Welcome

New Mexico State University College of Education is pleased to welcome you to the Training Program in Clinical Psychopharmacology. We hope you will find our program challenging, interesting and valuable. Prescriptive authority for psychologists (RxPs) is a relatively new concept within the healthcare industry. As the field of psychology and prescriptive authority for psychologists continues to develop and expand, so does the process of didactic training. Thus, the course content and curriculum will reflect the state of the current field. Our program is progressive and dynamic, making adaptations and modifications to the curriculum as supported by current research.

The program offers an Interdisciplinary Master of Arts Degree through the Department of Counseling and Educational Psychology upon successful completion of post-doctoral studies. The Post-Doctoral Training Program is an APA-designated program and meets the standards set forth in APA’s Criteria for Postdoctoral Education and Training Programs in Psychopharmacology for Prescriptive Authority (2009; See Appendix A) and adheres to all regulations set forth by the New Mexico Board of Psychologist Examiners, New Mexico Board of Medical Examiners and New Mexico state law for prescribing psychologists.

The Student Manual is intended to provide you with a framework of how to advance through the program and to provide you with a guide outlining your rights and responsibilities as a student of the Post-Doctoral Training Program in Clinical Psychopharmacology. Please refer to this manual in case you have questions or concerns during your post-doctoral training.

Please take time to read through this student manual to orient you to important information regarding departmental policies and procedures. For additional information on policies and procedures, please consult the NMSU Student Handbook.

As professional psychologists, it is expected that you will comply with the APA’s Ethical Principles of Psychologists and Code of Conduct (www.apa.org/ethics/code.pdf). As post-doctoral students of New Mexico State University, it is also expected that you comply with the Student Code of Conduct (http://studenthandbook.nmsu.edu/student-code-of-conduct).

In closing, thank you for choosing New Mexico State University in pursuing your post-doctoral training and welcome to our department. Please do not hesitate to contact us with your questions or suggestions for improvement.

Sincerely,

New Mexico State University
Department of Counseling and Educational Psychology
PO Box 30001
Las Cruces, New Mexico 88003
Direct: 575.646.5739
Fax: 888.854.0782
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEPARTMENTAL INFORMATION</strong></td>
</tr>
<tr>
<td><strong>PROGRAM OVERVIEW</strong></td>
</tr>
<tr>
<td><strong>HISTORY OF POST-DOCTORAL TRAINING IN CLINICAL PSYCHOPHARMACOLOGY</strong></td>
</tr>
<tr>
<td><strong>PROGRAM ORGANIZATION</strong></td>
</tr>
<tr>
<td><strong>PHILOSOPHY OF THE NEW MEXICO PSYCHOLOGISTS SEEKING PRESCRIPTIVE AUTHORITY</strong></td>
</tr>
<tr>
<td><strong>MISSION STATEMENT</strong></td>
</tr>
<tr>
<td><strong>HISTORY OF POST-DOCTORAL TRAINING IN CLINICAL PSYCHOPHARMACOLOGY</strong></td>
</tr>
<tr>
<td><strong>HISTORY OF THE SOUTHWESTERN INSTITUTE FOR THE ADVANCEMENT OF PSYCHOTHERAPY</strong></td>
</tr>
<tr>
<td><strong>CURRICULUM PLAN</strong></td>
</tr>
<tr>
<td><strong>CURRICULUM PLAN AND COURSE DESCRIPTIONS</strong></td>
</tr>
<tr>
<td><strong>INTERDISCIPLINARY MASTER’S DEGREE OF ARTS IN PSYCHOPHARMACOLOGY</strong></td>
</tr>
<tr>
<td><strong>CONTENTS DOMAINS</strong></td>
</tr>
<tr>
<td><strong>NEW MEXICO STATE UNIVERSITY GRADUATE CATALOG DESCRIPTION OF COURSES</strong></td>
</tr>
<tr>
<td><strong>PROGRAM REQUIREMENTS</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>PROGRAM POLICIES</strong></td>
</tr>
<tr>
<td><strong>STANDARDS FOR AWARDING CREDIT</strong></td>
</tr>
<tr>
<td><strong>GRIEVANCE PROCEDURES</strong></td>
</tr>
<tr>
<td><strong>TRANSFER</strong></td>
</tr>
<tr>
<td><strong>WITHDRAWAL FROM THE PROGRAM</strong></td>
</tr>
<tr>
<td><strong>TUITION, FEES AND COSTS</strong></td>
</tr>
<tr>
<td><strong>LIFE-LONG LEARNING</strong></td>
</tr>
<tr>
<td><strong>PROGRAM FACULTY AND STAFF</strong></td>
</tr>
<tr>
<td><strong>STANDARDS FOR AWARDING CREDIT</strong></td>
</tr>
<tr>
<td><strong>GRIEVANCE PROCEDURES</strong></td>
</tr>
<tr>
<td><strong>TRANSFER</strong></td>
</tr>
<tr>
<td><strong>WITHDRAWAL</strong></td>
</tr>
<tr>
<td><strong>APPENDIX</strong></td>
</tr>
</tbody>
</table>

A: American Psychological Association Recommended Postdoctoral Education and Training Program In Psychopharmacology for Prescriptive Authority
B: Practice guidelines regarding psychologist involvement in pharmacological issues.
C: Integration of Psychotherapy and Pharmacotherapy by Prescribing/Medical Psychologists; A Psychobiosocial Model of Care
D: Psychopharmacology Program Registration Form
E: Advisory Board
Philosophy of the New Mexico Psychologists Seeking Prescriptive Authority

Vision Statement
Our vision is to have competent mental health care accessible for all New Mexicans, including children, the poor, the elderly, and the silent sufferers – all of whom need and could benefit from our compassion, expertise, commitment and ever present advocacy on their behalf.

Mission Statement
Psychologists are trained in the empirical study and treatment of mental disorders. As our understanding of psychopathology evolves, so must our treatment. It is incumbent upon us to provide comprehensive, timely care that is consistent with the nature of mental health disorders. As scientists trained in the study of behavior, we too can become trained and competent practitioners in the prescription of psychotropic medications. To truncate our treatment plan to fit the exigencies of our patients’ lives is not the solution. The solution is to simultaneously keep ourselves knowledgeable in the field of psychotherapy, to learn the common skill set necessary for the competent administration of psychotropic medications, and to advocate for our patients’ well-being – including access to the full continuum of mental health treatment.

Our society has extended our prescription authority to optometrists, podiatrists, and other non-medical degree professionals. We doctoral level psychologists have shown the ability and determination to learn the curriculum and accept the supervision needed to develop expertise. We psychologists can do that, as shown by the Department of Defense Demonstration Project that trained 10 prescribing psychologists.

The program requirements meet or exceed requirements outlined in the APA Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority.

Action Plan
The program’s action plan is evolving and will be influenced by our Board of Examiners and the New Mexico Psychological Association.

We believe the plan will incorporate the following:

- That we will continue to train psychologists to be effective and safe prescribers of psychotropic medications
- That we develop protocol of treatment that will include:
  - Obtaining relevant family, medical, and psychological histories;
  - Collaborating with primary care physicians;
  - Requesting medical records, including results of physicals, lab work, and lists of medications;
  - Ordering any unavailable baseline and follow-up laboratory tests that are necessary for the safe monitoring of psychotropic medications;
  - Conducting ongoing, objective assessments of patient treatment gains;
  - Ensuring to the extent possible that patients receive comprehensive services, built upon the therapist-patient relationship, so that patients can use their individual strengths to make better choices in their lives.

The twelve psychologists in the first iteration of classes that completed coursework in 2002 developed the vision statement and action plan. Through self-evaluation and self-improvement, the current New Mexico State University program
founder psychopharmacology training at nmsu

Dr. Elaine S. LeVine
Prescribing Psychologist #0001

Center through the Looking Glass 1991- Present
Southwestern Institute for the Advancement of Psychotherapy/
New Mexico State University 2000-2012

Specialty: Clinical Child and Adolescent Psychology

Dr. LeVine initiated the successful RxP campaign in New Mexico which resulted in the first Prescribing Psychologist Act in the United States which remains in effect. New Mexico became the first state to approve RxP legislation in 2002. Dr. LeVine was the first psychologist in New Mexico to obtain RxP in New Mexico.

Dr. LeVine founded the Southwestern Institute for the Advancement of Psychotherapy and initiated the Psychopharmacology Training curricula at New Mexico State University. She served as the Director of Training until 2012 and remains an active member of Advisory Board. Through her efforts and determination, the training program is an international program, training licensed psychologist across the United States, Canada, and the Netherlands. As a result of Dr. LeVine’s continuous efforts, the SIAP/NMSU training program continues to grow and evolve.

Dr. LeVine has published four books and extensive articles on child therapy, law and mental health, cross-cultural therapy, and psychopharmacology. She is the consulting editor for Professional Psychology: Research and Practice. She is a fellow of the American Psychological Association (APA) through which she received 2003 APA Presidential Citation, Carl F. Heiser Award, Division 31 Outstanding Psychologist Award, Division 55 State Contribution to Psychotherapy Award, Division 55 National Visionary Leadership Award, and Division 47, Joan D. Black award.

Dr. LeVine maintains a private practice in Las Cruces, New Mexico.

Thank you Dr. LeVine for your dedication and commitment to the field
Program Organization

The New Mexico State Department of Counseling and Educational Psychology is comprised of APA-accredited undergraduate and graduate-level programs in Counseling Psychology with an emphasis on ethical responsibility and the development of multicultural competencies to work effectively with diverse populations and systems.

To date, New Mexico State University has offered eight iterations of classes in Psychopharmacology to students within the continental United States, Canada and the Netherlands. The majority of the psychologists participating in the program reside in New Mexico, the program has also provided education to psychologists from across the United States and Canada. In 2008 a class of twenty psychologists from the Netherlands completed the training in Psychopharmacology through NMSU in the summer of 2010. There are plans to initiate further international cohorts that would be available to students throughout Europe and Asia, with live classes held in Amsterdam, Netherlands.

Over 90 psychologists have completed the academic coursework from NMSU. The training in Psychopharmacology originated as a certificate program offering Professional Development Credit through New Mexico State University. It progressed to a post-doctoral Master’s Degree in 2008.

Over 30 psychologists who completed Psychopharmacology Training through NMSU have obtained a New Mexico prescriptive authority license and are prescribing psychologists in New Mexico and elsewhere.

Governance Structure

New Mexico State University

MS Clinical Psychopharmacology

The present Department Head is Gladys De Necochea, Ph.D. The Training Director works with a program committee comprised of faculty from NMSU’s Counseling Psychology, Nursing and Special Education departments. The present program committee is Professor Michael Waldo, Department of Counseling and Educational Psychology, New Mexico State University, Enedina Vazquez, Ph.D., Associate Dean, College of Education, Marlin Hoover, Ph.D., College Professor, Department of Counseling and Educational Psychology, New Mexico State University.

In addition, the Training Director of the MS in Clinical Psychopharmacology works with an advisory board. Key leaders in the field serve on this advisory board. The board members for 2014 are listed on a subsequent page.
CoED Organizational Structure

Within the College of Education there are five academic departments: Counseling Education and Psychology, Curriculum and Instruction, Educational Management and Development, Human Performance and Dance, and Special Education and Communication Disorders, and four administrative and/or educational support departments: Deans Office, Advisement, Educational Research and Budgeting, Distance Education, and the Learning Resource Center.
GOALS AND STRENGTHS NEW MEXICO STATE UNIVERSITY'S PSYCHOPHARMACOLOGY TRAINING

One of the strengths of the NMSU Master’s Degree program is that there is much opportunity for hands-on experience and direct interaction with professors.

All professors are trained at the Doctoral level and include prescribing psychologists, psychiatrists, physicians, and clinical nurse specialists. In selecting faculty, experts are drawn from within the state and nationally.

Students complete evaluations of each class. In addition, graduates of the program who are prescribing are surveyed to determine how well they believe the program prepares them to prescribe. The Training Director and the advisory council review this material so the coursework is continuously modified for improvement.

SIAP continues to provide continuing education in “best practice” psychotherapy to psychologists and other professionals. For example, in April of 2010 SIAP sponsored a symposium attended by eighty licensed psychologists and graduate students in counseling psychology, social work, nursing, physicians from the Family Practice Residence Center, and twenty psychologists from the Netherlands regarding critical access to care issues around the world.

NMSU provides coursework that is of cutting edge significance to the field of psychology and crucial to New Mexico psychologists wishing to become prescribing psychologist in order to further access to quality care in New Mexico. In sum, coursework is rigorous and taught by experts in the field so that participants’ knowledge, critical inquiry, and judgment are enhanced.
The NMSU Interdisciplinary Master of Arts program in psychopharmacology designed with the expectation that students will complete courses in sequence as described in detail below. Please refer to the online NMSU Graduate Catalog (www.gradschool.nmsu.edu) for a complete list of courses offered by the Department.

As the program and courses are continuously evolving to meet the current educational requirements, program modifications may be required and are permitted at any time by proper administrative procedure.

The program utilizes the most current approaches to postgraduate education and incorporates interactive case studies presented by faculty and invited guest speakers. Didactic materials presented in each module are closely tied to case studies, discussions and assignments. Psychologists are encouraged to incorporate and develop a “best practice model” based upon a Psychobiosocial Model that improves overall quality of care.

The overall curriculum is divided into five primary units over a 26-month period.

**Prerequisites:** Doctorate in Psychology or consent of instructor. (All Courses)

*Note: The courses within the curriculum are congruent with the College of Education's Conceptual Framework in that it provides a general knowledge background, addresses assessment competencies, and integrates content knowledge and professional knowledge.*

**UNIT I: INTRODUCTION TO PSYCHOPHARMACOLOGY FOR PSYCHOLOGISTS I  CEP 801** 3 Graduate Credits

13.5 CE Credits/Class

- Introduction to Psychopharmacology for Psychologists I: Program Overview, Integrating Psychotherapy and Pharmacotherapy, Introduction to Case History Construction and Analysis and Introduction to Gross Anatomy and Physiology
- Neuroanatomy I: Introduction to Gross Neuroanatomy and Chemical Anatomy of the Nervous System
- Neuroanatomy II: Introduction to Neuroanatomy and Chemical Anatomy of the Nervous System

This course is an introduction to physiology and an overview of gross and microanatomy, with a focus on gross, micro, and chemical anatomy of the nervous system. By the end of the course, psychologists will have an up-to-date understanding of human psychology, anatomy, and neuroanatomy.

**UNIT 2: INTRODUCTION TO PSYCHOPHARMACOLOGY FOR PSYCHOLOGISTS II  CEP 802** 3 Graduate Credits

13.5 CE Credits/Class

- Biochemistry: Introduction to Chemistry and Biochemistry for the Prescribing Psychologist
- Neurophysiology: The Major CNS Neurotransmitters and Effects of Drugs used in Treatment

Principles of organic chemistry and human biochemistry necessary for the understanding of psychopharmacology are discussed and related to the major transmitter systems and dynamics of transmission. By the end of the course, students will have an up-to-date understanding of biochemistry on which to base further didactic study in psychopharmacology.

Students develop a sophisticated understanding of drug action and drug use, as well as learning about specific classes of drugs and their effects and side-effects

**CLINICAL PSYCHOPHARMACOLOGY I  CEP 803** 3 Graduate Credits

13.5 CE Credits/Class

- Principles of Pharmacology I
- Principles of Pharmacology II

This course begins with an introduction to the scope of pharmacology; pharmacoepidemiology, ethical, and legal issues (informed consent, State and Federal regulation of drugs and prescribing, sources of drug information and computer aids) and continues with the principles of pharmacokinetics and pharmacodynamics as they relate to the use of psychotropic medications. It concludes with an introduction to the treatment of anxiety disorders from a biopsychosocial model of care with special emphasis on psychopharmacology for anxiety disorders.
UNIT III: PATHOPHYSIOLOGY AND EVIDENCE-BASED MEDICINE. One weekend a month for nine months, students study a different system of the human body. They learn about the physiology and pathophysiology associated with that organ system, lab tests used to measure functioning, and how to conduct a physical exam. These classes are taught by physicians from the Family Practice Residency Program associated with Memorial Medical Center in Las Cruces, New Mexico. Skills are practiced within the clinic setting. By the end of this unit, students are skilled in conducting physical exams and have a strong understanding of disease conditions and drug effects throughout the body.

PATHOPHYSIOLOGY FOR PSYCHOLOGISTS I  
• Pathophysiology and Physical Assessment of the Integumentary System for Prescribing Psychologists  
• Introduction to the Basic Physical Assessment and Laboratory Assessment  
• Neuropathophysiology and Neurological Disorders for Prescribing Psychologists / Neurological Disorders and Neurological Assessment for Prescribing Psychologists

This course is an introduction to human clinical physical assessment, history taking, charting, and laboratory testing and neuroimaging. An important emphasis is in functional neuroanatomy and diagnosis and assessment of neurological disorders; role of different components of human nervous system in health and disease; stroke, seizures, and movement disorders (chorea, athetos, dystonias, dyskinesias, Parkinsonism, akathesia, iatrogenic neurological disorders).

