Developing a PMHNP Program with a Fully Integrated Neuroscience Foundation

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Objectives
The learner will be able to...

- Discuss the rationale for full integration of neuroscience principles in PMHNP education.
- Apply framework to the development of a neuroscience based PMHNP program.
- Describe teaching methodologies to support learning in a neuroscience based PMHNP program.

Rationale

- Rapid advances in neuroscience
- Enables more precise diagnoses
- Enables more focused application of therapeutics
- Encourages treatment compliance
- Evidence-based
- Already adopted by psychiatry and psychology
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- Neuroscience:
  - Brain & Nervous System Development
  - Anatomy & Physiology
  - Focus on the function and integration of specific systems (Motor, Sensory, HPA, Limbic) related to complex functions:
    - Pain
    - Anger/Aggression
    - Sleep-Wake/Circadian Rhythm
    - Language, Memory and Cognition
  - Evaluate competency

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- DSM-5
  - Introduction to organization
  - Major classifications
  - Evaluate competency

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- Neuropsychopharmacology
  - Link classes of psychotherapeutics to DSM-5 disorder classifications.
  - Neuroscience-based rationales for psychopharmacological treatment approaches.
  - Use of neuroscience to guide treatment adjustments/address side effects.
  - Neuroscience Education Institute: Master of Psychopharmacology Certificate
- Evaluate competency

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- Neuropsychopathology:
  - Theories and Framework for Practice (Neurobiology, Nursing, Psychiatry, Sociology, etc.)
  - Psychosocial experience & neurobiologic consequences
  - Neuroplasticity
  - Review of neuropsychopharmacology
  - Overview of psychotherapies & neurobiologic rationale for utilization
- Evaluate competency

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- Assessment:
  - Diagnostic interview
  - Neurobiology of symptom clusters
- Diagnosis:
  - DSM-5 criteria
  - Differential diagnosis
  - Making a diagnosis
- Evaluate competency
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Treatment: Healing the brain
- Pharmacological review of:
  - Circuits
  - Enzymes
  - Neurotransmission
- Non-pharmacological
  - Neurobiologic rationale
  - Multimodal therapies
- Evaluate competency

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Clinical Application
- 3 credit course
- 16 hours per week of field application
- 16 hours of performance check offs
- 240 clinical/field study hours

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Neuropsychotherapy:
- Complexity of human experience
  - Domains of age, gender, race and ethnicity, sexual orientation, SES and violence
  - Organization, disorganization and reorganization of experience
  - Experience - epigenetic connection
- Role of the APRN as psychotherapist
- The Therapeutic Relationship
- Evaluate competency
Clinical Application

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  - 16 hours per week of field application
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Case Conceptualization:
- Case conceptualization models
- In-depth look at therapeutic modalities
- Examination of evidentiary support
- Application of therapies to mental health diagnoses
- Evaluate competency

Prevention of mental health disorders
- Allostasis and allostatic load
- Epigenetic influencers
- Care coordination

Management of complex mental health
- Children, antenatal/postnatal, dementia, palliative care/end-of-life, chronic illness
- Dual diagnoses & severe and persistent mental illness
- Principles of neuropsychopharmacology in special populations
- Utilization of genetics
- Evaluate competency
Advance Practice Topics:
- Legalities
- Ethics
- Role in health delivery system
- Interprofessional practice
- Billing compliance and reimbursement
- Documentation and records
- Making practice evidence-based
- Translating scientific advances into clinical practice
- Evaluate competency

Synthesized application:
- Formulation, modification, implementation and evaluation of management plans based on the state of the science -
  - Neuropsychototherapy
  - Neuropsychopharmacology
  - Care continuity across the continuum for individuals, families or groups in the delivery setting throughout the lifespan.
- Evaluate competency

Interprofessional Care Systems:
- Formulation, implementation and evaluation of management plans.
  - Health care providers
  - Administrators
  - Mental health care
  - Health promotion
- Appropriate/safe clinical and administrative judgments
  - Ethical principles
  - Evidence-based strategies
  - State of the science
- Evaluate competency
Clinical Application

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  - 16 hours per week of field application
  - 16 hours of competency checkoffs
  - 240 clinical/field study hours

Teaching Learning Methods

- Flipped Course Delivery
  - Reading Assignments
    - Textbook
    - Practice Guidelines
    - Journal Articles
  - NEI - Master of Psychopharmacology
    - Self-Test
    - Learning Activities
    - Case Study Drills
    - Reinforced in every course

Teaching Learning Methods

- Flipped Course Delivery cont.
  - Mini-lectures
  - Interactive learning quizzes
  - Animation
  - Case study
  - Discussion
  - Simulation
  - Clinical
  - Written and Clinical Evaluation
Psychiatric Mental Health Nurse Practitioner Degrees

Master’s of Science in Nursing
Doctor of Nursing Practice
Post Master’s Certificate