


Trigger 3: Fostering the Ability of Graduates to Work across Sub-disciplines and Transcend Them

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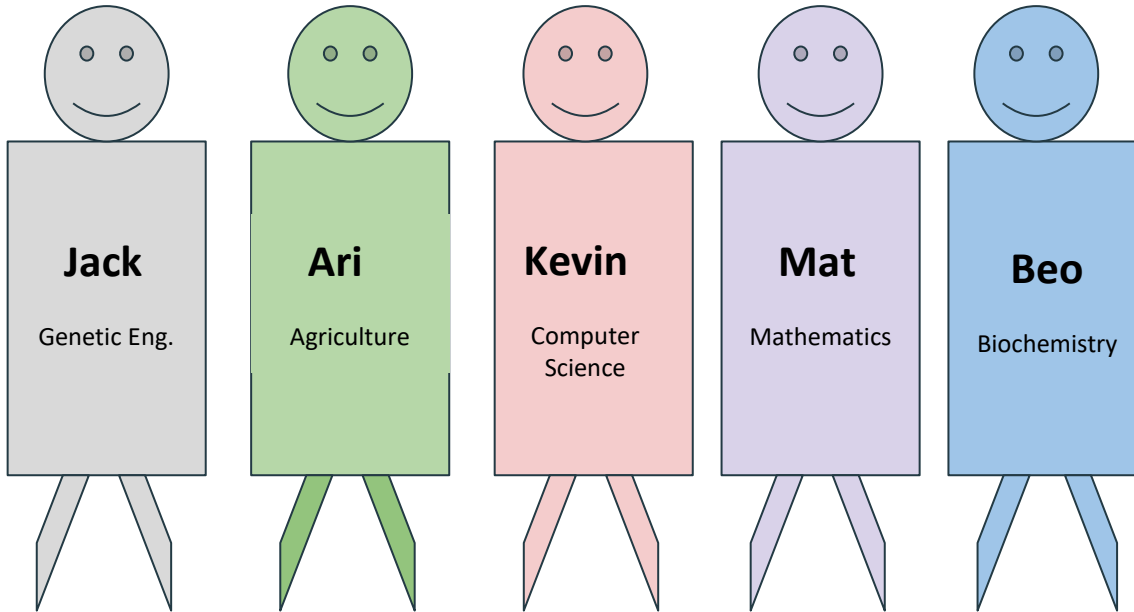
Asking the unasked questions

1. “**Silos**” in Bioinformatics?
2. Why people try to be focused in one field? When somebody wants to work across sub-disciplines what are the problems? What are the solutions to it?
 - For example, If I work in a specific field, say plant metabolomics, should I be able to communicate with others from other fields like plant transcriptomics or Animal breeding?- are we facilitated enough to do that now? If not, why? How can we facilitate that?
3. What **kind of training or facilities** we should have to break these boundaries?
4. How do we setup our **SWOT** (**Strengths-Weaknesses-Opportunities-Threats**)?

What is “silos” in Bioinformatics?