PATHOPHYSIOLOGY FOR PSYCHOLOGISTS II  
• Pathophysiology and Physiological Assessment of the Cardiovascular and Lymphatic Systems  
• Pathophysiology and Physiological Assessment of the Chest and Pulmonary System for Prescribing Psychologists  
• Pathophysiology and Physiological Assessment of the Immune, Hematologic and ENT System for Prescribing Psychologists  
  o This course continues with study in 3 areas. First, we will discuss the Hematopoetic system and its 3 major "bloodlines"—red cells, white cells and platelets including normal production and disorders of production. Second we will do an in depth study of the immune system including the types of cells responsible for the response and disorders resulting from alterations in the immune system. Finally we will look at the ENT systems reviewing the anatomy, physiology, and some common disorders and their treatments.

Physical assessment and pathophysiology of the cardiovascular system is studied in depth: structure and function of the heart and major blood vessels; innervation of the heart and vessels; electrocardiogram; components of blood; lymphatics; and physical assessment of cardiac function. The physical assessment and pathophysiology of eyes, ears, nose, and the immune system are studied in depth; anatomy and physiology of special senses; assessment of cranial nerves and sensory function; immune function and psychoimmunology. The physical examination and pathophysiology of the chest and pulmonary system and its relationship to the cardiac system is also studied.

PATHOPHYSIOLOGY FOR PSYCHOLOGISTS III  
• Pathophysiology and Physiological Assessment of the Renal and the Male Genitourinary Systems for Prescribing Psychologists  
• Pathophysiology and Physiological Assessment of the Gastrointestinal System for Prescribing Psychologists  
• Pathophysiology and Physiological Assessment of the Endocrine and Exocrine Functions and the Female Reproductive System for Prescribing Psychologists  
• Pathophysiology and Physical Assessment-Advanced Discussion of Psychopathology and Laboratory Assessment for Prescribing Psychologists  
• Head to Toe Physical Examination for Prescribing Psychologists  
• Exam Demonstration by Students
This course continues with an in-depth study of the chest and pulmonary system: pulmonary function and assessment; respiratory exchange and respiratory involvement in acid-base regulation, disorders of respiratory function.

The physical assessment of pathophysiology of the gastrointestinal system is discussed in depth: digestion, absorption and excretion of drugs and nutrients from the GI system; disorders of GI function; hepatic function; innervation of GI tract; endocrine and exocrine functions of GI system; physical assessment of GI function. The functions and pathophysiology of the male and female reproductive system, endocrine system, and renal system are discussed as they relate to psychopharmacology. **Prerequisites:** Doctorate in psychology or consent of instructor.

**UNIT IV: CLINICAL PSYCHOPHARMACOLOGY.** Students learn about the integration of psychotherapy and psychopharmacology in the diagnosis and treatment of the varied mental disorders.

**CLINICAL PSYCHOPHARMACOLOGY II  CEP 804  3 Graduate Credits  13.5 CE Credits/Class**

Clinical Psychopharmacology - Diagnosis and Treatment of Affective Disorders using a Psycho-bio-social Model of Care for Prescribing Psychologists

- Psychopharmacology of Bipolar and Anxiety Disorders for Prescribing Psychologists
  
  This course is a thorough investigation of the diagnosis and treatment of affective disorders from a biopsychosocial model of care. Particular emphasis is given to psychopharmacological treatment of depressive disorders and bipolar disorders.

**CLINICAL PSYCHOPHARMACOLOGY III  CEP 805  3 Graduate Credits  13.5 CE Credits/Class**

- Psychopharmacology of Psychotic Disorders for Prescribing Psychologists
- The Integration of Treatment with Psychopharmacology in the Treatment of Children and Adolescents for Prescribing Psychologists

  This course is an intensive study of the treatment of psychosis from a biopsychosocial model of care. Special consideration is given to: first, second and third generation antipsychotic drugs and their pharmacology and clinical uses; neurological and metabolic disorders associated with antipsychotic use; and appropriate use of antipsychotics in children and the elderly. Special attention is then given to child and adolescent psychopharmacology, including drugs used in pregnancy and lactation, teratogenicity, embryotoxicity, developmental disorders, conduct disorders, ADHD, and special considerations in use of approved drugs in children.

**UNIT V: SPECIAL TOPICS.** This unit focuses on special topics include the treatment of children, elderly, ethnically-diverse groups, pain patients, substance abusers, males and females. Special coursework is also provided regarding ethical and legal issues, with particular reference to the APA Code of Ethics, as well as the Practice Guidelines regarding psychologists’ involvement in pharmacological issues developed by Division 55 (American Society for the Advancement of Pharmacotherapy) Task Force on practice guidelines and adopted by the American Psychological Association Council in 2009 - (APPENDIX B).

**PSYCHOPHARMACOLOGICAL TREATMENT IN SPECIAL POPULATIONS I  CEP 809  3 Graduate Credits  13.5 CE Credits/Class**

- Geriatric Psychopharmacology and Treatment of the Elderly Pain Disorders for Prescribing Psychologists
- Ethno Psychiatry
- Sexual Dysfunction, Gender Considerations, Personality and Eating Disorders for Prescribing Psychologists

The psychopharmacology of several special populations are discussed in detail in this course. Geriatric psychopharmacology includes: geriatric physiology; cardiac, renal, hepatic changes with aging; pharmacokinetics/dynamics in the elderly; cognition enhancers in Alzheimer’s and other dementias. Special treatment of personality disorders, eating disorders, the importance of racial, ethnic, and gender differences and culturally sensitive practice is presented with applications. Pain management psychopharmacology is over-viewed, including: pharmacology of opioid and non-opioid analgesics; pain syndromes; acute and chronic pain; headache; pharmacological and non-pharmacological approaches to pain management; pharmacology and actions of abused substances: acute effects, withdrawal, biochemistry of tolerance and dependence, brain central reward pathways.
PSYCHOPHARMACOLOGICAL TREATMENT OF SPECIAL POPULATIONS II  CEP 810  3 Graduate Credits
13.5 CE Credits/Class

- Pain, Somatoform and Factitious Disorder; Medical comorbidity, chronic medical illness, integrated healthcare, diagnostic rating scales and psychiatric rating instruments
- The Ethical Practice of Integrated Behavioral Care, Ethical Issues and Informed Consent for Prescribing Psychologists
- Synthesis and Overview

The pathophysiology and treatment of substance use disorders from a biopsychosocial model is presented. Issues of medical comorbidity are studied: psychopharmacological treatment in the medically compromised patient, including case studies and review of comprehensive treatment models; mental disorders due to a general medical condition and/or adverse drug reactions; and referral practices to specialists. Diagnostic rating scales and psychiatric instruments of use to the prescribing psychologist are presented. The course ends with an integration of psychotherapy and pharmacotherapy, including ethical issues such as the right to refuse treatment, treatment compliance/adherence, risk management, and the role of the medical psychologist in the modern, integrated healthcare system.

SUPERVISED EXPERIENCE IN PSYCHOPHARMACOLOGY I  CEP 811  3 Credits

In this applied course, students employ their knowledge of psychopharmacology in treatment setting. Students will participate in the treatment of 50 patients for a minimum of 200 hours under the supervision of a physician. **Prerequisite:** Restricted to Post-Doctoral Master’s Programs. **Prerequisite:** Doctorate in psychology or consent of instructor.

SUPERVISED EXPERIENCE IN PSYCHOPHARMACOLOGY II  CEP 812  3 Credits

Continuation and completion of supervised experience in CEP 811. Students will participate in the treatment of 50 patients for a minimum of 200 hours under the supervision of a physician. Restricted to Post-Doctoral Master’s Program.

CAPSTONE PROJECT  CEP 698  1 – 3 Credits

In order to successfully complete the post-doctoral program, the College of Education requires students to complete a capstone project. The capstone project is designed to be more “experiential” projects where students take what they’ve learned throughout the course of their post-doctoral graduate program and apply it to examine a specific idea.

**PREREQUISITES FOR THE CAPSTONE PROJECT**
- Completion of coursework
- Completion of Supervised Experience (I &II)
- Capstone Project is to be completed the semester you plan to graduate and one month before the semester ends

**OVERVIEW OF THE CAPSTONE PROJECT**
- Case study/short essay exam in which the student is required to evaluate a clinical case from the supervised experience
- The student may utilize open resources to complete a case formulation integrating research and evidenced based theory to support the final conclusion. Self-evaluation and critique should also be incorporated.

**ENROLLING FOR CAPSTONE**
- **Completion of CEP 811 & 812 within 1 year of academic coursework**
  - Do Not register again until the semester you plan to graduate
  - Capstone should be completed the semester you plan to graduate
  - Contact the Director of Training for the essay exam
  - Register for CEP 698 (1 Credit)
- **Completion CEP 811 & 812 after 1 year of academic coursework**
  - Student receive an Incomplete for CEP 812 until completed
    - The “I” does not affect the GPA
  - Contact the Director of Training when CEP 812 is completed.
  - Register for CEP 698 (3 Credits)
APPLICATION REQUIREMENTS
The Interdisciplinary Post-Doctoral Master of Arts Degree at New Mexico State University was developed for individuals licensed at the doctoral level as psychologists. **Students are expected to maintain a license throughout the program. Suspension or revocation of the license is grounds for termination from the program.**

Post-doctoral candidates should complete the *Psychopharmacology Program Registration Form* and provide the following supplemental information:
- Copies of graduate transcript(s)
- Copy of current Psychology License
- Verification of good standing from the Board of Psychology.

The registration form can be found online ([http://cep.education.nmsu.edu/academic-programs/clinical-psychopharmacology/admission/](http://cep.education.nmsu.edu/academic-programs/clinical-psychopharmacology/admission/)) and in the Student Manual.

Materials should be submitted to:
Attention: Norma Martinez Arrieta, Student Program Coordinator
MSC 3CEP, PO Box 30001
New Mexico State University
Las Cruces, NM 88003-8001
Email: narrieta@ad.nmsu.edu

.Unofficial copies of graduate and undergraduate coursework are accepted at this stage of the application process. However, only official transcripts will be accepted when formally applying to the NMSU Graduate School (see details below).

NMSU GRADUATE SCHOOL APPLICATION
Once candidates have been qualified for the Clinical Psychopharmacology program, a formal application to the New Mexico State University Graduate School application must be completed online ([http://gradadmissions.nmsu.edu/](http://gradadmissions.nmsu.edu/)) and select “Apply to NMSU”). When you get to the section entitled “Planned Degree and Major” choose the option “Undeclared – Master’s” (this Master’s is an Interdisciplinary Master’s, initially when you apply online you will apply as the undeclared Master of Arts and you will specify it as an interdisciplinary when we fill out your program of study, at a later time.)

- To access the application applicants must create an account.
- This system will allow you to access your application multiple times prior to submission. We recommend reviewing the application to determine required supporting documentation.
- Information and documents you will need when applying:
  - Electronic copies of transcripts
  - Contact information for your recommenders
  - Required supporting documentation for the academic program supplement
  - Credit card information for the $30 Application Fee

Please be aware that once the application is submitted it cannot be edited. Contact the academic department if you would like to send updates to your application supplements. Students may apply two times. If you have already applied twice, please contact University Admissions to release the application.

When you have been accepted in the graduate school you will be given an NMSU Aggie ID number for registration and tuition payment.

University Admissions
[admissions@nmsu.edu](mailto:admissions@nmsu.edu)
(575) 646-3121 or (800) 662-6678
Educational Services Building, Suite A
As this process is continuously updated and revised through NMSU, please contact the Director of Training prior to registration.

Transferring Credits

Students may transfer up to six hours from another post-doctoral program to fulfill the initial two courses in this program in psychopharmacology, if their previous program has received designation from the American Psychological Association. Other potential students who believe they can demonstrate competence over some material can request credit by submitting substantiating material to be reviewed by the Training Director in consultation with the Program Committee.

Norma Martinez Arrieta, M.A.
Student Program Coordinator
Office: 575-646-5485
Fax: 575-646-8035

TUITION AND FEES

Each semester students will register for six credit hours which will give them part time graduate student status through NMSU. If you are interested in applying for student loans, or in deferring current loans, you should contact the NMSU Financial Aid Department.

Tuition and University fees can be found online (http://uar.nmsu.edu/tuition-fees/) for each academic year. Graduate tuition is assessed to students classified as Graduate, Post Baccalaureate and Non-Degree. The table below provides the current academic year tuition rate.

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<th>2015-2016</th>
<th>TUITION – Las Cruces Campus</th>
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<tr>
<td>Credits Enrolled</td>
<td>Price Per Credit</td>
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<tr>
<td>3</td>
<td>279.50</td>
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LABORATORY FEES

In addition to tuition, there is a monthly program lab fee of $100 (25 months = $2,500). The lab fee provides for additional expenses such as costs for CEU accreditation, lab supplies and travel for out of town expert lecturers.

ADDITIONAL FEES

Students are responsible to purchase the following items:

Supplies and Materials:
- Stethoscope
- Sphygmomanometer
- Tuning Fork
- Pen light
- Reflex Hammer

Textbooks:
- Approximately 10 required textbooks. Textbooks are determined by the instructor and may change upon instructor preference.

Travel Expenses, Lodging and Meals
- Students are responsible for their own travel arrangements, lodging, and meals. Most accommodation settings within the area offer a special NMSU rate, please check when arranging for accommodations.
  - Traveling to NMSU-Las Cruces
  - Our classes are held in Las Cruces, NM which is approximately three and a half hours south of Albuquerque and 45 minutes northwest of El Paso, TX. Typically, flying into El Paso is the most economical option.
Las Cruces is a high desert environment and typically has sunny weather with a large variation between daytime and nighttime temperatures. See Las Cruces Visitors Information for more details.

$9,612 tuition to NMSU + $2500 total NMSU fees = $12,112 plus books and travel expenses – WEBSITE

Estimated Program Costs: MANUAL
Total program costs (plus possible tuition increase in second year):
$9,612 tuition to NMSU + $2500 total NMSU fees = $12,112 plus books and travel expenses

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<th>Cost Per Credit/Session</th>
<th>Credit/Time</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>TUITION</td>
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<td>39</td>
</tr>
<tr>
<td>LAB FEES</td>
<td>100.00</td>
<td>26</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

REGISTRATION PROCESS
All tuition balances must be paid off in order to register. Tuition statements and payments are accessible via my.nmsu.edu.

Since these classes are only open to RxP students, preauthorization is required. The University staff must put your name as eligible for each class. When this is done, the Training Director (or assistant) will contact you by email that you are ready to register and make payment arrangements via MyNMSU.

Students have the option of paying in person, phoning the automated credit card payment system at 646-1680 (from Las Cruces) or 1-888-PAY-NMSU (toll-free), accessing the World Wide Web by using the “PAY-NMSU Online” option or mailing payment to NMSU Accounts Receivable-MSC 4570, P.O. Box 30001, Las Cruces, NM 88003.
Phone credit card and on-line payment systems are available 24 hours a day, 7 days a week. Note: All payments made after 5:00 p.m. Mountain Time are processed on the next business day. You can also call the cashiers directly at (575) 646-4911 or 3927.

WITHDRAWAL FROM THE PROGRAM
If a student needs to withdraw from a course, withdrawal intentions must be submitted to the Director of Training in writing. If a student does not attend class and does not withdraw, university policy dictates that a grade of “F” be given for the course. Students must complete procedures at New Mexico State University to formally withdraw from a class. Students who do not complete the formal withdrawal from the university will be expected to pay full tuition for any semester in which they have dropped out. University rules govern the withdrawal process.

TERMINATION FROM THE PROGRAM
Postdocs are expected to maintain a license throughout the program. Suspension or revocation of the license is grounds for termination from the program. See Program Policies for additional information.

STUDENTS WITH DISABILITIES
If you are a student with a disability and in need for modified accommodations any aspects of the course, it is your responsibility to inform and provide the DOT with the appropriate documentation as early as possible in the semester. The Training Director maintains a personal relationship with each psychologist participant so that any necessary special provisions can be made. NMSU does, of course, allow those with auditory, visual, or other impairments, to make use of any equipment or personnel needed for their successful study. All facilities within the NMSU campus are handicap accessible. You may contact the Services for Students with Disabilities at 575-646-6840 (voice), 575-646-1918 (TTY-TTD) with any questions you may have on issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information provided to the DOT and instructor will be treated confidentially.

FACILITIES
NMSU offers state of the art equipped academic classrooms and simulation skills laboratory rooms. Lectures are projected and recorded for distant education powered by Canvas Adobe Connect and digitally stored for future use.
In collaboration with NMSU School of Nursing, the program offers RxP’s in training the opportunity to learn hands-on skills through simulated patient-care scenarios in a safe learning environment. The School of Nursing’s simulation and skills center is comprised of three lab rooms and two specialized simulation rooms, fully equipped with blood pressure cuffs and instruments for eye and ear assessments. Utilization of SimMan, a high-fidelity manikin that can produce sounds, rising and falling chest, multiple pulse patterns, and ability for students to take blood pressure is also a feature of the physical assessment course and evaluation.

