

PHD RESEARCH, AND BEYOND: A SUPERVISOR PERSPECTIVE

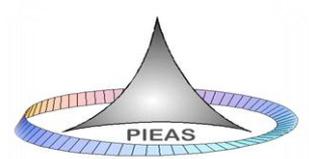
By:

Dr. Asifullah Khan
DCIS, PIEAS,
Islamabad, Pakistan

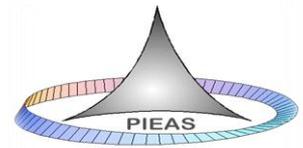


Sports is important
for PhD Scholars

PHD RESEARCH, AND BEYOND: A SUPERVISOR PERSPECTIVE

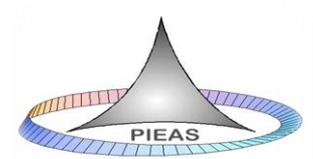


- The aim is to discuss some points related to PhD Research and Supervision.



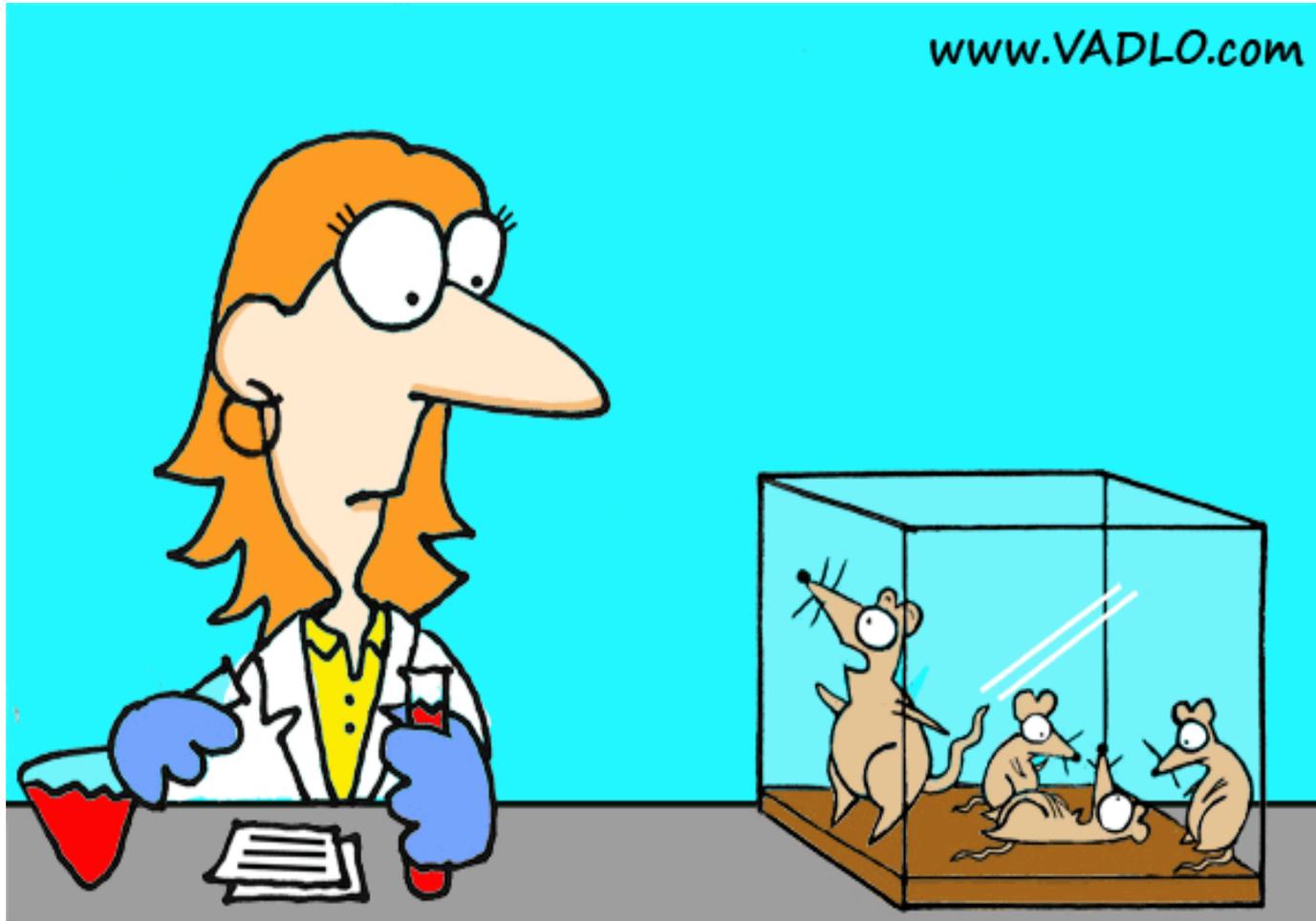
- Most of this discussion is based on my own Experience.
- Some relevant literature is also pointed-out at the end.
- Suggestions are welcomed.
- Informal presentation; Cartoons, Images, and Quotations.

