

# REGISTRATION EQUIVALENCE PORTFOLIO FOR THE CERTIFICATE OF COMPETENCE

# (BIOMEDICAL SCIENTIST)

**Institute of Biomedical Science** 12 Coldbath Square London ECIR SHL

Tel 020 7713 0214 Web www.ibms.org Email equivalence@ibms.org Version 3

# **Personal Details**

Name:

**Employment address:** 

Date Portfolio commenced:

**Date Portfolio completed:** 

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) of 30 Version 3 (09/19)

# **Contents**

	Page No
Introduction	4
Completion of Registration Equivalence Portfolio and Portfolio of Evidence	5
Section One – Professional Conduct	8
Module 1 – Personal Responsibility and Development	9
Module 2- Equality and Diversity	12
Module 3 – Communication	13
Module 4 – Patient Records and Data Handling	15
Module 5 – Professional Relationships	17
Section Two – Professional Practice	19
Module 1 – Application of Professional Knowledge	20
Module 2 – Health and Safety	22
Module 3 – Quality	23
Module 4 – Performing Standard Tests	25
Module 5 – Research and Development	27
Declarations	28
Resources and Reference Documents	29

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: www.ibms.org Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) Version 3 (09/19)

# 1. Introduction to the Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

- 1.1 The Institute of Biomedical Science (the Institute/IBMS) Registration Equivalence Portfolio has been updated against the revised standards of proficiency for biomedical scientists that the HCPC published in December 2014.
- 1.2 Due to the overlapping nature of some standards of proficiency individual standards have been grouped into modules that relate to areas of practice under two sectional heading: Professional Conduct; Professional Skills and Standards.
- 1.3 Professional Conduct

This is core to the principles of fitness to practise and is defined by standards that relate to professional roles and conduct. The relevant modules grouped under Professional Conduct are:

- Module 1: Personal Responsibility and Development
- Module 2: Equality and Diversity
- Module 3: Communication
- Module 4: Patient Records and Data Handling
- Module 5: Professional Relationships

#### 1.4 Professional Skills and Standards This is core to the principle of applicants being able to show they have the skills required to practise as a biomedical scientist.

- Module 1: Application of Professional Knowledge
- Module 2: Health and Safety
- Module 3: Quality
- Module 4: Performing Standard Investigations
- Module 5: Research and Development

#### 2. Completion of Registration Equivalence Portfolio and Portfolio of Evidence

- 2.1 All applications for equivalence are made against the Institute's Registration Equivalence Portfolio and thereby the HCPC standards of proficiency for biomedical scientists, regardless of the specialism or role. Applicants will be issued with the Institute's Registration Equivalence Portfolio only if they successfully meet the screening criteria. This portfolio is the framework against which their qualifications, professional training, experience and competence are mapped.
- 2.2 Applicants must present their evidence against the sections of the portfolio in the order in which the portfolio is constructed. The content and level of the curriculum detailed in the Programme Handbook should be used to guide the choice of evidence.
- 2.3 A mapping template is provided as an integral part of the Registration Equivalence Portfolio. The applicant must demonstrate, using the mapping template provided, how the portfolio of evidence supports each standard of proficiency. There must be no gaps or blank areas. One piece of evidence can be used in support of more than one standard.
- 2.4 The portfolio of evidence should contain: a contents list; a covering statement of no more than 1000 words that summarises their professional training and development (including relevant periods of secondment), their current role and how this comes together to show how the standards of proficiency are demonstrated (i.e. a summary of the primary sources of evidence); and the supporting evidence.
- 2.5 The supporting evidence must be clearly indexed and cross referenced to the mapping template. The portfolio of evidence may contain a number of differing types of evidence from periods of relevant education and training or employment/experience. Applicants are strongly advised to study the curriculum and outcomes carefully, and ensure that their training and experience covers the range of standards of proficiency contained therein.
- 2.6 Candidates are expected to understand how the HCPC standards of conduct performance and ethics apply to their practice
- 2.7 Candidates are expected to provide evidence that services users and learners in other relevant professions. have been involved in their own development.
- 2.8 Table 1 sets out some examples of evidence that may be submitted against the three main curriculum categories. Please note, this is for guidance purposes and applicants may submit more or less information in different formats for each standard of proficiency. There should be a variety of evidence types.