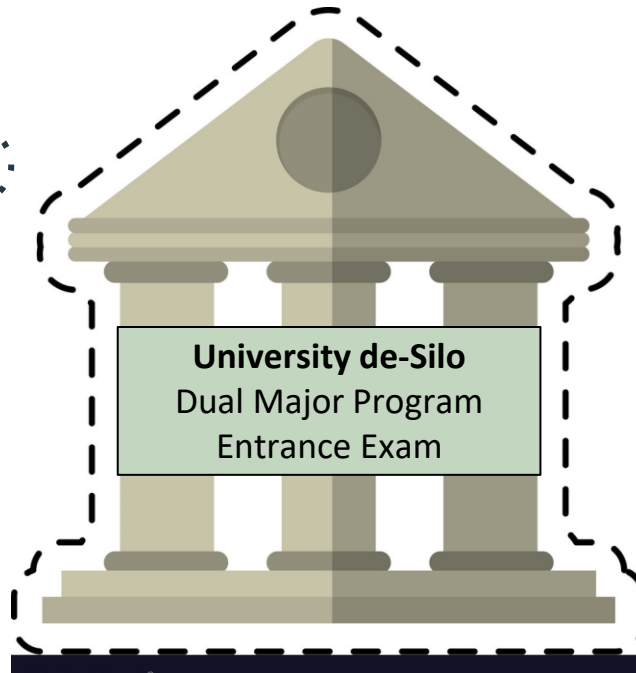
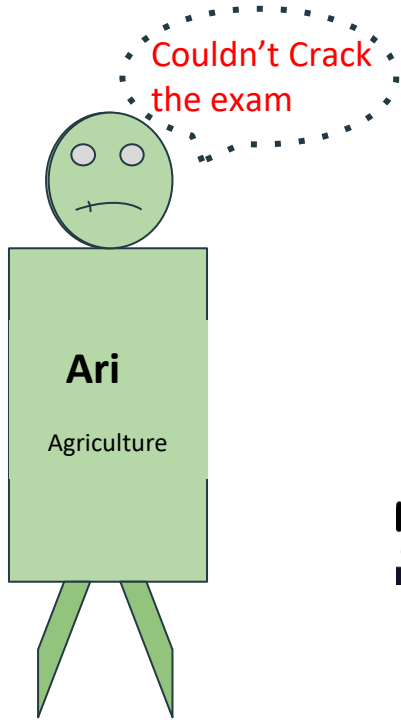
- Data deluge is taking a big leap in bioinformatics
- We need multi-faceted disciplinarians to come together, join hands and forces
- Collaborate and converge ideas ~ **collaborative convergence!**
- Reach the unreachable

Let's Hear Some Stories of 5 friends...

