

$$a^0 = 1 [a^0]$$

Scop: Introdúcere

arcsin

Bondor Cosmina-Ioana

- Conferențiar
- Contact:
 - email cbondor@umfcluj.ro
 - Teams chat: Bondor Cosmina Ioana
- [Profilul meu academic](#)



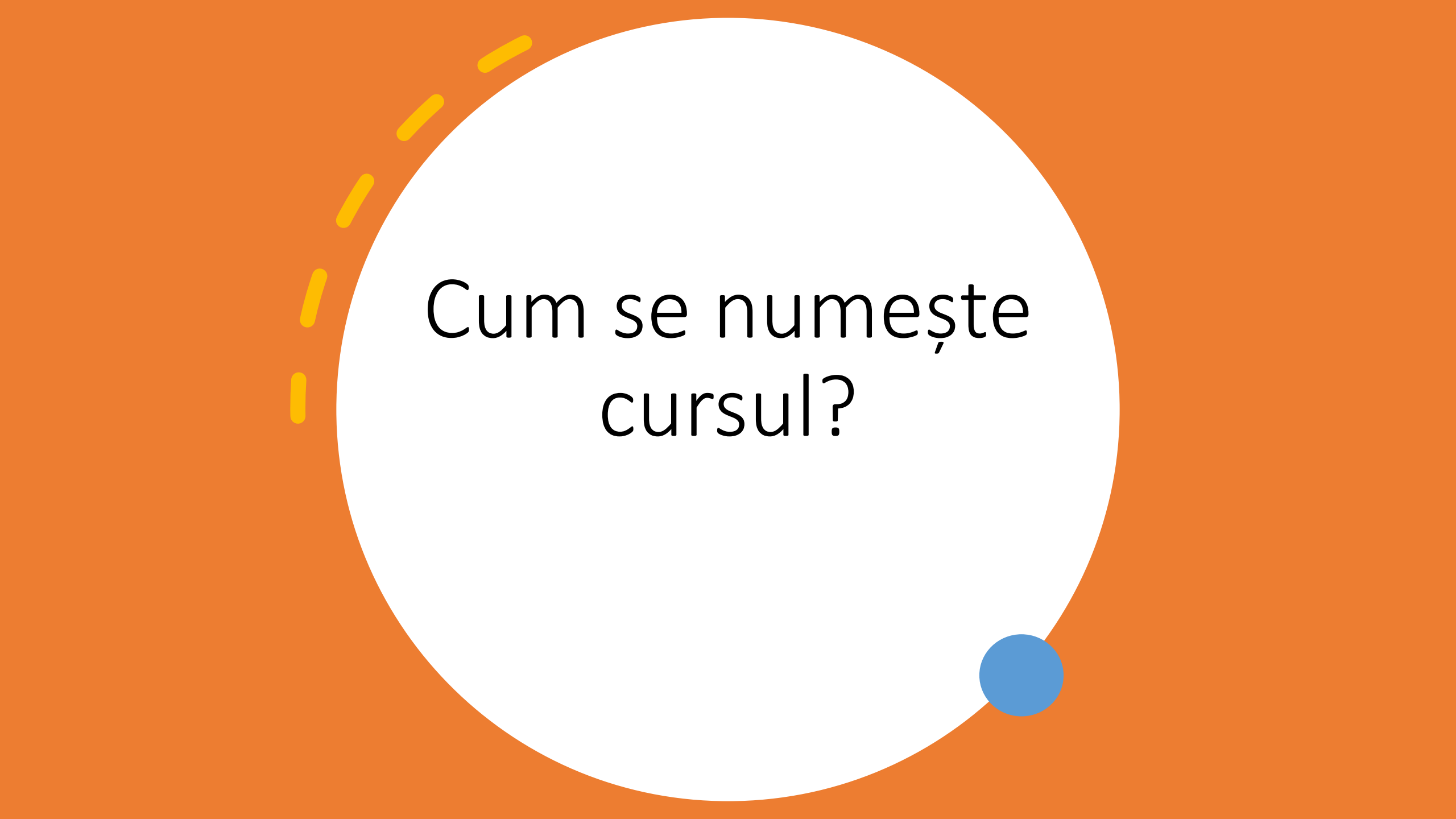
Bondor Cosmina-Ioana

- ~~Conferențiar~~ Eu sunt.
Obs. Nu vine nimic după sunt.
- Ce-mi place să fac?
 - Algoritmi și programare
 - Săpat prin date după cunoaștere
 - Istorie paleolitică și paleogenetică
 - Drumeții, psihologie, istoria religiilor