#### Table 1: Examples of Evidence

Curriculum	Route Source for Evidence	Examples of Evidence
Academic	Type of qualification,	Relevance against standards is summarized in a
Subject Content (based on	subject areas, dates qualified, curriculum	personal statement.
education, qualifications and experience)	Current knowledge	Examples how applicant has maintained theoretical knowledge and develop new knowledge
	Employment	CV and employment history Statements of competence from appropriately qualified supervisors Employer's reference
		Please note: statements by the candidate alone are not acceptable as evidence of their knowledge
Professional	Personal Responsibility	Personal reflection
Conduct	and Development	Personal development plan CPD
	Equality and Diversity	Personal statement
	Communication	Minutes demonstrating participation in team meetings, presentations
	Patient Records and Data	Evidence from working practices
	Handling	Personal reflection, staff structure, job role (e.g. team leader)
	Professional Relationships	Representative appointments, e.g. committee membership, advisory panel, specialist interest group
Professional Skills and Standards	Application of Professional Knowledge	Employer reference Evidence of training Job description Case studies
		Participation in scientific meetings

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL

Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) of 30 Version 3 (09/19)

H	lealth and Safety	Personal reflection Health reference Risk assessments
Q	Quality Assurance	Working practices. Personal statement Audit
Q	uality Control	Working practices. Personal statement
	erforming Standard vestigations	Working practices. Personal statement Employer reference Evidence of training Job description
	esearch and vevelopment	Degree project (abstract only required) List of published papers Poster s/presentations

- 2.9 The portfolio of evidence is the applicant's opportunity to demonstrate experience gained and competency achieved. The layout should be clear and the content should be well chosen, explicit, concise and readable. Statements of attendance or participation in meetings or training are, on their own, insufficient. They must be supported by personal reflection and a concise description on how the experience helped in achieving a particular competence. Evidence of 'hands-on' experience is important and should be supported by witness testimonies from qualified and where appropriate, professionally registered, individuals.
- 2.10 The portfolio of evidence must demonstrate a thorough understanding of the subject matter. Evidence should be carefully selected a few well-chosen examples will be more valuable than a mass of poorly organized material.
- 2.11 The portfolio of evidence should NOT include a detailed day to day diary or logbook, the full text of any case studies, theses, projects or essays summaries should be provided. The portfolio should NOT contain any original reference material, standard operating procedures, or other published documents.
- 2.12 Evidence must respect the requirements of data protection and confidentiality.
- 2.13 Further guidance is available in *Certificate of Competence by Equivalence (Biomedical Scientist) Guidance for Candidates* and the *Curriculum Handbook*.

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

- Module 1 Personal Responsibility and Development
- Module 2 Equality and Diversity
- Module 3 Communication
- Module 4 Patient Records and Data Handling
- Module 5 Professional Relationships

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) of 30 Version 3 (09/19)

#### **Module 1: Personal Responsibility and Development**

You are required to demonstrate an understanding of contractual responsibilities and expected behaviour of a biomedical scientist. The HCPC standards of conduct, performance and ethics and the Institute of Biomedical Science Code of Conduct and Guide to Good Professional Practice are reference points, together with other organisational and national/international standards. As a registered biomedical scientist you must be able to recognise the responsibilities you have for your own professional behaviour and its impact on others, the level of accountability that comes with your responsibility for completing tasks and procedures, for using judgment within broad parameters and being able to reflect on this and other learning opportunities to inform self-development. Central to this is the contribution of healthcare science to patient care, patient safety, service delivery, research and development. All biomedical scientists must understand the direct or indirect impact of their work on patients and patient care.

In the context of service users there are three areas of practice that are considered appropriate when interpreting the standards of proficiency:

- i) Patients or carers in clinics and/or wards where there is direct contact with biomedical and clinical scientists;
- ii) Professional groups that have direct patient healthcare role which relies on pathology services including clinical laboratory investigation, advice, treatment evaluation and research;
- iii) Service providers that employ biomedical and/or clinical scientists for services that contribute to the patient healthcare pathway.

