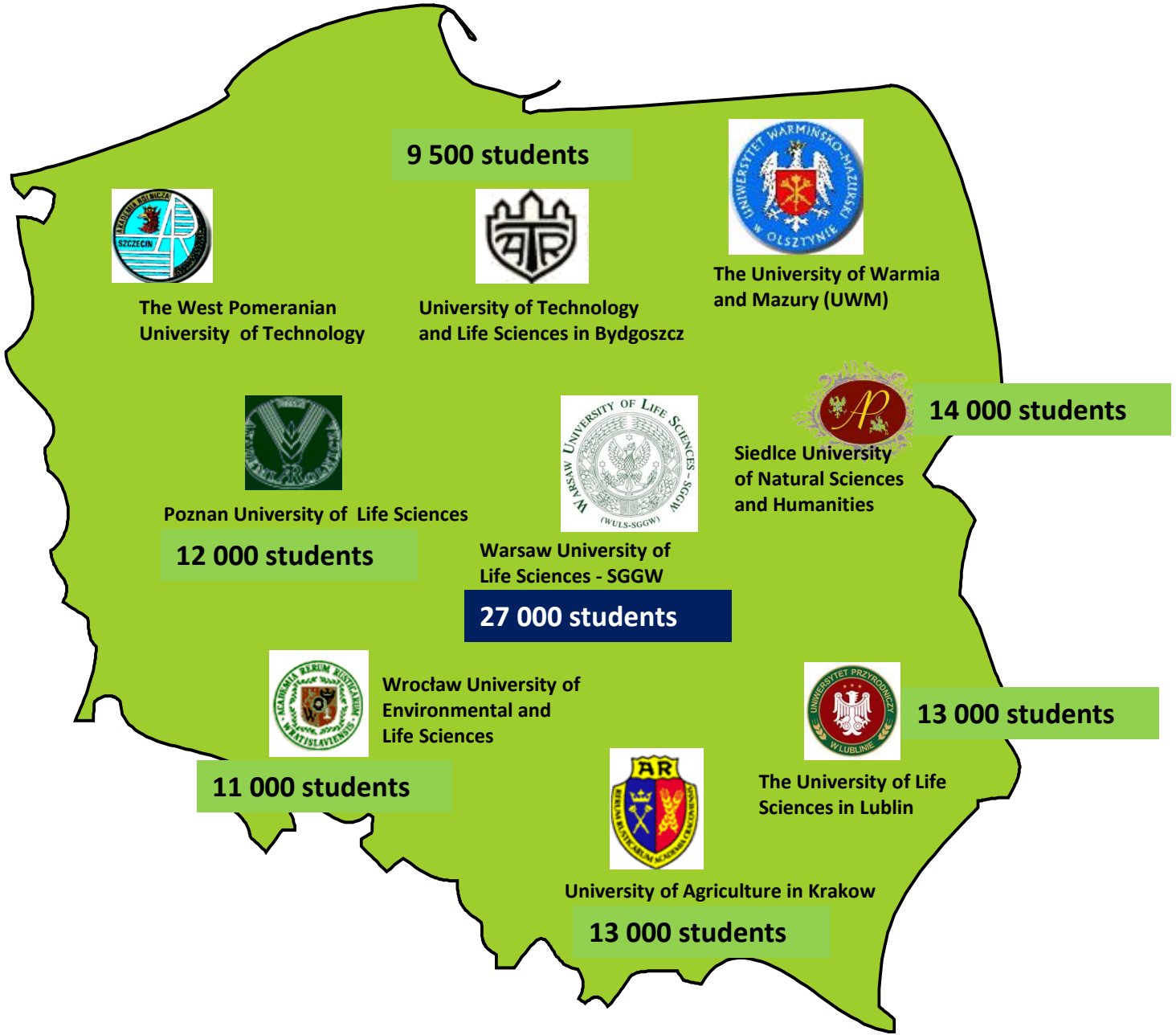
WARSAW UNIVERSITY OF LIFE SCIENCES - SGGW

Dr. Hab. Hazem M. Kalaji

POLISH LIFE SCIENCE UNIVERISTIES



SGGW - Warsaw University of Life Sciences

The oldest agricultural higher education institution in Poland

23 September 1816 – establishment of Institute of Agronomy in Marymont

1918 – renamed into Polish Royal Main School of Agriculture

1919 – nationalized and named Main School of Agriculture(SGGW) (Warsaw Agricultural University)

