

http://biology.karazin.ua/

# Training at School of Biology

The School of Biology provides training of **Bachelors** 

- in the field of 'Biology' (091). After 4-year course of study the students are qualified as "laboratory assistant in the field of Biology".
- in the field of 'Biotechnology and Bioengineering' (162). After 4-year course of study the students are qualified as "laboratory technician in the field of Biotechnology".
- **The Master degree** is awarded after the successfully completed 1.5-year-course (on the base of Bachelor) by 4 educational Programs: Biology, Biochemistry, Genetics, Human and animal Physiology.

SCHOOL OF BIOLOGY

• The School of Biology provides the Full-Time and the Distant forms of study.

БІОЛОГІЧНИЙ ФАКУЛЬТЕТ

## Training of Bachelors

- Departments provide teaching the special courses and special practicum during 3rd and 4th years of education. Students are carrying out their qualification Bachelor's work during industrial practice after 3rd year and during 4th year of study.
- Bases of practice are: Biological station, Herbarium CWU, Botanical garden, Nature museum, laboratories of scientific research institutions (Institute of Biology of the University, Institute for Cryobiology and Cryomedicine NAS of Ukraine and others).





## Training of Masters

- The courses leading to MA degrees in Biology provide the complete university education. The departments, that provide training of Masters according to specialty, provide teaching the special courses and preparing Master's thesis.
- >> http://biology.karazin.ua/study-eng.html





# Departments of the School of Biology

- Biochemistry
- Botany and plant ecology
- Genetics and cytology
- Molecular biology and biotechnology
- Mycology and phytoimmunology
- Physiology of human and animals
- Plant and microorganisms physiology and biochemistry
- Zoology and animal ecology

>> http://biology.karazin.ua/index-eng.html

# **BIOCHEMISTRY DEPARTMENT**

Head of the Department
Doctor of Sciences (Biology), Full Professor Yevhen E. Perskyi
Phone: 707-55-02, 707-52-49, room 2-3.
E-mail: evg.persky@gmail.com

### Lecturers – 707-55-02 (room 2-5), 707-52-49 (room 2-9, 2-15)



### The fields of the scientific research :

- Cellular and molecular mechanisms of signal transduction,
- Biochemistry of stress and adaptation,
- Biochemistry of extracellular matrix,
- Bioinformatics,
- Medicine biochemistry



# Ukrainian Biochemical Society

The department was one of the organizers of the IX Biochemical Congress of Ukraine (2006).

The lecturers and postgraduates of the department are the members of Ukrainian Biochemical Society that is the part of the Federation of European Biochemical Societies (FEBS, http://www.febs.org/).





Welcome to the FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES



## Employment of graduates of Biochemistry department

- The Biochemistry department provides training Masters in Biology (091) Educational Program - Biochemistry.

Graduates of Department work as scientific collaborators in scientificresearch organizations and laboratories of biological, medical, pharmaceutical, veterinary profiles as well as teachers of biological disciplines at Secondary and High Schools.

At the School of Biology there is postgraduate course by speciality 03.00.04 - "Biochemistry".



## **BOTANY AND PLANT ECOLOGY DEPARTMENT**

Head of the Department Doctor of Sciences (Biology), Full Professor **Tetyana V. Dogadina** Tel: 707-55-29, room 5-17.

E-mail: Tatjana.V.Dogadina@univer.kharkov.ua



#### Lecturers – room 5-16, 5-19, Tel 707-55-29

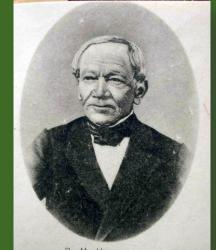


- floristics,
- taxonomy, ecology, geography of algae, lichens, higher plants,
- bioindication, algotechnology,
- methods for biological waste water purification,
- investigation of flora and vegetation in view of the problem of biodiversity preservation,
- the current state and development of regional ecological network

### The Herbarium of Kharkov National University (CWU)

The Herbarium was founded in 1825 by professor V.M. Chernyaev as botanical room of botany department. It belongs to the oldest herbaria of Ukraine and comprises in its funds about 300 thousands of specimens.

The Herbarium possesses the collections valuable in historical and scientific sense, particularly the collections of V.M. Chernyaev, M.S. Turchaninov, S.S. Schegleev, A.O. Potebnya, Yu.N. Prokudin etc. As well the Herbarium includes large collection of old mycological and lichenological exsiccatae.



В. М. Черняевъ

In 2009 CWU Herbarium was admitted national value of Ukraine.

#### Herbarium Curator:

PhD in biology (ecology), associate professor **Yurij G. Gamulya** Phone: 707-55-29 Address: Svobody sq., 4, Kharkov, 61022 Office: 5-16



# Employment of graduates of Botany and plant ecology department

The Botany and plant ecology department provides training Masters in Biology (091)/ Educational Program - Biology. Specialization - Bioecology and botany.

