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Speech delivered by Vidya Jyothi Emeritus Professor Rohan Jayasekara at the 1st Peradeniya Medical School Annual Research Conference 2022 - PEMSARC22, on September 30, 2022

Professor Athula Ekanayake Acting Vice Chancellor, of the University of Peradeniya

Professor, Vasanthi Pinto - Dean, Faculty of Medicine, University of Peradeniya

The Guest of Honour - Prof. Channa Ratnatunga - Emeritus Professor of Surgery

The Keynote Speaker Prof. Tissa Wijeratne - Professor in Neurology

Victoria University - Australia

Academic Staff of the Faculty

Deans of other Faculties

Special Invitees

Members of the Administrative & Non-Academic Staff

Dear Students

Good morning to you Ladies & Gentlemen

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This morning, I was driven through the all too familiar town of Peradeniya, turned left and then crossed the bridge originally built by Mr. Frazer way back in 1832. I then rolled down the shutters and looked left, nostalgia I presume, to get a glimpse of the familiar Mahaweli river as it meandered lazily on its predetermined journey.

Soon the aroma of fresh leaves and blossoms from the botanical gardens flirted with me, and then as I turned at the Galaha junction, the crisp, cool fresh air of Peradeniya embraced me. That brought back memories, and I knew that I was back home and in the bosom of my *Alma Mater* or 'nourishing mother'.

So here I am, having accepted the invitation from Prof. Vasanthi Pinto the Dean of the faculty and the organising committee, to be present here today. For this opportunity afforded me, I wish to say thank you from my apex beat. Thank you again Dr Samidi Navaratne for that very generous and kind introduction. I feel truly honoured to stand before you here today, as the Chief Guest of this 1st Peradeniya Medical School - Annual Research Conference 2022 - PEMSARC22.

Looking back a little over six decades, the year 1962 saw the birth of this faculty, the first medical school in a residential campus in Sri Lanka. A diamond, 60 years young, sitting pretty, proud, and perfect, dazzling in a lush green valley embraced by that awesome Hanthana mountain range. A sight you barely appreciate as you live here. I do appreciate it very much and always in awe, having just arrived from a hot and humid concrete jungle.

The rapid growth and achievements of this faculty, throughout the closing years of the past century and the 22 years of the present one, is indeed a pride to us all. This faculty was always an innovative and unique structure. Way back it was a seat of learning, which still even today sustains that stamp of erudition and originality of thought. From day one, it had chartered its own unique course in the vast and unchartered waters of modern medical education.

I always thought that this raging energy seems to be in step with a less well-known geographic significance of the University of Peradeniya. Did you know that there is no fence or wall to make a boundary of this unique University? It is a well-planned engineering of a city, for a university. So there lies the free spirit of adventure with no boundaries.

I was pleased to hear from Prof. Vasanthi Pinto the Dean, that this conference is organized for the students of this faculty, as well as for those reading for higher degrees.

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Twisting what Mr. Abraham Lincoln said in his famous Gettysburg address [*Pardon me Mr. Lincoln*] - this is a conference of the students, by the students and for the students.

My sincere congratulations to the organizers for their innovative attempts at introducing the concepts of research methodology, honing organizational skills, and fine tuning the human networking talents of undergraduates through this conference, a substitute research module for undergraduates.

The first statement of the faculty mission says to “Produce scientifically trained, socially responsible, compassionate doctors and instill in them a spirit of inquiry and learning”. Well, it is notable that the creation of this forum for the dissemination of research for undergraduate and postgraduate students, will provide a conducive platform for academics and students alike, to share debate and collaborate their research outputs and outcomes.

A healthy and sustainable research ecosystem depends on ample opportunities for new researchers to break into the system and establish themselves. This conference will play an important role, in inspiring students to understand more about the world of research around them, and in so doing set them on the path of exploration and enquiry. High quality research activities also add value, status, and recognition to this institution’s role as a centre of research and learning.