1945 –First University in Warsaw which revives its activity after II World War

2002 – New campus in the Ursynów district

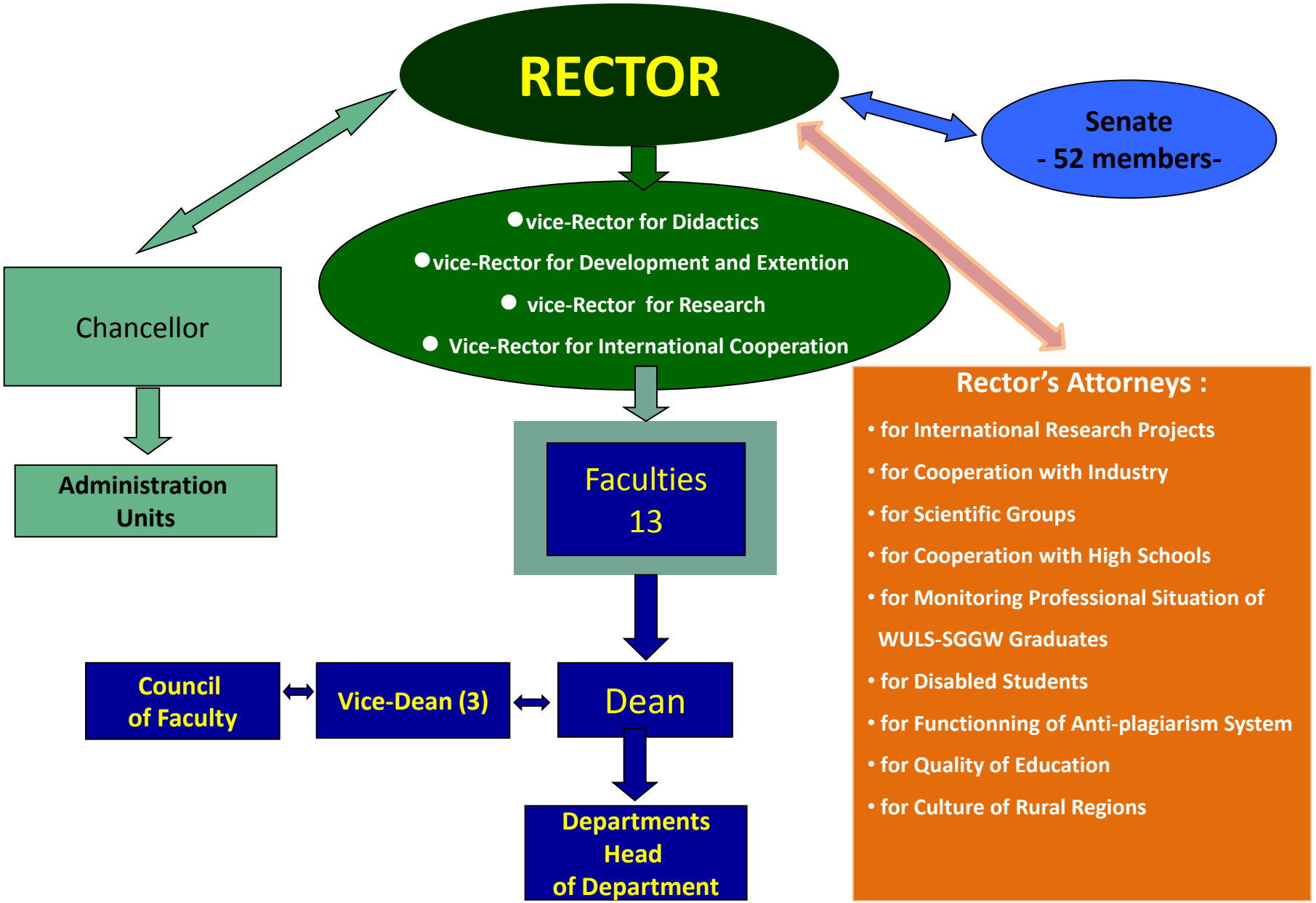
2006 – Change of the University name **Warsaw University of Life Sciences - SGGW**

