

# Faculty Address

10/01/2010



**KLE** Technological  
University  
Creating Value  
Leveraging Knowledge

## Agenda

- **Redefining KLE Tech Research Strategy**
  - *Enabling Support System & Defining Research path for **Young Faculty Researchers***
  
- **New Appraisal Process to be adopted**

## ➤ Redefining KLE Tech Research Strategy

# Enabling Support System and Defining Research Path for **Young Faculty Researchers**

## Research Scholars:

- Shallow Knowledge of Research area they have picked up
- Systematic literature study -highly inadequate
- No knowledge of Research process
  - *Even basic things like identifying research problem, writing objectives totally missing*
- No rigor of research - long gaps..
- Struggling to understand even after 3-4 years
- Don't understand the breadth and depth of research they need to focus at various stages

**Totally Unprepared to enter into Research**

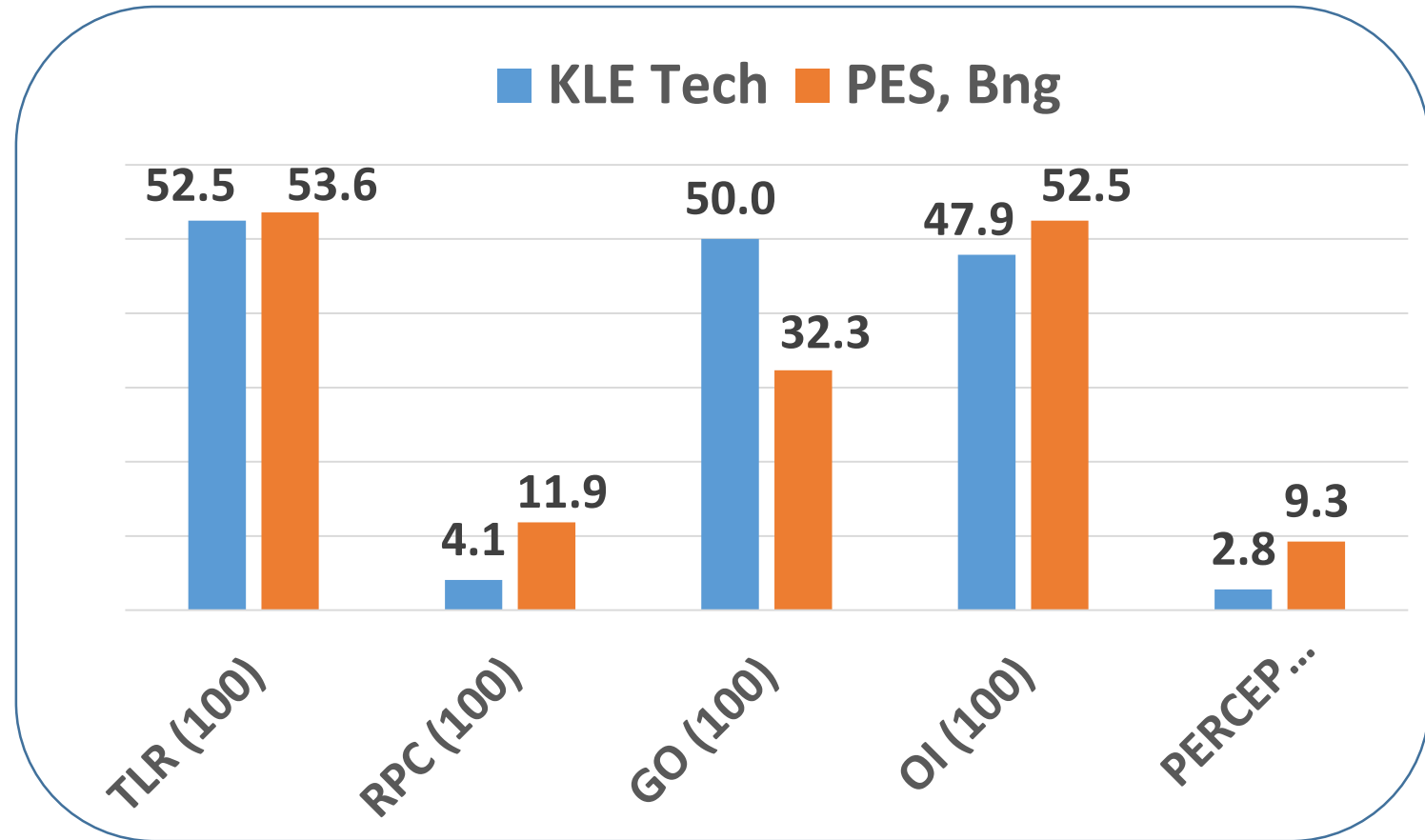


# Entered NIRF Ranking Top 200



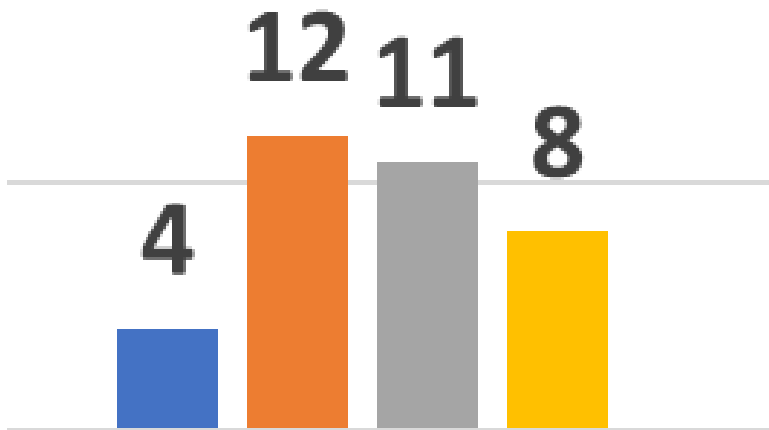
# 159

1. **TLR : Teaching, Learning & Resources**
2. **RPC : Research and Professional Practice**
3. **GO : Graduation Outcomes**
4. **OI : Outreach and Inclusivity**
5. **Perception**



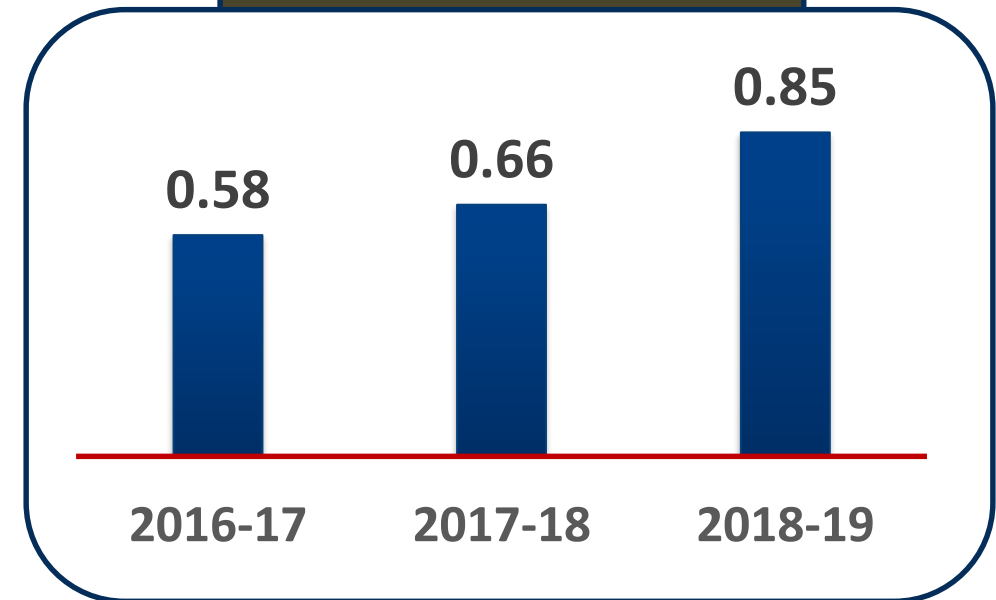
## RPC : Research and Professional Practice