PHD RESEARCH, AND BEYOND: A SUPERVISOR PERSPECTIVE

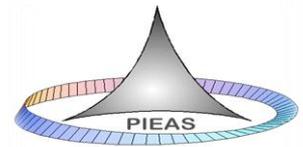


- Before we start, lets view some comics about PhD Research

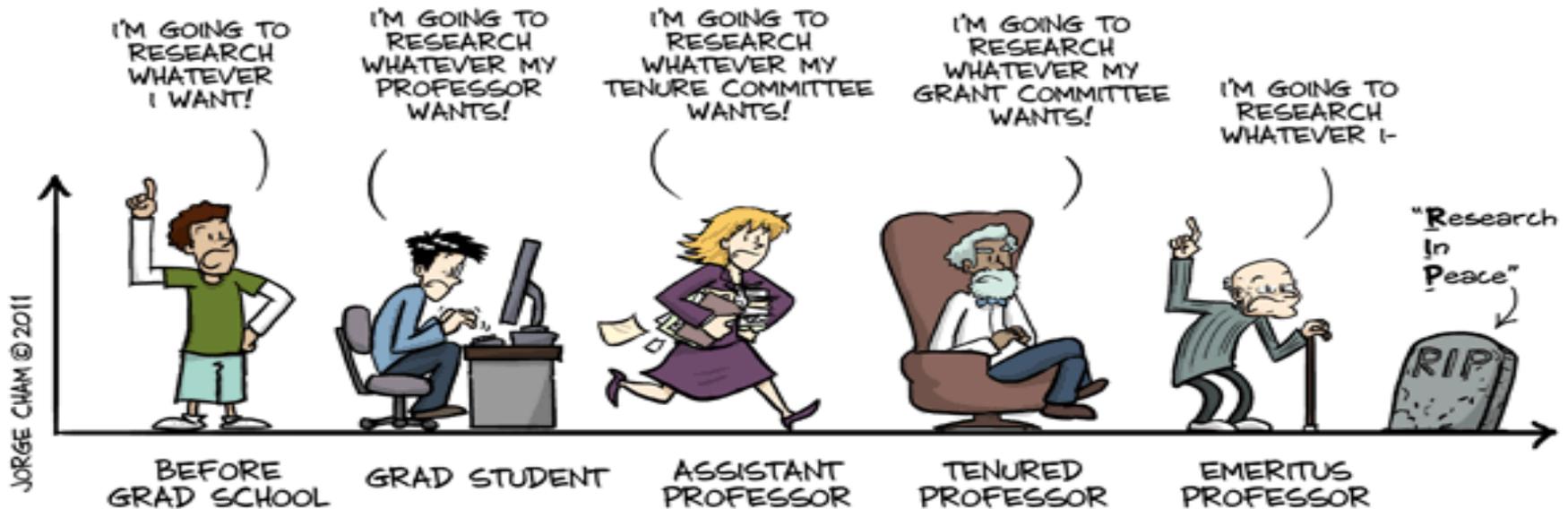




“Hey, my pup is sick. Are you a real doctor or just PhD?”

