

# Specific Basic Standards for Osteopathic Fellowship Training in Hematology / Oncology

American Osteopathic Association and American College of Osteopathic Internists

These specific BASIC standards are part of the *Common Basic Standards for Fellowship Training in Internal Medicine Subspecialties*, which govern and define training in all medical subspecialties. These requirements are in addition to all requirements in the Common Basic Standards.

# IV INSTITUTIONAL REQUIREMENTS

- 4.1 The base institution or an affiliate must have laboratory facilities that include the following: immunopathology, nuclear and medical imaging services, blood banking, transfusion and apheresis, coagulation laboratories and radiation oncology services. Full surgical services shall be available.
- 4.2 The base institution or an affiliate must have support services including oncologic nursing, pharmacy, hospice and palliative care, rehabilitation medicine, nutritional and social services must be available for consultation and participation in multidisciplinary patient care.
- 4.3 The base institution or an affiliate must have educational and multidisciplinary tumor conferences.
- 4.4 The base institution or an affiliate must participate in research protocols and cooperative group trials.

### V PROGRAM REQUIREMENTS AND CONTENT

# A. Program Duration

- 5.1 The fellowship training program is a full-time training program that must be of a minimum of 36 months in duration.
- 5.2 A minimum of 24 months must be supervised management of patients (clinical rotations).
- 5.3 A minimum of 1 month clinical rotation must focus on allogeneic and autologous bone marrow or peripheral stem cell transplantation and management of post transplant patients

#### B. Medical Knowledge

- 5.4 The fellow must have learning activities in morphology, physiology and biochemistry of blood, marrow, lymphatic tissue and the spleen.
- 5.5 The fellow must have learning activities in basic molecular and pathophysiologic mechanisms, diagnosis and therapy of diseases of the blood, including anemias, diseases of white cells and disorders of hemostasis and thrombosis.
- 5.6 The fellow must have learning activities in etiology, epidemiology, natural history, diagnosis, pathology, staging and management of neoplastic disorders.
- 5.7 The fellow must have learning activities in immune markers, immunophenotyping, cytochemical studies and cytogenetic and DNA analysis of neoplastic disorders.
- 5.8 The fellow must have learning activities in molecular mechanisms of neoplasia, including the nature of oncogenes and their products.
- 5.9 The fellow must have learning activities in chemotherapeutic drugs, biologic products and growth factors and their mechanisms of action, pharmacokinetics, clinical indications and limitations, including their effects, toxicity and interactions.
- 5.10 The fellow must have learning activities in multiagent chemotherapy protocols and combined modality therapy in the treatment of neoplastic disorders.

- 5.11 The fellow must have learning activities in management and care of indwelling venous access catheters.
- 5.12 The fellow must have learning activities in principles and application of surgery and radiation therapy in the treatment of neoplastic disorders.
- 5.13 The fellow must have learning activities in management of the neutropenic and the immunocompromised patient.
- 5.14 The fellow must have learning activities in effects of systemic disorders, infections, solid tumors and drugs on the blood, blood-forming organs and lymphatic tissues.
- 5.15 The fellow must have learning activities in indications and application of imaging techniques in patients with blood and neoplastic disorders.
- 5.16 The fellow must have learning activities in pathophysiology and patterns of solid tumor metastases.
- 5.17 The fellow must have learning activities in principles of multidisciplinary management of organ-specific cancers.
- 5.18 The fellow must have learning activities in pain management in the cancer patient.
- 5.19 The fellow must have learning activities in rehabilitation and psychosocial management of patients with hematologic and neoplastic disorders.
- 5.20 The fellow must have learning activities in hospice and home care for the cancer patient.
- 5.21 The fellow must have learning activities in recognition and management of paraneoplastic disorders.
- 5.22 The fellow must have learning activities in the etiology of cancer, including predisposing causal factors leading to neoplasia.
- 5.23 The fellow must have learning activities in cancer prevention and screening, including competency in genetic testing and counseling as they relate to hereditary cancers and hematologic disorders for high-risk individuals.
- 5.24 The fellow must have learning activities in tests of hemostasis and thrombosis for both congenital and acquired disorders and regulation of antithrombotic therapy.
- 5.25 The fellow must have learning activities in treatment of patients with disorders of hemostasis and the biochemistry and pharmacology of coagulation factor replacement.
- 5.26 The fellow must have learning activities in transfusion medicine, including the evaluation of antibodies, blood compatibility and the use of blood component therapy and apheresis procedures.
- 5.27 The fellow must have learning activities in personal development, attitudes and coping skills of physicians and other health-care professionals who care for critically ill patients.
- 5.28 The fellow must have learning activities in human immunodeficiency virus-related malignancies.
- 5.29 The fellow must have learning activities in the care and management of the geriatric patient with malignancy and hematologic disorders.

#### C. Patient Care

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- 5.30 The fellow must have training and experience in bone marrow aspiration and biopsy, including preparation and interpretation of peripheral blood smears, bone marrow aspirates and touch preparations.
- 5.31 The fellow must have training and experience in measurement of complete blood counts including platelets and white cell differential using automated and/or manual techniques.
- 5.32 The fellow must have training and experience in administration of chemotherapeutic agents and biologic products through all therapeutic routes.
- 5.33 The fellow must have training and experience in the management and care of indwelling venous catheters.
- 5.34 The fellow must have training and experience in therapeutic phlebotomy, therapeutic thoracentesis and therapeutic pheresis.
- 5.35 The fellow must have training and experience in correlation of clinical information of the findings of cytology and histology and imaging techniques as they relate to hematology and oncologic disease.
- 5.36 The fellow must have training and experience in blood and platelet transfusion.
- 5.37 The fellow must have training and experience in the performance and interpretation of coagulation studies and blood banking.
- 5.38 The fellow must have training and experience in platelet aggregometry.
- 5.39 The fellow must have training and experience in serial tumor mass measurement.
- 5.40 The fellow must have training and experience in fine needle aspiration and biopsy.
- 5.41 The fellow must have training and experience in bone marrow or peripheral stem cell harvest for transplant.
- 5.42 The fellow must participate in research protocols and cooperative group trials.

#### D. Ambulatory Clinic

- 5.43 The fellow must attend a supervised continuity clinic for a minimum of four hours per week, 46 weeks per year.
- 5.44 The fellow must see a minimum of four patients per week in the ambulatory clinic.
- 5.45 The fellow must maintain a log of all outpatient cases.