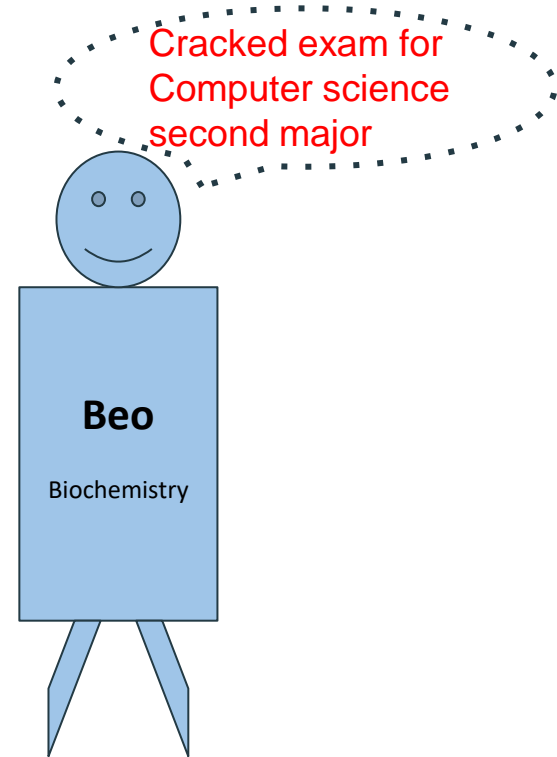


Case Studies

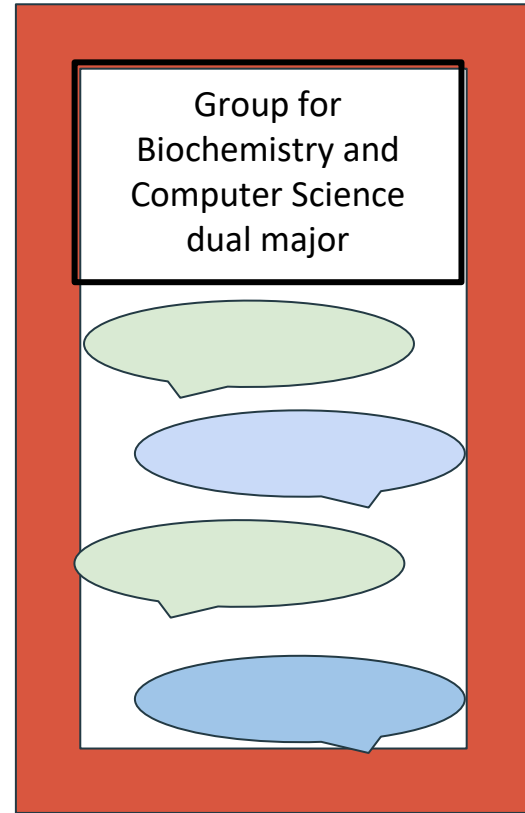
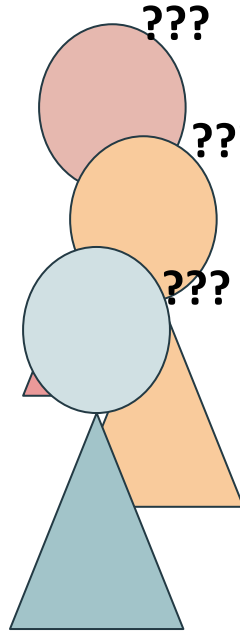
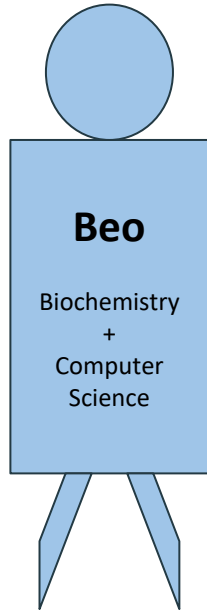
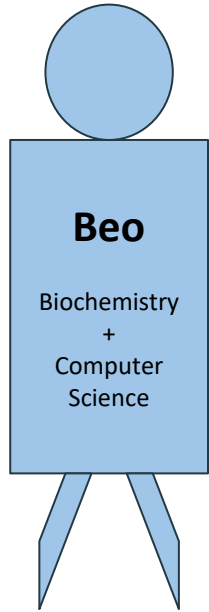
Case Study 1



**** Really tough and not an option for all**



Case Study 1



Case Study 1 : Problem to Solution

1. Open option in Universities to study more than one major

- Take designated electives
- Minor subjects

2. Opt the same road might be disastrous! (**weakness**)

- Having de-silo groups in online platforms solves this problem

3. Fixing a career goal is always a trouble for de-silos (**weakness**)

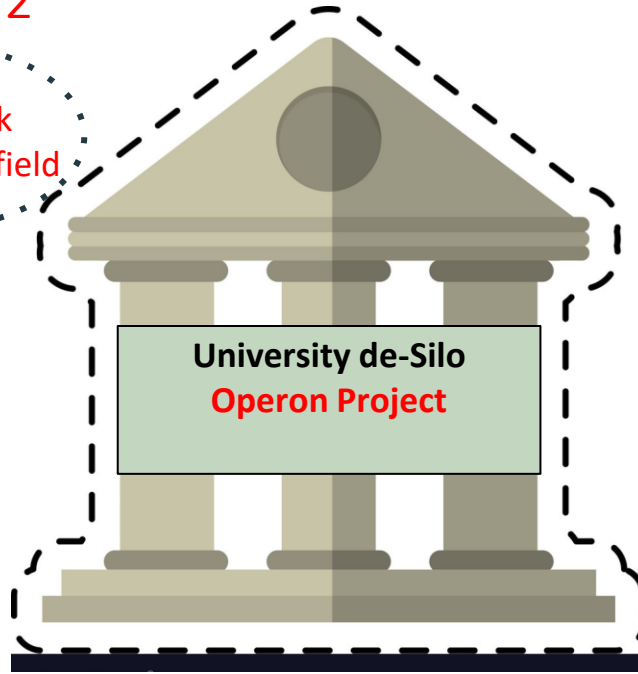
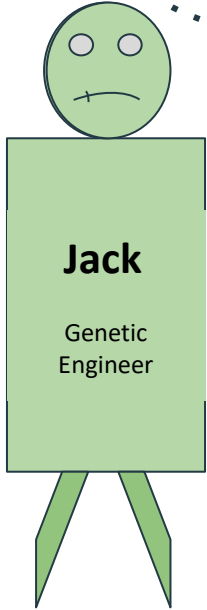
- Experienced de-silo individuals must leave suggestions and footprints through writing, vlogging or even just being in the related forums for grooming up the newbie de-silos