■ KLE Tech ■ PES, Bng ■ RV ■ BMS

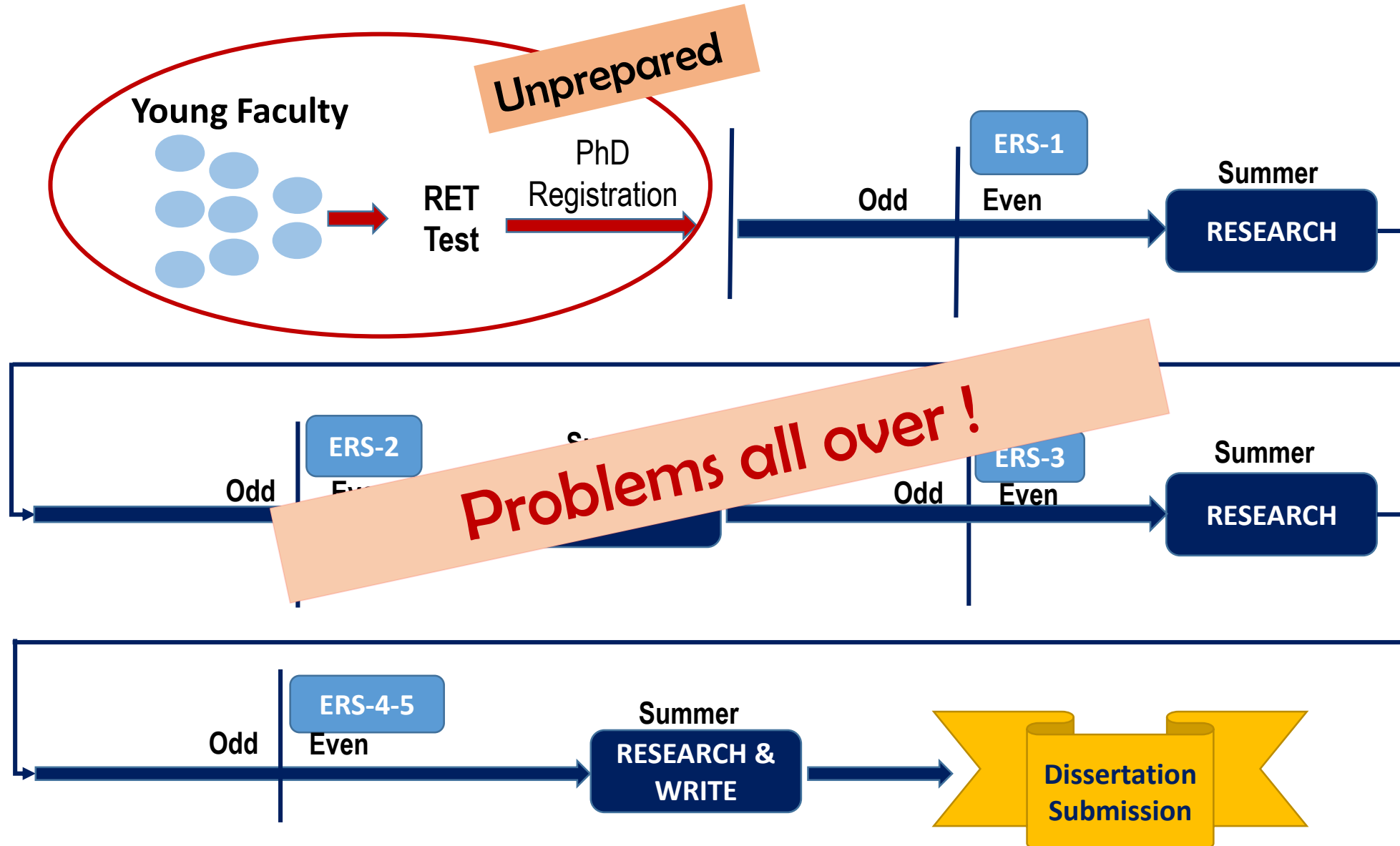


**RPC  
Scores**

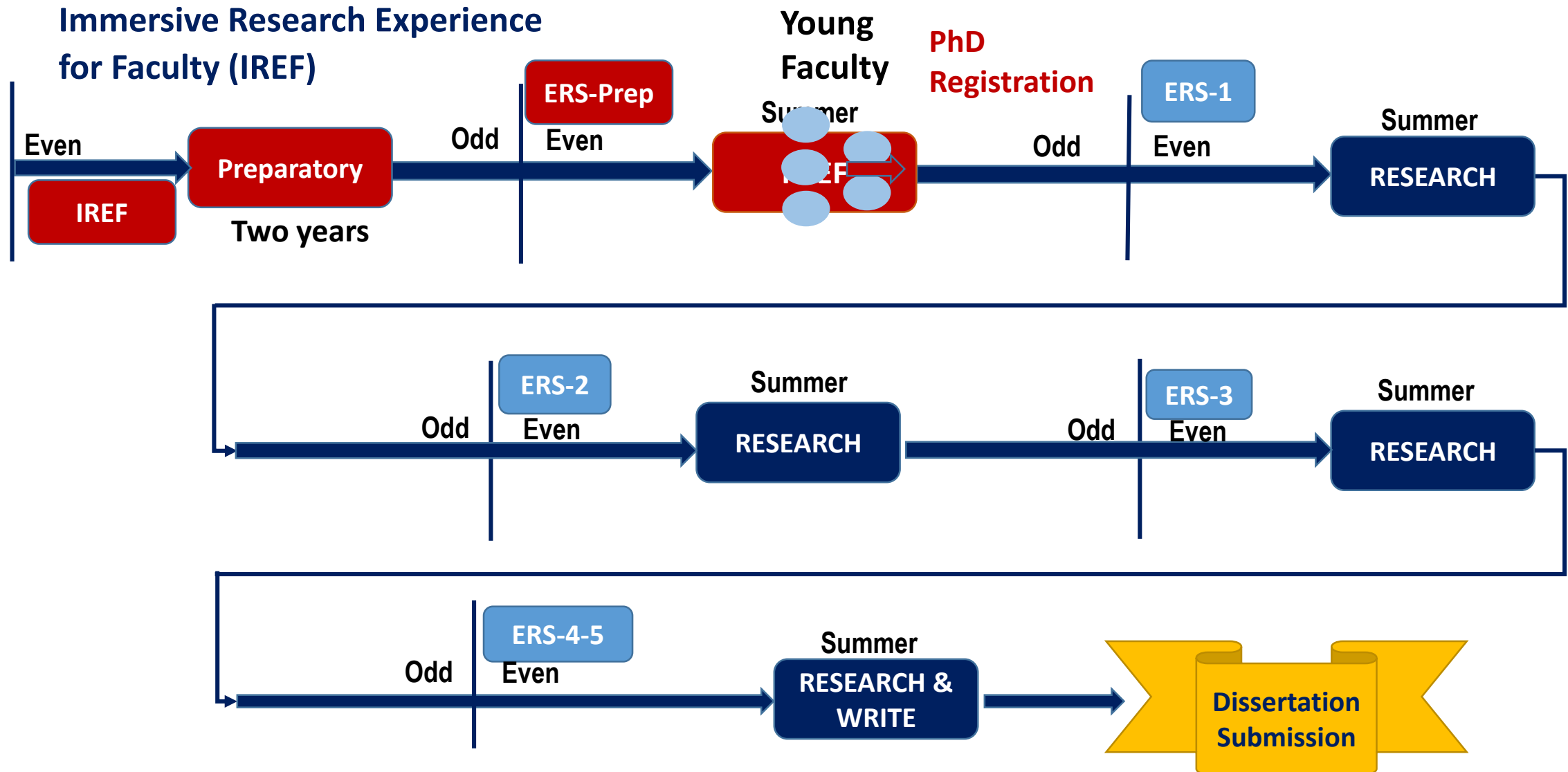
### KLE Tech Paper per Faculty



# Research Path.... Present

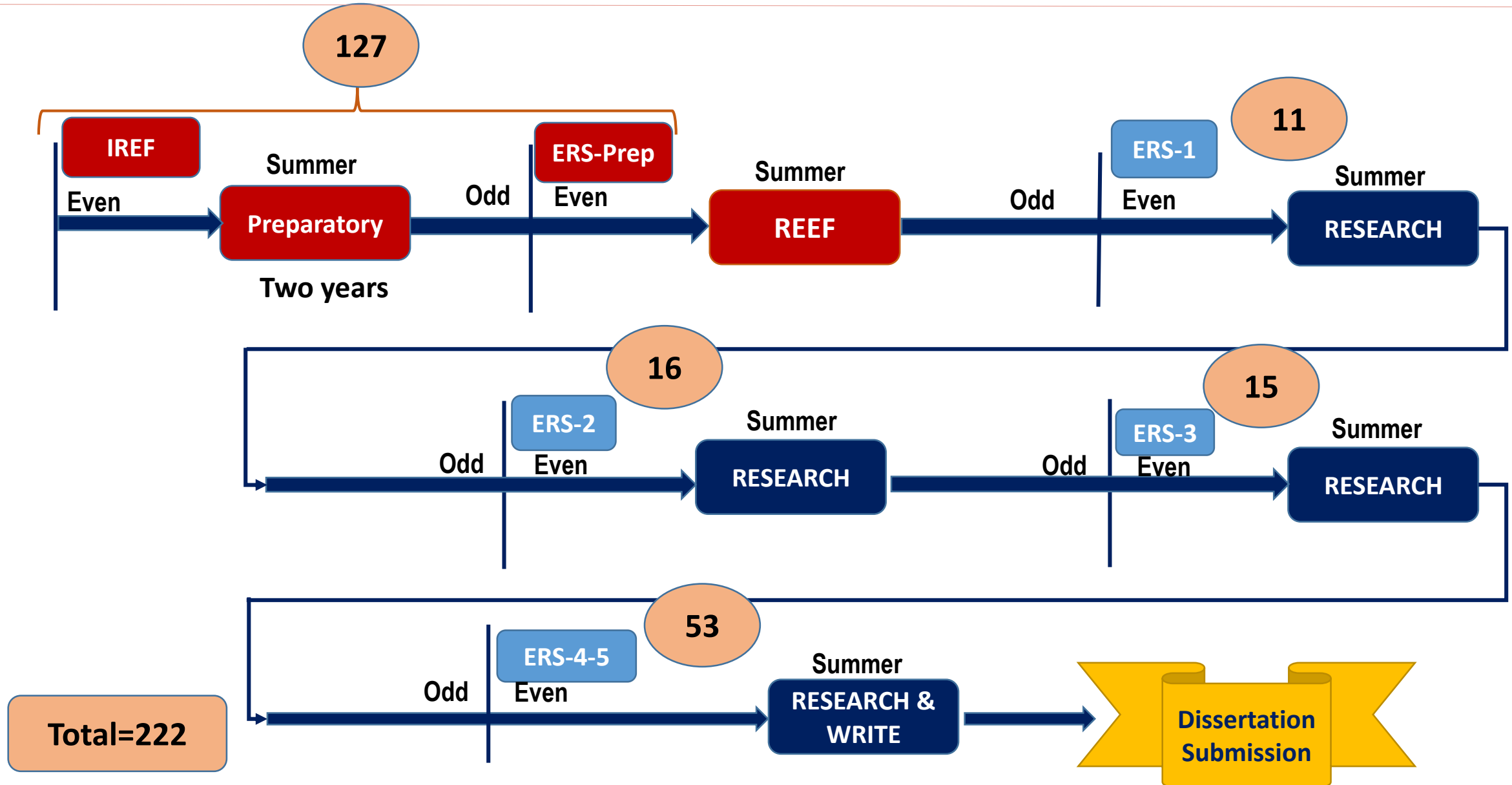


# Research Path.... Proposed

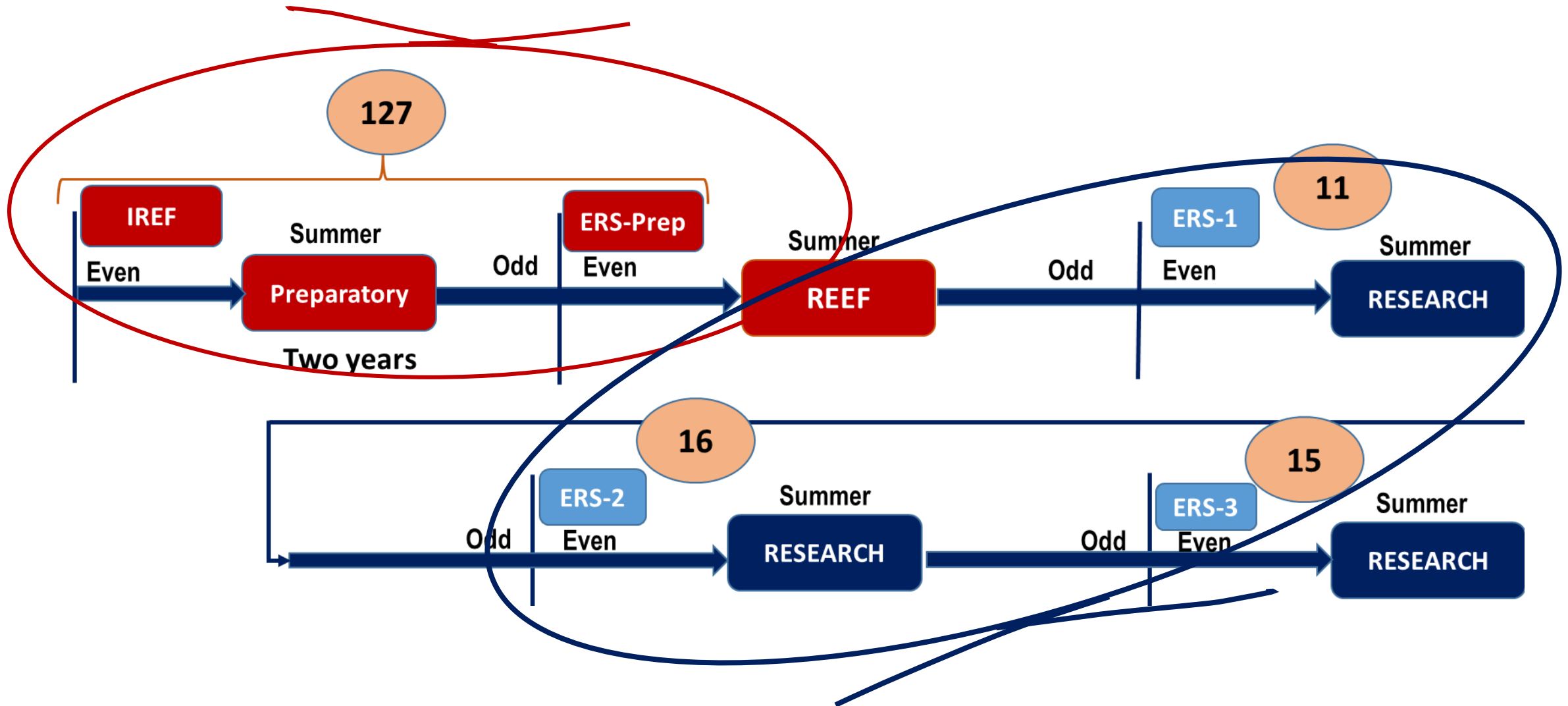




# Research Path



# Evolving Research faculty.....Big Number ....

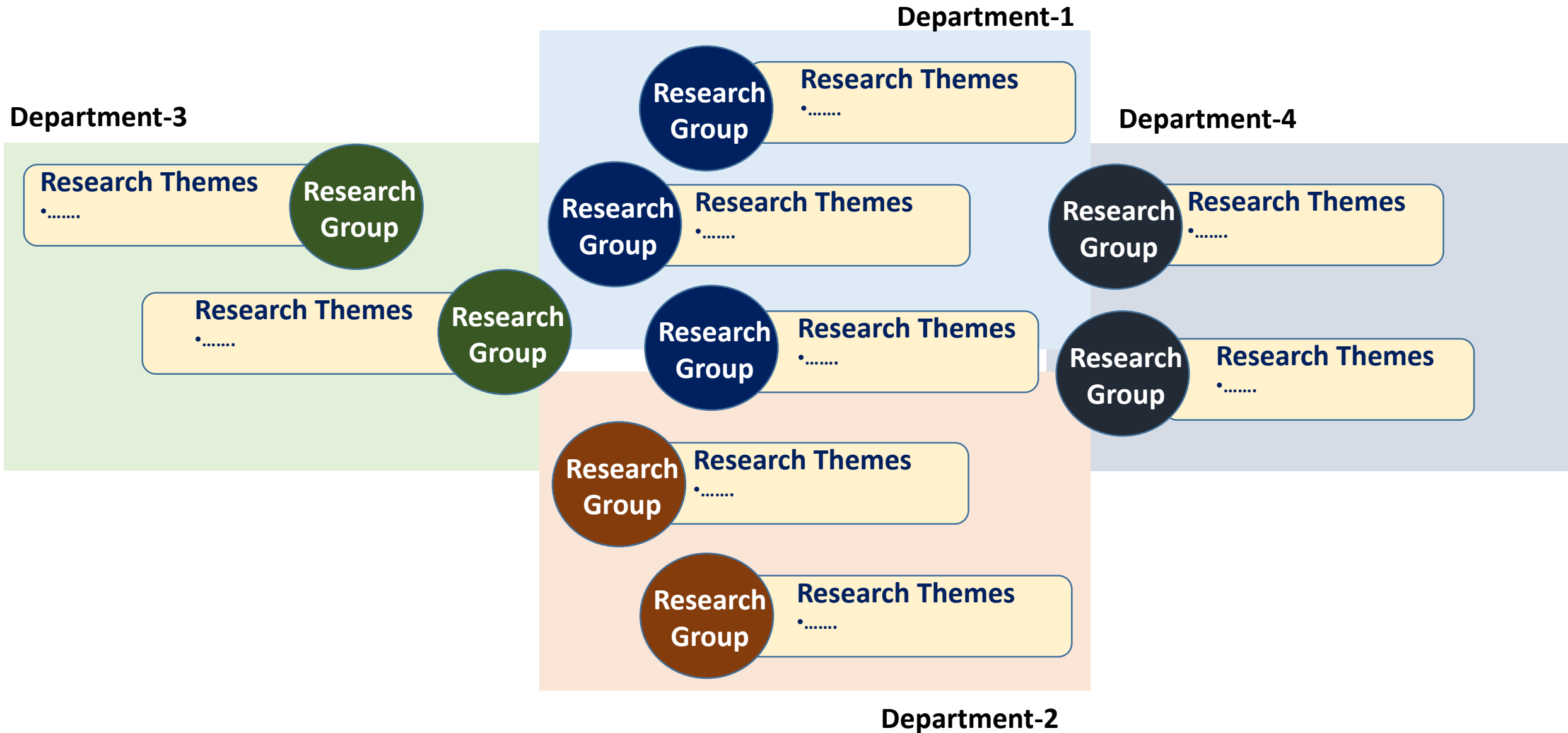


# Evolving Research faculty.....Big Number ....

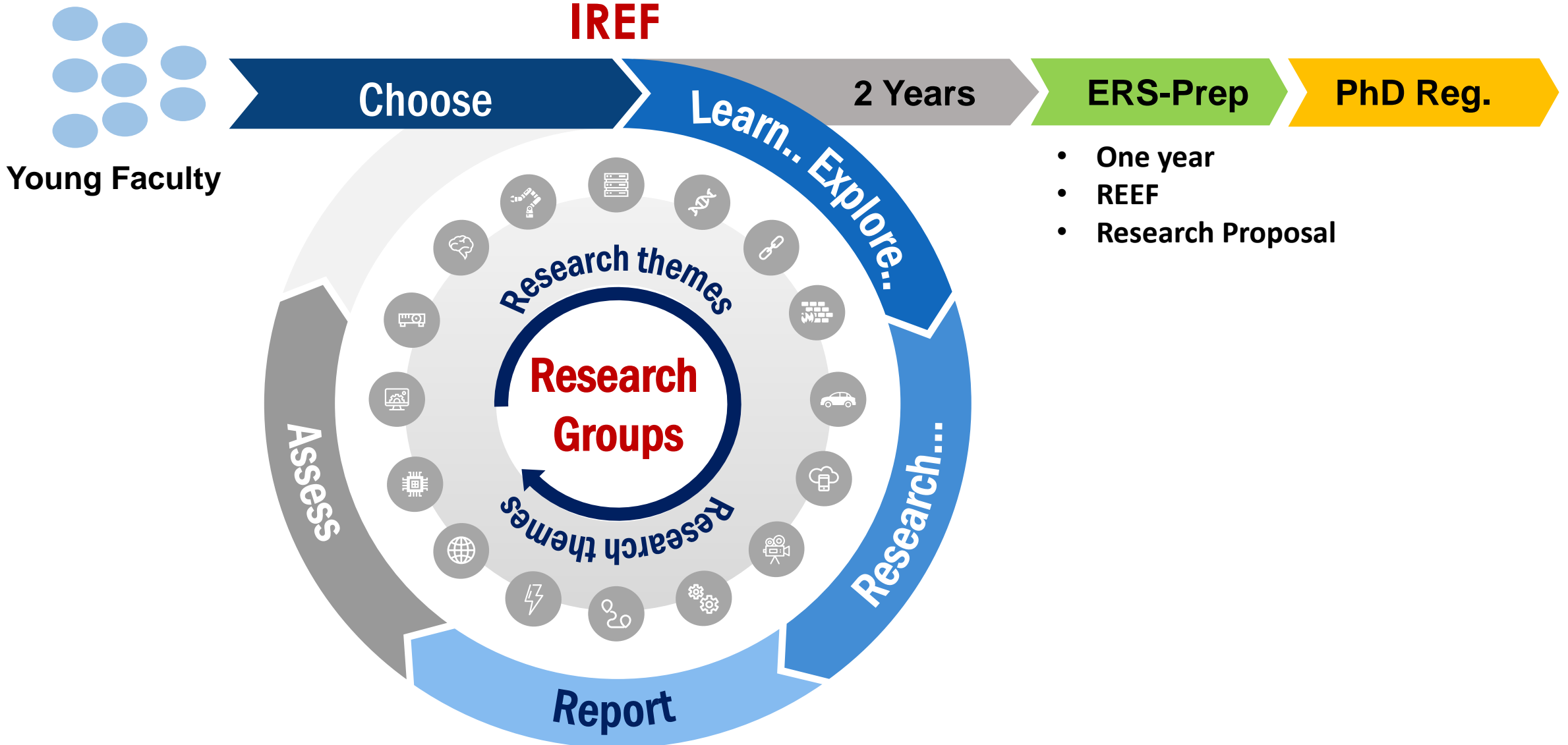
	<b>YFR (&lt;10yrs)</b>	<b>ERS-1 to 3</b>	<b>Total</b>	<b>Groups required</b>
<b>Civil</b>	<b>10</b>	<b>03</b>	<b>13</b>	<b>03</b>
<b>CSE</b>	<b>12</b>	<b>13</b>	<b>25</b>	<b>05</b>
<b>ECE</b>	<b>19</b>	<b>11</b>	<b>30</b>	<b>06</b>
<b>Mechanical</b>	<b>18</b>	<b>14</b>	<b>32</b>	<b>06</b>
<b>A&amp;R</b>	<b>03</b>	<b>03</b>	<b>06</b>	<b>02</b>
<b>EEE</b>	<b>10</b>	<b>04</b>	<b>14</b>	<b>03</b>
<b>Total</b>	<b>72</b>	<b>48</b>	<b>120</b>	<b>25</b>