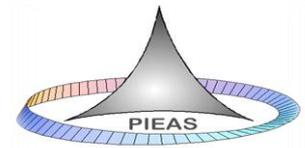


THE EVOLUTION OF INTELLECTUAL FREEDOM



WWW.PHDCOMICS.COM

PAPER/THESIS WRITE-UP



"FINAL".doc



FINAL.doc!



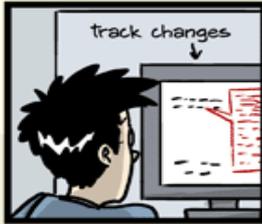
FINAL_rev.2.doc



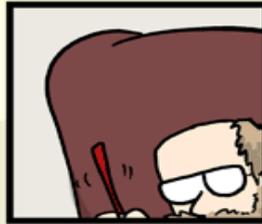
FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



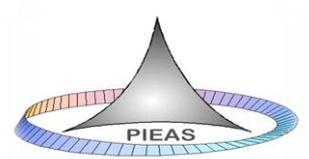
FINAL_rev.22.comments49.
corrections.10.#@\$%WHYDID
ICOMETOGRADSCHOOL????.doc



In addition to doing **Research and obtaining Results, Technical-Writing skills** is another art that PhD students need to improve; **Be patient**

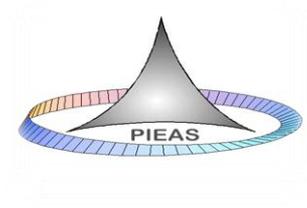
JORGE CHAN © 2012

- Many iterations of the manuscript mostly result in mature manuscript.
- One month delay at our side is far better than 3-4 months delay at the Journals' side
- Avoids bad Impression on Reviewers/ Associate-editor as well.

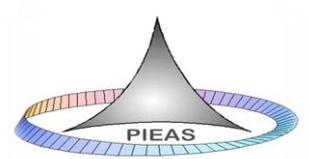


Gaining Knowledge:

Prophet Muhammad (saw) “Go in quest
of knowledge even unto China.”



- PhD gives you a taste of research
- And research is what a true scientist lives for



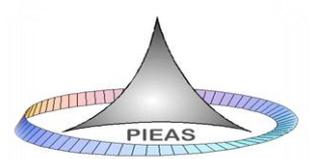
- Roughly speaking;
 $Scientist = f(\text{research}, \dots)$
- And mostly $Research = f(\text{PhD}, \dots)$

- How come a PhD produce a good Scientist?
- It largely depends upon the intention of the PhD scholar; Whether he does research for PhD **OR** PhD for research?
- “There is a great deal of difference between an eager man who wants to read a book and the tired man who wants a book to read.” - GK Chesterton

SO, WE DISCUSS A FEW QUOTATIONS

- Prophet Muhammad (saw) “The ink of the scholar is more holy than the blood of the martyr.”
- "An investment in knowledge pays the best interest." -Benjamin Franklin

QUOTATIONS; CONTINUED



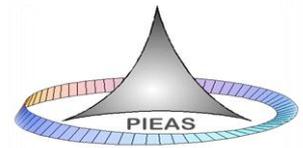
- "Imagination is more important than knowledge."-Einstein

If your Experimental OR Simulation based work is stalled, nobody is stopping you from thinking, imagining, and visualizing.

QUOTATIONS; CONTINUED

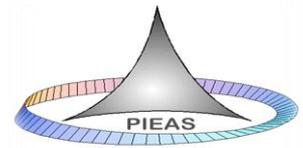
- “If I have seen farther than others, it is by standing upon the shoulders of giants.” - Isaac Newton
 - Respect Teachers, Senior Researchers, and those works that we are referring.
- “We live on an island surrounded by a sea of ignorance. As our island of knowledge grows, so does the shore of our ignorance” - John Archibald Wheeler
 - Research goes-on; no ending.