#SWOTAnalyses

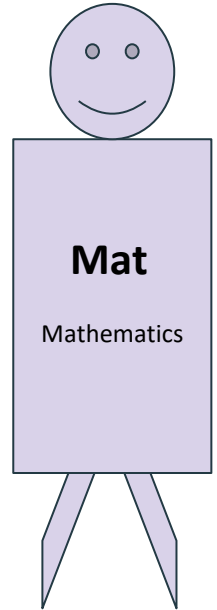
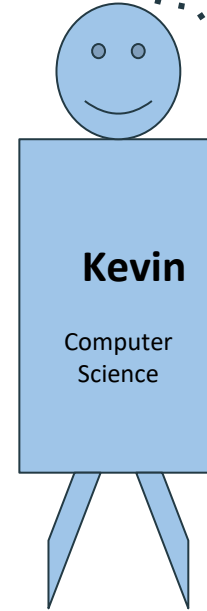
#ConvertYourWeaknessesToStrengths #FailuresMeetOpportunities

Case Study 2

Wanted to work
only within his field



Competitors or
collaborators?



Case Study 2: Problem to Solution

1. Facilitate projects at undergraduate level which include multi-faceted disciplines
2. Moving from “That is not my field”- to “Yes, we can”
 - *encase the researchers into silos.*
3. Come out of your comfort zones
4. Collaborate NOT compete!

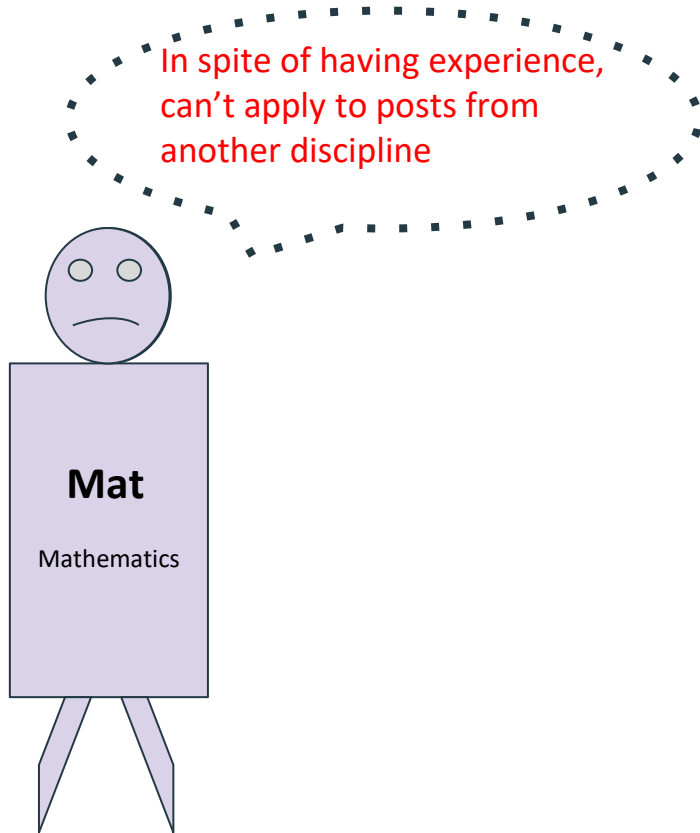
#TogetherWeCan

#Collaborate

#Converge

#CollaborativeConvergence

Case Study 3



Bio-statistician Job Circular

Post: Biostatistician
Job Roles:.....

....

...

...

...

..

