



*New Roles for Pharmacists in
Modern Romanian Society*

Mariana Palage, Felicia Loghin, M.T. Bojita
Faculty of Pharmacy,
University of Medicine and Pharmacy
„Iuliu Hatieganu”
Cluj-Napoca, Romania

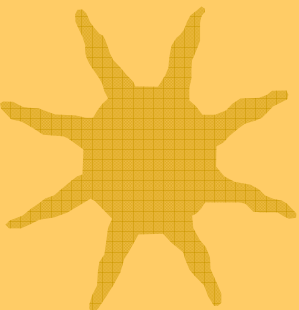
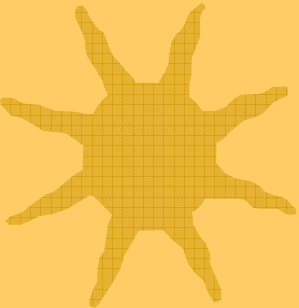
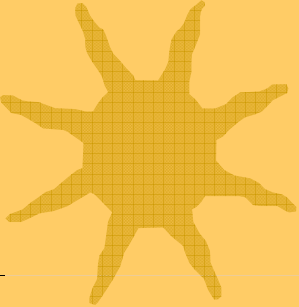


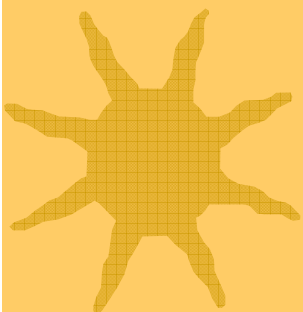
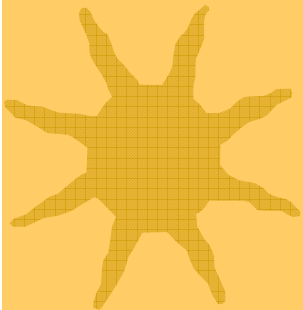
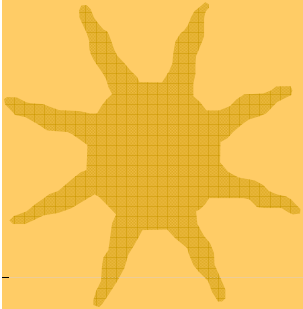


Roles of pharmacist

★ Pharmacists may work in:

- Community pharmacy
- Hospital pharmacy
- Drugs and cosmetics industry
- Laboratory (toxicology, biochemistry, analysis of medicinal products)
- Administration
- University





Roles of pharmacist

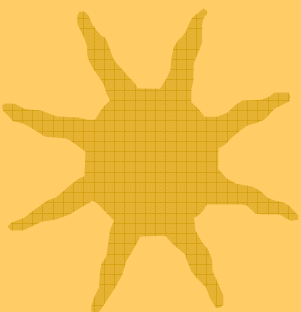
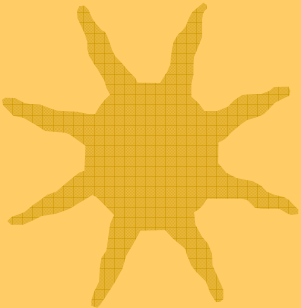
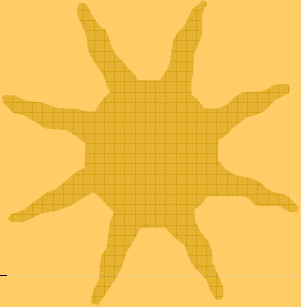
- ★ Not only to dispense medicinal products, but also to:
 - provide health information and services to the patients,
 - be implicated in Primary Health Care
 - collaborate with physicians to establish the best therapeutic schedule
 - elaborate farmacovigilence files