PH.D. RELATED STATEMENT BY A STUDENT

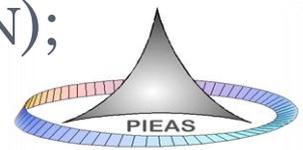


- "A Ph.D. is an exhausting, emotional struggle. You are forced to confront all of your fears, insecurities and doubts you have about yourself and somehow overcome them" Anonymous Student
- It's terrifying. A lot of bravery is required, which often goes unrecognized and unrewarded"-Anonymous Student

PHD STUDENTS CATEGORIES; IN MY OPINION

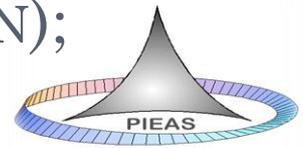


- *“There is a great deal of difference between an eager man who wants to read a book and the tired man who wants a book to read.”- GK Chesterton*
- In my opinion, some PhD students are interested in just PhD degree.
- Some take interest in research, while a few go much farther and develop a passion for research.



○ So if we roughly categories PhD Students

- a) $S_1 \rightarrow f(\text{Degree, Prestige, Worldly-Advantages, ...})$
- b) $S_2 \rightarrow f(\text{Hardworking, Obedient, Degree, Prestige, Worldly-Advantages,})$
- c) $S_3 \rightarrow f(\text{Intelligent, Degree, Prestige, Worldly-Advantages,})$
- d) $S_4 \rightarrow f(\text{Passion, Intelligent, Hardworking, Degree, Prestige, Worldly-Advantages, ...})$



Passion $\rightarrow f$ (Dedication, Patience)

S4 \rightarrow More chance to become a **Real Scientist**

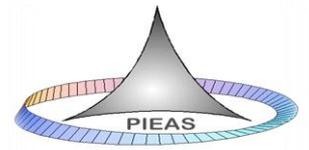
“PhD is like crossing a river by swimming”

PHD STUDENTS CATEGORIES (IN MY OPINION) CONTINUED...

- PhD is like crossing a river Or reaching seashore by swimming.



CROSSING RIVER AND THE TRIATHLON; S4

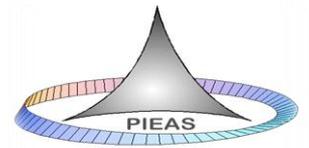


Swimming

Cycling

Running

PHD STUDENTS; S4; TRIATHLON (SWIMMING)

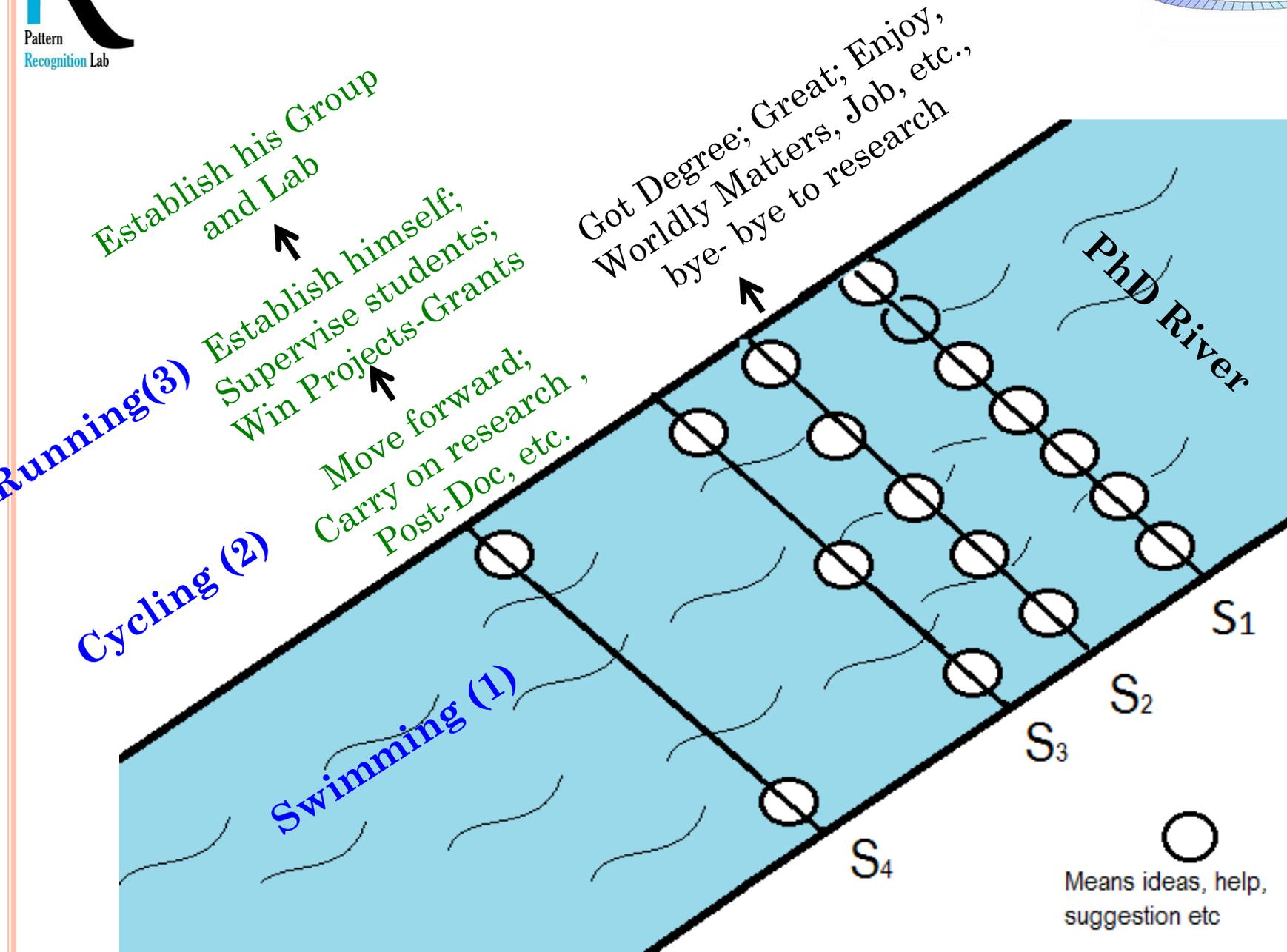
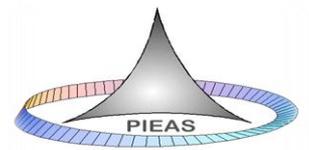