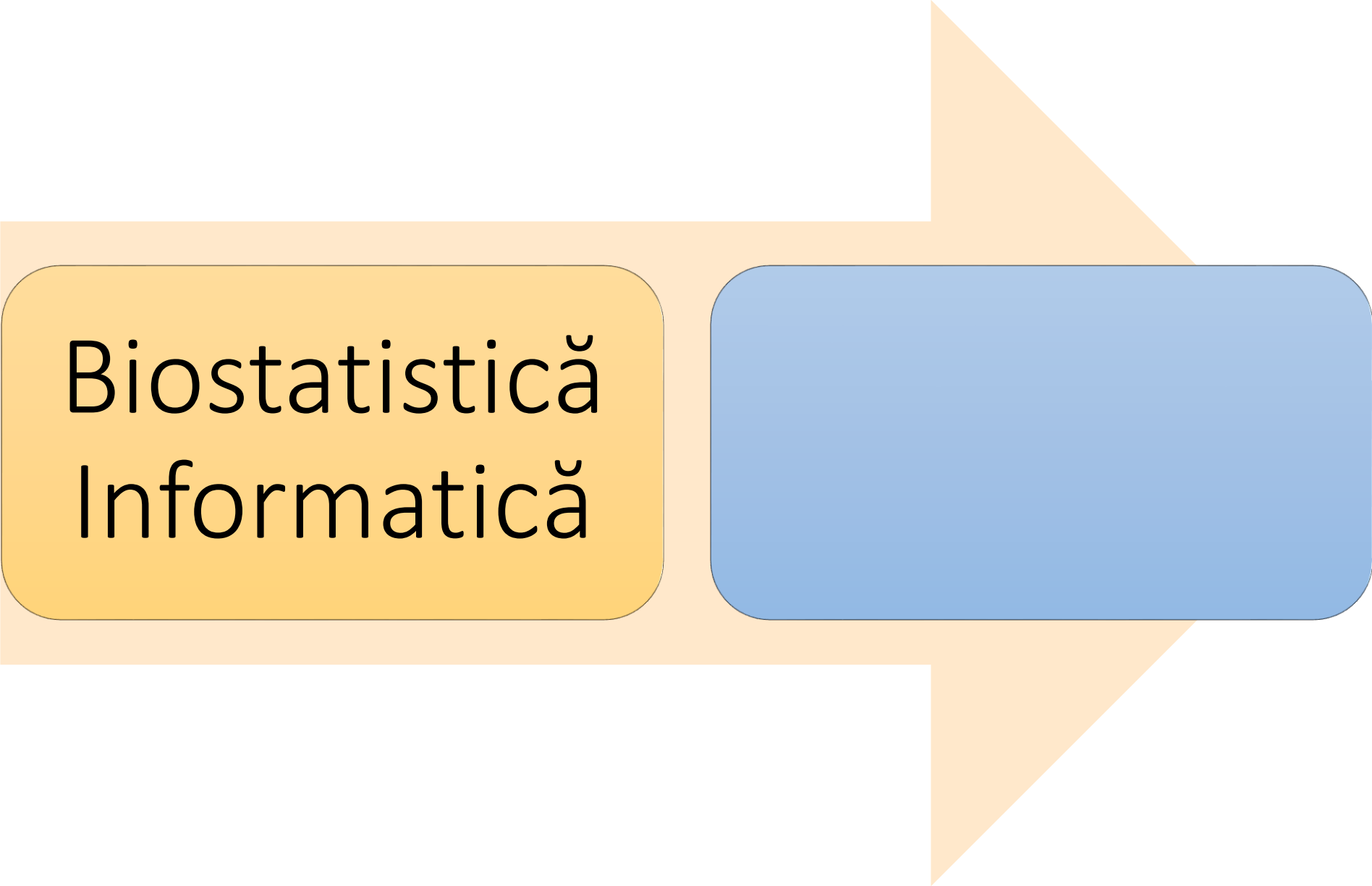




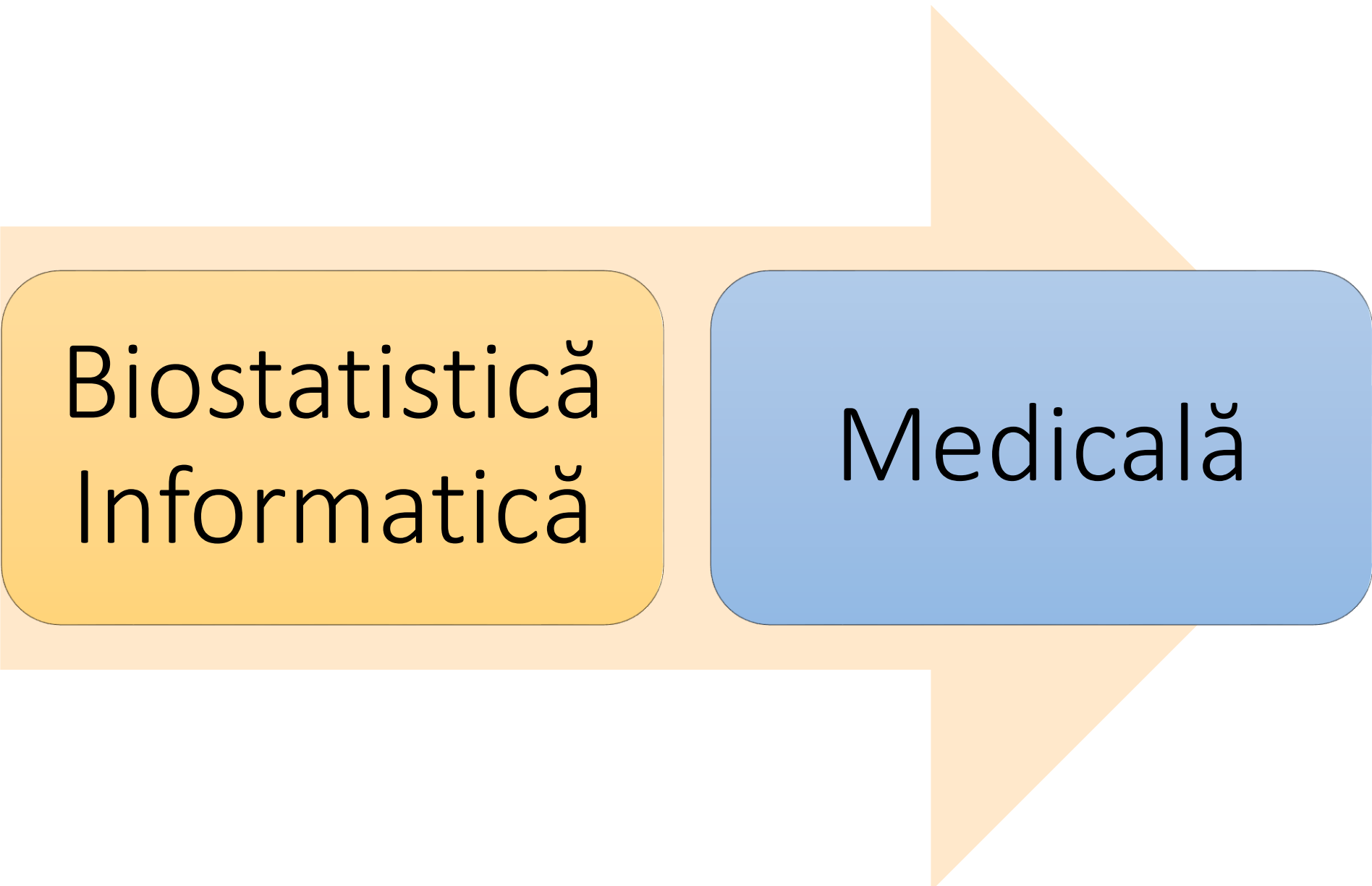
- **ASK** - Întrebați.... oricând întrebați...
- Mă voi strădui să răspund