<b>YFR</b>	<b>Young Faculty Researchers</b>	<i>Faculty less than 10 years of experience, not yet registered for PhD</i>
<b>ERS-1 to 3</b>	<b>Evolving Research Scholars</b>	<i>Faculty registered for their PhD under KLE Tech, Completing 1 to 3 years</i>

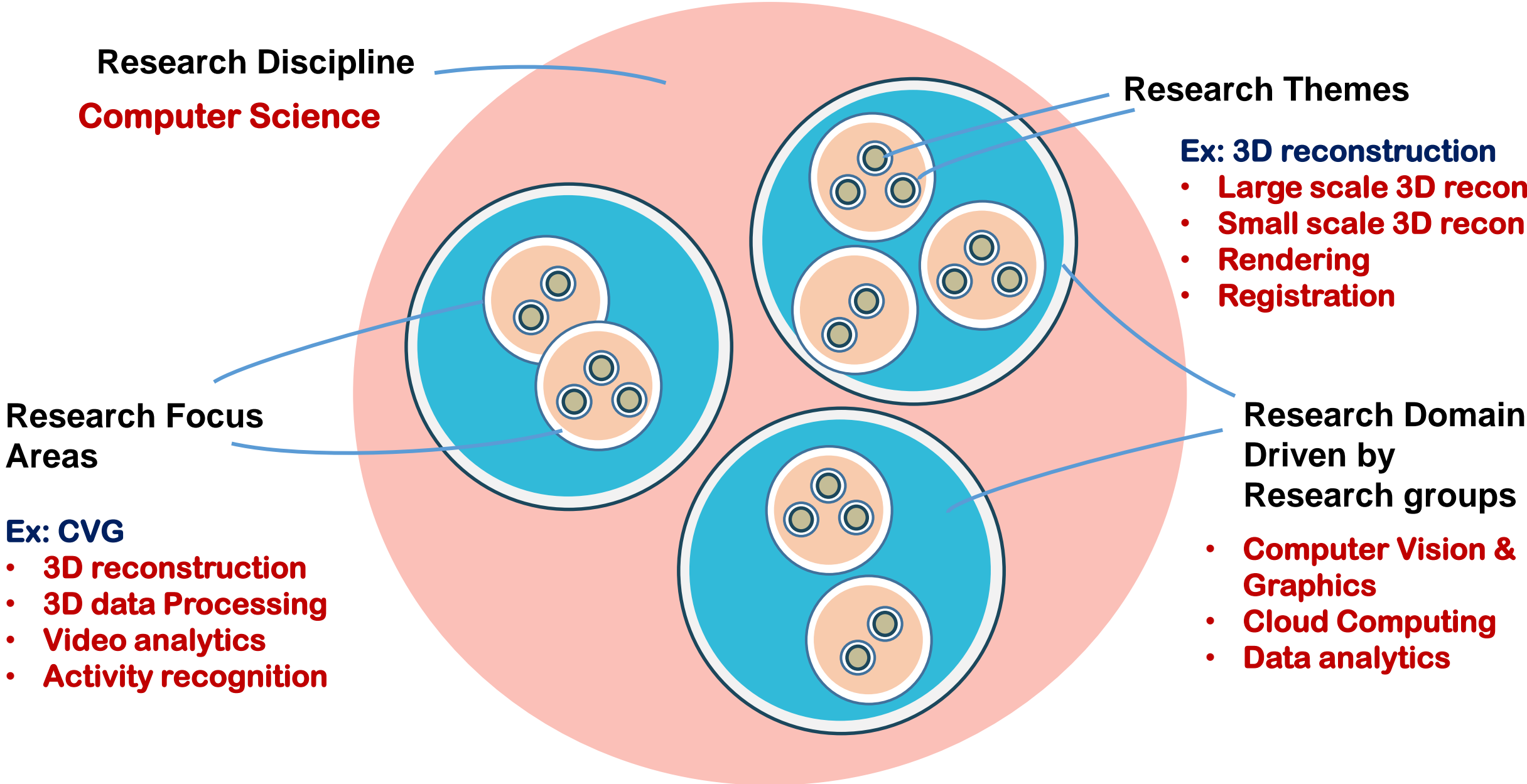
# Imagining Support for Young Faculty Researchers



# Immersive Research Experience for Faculty (IREF)



# KLE Tech Research Strategy – Research Groups



# Every Research Group has identified.....

1 Research Domain

Ex:  
Computer Vision & Graphics

2 Research Focus Areas

3D reconstruction

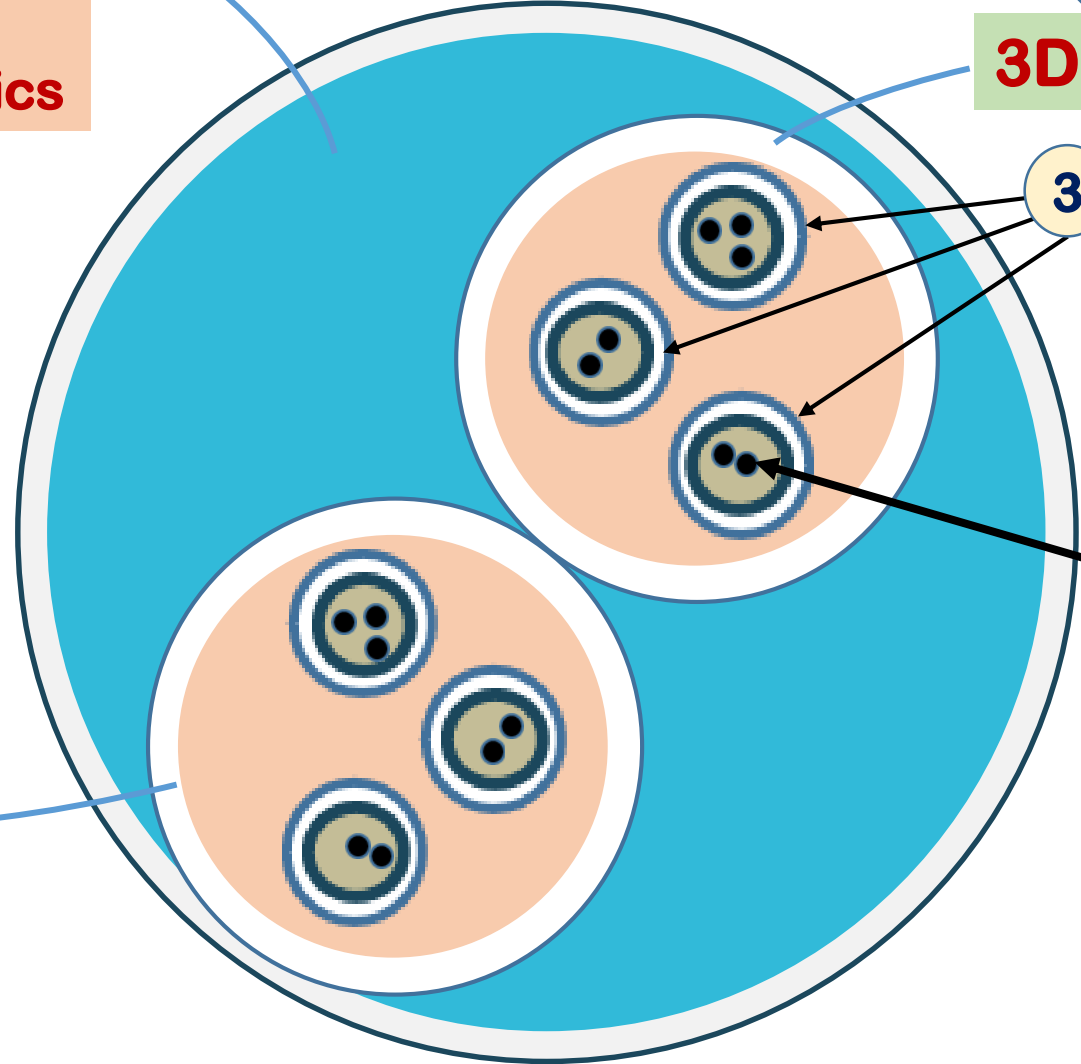
3 Research Themes

1. Small scale 3D recon
2. 3D Rendering
3. 3D Registration

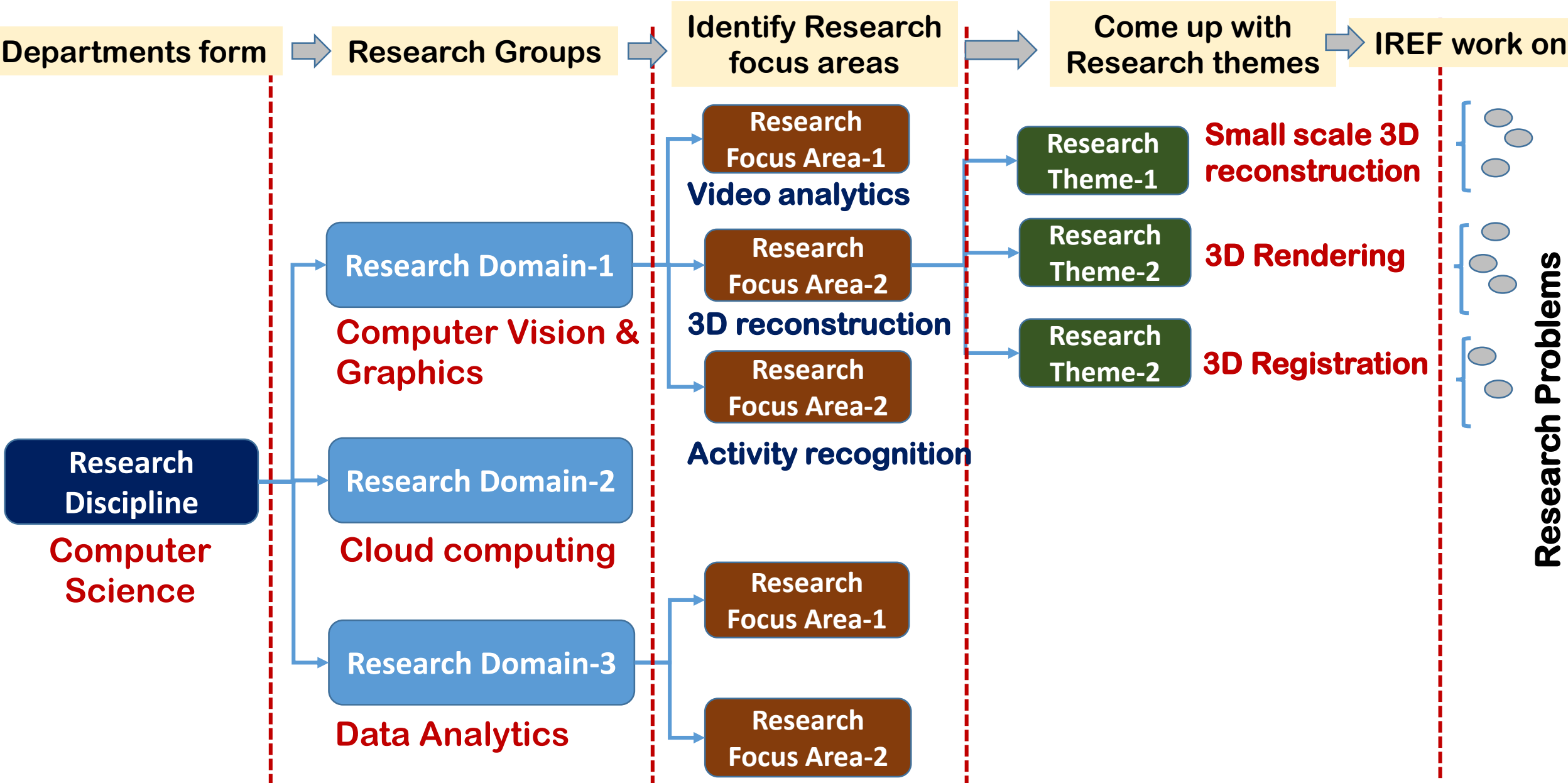
4 Research Problems

1. ....
2. ....
3. ....