The Romanian pharmaceutical curriculum

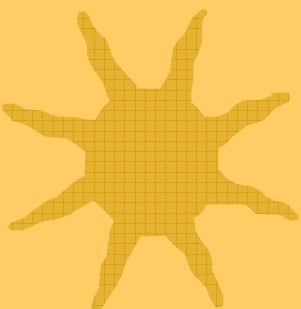
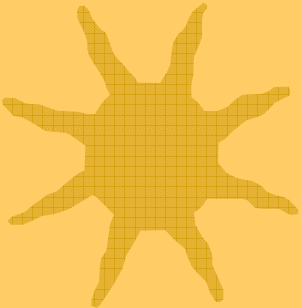
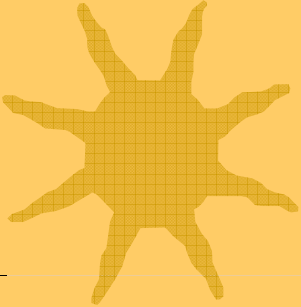
★ Conditions for admission:

- pre-requisite schooling - 4 years of primary and 8 years of secondary school
- examination at the admission in the first year, consisting in a test of multiple-choice questions on subjects from Botanic and Organic or Inorganic chemistry





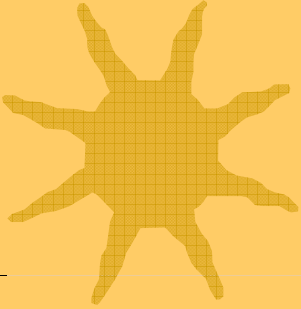
The subjects of instruction



Plant and animal biology	✓
Physics	✓
General and inorganic chemistry	✓
Organic chemistry	✓
Analytical chemistry	✓
Pharmaceutical chemistry, including analysis of medicinal products	✓
General and applied biochemistry (medical)	✓
Anatomy and physiology; medical terminology	✓
Microbiology	✓
Pharmacology and pharmacotherapy	✓
Pharmaceutical technology	✓
Toxicology	✓
Pharmacognosy	✓
Legislation and, where appropriate, professional ethics	✓

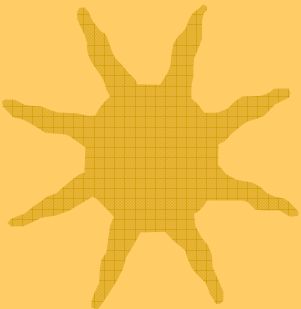
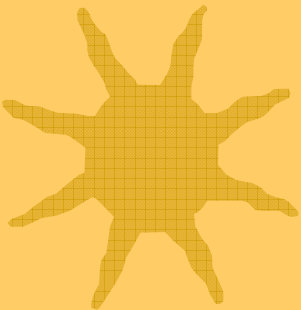


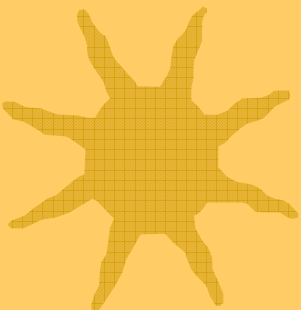
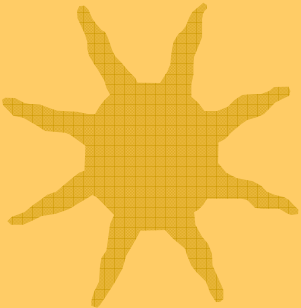
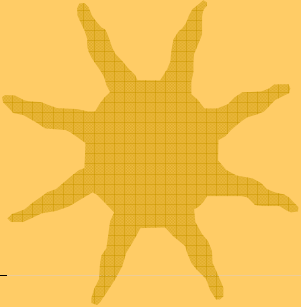
The Romanian pharmaceutical curriculum



★ Training: 5 years:

- 4 years and a half (9 semesters) full-time theoretical and practical training in the University
- One semester (now 6 months) of in-service training in a pharmacy open to the public or in a hospital pharmacy



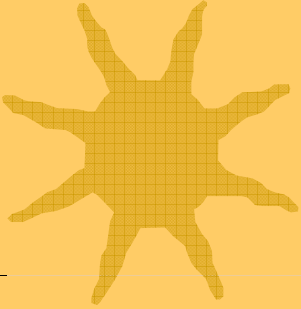


The Romanian pharmaceutical curriculum

- ★ Course organization and structure: 3 cycles
 - First cycle: 1st and 2nd years of training
⇒ general scientific knowledge and introductory pharmacy knowledge
 - Second cycle: 3rd, 4th and 5th years of training ⇒ specialist pharmaceutical knowledge
 - Third cycle: postgraduate (master, PhD, residency)



