



# Course Description

This is a 1-week course which aims to equip the post graduate interns with the knowledge, skills and attitude in the proper evaluation, management and follow-up care of patients with common neurological diseases in the acute, chronic and intensive care settings, using the biopsychosocial approach.











- To acquire knowledge on the epidemiology, signs and symptoms, management and treatment of the most common neurological diseases encountered in the hospital setting
  - 1. Cerebral Infarction
  - 2. Intracerebral Hemorrhage
  - 3. Encephalopathy
  - 4. Inflammatory Diseases of the CNS
  - 5. Subarachnoid Hemorrhage
  - 6. Secondary Malignant Neoplasms of the Brain & Cerebral Meninges
  - 7. Acute Symptomatic Seizure
  - 8. Basilar Artery Thrombosis
  - 9. Spinal Cord Diseases
  - 10. Status Epilepticus











- To acquire knowledge on the epidemiology, signs and symptoms, management and treatment of the most common neurological diseases encountered in the outpatient setting
  - 1. Epilepsy
  - 2. Cerebral Infarction
  - 3. Intracerebral Hemorrhage
  - 4. Myasthenia Gravis
  - 5. Parkinson's Disease
  - 6. Malignant Neoplasms of the Brain
  - 7. Headache
  - 8. Inflammatory Diseases of the CNS
  - 9. Hemifacial spasm
  - 10. Bell's Palsy











- To perform a neurologic history and examination appropriately
- To localize the lesion along the neuraxis
- To discuss differential diagnoses based on the history and examination
- To know the appropriate diagnostic examinations and to interpret the results.
  - Routine diagnostics: CBC, blood chemistries, chest x-ray, ECG
  - Neuroimaging Studies (CT scan, MRI, skull and spinal x-rays)
  - CSF studies
  - Neurophysiologic Studies (Electroencephalography, Electromyography and Nerve Conduction Studies)











- To formulate a treatment plan and appreciate the mechanisms of action and discuss the benefits of treatment
- To monitor the progress of patients and their response to intervention using daily Neurologic Examination, Glasgow Coma Scale, Functional Outcome Scales (NIHSS, Barthel Indices, Modified Rankin Scale), Criteria for Brain Death.
- To periodically reformulate management plan/s based on the clinical course and treatment response.
- To recognize neurologic emergencies and initiate supportive measures
- To recognize the need for subspecialty care for patients with neurologic disorders











## Official Time

- Official Hours:
  - 7AM-5PM during weekdays
  - 7:30AM-12noon during weekends and holidays
- Sign on Attendance Sheet on Code Cart
- Late
  - 7:15 AM during weekdays
  - 7:45 AM during weekends
- Absent
  - Beyond 7:30 AM during weekdays
  - Beyond 8:00 AM during weekends







### Schedule

For 3 rotators (without clerks):

POST	SAT	SUN	MON	TUE	WED	THU	FRI
Inpatient Assessment	С	В	Α	С	В	Α	С
DUTY AM (7AM-7PM)	Α	С	В	Α	С	В	Α
OPD	В	Α	С	В	Α	С	В
DUTY PM (7PM-7AM)	В	Α	С	В	А	С	В











#### Schedule

• For 3 rotators (with clerks):

POST	SAT	SUN	MON	TUE	WED	THU	FRI
OPD	С	В	Α	С	В	Α	С
DUTY AM (7AM-7PM)	Α	С	В	Α	С	В	Α
Inpatient Assessment	В	Α	С	В	А	С	В
DUTY PM (7PM-7AM)	В	Α	С	В	А	С	В











## Schedule

For 4 rotators:

POST	SAT	SUN	MON	TUE	WED	THU	FRI
Inpatient Assessment	D	Α	С	В	D	Α	С
OPD	С	В	D	Α	С	В	D
DUTY AM (7AM-7PM)	А	С	В	D	А	С	В
DUTY PM (7PM-7AM)	В	D	Α	С	В	D	А













#### **OUTPATIENT DEPARTMENT**

- 8:00 AM to 12noon at Room 132A
- Chart at least one new patient for reporting and discussion with the OPD Consultant













#### INPATIENT ASSESSMENT

- Attend to new ER consults with Neurologist-on-duty.
- Facilitate work-up needed
- Chart patients who are stable, GCS15 at the discretion of the SNOD/NOD











# Tour of Duty

#### **DUTY TEAM**

- Senior Neurologist-on-Duty (SNOD)
- Neurologist-on-Duty (NOD)
- Intern-on-Duty
- Clerk-on-Duty











## Dities and Resposibilities of the Intern on Duty

PM DUTY (7AM-7PM)

- Together with the ROD, look at newly admitted patients at the ER
- Carry out orders for newly admitted service patients at the ER
  - BE/IV/IFC/NGT
  - Accompany patients to procedures
  - Provide needed paperwork











## Dities and Resposibilities of the Intern on Duty

AM/PM DUTY (7AM-7PM)

While there are no clerks:

- Monitoring of all Neuro patients at the ER
- Attach a vital signs monitoring sheet bedside

Name BP HR RR T O2 GCS Pupils Inotropes/Nicard

Carry a monitoring sheet

Name & L	oc BP	HR	RR	Т	02	GCS	Pupils	Inotropes/ Nicard
Crit1	140/90	88	19	37.4	99%	E4V5M6	3/3 BRT	Ί
Surg 1								