Institute of Agronomy in Marymont

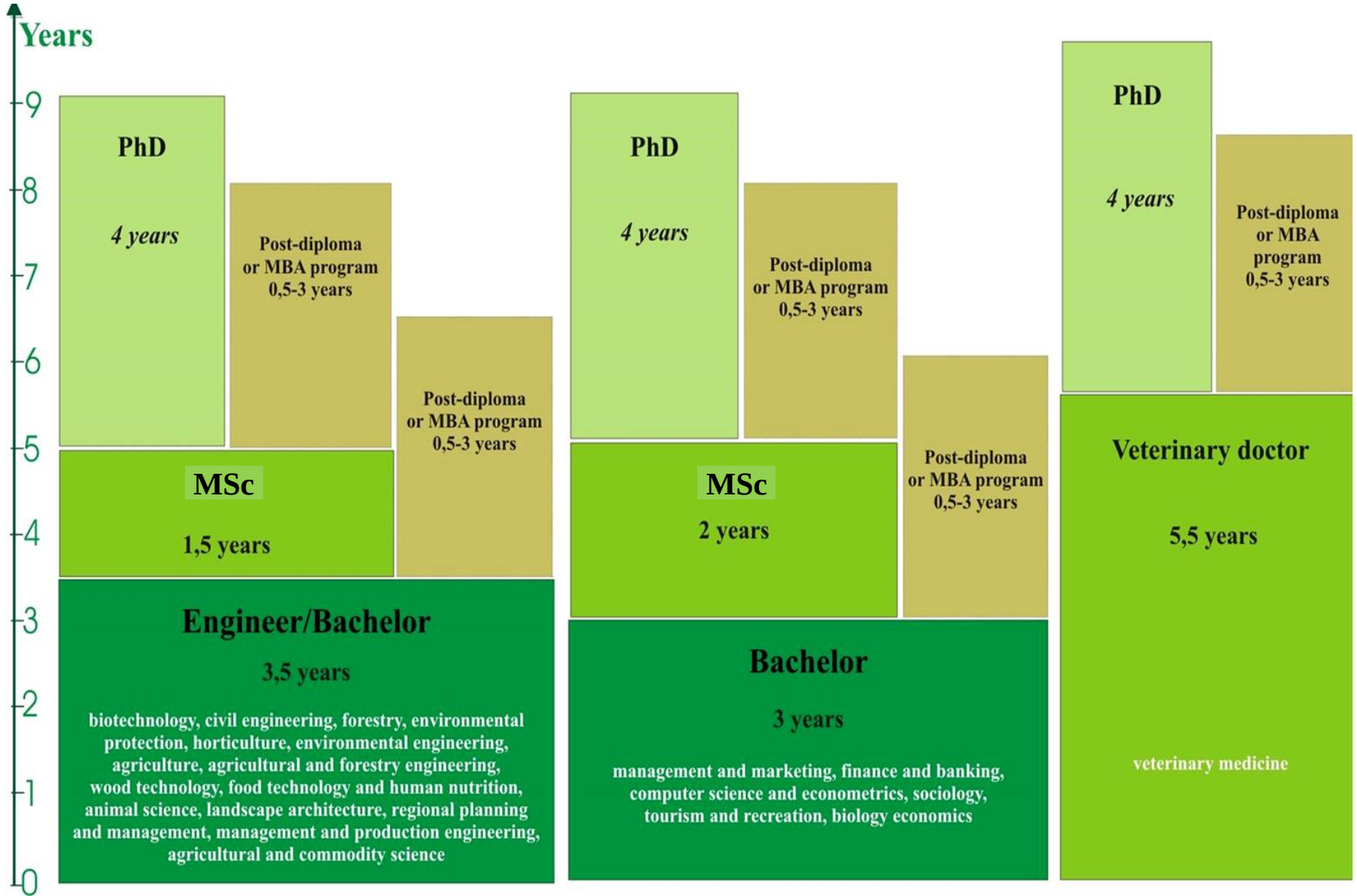
WULS-SGGW Open Days


KLINIKA MAŁYCH ZWIERZĄT

SGGW - Organization chart



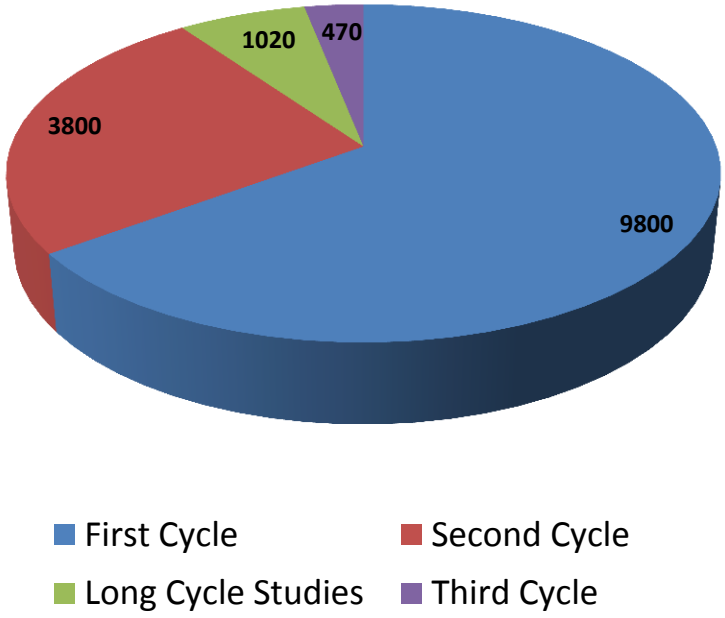
ORGANIZATION OF THE UNIVERSITY EDUCATIONAL SYSTEM



Number of students in WULS-SGGW in academic year 2012/2013 (ca. 25000)