Video Analytics



# KLE Tech Research Strategy





## Research Groups Needed

	<b>Groups required</b>
<b>Civil</b>	<b>03</b>
<b>CSE</b>	<b>05</b>
<b>ECE</b>	<b>06</b>
<b>Mechanical</b>	<b>06</b>
<b>A&amp;R</b>	<b>02</b>
<b>EEE</b>	<b>03</b>
<b>Total</b>	<b>25</b>

## Each Research Group needs to have (Minimum)

1. One Senior Research Guide
2. Two Evolving Research Guides
3. External Research Reviewer (Mentor)  
either from industry or from academia

...????.....

1. Every department need to have research groups identified in alignment with department research focus areas and strengths of the mid and senior level researchers (with Ph D)
2. These groups can co-opt / bring-in / collaborate external researchers from higher level institutions / industry

3. The younger faculty with less than 5 years of experience and also faculty with more than 5 years of experience who have not yet decided upon their research areas / path are to be identified – They are referred as YFRs
4. The identified (as per 3.) faculty can join any of these research groups for a year. One should keep in mind the following while working with the research group
  - a. Working with research group does not mean that faculty will be bound to work for their PhD with the same group. After a year they can work with another group. This can give them exposure to different research areas to make an informed choice for their PhD.

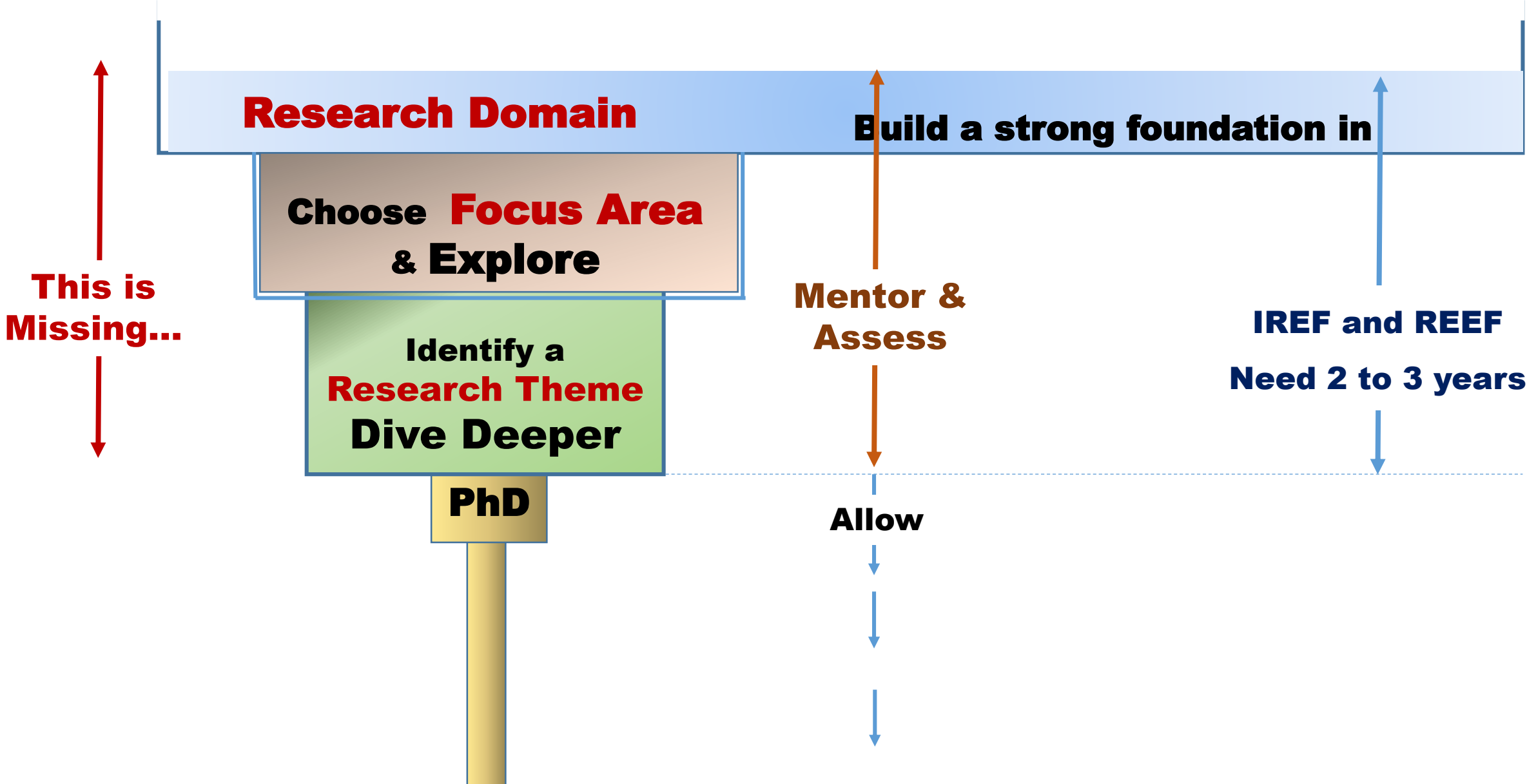
5. Each of the research group will come up with themes for these YFRs to work on. While formulating these themes following should be kept in mind:
  - a. Theme should be within the area of interest of group and enough expertise should be available with the senior researchers (in the group) to mentor the faculty.
  - b. The theme should lead the young researcher to explore the broad research area to gain new knowledge, concepts, tools etc.,
  - c. Further, it should also help the researcher to go deeper into one specific research topic to
    - i. Explore state-of-the-art research that is being carried out
    - ii. Understand Research gaps
    - iii. Formulate research questions
6. Based on the above study each faculty will write an Annual Research Report.

7. 70 to 80 % of appraisal (Research) ratings of these category of the faculty is going to be based on the review of the above work. The review consists of two parts

	Outcome	Weightage	Evaluated
Part A	acquiring new knowledge, learning Tools etc., (b above)	40 %	HOD, two senior researchers of group
Part B	Research report (c above)	60 %	HOD, Two senior researchers, One external researcher from academia or industry (of repute)

8. It is expected that based upon their work, the faculty will publish (individual or as part of group) a paper in national or international conference (SCOPUS or WoS indexed).
9. In the second year these YFRs can continue to work under the same group or move on to another group. If the YFR is continued in the same group, the next year plan for A and B part of the work need to be specified and approved by the committee evaluating Part-B
10. The performance in this stage is important for the following
  - a. It decides whether faculty is ready to move to ERS-Prep category
  - b. It also becomes a measurement parameter of the faculty in performance appraisal of that particular year
11. Normally a faculty is expected to spend two years as IREF scholar

# KLE Tech Research Strategy – Evolve Capable Researchers

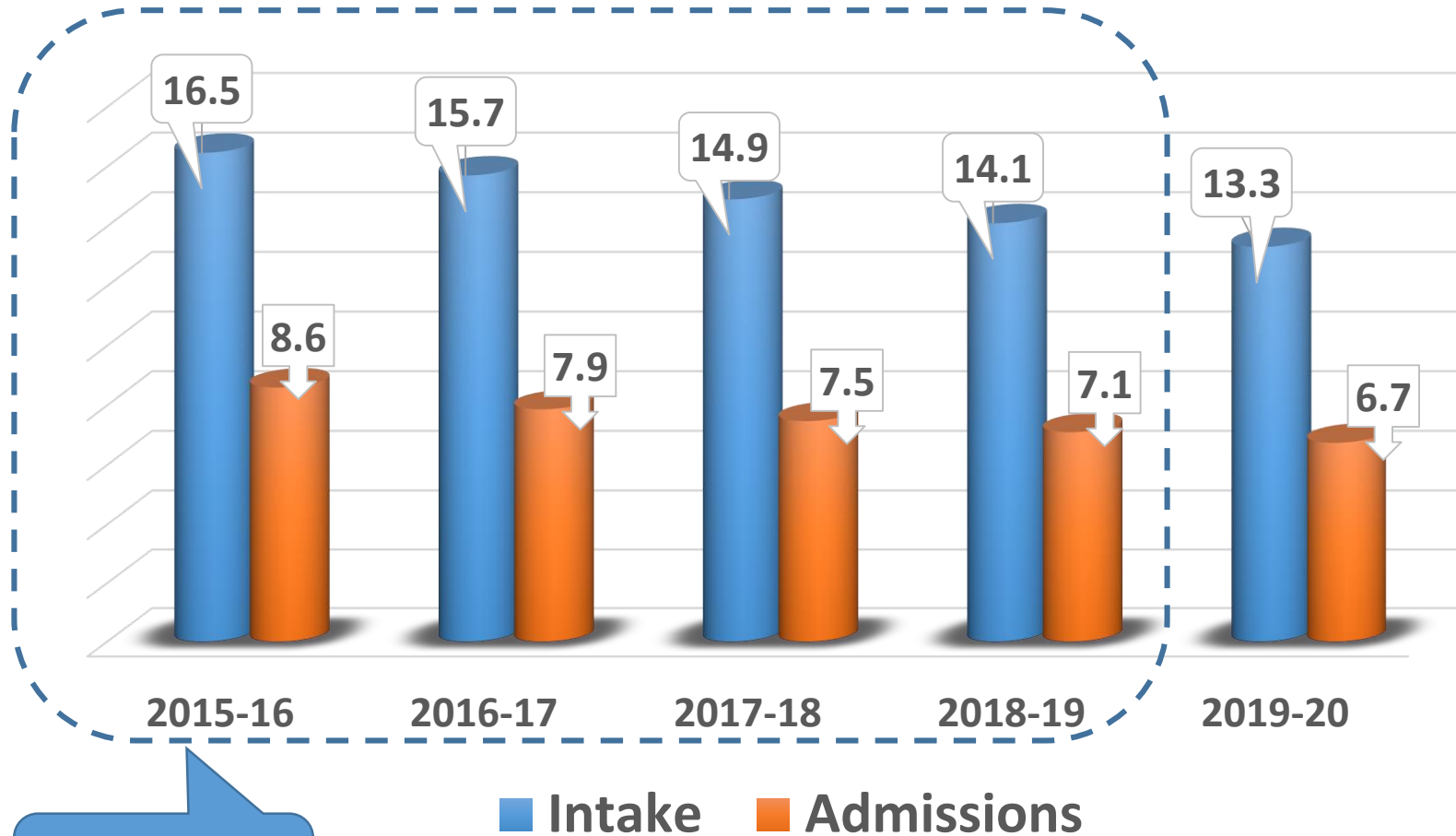


## New Appraisal Process to be adopted

Why ?