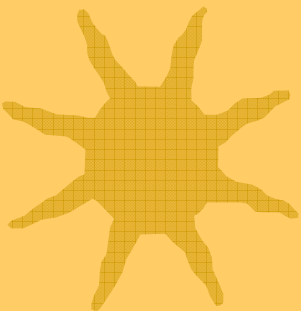
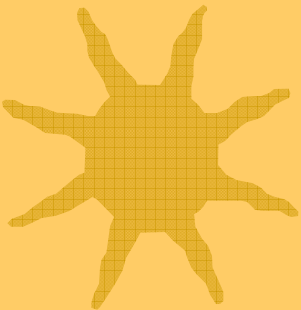
The Romanian pharmaceutical curriculum



★ First and second cycle:

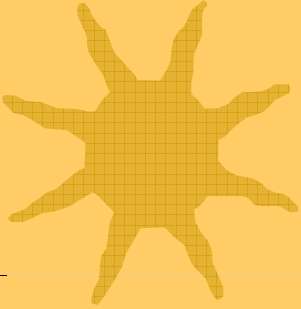
During faculty training

- Theoretical and practical examination covering each discipline at the end of each semester
- At least 50 credits of 60 must be taken to pass from one year to another (within the same cycle)





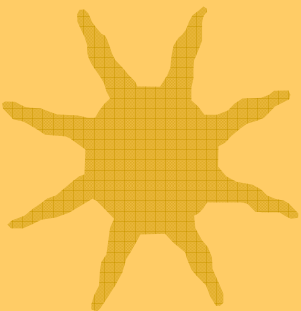
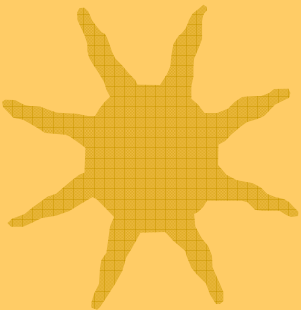
The Romanian pharmaceutical curriculum



★ First and second cycle:

3 optional courses/year, during the 2nd to the 5th year, mostly basic medical subjects, social aspects of pharmacy or research methodology

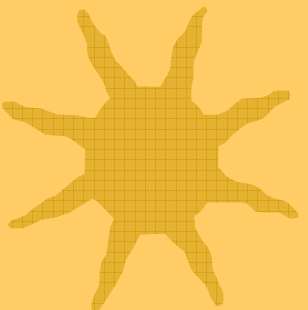
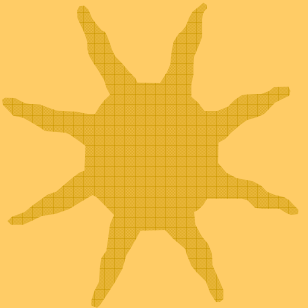
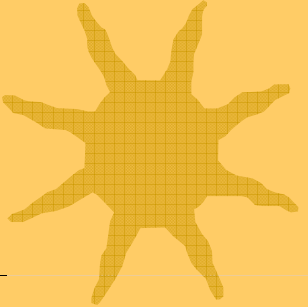
⇒ at least one course must be taken each year

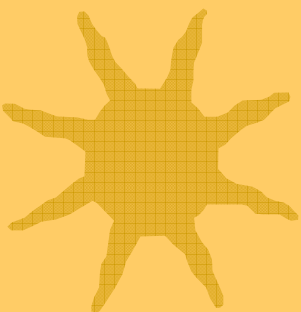
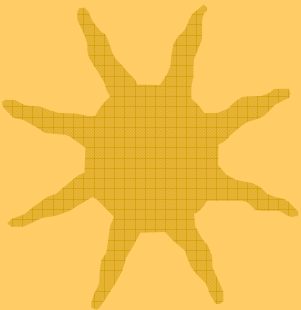
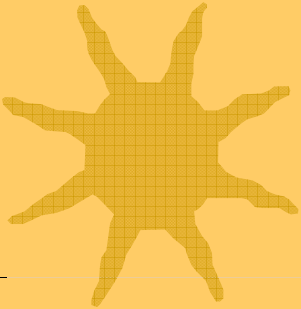