Kn	owledge	Location of Evidence
Re	gistered biomedical scientists must:	
1.	Know the limits of their practice and when to seek advice or refer to another professional (HCPC SoP 1.1)	
2.	Recognise the need to manage their own workload and resources effectively and be able to practise accordingly (HCPC SoP 1.2)	
3.	Understand the need to act in the best interests of service users at all times (HCPC SoP 2.1)	
4.	Understand what is required of them by the Health and Care Professions Council (HCPC SoP 2.2)	
5.	Understand the need to respect and uphold the rights, dignity, values and autonomy of service users including their role in the	

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

	diagnostic and therapeutic process and in maintaining health and wellbeing (HCPC SoP 2.3)	
6.	Recognise that relationships with service users should be based on mutual respect and trust (HCPC SoP 2.4 – joint with 'c' below)	
7.	Know about the current legislation applicable to the work of their profession (HCPC SoP 2.5)	
8.	Be aware of the British, European and International Standards that govern and affect pathology laboratory practice (HCPC SoP 2.6)	
9.	Understand the importance of obtaining informed consent (HCPC SoP 2.7 – joint with 'd' below)	
10.	Understand the need to maintain high standards of personal and professional conduct (HCPC SoP 3.1)	
11.	Understand the importance of maintaining their own health (HCPC SoP 3.2)	
12.	Understand both the need to keep skills and knowledge up to date and the importance of career-long learning (HCPC SoP 3.3)	
13.	Recognise that they are personally responsible (HCPC SoP 4.4 – joint with 'k' below).	
14.	Understand the importance of participation in training, supervision and mentoring (HCPC SoP 4.6)	
15.	Understand the value of reflection on practice and the need to record the outcome of such reflection (HCPC SoP 11.1)	

	mpetence gistered biomedical scientists must be able to:	Location of Evidence
a)	Practice safely and effectively within their scope of practice (HCPC SoP 1)	
b)	Practice within the legal and ethical boundaries of their profession (HCPC SoP 2)	
c)	Maintain high standards of care even in situations of personal incompatibility (HCPC SOP 2.4 – joint with '6' above)	

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL

Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

d)       Obtain informed consent (HCPC SoP 2.7 – joint with '9' above)         e)       Exercise a professional duty of care (HCPC SoP 2.8)         f)       Maintain fitness to practise (HCPC SoP 3)         g)       Practice as an autonomous professional, exercising their own professional judgement (HCPC SoP 4)         h)       Assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem (HCPC SoP 4.1)         i)       Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)         j)       Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)         k)       Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l)       Make and receive appropriate referrals (HCPC SoP 4.5)         m)       Reflect on and review practice (HCPC SoP 11)         n)       Change their practice as needed to take account of new developments or changing contexts (HCPC SoP 14.1)			
f) Maintain fitness to practise (HCPC SoP 3)         g) Practice as an autonomous professional, exercising their own professional judgement (HCPC SoP 4)         h) Assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem (HCPC SoP 4.1)         i) Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)         j) Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)         k) Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l) Make and receive appropriate referrals (HCPC SoP 4.5)         m) Reflect on and review practice (HCPC SoP 11)         n) Change their practice as needed to take account of new	d)	Obtain informed consent (HCPC SoP 2.7 – joint with '9' above)	
g)       Practice as an autonomous professional, exercising their own professional judgement (HCPC SoP 4)         h)       Assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem (HCPC SoP 4.1)         i)       Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)         j)       Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)         k)       Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l)       Make and receive appropriate referrals (HCPC SoP 4.5)         m)       Reflect on and review practice (HCPC SoP 11)         n)       Change their practice as needed to take account of new	e)	Exercise a professional duty of care (HCPC SoP 2.8)	
in professional judgement (HCPC SoP 4)         h) Assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem (HCPC SoP 4.1)         i) Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)         j) Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)         k) Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l) Make and receive appropriate referrals (HCPC SoP 4.5)         m) Reflect on and review practice (HCPC SoP 11)         n) Change their practice as needed to take account of new	f)	Maintain fitness to practise (HCPC SoP 3)	
of the problem and call upon the required knowledge and experience to deal with the problem (HCPC SoP 4.1)i) Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)j) Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)k) Justify their decisions (HCPC SoP 4.4 – joint with '13' above)l) Make and receive appropriate referrals (HCPC SoP 4.5)m) Reflect on and review practice (HCPC SoP 11)n) Change their practice as needed to take account of new	g)		
treatment or the use of techniques or procedures, and record the decisions and reasons appropriately (HCPC SoP 4.2)         j)       Initiate resolution of problems and be able to exercise personal initiative (HCPC SoP 4.3)         k)       Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l)       Make and receive appropriate referrals (HCPC SoP 4.5)         m)       Reflect on and review practice (HCPC SoP 11)         n)       Change their practice as needed to take account of new	h)	of the problem and call upon the required knowledge and	
initiative (HCPC SoP 4.3)         k) Justify their decisions (HCPC SoP 4.4 – joint with '13' above)         l) Make and receive appropriate referrals (HCPC SoP 4.5)         m) Reflect on and review practice (HCPC SoP 11)         n) Change their practice as needed to take account of new	i)	treatment or the use of techniques or procedures, and record the	
I) Make and receive appropriate referrals (HCPC SoP 4.5)         m) Reflect on and review practice (HCPC SoP 11)         n) Change their practice as needed to take account of new	j)		
m) Reflect on and review practice (HCPC SoP 11) n) Change their practice as needed to take account of new	k)	Justify their decisions (HCPC SoP 4.4 – joint with '13' above)	
n) Change their practice as needed to take account of new	I)	Make and receive appropriate referrals (HCPC SoP 4.5)	
	m)	Reflect on and review practice (HCPC SoP 11)	
	n)	<b>.</b> .	