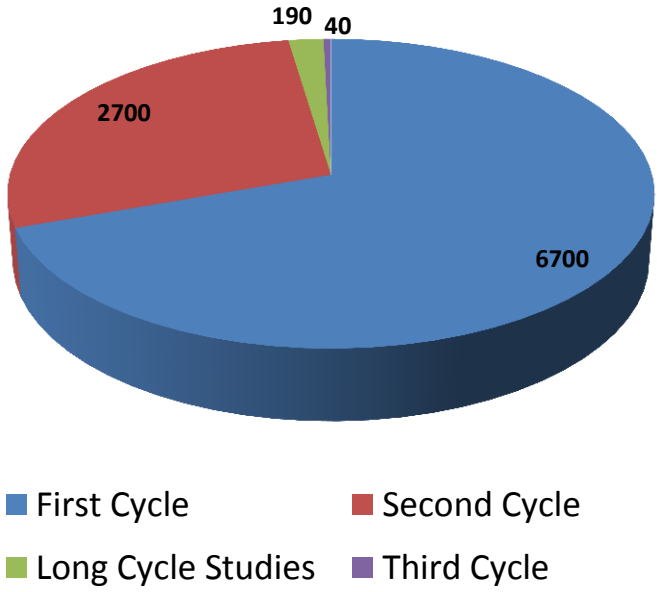
15 100 STUDENTS

FULL - TIME STUDIES



9 600 STUDENTS

EXTRA - MURAL STUDIES



13 FACULTIES

Faculty of Agriculture and Biology
Faculty of Veterinary Medicine
Faculty of Forestry
Faculty of Horticulture,Biotechnology
and Landscape Architecture
Faculty of Civil and Environmental Engineering
Faculty of Wood Technology
Faculty of Animal Sciences
Faculty of Economic Sciences
Faculty of Food Sciences
Faculty of Human Nutrition and Consumer Sciences
Faculty of Production Engineering
Faculty of Social Sciences
Faculty of Applied Informatics and Mathematics

STUDY PROGRAMMES

Agricultural and Forestry Engineering
Agriculture
Animal Science
Biology
Biotechnology
Bioengineering of animals **(2013)**
Breeding and Protection of wild and accompanying animals **(2011)**
Civil Engineering
Gastronomy and hotel industry **(2013)**
Commodity Sciences
Computer Science
Computer Science and Econometrics
Dietetics
Economics
Ecological Engineering **(2011)**
Environmental Engineering
Environmental Protection
Finance and Accounting
Food Safety **(2011)**
Food Technology and Human Nutrition
Forestry
Horticulture
Landscape Architecture
Logistics
Management
Management and Production Engineering
Pedagogy
Renewable Energy Technology **(2010)**
Regional Planning and Management
Sociology
Tourism and recreation
Veterinary Medicine
Wood Technology

SGGW – Research

Scientific research carried out at SGGW by the 13 Faculties encompass the wide scientific problems related to areas of:

- Agriculture
- Animal sciences
- Biology
- Biotechnology
- Economics and social sciences
- Environmental Protection
- Civil and Environmental Engineering
- Engineering and Technology
- Forestry and Wood Technology
- Nutrition and food sciences
- Sustainable development of multifunctional rural environment
- Veterinary medicine





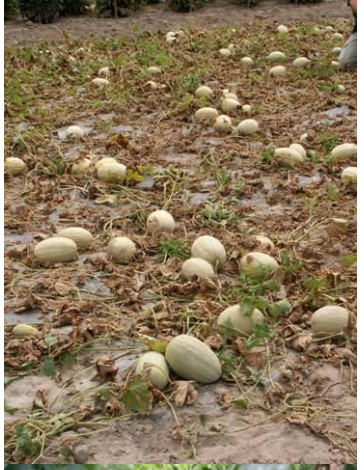
Experimental Field Station for Plant Genetics, Breeding and Biotechnology at Warsaw - Wolica

Faculty of Horticulture and Landscape Architecture
Department of Plant Genetics, Breeding and Biotechnology

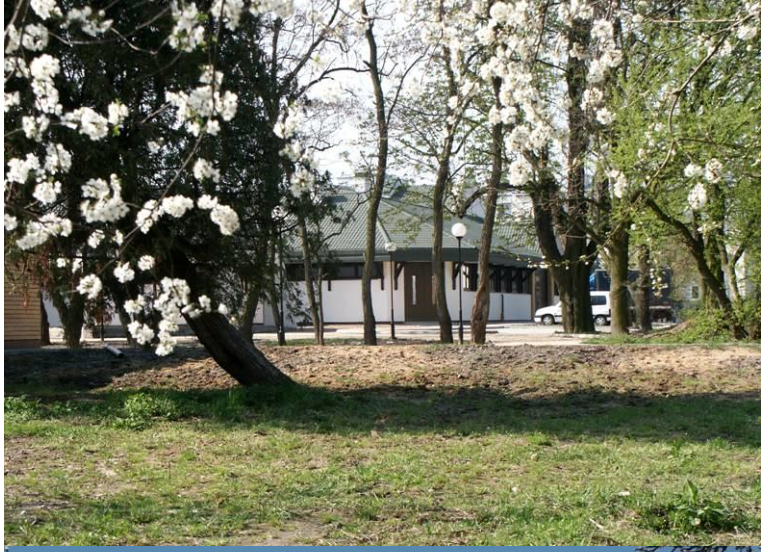

Experimental Field Station for Plant Genetics, Breeding and Biotechnology at Warsaw – Wolica is governed by the Department of Plant Genetics, Breeding and Biotechnology.