PHD STUDENTS; S4; TRIATHLON; CONTINUED...(CYCLING)

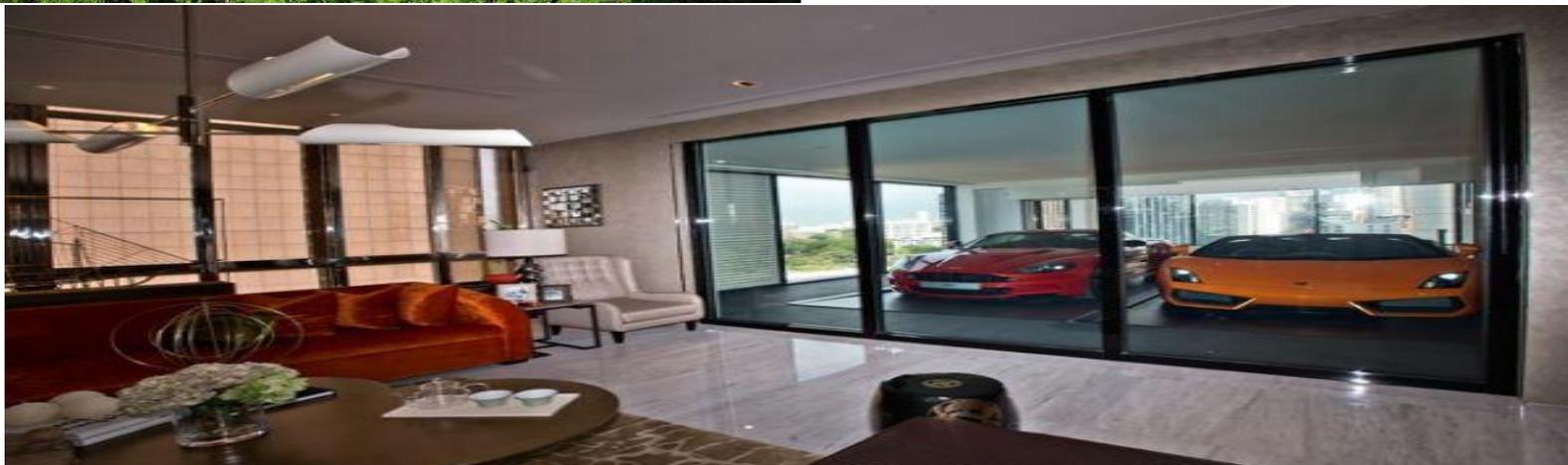


PHD STUDENTS; S4; TRIATHLON; CONTINUED...(RUNNING)