#### **Module 2: Equality and Diversity**

You must be able to recognise and respect the equality culture and diversity of people and their rights and responsibilities. You are expected to be proactive against discrimination and act as a role model. You must be able to handle a number of competing tensions with an individual themselves or between a group of individuals.

Knowledge	Location of Evidence
Registered biomedical scientists must:	
1. Be aware of the impact of culture, equality and diversity on practice (HCPC SoP 5)	
2. Understand the requirements to adapt practice to meet the needs of different groups and individuals (HCPC SoP 5.1)	

	apetence Istered biomedical scientists must be able to:	Location of Evidence
a)	Practice in a non-discriminatory manner (HCPC SoP 6)	

#### **Module 3: Communication**

You will be expected to apply a variety of communication methods and approaches, appropriate to others and the situation, in order to facilitate and promote constructive outcomes. You will be expected to be able to communicate effectively on difficult, complex and sensitive issues and demonstrate the ability to overcome barriers to communication. This must take into account factors such as age, capacity, learning ability and physical ability, characteristics and consequences of verbal and non-verbal communication and how this could be affected by factors such as age, culture, ethnicity, gender, socio-economic status and spiritual or religious beliefs, assisted communication (use of interpreter).

Applicants who do not have English as their first language and do not have a UK degree are required to provide evidence of English language skills with a minimum International Language Testing System (IELTS) score of 7.0 with no element less than 6.5, or a Test of English as a Foreign Language (TTOEFL) Internet Based Test with a minimum score of 100/120. (HCPC SoP 8.2)

Kno	owledge	Location of Evidence
Reg	sistered biomedical scientists must:	
1)	Understand how communication skills affect assessment of, and engagement with, service users and how the means of communication should be modified to address and take account of factors such as age, capacity, learning ability and physical ability (HCPC SoP 8.3)	
2)	Be aware of the characteristics and consequences of verbal and non-verbal communication and how this can be affected by factors such as age, culture, ethnicity, gender, socio-economic status and spiritual or religious beliefs (HCPC SoP 8.6)	
3)	Understand the need to provide service users or people acting on their behalf with the information necessary to enable them to make informed decisions (HCPC SoP 8.7)	
4)	Understand the need to assist the communication needs of the service users such as through the use of an appropriate interpreter, whenever possible (HCPC SoP 8.8)	
5)	Recognise the need to use interpersonal skills to encourage the active participation of service users (HCPC SoP 8.9)	

Со	mpetence	Location of Evidence
Re	gistered biomedical scientists must be able to:	
a)	Communicate effectively (HCPC SoP 8)	
b)	Communicate in English to the standard equivalent to level 7 of the International English Language Testing System, with no element below 6.5 (HCPC SoP 8.1)	
c)	Demonstrate effective and appropriate verbal and non-verbal skills in communicating information, advice, instruction and professional opinion to service users, colleagues and others (HCPC SoP 8.2)	
d)	Communicate the outcomes of biomedical procedures (HCPC SoP 8.4)	
e)	Select, move between and use appropriate forms of verbal and non-verbal communication with service users and others (HCPC SoP 8.5)	
f)	Use information and communication technologies appropriate to their practice (HCPC SoP 14.34)	

#### **Module 4: Patient Records and Data Handling**

You must be able to demonstrate the knowledge and skills needed to follow correct procedures for recording, sharing, storing and accessing information in the laboratory with respect to your role as a clinical scientist.

