

## Contents

<i>P.G.Kostyuk, R.I.Stanika, L.M.Koval, E.A.Lukyanetz</i> Intracellular calcium homeostasis of sensory neurons at hypoxic influences . . . . .	3
<i>N.A.Agadjanyan, A.Ya.Chizhov</i> Classifications of hypoxical, hypo- and hypercapnical conditions . . .	11
<i>L.D.Lukianova</i> Molecular mechanisms of tissue hypoxia and organism adaptation . . . . .	17
<i>P.V.Beloshitsky</i> Comprehensive medical and ecological studies in prielibrusie . . . . .	36
<i>A.G.Portnychenko, M.I.Vasylenko, A.A.Moybenko</i> Influence of acute hypoxic hypoxia on nitric oxide synthase induction in rats . . . . .	47
<i>O.V.Korkushko, V.Yu.Lishnevskaya, V.P.Chizhova, T.V.Ruhlyada, G.V.Duzhak</i> Peculiarities of hypoxia development in aged people . . . . .	50
<i>E.O.Asanov, N.D.Chebotaiev</i> Tissue respiration in elderly patients with chronic obstructive bronchitis: age peculiarities . . . . .	58
<i>O.V.Korkushko, L.A.Ivanov, N.D.Chebotaiev, A.V.Pisaruk</i> Peculiarities of the reaction of respiration to hypoxia in aging . . . . .	63
<i>E.V.Moiseenko</i> Medical - biological researches of Ukraine in Antarctic . . . . .	70
<i>I.N.Mankovska, K.G.Lyabakh</i> Oxygen transport in skeletal muscle working at $VO_{2MAX}$ under arterial hypoxemia . . . . .	75
<i>N.N.Taradij, I.V.Bagdasarova, Z.H.Uzdenova, F.H.Bichekueva, L.B.Doloman, A.V.Kotsuruba, L.D.Krivokhatskaia, O.V.Kamenetskaia, Y.P.Mandziuk, R.V.Bagdasarova</i> Expression of markers of immunocompetent cells, cytokine levels and L-arginine metabolism in complex ehinterferon therapy of inflammatory diseases in women-highlanders . . . . .	80
<i>Yu.P.Gorgo, T.G.Miroshnik, V.B.Bogdanov, N.V.Kharkovljuk</i> Changes in functional state of humans at the adaptative period to Antarcitics . . . . .	90
<i>T.V.Serebrovskaya, E.E.Kolesnikova, I.N.Karaban</i> Breathing regulation under intermittent hypoxic training in patients with Parkinson's disease . . . . .	95
<i>N.M.Kurhalyuk, T.V.Serebrovskaya</i> Role of krebs cycle intermediates in lipid peroxidation and antioxidant enzymes activity under acute hypoxia . . . . .	104
<i>Zubieta-Castillo G., Zubieta-Calleja G.R., Zubieta-Calleja L., Zubieta-Calleja, Nancy</i> Adaptation to life at the altitude of the summit of Everest . . . . .	110
<i>S.A.Bekuzarova, A.S.Khromov, L.B.Doloman, I.A.Beslaneev, H.A.Kurdanov</i> High altitude hypoxia increases vasodilative reaction on nytroglycerin in healthy subjects . . . . .	118
<i>P.O.Radzievsky, M.P.Radzievskaya</i> Hypoxic training during the preparation of high qualification sportsmen . . . . .	126
<i>Y.A.Polataiko, I.V.Radysh</i> Features physiological reactivity cardiorespiratory system of the juvenile sportsmen . . . . .	134
<i>P.V.Beloshitsky, Yu.N.Onopchuk, D.I.Marchenko, N.I.Aralova</i> Mathematical methods for investigating the reliability of organisms functioning under the extreme conditions of high mount ains . . . . .	139
<i>N.A.Agadjanyan, A.I.El'fimov, L.V.Shevchenko</i> Carotid body hemoreceptors and animal adaptive reactions . . . . .	144
<i>N.V.Ermakova</i> Specific features of the adaptive reactions of the students from mountain and plain regions of Latin America in conditions of middle Russia . . . . .	150

<i>D.A.Sutkovoy</i> Pro- and antioxidant status in blood of patients with postradiation encephalopathy and possibility of its correction by moderate hypoxytherapeutical influence . . . . .	156
<i>Y.Kravchenko</i> Simulation methods of functional working states under the neurodynamic loading and hypoxia . . . . .	161
<i>M.T.Shaov, O.V.Pshikova</i> To the problem of organism physiological function distant controls . . . . .	169
<i>Pasyechnikova N.V.Naumenko V.A.Zborovska A.V.</i> Ischemic form of diabetic maculopathy . . . . .	174