- Hurray!
- That's fantastic; I got it; Degree obtained; Rest & Rest; Bye-Bye to Research

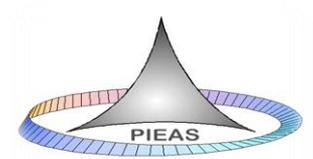


- Destination is not just a PhD degree
- He moves forward and wants to explore valleys instead of starting living on the beach.
- Makes way in the Jungle; goes beyond mountains



- Not frightened from Obstacles
- He wants to do something for his research-field by going beyond the jungle and Mountains





- For S4, its a Triathlon not a Single-Stage Competition
- Going beyond the **Jungle** and **Mountains** after crossing the **River**.

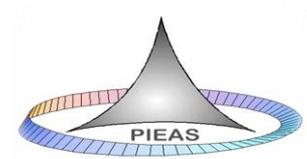
- S4's research and carrier targets; to become a real Scientist

To Move forward:
carry-on research, post-
Doc, etc.

To Establish himself:
Supervise Students, Win
Project-Grants

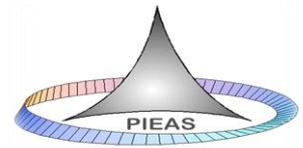
Establish his group
and Laboratory

Possible Features of S4



S4 will never disrespect his supervisor

To enhance Interaction among
PhD Students.



Interaction and Activities;
Sport, Hiking, Tea-party, etc. based
activities

- Such an Activity starts technical discussions
- Increases cooperation among students
- Supervisor gets to know their problems (both technical and administrative through discussions)
- Research group becomes strong

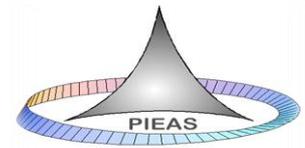








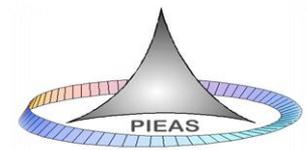
Related Literature; Conceptions of Doctoral Students' about PhD



Some studies have suggested that doctoral students' conceptions of completing a PhD show a wide range of perspectives:

- Some see research as learning and scholarly development,
- Whereas others stress the outcome and the possible benefits that a degree may provide in terms of job opportunities or other benefits

Things Needed to Achieve PhD Degree

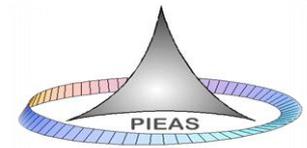


It is necessary to demonstrate that you have mastered the skills necessary to carry out research to professional standards.

The point of the PhD is not to demonstrate your brilliance (although this might also occur), but to demonstrate that you have mastered a set of research skills.

Guidelines on PhD research and supervision;
Roberto Cipolla, August 1995

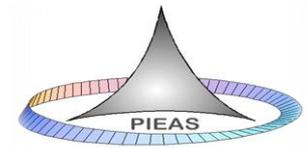
Things Needed to Achieve PhD Degree, Continued.....



Professional research standards means:

1. You have something to say: i.e. you are able to present.
2. You are able to evaluate the worth of what others are doing and have analytical skills to compare your work.
3. You have the intelligence to discover where to make a contribution and the ability to evaluate and re-evaluate your contribution.

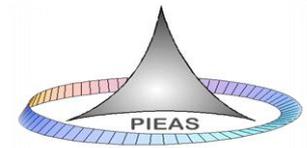
Things Needed to Achieve PhD Degree, continued.....