Cum se numește
cursul?



Biostatistică
Informatică



A diagram consisting of a large, light orange arrow pointing to the right. Inside the arrow, there are two rounded rectangular boxes. The left box is yellow and contains the text 'Biostatistică Informatică'. The right box is blue and contains the text 'Medicală'.

Biostatistică
Informatică

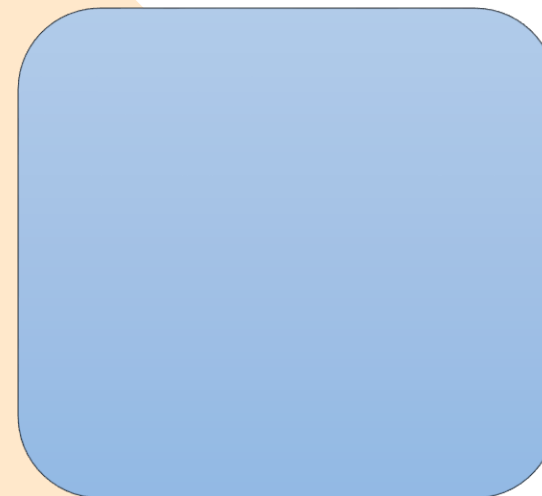
Medicală



Biostatistică
Informatică

Medicală

Biostatistică
Medicală
Informatică
Medicală



Biostatistică
Informatică

Medicală

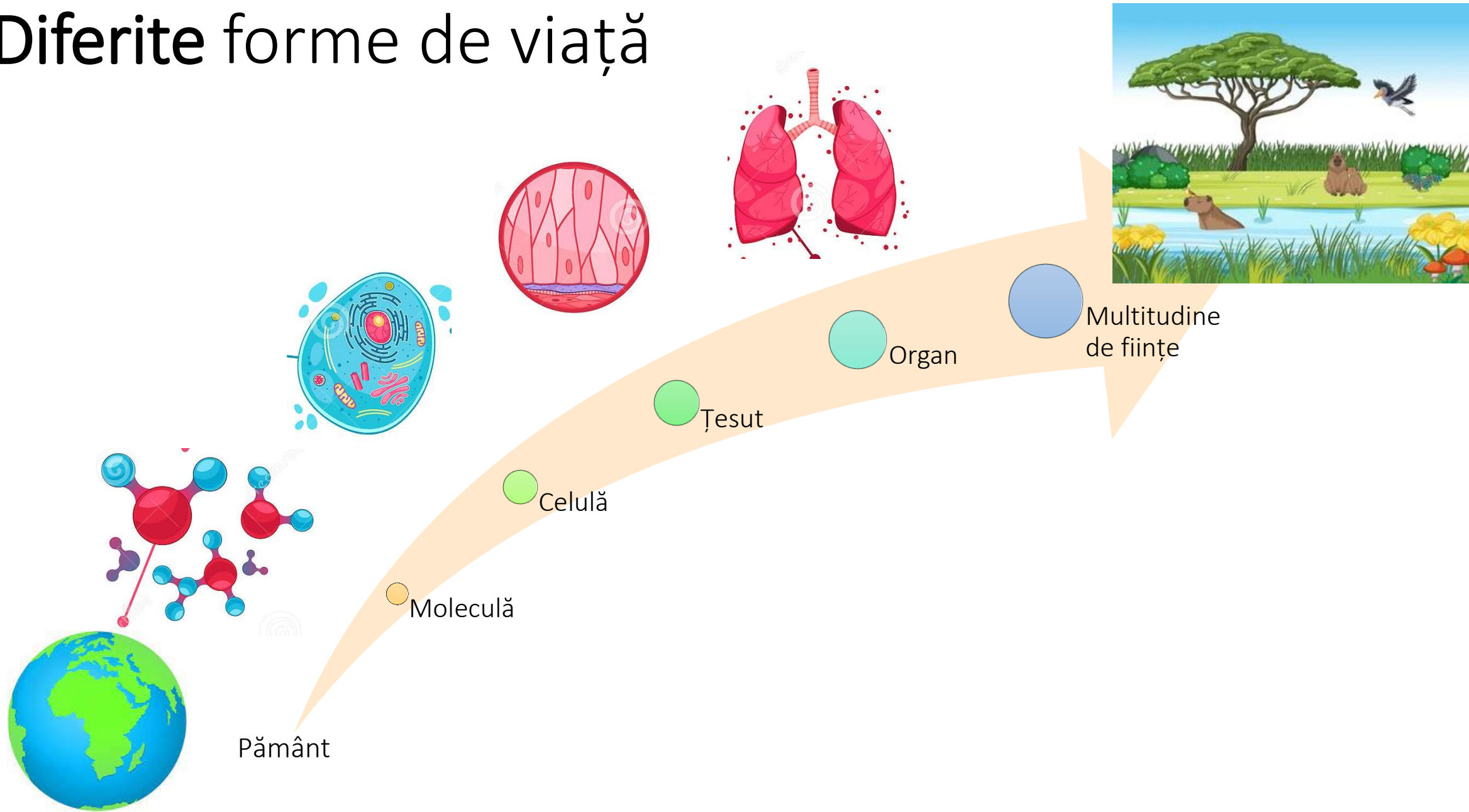
Biostatistică
Medicală
Informatică
Medicală

Biostatistică
și
Informatică
Medicală

Why on Earth we should do this "curs"?