Graduates of the department (masters) can work in the organizations of environment protection, reserve nature areas, at the enterprises of biological and pharmaceutical branch, in research institutions of biological branch; be occupied as educators at educational institutions.

The most talented graduates have the opportunity to continue their education at postgraduate courses.



## **GENETICS AND CYTOLOGY DEPARTMENT**

Head of the Department Professor **Lubov O. Atramentova** Phone: 707-54-52, room 6-21 . e-mail: atramentova@ukr.net

#### Lecturers – room 6-12, Tel 707-55-71





- human, animal and plant genetics,
- radiobiology
- human cytogenetics
- cell culture methods
- mechanisms of formation and manifestation of organisms fitness,
- genetic analysis of behavior traits,
- mechanisms of gene expression regulation







The department has genetic collections of drosophila, mulberry and oak silkworms which are the richest in Ukraine









# Employment of graduates of Genetics and cytology department

The Genetics and cytology department provides training Masters in Biology (091). Educational Program - Genetics.

 Graduates of department successfully work in different fields of science and industry, teach in school or continue study as post-graduates.



## MOLECULAR BIOLOGY AND BIOTECHNOLOGY DEPARTMENT

Head of the Department

Doctor of Sciences (Biology), Full Professor **Anatoliy I. Bozhkov** Phone: 707-53-40, 707-52-62, room 7-22.

E-mail: Bozhkov[at]univer.kharkov.ua

Lecturers: room 7-15, Tel 707-52-62





### Collaborators of Research Institute of Biology take part in Masters training http://www-niibio.univer.kharkov.ua/

- molecular biology and biochemistry of aging,
- biotechnology (in particular, biotechnology of yeasts and one-celled algae),
- cyto-ecology (cellular aspects of stress)
- theoretical molecular biology

# Employment of graduates of Molecular biology and biotechnology department

The department of Molecular biology and biotechnology provides training Masters in Biology (091). Educational Program - Biology, specialization molecular biology and biotechnology.

- From 2015 The School of Biology starts training of Bachelors in the field of Biotechnology (162).
- Now the need in specialists with broad general biological education and a high level of the practical knowledge in technology has appeared in industry and in agricultures. The Department of Molecular Biology and Biotechnology trains the specialists of such direction.



## MYCOLOGY AND PHYTOIMMUNOLOGY DEPARTMENT

Head of the Department

Professoe Shkorbatov Yuriy G. E-mail: Yury.G.Shckorbatov[at]univer.kharkov.ua

Lecturers: Tel 707-56-16, room 7-19,7-13.





- biodiversity, ecology and systematic of fungi,
- plant pathology, plant resistance to fungal diseases,
- medical and veterinary mycology,
- sozology and conservation of fungi,
- industrial mycology and protection of materials from biodestructors,
- mushrooms cultivation, biotechnology of fungi



The department cures mycology herbarium (fungarium), that is the part of scientific herbarium (CWU) and the oldest collection of fungies in Ukraine. It collects more than 37,000 samples.

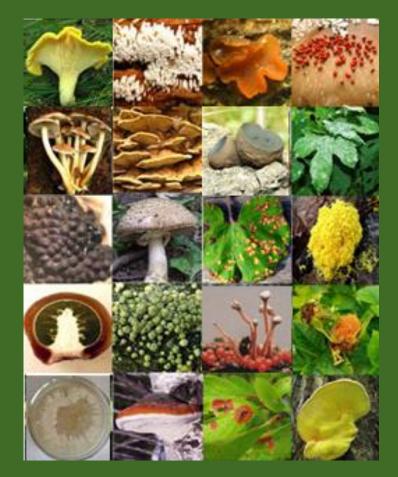
Great methodical work is held by staff of the Department in preparing of the monographs, text-books and scientific papers.



# Employment of graduates of Mycology and phytoimmunology department

The department Mycology and phytoimmunology provides training Masters in Biology (091). Educational Program – Biology. Specialization - mycology and phytoimmunology.

Graduates working in mycology, plant pathology and microbiology fields, engaged in crop and plant protection from diseases, in the food and pharmaceutical industry, biotech companies which used cultures of fungi, in environmental services, monitoring and quarantine of plants, research laboratories of biological and medical profile and are engaged in teaching in various schools



## DEPARTMENT OF PHYSIOLOGY OF HUMAN AND ANIMALS

Head of the Department
Doctor of Sciences (Biology), Full Professor, laureate of the A.V. Palladin Prize of the Ukrainian NAS
Valeriy A. Bondarenko
Tel: 707-53-55, 707-52-13, room: 2-11
E-mail: KFCHZH[at]ukr.net



#### Lecturers: room 2-19, Tel 707-52-13



- physiology of aging and gerontology,
- immunophysiology,
- psychophysiology,
- development of new educational technologies in the field of physiology
- investigations of the mechanisms of cell sensitivity to external factors, including those in ontogenesis







The department has got the international grant for computer equipment to provide bioethics technologies (modeling of experiments on animals) in teaching of some subjects for Bachelors and Masters

# Employment of graduates of the department of Physiology of human and animals

The department of Physiology of human and animals provides training of Masters of Biology (091). Educational Program - 'Physiology of human and animals'.