The lecturer and Training Director (or an assistant) are present during class. Only enrolled students and special invited guests may attend. The Training Director reviews copies of all written materials before they are distributed to students. Most material is theoretical and, in those cases, issues of confidentiality are not of concern. The program makes extensive use of interactive cases. In all use of case material, anonymity is maintained and no identifying features are allowed.

**TIME TO COMPLETE THE PROGRAM**

In order for all of your coursework to count towards the Master’s degree, you must complete within a seven year period from the initial course taken, the following:

- 450 academic hours (CEP 801 through CEP 810)
- 80 hour practicum with LICENSED physician
- 100 patient, 400 hour practicum in psychopharmacology
- Capstone Project

You do not need to register for any additional coursework until the semester that you plan to graduate. Any coursework more than seven years old at the time of the Capstone project will not be included in the program.

**PRACTICUM TRAINING**

Students will receive a Practicum Training Manual upon matriculation to the program.
AWARDING CREDIT

CE CREDIT
NMSU is approved by the American Psychological Association to offer continuing education for psychologists through SIAP.

In accordance with APA guidelines and standards, the student or visiting psychologist must complete at least 80% of the activities required to receive CE credits. CE certificates for each class are distributed at the end of the course or may be mailed.

ACADEMIC CREDIT
Course activities associated with the awarding of credit are outlined in the Course Syllabi. The requirements for each course are specified in the syllabi and on the website [www.nmsu.edu/academic-programs/clinical-psychopharmacology](http://www.nmsu.edu/academic-programs/clinical-psychopharmacology)

Participants are expected to complete all courses and exams. To obtain the Interdisciplinary Master of Arts Degree, students must maintain a B average. The 39 hour curriculum is taught through day modules for 26 separate weekends. Five days of classes (the equivalent of 2 ½ weekends of classes) constitute a three credit course as listed in the catalog.

Mandatory in person attendance is required for the following courses for awarded credit:

<table>
<thead>
<tr>
<th>UNIT 1: Introduction to Psychopharmacology for Psychologists I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Psychopharmacology for Psychologists I: Program Overview, Integrating Psychotherapy and Pharmacotherapy, Introduction to Case History Construction and Analysis and Introduction to Gross Anatomy and Physiology</td>
</tr>
<tr>
<td>Neuroanatomy I: Introduction to Gross Neuroanatomy and Chemical Anatomy of the Nervous System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNIT 3: Pathophysiology for Psychologists I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophysiology of the Integumentary System for Prescribing Psychologists</td>
</tr>
<tr>
<td>Physical Assessment of the Integumentary System</td>
</tr>
<tr>
<td>Introduction to the Basic Physical Assessment and Laboratory Assessment</td>
</tr>
<tr>
<td>Neuropathophysiology and Neurological Disorders for Prescribing Psychologists / Neurological Disorders and Neurological Assessment for Prescribing Psychologists</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Pathophysiology for Psychologists II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophysiology and Physiological Assessment of the Cardiovascular and Lymphatic Systems</td>
</tr>
<tr>
<td>Pathophysiology and Physiological Assessment of the Chest and Pulmonary System for Prescribing Psychologists</td>
</tr>
<tr>
<td>Pathophysiology and Physiological Assessment of the Immune, Hematologic and ENT System for Prescribing Psychologists</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pathophysiology for Psychologists III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophysiology and Physiological Assessment of the Renal and the Male Genitourinary Systems for Prescribing Psychologists</td>
</tr>
<tr>
<td>Pathophysiology and Physiological Assessment of the Gastrointestinal System for Prescribing Psychologists</td>
</tr>
<tr>
<td>Pathophysiology and Physiological Assessment of the Endocrine and Exocrine Functions and the Female Reproductive System for Prescribing Psychologists</td>
</tr>
<tr>
<td>Pathophysiology and Physical Assessment-Advanced Discussion of Psychopathology and Laboratory Assessment for Prescribing Psychologists</td>
</tr>
<tr>
<td>Head to Toe Physical Examination for Prescribing Psychologists</td>
</tr>
<tr>
<td>Exam Demonstration by Students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PSYCHOPHARMACOLOGICAL TREATMENT OF SPECIAL POPULATIONS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthesis and Overview</td>
</tr>
</tbody>
</table>
Counseling and Educational Psychology Policy on Academic Misconduct

**Academic Misconduct** - Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to, the following actions:

1. Cheating or knowingly assisting another student in committing an act of cheating or other forms of academic dishonesty.
2. Plagiarism is using another person’s work without acknowledgment, making it appear to be one’s own. Any ideas, words, pictures, or other source must be acknowledged in a citation that gives credit to the source. This is true no matter where the material comes from, including the internet, other student’s work, unpublished materials, or oral sources. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct. It is the responsibility of the student submitting the work in question to know, understand, and comply with this policy. If no citation is given, then borrowing any of the following would be an example of plagiarism:
   - An idea or opinion, even when put into one’s own words (paraphrase)
   - A few well-said words, if these are a unique insight
   - Many words, even if one changes most of them
   - Materials assembled by others, for instance quotes or a bibliography
   - An argument
   - A pattern or idea
   - Graphs, pictures, or other illustrations
   - Facts
   - All or part of an existing paper or other resource

   This list is not meant to include all possible examples of plagiarism. See the University Library’s web page on plagiarism for further examples. (http://lib.nmsu.edu/instruction/index.html)

   It is the policy of the Department of Counseling and Educational Psychology that students found to have committed an act of plagiarism, one or more of the following consequences will occur; and, a written statement outlining the offense and consequences will be placed in the student’s permanent file by the Department Head/Hearing Officer:

   - Redo the assignment with a maximum grade of C
   - Failure of the course assignment;
   - Failure of the course;
   - Academic suspension for one or two semesters;
   - Dismissal or expulsion from the program.

   There is no statute of limitations for an act of plagiarism. Once committed, a student can be held accountable at any time even after the semester has ended.

3. Unauthorized possession of examinations, reserve library materials, laboratory materials, or other course-related materials.
4. Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records.
5. Nondisclosure or misrepresentation in filling out applications or other University records in, or for, academic departments or colleges.
Students who engage in disruptive activities in an academic setting (e.g., classrooms, academic offices or academic buildings) are subject to disciplinary action in accordance with Section IV-Non Academic Misconduct-All Students. Such students are also subject to administrative actions in accordance with the NMSU Graduate and Undergraduate Catalogs.

All students and instructors are obliged to follow the procedure for documenting the offense as described in the Student Handbook under Section II: Academic Misconduct. http://www.nmsu.edu/~vpss/SCOC/student_hand_book.html

GRIEVANCE PROCEDURES

It is hoped that as students proceed through the Psychopharmacology curriculum offered by New Mexico State University, they will feel free to openly discuss any concerns that they may have with the Training Director. As is suggested by the American Psychological Association (APA) Professional Code of Ethics, as professional psychologists, we should first attempt to work through any difficulties by communicating in a collegial fashion.

However, at times, issues do arise that are difficult to resolve on an informal or individual manner. The following guide describes procedures of the program governing such situations. Students are expected to abide by these policies and procedures.

Under normal circumstances, the student should discuss the issue with the instructor/adviser.

If the student is unable to resolve the issue through consultation with the faculty member, the student must submit a written memorandum detailing the grievance to the course instructor or adviser within 30 calendar days of the beginning of the following full (i.e., fall or spring) semester. The person to whom the memorandum is addressed must respond in writing within 30 calendar days to the student.

If the student is not satisfied with the response from Steps 1-2, he or she must submit a written appeal to the department head of the Department of Counseling and Educational Psychology within ten working days of the initial decision. If the student is initiating the appeal at the departmental level, it must be in writing, within 30 calendar days of the beginning of the following full (i.e., fall or spring) semester. The department head must respond in writing within ten working days to the student, the instructor or adviser (if one is involved), and the Dean of the Graduate School.

If after the third step the student or any of the other parties involved is still not satisfied with the response, he or she must present to the Dean of the Graduate School within ten working days a written complaint detailing the nature of the grievance and requesting a Graduate Student Appeals Board hearing.

After receiving a written complaint, the Dean of the Graduate School will determine whether the complaint has merit. If the graduate dean determines that the appeal does not have merit, he or she will inform the appellant and other parties, in writing, within ten working days of receiving the appeal. If the graduate dean decides that the appeal does have merit, he or she will convene the Graduate Student Appeals Board, normally within three weeks. The Graduate Student Appeals Board will conduct, within 60 days of their convening, whatever investigations and deliberations are necessary, and will forward to the Dean of the Graduate School a recommendation to resolve the grievance.

After reviewing the recommendation of the Graduate Student Appeals Board, the Dean of the Graduate School will, within ten working days, inform all parties involved of his or her decision in writing.

The decision of the Dean of the Graduate School is final.

The Dean of the Graduate School may waive the normal time frame for grievances when either party presents compelling evidence justifying such a delay, but grievances must be launched within one year.
IN CASE OF DIFFICULT SITUATIONS

The New Mexico State University Post-Doctoral Clinical Psychopharmacology program is built upon the curriculum recommendations set forth by the American Psychological Association and the New Mexico Prescribing Psychologists Act. Most of the coursework is lecture and case studies presented in an interactive learning format. Each of the course modules ends with a multiple-choice test. Students have an opportunity to meet proficiency if they do not pass the tests. Thus, most of the coursework will not provide undue stress to psychologists who are familiar with academic processes.

A part of this training in psychopharmacology involves an understanding of normal human body and disease processes. Students are expected to learn about pathophysiology, as well as the basics of conducting a physical examination. In order to learn how to conduct a physical examination, students will be expected to practice skills of physical examination with one another. There will be no physical examination on the genitalia. Males will practice with males, and females with females. During the practicing of some of these skills, students may disrobe to their underwear, or to their bathing suit, and will also be covered with an appropriate examination robe.

In the past, these activities have created minimal discomfort for a few psychologists (partly because we have been carefully taught to not touch). However, students in the past have all found that they were able to overcome this discomfort very quickly. At the end of the sequence of courses on pathophysiology and physical assessment, participants will be expected to demonstrate skills of conducting a physical examination before faculty teaching those courses. Participants will be allowed to bring a model (friend, child, spouse) on whom they wish to conduct the examination, or they may use a fellow student as the subject.

If for any reason learning these physical assessment skills would be particularly stressful for a student, it is important to discuss this matter before embarking on coursework. Individual arrangements will be made to try to meet any legitimate concerns by the participants. However, the participants must recognize that learning basic skills of physical assessment are considered an appropriate part of mastery of material to become a prescribing psychologist.

As mentioned above, most other materials within this program would not be expected to be stressful in any unusual way to students. Students are strongly encouraged to talk with the Training Director at any time if a student is unduly stressed by activities of the program.

LIFE-LONG LEARNING

The field of psychopharmacology is exciting and changing daily. Students participating in the NMSU Interdisciplinary Master of Arts in Psychopharmacology are expected to commit to enriching and stimulating life-long learning in the field.

New Mexico psychologists with prescriptive authority must obtain 20 hours of continuing education in psychopharmacology annually. The NMSU program expects all of its graduates to maintain this standard.

In order to facilitate graduates’ efforts of life-long learning, NMSU has always made its new coursework available to its graduates for continuing education credit for a very nominal fee. SIAP partners with NMSU and other programs to provide other opportunities for continuing education in the field.
ADMINISTRATION
Director of Training in Clinical Psychopharmacology

New Mexico State University
Department of Counseling and Educational Psychology
Associate Professor-Director of Training in Clinical Psychopharmacology
PO BOX 30001
Las Cruces, New Mexico 88003-8001
Direct: 575.646.5739
Fax: 888.854.0782
Email: drjovela@nmsu.edu

The Director of Training is responsible for oversight of the program both academically and technically. Any issues or concerns about the Instructor, about the program in general, or about on-going problems should be brought to the attention of the Director of Training.

As the director of training of the NMSU psychopharmacology program and as a licensed clinical psychologist, Dr. Velasquez provides psychotropic medication consultation, cognitive behavioral therapy, interpersonal psychotherapy, trauma resolution therapy, biofeedback, and psycho-education services at La Clinica de Familia, an FQHC. The rural clinic in Chaparral, New Mexico focuses on fulfilling the behavioral healthcare needs of medically involved children and adults including pain, mood and behavioral dysregulation and trauma related manifestations in a primary care integrated healthcare environment. Her clinical duties on the NMSU campus focus on the delivery of psychophysiological and neuropsychological evaluation services of children and adolescents with special needs while incorporating training component across healthcare specialties.

As the NMSU psychopharmacology training director she assumes a leadership position in the growth of the program, recruitment and selection of licensed psychologists for post-doctoral training, recruitment and hiring of medical faculty, monitoring and maintenance of a high quality academic program, credentialing and placement of psychopharmacology post-doctoral residents at various healthcare facilities and support and coordination of supervising MD’s in the post-doctoral practica and residency training component of the program.

Dr. Velasquez’ research interests include cognitive and emotional rehabilitation of children and adolescents suffering catastrophic medical illness, mTBI secondary to chemical and/or mechanical insult and developmental disabilities, including ASD’s and ADHD diagnoses. Pre and post measurements of treatment efficacy related studies will incorporate standard neuropsychological instruments like the NEPSY II and the TOVA, as well as the qEEG. Treatment interventions methods will include EEG Neurofeedback.

Student Program Coordinator

Norma Martinez Arrieta, M.A.
Office: 575-646-5485
Fax: 575-646-8035
Email: Norma.Arrieta

Graduate Assistant

2015-2016  Kristin Rankin
CEP Graduate Assistant for student related questions such as grades, homework submissions, and files

2015-2016  Sajia Afrin Ema
CEP Graduate Assistant for Technology - Canvas for panopto, adode connect, and technology
INSTRUCTORS AND INVITED SPEAKERS
NMSU employs state and national experts in Medicine, Pharmacology, Psychopharmacology and integrates multicultural conceptualization, current research and applied skills in treating disorders within diverse patient populations. The program has also incorporated Cuandera and Native American healers to address mental health and use of medications within specific cultures.

**THIS SECTION SHOULD BE UPDATED**—Once updated, a table will be incorporated sample below

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialty</th>
<th>Practice</th>
</tr>
</thead>
</table>

Gaston Berrios, MD

**Lia Billington, Ph.D.,** Child psychologist and prescribing psychologist, currently practicing in Albuquerque, New Mexico.

**Wanda Borges, CNS,** Clinical Nurse Specialist and nursing faculty, New Mexico State University.

Irene Chiucchini, MD


**Robert Julien, Ph.D.**

**S. Marshall, Ph.D.**

**Kevin McGuinness, Ph.D.,** Prescribing Psychologist and Captain in the Public Health Service. 2014 recipient of the APA Leadership Award in Public Service. Currently in part-time private practice in Las Cruces, New Mexico while stationed in Washington, D.C.

**Marlin Hoover, Ph.D.,** Prescribing Psychologist, Behavioral Medicine Faculty, The Family Practice Residency Center at Memorial Medical Center in Las Cruces, NM.

Sheeba Imran, MD

**Tony Kreuch, Psy.D.,** Neuropsychologist and prescribing psychologist. Staff psychologist for Sandia Labs Health Clinic, Albuquerque, NM.

**Elaine LeVine, Ph.D.,** Prescribing Psychologist, Acting Training Director, NMSU RxP Program; Affiliate Professor, New Mexico State University; Director of the Southwestern Institute for the Advancement of Psychotherapy.

**Mai Oushy, M.D., MPH,** Specializing in obstetrics and gynecology. Ain Shams University School of Medicine, Cairo, Egypt, and college professor, Department of Health, New Mexico State University.
Mario Marquez, Ph.D., Child psychologist and prescribing psychologist, consultant to Bernalillo School District, New Mexico.

Joseph M. Masserano, Ph.D., Associate Professor of Pharmacy at the University of New Mexico in Albuquerque, NM Pharmacy teacher of the year, 2013, 2007, 2006, and 2002.

Claudio Perez-Ledezma, M.D. Physician in practice at La Clinica de Familia, a federally qualified health center in Southern New Mexico.

John Preston, Psy.D., Board certified clinical neuropsychologist and author of numerous texts on psychopharmacology.

Evangelina Ramirez, Clinical Nurse Practitioner Nursing Faculty New Mexico State University, Las Cruces, New Mexico

Mitchell Simson, M.D., Internist and Chemical Dependency Specialist, Chair of Internal Medicine Clinic, University of New Mexico, Albuquerque, New Mexico.

Linda Summers, Ph.D., RN, FNP, Nursing Faculty New Mexico State University, Las Cruces, New Mexico and Family Nurse Practitioner, New Mexico Department of Health.

John Tanner, M.D., Physician in practice at Lovelace Medical Center in Albuquerque, New Mexico specializing in Neurology.
APPENDIX

Appendix A: American Psychological Association Recommended Postdoctoral Education and Training Program In Psychopharmacology for Prescriptive Authority Approved by APA Council of Representatives, 2009

Appendix B: Practice guidelines regarding psychologist involvement in pharmacological issues. Accepted by the American Psychological Association Council 2009, as written by the task force on practice guideline of Division 55, The American Society for the Advancement of Pharmacotherapy.