4. You can communicate effectively by writing clear, precise, logical articles and making presentations.
5. You have mastered the appropriate experimental, mathematical and computational research skills. You are able to conduct literature searches and review journal submissions.
6. You are able to formulate plans to meet short-term and long-term goals.
7. You are able to meet deadlines. You must have the determination to reach the conclusion of what you set out to do.

Guidelines on PhD research and supervision;
Roberto Cipolla, August 1995

What students can expect from a PhD Supervisor

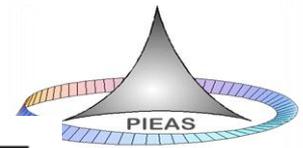


1. Early direction; Initial project formulation and plan.
2. Exposure to all elements of research training.
3. Advice on reformulation of goals and plans
4. Positive feedback on research proposals.
5. Interest in what they are doing and why.
6. Criticism if fail to meet professional research standards.
7. Meetings/Discussions as requested by student and supervisor.
8. Support and encouragement in time of research, financial or personal crisis.

- Doctoral Supervision was ranked third most important issue for academics in a large international study (Green and Powell, 2005: 151-152).
- Until recently, Its more about how supervisors could adapt to the need of their students, rather than how the doctoral students need to adjust to the style of their supervisor (Willis et al., 2010: 116)

- Contemporary doctoral supervision has multiple roles, as it guides students to grasp research philosophy, methodology, the research topic and university bureaucracy.
- As well as, it constitutes the interpersonal relationships between students and supervisors (Handal and Lauvås, 2006: 25-26).
- This complexity makes doctoral supervision into an art and craft to be learned and developed.

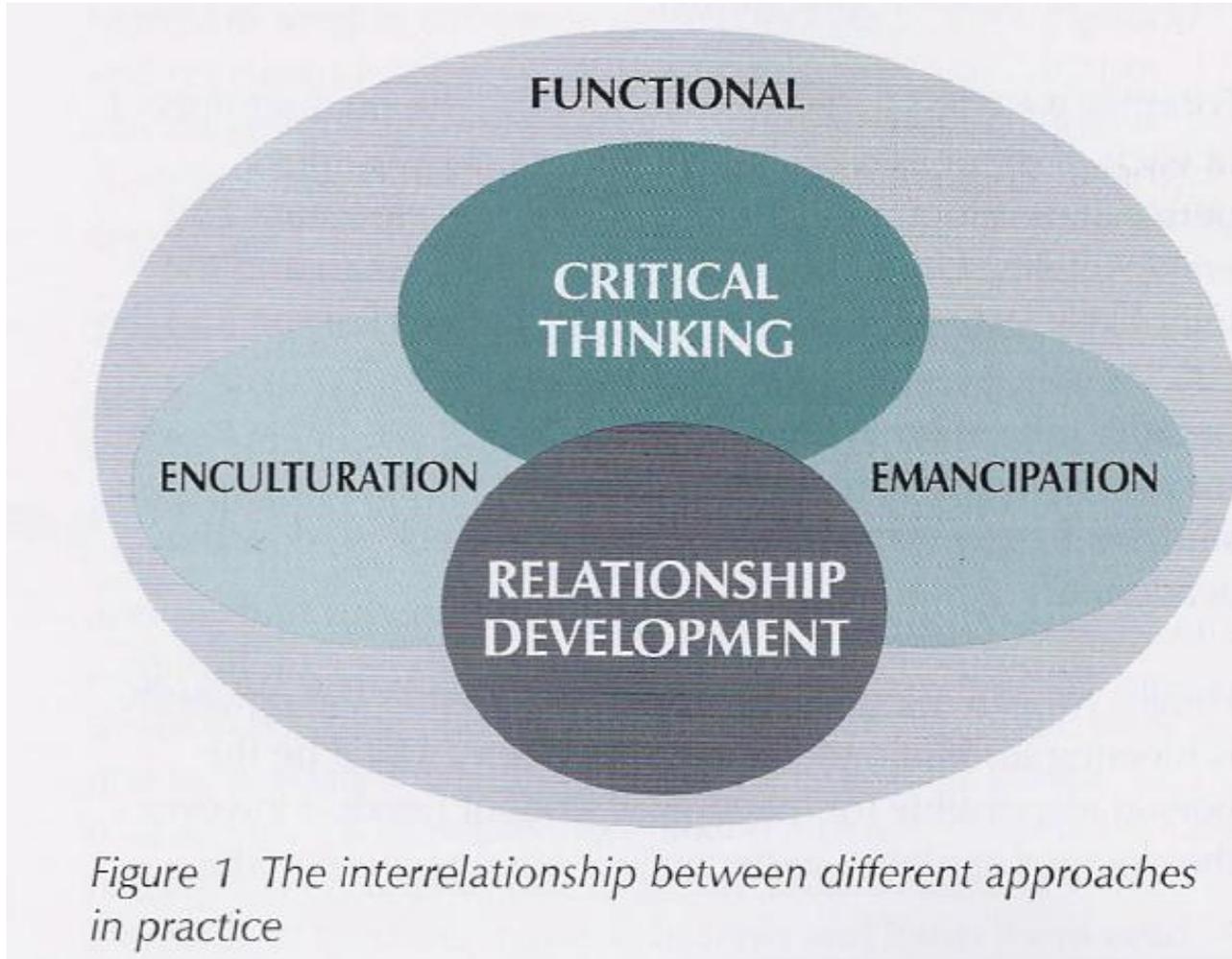
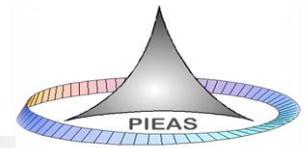
Supervision Approaches