- Graduates of the department work in research and medical institutions in Ukraine and many other countries.
- The most talented graduates continue their education in the post-graduate school.
- Bases for practice and diplom works are Institute for cryobiology and cryomedicine NAS of Ukraine and other scientific research institutions of Kharkov.

## PLANT AND MICROORGANISMS PHYSIOLOGY AND BIOCHEMISTRY DEPARTMENT

Head of the Department

Doctor of Sciences (Biology), Full Professor **Vasyl V. Zhmurko** Tel: 707-52-32, 707-54-82, room 3-21 E-mail : Vasily.V.Zhmurko[at]univer.kharkov.ua

Lecturers - Tel 707-54-82, room 3-14, 3-16

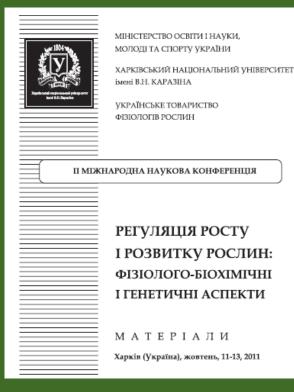




- plant growth and development control,
- plant tissues and cell cultures morphogenesis in vitro
- physiological and biochemical mechanisms of plant-microbes interactions,
- stress and environmental effects on plant growth and development

# The department traditionally get prizes for methodical work





The department organizes scientific conference "Regulation of plant growth and development" and photo exhibition "Autumn colors".







## Employment of graduates of the Plant and microorganisms physiology and biochemistry department

The Plant physiology and biochemistry department provides training Masters in Biology (091), Educational Program – Biology. specializations 'Plant physiology' or 'Microbiology'.

- Graduates of the Department work as scientific collaborators in research organizations and laboratories of biological, medical (clinical, biochemical and bacteriological), pharmaceutical, agricultural specializations as well as teachers of biological disciplines.
- At the department there is a postgraduate course.



## ZOOLOGY AND ANIMAL ECOLOGY DEPARTMENT

Head of the Department DSci (Biology), Professor **Viktor Tokarsky** Tel: 707-51-72, room 4-25 E –mail: Viktor.A.Tokarsky[at]univer.kharkov.ua



Lecturers – room 4-11, Tel 707-51-72



- systematics and phylogeny animals
- parasitology,
- hydrobiology,
- entomology,
- teriology,
- ornithology,
- herpentology,
- ecology and sea biology of Arctic and Antarctica

Department representatives took part in several Antarctic expeditions (investigation of fauna, underwater photography), expedition to Northern seas, in organization of International Antarctic conferences





By initiative of professor Viktor Tokarsky the Groundhog Day has been introduced and is carried out every February on Biological Station



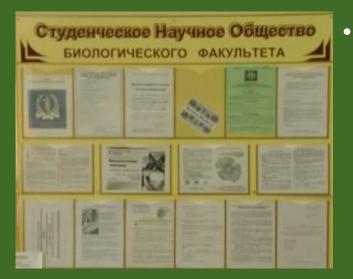
# Employment of graduates of Zoology and animal ecology department

The Zoology and animal ecology department provides training Masters in Biology (091), Educational program – Biology. Specialization 'Zoology and animal ecology'.

 The graduates work as teachers of biological disciplines, work as engineer s and scientific collaborators in institutions of NAS of Ukraine, agriculture field, protected nature areas, organs of nature protection, etc



## **STUDENT SCIENTIFIC SOCIETY**



Student scientific society takes an active part in the organization of Ukrainian and Kharkov biological tournaments, student olimpiads, conferences, scientific works competitions.







Every year the Student scientific society of the School of Biology organizes International scientific conference of young scientists "BIOLOGY: FROM MOLECULE TO BIOSPHERE"





## Work with schoolchildren: Chemical-biological tournament named by I.I.Mechnikov



 Schools of Biology and Chemistry organize chemical-biological tournament for pupils of 7-11 classes (school years).





## **Team for Nature Protection**



Team for nature protection is the social organization uniting young people (mostly - the students and the graduates of Kharkov National University), who what to really act for Nature protection.

The tasks of this organization: practical activity for nature protection, maintaining of biological diversity, ecological education and propaganda.





#### **Contact information:**

Dean of the School of Biology Doctor of Sciences (Biology), Full Professor Vasyl V. Zhmurko Tel: 707-52-32, 707-55-01, room 3-21

E-mail: biology@karazin.ua Address: Svobody sq., 4, Kharkov, 61022 Office: 3-11

Dean's office for full-time students: Tel: 707-54-41, room 3-11a Dean's office for distant study: Tel: 707-56-35, room 3-17

Our website http://biology.karazin.ua/

# Welcome!

