, Portugal; 5 -Inst Politec Coimbra, ESTeSC, Department of Biomedical Laboratory Sciences, Coimbra, Portugal.

Unfortunately, Continuous Professional Development (CPD) in Portugal it is not mandatory now a day, although if Biomedical Scientist (BMs) wish to progress on is career, the Portuguese System recognizes several activities that can be taken in consideration in order to evaluate the BMs investment on the profession and his own career pathway. Actually the career has five categories. To move and up from the base to the top several phases must happen.

We start as 2nd class BMs, 1st class BMs, principal BMs, specialist BMs and specialist 1st class BMs.

To get the next category we have to be evaluated by peers who are above us in category and in professional experience.

This evaluation is made not only by interviews where the goals are established and the BMs have to write a critical report with all the activities, as well as formal and informal CPD.

The activities that are by law recognize as CPD are: attending congresses and courses International and National, doing post graduate studies, present oral communications or posters International and National, write scientific articles among other activities.

In order to be scientifically and professionally updated and due to the fact that we are Health Professionals, we think that CPD is highly recommended, only due to the CPD we will be able to develop and increase the patient care.

Sweden

Who is Responsible for Continuous Professional Development (CPD) for Biomedical Scientists in Sweden?

Anne Berndt[1], Agneta Colliander[2,3], & Gabriella Lillsunde Larsson[2,3]

[1]Vårdförbundet (the Swedish Association of Health Professionals), Stockholm, Sweden
[2]IBL (Swedish Institute of Biomedical Laboratory Science), Stockholm, Sweden
[3]Department of Laboratory Medicine, Örebro University Hospital, Örebro, Sweden

Background: International Standard ISO 15189 provides requirements for competence and quality of medical laboratories adopted by medical laboratories in over 60 countries around the world. In Sweden, registered health care professionals are required by law to perform their duties according to current scientific and evidence-based experience. This means that all practicing, registered professionals are obliged keep up-to-date with progress in their respective fields. The Swedish Institute of Biomedical Laboratory Science (IBL) launched a comprehensive CPD model in 1996 that was discontinued after 12 years due to lack of interest from both practicing biomedical scientists and their employers. Sweden currently has no organized CPD program for registered biomedical scientists placing the responsibility for lifelong learning on the individual professional. Annual plans are made up in work places regarding individual and group level professional development and appropriate resources are set aside to accomplish this.

Challenges: The absence of national system/model for organization and documentation, means CPD models must be developed locally. In times of staff shortages and cutbacks, CPD may take a backseat to more immediate issues in the workplace.

Current efforts: Health care needs competent, specialized, motivated biomedical scientists. The professional body, IBL, as well as other organizations provide specialist courses and conferences in different disciplines for the biomedical scientist. Vårdförbundet and IBL have lobbied for a nationally regulated, specialist education for biomedical scientists in order to ensure career path mobility and promote salary development. As part of collective bargaining for health care professionals, Vårdförbundet has implemented education employment positions for registered nurses and is working to extend this to biomedical scientists and radiographers.

Conclusion: While CPD is required of Swedish professionals and employers indirectly by law, it is not formally organized and takes a wide range of forms. Although, the ultimate responsibility resides with the individual professional, both professional and employer must work together to ensure quality CPD is a sustainable reality.

United Kingdom

CPD in the UK

In the UK Biomedical scientists have statutory regulation with the Health and Care Professions Council and must confirm they continue to meet the standards for CPD when they renew their registration every 2 years.

The HCPC standards require registrants to
maintain a continuous, up-to-date and accurate record of their CPD activities;
demonstrate that their CPD is a mixture of learning activities relevant to current and future practice;
ensure that their CPD has contributed to the quality of their practice and benefits the service user;
and finally, be able to present a written profile containing evidence of their CPD.
The Institute of Biomedical Science does not have a mandatory requirement for CPD, but it does actively encourage CPD as part of its commitment to good professional practice.

The Institute provides an on-line CPD e-portfolio facility for members to record and monitor activities in 5 categories: professional, formal educational, self-directed learning, work-based learning and other activities such as voluntary work.

These encourage a flexible approach to CPD which can be achieved through everyday work activities such as: engagement with other professionals, learning new techniques introduced into the laboratory, incidents that may occur, training opportunities (as a trainer or recipient), reading journals, and attending conferences.

The ePortfolio is designed to enable members to critically analyse and reflect on their learning experiences and record the resulting benefits to their professional practice and development.

The IBMS awards CPD diplomas to encourage members to hit a 'CPD target. Those who complete a minimum of 24 activities (from at least 3 different categories) in a period of 2 years and provide a reflective statement on each of these activities will be awarded a CPD Diploma in recognition of their efforts.

In summary the IBMS sees the practice of CPD as a **continuous process of active engagement with learning** and **professional activities with recognisable outcomes and benefits**.