The Romanian pharmaceutical curriculum

- ★ On the 5th year of study are introduced 2 new courses:
 - Pharmaceutical Care
 - Therapy of metabolic disease

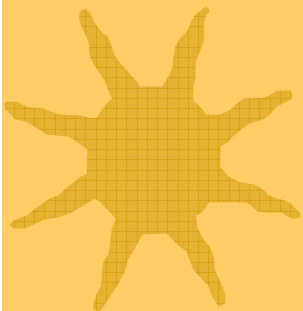
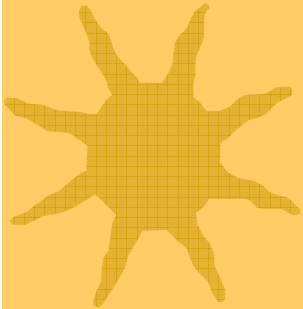
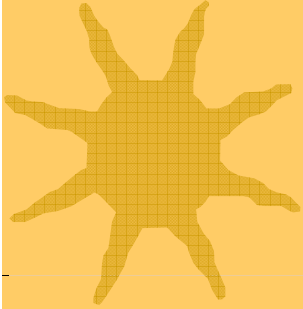




The Romanian pharmaceutical curriculum

★ Graduation examination – 3 parts

- national exam with multiple choice questions concerning pharmaceutical disciplines
- practical exam, covering topics on pharmaceutical technology, analysis of medicinal products, effects of medicinal products
- dissertation (thesis)

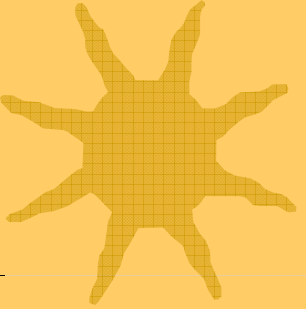


Future challenges:

- ★ balance between the theoretical and practical training
- ★ more interactive teaching
- ★ increased percentage of basic medical subjects
- ★ integrated teaching
- ★ continuity and correlation of information by rethinking the position of some disciplines in the Curricula

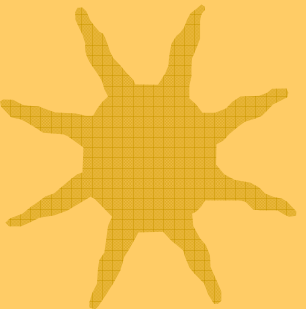
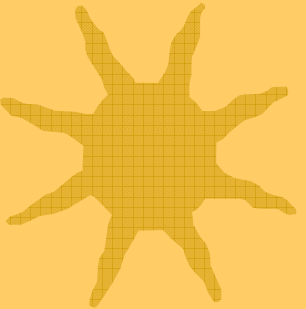


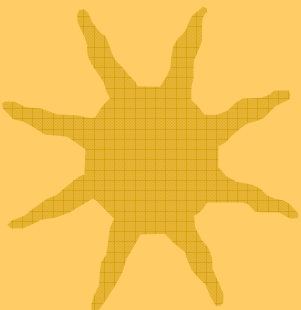
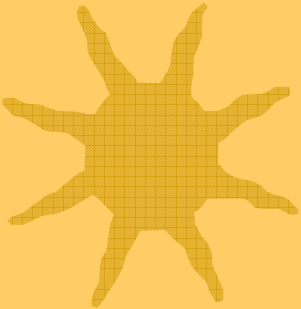
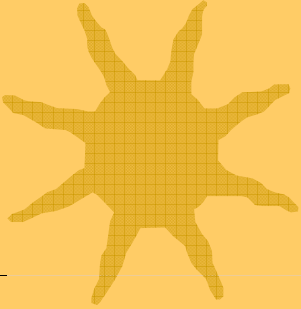
Residency



★ Is an organized, directed, post-graduated training program in:

- Industry
- Laboratory
- Clinical pharmacy

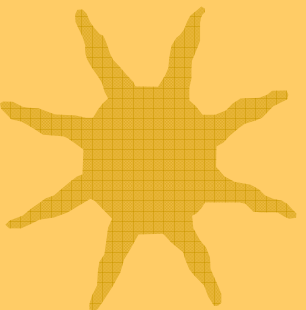
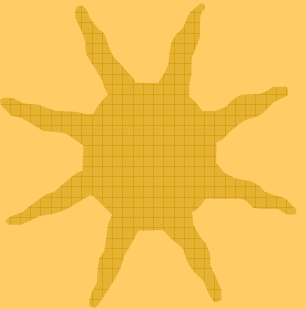
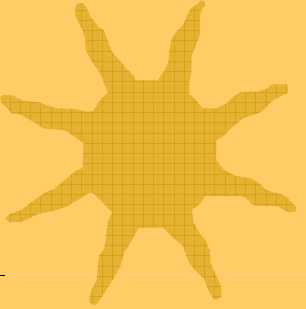




Project: “Expanding Primary Health Care in the Pharmacy Curriculum”

- ★ An integration course for senior pharmacy students: “*Primary Health Care Delivery and the Role of the Pharmacist*”, with the goal to provide the student with knowledge of the structural features and operational characteristics of a dynamic health care system.

Lecturers: Dr. Marius Bojita, Dr. Rosalyn C. King, Dr. Felicia Loghin



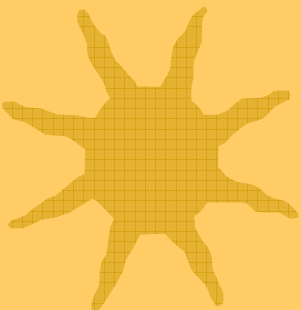
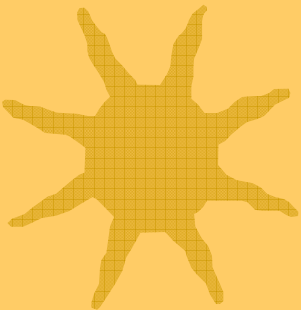
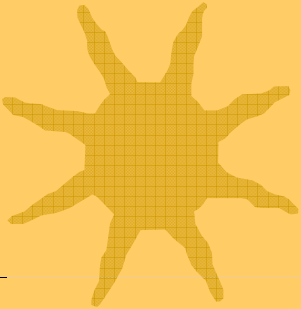
Continuing Education System

- ★ It was obvious the need to put into place an innovative Continuing Education System based on interactive training methods and intended to increase the professional skills of pharmacist.
- ★ This desideratum was realized by TrainPharm Project



