

Exam topics for the position of Scientific Researcher within the CCAMF Laboratory of Humoral and Cellular Immunology

1. Nonspecific cellular and humoral defense (1, 2, 4, 8).
2. The notions of antigen and antibody (1, 2, 5).
3. Biological identity of higher organisms - CMH 1st class and 2nd class (1, 2, 3)
4. Immune cells and their development (1, 2)
5. Lymphoid system (primary / secondary lymphoid organs) - (1, 2, 8)
6. Specific, primary and secondary immune response (4, 8)
7. Transplant immunity (1, 4, 5).
8. Antitumor immunity. Tumor immune therapy (1, 4, 5).
9. Primary and secondary immunodeficiency states (1, 4, 5, 7, 8).
10. Pathological immune reactions. Allergies (1, 5, 7, 8).
11. Autoimmune system and organ diseases (1, 4, 5, 7).
12. Immune techniques in suspension: Turbidimetry, Nephelometry (6, 7, 9).
13. Gel immune techniques: double diffusion, IDRS, Laurell, IEF, Electrophoresis (6, 7, 9, 10).
14. Immune techniques on solid support: CLIA, ELISA, hybridization techniques, Multiplex (6, 7, 9).
15. Cytological immune techniques: flow cytometry, immunofluorescence microscopy, confocal, cell cultures (6, 9)
16. Metabolism of carbohydrates, lipoproteins (10)
17. Proteins - structure, functions, metabolism (10)
18. Biochemistry and pathophysiology of hemostasis (10)

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Written test and interview

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