Appendix D: PSYCHOPHARMACOLOGY PROGRAM REGISTRATION FORM

Appendix E: Nuts and Bolts

Appendix F: POST-DOCTORAL EDUCATION AND TRAINING PROGRAM IN PSYCHOPHARMACOLOGY FOR PRESCRIPTIVE AUTHORITY: Specified Content Domains Identified by APA (2009)
APPENDIX A

American Psychological Association Recommended Postdoctoral Education and Training Program In Psychopharmacology for Prescriptive Authority
Approved by APA Council of Representatives, 2009

INTRODUCTION

Education and training in psychopharmacology for prescriptive authority has evolved rapidly over the past two decades. As of the writing of this document, there were approximately 10 programs in a range of educational contexts offering this training on a postdoctoral basis. As more states pass laws authorizing properly trained psychologists to prescribe it will continue to be necessary to define what is meant by “properly trained psychologists.” Psychology’s ethical responsibility to the public requires that the profession be able to define the training needs and minimum competencies required for prescriptive authority. This document reflects the most current thinking in the field as to the nature of such education and training. It incorporates knowledge and experience derived since the 1996 version of this document, Recommended Postdoctoral Training in Psychopharmacology for Prescription Privileges, became APA policy.

In accordance with Association Rule 30-8.3 requiring that all APA standards and guidelines be reviewed at least every 10 years, and in light of the advances that have been made in prescriptive authority education and training and legislation enacted since the document APA Recommended Postdoctoral Training in Psychopharmacology for Prescription Privileges (1996 Recommended Training) was approved in 1996,1 the Council of Representatives authorized a joint BEA-CAPP Task Force in February 2006 to review the current program requirements and recommend any necessary updates and revisions.

When the original model program standards were developed over a decade ago, few programs existed and no state legislation, enabling psychologists to prescribe, had been enacted. Since then, a number of new programs have developed operating under varying education and training models, and enabling legislation has been passed in two states and one U.S. territory (with legislation pending or planned in several others). These developments clearly called for revisions of the existing policy.

Contextual Framework

The program described in this document is a postdoctoral experience, which is intended to be an extension of doctoral education and training in psychological practice. Accordingly, the scientific basis of pharmacology and its application to clinical practices of prescribing must be viewed in the context of the total complex of factors influencing human psychology. Education and training should reflect the integration of research literature and practice experience on the relationship between psychopharmacological and psychological interventions.

Psychopharmacology education and training for psychologists, while building on training traditions in medicine, pharmacy, and nursing, should be conducted in a manner consistent with the education and training of psychologists. These standards are also designed specifically to meet the needs of practicing psychologists and their patients and are intended, in part, as a service to the public by describing the minimum requirements for this training.

1 The 1996 Recommended Training was based on several earlier documents, including the Department of Defense Psychopharmacology Demonstration Project curriculum, the report of the Blue Ribbon Panel of the Professional Education Task Force of the California Psychological Association, and an initial document prepared by the CAPP Task Force on Prescription Privileges. The final draft of the document was developed by the APA Presidential Working Group and submitted to the APA Council of Representatives.

Application for Psychologists Matriculating through the 1996 Recommended Training

A number of programs have emerged that included many, if not most, of the key elements of the 1996 recommended Training, and many psychologists have completed significant portions of the 1996 Recommended Training through those programs. The revisions found in the present document reflect subsequent advances in learning models and methods of pedagogy, as well as feedback from psychologists who have completed a postdoctoral program in psychopharmacology. Inasmuch as the current document builds on the earlier model, those psychologists who completed programs based on that earlier model can be recognized as meeting the curriculum requirements relevant at the time of their matriculation. To address the needs of those psychologists who completed postdoctoral programs that did not meet all requirements of the 1996 Recommended Training, programs are encouraged to develop policies that would permit, on an individual case basis, the demonstration of competence to meet current program requirements.

Essential Elements

Postdoctoral Education and Training

These standards are intended to describe a postdoctoral experience. This program involves advanced training in a specific content area of psychology representing a significant expansion of scope of practice. The prerequisites for admission to a program continue to be (1) a doctoral degree in psychology; (2) current licensure as a psychologist, and (3) practice as a health services provider as defined by state
law, where applicable, or as defined by APA. The 1996 Recommended Postdoctoral Training Program includes didactic coursework prerequisites that are included now in these standards in the basic sciences and neurosciences domains of instruction. Training programs in psychopharmacology for prescriptive authority can award transfer credit for no more than twenty percent (20%) of the total curriculum hours. This twenty percent shall be limited to the basic science and neuroscience domains of the curriculum.

These standards include three components that reflect an evolution in instruction and assessment from the 1996 Recommended Training. These include integration of didactic instruction and supervised experience, the incorporation of competence based assessment, and incorporation of a capstone competency.

**Integrated Didactic Instruction and Supervised Clinical Experience**

Relevant supervised clinical experiences are now integrated into the sequence of courses. These standards allow psychologists to assimilate new knowledge as it is learned through its application.

The revised curriculum integrates supervised clinical experiences with coursework so that as each content area is addressed in the curriculum, supervised clinical experiences relating to the course content are provided to the participant. Supervised clinical experience remains an important aspect of training. By building such experiences into the sequence of didactic coursework, participants will be able to apply the concepts acquired through coursework at the time that is optimal for cementing learning.

The term “supervised clinical experience” is substituted for the term “practicum” used in the 1996 Recommended Training.

**Addition of Elements of a Competency Model**

The curriculum promotes the integration of knowledge, skills and attitudes fundamental to professional practice with psychopharmacologic interventions. In this context, movement to competency-based models to measure education and training outcomes is occurring across the health professions. These models include both formative (ongoing) and summative (end point) assessment approaches. Various entities within psychology (e.g., the APA Benchmark Competencies Initiative, the APA Policy on Education and Training Leading to Licensure, and the Practicum Working Group on Competencies) are focusing on the identification and assessment of competencies in education and training that have resulted in important changes in how educational outcomes are defined and evaluated. The APA Task Force on the Assessment of Competence in Professional Psychology articulated 15 principles that are a useful resource in this process. By focusing on necessary competencies, these standards are intended to allow maximum flexibility in program design within the parameters of ensuring an optimal educational experience.

**Capstone Competency Evaluation**

To be consistent with a model that emphasizes the mastery of essential competencies, training programs developed under these standards provide a capstone competency evaluation that requires integration of the knowledge, skills, and attitudes the psychologist is expected to master during their matriculation in the program. Two recommended components of this could be a review of a portfolio of cumulative supervised clinical experiences and the application of the knowledge, skills, and attitudes to unrehearsed clinical situations ranging from routine, uncomplicated cases to those of a more complex nature involving multiple medical comorbidities. This evaluation is distinct from any evaluation that focuses exclusively on mastery of information, such as the Psychopharmacology Examination for Psychologists. The capstone competency evaluation is summative and follows demonstration of mastery of multiple, foundational competencies throughout the training program.

**Education and Training in Issues of Diversity**

Programs developed under these standards will continue their commitment to providing training courses and experiences that encourage sensitivity to the interactions between pharmacological interventions with development across the lifespan, gender, health status, and ethnicity of patients. This focus is reflected in both the didactic and experiential components of the program so that psychologists will develop the appropriate skill-based competencies to address diversity in the population being served.

**Designation Process Requirement**

Both the 1996 Recommended Training and these standards are exclusively relevant to the evaluation of programs, not individuals; they are not intended to be used for the evaluation of individuals’ qualifications to engage in any activities related to psychopharmacology. The policies do, however, have important implications for determining whether or not individual psychologists have completed an acceptable course of education and training. The shift to an emphasis on skills-based competencies and away from requirements presumed to be suggestive of the mastery of skills (such as the institutional location of the training, the number of hours allotted to each topic, or the type of credential awarded upon the completion of training) implies that it is the development of critical competencies that should decide whether or not the training is adequate. Experiences to date do not provide a convincing rationale for choosing any given training model over others. Furthermore, it seems prudent to encourage the development of viable alternative routes to training competent practitioners at this still early stage in the development of this area of practice.

The shift to include more of a competency-based model, the breadth of formats in which programs may operate, the integration of didactic coursework and supervised clinical experience, and other significant changes in demonstration of competency and methods of
assessment of competencies require a mechanism to ensure that programs are providing the recommended education and training outlined in these standards. Therefore, APA will establish a formal designation body that represents psychopharmacology education and training programs, educators, relevant basic scientists, relevant public interests and practitioners to establish processes and procedures to evaluate consistency with these standards that will provide a system for assuring that programs are providing education and training presumed necessary for responsible psychopharmacological practices. Although detailed recommendations for establishing an appropriate designation process were beyond the scope of the task force that developed these standards, such a system is important and the establishment of a designation body is critical to establishing and maintaining minimal standards of program quality.

Maintenance of Competencies through Lifelong Learning
Postdoctoral training programs in psychopharmacology for prescriptive authority are rigorous and comprehensive in didactic content, clinical experiences, and the integration of psychological and pharmacological principles. Programs developed under these standards place a special emphasis on preparing psychologists to evaluate future advances in psychopharmacological knowledge and on the critical importance of lifelong learning in psychopharmacological practice.

Summary
These policies and procedures represent changes inherent in a shift toward a competency-based model of learning and assessment in preparation for prescriptive authority, and are intended to set the context for the understanding of the curriculum as further described in this document. Given the rapid evolution of the field, these standards should be reviewed in five years. This review should include a review of the quality assurance systems.

PREREQUISITES FOR ADMISSION TO EDUCATION AND TRAINING PROGRAMS IN PSYCHOPHARMACOLOGY

To participate in postdoctoral education and training in psychopharmacology, programs must require that psychologists meet the following prerequisites:

1. Be a graduate of a doctoral program in psychology;
2. Hold a current state license as a psychologist; and
3. Practice as a “health services provider” psychologist as defined by state law, where applicable, or as defined by APA.2

2 In 1995, the APA Council of Representatives approved the following definition of "health service provider" psychologists: Psychologists are recognized as Health Service Providers if they are duly trained and experienced in the delivery of preventive, assessment, diagnostic and therapeutic intervention services relative to the psychological and physical health of consumers based on: 1) having completed scientific and professional training resulting in a doctoral degree in psychology; 2) having completed an internship and supervised experience in health care settings; and 3) having been licensed as psychologists at the independent practice level.

PROGRAM CHARACTERISTICS

The entire program of education and training should be an organized and sequenced program of instruction at the postdoctoral level. The program is responsible for determining and disseminating admissions standards. The program could develop policies for allowing credit from a previous graduate or postdoctoral education and training program(s). To ensure that the training experience is up-to-date, sequential, and cumulative, transfer of a limited number of credits as appropriate for previous coursework is not to exceed twenty percent (20%) of the postdoctoral curriculum and is to be limited to the basic science and neuroscience domains (Domains I & II). This does not preclude the development of program policies that would permit, on an individual case basis, the meeting of program requirements through a current demonstration of competence obtained through prior postdoctoral education and training. In such unusual cases, program policies should explicitly state the criteria for such decisions, and there should be an accompanying record of the specific competencies demonstrated by the psychologist and those yet to be acquired through the program.

The program is accountable for establishing and demonstrating evidence of appropriate quality assurance mechanisms. As such, the program will demonstrate the following characteristics:

Ethical Standards
The program administrators and faculty will abide by the current Ethical Principles of Psychologists and Code of Conduct of the American Psychological Association.

Mission
The program has a clear and comprehensive mission statement that guides it, is approved by the governing body, and is publicly communicated.

Governance & Administration
The program has sufficient financial resources and access to appropriate physical resources to support its mission. The program has qualified and competent administrators, including a director, with appropriate administrative authority.

The legal authority and operating control of the program are clearly described.
Program Characteristics
- The program is an integrated and organized program of study.
- The program has an identifiable body of students.
- The program is clearly identified and labeled as a postdoctoral education and training program in psychopharmacology for prescriptive authority.
- The program ensures the quality of education and training, including any consortial relationships or contractual agreements.
- The program protects the security, confidentiality, integrity, and availability of student records.
- The program has due process and grievance procedures.
- The program regularly engages in a process of self-evaluation.
- The program ensures that students maintain licensure throughout the program.

Faculty
Faculty and supervisors are qualified and sufficient in number to accomplish the program’s education and training goals. In addition to psychology, the program faculty and supervisors may come from a variety of appropriate disciplines. Faculty will participate in the program’s planning, implementation and evaluation.

Learning Resources
The program provides access to facilities, services, and learning/information resources that are appropriate to support its didactic and experiential teaching, research, and service mission. This may include access to facilities, library materials, and an appropriate array of learning resources.

Further, the program will offer an integrated and sequential program of instruction as evidenced through the following:
1. An organized sequence of courses with relevant syllabi;
2. Frequent evaluation of students’ knowledge and application of that knowledge and feedback to students of outcomes;
3. Periodic program evaluation;
4. Certification of program completion upon demonstration of appropriate level of competence

DIDACTIC INSTRUCTION AND SUPERVISED CLINICAL EXPERIENCE
A competency-based approach entails educational objectives or defined competencies at each level of learning. Competences facilitate demonstration of the ability to perform defined tasks along a continuum with a wide range of possible outcomes. Competencies are conceived as holistic and represent:
- Knowledge of subject matter concepts and procedures
- Performance of behaviors that demonstrate specific skills and abilities
- Problem solving strategies and capabilities that involve elements of critical thinking and ethical responsibility
- Self-reflection that focuses on knowing the limits of one’s knowledge; clarification of attitudes, beliefs, and values; and identification of self-perceptions and motivations in the context of prescriptive authority.

Assessment of the delineated competencies for prescriptive authority includes approaches that integrate evaluation that is both formative (i.e., ongoing corrective feedback that advises for further development) and summative (i.e., determines attainment of a specific competency). Assessment is developmentally informed and conducted using multiple reliable and valid methods and varied sources of information. This approach shifts the focus from exclusively documenting what is taught to one based on demonstrating what students have learned and how they effectively apply didactic instruction in integrated practice. Throughout the curriculum, students will demonstrate threshold performance levels at identified benchmarks of competence across the delineated competencies.

The topics that should be addressed by the psychopharmacology curriculum must cover a broad range of both basic science and clinical content areas with sufficient specificity such that the learner is adequately prepared for the practical application of the knowledge and skills attained. All areas should also address cultural context, including variability due to development across the lifespan, gender, health status, and ethnicity. A foundation of knowledge should be laid so that the learner can continually develop an understanding of and ability to use emerging treatments. This foundation should include instruction in the core principles regarding the implementation and evaluation of research on psychoactive substances.

Didactic Content Areas
The approaches taken to the didactic instruction of content should make use of multiple pedagogical methods. In addition to the provision of knowledge via more traditional means such as readings, lecture and discussion, participants may make use of various means for applying, integrating and thereby broadening their knowledge via the analysis of clinical cases, problem based learning, computerized patients and simulations using layered decision models, and skills-based demonstrations throughout the curriculum.
Recognizing that this is a dynamic field and that subsequent revision may become necessary over time, 400 contact hours, at a minimum, of didactic instruction is expected in the following core content areas (I-VIII).

As programs may develop specific courses using different content integration approaches, these are not meant as specific courses and the contact hours are not broken down into each area. The program must demonstrate that all content is covered and that the students achieve clinical competency in all content areas. Italicized content represents examples of some of the clinical competencies that may be associated with the domain of instruction.

I. Basic Science
   A. Anatomy & Physiology
   B. Biochemistry

II. Neurosciences
   A. Neuroanatomy
   B. Neurophysiology
   C. Neurochemistry

III. Physical Assessment and Laboratory Exams
   A. Physical Assessment
   B. Laboratory and Radiological Assessment
   C. Medical Terminology and Documentation

   Integration of A-C through supervised clinical experience or lab experience in conducting physical exam, ordering psychometric and laboratory tests, understanding results and interpretation

IV. Clinical Medicine and Pathophysiology
   A. Pathophysiology with particular emphasis on cardiac, renal, hepatic, neurologic, gastrointestinal, hematologic, dermatologic and endocrine systems.
   B. Clinical Medicine, with particular emphasis on signs, symptoms and treatment of disease states with behavioral, cognitive and emotional manifestations or comorbidities
   C. Differential Diagnosis
   D. Clinical correlations-the illustration of the content of this domain through case study
   E. Substance-Related and Co-Occurring Disorders
   F. Chronic Pain Management

   Integration of A-F through supervised clinical experience or lab experience in taking medical history, assessment for differential diagnosis, and review of systems

V. Clinical and Research Pharmacology and Psychopharmacology
   A. Pharmacology
   B. Clinical Pharmacology
   C. Pharmacogenetics
   D. Psychopharmacology
   E. Developmental Psychopharmacology
   F. Issues of diversity in pharmacological practice (e.g., sex/gender, racial/ethnic, and lifespan factors related to drug metabolism access, acceptance, and adherence)

   Integration of A-F through supervised clinical experience or lab experience in Clinical Medicine and ongoing treatment monitoring and evaluation

VI. Clinical Pharmacotherapeutics
   A. Combined therapies - Psychotherapy/pharmacotherapy interactions
   B. Computer-based aids to practice
   C. Pharmacoepidemiology

   Integration of A-C through supervised clinical experience or lab experience in integrated treatment planning and consultation and implications of treatment

VII. Research
   A. Methodology and Design of psychopharmacological research
   B. Interpretation and Evaluation of research
   C. FDA drug development and other regulatory processes

VIII. Professional, Ethical, and Legal Issues
A. Application of existing law, standards and guidelines to pharmacological practice
B. Relationships with pharmaceutical industry
   1. Conflict of interest
   2. Evaluation of pharmaceutical marketing practices
   3. Critical consumer

Supervised Clinical Experience
The supervised clinical experience should be an organized sequence of education and training that provides an integrative approach to learning as well as the opportunity to assess competencies in skills and applied knowledge. The intent of the supervised clinical experience is two-fold:
   1. To provide ongoing integration of didactic and applied clinical knowledge throughout the learning sequence, including ample opportunities for practical learning and clinical application of skills.
   2. To provide opportunity for programs to assess formative and summative clinical competency in skills and applied knowledge.