Ladies and gentlemen, my focus this morning is on the undergraduate medical student, the young postgraduate, and the fledgling researcher. I am sure all of you have received ample doses, even to a level of toxicity, of the basic principles and guidelines of research. It is my intention to convey a few thoughts on some other aspects of research and some future ramifications of it. Aspects which do not seem to be addressed often enough and are hard to assess too. It is about the impact of basic human values in research.

What is research? Research is defined as the creation of new knowledge and/or the use of existing knowledge in a new and creative way, to generate new concepts, methodologies, and understandings. This could include synthesis and analysis of previous research, to the extent that it leads to new and creative outcomes. These dear young researchers are your objectives, which you are expected to achieve or reach, under the watchful and guiding eyes of your senior staff research scientists. Once you decide dear students on your choice of staff member to work with, you will need to not only gain the technical expertise while pursuing your project, but also be receptive to and acquire, some important soft values that are associated with research.

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At present, most of the technical factors of your project would have been thoroughly scrutinised by the Ethics Review Committees and the rules and regulations governing research conveyed to you. The project that was submitted for review and approved would have been on paper a perfect piece of scientific investigation. But hidden between the lines so to speak, are challenging unethical and amoral traps. These factors may surface during the project, as they are barely monitored by any committee except your conscience. These will be the ghost factors driven by human failings.

To illustrate a few of these concerns, I wish to draw your kind attention to just a couple of these research failings, or 'Research Sins' committed by us researchers, from a list, longer than the Kandy - Peradeniya Road. Ones which you may be already familiar with, and which you the young researcher should be conscious of.

Let me deal with a few examples. In the category of data collection, some data collectors treat the subjects of their study like 'guinea pigs', in a rough, rude, and abrupt way, devoid of any kindness or understanding which the sick deserve. After all they are your volunteers - the bread and butter of your project. In the case of verbal data collections as in the filling of questionnaires, data falsification is not uncommon. I have personally experienced 'ghost' questionnaires being filled, or the figures cooked to inflate the numbers when samples are hard to come by.

Other questions which we need to ask ourselves are, do we sincerely obtain 'informed consent', and do the subjects of the study make true 'informed choices'? Do we skip or just gloss over the information sheet meant for the subject by explaining it in a hurry, omitting salient facts that affect the subjects, exploiting their illiteracy or fear of questioning you? Are the translations of information meant for the subjects from the original document in English into the other two languages accurate?

After ethical approval is granted, are some salient information very informative to the subjects totally omitted and missing in the translated version, simply to expedite your project? Is that all important contact number available to the participant, who may want a clarification on what he or she will be subject to?

Are we guilty of plagiarism? Not the blatant kind, which we will not attempt to commit, but the partial type. Just a little bit from here and there, that is hard to detect.

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Do we duplicate our research findings by unjustifiably adding a little literary camouflage, a dash of statistical spice, twisting the title and submitting the same study to several publishing sources? All this, to just make your *Curriculum Vitae* or your CV a little more obese.

If we have strong connections with a supplier of a product we are testing, do we use any undue influence to get the desired results for that product by using biased methods of assessment to justify product selection? Thereby violating the principle of 'conflicts of interest'.

Or once the final script is ready for submission or presentation, have we very conveniently omitted as co-authors some who actively contributed? To add insult to injury, we simply acknowledge them in fine print, particularly categories such as our technological officers, statisticians or junior staff who sweated for us, but who were powerless to challenge us. Their only solace and way of retaliation left to them being - to 'bad mouth you' from the shadows.

These are dear students, just a handful of violations of basic human values that are barely assessed and rarely reported during the projects, after approvals are granted by the ethics review committee. Even your dear supervisor will be ignorant of such acts and will certainly not condone such demeaning behaviour.

Basically, what I am requesting from you dear young researchers, is that you need to inherit if not cultivate, spiritually rich sterling human values of honesty, integrity, and moral uprightness, and apply it to life and research too. In my opinion, these essential spiritual values from whatever religious beliefs you follow, will be invaluable traits to possess. It will be these rich human qualities that will sustain or keep you, within the realm of that ethical and moral framework laid down for research.

