

**NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA**



**SENIOR RESIDENCY LOGBOOK FOR  
SUBSPECIALTY OF CHEMICAL PATHOLOGY**

**FACULTY OF PATHOLOGY**

**APPROVED BY THE SENATE ON 1<sup>ST</sup> JUNE, 2023**

**DR F. A. AROGUNDADE, MD FMCP  
COLLEGE REGISTRAR**



**National Postgraduate Medical College of Nigeria  
(NPMCN)**

**FACULTY OF PATHOLOGY**

**CHEMICAL PATHOLOGY**

**SENIOR RESIDENCY TRAINING  
LOGBOOK**

## **PREFACE:**

### **CHEMICAL PATHOLOGY RESIDENCY TRAINING**

To specialize in Chemical Pathology, Trainees must undertake at least four years of training. The objectives of the Chemical Pathology training are to produce individuals capable of managing high quality laboratories and of contributing effectively to the biochemical investigation and management of patients. Training is designed to attract Trainees and maintain their interest - particularly those with the potential to contribute to the advancement of Chemical Pathology. When training is completed, Trainees will be expected to have a comprehensive knowledge of and skills in:

- Biochemistry, physiology, general and special pathology
- The biochemical basis of disease
- The application of results of laboratory tests to the investigation and management of patients, particularly those with biochemical problems
- Analytical techniques
- Efficient laboratory administration and management
- The functioning of health care services in Nigeria
- The investigation of clinical and laboratory problems

The chemical pathologist should be routinely involved in:

- The interpretation of laboratory-derived information on the basis of clinical findings
- Other investigations for the purpose(s) of establishing diagnoses
- Assisting prognoses, indicating management, monitoring treatment and/or detecting complications
  - The Chemical Pathology examination process involves three parts – Primary, Part I and Part II examinations.
  - The **Primary Examination** is made up of the basic sciences and is usually taken before the commencement of the residency program. It is a pre-requisite for entering into the program.
  - **Part I Examination**
  - Trainees take the Part I examination in Chemical Pathology at the end of the second year of training. During the first two years of training, the trainee spends 3 months each rotating through the other pathology specialties (Medical Microbiology and Parasitology, Anatomical Pathology and Haematology/Blood Transfusion)

#### **Grading:**

- A. Well above expectation for stage of training (excellent) - 80% and above
- B. Above expectation for stage of training (very good) -70 to 79%
- C. Meets expectation for stage of training (good) – 60 to 69%
- D. Borderline for stage of training (average) – 50 to 59%
- E. Below expectation for stage of training (below average) – 40 to 49%
- F. Well below expectation for stage of training (unsatisfactory) -<40%

## **1. CHEMICAL PATHOLOGY SEMINAR PRESENTATIONS**

The trainee is expected to attend as well as make seminar presentations that are to be graded and signed. Seminar attendance is to be captured into Departmental Log Sheets and appropriately signed by Departmental Residency Training Coordinator per seminar and the Head of Department.

TITLE	Attended	Presentation
Principles of Laboratory Medicine	10	4
Analytical Techniques and Instrumentation	10	4
Analytes	10	4
Molecular Diagnostics and Genetics	10	4
Pathophysiology	10	4

#### 1B. RECORDS OF CHEMICAL PATHOLOGY SEMINAR PRESENTED

S/N	Date	Wet Practical Session	Grade (A – F, or NA)	Observed/ Attended	Performed/ Presented	Supervising Consultant's Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

<b>13.</b>						
<b>14</b>						
<b>15</b>						
<b>16</b>						
<b>17</b>						
<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						
<b>29</b>						
<b>30</b>						
<b>31</b>						
<b>32</b>						
<b>33</b>						
<b>34</b>						
<b>35</b>						

<b>36</b>						
<b>37</b>						
<b>38</b>						
<b>39</b>						
<b>40</b>						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

**2.CHEMICAL PATHOLOGY WET PRACTICAL**

Proficiency in developing Calibration Curves	Performed
One Step Endpoint assay Calibration Curve eg Glucose	2
Two Steps Endpoint assay Calibration curves e.g. Creatinine	2
Kinetic Assay Calibration curve e.g. creatinine	3
ELISA Based assay Calibration Curve.	5

**2B. RECORDS OF CHEMICAL PATHOLOGY WET CALIBRATION PRACTICAL SESSIONSPERFORMED**

<b>S/N</b>	<b>Date</b>	<b>Wet Practical Session</b>	<b>Grade (A – F, or NA)</b>	<b>Observed/ Attended</b>	<b>Performed/ Presented</b>	<b>Supervising Consultant’s Signature</b>
<b>1.</b>						
<b>2.</b>						
<b>3.</b>						
<b>4.</b>						
<b>5.</b>						

<b>6.</b>						
<b>7.</b>						
<b>8.</b>						
<b>9.</b>						
<b>10.</b>						
<b>11.</b>						
<b>12.</b>						
<b>13.</b>						
<b>14</b>						
<b>15</b>						
<b>16</b>						
<b>17</b>						
<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						

29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

.....