Diferite forme de viață

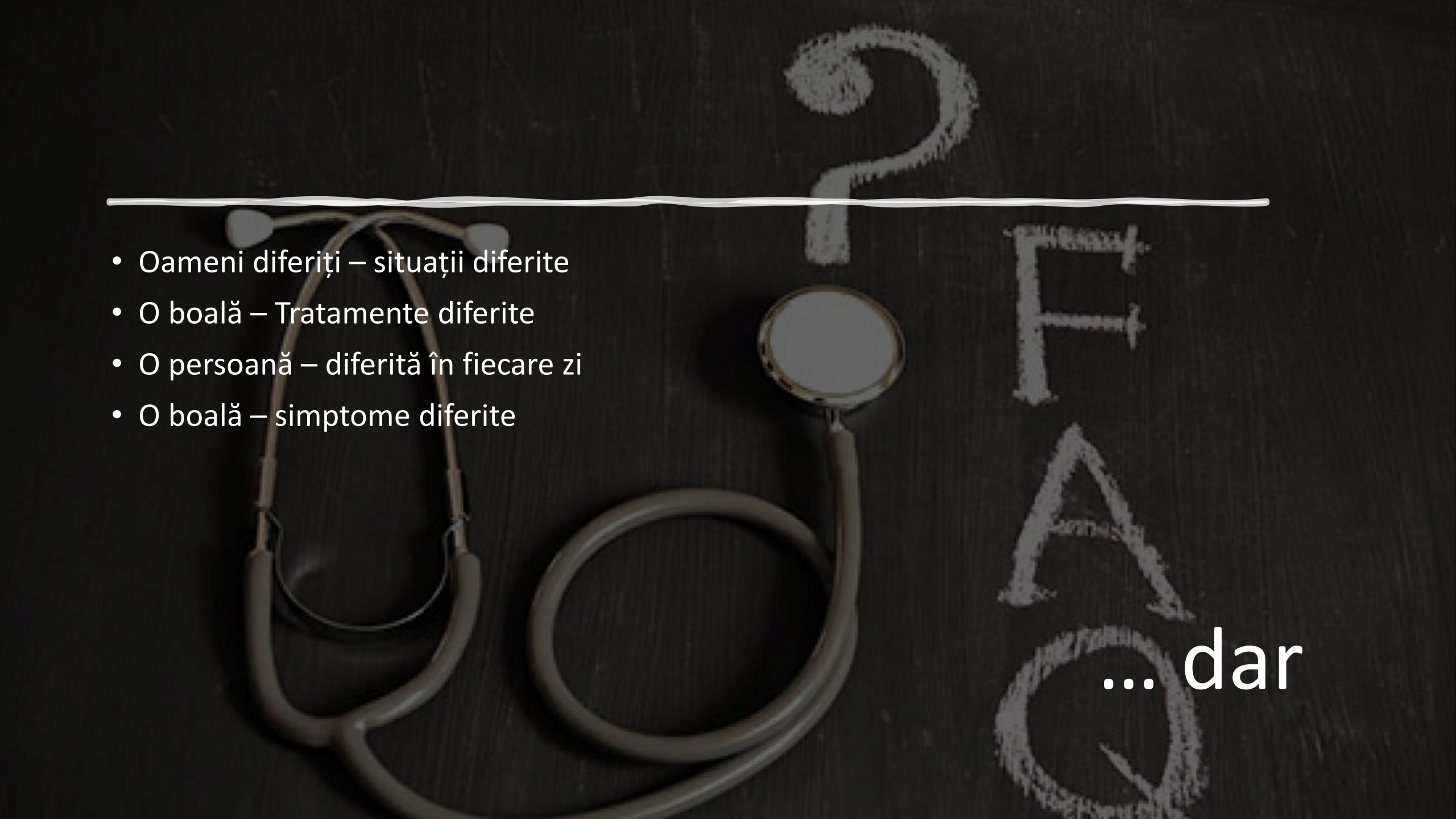




Colindătorii Bihorului



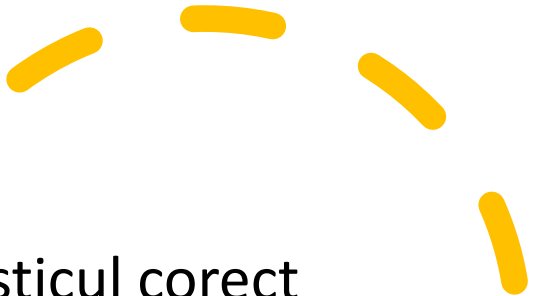
O selecție din armată

- 
-
- Oameni diferiți – situații diferite
 - O boală – Tratamente diferite
 - O persoană – diferită în fiecare zi
 - O boală – simptome diferite