Knowledge	Location of Evidence
Registered biomedical scientists must:	
<ol> <li>Understand the importance of maintaining confidentiality (HCPC SoP 7 – joint with 'a' below)</li> </ol>	
<ol> <li>Be aware of the limits of the concept of confidentiality (HCPC SoP 7.1)</li> </ol>	
3. Understand the principles of information governance and be aware of the safe and effective use of health and social care information (HCPC SoP 7.2)	
<ol> <li>Recognise and respond appropriately to situations where it is necessary to share information to safeguard service users or the wider public (HCPC SoP 7.3)</li> </ol>	
<ol> <li>Recognise the need to manage records and all other information in accordance with applicable legislation, protocols and guidelines (HCPC SoP 10.2)</li> </ol>	
6. Understand the risks and possible serious consequences of errors and omissions in both requests for, and results of, laboratory investigations (HCPC SoP 10.3 - joint with 'd' below)	
<ol> <li>Understand the need to adhere to protocols of specimen identification, including bar coding and electronic tag systems (HCPC SoP 10.5)</li> </ol>	
<ol> <li>Understand the importance of backup storage of electronic data (HCPC SoP 10.6)</li> </ol>	

Со	npetence	Location of Evidence
Re	gistered biomedical scientists must be able to:	
a)	Maintain confidentiality (HCPC SoP 7 – joint with '1' above)	
b)	Maintain records appropriately (HCPC SoP 10)	
c)	Keep accurate, comprehensive and comprehensible records in accordance with applicable legislation, protocols and guidelines (HCPC SoP 10.1)	
d)	Recognise and communicate the risks and possible serious consequences of errors and omissions in both requests for, and results of, laboratory investigations (HCPC SoP 10.3 – joint with '6' above)	
e)	Use systems for the accurate and correct identification of patients and laboratory specimens (HCPC SoP 10.4)	

#### **Module 5: Professional Relationships**

You must demonstrate that you can sustain a consistent approach to work relationships in the context of the role of a biomedical scientist in order to achieve the best results for service users. This is achieved by recognising and valuing the contributions of other team members and demonstrating the ability to work effectively with others and develop productive working relationships. This includes the building and sustaining professional relationships as an independent practitioner.

In the context of service users there are three areas of practice that are considered appropriate when interpreting the standards of proficiency:

- i) Patients or carers in clinics and/or wards where there is direct contact with biomedical and clinical scientists;
- Professional groups that have direct patient healthcare role which relies on pathology services including clinical laboratory investigation, advice, treatment evaluation and research;
- iii) Service providers that employ biomedical and/or clinical scientists for services that contribute to the patient healthcare pathway.

Kno	owledge	Location of Evidence
Reg	gistered biomedical scientists must:	
1.	Understand the need to build and sustain professional relationships as both an independent practitioner and collaboratively as a team member (HCPC SoP 9.2)	
2.	Understand the need to engage service users and carers in planning and evaluating diagnostics, treatments and interventions to meet their needs and goals (HCPC SoP 9.3)	
3.	Be aware of the impact of pathology services on the patient care pathway (HCPC SoP 9.5)	
4.	Recognise the role of other professions in health and social care (HCPC SoP 13.3)	
5.	Understand the structure and function of health and social care services in the UK (HCPC SoP 13.4)	
6.	Understand the concept of leadership and its application to practice (HCPC SoP 13.5)	

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL

Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

	<b>mpetence</b> gistered biomedical scientists must be able to:	Location of Evidence	
a)	Work appropriately with others (HCPC SoP 9)		
b)	Work, where appropriate, in partnership with service users, other professionals, support staff and others (HCPC SoP 9.1)		
c)	Contribute effectively to work undertaken as part of a multi- disciplinary team (HCPC SoP 9.4)		
d)	Gather information, including qualitative and quantitative data, that helps to evaluate the responses of service users to their care (HCPC SoP 12.2)		

**IMPORTANT:** In addition to other evidence that may be produced for this module applicants are required to produce a reflective statement on how the engagement with service users and learners from other professions has contributed positively to their professional development.