**3. CHEMICAL PATHOLOGY WET PRACTICAL**

TITLE	Observed	Performed
Glucose	NA	1
Creatinine	NA	1
Urea	NA	1
Calcium	NA	1
Total Cholesterol	NA	1
Triglycerides	NA	1
HDL-Cholesterol	NA	1
Uric Acid	NA	1
Total Protein	NA	1
Albumin	NA	1
Protein electrophoresis	NA	2



Enzyme Assays	NA	2
Immunoassay for Tumour Markers/Hormones	5	3

**3B. RECORDS OF CHEMICAL PATHOLOGY WET PRACTICAL SESSIONSPERFORMED**

S/N	Date	Wet Practical Session	Grade (A – F, or NA)	Observed/ Attended	Performed/ Presented	Supervising Consultant's Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14						
15						
16						
17						

<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						
<b>29</b>						
<b>30</b>						
<b>31</b>						
<b>32</b>						
<b>33</b>						
<b>34</b>						
<b>35</b>						
<b>36</b>						
<b>37</b>						
<b>38</b>						
<b>39</b>						
<b>40</b>						

--	--	--	--	--	--	--

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**  
 .....

**4. CHEMICAL PATHOLOGY LABORATORY BENCH WORK**

TITLE	Performed
Glucose /OGTT/HbA1C	10
Electrolytes/Urea/Creatinine	5
Lipid profile	5
Liver enzymes/	2
Bilirubin	2
Cardiac biomarkers	2
CSF analysis	2
Hb Quantification	2
Dynamic Tests: OGTT. Water Deprivation test, Dexamethasone Suppression.Test. etc	1

**4B. RECORDS OF CHEMICAL PATHOLOGY LABORATORY BENCH WORK PERFORMED**

S/N	Date	Wet Practical Session	Grade (A – F, or NA)	Observed/ Attended	Performed/ Presented	Supervising Consultant’s Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						

<b>8.</b>						
<b>9.</b>						
<b>10.</b>						
<b>11.</b>						
<b>12.</b>						
<b>13.</b>						
<b>14</b>						
<b>15</b>						
<b>16</b>						
<b>17</b>						
<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						
<b>29</b>						
<b>30</b>						

31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

.....

**5. CHEMICAL PATHOLOGY LABORATORY BENCH CALL**

TITLE	Performed
Glucose /OGTT/HbA1C	10
Electrolytes/Urea/Creatinine	5
Lipid profile	5
Liver enzymes/	2
Bilirubin	2
Cardiac biomarkers	2
CSF analysis	2
Hb Quantification	2

**5B. RECORDS OF CHEMICAL PATHOLOGY LABORATORY BENCH CALL PERFORMED**

<b>S/N</b>	<b>Date</b>	<b>Wet Practical Session</b>	<b>Grade (A – F, or NA)</b>	<b>Observed/ Attended</b>	<b>Performed/ Presented</b>	<b>Supervising Consultant's Signature</b>
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14						
15						
16						
17						
18						
19						
20						
21						

22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

.....

**6. CHEMICAL PATHOLOGY JOURNAL CLUB/ ARTICLE REVIEW/ CASE PRESENTATIONS**

<b>TITLE</b>	Present
Journal Club/Article Review	5
Case Review and Presentation	5

**6B. RECORDS OF CHEMICAL PATHOLOGY JOURNAL CLUB/ ARTICLE REVIEW/ CASE PRESENTATIONS PERFORMED**

<b>S/N</b>	<b>Date</b>	<b>Wet Practical Session</b>	<b>Grade (A – F, or NA)</b>	<b>Observed/ Attended</b>	<b>Performed/ Presented</b>	<b>Supervising Consultant's Signature</b>
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						



<b>15</b>						
<b>16</b>						
<b>17</b>						
<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						
<b>29</b>						
<b>30</b>						
<b>31</b>						
<b>32</b>						
<b>33</b>						
<b>34</b>						
<b>35</b>						
<b>36</b>						
<b>37</b>						

<b>38</b>						
<b>39</b>						
<b>40</b>						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

.....

**7. CHEMICAL PATHOLOGY WEIGHT & OBESITY/ NUTRITION (METABOLIC) CLINIC ACTIVITY**

<b>TITLE</b>	Consultation
Metabolic Clinic	30

**7B. RECORDS OF WEIGHT & OBESITY/ NUTRITION (METABOLIC) CLINIC ACTIVITY PERFORMED**

<b>S/N</b>	<b>Date</b>	<b>Wet Practical Session</b>	<b>Grade (A – F, or NA)</b>	<b>Observed/ Attended</b>	<b>Performed/ Presented</b>	<b>Supervising Consultant’s Signature</b>
<b>1.</b>						
<b>2.</b>						
<b>3.</b>						
<b>4.</b>						
<b>5.</b>						
<b>6.</b>						
<b>7.</b>						
<b>8.</b>						
<b>9.</b>						

<b>10.</b>						
<b>11.</b>						
<b>12.</b>						
<b>13.</b>						
<b>14</b>						
<b>15</b>						
<b>16</b>						
<b>17</b>						
<b>18</b>						
<b>19</b>						
<b>20</b>						
<b>21</b>						
<b>22</b>						
<b>23</b>						
<b>24</b>						
<b>25</b>						
<b>26</b>						
<b>27</b>						
<b>28</b>						
<b>29</b>						
<b>30</b>						
<b>31</b>						
<b>32</b>						

33						
34						
35						
36						
37						
38						
39						
40						

**NAME & SIGNATURE & DATE OF RESIDENCY TRAINING COORDINATOR**

.....  
**NAME, SIGNATURE & DATE OF HEAD OF DEPARTMENT**

.....  
**8. CHEMICAL PATHOLOGY LECTURES AND UPDATES ON PROGRESS OF PART II DISSERTATION**

Activity	Senior Residency		Date Delivered	Supervising Consultant's Signature and Grade
	S/N	Topic		
Chemical Pathology Lectures	1.			
	2.			
	3.			
	4.			
Updates on Progress	1.			
	2.			

of Part II Dissertati on/Thesis	3.			
	4.			