... dar

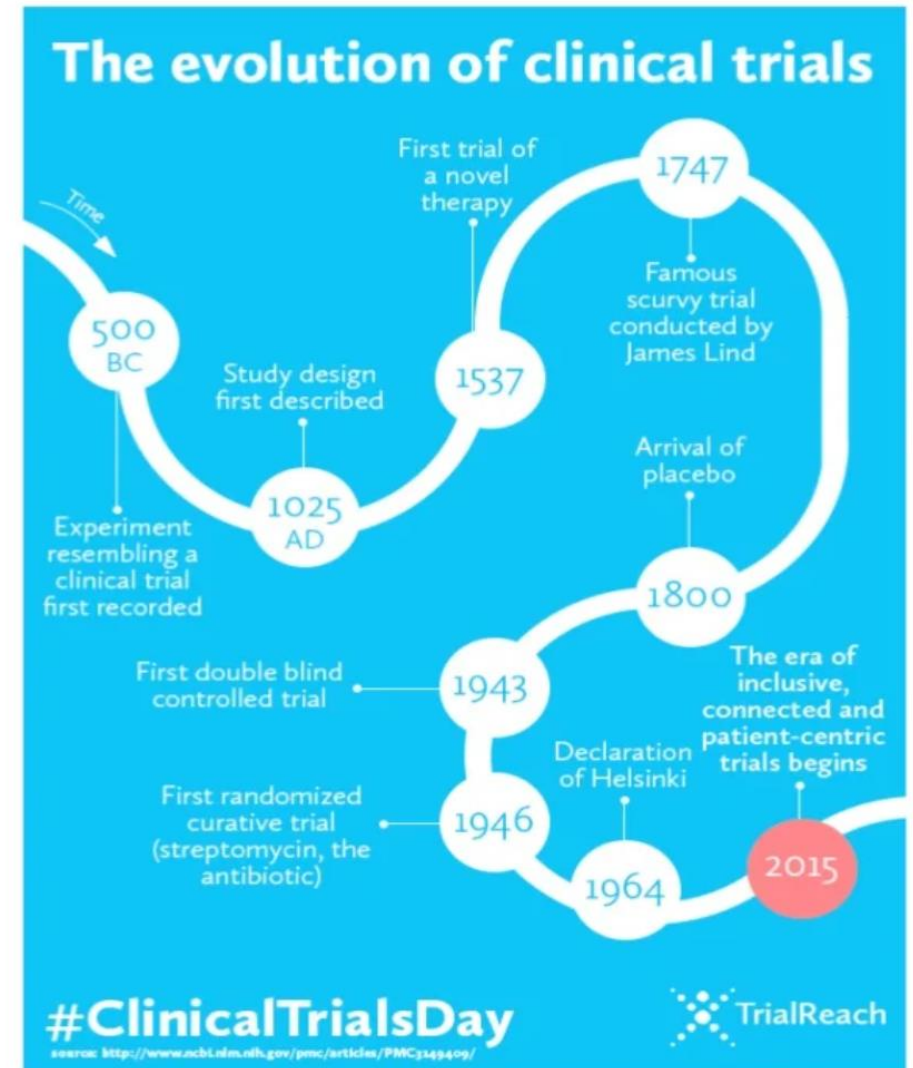


Putem

- 
- Să tratăm unele boli
 - Câteodată să punem diagnosticul corect
 - Câteodată să prezicem rezultatul

Cum s-a ajuns aici?

Cercetarea medicală



<http://crbtech.in/Student-Reviews/Clinical-Research-Reviews>

RESEARCH SUMMARY

Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine

F.P. Polack, et al. DOI: 10.1056/NEJMoa2034577

CLINICAL PROBLEM

Safe and effective vaccines to prevent severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and Covid-19 are urgently needed. No vaccines that protect against betacoronaviruses are currently available, and mRNA-based vaccines have not been widely tested.

CLINICAL TRIAL

A randomized, double-blind study of an mRNA vaccine encoding the SARS-CoV-2 spike protein.

43,548 participants ≥ 16 years old were assigned to receive the vaccine or placebo by intramuscular injection on day 0 and day 21. Participants were followed for safety and for the development of symptomatic Covid-19 for a median of 2 months.

RESULTS

Safety:

Vaccine recipients had local reactions (pain, erythema, swelling) and systemic reactions (e.g., fever, headache, myalgias) at higher rates than placebo recipients, with more reactions following the second dose. Most were mild to moderate and resolved rapidly.

Efficacy:

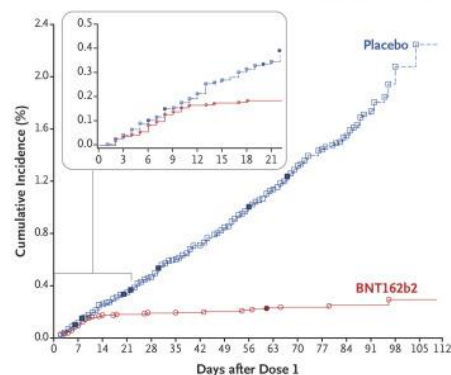
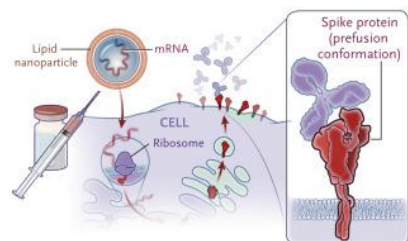
The vaccine showed some early protection 12 days after the first dose; 7 days after the second dose, 95% efficacy was observed.

LIMITATIONS AND REMAINING QUESTIONS

Further study is required to understand the following:

- Safety and efficacy beyond 2 months and in groups not included in this trial (e.g., children, pregnant women, and immunocompromised persons).
- Whether the vaccine protects against asymptomatic infection and transmission to unvaccinated persons.
- How to deal with those who miss the second vaccine dose.

Links: Full article | NEJM QuickTake | Editorial



	BNT162b2 Vaccine	Placebo
Symptomatic Covid-19	8	162
	N=18198	N=18325
Severe Covid-19	1	9
	N=21669	N=21686

Vaccine efficacy of 95% (95% credible interval, 90.3–97.6%)

CONCLUSIONS

Two doses of an mRNA-based vaccine were safe over a median of two months and provided 95% protection against symptomatic Covid-19 in persons 16 years of age or older.