This object consists of :

- **Experimental fields of 8,5 ha**
- **Experimental Greenhouses**
- **Laboratory House for chemical analysis (5 laboratories)**
- **Seeds Storage Room**
- **Low Temperature Store**
- **Didactic facilities** *(seminar room, exercise rooms, lecture room, work rooms)*



Horse Clinic at Warsaw – Wolica

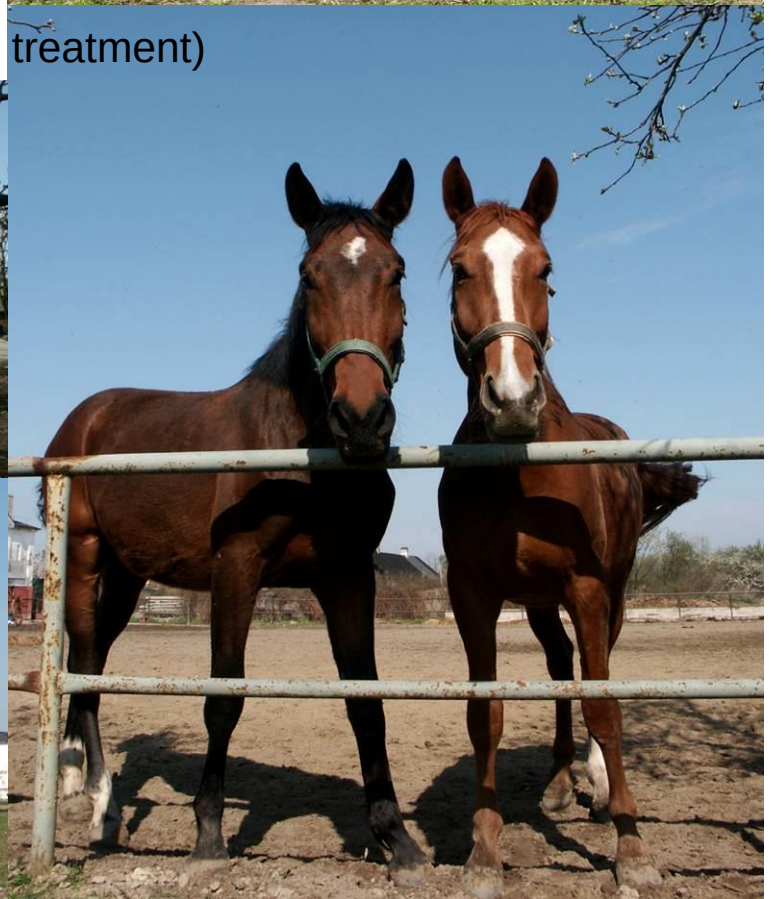


The Clinic has 3000 m² surface and consists of:

50 posts for stationary treatment
2 operation rooms
4 laboratories

Additional facilities:

running track (for effort tests)
menage
stable
pavilion for hypotherapy purposes (handicaped children treatment)






Experimental Horticultural Field Station at Warsaw – Wilanów

Faculty of Horticulture and Landscape Architecture





Experimental Field of the Faculty of Horticulture and Landscape Architecture at Wilanów

The field covers a total area of 36 ha in that in management inside:

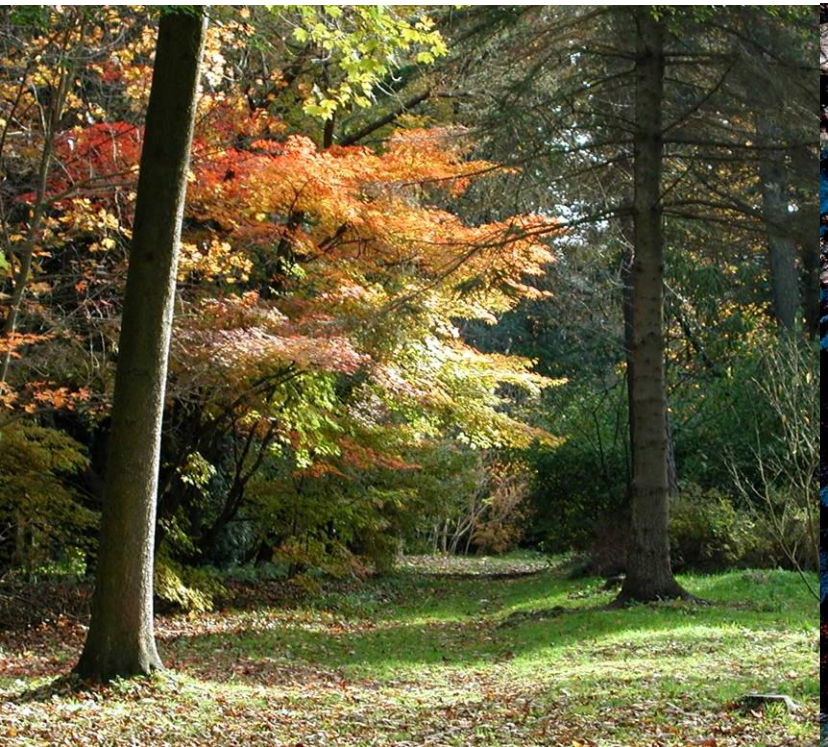
- **Department of Pomology and Basic Natural Sciences in Horticulture - 23,5 ha**
- **Department of Vegetable and Medicinal Plants - 6 ha**
- **Department of Ornamental Plants - 2 ha.**