# Engineering Education..... Emerging Scenario

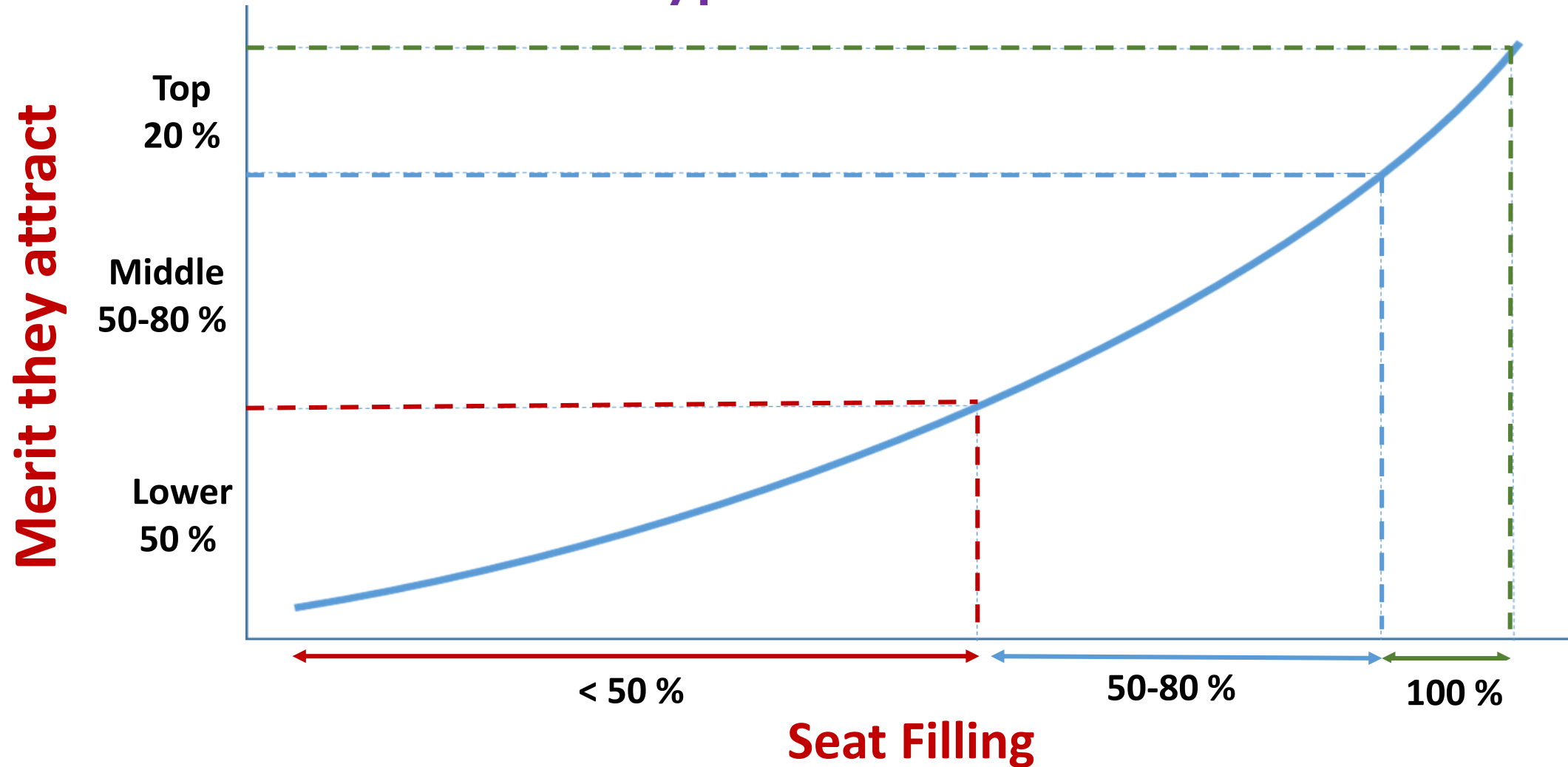


**Actual**  
available data

**Yearly**

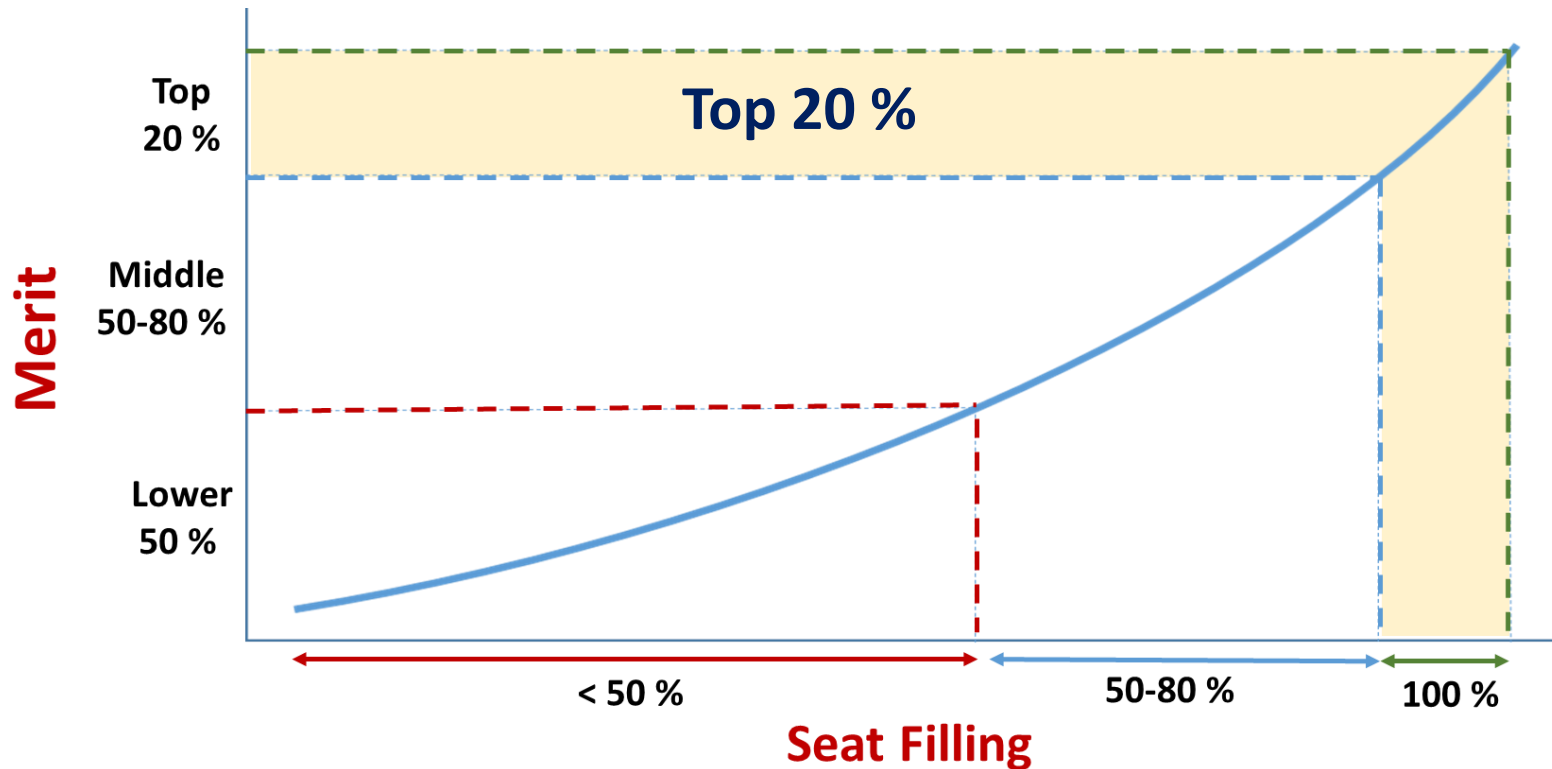
- **80,000 Intake reduction**
- **5 % reduction admissions taken**