Who Can Apply: People
having major only in
Statistics, or Biological field

Case Study 3: Problem to Solution

1. Job applications shouldn't specify the fields rather specify the job roles.
2. Talk about **achievements** NOT just experience
3. Talk about **consistency, which brings continuity and credibility: Three Cs**

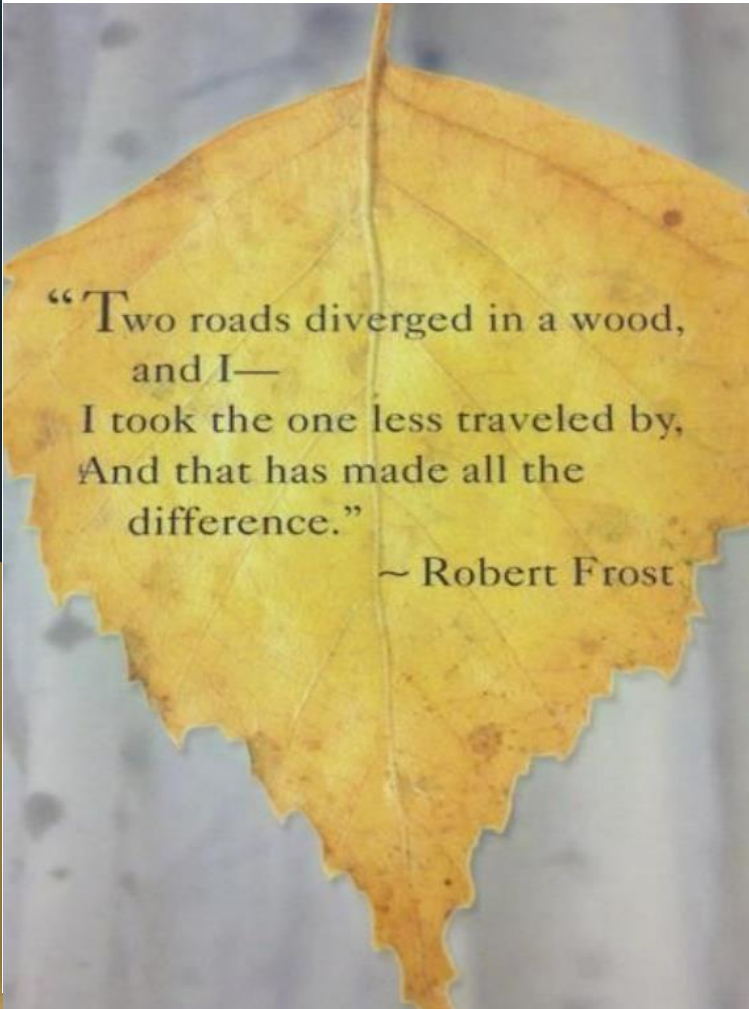
#BreakTheSilos #ThreeCs #Consistency #Continuity #Credibility

#BridgingTheGap

- Advertise openly for cross-collaboration
- Strong foundations for Math Logic
- Science, Technology, Engineering, Mathematics and Medicine (STEMM) adaptation
- Inculcate strong pedagogical methods

Conclusions and Take Home

- Encourage the risk takers: **#BelieveInYourselves**
- Develop platform for searching individuals with experience/similar multiple-disciplines: **#Operon**
- Develop platform for grooming up de-silos
- Take up the academics beyond the intended expertise!
- Transferring the guidance from experienced *de-silos* to *newbie de-silos*

A close-up photograph of a single, yellow autumn leaf with a serrated edge. The leaf is positioned on the left side of the frame. Overlaid on the leaf is a quote in a black serif font. The quote reads: "Two roads diverged in a wood, and I— I took the one less traveled by, And that has made all the difference."

“Two roads diverged in a wood,
and I—
I took the one less traveled by,
And that has made all the
difference.”

~ Robert Frost

THANK YOU

- Ayesha Fatima, Ph.D.
- Asif M Khan, Ph.D
- and Team COBLET