Supervision approach	Supervision activity
functional	<ul style="list-style-type: none"> Check research progress Help in selecting courses
enculturation	<ul style="list-style-type: none"> Provide contacts in the research society Introduce the unspoken rules of the research field
critical thinking	<ul style="list-style-type: none"> Challenge arguments Encourage to think critically
emancipation	<ul style="list-style-type: none"> Support independence Coach in career
relationship development	<ul style="list-style-type: none"> Build work relationships Involve in unplanned work related discussions

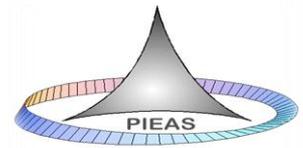
Lee, A. (2008). 'How are doctoral students supervised? Concepts of doctoral research supervision', *Studies in Higher Education*, 33(3): 267-281.

Supervision Approaches



The challenge is to balance these five approaches and to adjust focus to continuously meet the changing needs of each doctoral student.

New Approaches to Doctoral Supervision: Implications for Educational Development, Educational Developments, Anne Lee, 11.2, June, 2010.



- Mentoring PhD Students:

Departmental-level Committee, PhD Research Coordinator, Dean-Research

- Supervisor's Training:

SWEEDEN; PGCerts, PGCAPs

- Keep a habit of writing-down ideas in a diary/register

References:

1. T. Gatfield, "An Investigation into PhD Supervisory Management Styles: Development of a dynamic conceptual model and its managerial implications," *Journal of Higher Education Policy and Management*, vol. 27, pp. 311-325, 2005/11/01 2005.
2. J. Lindén, M. Ohlin, and E. M. Brodin, "Mentorship, supervision and learning experience in PhD education," *Studies in Higher Education*, vol. 38, pp. 639-662, 2013/06/01 2011.
3. J. Stubb, K. Pyhältö, and K. Lonka, "Conceptions of research: the doctoral student experience in three domains," *Studies in Higher Education*, vol. 39, pp. 251-264, 2014/02/07 2012.
4. B. N. Martin Bengtsson, Claes Thelander, Zsuzsanna Toth-Szabo, Per Becker, Daniel Nilsson, "A study of supervision approaches". The needs of doctoral supervision from a student perspective", <http://journals.lub.lu.se/index.php/lil/article/view/8950>

THANKS

THIS PRESENTATION IS AVAILABLE IN PDF
FORM AT;

[HTTP://FACULTY.PIEAS.EDU.PK/ASIFULLAH/PRESENTATION/PHD_RESEARCH_SCIENTIST.PDF](http://FACULTY.PIEAS.EDU.PK/ASIFULLAH/PRESENTATION/PHD_RESEARCH_SCIENTIST.PDF)