## Three types of Institutions



# TOP 20 % Institutions

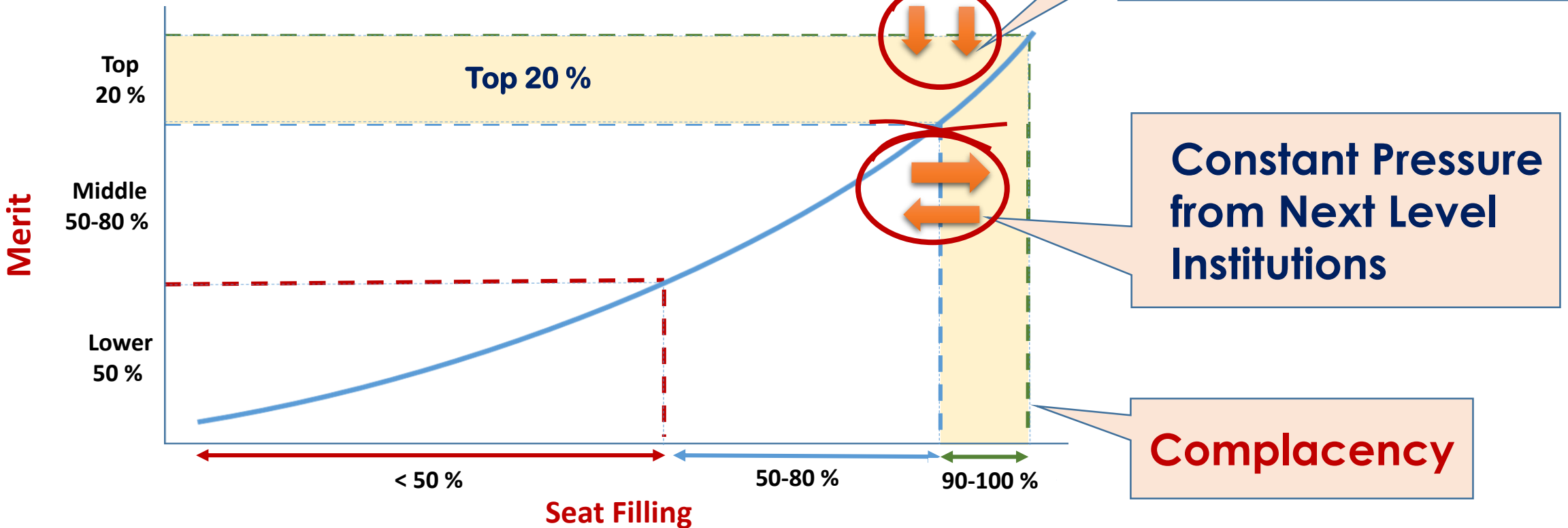
**To be in Top 20 % They have to Maintain within top 200 NIRF Ranking**



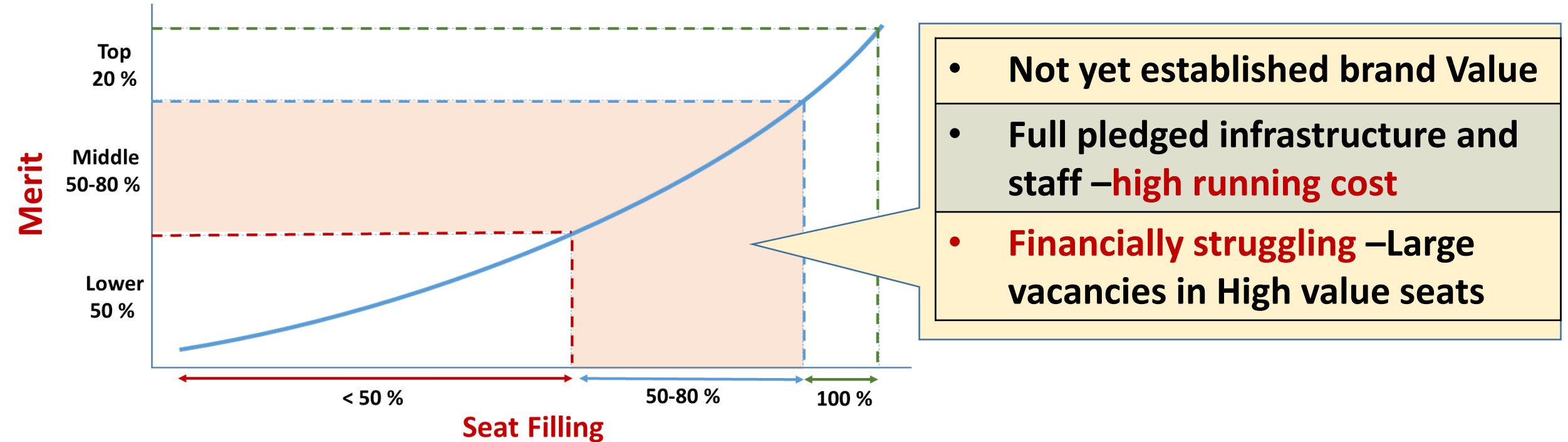
- Brand Value
- Financial Stability
- Autonomy
- Scale of Operation

# TOP 20 % Institutions

**“ It is more difficult stay on top than to reach there”** -Mia Hamm

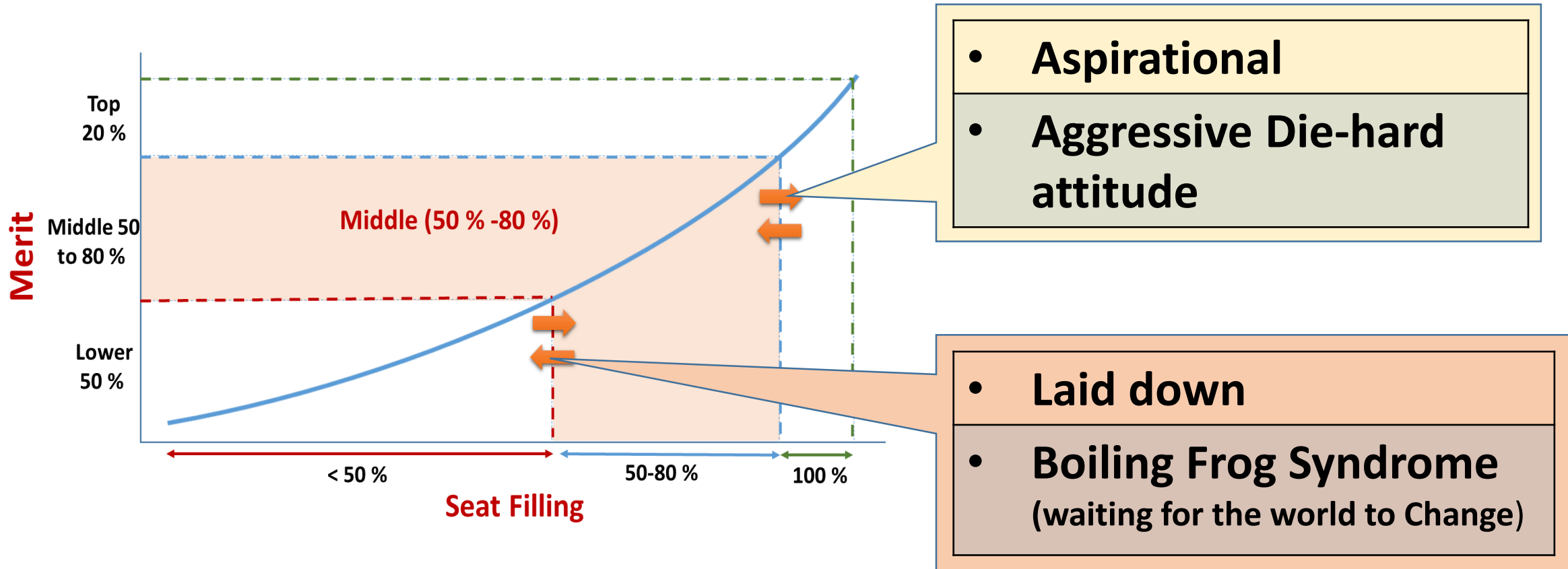


# Middle 50% TO 80% Institutions



# Middle 50% TO 80% Institutions

## Two Types

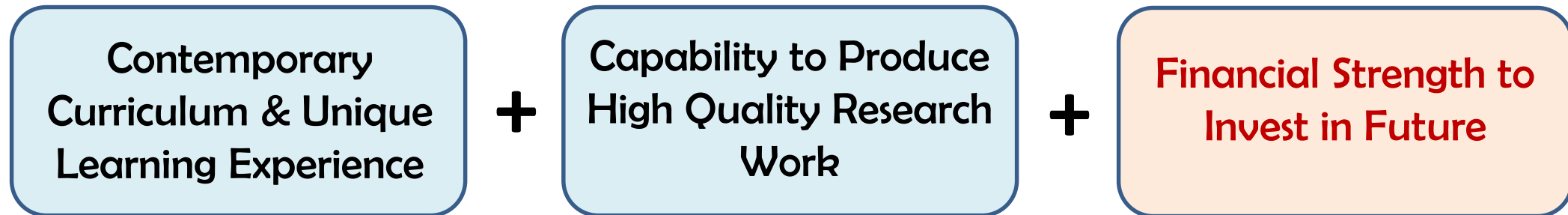


We have to Maintain below 200 NIRF Ranking to Survive

**NIRF Ranking below 200**



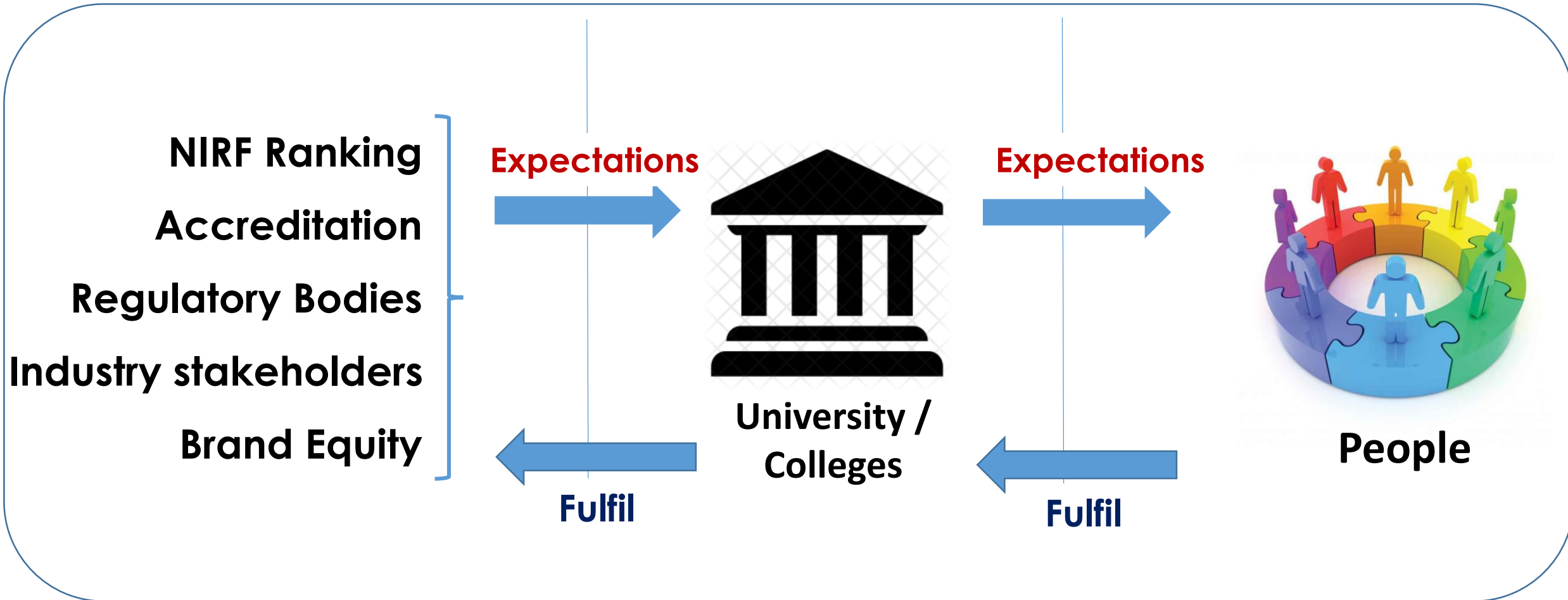
Change in  
Policy



- Attract High quality Students
- High value placements

- Focussed efforts
- Relook at our PhDs
- Everybody contributes to research

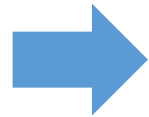
# Why need to be Serious about Appraisal ?