- Module 1 Application of Professional Knowledge
- Module 2 Health and Safety
- Module 3 Quality
- Module 4 Performing Standard Investigations
- Module 5 Research and Development

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) Page 19 of 30 Version 3 (09/19)

#### **Module 1: Application of Professional Knowledge**

This is the basis for statutory regulation as a biomedical scientist and you must be able to demonstrate a strong knowledge base appropriate to your scope of practice and to the application of skills, laboratory investigations and diagnosis, and to development and evaluation of new and current methods.

Kn	owledge	Location of Evidence
Re	gistered biomedical scientists must:	
1.	Understand the key concepts of the knowledge base relevant to their profession (HCPC SoP 13)	
2.	Understand the structure and function of the human body, together with knowledge of health, disease, disorder and dysfunction relevant to their profession (HCPC SoP 13.1)	
3.	Be aware of the principles and application of scientific enquiry, including the evaluation of treatment efficacy and research process (HCPC SoP 13.2)	
4.	Understand the theoretical basis of, and the variety of approaches to, assessment and intervention (HCPC SoP 13.6)	
5.	Demonstrate knowledge of underpinning scientific principles of investigations provided by clinical laboratory services (HCPC SoP 13.7)	
6.	Understand the role of the following specialisms in the diagnosis, treatment and management of disease: cellular science, blood science, infection science, molecular and genetic science and reproductive science (HCPC SoP 13.8)	

	<b>npetence</b> gistered biomedical scientists must be able to:	Location of Evidence
NEξ	sistered biomedical scientists must be able to.	
a)	Draw upon appropriate knowledge and skills to inform practice (HCPC SoP 14)	
b)	Demonstrate operational management of laboratory equipment to check that equipment is functioning within its specifications and respond appropriately to abnormalities (HCPC SoP 14.14)	
c)	Formulate specific and appropriate management plans including setting of timescales (HCPC SoP 14.17)	
d)	Gather appropriate information (HCPC SoP 14.18)	
e)	Select suitable specimens and procedures relevant to patients' clinical needs, including collection and preparation of specimens as and when appropriate (HCPC SoP 14.19)	
f)	Select and use appropriate assessment techniques (HCPC SoP 14.20)	
g)	Undertake and record a thorough, sensitive and detailed assessment, using appropriate techniques and equipment (HCPC SoP 14.21)	
h)	Undertake or arrange investigations as appropriate (HCPC SoP 14.23)	
i)	Analyse and critically evaluate the information collected (HCPC SoP 14.24)	
j)	Investigate and monitor disease processes and normal states (HCPC 14.25 SoP 14.25)	
k)	Understand the principles of good laboratory practice (HCPC SoP 15.6)	

#### Module 2: Health and Safety

You must demonstrate your responsibility to ensure yourself and others work in accordance with national legislation and organisational policy for health and safety, and your contribution to the evaluation and improvement of procedures.

Kn	owledge	Location of Evidence
Re	gistered biomedical scientists must:	
1.	Understand the need to establish and maintain a safe practice environment (HCPC SoP 15)	
2.	Understand the need to maintain the safety of both service users and those involved in their care (HCPC SoP 15.1)	
3.	Be aware of applicable health and safety legislation, and any relevant safety policies and procedures in force at the workplace, such as incident reporting (HCPC SoP 15.2 – joint with 'a' below)	
4.	Understand the biological hazard groups and associated containment levels (HCPC SoP 13.11)	

	npetence gistered biomedical scientists must be able to:	Location of Evidence
a)	Act in accordance with applicable health and safety legislation, and any relevant safety policies and procedures in force at the workplace, such as incident reporting (HCPC SoP 15.2 – joint with '3' above)	
b)	Work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation (HCPC SoP 15.3)	
c)	Select appropriate protective equipment and use it correctly (HCPC SoP 15.4)	
d)	Establish safe environments for practice, which minimise risks to service users, those treating them and others, including the	

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist) 2 of 30 Version 3 (09/19)

use of hazard control and particularly infection control (HCPC	
SoP 15.5)	

#### Module 3: Quality

You must demonstrate experience of maintaining quality improvement programmes and improving the quality of your own work and that of others against the organisational and professional standards that are used to measure it.

In the context of service users there are three areas of practice that are considered appropriate when interpreting the standards of proficiency:

- i) Patients or carers in clinics and/or wards where there is direct contact with biomedical and clinical scientists;
- ii) Professional groups that have direct patient healthcare role which relies on pathology services including clinical laboratory investigation, advice, treatment evaluation and research;
- iii) Service providers that employ biomedical and/or clinical scientists for services that contribute to the patient healthcare pathway.