In addition to the didactic hours, the number of hours needed to achieve mastery of clinical competencies is expected to be substantial and will vary across individuals.

The supervised clinical experience is intended to be an intensive, closely supervised experience. The range of diagnostic categories, settings and characteristics such as development across the lifespan, gender, health status, and ethnicity reflected in the patients seen in connection with the supervised clinical experience should be appropriate to the current and anticipated practice of the trainee. It should allow the practitioner to gain exposure to acute, short-term, and maintenance medication strategies.

The trainee gains supervised clinical experience with a sufficient range and number of patients in order to demonstrate threshold performance levels for each of the competency areas. In order to achieve the complex clinical competency skills required for independent prescribing, a sufficient number of supervised patient contact hours must be completed. The supervised clinical training experiences must be approved by the Training Director prior to commencing that placement. The program must document the total number of supervised clinical experience hours that students experience. These must be broken out by face-to-face patient contacts versus other clinical experiences, and the clinical competencies employed.

In addition, the method and appropriate benchmarks for assuring each clinical competency must be described. These methods may include, for example, performing physical examinations and presenting cases based on actual and simulated patients. The trainee recommends/prescribes in consultation with or under a designated supervisor(s) with demonstrated skills and experience in clinical psychopharmacology and in accordance with the prevailing jurisdictional law.

The program is responsible for the approval and oversight of each supervised clinical experience. Final approval of the supervised clinical experience must be provided by the program prior to initiation.

The supervised clinical experience may be integrated into each level of education and training, provided in a final summative practical experience or a combination of both according to the design of the program. The last item in Domains of Instruction, Sections III-VI, encompasses areas where clinical experience can be integrated with didactic instruction.

In either event, the trainee must demonstrate competency in his or her ability to integrate didactic learning and applied clinical skill in a capstone competency evaluation.

There is also a responsibility to maintain competency through continuing education over the lifespan of maintaining and practicing in prescriptive authority or collaborative activities with prescribing professionals.

The clinical competencies targeted by this experience include the following:

1. PHYSICAL EXAM AND MENTAL STATUS
   Knowledge and execution of elements and sequence of both comprehensive and focused physical examination and mental status evaluation, proper use of instruments used in physical examination (e.g., stethoscope, blood pressure measurement devices, etc.), and scope of knowledge gained from physical examination and mental status examination recognizing variation associated with developmental stage and diversity

2. REVIEW OF SYSTEMS
   Knowledge and ability to systematically describe the process of integrating information learned from patient reports, signs, symptoms, and a review of each of the major body systems recognizing normal developmental variations
3. MEDICAL HISTORY INTERVIEW AND DOCUMENTATION
Ability to systematically conduct a patient or parent/caregiver clinical interview producing a patient’s medical, surgical, and psychiatric (if any) history and medication history in cultural context as well as a family medical and psychiatric history, and to communicate the findings in written and verbal form

4. ASSESSMENT: INDICATIONS AND INTERPRETATION
Ability to order and interpret appropriate tests (e.g., psychometric, laboratory and radiological) for the purpose of making a differential diagnosis and for monitoring therapeutic and adverse effects of treatment

5. DIFFERENTIAL DIAGNOSIS
Use of appropriate processes, including established diagnostic criteria (e.g., ICD-9, DSM-IV), to determine primary and alternate diagnoses

6. INTEGRATED TREATMENT PLANNING
Ability to identify and select, using all available data, the most appropriate treatment alternatives, including medication, psychosocial and combined treatments and to sequence treatment within the larger biopsychosocial context

7. CONSULTATION AND COLLABORATION
Understanding of the parameters of the role of the prescribing psychologist or medical psychologist and working with other professionals in an advisory or collaborative manner to effect treatment of a patient

8. TREATMENT MANAGEMENT
Application, monitoring and modification, as needed, of treatments and the writing of valid and complete prescriptions.
APPENDIX B

Practice guidelines regarding psychologist involvement in pharmacological issues.

Accepted by the American Psychological Association Council 2009, as written by the task force on practice guideline of Division 55, The American Society for the Advancement of Pharmacotherapy.

Several factors have converged that will inevitably increase psychologists’ involvement in the medication management of the individuals they serve. One is the increasing use of psychotropic medications for the treatment of psychological disorders, a clinical practice which will be referred to as pharmacotherapy in this document. A national survey of physician records suggested the proportion of the population using antidepressants increased from 6.7% in 1990 to 15.1% in 1998, an increase of 125.4% even after adjusting for population growth (Skaer, Sclar, Robison, & Galin, 2000). According to VandenBos and Williams (2000), practicing psychologists on average estimated that 43% of their current patients were using psychotropic medications. Another factor is the movement for prescriptive authority within psychology. Appropriately trained psychologists are now eligible for prescriptive authority in two states (Louisiana and New Mexico) as well as in the military. With similar legislative agendas emerging in a number of other states, the number of states offering prescriptive authority to psychologists will inevitably increase further.

In response to a series of articles describing the professional challenges faced by psychologists as they become prescribers (e.g., Antonuccio, Danton, & McClanahan, 2003; Buelow & Chafetz, 1996; DeLeon, Robinson Kurpius, & Sexton, 2001; McGrath et al., 2004), it was recognized in discussions among members of the American Psychological Association (APA) Division 55, the American Society for the Advancement of Pharmacotherapy, that the implications of the APA (2002b) Ethical Principles of Psychologists and Code of Conduct (the Ethics Code) specifically for psychologists’ involvement in pharmacotherapy merited clarification. Beth Rom-Rymer, president of the division at that time, convened a task force to explore the issue. Three of seven task force members were psychologists with prescriptive authority in the civilian or military sector. The task force also included representation from Division 18 (Psychologists in Public Service).

Members of the task force reviewed relevant literature and participated in formulating the content of the guidelines. The literature review began with a document titled Policies of Other Organizations and Background Materials: Pharmaceutical Marketing, Gifts, and Financial Support (APA, 2002c), which provided primary sources addressing the relationship between prescribing professionals and the pharmaceutical industry. This document was updated with more recent publications on the topic. Medicine, nursing, pharmacy, and the pharmaceutical industry have all generated guidelines relevant to the objective practice of pharmacology. These were reviewed as well. Finally, the task force considered specific implications of the APA’s (2002b) Ethics Code for psychologists’ involvement in the practice of pharmacotherapy.

The guidelines presented in this document are intended to provide a resource to psychologists interested in the issue of what represents optimal practice in relation to pharmacotherapy. They are not intended to apply to those psychologists who may choose not to become directly or indirectly involved in medication management regardless of their level of competency. As background to these guidelines, it may be noted that psychologists’ activities reflect three different levels of involvement in pharmacotherapy. The first level occurs when the psychologist serves as the prescriber. As indicated above, psychologists currently can only prescribe in the U.S. military and in two states. The population of psychologists with prescriptive authority is therefore small, but is one that is sure to increase in size in the coming years. It should be noted that some psychologists prescribe only through a second license, for example, as a nurse practitioner or physician. Such individuals determine for themselves the degree to which the guidelines presented here for prescribing are relevant to their activities.

The second level occurs when psychologists actively collaborate in medication decision-making. The psychologist is not ultimately responsible for the decision that is made in these circumstances, but does play a substantive role in the decision-making process. VandenBos and Williams (2000) found that 87% of their sample of practicing psychologists reported they had been involved in the decision to prescribe medication for at least one of the patients on their caseloads. However, it is unclear what role they played in the decision, especially since over 80% also indicated this was not a frequent occurrence. On the other hand, 7% of respondents indicated they participated in the decision to prescribe for more than half their patients, suggesting that they were consistently and perhaps formally involved in decisions about the appropriateness of medications for their patients. This might for example include making recommendations concerning specific classes of medications to be used or even specific medications, dosing, or other aspects of the treatment regimen, though the prescribing professional maintains ultimate responsibility for the decision.

The third, and probably most common, level of involvement occurs when psychologists provide information that may be relevant to pharmacotherapy decision-makers. The information-providing psychologist may offer opinions relevant to the pharmacotherapy, but does not play a formal role in the decision-making process. Examples of providing information include reporting concerns about the treatment to the prescribing professional, referring patients for a medication consult, pointing patients to vetted referral or information sources, or discussing with patients how to address their concerns about the medication with the prescriber. It is likely that many of those psychologists who indicated to VandenBos and Williams (2000) that they were infrequently involved in the decision to prescribe did so in an information-providing role. Table 1 summarizes the characteristics of the three roles.

Some of the guidelines presented in this document are targeted specifically at the population of psychologists with prescriptive authority. Others are considered relevant in any case where the psychologist is actively involved in decision-making, whether as a prescriber or collaborator. Still others are considered applicable any time a psychologist is involved in the practice of pharmacotherapy whether as a prescriber, collaborator, or information provider. Given the unique elements of the population of psychologists who can prescribe on the one hand, and the frequency with which psychologists participate in collaborative and information-providing activities on the other, it
was considered important to provide guidelines appropriate to each set of activities. However, it is important to recognize that a principle of optimal practice may have different implications in the context of active participation versus providing information.

Technology-based alternatives to face-to-face contact with patients are proving particularly useful in the conduct of pharmacotherapy (Hyler, Gangure, & Batchelder, 2005). The telephone has dramatically affected the nature of interactions with patients; videoconferencing can expand these options even further, particularly in rural areas. E-prescribing and e-mail correspondence between patients and providers regarding medication will be used more and more as a mechanism for service delivery. For example, prescription renewal can often be safely and efficiently accomplished without face-to-face contact between the prescribing professional and the patient. These guidelines can be considered relevant across all modalities of contact.

Standards versus Guidelines

To clarify the goals of the present document, it is worth summarizing the differences among treatment guidelines (or clinical guidelines), standards, and practice guidelines. Treatment guidelines provide recommendations for clinical interventions that are usually specific to a certain disorder and/or method of treatment (APA, 2002a). Practice guidelines and standards differ from treatment guidelines in that they have to do with general professional conduct in a particular domain of psychological practice. Practice guidelines refer to statements that suggest or recommend general principles of optimal behavior or conduct for psychologists. Guidelines differ from standards in that standards are mandatory and may be accompanied by an enforcement mechanism. Guidelines are instead aspirational in intent. They are intended to facilitate the continued systematic development of the profession and to help encourage a high level of professional practice by psychologists. Guidelines are not intended to be mandatory or exhaustive and may not be applicable to every professional or in every clinical situation. They are not definitive and they are not intended to take precedence over the judgment of psychologists.

Given the degree to which involvement in pharmacotherapy represents a new activity for psychologists, and the level of controversy that has surrounded the use of psychotropic medications in general and the prescriptive authority movement for psychologists in particular, it is tempting to proscribe or mandate certain behaviors or professional practices associated with pharmacotherapy. This is not the intention of the present document. The task force speculated that at some point psychologists may decide it would be judicious to establish standards specific to the conduct of pharmacotherapy. However, such a decision at this time would be premature given the nascent state of prescriptive practice in psychology.

Finally, nothing in these guidelines is intended to contravene any limitations set on psychologists’ activities based on ethical standards, federal or local statutes or regulations, or—for those psychologists who work in agency and public settings—the policies of those agencies in which they provide services. As in all other circumstances, psychologists must be aware of the standards of practice for the jurisdiction or setting in which they function and comply with those standards.

In particular, psychologists who participate in collaboration and providing information should be aware of local statutory and regulatory language or opinions by the state board of psychology concerning their involvement in pharmacotherapy and the use and interpretation of laboratory tests. Fourteen jurisdictions have explicitly identified certain activities related to medication management as within the scope of practice of psychology—California, District of Columbia, Florida, Louisiana (for psychologists without prescriptive authority), Maine, Massachusetts, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Tennessee, and Texas—though the description of permitted activities and circumstances under which they are permitted varies. In contrast, several states have passed legislation prohibiting discussion of medication by school personnel (including psychologists employed by schools). Even so, the legal status of involvement in pharmacotherapy for psychologists who cannot prescribe remains an open question in other jurisdictions.

The Guidelines

The list of guidelines, with the types of activities for which each is relevant, may be found in Table 2.

**General**

**Guideline 1. Psychologists are encouraged to consider objectively the scope of their competence in pharmacotherapy and to seek consultation as appropriate before offering recommendations about psychotropic medications.**

Rationale. Ethical standard 2.01 of the APA (2002b) Ethics Code indicates psychologists provide services within the boundaries of their competence. Two factors complicate psychologists’ efforts to comply with this standard in the context of pharmacotherapy. The first factor is pressure exerted on psychologists to serve in a collaborative or information-providing role. Patients or family members who find it difficult or uncomfortable to request information from the prescriber may look to the psychologist with whom they have established a therapeutic relationship for specific advice. Primary care physicians and other prescribers with limited specialized training in psychological disorders and their treatment, or who do not know the patient as well as the psychologist does, sometimes look to the psychologist for input on the choice of medication.

The second factor affects psychologists at all three levels of involvement, that being the rapidly evolving nature of treatment guidelines in pharmacotherapy. While the psychologist with prescriptive authority faces a statutory obligation to remain current, their level of expertise can vary across treatment populations and classes of medications. The psychologist asked to serve in a collaborative or information-providing role has no similar statutory obligation, though APA has established educational expectations for the psychologist who serves in a collaborative role (American Psychological Association Board of Educational Affairs Working Group on
Psychopharmacology Education and Training; 1997). These factors can combine to create a situation in which psychologists can feel pressured to discuss their patients’ treatment with medication at a level beyond their expertise.

**Implications.** Psychologists are encouraged to evaluate objectively their level of competence for addressing questions raised by other professionals, patients, or significant others. At any level of involvement in pharmacotherapy, psychologists clarify their role in the process and admit the limits of their own competence when appropriate, up to and including refusing to offer an opinion if the psychologist objectively considers doing so to be inappropriate. Particularly when asked to serve as prescribers or collaborators, psychologists are encouraged to consider the extent to which their beliefs about the appropriate course of action comes from reliable sources (such as peer-reviewed journals or reputable summaries of that literature) or from potentially biased or unreliable sources (such as unfamiliar websites, sales representatives, advertisements, or casual conversations with colleagues who may be relying on the same unreliable sources of information). It is important to remember that research suggests health care providers can be susceptible to relying on easily accessible sources of information even when the source of that information is potentially unreliable (Haug, 1997).

**Guideline 2.** Psychologists are urged to evaluate their own feelings and attitudes about the role of medication in the treatment of psychological disorders, as these feelings and attitudes can potentially affect communications with patients.

**Rationale.** There is some evidence to suggest the clinician’s faith in the treatment can be an important predictor of treatment response (Jacobson & Hollon, 1996). Unfortunately, treatment with medication has at times been associated with both excessive optimism and skepticism (e.g., Kramer, 1993; Valenstein, 1998), and both positions have been exaggerated by media attention. Psychologists will inevitably form their own opinions about medications. These opinions can in turn affect patients’ decisions about taking a prescribed medication, and even medication effectiveness, if they are not addressed openly in the process of discussing psychopharmacological interventions.

**Implications.** Psychologists who are aware of their attitudes and feelings towards medications, and who openly accept the possible validity of alternative viewpoints, are in the best position to discuss the potential risks and benefits of using medication in a balanced manner. Psychologists are encouraged to explore their own feelings about medication, and to consider the possible role of those feelings in discussions about pharmacotherapy with the individuals they serve.

**Guideline 3.** Psychologists involved in prescribing or collaborating are sensitive to the developmental, age and aging, educational, sex and gender, language, health status, and cultural/ethnicity factors that can moderate the interpersonal and biological aspects of pharmacotherapy relevant to the populations they serve.