Vaccinul Pfizer anti – Covid-19

- Primul articol publicat
- Trial clinic pe 43 548 de participanți
- Efectuat înainte de omologare și punerea pe piață a vaccinului

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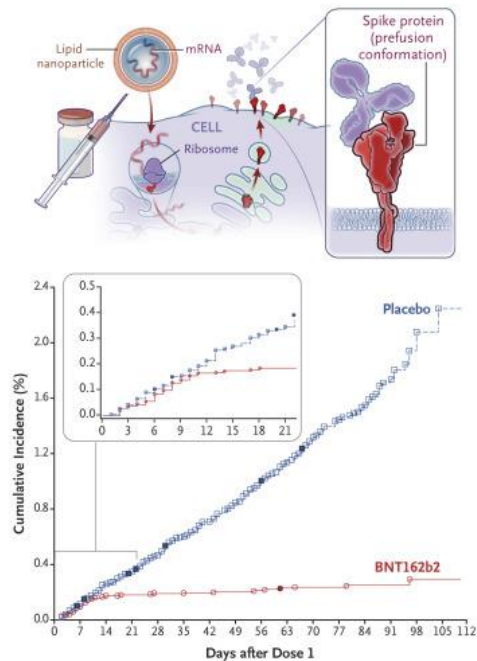
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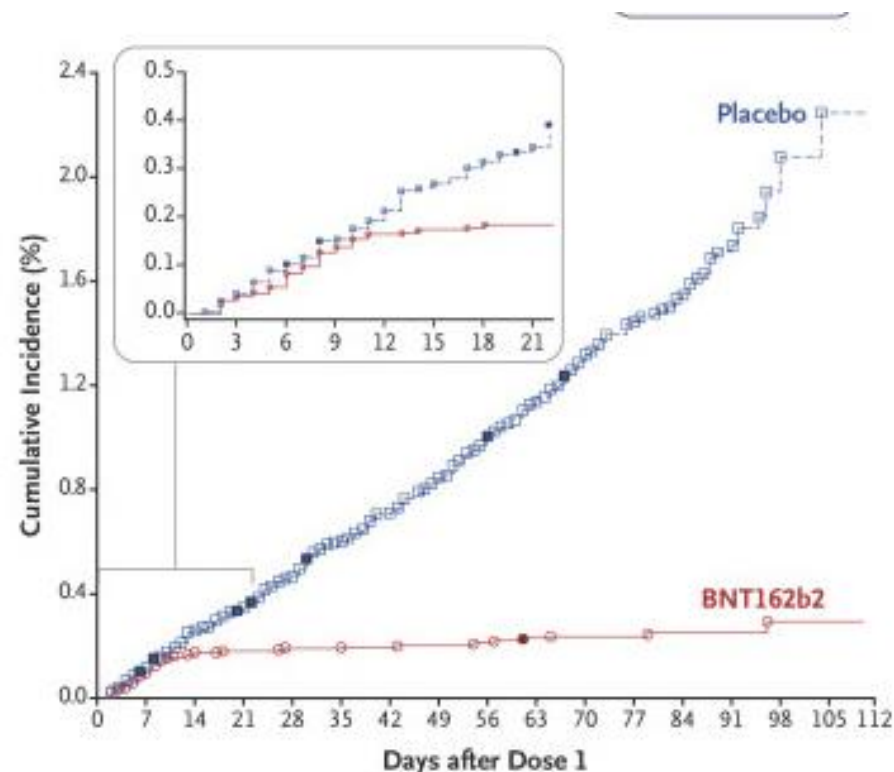
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Vaccinul Pfizer anti – Covid-19



- Ce vrea să spună acest grafic?