Kn	owledge	Location of Evidence
Re	gistered biomedical scientists must:	
1.	Recognise the value of case conferences and other methods of review (HCPC SoP 11.2)	
2.	Be aware of the role of audit and review in quality management, including quality control, quality assurance and the use of outcome measures (HCPC SoP 12.3)	
3.	Be aware of quality assurance programmes, where appropriate (HCPC SoP 12.5 – joint with 'd' below)	
4.	Recognise the need to monitor and evaluate the quality of practice and the value of contributing to the generation of data for quality assurance and improvement programmes (HCPC SoP 12.7)	
5.	Understand the implications of non-analytical errors (HCPC SoP 14.15)	
6.	Know the extent of the role and responsibility of the laboratory with respect to the quality management of hospital, primary	

Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL

Tel 020 7713 0214 Fax: 020 7837 9658 E-mail equivalence@ibms.org Website: <u>www.ibms.org</u> Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)

care and community based laboratory services for near-patient	
testing and non-invasive techniques (HCPC SoP 14.16)	

Со	npetence	Location of Evidence	
Registered biomedical scientists must be able to:			
a)	Assure the quality of their practice (HCPC SoP 12)		
b)	Engage in evidence-based practice, evaluate practice systematically and participate in audit procedures (HCPC SoP 12.1)		
c)	Maintain an effective audit trail and work towards continual improvement (HCPC SoP 12.4)		
d)	Participate in quality assurance programmes, where appropriate (HCPC SoP 12.5 - joint with '3' above)		
e)	Evaluate intervention plans using recognised outcome measures and revise the plans as necessary in conjunction with the service user (HCPC SoP 12.6)		
f)	Select and apply quality and process control measures (HCPC SoP 12.8)		
g)	Identify and respond appropriately to abnormal outcomes from quality indicators (HCPC SoP 12.9)		

#### Module 4: Performing Standard Investigations

You must demonstrate you achieved a high level of competence in performing analytical techniques and procedures in common use at a standard that produces consistently valid results.

You must be able to demonstrate an understanding of the requirements of accuracy and precision of a procedure in the context of diagnosis, monitoring and treatment and the effects of pre- and post-analytical variables, including the effects of confounding factors such as age, pregnancy and drugs.

Kn	owledge	Location of Evidence
Re	gistered biomedical scientists must:	
1.	Understand the techniques and associated instrumentation used in the practice of biomedical science (HCPC SoP 13.10)	
2.	Be aware of the need to assess and evaluate new procedures prior to routine use (HCPC 14.22)	

	npetence gistered biomedical scientists must be able to:	Location of Evidence
a)	Evaluate analyses using qualitative and quantitative methods to aid the diagnosis, screening and monitoring of health and disorders (HCPC SoP 13.9)	
b)	Conduct appropriate diagnostic or monitoring procedures, treatment, therapy or other actions safely and effectively (HCPC SoP 14.2)	
c)	Perform and supervise procedures in clinical laboratory investigations to reproducible standards (HCPC 14.3)	
d)	Operate and utilise specialist equipment according to their discipline (HCPC SoP 14.4)	
e)	Validate scientific and technical data and observations according to pre-determined quality standards (HCPC SoP 14.5)	

Demonstrate proficiency in liquid handling methodologies.	
including preparation of standard solutions and buffers (HCPC SoP 14.6)	
Demonstrate proficiency in practical skills in cellular science, blood science, infection science, molecular and genetic science and reproductive science, where appropriate to the discipline (HCPC SoP 14.7)	
Demonstrate practical skills in the processing and analysis of specimens including specimen identification, the effect of storage on specimens and the safe retrieval of specimens (HCPC SoP 14.8)	
Demonstrate practical skills in the investigation of disease processes (HCPC SoP 14.9)	
Work in accordance with standard operating procedures and conditions (HCPC SoP 14.10)	
Work with accuracy and precision (HCPC SoP 14.11)	
Prepare reagents accurately and consistently (HCPC SoP 14.12)	
Perform calibration and quality control checks (HCPC SoP 14.13)	
Use standard operating procedures for analyses including point of care in vitro diagnostic devices (HCPC SoP 14.26)	
	SoP 14.6) Demonstrate proficiency in practical skills in cellular science, blood science, infection science, molecular and genetic science and reproductive science, where appropriate to the discipline (HCPC SoP 14.7) Demonstrate practical skills in the processing and analysis of specimens including specimen identification, the effect of storage on specimens and the safe retrieval of specimens (HCPC SoP 14.8) Demonstrate practical skills in the investigation of disease processes (HCPC SoP 14.9) Work in accordance with standard operating procedures and conditions (HCPC SoP 14.10) Work with accuracy and precision (HCPC SoP 14.11) Prepare reagents accurately and consistently (HCPC SoP 14.12) Perform calibration and quality control checks (HCPC SoP 14.13) Use standard operating procedures for analyses including point