TrainPharm Project

OBJECTIVE

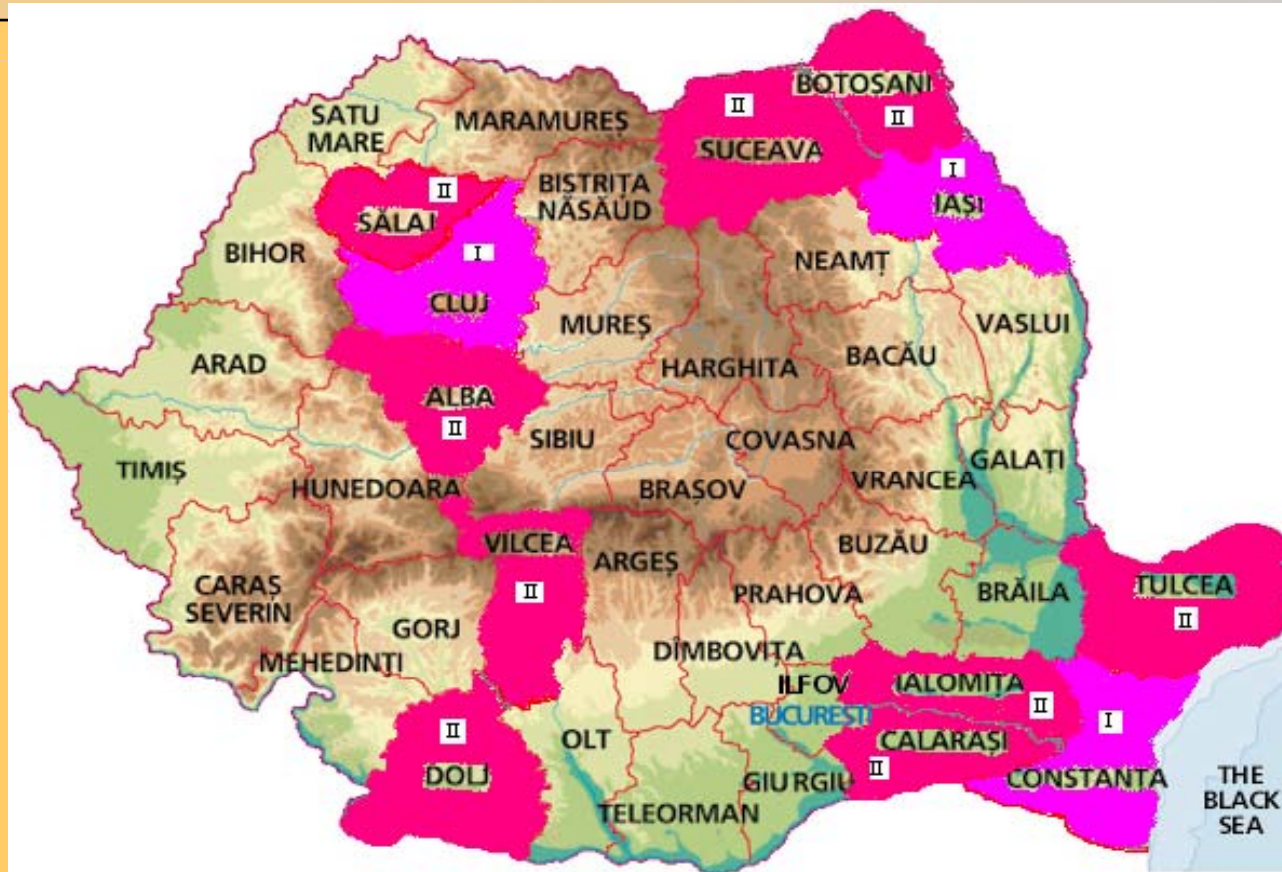


- ★ to implement a sustainable continuing education system for pharmacists and to meet the USAID strategic objective of improving the welfare of women and children in Romania



TrainPharm Project **RESULTS**

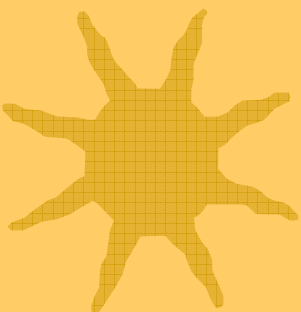
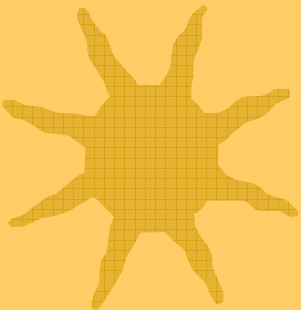
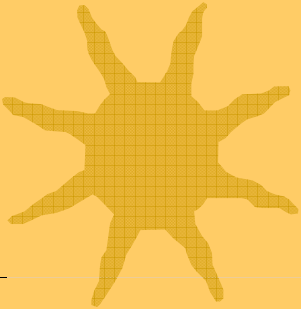
★ pharmacists from 30% of the districts of Romania (12) were trained





TrainPharm Project

RESULTS

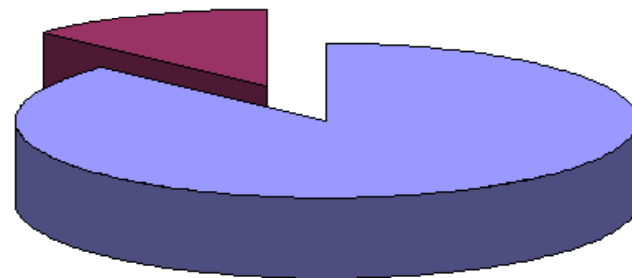


- ★ 1026 pharmacists, who represented over 500 pharmacies, mostly community pharmacies,
- ★ were trained (382 in Phase I, 644 in Phase II)