The Experimental Field is equipped with cold storage facilities. Four KA rooms with 50 ton storage capacity each and four small chambers 6 ton each are for commercial and experimental disposal. Two chamber with 15 small KA boxes 1 m^3 each are prepared for work with different gas ratios in two different temperatures. One specially equipped chamber for plant storage has the rooting bed in and three different temperatures of bottom heating enables work with hardwood cuttings. All chambers are computerized and automatically regulated.




Experimental Forestry Station in Rogów

Faculty of Forestry






The Forest Experimental Station in Rogów

Land use:
Forests – 3482 ha
Fields - 85 ha
Arboretum – 56 ha
Ponds - 7 ha
Others – 61 ha
Total - 3691 ha

Training facilities:
Auditory for 210 persons
2 seminar room for 30 persons each
Seminar room for 16 persons
3 conference rooms for 60 persons each

Accommodation facilities:
Student's canteen for 120 person
Dormitory for 170 persons
Hunter's house for 7 persons
12 foil tunnels 180 m2 each
Watering system

Equipment:
2 cold storage plant 100 m2 each – T -1ºC
1 cold storage plant 50 m2 – T -5ºC
Green house 270 m2


Production:
wood 10000 per year: timber -3250 m3 , palpwood – 3000 m3, fuel wood 1700 m3, seedlings

Agricultural Experimental Station in Żelazna
is situated 90 km south from Warsaw

Production:
Potatoes for chips, carrot, been, corn, grain
Mainly potatoes and vegetables - 70% of total crop

Land use:
Fields – 325 ha
Ponds – 13 ha
Meadows – 12 ha
Forests – 18 ha 2
Others – 18 ha

Facilities:
Dormitory for 13 persons
Conference room for 60 persons
Canteen for 60 persons
Guest's rooms for 2 persons each

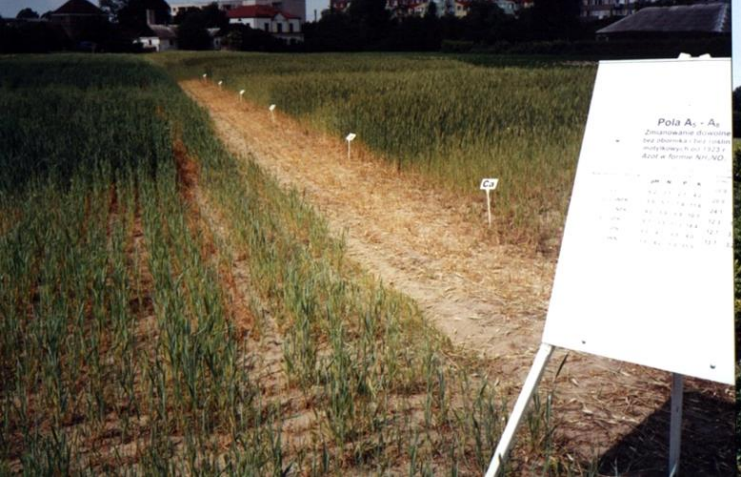
Infrastructure:
Potato storage magazine for 3500 t
Carrot storage magazine for 700 t
Cool storage plant for 100 t
Green house 520 m2

Animal breeding
3 herds of old Polish breed of sheep
Fish production in pounds



Agricultural Experimental Station in Skierniewice

Faculty of Agriculture

Agricultural Experimental Station in Skierniewice is situated 70 km south from Warsaw

Facilities:
Guest rooms for 30 persons
Kitchen
2 Seminar rooms
Vegetation hall for 1000 pots
Weather station

Cooperation:
Vegetable Institute
Warsaw University of Technology
Biotechnology Institute