**Rationale.** Principle E of the Ethics Code (APA, 2002b) focuses on the importance of considering cultural and personal variables in the populations served. This standard takes on additional implications in the context of pharmacotherapy, because individual differences can affect the interpersonal aspects of medication management, the effectiveness of the treatment, and its side-effect profile. Issues that can be important include the following (Lin, Smith, & Ortiz, 2001; Smith, Mendoza, & Lin, 1999; U.S. Department of Health and Human Services, 2001):

1. **Differences in presentation:**
   a. Both the physical and psychological presentation of emotional distress can vary across cultures (e.g., Carr, 1976; Chowdhury, 1996). This finding has led to controversy over whether any specific presentation is truly culture-bound or simply more prevalent in some (Sakamoto, Martin, Kumano, Kuboki, & al-Adawi, 2005), and whether such syndromes can be fully understood in terms of standard psychiatric diagnosis (e.g., Guarnaccia & Rogler, 1999). Such issues aside, it is important that clinicians be aware of the existence of such cultural variants in presentation.
2. **Differences in participation in treatment:**
   a. Psychosocial factors such as differences in help-seeking behaviors and symptom expression, beliefs about the doctor-patient relationship, and beliefs about healing can influence the interpersonal context of pharmacotherapy.
   b. Certain cultures encourage the use of alternative healing practices including herbal and other folk and traditional remedies that can moderate the effectiveness and safety of psychotropic medications.
   c. Age, intellectual development, language barriers, level of formal education, problems with numeracy, and disability can affect communications about and the ability to participate effectively in pharmacotherapy.
   d. The patient’s level of health literacy, which has been defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (U.S. Department of Health and Human Services, 2000, p. 11-20), are considered in all aspects of treatment planning.
3. **Differences in response to treatment:**
   a. Biological correlates of cultural/ethnicity status, age, and gender, such as genetic polymorphisms, dietary factors, and other lifestyle habits may affect drug protein binding, metabolism and clearance. These can in turn affect bioavailability and subsequent therapeutic and adverse effects.
4. **Differences in access to appropriate treatment:**
   a. Socioeconomic factors can affect treatment availability and adherence. These can include both the cost of medication
and the ability to participate in treatment effectively.

b. Limited diversity in treatment trial samples can raise concerns about the generalizability of results across populations.

**Implications.** As the preceding list illustrates, the number and variety of person variables that can potentially moderate the process or outcome of pharmacotherapy is daunting, and no one person can be expected to be familiar with all potential moderators. Psychologists who prescribe or collaborate strive to educate themselves on those factors that are particularly relevant for populations of individuals they serve on a regular basis, and are sensitive to the possible role of such factors in the psychopharmacological treatment of other groups as well. When clinicians work with patients or clients from different linguistic, ethnic, or cultural groups, clinicians recognize that the presentation or description of the clinical syndrome may reflect culturally-specific referents and may not conform to those of the dominant group. In such instances, clinicians attempt to obtain information about presenting complaints in behavioral terms rather than in terms that could be misinterpreted. Clinicians avoid the use of unfamiliar or ambiguous terminology with clients. Whenever unfamiliar terminology or cultural referents are used in presenting complaints, further explanation or as needed consultation is sought to avoid misunderstanding.

**Education**

Guideline 4. Psychologists are urged to identify a level of knowledge concerning pharmacotherapy for the treatment of psychological disorders that is appropriate to the populations they serve and the type of practice they wish to establish, and to engage in educational experiences as appropriate to achieve and maintain that level of knowledge.

**Rationale.** Where Guideline 1 focused on practicing within one’s scope of competence, this guideline focuses on involvement in continuing education activities that are appropriate for providing optimal care to one’s patients. Various studies suggest most doctoral programs in professional psychology offer training in psychopharmacological interventions, but the educational requirements are fairly limited in scope (Collins, 2000; Monti, Wallander, & Delancey, 1983; Smyer et al., 1993). For the psychologist with prescriptive authority, state legislation will ultimately establish the minimum criteria for basic and continuing education and the boundaries of acceptable practice. The psychologist who at times plays a collaborative or information-providing role operates under more ambiguous expectations about the appropriate degree of continuing education. At this time only one state mandates continuing education in psychopharmacology as a condition for maintaining licensure.

**Implications.** Psychologists are encouraged to consider what level of formal education and training about psychotropic medications would be appropriate to the populations they serve, recognizing that scientific and clinical information about pharmacotherapy is rapidly evolving. The range of options is greater for the psychologist without prescriptive authority, since there is often no mandated minimum training. In making judgments about how much training is important, psychologists who find themselves involved in providing information may consider various factors, including:

1. The proportion of their patients receiving psychotropic medication.
2. The severity of side effects associated with those medications.
3. The ages of the individuals they serve.
4. The degree to which specialized psychiatric care is available to their patients. For example, in communities where psychiatric services are unavailable, the psychologist may experience a stronger motivation to seek a level of education that will allow him or her to collaborate effectively with primary care providers.

The three levels of participation in pharmacotherapy—prescribing, collaborating, and providing information—parallel the three levels of education and training that have been suggested for training in pharmacotherapy for psychologists (Smyer et al., 1993). Level 1 represents basic education in pharmacotherapy, with the expectation that this level of education can be obtained through a single graduate-level course. The APA Board of Educational Affairs provides a model curriculum for such a course (Kilbey et al., 1995). Level 2 is specifically intended to represent the level of education and training appropriate for active collaboration with prescribers in decision-making about medication. A similar didactic curriculum has been generated to identify the additional didactic training beyond Level 1 considered appropriate for this role (Kilbey et al., 1997). Since programs have not developed specifically for purposes of Level 2 training, in practice many psychologists interested in collaborating with prescribers pursue the didactic training associated with Level 3 without completing the experiential component. At present, a revised description of the didactic and experiential training for Level 3 is in development, and should represent APA policy by the time these guidelines are completed. These documents provide guidance to psychologists seeking to identify the appropriate level of training for their intended or anticipated involvement in pharmacotherapy.

Psychologists with prescriptive authority are encouraged to evaluate their need for initial and continuing education beyond the minimum defined in statute or regulations. Such an evaluation might involve consideration of patient populations, classes of medications, treatment of side effects, the evaluation of contraindications, and other factors.

**Guideline 5.** Psychologists strive to be sensitive to the potential for adverse effects associated with the psychotropic medications used by their patients.
Rationale. Adverse effects of medication are widespread and in some studies represent the most common reason cited for premature termination of pharmacotherapy (e.g., Ashton, Jamerson, Weinstein, & Wagoner, 2005; Brambilla, Cipriani, Hotopf, & Barbui, 2005; Kampman & Lehtinen, 1999). Iatrogenic medication effects can arise from a number of sources, including the patient’s reaction to a medication protocol, a drug-drug interaction, a drug-diet interaction, a known or undiagnosed medical condition, or poor patient adherence with the medication schedule or dosing (Brown, Frost, Ko, & Wooley, 2006). Newly introduced medications may prove to be associated with unexpected adverse effects. Often, these adverse effects are not identified until well after the medication has received Food and Drug Administration approval (Lasser et al., 2002). The possibility even exists that effects may not emerge until many years later, particularly in developmentally immature patients.

Implications. The prescribing psychologist strives to maintain access to current information about the side effect profiles of the medications he or she prescribes, and uses this information in treatment planning and monitoring. This expectation does not apply to the psychologist providing psychotherapy to an individual receiving medication from another prescribing professional. However, it is important to keep in mind that this psychologist typically sees the patient more frequently than the professional who is responsible for medication management, and can therefore play a useful role in the early detection of possible side effects. All psychologists are sensitive to the possibility that physical events subsequent to the initiation of medication can represent adverse events, and either intervene or refer the patient for intervention as appropriate within their scope of practice. The prescribing psychologist is aware of the importance of evaluating adverse events and of reporting such events when they occur, while other psychologists are aware of the importance of referring the individual to the prescribing professional when concerned about the possibility of an adverse event.

Guideline 6. Psychologists involved in prescribing or collaborating are encouraged to familiarize themselves with the technological resources that can enhance decision-making during the course of treatment.

Rationale. The practice of pharmacotherapy is undergoing rapid change as information is gathered about the positive and negative effects of various medications. Mastery of the relevant literature is difficult to develop and maintain, especially when one considers such issues as drug-drug and drug-diet interactions. A range of electronic resources has emerged in recent years that many prescribing professionals find indispensable in their daily practice.

Implications. Psychologists with prescriptive authority and direct collaborators are urged to familiarize themselves with Internet and other resources (e.g., www.guidelines.gov, www.cochrane.org) that offer critically evaluated synthesized information about the effective practice of pharmacotherapy. In terms of daily practice, psychologists with prescriptive authority and psychologists who directly collaborate in medication decision-making are well-served by products now available for computers and/or personal digital assistants which offer extensive and frequently updated information about pharmaceutical agents. This software offers a supplement to personal knowledge of the pharmacotherapy literature, not an alternative.

Assessment

Guideline 7. Psychologists with prescriptive authority strive to familiarize themselves with key procedures for monitoring the physical and psychological sequelae of the medications used to treat psychological disorders, including laboratory examinations and overt signs of adverse or unintended effects.

Rationale. Methods of assessing medication effects and indications, both positive and negative, represent a body of knowledge that is distinct from the literature devoted to the medications themselves. The psychologist with prescriptive authority strives to remain current in both bodies of literature as a means of ensuring optimal patient care.

Implications. Among the topics relevant to this guideline are knowledge of laboratory tests, normative ranges, test interpretation, and how often such tests are warranted, particularly in the populations served. When the psychologist with prescriptive authority encounters anomalies that indicate a medical health issue, the psychologist endeavors to ensure rapid and appropriate consultation with the patient’s primary medical caregiver or another appropriate resource.

Though existing guidelines for training and education in psychopharmacology for psychologists (APA, 2007) highlight the importance of training in physical examination, and such training is considered valuable when the psychologist interprets the results of a physical examination, no position is offered here concerning the appropriate level of involvement of the psychologist with prescriptive authority in the practice of physical assessment. This is a matter for the psychologist with prescriptive authority to consider in light of the nature of his or her practice, the population served, the potential impact of the psychologist’s conducting a physical examination on therapeutic interactions, and local statutory and regulatory limitations. Psychologists are also sensitive and responsive to concerns expressed about physical examinations, particularly in the case of pediatric patients or members of certain cultural groups.

The extent to which it will be appropriate for psychologists to integrate psychological tests into prescriptive practice is unclear at this time. An extensive literature exists supporting the use of psychological tests for diagnosis and psychotherapeutic treatment planning (e.g., Beutler, Malik, Talebi, Fleming, & Moleiro, 2004). In contrast, comparatively few studies have specifically evaluated the use of such tests to enhance the quality of decision-making in pharmacotherapy, but it is a potentially fruitful avenue for future efforts.
Guideline 8. Psychologists with prescriptive authority regularly strive to monitor the physiological status of the patients they treat with medication, particularly when there is a physical condition that might complicate the response to psychotropic medication or predispose a patient to experience an adverse reaction.

Rationale. When serving as a prescriber, a psychologist is participating in the medical treatment of the patient at a level previously unparalleled in the history of psychology. A thorough medical history, including prior adverse responses to medication, represents an important starting point for optimal medical care and for avoiding adverse reactions.

Implications. Psychologists with prescriptive authority are encouraged to consider co-morbid medical conditions that can complicate the course of treatment with pharmaceutical agents, as well as possible drug-drug and drug-diet interactions. These relationships at times can be quite complicated. A thorough medical history that includes all other medications (over the counter, herbal, and dietary agents) that the patient is taking can contribute a great deal to understanding the patient’s current physiological status (Beitman & Klerman, 1991; Sammons & Schmidt, 2001; Sperry, 1995).

Guideline 9. Psychologists are encouraged to explore issues surrounding patient adherence and feelings about medication.

Rationale. Adherence rates in pharmacotherapy are quite poor. Olfson, Marcus, Tedeschi, and Wan (2006) found 42% of patients discontinue use of antidepressants within 30 days; 72% stopped within three months. Patients do not, choose not to, or cannot adhere with treatment for many reasons including lack of access; ambivalence or fears about the medication; distressing side effects; misinformation about the latency of the therapeutic effect; shame or self-consciousness about taking psychoactive medications; the perception (which can be valid but is sometimes mistaken) that the treatment is ineffective or insufficiently effective; and concerns about medication changing their behavior or ways of thinking. As a result, many patients receive less than optimal benefit from their medication (Mitchell, 2006). The frequent contact between psychologist and patient that characterizes traditional psychological treatment provides a setting for monitoring patient feelings about the medication and willingness to continue.

Implications. This guideline is not intended to imply any recommendation concerning the frequency of inquiry into patients’ reactions to or use of their medications, particularly in the case of psychologists who serve only in an information-providing role. At the least, it does suggest that when the psychologist perceives ambivalence or negative feelings about the medication, the psychologist can play an important role in monitoring this aspect of the patient’s treatment more closely and deciding on an appropriate course of action. This can be particularly important when working with families, if parents/caregivers demonstrate conflicting views about the medication among themselves, or if a pediatric patient disagrees with the views of the parents/caregivers. Finally, psychologists are sensitive to the potential for diversion of medication and misrepresentation of its use in the case of stimulants and other drugs with resale value.

Intervention and Consultation
Guideline 10. Psychologists are urged to develop a relationship that will allow the populations they serve to feel comfortable exploring issues surrounding medication use.

Rationale. This guideline is intended to complement the previous one. A sizeable proportion of patients who terminate medication treatment prematurely do so without informing the prescribing professional of this decision, and may even report continued use of the medication to the prescriber (e.g., Maddox, Levi, & Thompson, 1994). Research consistently demonstrates the communication style of the provider is a significant predictor of adherence to medication (Bultman & Svarstad, 2000; Di Matteo, 2003). Whether the psychologist serves as a prescriber, collaborator, or information provider, the effectiveness of monitoring attitudes concerning and adherence to prescribed medications depends on the degree to which the patient perceives the relationship with the psychologist as one that allows for such discussion.

Implications. In any exchange concerning medication, the psychologist may want to consider the potential impact of moderating factors that can interfere with the free flow of information, such as intellectual, development, emotional, interpersonal, or cultural factors. When a psychologist serves in the role of prescriber, this can include reticence on the part of the patient to express uncertainties about their adherence to the medication regimen. Assessment and intervention using the stages-of-change model and motivational interviewing may be useful approaches to evaluating and addressing motivation for treatment (Beitman et al., 1994; Miller & Rollnick, 2002).

Psychologists in general can help create such an environment by simply monitoring the patient’s use of and concerns about their medications. This may involve posing specific questions to evaluate the level of adherence in a non-stressful manner as possible, promoting adherence when it is sub-optimal, and normalizing the patient’s concerns about medication. It is left to the psychologist to evaluate what is the appropriate level of inquiry for each patient. Supervisors of clinical trainees (practicum students, interns, etc.) are urged to consider supervisees as one of the populations for which this guideline is relevant, to create an environment in which trainees can raise concerns about their patients’ medications, and to encourage trainees to address questions to their patients about their medications at appropriate points.

Guideline 11. To the extent deemed appropriate, psychologists involved in prescribing or collaboration adopt a biopsychosocial approach to case formulation that considers both psychosocial and biological factors.
Rationale. The biopsychosocial model for the understanding of human health (Engel, 1977) represents the dominant model in the healthcare disciplines. At a minimum, this model suggests that psychosocial factors (including interpersonal, intrapersonal, cultural, spiritual, and socio-economic variables) play an important role in the etiology of and response to medical conditions, as well as the recognition that psychoeducational and psychological services can be essential in coping with and recovering from illness. Within this broad perspective, there is much room for variation in the degree to which these different perspectives are considered important for understanding the nature of psychological disorders.

The prescribing or collaborating psychologist conducts a full evaluation of the patient's current condition in light of the psychological and social issues relevant to treatment. It would seem that a biopsychosocial approach to prescribing or collaborating in medication decision-making that is appropriate for psychologists would be based on the assumption that behavioral, social, psychological, and educational interventions are treated as equal to, and perhaps superior to, biological interventions in importance in certain circumstances. Indeed, evidence is beginning to emerge that substantiates this assumption. For example, behavioral parent training and classroom behavior management, when implemented with integrity, yield effect sizes comparable to stimulants for the treatment of the core symptoms of attention deficit-hyperactive disorder and are superior to medication for functional outcomes in family, school and peer settings (see Brown et al., 2008). Cognitive-behavioral therapy also yielded an effect size comparable to drug treatment for pediatric anxiety in a large, recent multi-site study (Walkup et al., 2008). In addition, Fabiano et al. (2007) have demonstrated that the amount of stimulant medication needed to maintain improvements in symptoms and classroom functioning among children with attention deficit disorder can be reduced when concurrent behavioral classroom management is provided. Similar conclusions have been drawn concerning the relative efficacy of medication and psychotherapy for depression (Antonuccio, Danton, DeNelsky, Greenberg, & Gordon, 1999). As encouraging as these findings are, much additional research is needed to identify other conditions and populations for which psychosocial and drug interventions may be comparably effective, or psychosocial treatments that may enable reductions in drug dosages.