Percentage of trained pharmacists at national level

Trained pharmacists

13%



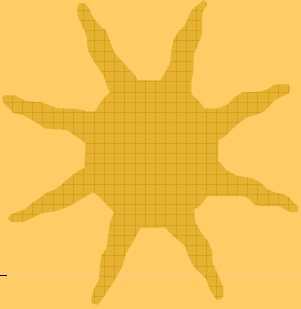
87%

Not-trained pharmacists

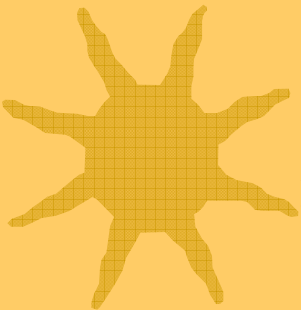


TrainPharm Project

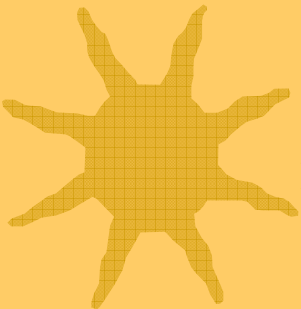
ACHIEVEMENTS



★ The number of professionals trained to provide counselling and assistance on contraceptives use and on prevention and treatment of HIV/AIDS or other sexually transmitted diseases was substantially increased



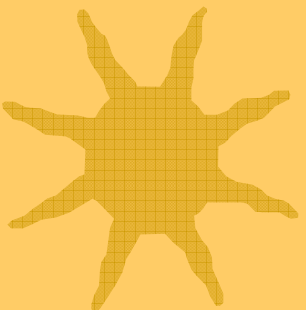
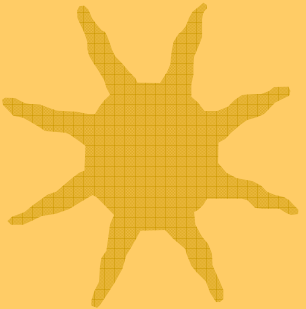
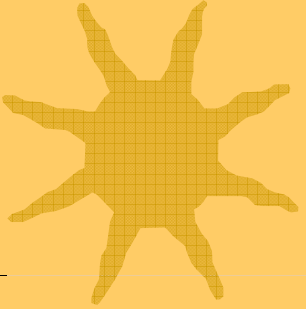
★ The number of pharmacies providing contraceptive products has increased in the context of a total privatisation of community pharmacies and of the partial reimbursement of contraceptives



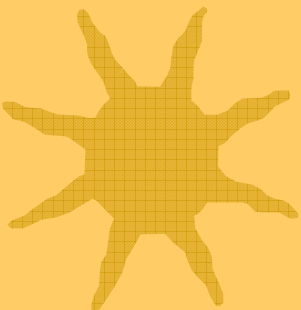
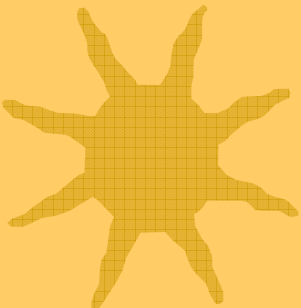
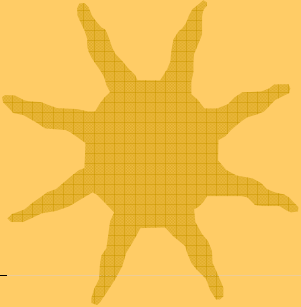
★ The access of women to reproductive health information has considerably improved



TrainPharm Project **ACHIEVEMENTS**



- ★ The results were presented in September 2002 at the International Pharmaceutical Federation's 62 Annual Congress of Pharmacy and Pharmaceutical Sciences in Nice, France, being highly appreciated by the participants.