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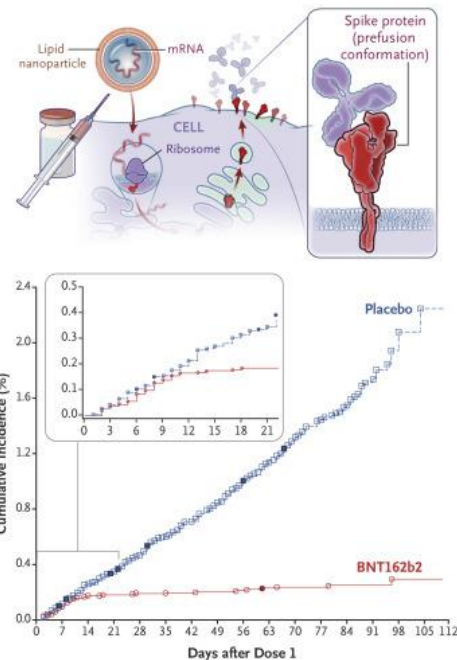
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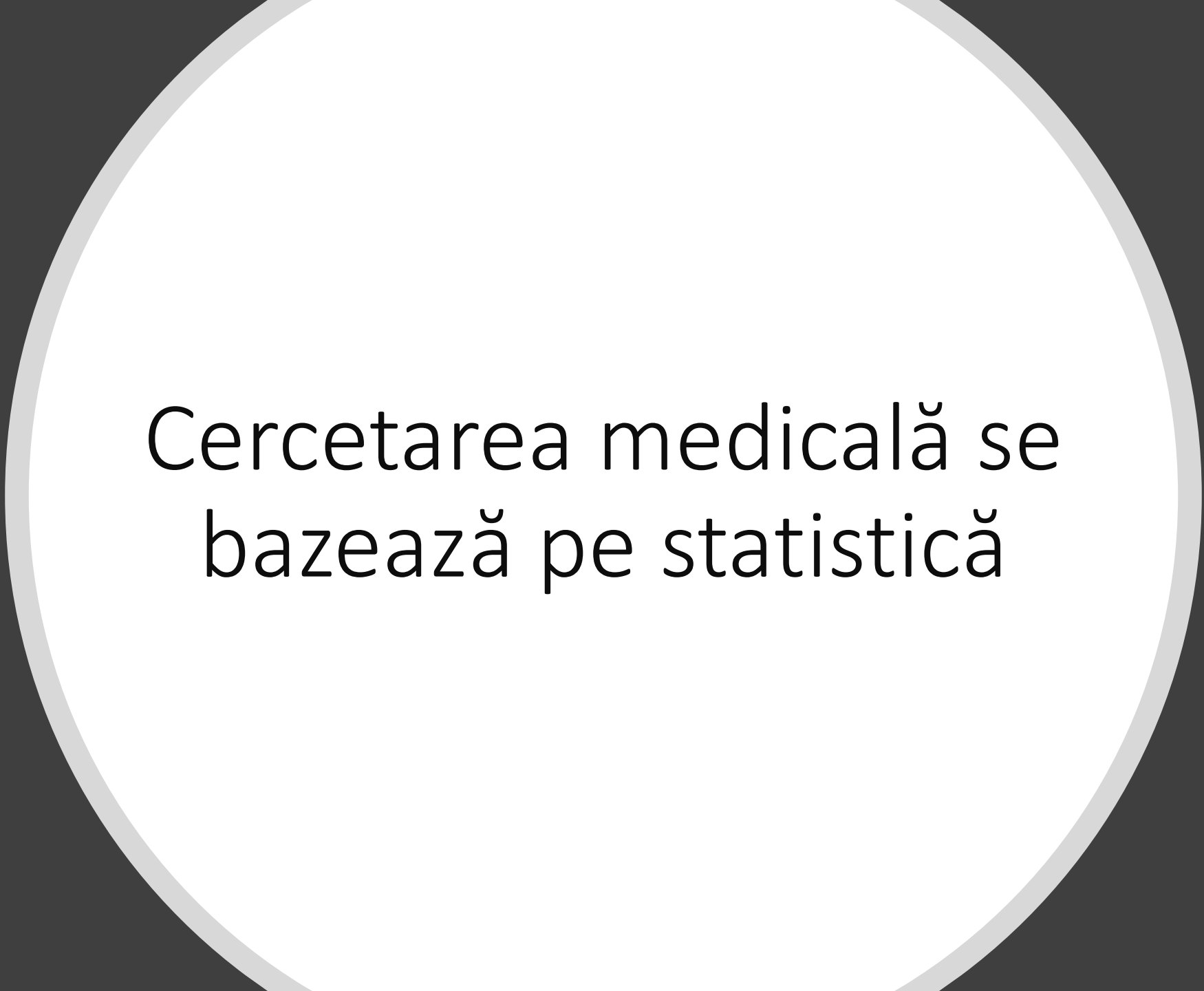
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• Ce înseamnă asta?



Cercetarea medicală se
bazează pe statistică

Obiective

- Studentul să înțeleagă
 - Articolele publicate
 - Cercetarea medicală
- Studentul să știe
 - De unde să se informeze
 - Cum să caute informația medicală

Dar deocamdata
... statistica



Scopul:

Curs

Prezentare
generală

Obiective

Cuprinsul
cursului

Examene

Teoretic

Practic

Teme pe
parcurs

Reguli și reglementări

Didactice

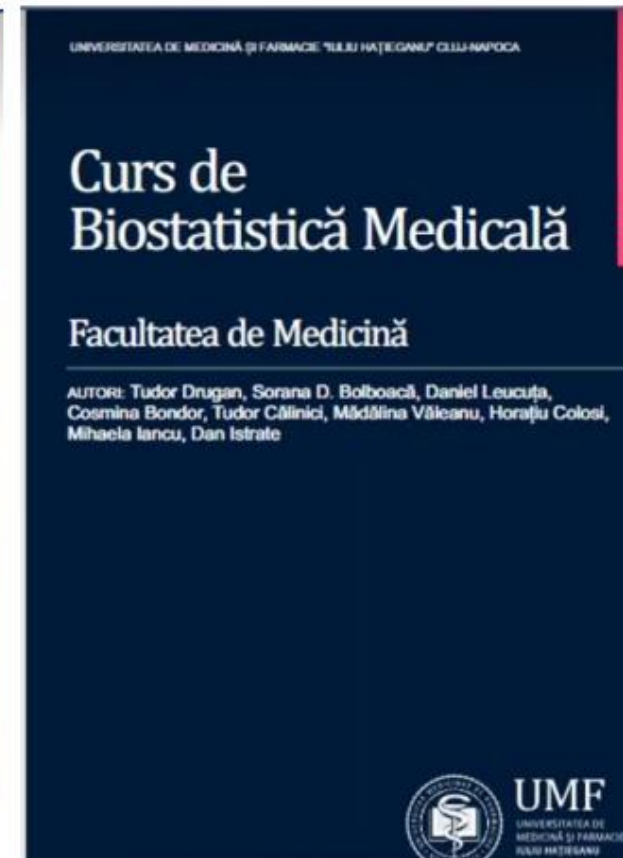
Interne

Specifice

Activitate didactică

- Curs
 - 14 săptămâni = 14 cursuri
 - Introducere
 - 11 cursuri
 - Recapitulare
 - Examen

Bibliografie



Activitate didactică

- Lucrări practice
 - 14 săptămâni = 14 lucrări
 - Introducere
 - 12 lucrări
 - Examen practic

Pagina:
<http://www.info.umfcluj.ro>



SUBCATEGORII



 **Cursuri**

[Mai mult ...](#)



 **Lucrări practice de Informatică Medicală și Biostatistică**

[Mai mult ...](#)

Laborator 08:

Citit **10673** ori

 Categorie [Lucrări practice de Informatică Medicală și Biostatistică](#)

Descarcă fișierele atașate:

- [Exercitii suplimentare 2](#) (987 Descărcări)
- [Cerinte](#) (3207 Descărcări)
- [Exerciții suplimentare](#) (2421 Descărcări)
- [BD_PA8.xlsx](#) (2415 Descărcări)