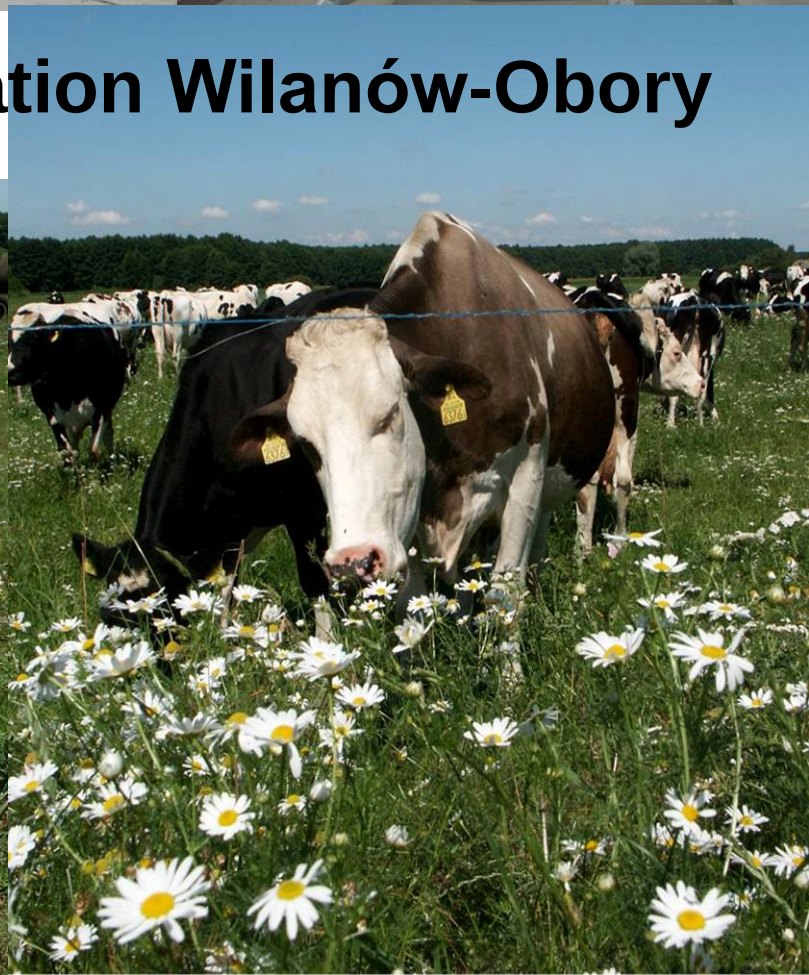
Land use:
Fields – 59 ha

Equipment
2 Combine harvester for grain
Tillage sets
Sprinkler

Planned Investments:
Building of organic farming farm

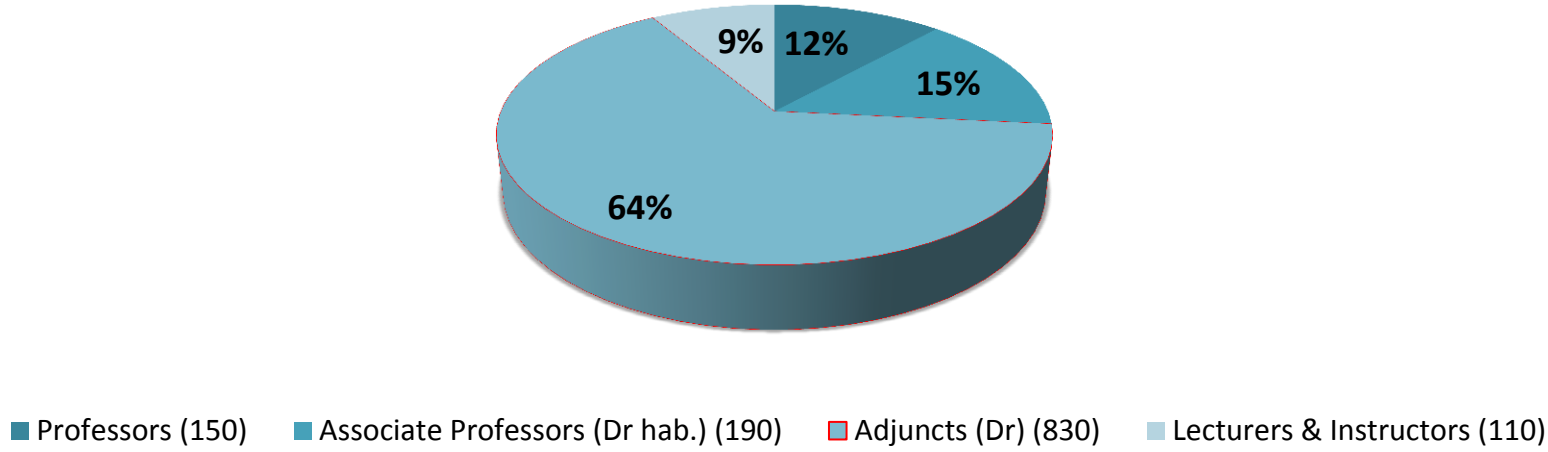


Agricultural Experimental Station Wilanów-Obory

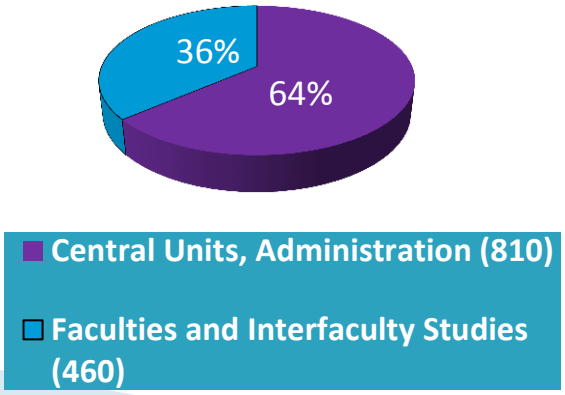


HUMAN RESOURCES

Teaching and research staff (1280)



(1270)



Supporting staff	1270
Administration	410
Technical Staff	270
Workers	510
ICT + Librarians	80

SGGW – International cooperation

Any educational, scientific or cultural inspiration worldwide is to be regarded as absolutely vital for SGGW development.