Continuing Education System

★ Organized by

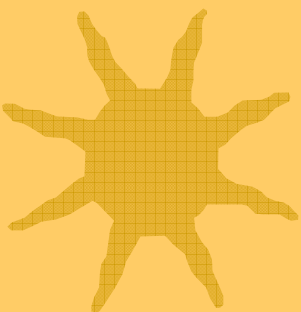
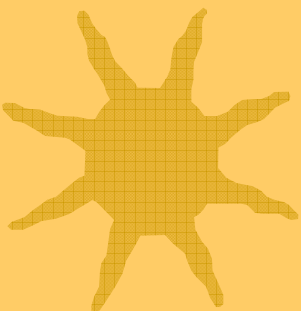
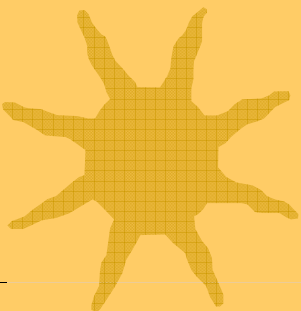
- Faculty of Pharmacy (courses, symposiums)
- Romanian Pharmaceutical Association
 - All the pharmacists have to cumulate 40 credits/year



Continuing Education System

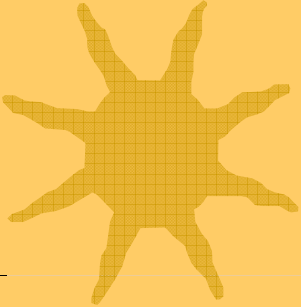
Our Faculty offers 60 courses in the following fields:

- ★ Pharmaceutical Biochemistry
- ★ Analytical chemistry
- ★ Analysis of medicinal products
- ★ Therapeutically chemistry
- ★ Clinical pharmacy
- ★ Cosmetics and dermato-pharmacy
- ★ Pharmacology
- ★ Toxicology
- ★ Medicinal plants
- ★ Pharmaceutical technology
- ★ Legislation and management
- ★ Informatics and biostatistics for pharmacists

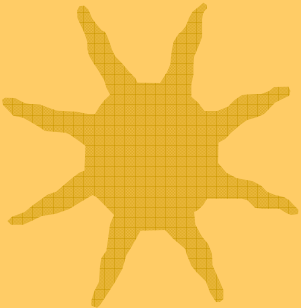




PRESENT AND PERSPECTIVES



★ **The first *Drug Information Center*** in Romania, a valuable tool for physicians and pharmacists

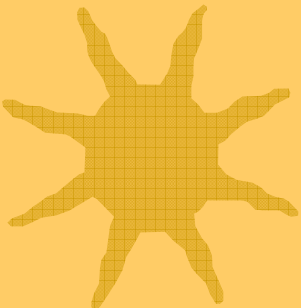


★ ***Partnership between:***

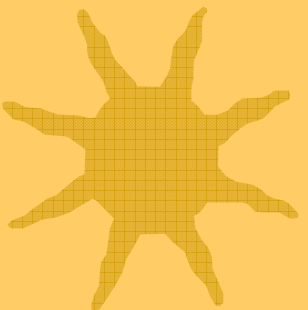
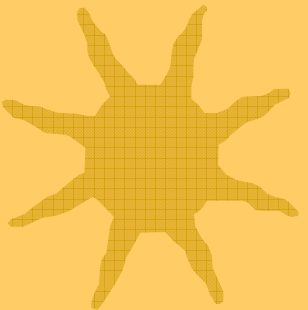
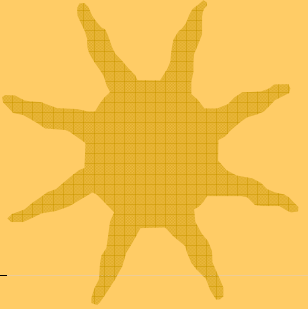
– *United States Pharmacopoeia*

– *University of Medicine and Pharmacy*

“Iuliu Hatieganu” Cluj-Napoca



With the financial support of the United States Government



CONCLUSIONS

★ The key that unlocks all difficulties is the hard work and the cooperation between nations, based on understanding and mutual respect