- Cerințe obligatorii
- Cerințe opționale
- Alte fișiere necesare

Regulament - obligații student

- **Curs**
- Minim 70% participare
 - se realizează prezența

Regulament - obligații student

- **Lucrări practice**
- Participare 100%
 - se realizează prezența
- Maxim 3 absențe
 - Motivate sau cu plata până în penultima săptămână de școală
 - Recuperate până până în penultima săptămână de școală
- ! Se vor realiza toate laboratoarele

Regulament

- **Nu intră în examen !!!**
- Studenții care
 - Nu au reușit să recupereze absențele
 - Au depășit limita de 3 absențe la LP
 - Nu au audiat 70% din cursuri
 - Sunt suspendați din cauză de nerespectare de regulament intern (se va prezenta la LP)

Regulament - drepturi student

- **O prezentare la examen / sesiune**
- **3 prezentări la examen / an**
- Sesiune vară
- Sesiune re-examinare I
- Sesiune re-examinare II

Evaluare

Tip activitate	Criterii de evaluare	Metode de evaluare	Pondere din nota finală
Curs - examen	Consistente cu obiectivele educaționale Activitatea în clasă	În conformitate cu regulamentele universității	70%
Lucrări practice – examen practic	Consistente cu obiectivele educaționale Activitatea în clasă	În conformitate cu regulamentele universității	30%

Standard minim de performanță: nota obținută = 5 la ambele examene

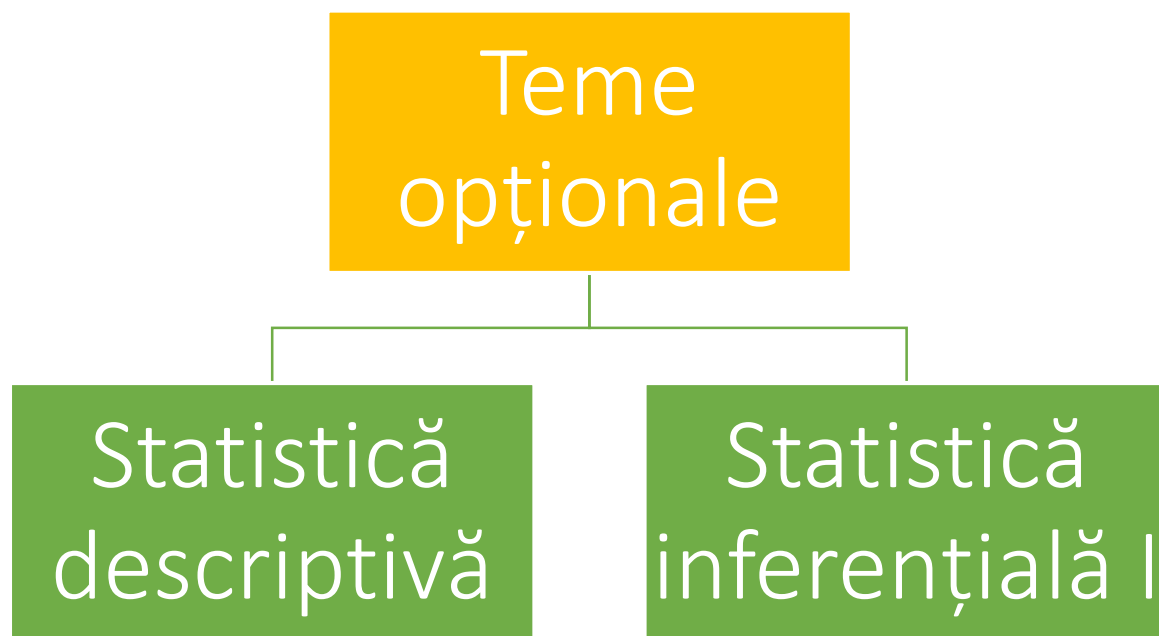
Nota finală

- Dacă studentul a obținut
 - minim nota 5 la examenul teoretic,
 - respectiv minim 5 la examenul practic
- Se calculează nota finală

Nota finală

- Media ponderată
 - Examenul teoretic - pondere de 70%
 - Examenul practic - pondere de 30%
- Dacă nota finală < 10
 - nota finală = media ponderată a notelor + $0,2 \cdot \text{nr. teme notate cu minim 5}$.

Teme - opționale: două



- O singură încercare/temă
- Dacă studentul a obținut peste nota 5 la temă
 - nota finală = media ponderată a notelor + $0,2 \cdot \text{nr. teme notate}$ cu minim 5

Examen teoretic — varianta onsite

- Întrebările
 - 16
 - cu răspunsuri multiple
 - între 1 și 4 răspunsuri corecte
 - vor fi marcate cu *
 - Cele cu răspuns unic
- !Aveți voie cu notițe
conspectate și scrise de mână

Obiectivul muncii suplimentare

un ajutor

- Dacă nu aveți/ sunt slabe - competențe de a lucra la calculator
 - --> munca suplimentară va fi de ajutor

Înțelegerea a
ceea ce facem

- --> poate fi îmbunătățită prin
 - realizarea cerințelor suplimentare de la LP

Câștigarea de
experiență

- îmbunătățirea performanței de la examen
- Temele opționale = Similare cu examenul teoretic

Cerințe Biostatistică și Informatică Medicală

12 LP

Realizarea 100% a cerințelor obligatorii = prezență la LP

absență la LP

- Maxim 3
- Recuperate
 - motivare medicală
 - plățirea unei sume de bani

Examen pract
ic în ultima
săptămână
de școală

Minim nota 5

14 Cursuri

Minim 70%
participare la
cursuri

Examenul
teoretic în
ultima
săptămân
ă de
școală

Minim nota 5

Gata



**"Your x-ray showed a broken rib,
but we fixed it with Photoshop."**

+
•
○

Muțumesc!