## to Change the Mental Model

- Ph D Degree is Important for my career
- Being active & productive researcher is not mandate of my job



- **Ph D degree has no more value**

The Value is in

- ✓ **Research Capability** – Potential to remain as active researcher throughout your career
- ✓ **Research Quality and Productivity**
- Research is **no more an option** but a mandate for career in College / University

**& Support the Change**

## Appraised in **Three Dimensions**

1. Teaching
2. Research
3. Leadership

## Faculty Categories : **Teaching**

Category	Criteria
T1	Assistant Professor having Experience 5 years and less
T2	Assistance Professor having Experience more than 5 years
T3	Associate Professor
T4	Professor

# KLE Tech –Faculty Appraisal System -2020



## Faculty Categories : **Research**

Category	Criteria
IREF	Faculty who have not yet registered for PhD
ERS-Prep	Faculty who have completed minimum of 2 years of IREF successfully, wishes to register for PhD in next one year
ERS-1	Faculty in first year of PhD registration
ERS-2	Faculty in second year of PhD registration
ERS-3	Faculty in third year of PhD registration
ERS-4	Faculty in fourth year of PhD registration
.....	.....
ERG	Evolving Research Guides; Faculty having completed PhDs, not yet produced PhD
SRG	Senior Research Guides – Faculty having completed PhD and successfully guided PhD completion

## Faculty Categories : **Leadership**

Category	Criteria
IL1	Institutional Leader- layer -1 : Deans, Centre heads, HODs
IL2	Institutional Leader- layer -2 : Associate deans, institutional coordinators (decided by the central authority)
IL3	Institutional Leader- layer -3 : faculty playing specific assigned roles at institutional level ((decided by the central authority)
DL1	Departmental leader- layer-1 : faculty playing specific assigned roles at department level ((decided by the central authority and department Head)
DL2	Departmental leader- layer-2 : faculty playing specific assigned roles at department level ((decided by the central authority and department Head)
DL3	Departmental leader- layer-2 : faculty playing specific assigned roles at department level ((decided by the central authority and department Head)
NYL	Faculty who does not belong to the above category

# KLE Tech –Faculty Appraisal System -2020



	Teaching Category	Research Category	Leadership category
<b>Faculty –A</b>	<b>T1</b>	<b>IREF</b>	<b>NYL</b>
<b>Faculty –B</b>	<b>T2</b>	<b>ERS-3</b>	<b>NYL</b>
<b>Faculty –C</b>	<b>T5</b>	<b>SRG</b>	<b>IL-2</b>

## In each Dimension

### For Each Category :

1. A Clear set of Expectations, that are converted to the outcomes to be achieved
2. Support system required to achieve the outcomes
3. Measurement Metrics and Schedule for Reviews (biannual)
4. How each of the parameters in metrics are Assessed
5. Performance appraisal in each of the dimensions

# Faculty Appraisal -Teaching



Teaching	L1		L2		L3		L4	
	✓	Max Marks	✓	Max Marks	✓	Max Marks	✓	Max Marks
1. Teaching Effectiveness - Planning, implementing and assessing instruction to ensure student learning	✓	60	✓	50	✓	40	✓	40
1. Cooperating with departmental programs and processes	✓	20	✓	20	✓	20	✓	20
1. Demonstrating leadership in developing innovative new courses / enhanced learning environment through new teaching / assessment approaches , open ended problems / PBL approaches			✓	10	✓	15	✓	20
1. Participating in the design, development and delivery of the new courses being offered.	✓	10	✓	10	✓	10	✓	05
1. Advising students; to assist undergraduate and graduate students to develop meaningful educational plans and monitor their progress.			✓	05	✓	10	✓	10
1. Participating in two or more teaching workshop/seminar to improve teaching	✓	10	✓	05	✓	05	✓	05



# Faculty Appraisal -Teaching

Teaching / Learning	L1 M	L2 M	L3 M	L4 M
<p><b>1. Teaching Effectiveness - Planning, implementing and assessing instruction to ensure student learning</b></p> <p><i>Number of courses taught in the year =N</i>  <i>Average feedback from N number of courses =A</i>  <i>Maximum Marks for the criteria =M</i>  <i>Marks to be allotted:</i>  <i>Factor F= ((N-1)/6) *15</i>  <i>Marks to be allotted, V= ((A + F)/100) * M</i>  <i>If V is more than M allot M</i></p> <p><b>Example: For a faculty</b>  <b>N=4 ; A=82 %</b>  <b>F=((4-1)/6)*15 = 7.5</b>  <b>Marks to be allotted V= ((82+7.5)/100) * 40 =36</b></p>	✓	60	✓	40

# Faculty Appraisal -Teaching

Teaching / Learning	L1		L2		L3		L4	
	✓	M	✓	M	✓	M	✓	M
<p><b>2. Cooperating with departmental programs and processes</b></p> <p>a. Timely completion of tasks (weightage 40 %)</p> <p>    i. Attendance entry</p> <p>    ii. CIE entry</p> <p><i>Taken from Conteneo database: % Score: A</i></p> <p>b. Other documents required for department (Lesson Plans, accreditation data etc.,) (Weightage 40%) HOD evaluation</p> <p><i>Evaluated and assigned by HOD: B</i></p> <p>c. Attendance of meetings (weightage 20 %)</p> <p><i>% of meetings attended: C</i></p> <p><b>Marks to be allotted=<math>((0.4*A+0.4*B+0.2*C) / 100) * M</math></b></p> <p><b>Example:</b></p> <p><b>A = 85%; B=70%; C=65% ; Maximum marks=20</b></p> <p><b>Marks to be allotted = <math>((0.4*85+0.4*70+ 0.2*65)/100)*20 = 15</math></b></p>	✓	20	✓	20	✓	20	✓	20

## Research Plan and performance appraisal

**Category: ERS-1**

### Expectations:

1. PhD Registration
2. Finalisation of Dissertation area
3. Guide selection
4. Course work as a foundation for thesis work
5. Literature survey
6. Attend research seminars and workshops
7. Research problem definition
8. Research questions
9. Dissertation Research Proposal
10. Approval from Review Committee

### Outcomes:

- Research problem and research questions
- Dissertation Research proposal with detailed plan, tasks and timelines
- Greater exposure to the subject and networking with experts
- At least 50 % coursework completed
- Two review articles in department colloquia
- Year-end research report

## A. Outcome Review Schedule

	Outcomes	First half year Review, June		Final Review, December		
			Review points		Review points	Grade
1	Dissertation Research proposal with – Literature survey, research problem and research question, detailed plan, tasks and timelines	✓	<ul style="list-style-type: none"> <li>Literature survey – depth</li> <li>Attempt to identify research gaps</li> <li>Attempt to formulate research problem</li> </ul>	✓	<ul style="list-style-type: none"> <li>Comprehensive proposal with – Literature survey, research problem and research question, detailed plan, tasks and timelines</li> </ul>	
2	At least 50 % coursework completed	✓	Finalisation of courses and registrations	✓	Completion Status	
3	Review articles in department colloquia	✓	Status	✓	Quality and depth	
4	Publications in the area in national or international conference			✓	Status	

# Faculty Appraisal -Research

## B. Goal Setting and Review

i. First Half Year: January –June;  
Week

Review-1: December last week

Review-2: July 1<sup>st</sup>

	Outcomes to Reviewed	Review:1 Goal Setting for the period	Review-2-Performance against goals set	Grade
1	Dissertation Research proposal with – Literature survey, research problem and research question, detailed plan, tasks and timelines			
2	At least 50 % coursework completed			
3	Review articles in department colloquia			

Signature of Faculty Member:

Date:

Signature of Appraiser :

Date:

## C. Year-end Appraisal

Appraisal of Scholarly Activities –ERS-1					
	Outcomes expected	Weightage	Evaluation	Evaluated by	Score
1.	Detailed proposal with – Literature survey, research problem and research question, detailed plan, tasks and timelines	40 % (40)	Quality, depth of work	HOD, Two senior researchers, One external researcher from academia or industry (of repute)	
2	50 % coursework completed	20% (20)		HOD	
3	Review articles in department colloquia	20% (20)	Quality, Quality, depth of work Sense of direction	Colloquium expert panel (need to have external also)	
4	Publications in the area in national or international conference	20% (20)	One publication	HOD	
	Any other				
				Total	

## C. Year-end Appraisal

Appraisal of Scholarly Activities –ERG				Section-A
	Outcomes	Weightage	Evaluated by	Score
1	<b>Individual research plan for next 3 years</b>	20	HOD	
2	<b>Publication of papers in refereed / indexed journals and conferences Patents / IP</b> Number of papers published in Conference = PC Number of papers published in Journal = PJ Number of patents = PT Factor $F = (PC+PT) * 0.4 + PJ* 0.8$ If F is greater than 1 then 1 ; Marks to be allotted = $F*50$	50 (for yet to be guides weightage 80)	HOD (Based on data from portal)	
3	<b>Number of doctoral students / progress of work</b> Number of Doctoral Students between ERS-1 to ERS-6=DS1 Number of Doctoral students beyond ERS-6 =DS2 Factor $F=0.5*DS1 - 0.2 *DS2$ If F is > 1 then 1 and if <0 then 0 Marks to be allotted = $F*30$	30 (for yet to be guides weightage 0 (zero))	HOD (Based on data from portal)	

- **New HR Policy will come into effect from 1<sup>st</sup> January 2020**
- **Faculty appraisal based on 'New Appraisal Indicators' will be carried out during December 2020**
- **Action based on appraisal will be implemented from January 2021, i.e. it will be reflected in the salary of January 2021 payed in Feb 2021.**



**Thank You**