#### **Module 5: Research and Development**

The overall aim of this module is to ensure that you have the knowledge, skills and experience of the role of research, development and innovation in the context of improving patient healthcare and service delivery.

Knowledge Registered biomedical scientists must:		Location of Evidence
Ne		
1.	Recognise the value of research to the critical evaluation of practice (HCPC 14.30)	
2.	Be aware of a range of research technologies (HCPC 14.31)	

Со	npetence	Location of Evidence
Re	gistered biomedical scientists must be able to:	
a)	Use statistical packages and present data in an appropriate format (HCPC SoP 14.27)	
b)	Demonstrate a logical and systematic approach to problem solving (HCPC SoP 14.28)	
c)	Use research, reasoning and problem solving skills to determine appropriate actions (HCPC SoP 14.29)	
d)	Evaluate research and other evidence to inform their own practice (HCPC SoP 14.32)	
e)	Experiments, report, interpret and present data using scientific convention, including application of SI units and other units used in biomedical science (HCPC 14.33)	

#### **Applicant Declaration**

I confirm that the evidence provided is my own work, demonstrates my professional competence, and that I meet the HCPC standards of proficiency for biomedical scientists.

Signature:		
Date:		

#### **Mentor Declaration**

Surname	Title	
Forename	DOB	Remove this
HCPC no.	IBMS No (if applicable)	
Email Address	Telephone No	
Work Address		
WORK Address	Postcode	

I declare that I have read and understood the HCPC Standards of Proficiency for Biomedical Scientists and can confirm that the named applicant is working at this level and fulfils these standards.

Signature:	
Date:	

# Additional Resources and Reference Documents available on the Institute of Biomedical Science website <u>www.ibms.org</u>

#### 1. https://www.ibms.org/go/registration/become-hcpc-registered

Details of all the institute routes and processes supporting individuals seeking HCPC registration.

#### 2. Good Professional Practice for Biomedical Scientists

Benchmark guidance summarises current regulations and guidance relating to laboratory medicine, provides information on generic requirements set by regulation and clarifies how these relate to biomedical science.

#### 3. Institute's Code of Conduct

The Code consists of principles, which Institute members are expected to observe in the interests of patients care and in order to promote confidence in the profession of biomedical science.

#### 4. Management of Laboratory Training

This benchmark policy outlines best practice for the management and delivery of laboratory training.

#### 5. Institute's CPD scheme

The IBMS CPD scheme encourages members to maintain, improve and extend their knowledge, skills and practice for the purpose of maintaining Continuing Professional Development (CPD).

- 6. Equal Opportunities and Diversity Monitoring Policy IBMS QM 801 https://www.ibms.org/go/members/join-ibms/application-forms
- 7. Complaints Handling Process https://www.ibms.org/go/contact-find-us

About this document		
Title:	Registration Equivalence Portfolio for the Certificate of Competence (Biomedical Scientist)	
Produced by:	Education Department	
Version:	Version 3	
Active date:	September 2019	
Review date:	September 2022	
Contact:	Education Department	
	T: +44 (0)20 7713 0214	
	E: registration@ibms.org	

#### **Copyright and disclaimer**

This document and its contents, including the IBMS logo, are the property and trademarks of the Institute of Biomedical Science. The copyright on this material is owned by the IBMS (unless otherwise explicitly stated). This document, or any part of it, may not be copied, reproduced, republished, downloaded or transmitted in any way, other than for your own personal, non-commercial use. Prior written permission must be obtained from the IBMS, using the contact details above, for any other use of this material. All rights are reserved.

© Institute of Biomedical Science 2018

#### About IBMS Publications

The Institute publishes a wide range of professional and scientific documentation and guidance.

Further information and downloadable publications are available on the IBMS website (www.ibms.org/publications).