Implications. Psychologists actively involved in decision-making about medication are encouraged to consider both the interpersonal/psychosocial and the biological aspects of treatment. Increasing hopefulness, reducing demoralization, and providing support represent elements of good patient care, and maximize the potential for effective intervention (Stewart et al., 1995). The psychologist may conclude a sufficient biopsychosocial evaluation can require more time than is currently typical for medication management (Olfson, Marcus, & Pincus, 1999).

Psychologists with prescriptive authority will sometimes find themselves called upon to provide consultations to other healthcare providers solely for purposes of evaluating the patient for medication, for example, when on call or when asked to serve as a consultant to another professional who is providing psychosocial services. Even so, the psychologist with prescriptive authority is encouraged to evaluate the clinical presentation from a biopsychosocial perspective to the extent possible. Even in emergency circumstances, or when the patient has an on-going relationship with another mental health provider, the psychologist with prescriptive authority is encouraged to consider psychosocial and interpersonal as well as biological issues and interventions. This can be an important tool for avoiding over-reliance on medications even when psychologists are involved specifically because of their prescriptive authority.

Guideline 12. The psychologist with prescriptive authority is encouraged to use an expanded informed consent process to incorporate additional issues specific to prescribing.

Rationale. The APA (2002b) Ethics Code requires psychologists to obtain informed consent before any professional interaction whenever possible. The decision to prescribe medication for a patient optimally results from collaboration between that patient and the psychologist, rather than from a unilateral decision by the prescriber. A collaborative decision depends upon appropriate education of the patient about alternative treatments and full informed consent.

Implications. Even when the recipient of the intervention is not capable of giving informed consent, the psychologist with prescriptive authority considers what sorts of information may be useful or anxiety-reducing for the individual. The use of medication increases the universe of topics that may meet these goals. The following is a sample of the sorts of topics a psychologist with prescriptive authority may choose to discuss with a patient when pharmacotherapy is being considered as a treatment option (Grisso & Appelbaum, 1998):

1. Describing the agent to be used.
2. Indicating the symptoms it is intended to address.
3. Providing the rationale for the treatment relative to other treatment options. This may involve outlining alternatives to the recommended treatment, including a review of other medications that can be considered as well as non-pharmacological treatment options.

4. When discontinuing or reducing levels of medication use, explaining the reason for this course of action and addressing any concerns about the change in regimen.

5. Describing the benefits and potential risks of the protocol, including both therapeutic and potential adverse effects of the medication.

6. Estimating the duration and cost of treatment, and the time to therapeutic effect. Simply indicating how long to remain on the medication has been found to reduce the rate of premature termination (Bull et al., 2002).

7. Providing information about relative or absolute contraindications for the treatment and possible drug interactions.

8. Reviewing the risks associated with sudden, unilateral discontinuation of the medication.

9. Providing an explanation of any indicated laboratory examinations or requirements for ongoing therapeutic monitoring of drug levels.

10. Offering appropriate references for further patient education, in formats that are accessible to and understandable by the patient.

11. Describing the ongoing psychologist-patient partnership in deciding on medication changes (including titration) or criteria for termination of medication. This can involve orienting patients to the psychologist’s new combined role of prescriber and psychotherapist.

12. Remaining open and responsive to the patient’s questions and concerns including, at the patient’s request and with appropriate consent, providing information and education to family members or significant others.

13. Underscoring how psychopharmacology can be a key component, but often not the exclusive component, of a successful treatment plan.

14. When psychotherapy and psychopharmacology are used together, explaining why the combination is recommended over either intervention alone and how sessions will be structured to combine the two, and estimating the expected time course for treatment as a whole.

15. Inviting questions and the expression of concerns. It is important to remember that concerns can be practical and financial as well as physical, so explicitly encouraging questions about the range of obstacles can be helpful.

16. Evaluating the patient’s likelihood of adherence to the treatment selected.

In regard to the last component, it is important to remember that acceptance does not imply agreement. Patients may accept the prescription with little or no intention of complying, with mixed feelings about the treatment, or with the full intention of complying. The psychologist with prescriptive authority is encouraged to look beyond patients’ acceptance of the prescription to evaluate their likelihood of compliance with the treatment.

As with any good informed consent process, the psychologist with prescriptive authority seeks to address patients in terms that are congruent with their level of education and their ability to understand the language. The collaborative agreement that emerges from the informed consent process can benefit from individual tailoring with regard to any disability that might impair the patient’s ability to give full informed consent. Informed consent is a dynamic process to be revisited repeatedly throughout the treatment, to refresh the patient’s understanding of relevant issues and when substantive changes to the treatment agreement or process are being considered. The process is best completed in an environment in which the patient feels safe to disagree with the psychologist, to pose questions, and to report difficulties complying with the protocol.

Guideline 13. When making decisions about the use of psychological treatments, pharmacotherapy, or their combination, the psychologist with prescriptive authority considers the best interests of the patient, current research, and when appropriate, the needs of the community.

Rationale. There is increasing evidence that, at least in some circumstances, combined psychotherapy and pharmacotherapy is superior to either treatment alone (Friedman et al., 2004; Thase, 2003; The Treatment of Adolescent Depression Study Team, 2004). The therapeutic relationship, characterized by empathic interaction with the patient and the enhancement of awareness, often provides the optimal framework for focal interventions including medication. However, the situational factors that predict which treatment option to select remain largely unknown. In the absence of clear guidelines, personal preferences for one approach or the other can become predominant in a practitioner’s decision-making, rather than an individualized analysis of the best course of action. For example, given psychologists’ traditional reliance on psychotherapy as a primary treatment, it would not be surprising to find some psychologists with prescriptive authority elect never to prescribe except in the context of a psychotherapeutic relationship.

Implications. The psychologist with prescriptive authority is encouraged to remain current in terms of the literature on additive and multiplicative effects associated with the effectiveness of pharmacotherapy and psychosocial interventions. Until these processes are better understood, the psychologist with prescriptive authority is encouraged to consider what might be reasonable predictors of the relative efficacy of alternative interventions. Not all patients who are interested in pharmacological treatment desire or are appropriate for psychological interventions. In rural areas, in economically distressed areas, or in agencies with insufficient resources for the
catchment population, psychologists may also decide that serving solely as a prescriber in some cases represents the best response to the community’s public mental health needs.

On the other hand, there is evidence that patients and guardians often report more positive feelings about psychosocial than pharmacological intervention (MTA Cooperative Group, 1999; Pyne et al., 2005). As in any therapeutic decision, the patient is the ultimate decision maker regarding the choice of therapy. The psychologist strives to assess his or her preferences, expectations, and decisions regularly throughout the course of treatment. It is also important to note that a referral from another professional for pharmaceutical treatment does not create an obligation to prescribe, or to restrict one’s focus to the physical aspects of the disorder.

The psychologist with prescriptive authority is encouraged to consider combined treatment, or a shift from one treatment modality to the other, as part of decision-making either as the primary clinician or as a consultant.

**Guideline 14. Psychologists involved in prescribing or collaborating strive to be sensitive to the subtle influences of effective marketing on professional behavior and the potential for bias in information in their clinical decisions about the use of medications.**

*Rationale.* A substantial literature indicates the pharmaceutical industry potentially influences decision-making about medications in at least four ways. First is through its role in research and journal publications. A recent comparison of seven meta-analyses published with pharmaceutical industry support versus parallel meta-analyses published under the auspices of the independent Cochrane Collaboration found every one of the former recommended the medication without reservations while none of the latter did, even though mean effect sizes reported were similar (Jørgensen, Hilden, & Gøtzsche, 2006). Panels created for the development of treatment guidelines rely heavily on researchers receiving funding from the pharmaceutical industry (Choudhry, Stelfox, & Detsky, 2002). However, even relatively independent analyses of the literature must rely on primary research that is heavily funded by pharmaceutical companies, and such studies tend to support the superiority of the funder’s products (e.g., Heres et al., 2006; Lexchin, Berlo, Djlubegovic, & Clark, 2003). This effect presumably reflects the funder’s role in both the design of the research and the decision whether or not to publish the results (Davidoff et al., 2001).

Second, the pharmaceutical industry remains the primary source of support for continuing education in medication (Holmer, 2001; Society for Academic Continuing Medical Education, 2004). Third, direct-to-consumer advertising has a demonstrated tendency to increase the volume of prescriptions, even when the prescribing professional is ambivalent about the medication’s appropriateness (Mintzes et al., 2003). Fourth, the industry markets directly to prescribers through advertisements, which studies find are often misleading about the effectiveness and safety of medications (Villanueva, Peiró, Librero, & Pereiró, 2003; Wilkes, Doblin, & Shapiro, 1992), and through sales representatives (Avorn, Chen, & Hartley, 1982).

It is difficult to evaluate whether the net effect of this comprehensive and well-funded marketing system on healthcare practices is positive or negative. However, there can be no doubt that the system exists primarily to increase prescribing rates. The elements of that system have been spelled out in some detail here to emphasize the intensity of efforts to influence decision-making in pharmacotherapy.

**Implications.** Psychologists are encouraged to engage in activities likely to improve their awareness of pharmaceutical industry marketing on prescriptive practice, examples of which include:

1. Reviewing research on the effect of pharmaceutical industry advertising on prescriptive practice, and on the relationship between industry funding and the published literature.
2. Reading conflict of interest statements in publications of drug trials, as the presence of a financial relationship with the maker of a medication is consistently found to be a significant predictor of positive outcomes (e.g., Perlis et al., 2005).
3. Relying primarily on independent reviews of the literature, such as Cochrane reviews (www.cochrane.org).
4. Examining study methodology carefully to detect potential biases in patient or treatment selection or other threats to internal or external validity that might bias the outcome in favor of a pharmaceutical intervention (e.g., Smith, 2005).
5. Engaging in continuing education activities that challenge standard practice in pharmacotherapy.
6. Critically evaluating published literature for methodological weaknesses or medication risks.

Psychological research has contributed substantially to the understanding of interpersonal processes such as marketing. To cite a pertinent and particularly well-known example, while current professional standards in the prescribing professions focus on limiting the size of gifts, cognitive dissonance theory suggests that small gifts can sometimes have a more powerful effect on attitudes and behaviors than large gifts (Festinger & Carlsmith, 1959). There is also research suggesting that more familiar products are generally assumed to be superior (Goldstein & Gigerenzer, 2002). This assumption is often effective in daily practice in that the better option is referenced more frequently, but marketing corrupts this process by directly increasing familiarity independent of relative effectiveness. Psychologists involved in prescribing or collaboration may benefit from considering the possible influence of well-known methods for attitude change on their decision-making.

Psychologists with prescriptive authority may also find it helpful to review their own prescribing practices: the number of prescriptions written, the frequency of prescriptions written for various medications, the length of time patients remain on medication, and so forth.
This information can alert psychologists that marketing may have subtly influenced their prescribing patterns.

**Guideline 15. Psychologists with prescriptive authority are encouraged to use interactions with the patient surrounding the act of prescribing to learn more about the patient’s characteristic patterns of interpersonal behavior.**

*Rationale.* The patient’s characteristic patterns of interpreting interpersonal situations inevitably play a role in the desire for medication, the reaction to the recommendation of medication, and compliance with the treatment regimen (e.g., Brockman, 1990; O’Neill & Bornstein, 2001).

*Implications.* The psychologist with prescriptive authority is encouraged to consider reactions such as excessive faith in the effectiveness of the medication, emotional reactions to the medication, and overt or passive resistance to the medication as clues to the patient’s cognitive assumptions or characteristic patterns in interpersonal situations, or at least in interpersonal situations that involve health care professionals. These responses, and the hypotheses they generate about the patient, can be useful in achieving a transition from a purely biological intervention to a more biopsychosocial approach to the patient’s difficulties.

**Relationships**

**Guideline 16. Psychologists with prescriptive authority are sensitive to maintaining appropriate relationships with other providers of psychological services.**

*Rationale.* There are various circumstances in which one mental health professional may refer to another for specialized services, referral for assessment perhaps being the most common. The emergence of the psychologist with prescriptive authority will undoubtedly produce circumstances in which mental health professionals refer to a psychologist for purposes of medication consultation only. Within this division of labor there exists the potential for miscommunication, differences in interpretation of the patient’s problems, and differences in beliefs about optimal interventions. Rivalry can also develop between clinicians, with unintended iatrogenic effects. Feldman and Feldman (1997) noted that

> Potential problems with two-therapist integration always exist, such as miscommunication, conflict, and competition between therapists ... [and as a result] the patient may receive contradictory messages about their diagnosis or treatment. Therapists must avoid competing for the role of primary treatment provider because it interferes with the collaborative process, and by extension, optimal patient care. (p. 2)

*Implications.* Psychologists with prescriptive authority are encouraged to be alert to the potential for conflict when collaborating with non-prescribing colleagues. This can include maintaining frequent contact, and/or working collaboratively to establish a comprehensive treatment plan that encompasses the activities of both providers.

**Guideline 17. Psychologists are encouraged to maintain appropriate relationships with providers of biological interventions.**

*Rationale.* Ethical standard 3.09 of the APA (2002b) Ethics Code highlights the importance of cooperation with other professionals in service to patients. Psychologists who prescribe, collaborate, or provide information on pharmacotherapy will find themselves working with other healthcare professionals at times, a category that in some cases will include traditional healers offering complementary medical treatments. Collaborating and information-providing psychologists by definition work in conjunction with prescribing professionals, most of whom are not psychologists at this point, though they increasingly may be. Prescribing, collaborating, and information-providing psychologists are often dealing with patients who demonstrate co-morbid medical conditions. Given the potential for drug-drug interactions and medical complications in such situations, collaboration with other healthcare providers actively involved in treating the patient can be particularly important.

*Implications.* When making referrals for biological interventions, psychologists consider the competencies of the provider. For example, psychologists may be tempted to refer pediatric patients to a prescribing psychologist over another prescribing professional without first considering whether that prescribing psychologist has pediatric competency. Instead, the psychologist resists such temptations and consistently considers the competencies of the other professional when making referrals for medication.

The psychologist with prescriptive authority is encouraged to make contact with other healthcare providers involved in patient care, with appropriate authorization, and to establish clear guidelines regarding responsibilities within their overlapping functions. Psychologists with prescriptive authority update the patient’s primary medical caregiver of the pharmaceutical treatment plan as appropriate. The psychologist with prescriptive authority is also encouraged to establish policies to prevent confusion or redundancy in roles played or the medications prescribed. When a transfer of care or consultation with another provider is indicated and requested by the patient, the psychologist with prescriptive authority is encouraged to seek appropriate communication between all parties, and to ensure optimal continuity of care.
Whenever a psychologist is involved in the practice of pharmacotherapy, the psychologist is encouraged to maintain ongoing consultation with the patient’s primary health care provider(s), assuming the patient agrees to such contact. The primary care provider may in turn be reminded to alert the psychologist to any changes in the patient’s health status that could affect the patient’s treatment by the psychologist, whether that treatment involves pharmacotherapy or psychosocial interventions.

Author’s Note
These guidelines were developed by the American Psychological Association (APA) Division 55 (American Society for the Advancement of Pharmacotherapy) Task Force on Practice Guidelines. The task force was chaired by Robert E. McGrath, Ph.D. (Fairleigh Dickinson University). Task force members included Stanley Berman, Elaine LeVine, Elaine Mantell, Beth Rom-Rymer, Morgan Sammons, and James Quillin. Additional input on the guidelines was provided by Robert Ax, representing Division 18 (Psychologists in Public Service). None of the individuals involved in the development of this document has any personal investment in pharmaceutical products of any kind, nor did the developers receive any financial support for its creation.

The task force anticipates these guidelines may deserve reconsideration in a relatively brief time frame, given anticipated changes in psychologists’ role in pharmacotherapy, as well as changes in the perceptions and use of psychotropic medications. In particular, it is the belief of the members of the task force that future efforts should include consideration of whether some elements of the enclosed guidelines merit elevation to the level of practice standards. Accordingly, this document is scheduled to expire as APA policy in five years from publication, by. After this date, users are encouraged to contact the APA Practice Directorate to confirm whether this document remains in effect.
References


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<th>Table 1</th>
<th>Characterizing Psychologists’ Activities Related to Pharmacotherapy.</th>
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<th>Relevant Activities</th>
<th>Prescribing</th>
<th>Collaborating</th>
<th>Providing Information</th>
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<tr>
<td>Legal responsibility for decision-making</td>
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<td>Involvement in decision-making</td>
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<td><strong>General</strong></td>
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<td>Guideline 1. Psychologists are encouraged to consider objectively the scope of their competence in pharmacotherapy and to seek consultation as appropriate before offering recommendations about psychotropic medications.</td>
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<td>Guideline 2. Psychologists are urged to evaluate their own feelings and attitudes about the role of medication in the treatment of psychological disorders, as these feelings and attitudes can potentially affect communications with patients.</td>
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<td>Guideline 3. Psychologists involved in prescribing or collaborating are sensitive to the developmental, age and aging, educational, sex and gender, language, health status, and cultural/ethnicity factors that can moderate the interpersonal and biological aspects of pharmacotherapy relevant to the populations they serve.</td>
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*Training Director’s note: Commander Dr. Sammons is a prescribing psychologist in the Navy stationed at Bethesda Naval Hospital in Washington, D.C. This letter represents his personal views, and is not an official position of the military.*

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INTEGRATION OF PSYCHOTHERAPY AND PHARMACOTHERAPY BY PRESCRIBING/MEDICAL PSYCHOLOGISTS: A PSYCHOBIOSOCIAL MODEL OF CARE

INTRODUCTION

The strategic integration of psychotherapy and pharmacotherapy by prescribing/medical psychologists is an evolutionary approach to addressing the critical and increasingly mental health needs of United States citizens. It is argued in this chapter that, because of their psychological training, prescribing/medical psychologists can apply the analysis of biological, social and psychological etiologies and treatment strategies from a somewhat unique framework we call the “psychobiosocial model of care.” In the psychobiosocial model posited within herein, the therapist-patient relationship and the patient’s phenomenological view of the psychotherapy and medication management are central. Patient-specific resiliency and vulnerability factors are analyzed within each sphere of functioning. By assessing resilience and vulnerability within all dimensions of functioning, the biopsychosocial model places patient’s perceptions, personal values and needs as the basis for deciding all forms of biological, psychological and social interventions.