# Glasgow Coma Score

Eye Opening	4	Spontaneous eye opening
	3	Eye opening to tapping/name calling
	2	Eye opening to pain
	1	No eye opening to pain
<b>Verbal Response</b>	5	Oriented
	4	Disoriented
	3	Incomprehensible words
	2	Incomprehensible sounds
	1	No verbal response
<b>Motor Response</b>	6	Follows commands
	5	Localizes to pain
	4	Withdraws to pain
	3	Abnormal flexion to pain
	2	Extends to pain
	1	No motor response to pain











# Monitoring

- Check pupillary size
- Keep MAP 110-130 for CVD infarct patients
- We may use Nicardipine drip, titrate by 5cc/hr (max 15mg or 150cc/hr for 10mg/90pNSS
- MAP= (2DBP + SBP)/3











# Monitoring

- Watch out for:
- Decreasing sensorium
- Progressing neurologic deficit/s
- Persistent headache, vomiting
- Inc BP + bradycardia + bradypnea
- Anisocoria/ sluggish pupils











PATIENT DATABASE (DBRAIN & hardcopies)

- 2 updated Clinical Abstracts
- Summary of Labs (update daily)
- Incoming Notes for all patients
- Progress Notes for all patients
- Outgoing Notes (on last day of rotation for endorsement purposes
- Discharge Summary (updated)











### Duties and Resposibilities of the Intern-in-Charge

- Carry out orders of the RIC
  - BE, IV insertion, Foley/NGT insertion during the day
- Procedures to be done outside office hours are to be endorsed to the IOD
- Drop formal elective and emergency referrals (within the day)
- Accompany patient for procedures INSIDE the hospital











## Lectures and Conferences

 Neurology Lectures include: Neurologic Emergencies, Neuroanatomy and Subspecialty lectures

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 Neurology Small Group Discussions include: Service Rounds, Chief Resident's Rounds, OPD case presentation, Endorsements

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Neurology Clinical Work include: Inpatient care, OPD patient evaluation, Ward Work and 24-Hour duties

•

 Conferences: Grand Rounds, Mortality and Morbidity Review, Brain Cutting (Alternates every Wednesday) Will only attend one of these conferences during the rotation











## Evaluation

- Grades on the following learning activities:
  - Case Management Conference
  - Rounds with the Service Consultant
  - Ward Performance
  - Out-Patient Case Presentation
- Score on the written Examination given at the end of the school year
- Full completion of the 1-week clinical rotation with corresponding duties and responsibilities





# References

- Adam and Victor's Principle of Neurology, 9th edition
- DeMyer, Technique of the Neurologic Examination, 5th edition.
- Martin A. Samuels (editor), Manual of Neurologic Therapeutics, 7th edition.
- Guidelines for the Prevention, Treatment, and Rehabilitation of Brain Attack, by the Stroke Society of the Philippines, 5th Edition
- Kandel, Principles of Neural Science, 4th edition











## Deficiencies and Sanctions

- Tardiness on a non-duty day = 4 hours
- Tardiness on a duty day = 8 hours
- Excused\* absence on a non-duty day = 12 hours
- Excused\* absence on a duty day = 24 hours hours
  - Certification by the college
- Unexcused absence
- Twice the makeup hours for excused absences











## Deficiencies and Sanctions

- No clinical abstract/endorsement notes= 4 hours
- No incoming or outgoing notes = 8 hours
- Failure to drop a referral to co-managing service = 4 hours
- Failure to carry out orders- subject to discretion of resident/s involved, depending on gravity of offense











## Deficiencies and Sanctions

- Tardiness in conferences/ lectures = 4hours
- Absence in conferences/lectures = 8 hours
- No endorsements = Special Assignment/4hours
- Failure to submit evaluation forms on time = 8hours
- Offenses not covered above subject to remedial measures as recommended by the resident/s and concurred with the consultant/s involved











## Reminders

- Submit a 5x8 index card with the following details:
  - Name, Contact number, Age, Sex, Address,
     Emergency Contact number, Hobbies, Motto,
     Favorite color, planned specialization (if any) and
  - a 1x1 picture
- Keep laptops and other valuables in the callroom. (please ALWAYS lock the door)
- When in doubt, call local 2401 to refer!











#### **Consultant Monitors**

- Dr. Carissa Dioquino-Maligaso, MD, FPNA
  - Overall PGI Consultant Coordinator
  - Assistant Chair for Undergraduate Training
- Block consultant
- Service consultant
- OPD consultant











#### Postgraduate Intern Monitors

#### **Resident Monitors**



Athena Kate Antonio, MD
Third Year Resident



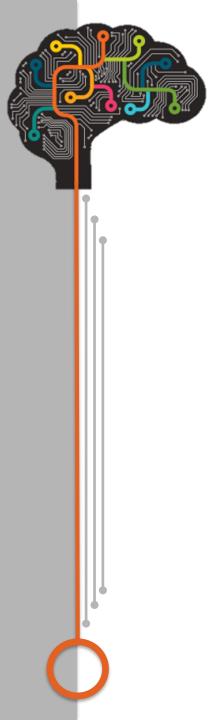
Karen Joy Adiao, MD
First Year Resident











## Section Chief Resident



Joshua Emmanuel Abejero, MD











# Department Chief Resident



Jose Danilo Diestro, MD