Taking into account the current and the future economic and political relations as well as the past, our attention is focused on new inspiration from the European Union countries and other countries of the world.

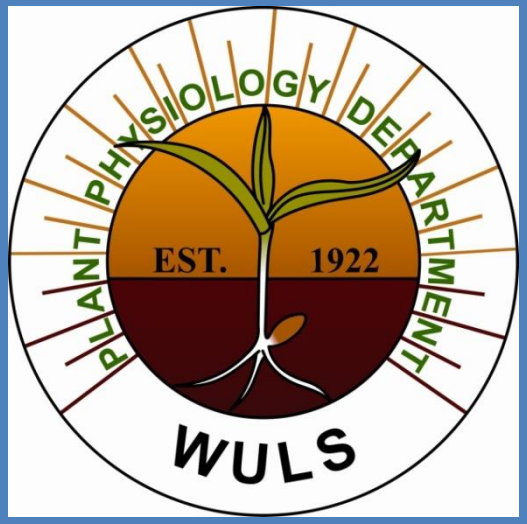
Simultaneously, we develop the already existing cooperation with our neighbours from Central and Eastern European Countries and Newly Independent States.

SGGW is a member of prestigious international organizations such as:

- **European University Association (EUA)**
- **International Association of Universities (IAU)**
- **Association for European Life Science Universities (ICA)**
- **Euroleague for Life Sciences (ELLS)**

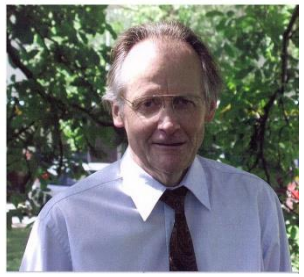
and many others international associations and organizations for research, education and management of higher education institutions.

Department of Plant Physiology
Faculty of Agriculture and Biology



Energy crops

- **Begining investigation energy crops and cooperation by Prof. Emil Nalborczyk with Stuttgart Hohenheim and Bonn Universities and UK Wye College London in 1994**
- **Creating term „altenative crops” by Prof. Walter Aufhammer, Dr. Hans Peter Kaul and Prof. Dennis Baker and begining reaseaches on them in Dewpartment Plant Physiology WULS**



Prof. Walter Aufhammer

Prof. Emil Nalborczyk

Dr. Hans Peter Kaul

Miscanthus

Praire Cordgrass

Willow

Thorn free rose

Virginia Mallow

Giant Knotweed

Jerusalem artichocke

Opportunities for a Polish Camelina value chain

This proposal aims to identify opportunities of Polish Camelina value chain as:

- Biodiesel;
- A second generation biofuel, used for aviation.

The proposal is also aiming to establish a sustainable bio-kerosene jet-fuel processing and production capability in Poland.

Faculty of Production Engineering
Department of Production Management and Engineering

Section of Technical Infrastructure

- **Research activity in the Section of Technical Infrastructure includes the following projects:**
  - toxicity of exhaust gases in agricultural tractors and machines;
  - Systems for purifying of exhaust gases in self-ignition engines;
  - mathematical models of phenomena accompanying the catalysis processes;
  - computer systems of diagnostics and servicing agricultural vehicles and machines;

Combustion Processes Laboratory on the stands for: visualization of liquid fuel combustion processes, investigations on the effect of injection parameters and fuel properties on combustion process in Diesel engines.

- The test chamber allows to explore the process injection and combustion in a chamber of constant volume with Common Rail injection system and the heating medium in the temperature range 400 - 700 °C..

Participation in projects for the subject of biofuels:

- Green fuels and human health – toxicity of engine emission from 1st and 2nd generation biodiesel fuels, implemented within Polish-Norwegian Research Programme No Pol-Nor/201040/72/2013.

Realized projects for biofuel subject:

- Research of the combustion process rapeseed oil and its mixtures with additives in the test chamber with variable parameters of air and fuel intake (Common Rail) No PB0573/T02/2006/31 (2006-2010);
- The use of crude rapeseed oil as a fuel for diesel engines of tractors and agricultural vehicles No R10 037 03 (2007-2011).

SGGW in FP7, and other Programmes (2013)

22 + 4

Weak participation of Polish and other new members of EU (Eastern and Central Europe) of institutions in research consortia

Solution:

- Providing changes in the proposals evaluation criteria e.g. not the same for all partners

or/and

- Providing changes in the calls requirement e.g. by encouraging to cooperate with
Eastern European Countries by e.g. adding more scores

THANK YOU
FOR YOUR ATTENTION