Components of a Psychobiosocial Model of Care

The psychobiosocial model presented here is based upon three major tenets. The first is that psychologists, through unique training, offer a specialized skill set for addressing mental health concerns. In their initial training, psychologists are well-studied in aspects of behavioral change as well as the biological sciences. Education and training for prescriptive authority adds an additional skill set to an existing diagnostic and treatment armamentarium. Because these skills are taught through specialized programs for psychologists, who have already been trained in human development and the behavioral and cognitive components of psychopathology, psychologists can practice differently, integrating the medication into the therapy process and utilizing medications only when psychotherapy alone is not sufficient to improve functioning.

The second tenet is a result of psychologists’ specialized training. Because psychologists are skilled in a broad range of therapeutic intervention techniques, they can help the patient choose the least invasive treatment while focusing on an empirically-supported approach as a first-line intervention. When empirical research indicates psychotropic intervention is efficacious, psychologists recommend this additional treatment to the psychotherapeutic regimen with extensive informed consent including standard education on indications, risks, benefits, average time-to-therapeutic effect, alternatives, and side effect profiles of each treatment. Information provided is tailored to the patient, particularly addressing side effects that are relevant to the patient’s concerns such as weight loss or gain, sleep difficulties or triglyceride levels. The premise is that the psychologist acts a consultant to the patient who, with occasional exception (e.g., when frankly psychotic or demented), is considered capable of making an informed decision and who is expected to remain an active problem-solver throughout the therapy partnership.

The third tenet has many ramifications. It is postulated that a critical component of the psychologist’s psychobiosocial model of care is the integration of the meaning, impact, and usefulness of continued psychotropic medication across the various phases of the therapy process.

Psychologists, by virtue of their training in psychotherapy that requires verbal exploration and non-pharmacologic techniques to effect behavior change, are well versed in the dynamics of relationship building. When a collaborative decision is made to add medications to the therapeutic encounter, the relationship can be affected by a number of additional variables, including the meaning patients ascribe to medication, the knowledge or misinformation they may have about certain medications, the patient’s intellectual/linguistic capacity to understand the complexities of medication use, cultural and religious beliefs pertaining to medications and their side effects, and pressures to use or avoid use of medications. The prescribing/medical psychologist must incorporate these variables into both the informed consent and the ongoing dynamics of the therapeutic relationship.

Summary

The causes of the worldwide crisis in mental health care and the breakdown in the mental health care system in the United States in particular are complex and multiple. Clearly, the dearth of sufficient providers, as well as the limitations in training that create fragmented care, are important contributors. Prescribing/medical psychologists, adopting the psychobiosocial model of care, can be an important part of the solution to this crisis. An integrated psychobiosocial model of care, including cognitive and behavioral intervention, changes in the social environment, and psychotropic aid is often more efficacious in patient treatment, especially complex cases.
PSYCHOPHARMACOLOGY PROGRAM REGISTRATION FORM

Name: __________________________  Degree: __________________________
DOB: __________________________  SS#: __________________________

Home Address: __________________________

City, State, Zip Code: __________________________

Primary Email: __________________________  Alternate Email: __________________________

Cell Phone#: __________________________  Work Phone#: __________________________

Current Employer: __________________________

Employment Address: __________________________

City, State, Zip Code: __________________________

Degree Information

Type of doctorate: __________________________  Date of Graduation: __________________________

Academic Institution: __________________________

APA Accredited: YES NO  Copy of doctoral transcripts attached  [ ]

License Information

State of current licensure: __________________________  License #: __________________________

Date licensed first issued: Copy of __________________________  Current License attached  [ ]

Verification of “Good Standing” from Board of Psychology from state of choice attached  [ ]

Signature & Date
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree</th>
<th>Current Affiliation</th>
<th>Organizational Contribution to Program Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaine S. LeVine</td>
<td>Ph.D.</td>
<td>Acting Training Directors and Director of the Southwestern Institute for the Advancement of Psychotherapy</td>
<td>Training Directors</td>
</tr>
<tr>
<td>Patrick Quinn</td>
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<tr>
<td>Gladys De Necochea</td>
<td>Ph.D.</td>
<td>Acting Department Head of Counseling and Educational Psychology, New Mexico State University</td>
<td>Faculty liaison; helps establish curriculum, monitors administrative procedures through University</td>
</tr>
<tr>
<td>Enedina Vazquez</td>
<td>Ph.D.</td>
<td>Associate Dean of the College of Education, New Mexico State University</td>
<td>Administrative liaison offering overall program advice, assistance in seeking post-doctoral Master’s status</td>
</tr>
<tr>
<td>Elaine Foster</td>
<td>Ph.D.</td>
<td>One of the original prescribing psychologists from the Department of Defense Demonstration Project</td>
<td>Overall review of curriculum</td>
</tr>
<tr>
<td>Thomas Thompson</td>
<td>Ph.D.</td>
<td>Member of the New Mexico Board of Psychologists Examiners and Prescribing Psychologist of New Mexico</td>
<td>Overall review of curriculum</td>
</tr>
<tr>
<td>Don Fineberg</td>
<td>M.D.</td>
<td>Psychiatrist in Private Practice in New Mexico and RxP Admissions Committee of the New Mexico Board of Psychologists</td>
<td>Overall review of curriculum</td>
</tr>
<tr>
<td>John Andazola</td>
<td>M.D.</td>
<td>Director of the Family Practice Residency program in Las Cruces, NM</td>
<td>Advice about faculty and review of curriculum concerning evidence-based medicine</td>
</tr>
<tr>
<td>Juanita Mendoza-Hannan</td>
<td>Ph.D.</td>
<td>Dean of Distance Education, NMSU</td>
<td>Overall review of curriculum and particular guidance on administrative matters</td>
</tr>
</tbody>
</table>
Nuts and Bolts

As you well know, all institutions have a series of administrative steps to work through. In this case, you must address administrative factors at New Mexico State University, as well as with the New Mexico Board of Psychological examiners. The purpose of this appendix is to serve as a resource to help you with these different steps.

PRACTICUM REQUIREMENTS

Eighty (80) Hour Practicum In Clinical Assessment and Pathophysiology
(Based on NMAC 16.22.23 Requirements for Education and Conditional Prescription Certificate)

- The 80 hour practicum shall be part of the psychopharmacology training program from which the applicant obtains the certification or degree.
- The 80 hour practicum shall provide the opportunity for the applicant to observe and demonstrate competence in physical and health assessment techniques within a medical setting under the supervision of a physician. You may have a secondary supervisor; however, the primary supervisor must be a physician.
- The 80 hour practicum shall be completed in a timeframe of full-time over two (2) weeks to thirty (30) weeks. If the student cannot complete the practicum within the designated time frame, due to illness or extenuating circumstances, the student may request an extension explaining in writing explaining the extenuating circumstances and the additional time requested.
- Evaluation and verification of completion:
  - The supervising Physician and the training Director of Training shall certify in writing that the applicant:
    1. Assessed a diverse and significantly medically ill patient population
    2. Observed the progression of illness and continuity of care of individual patients
    3. Adequately assessed vital signs
    4. Demonstrated competent laboratory assessment
    5. Successfully completed the 80-hour practicum

Evaluation forms can be found in Student Practicum Training Manual and online. The Physician and Director of Training must sign the final evaluation form. The Director of Training will keep a copy of the verification form. The student will retain the original verification form and submit to the New Mexico Board when applying for Conditional prescriptive Authority.

Four-Hundred (400) Hour Practicum Requirements
(Based on NMAC 16.22.23 Requirements for Education and Conditional Prescription Certificate)
Requirements for the general 400 hour practicum treating a minimum of 100 patients with mental disorders include:
- The 400 hour practicum shall be part of the psychopharmacology training program from which the applicant obtains the degree.
- One-hundred (100) patients shall mean 100 separate patients.
- The four-hundred (400) hours shall refer to four-hundred face-to-face hours.
  - The four-hundred face-to-face hours shall include only time spent with patients to provide evaluation and treatment for medical psychopharmacotherapy of patients and time spent in collaboration with the patient’s treating health care practitioner(s).

Formal Written Plan
- Prior to initiating the 400 Hour Practicum, a formal written plan will be submitted to the Training Director for approval. The practicum plan should identify the primary and secondary supervisor (if applicable) and must be signed by all participants. Upon approval, the Training Director will sign the plan and return the original to the student for Board submission when applicable.

Time Frame to Complete the Practicum
- The practicum shall be completed in a period of time of not less than six (6) months and not more than three (3) years.
  - If the student cannot complete the 400 hour practicum within the timeframe because of illness or other extenuating circumstances, the student may request an extension explaining in writing explaining the extenuating circumstances and the additional time requested.
- The practicum shall be completed within the five years immediately preceding the date of application for a conditional prescription certificate.

SUPERVISION REQUIREMENTS
- A Psychiatrist or other appropriately trained Physician, licensed in good standing in the jurisdiction in which the psychiatrist or other physician rendered supervision shall be the primary supervising physician of the practicum.
  - The primary supervising physician shall be responsible for the overall supervision of the applicant; however, training may be assigned to other licensed physicians, i.e., secondary supervisors, as designated by the primary supervising
physician and the training director of the program

- The primary or secondary supervisor shall be on site.
  - The applicant shall consult with the primary or secondary supervising physician as appropriate, before the applicant makes a decision about the psychopharmacological treatment of the patient.
- The primary or secondary supervising physician shall review the charts and records of any patient seen by the psychologist in practicum training during the practicum while under the supervision of the primary or secondary supervising physician.

INFORMED CONSENT

- **Informed Consent:** The psychologist in practicum training is responsible for informing the patient or the patient’s legal guardian, when appropriate, or explain to the patient through the recommendation system at an institution if the institution itself generally handles such informed consent.
  - The name and role of the supervisor and sufficient information of the expectation and requirements of the practicum shall be provided to the patient or the patient’s legal guardian at the initial contact necessary to obtain informed consent and appropriate releases.
  - The psychologist in practicum training shall provide additional information requested by the patient or the patient’s legal guardian concerning the applicant’s education, training and experience.

DOCUMENTATION REQUIREMENTS

- **Clinical Diversity:** The psychologist in practicum training must have supervised experience in the evaluation and treatment of 100 patients, representing as diverse a patient population as possible, including diversity in the patients:
  - Gender
  - Different ages throughout the life cycle, including adults, children/adolescents, and geriatrics; as possible and appropriate
  - Range of disorders listed in the most recent Diagnostic And Statistical Manual of Mental Disorders (DSM; APA) and acute and chronic disorders
  - Ethnicity
  - Socio-cultural background
  - Economic background

- **Documentation of Cases:** The psychologist in practicum training and the training program shall maintain a log on patient seen, which shall include a coded identification number for the following:
  - The patient
  - Patient’s age
  - Gender
  - Diagnosis
  - Date and time seen
  - Amount of time seen for psychopharmacotherapy
  - The log shall be available to the RxP application committee or the board upon request.
  - The log shall contain the name and signature of the supervisor.

- **Documentation of Practicum Hours:** The psychologist in practicum training and the training program shall keep records of the time spent during this practicum.
  - The records shall be available to the psychopharmacology application committee or the board upon request. The records shall not contain patient identifying information.

- **Supervision and Documentation of Supervision Hours:** The psychologist in practicum training shall receive a minimum of one (1) hour of supervision for every eight (8) hours of patient time.
  - The applicant is responsible to keep a log of the dates and time of supervision.
  - The supervisor may meet with the psychologist in practicum training for additional education at their discretion.

EVALUATION REQUIREMENTS

- **Formal Evaluations:** The primary supervising physician shall conduct a formal, written evaluation on at least two occasions, at the midpoint (50 Patients) and at the end of the practicum.
  - The evaluation shall assess the applicant’s progress and competencies and shall describe any deficiencies or areas where competency has not been achieved.
  - The student shall submit copies of the evaluations to the training director.
  - The student shall retain all original evaluations for submission to the Board.

DEFICIENCIES

- **Deficiencies:** In the event of documented deficiencies the training director of the psychopharmacology program shall specify in writing:
  - The areas in need of remediation
  - The process and procedures by which these areas are to be re-mediated
• The method by which the training director and supervisor shall determine that the applicant has achieved the competencies necessary to successfully complete the practicum.

Additional Documentation
• Upon completion (100 patients for 400 hours) Upon request of the RxP application committee or the board, the primary supervising physician shall provide an affidavit stating that:
  o The supervisor does not have conflict of interest and is not a member of the applicant’s family or household as defined in 16.22.26 NMAC, of these regulations;
  o The supervisor or a designated secondary supervisor reviewed and discussed with the applicant the charts and records of patients seen by the applicant during the practicum;
  o The practicum included a diverse group of patients, as defined in these regulations; and
  o The applicant did not write any prescriptions without the primary or secondary supervisor’s supervision and signature or authorization.

• The primary supervising physician and the training director will certify to the board in writing that the applicant has successfully completed the practicum.

Taking the PEP
1. You are eligible to take the PEP as soon as you complete the coursework, even before you complete the Practicum.
2. To get the official PEP application you need to email Jan Ciuccio (jciuccio@apa.org) at the American Psychological Association.
3. You need to submit an official transcript from NMSU and a certificate of coursework completion with the application.
4. The pass rate for the exam is set somewhere around 71-72% of the items. It is hard to know exactly what the rate is until you have taken the test.

Applying for your conditional license to prescribe.
1. The information for applying for your conditional license is on the Board of Psychologist Examiners webpage. That information, as well as the forms for the application, can be downloaded from there.
2. You will be asked to fill out an application form and send to the Board copies of your evaluation of each practicum. They may also ask for the documentation of the number of hours of supervision and basic data about your patients. You will also need to provide evidence that you passed the PEP.
3. They will ask me to fill out a form about you. In order for me to do that, I must have the following:
   a. Copies of your evaluation forms.
   b. Copies of your case notes of your 100-hour practicum without the names (using a code to protect their identity) OR completion of the form titled Verification of Specifics of 100 Patients/400 hour Practicum (that form is attached).
   c. Two short forms which indicate your hours of supervision and basic data about the patients.

Moving from a conditional to an unconditional license to prescribe:
1. During the two years of a conditional license, you must see 50 patients and you must be supervised for four hours a month.
2. There is no formal interaction with the New Mexico State University program necessary at this point. New Mexico State University does not keep records of your work as a conditional prescribing psychologist.
3. You can obtain the application forms on the Board of Psychologist Examiners website.
4. After you apply, you will be contacted by the Board about how they will review your cases.

Getting a Diplomate designation
1. The American Board of Medical Psychology offers a Diplomate that allows you to put the initials ABMP after your name.
2. You can then call yourself a “medical psychologist” otherwise you must refer to yourself as a prescribing psychologist.
3. You now must complete an exam as well as document experience.
4. As of the summer of 2010 Division 55 (The American Society for the Advancement of Pharmacotherapy) and the American Psychological Association has also applied to The American Board of Professional Psychology to develop ABPP in psychotherapy.

Remember, it is your responsibility that you progress smoothly through these steps.
1. Please read New Mexico State University regulations regarding graduate school and a Master’s degree.
2. Please be familiar with the law for prescriptive authority.
3. Please carefully read the New Mexico regulations for prescriptive authority.
4. We have tried to make these notes as inclusive as possible, but there are so many steps and so many specific items, it really is important for you to become familiar with the regulations for yourself.

56
### APPENDIX F

**POST-DOCTORAL EDUCATION AND TRAINING PROGRAM IN PSYCHOPHARMACOLOGY FOR PRESCRIPTIVE AUTHORITY:** Specified Content Domains Identified by APA (2009)

**Mapping Chart**

<table>
<thead>
<tr>
<th>COURSE CONTENT</th>
<th>Course or Course Module</th>
<th>NMSU Course Number</th>
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<td>I. Basic Science</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>CEP 801</td>
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<td>A. Anatomy &amp; Physiology</td>
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<td>B. Biochemistry</td>
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<td>III. Physical Assessment/Labs</td>
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<td>3. Critical Consumer</td>
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