This ethical framework is presently under grave and growing threats in our country, with frequent violations in the recent past, far too shocking even to mention. Fortunately, in the recent past, we have experienced some blessings in disguise. Thanks to the twindemics which in my opinion are [viral and economic], not 'FLUORONA' or - double infections of influenza and corona, the temples, churches, kovils, and the mosques are well patronized, with devotees and followers seeking help from beyond. This welcome breeze with a palpable need for spirituality is presently sweeping through society. It is our hope and prayer, that it will blow away and cleanse the hearts and minds of everyone including us who are involved in Research.

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Dear research students, your senior principal investigator or supervisor whom you will work with, will always be your guide, and your beckoning beacon of light, your role model, and your mentor. As a mentee, follow them, emulate them, clone their values, and acquire from them the values of professionalism, and social skills. You may be wondering dear students; how professionalism and excellent social skills enhance your career in research.

Well, it really does. Because I personally view the future, not only in width, but in depth too and well beyond the usually myopic normal limits. As you mature and ascend the ladder of success in academia, the scene will change. There will now be matters that involve negotiations and discussions with potential sponsors particularly overseas grant making bodies with elastic budgets. Or the need for interactions with internationally respected scientists and their teams on possible collaborations, or at a simpler level even with established overseas suppliers of equipment and consumables.

In this type of scenario, you the budding scientists will now have to acquire a new skill set. Skills in communication. For instance, when on a telephone call or discussion on a digital platform, particularly with an overseas contact, you will need to speak perfect English using proper pronunciation. Regarding the written word too, when writing articles for journals, scientific reports, research proposals, or even in simple correspondence such as writing official letters or in e mail exchanges, the use of perfect grammar will certainly strengthen your image and personality. So do work on improving these skills.

Dear Students, while acquiring scientific writing skills and developing verbal and slide presentations, practice the art of delivering these presentations under the eagle eyes of your seniors. Do practice and perfect your techniques. Have the humility to ask your seniors to assist you, instead of making a mess of your task in a professional scenario. At a conference, when a query is made at your presentation with a question, do learn the art of replying in a polite manner with clarity. If questions are raised at a presentation and there is a disagreement with a scientist, do acquire the virtue of patience, and continue with the verbal exchanges in a civilized and dignified manner, irrespective of the heat of the moment. These are basic facts which I believe one needs to pay attention to, in the embryonic and fetal stages of your research careers, which is now.

At research conferences in Sri Lanka or overseas, we Sri Lankans appear to suffer from the 'Inferiority Complex Syndrome'. We simply gang up and socialize only with each other in some corner of the venue, away from it all. All due to low self-esteem – inadequacy and insecurity. Remember, that you are as good as anyone, if not better, and inferior to none. So, stay upright and hold your head high.

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Acquire confidence and learn to mix and interact socially even with the high and mighty, especially at international meetings. Communicate with confidence with other senior scientists, authorities in your field of research, and fellow delegates. Do not fear them. They are merely older humans, and you, simply the younger but growing version in the same phylum. Build dialogues with your colleagues both local and overseas and learn to build robust social and research networks. Learn from your mentor the charms of socializing and the skills of networking, especially during conferences. These are but traits and soft human values, that put the proverbial - 'icing of skills, on your cake of talent'.

Having acquired most of what I have mentioned, which will help build your professional image, a few other areas remain, which are at present paid scant respect or given poor attention. To use genetic terminology, don't ignore your very own phenotype - what people physically see in you - your looks, your attire, your attitudes, and your body language, all of which will complement your personality.

At scientific meetings, you should always be well-groomed, smart, and confident and possess a positive body language, bursting with energy. Your eyes and posture should say it all. Be on fire. Dress smartly, modestly, and appropriately, in keeping with the time of day, and the style and fashion of the times, upholding the dignity of the profession. So basically - look professional. Do not forget 'that you never get a second chance to make a first impression'.

Dear Students of research, most of the information I exchanged with you this morning is not dealt with in the copious literature that circulates today under the title - HOW TO RESEARCH. I have gone over the edge as usual, to encourage you to begin exploring other much-neglected facets associated with research. But please remember, that you and I are on the same page of the same book, climbing the same curve. I, with a lot of enthusiasm, have shared some of my thoughts, collected from an experience a bit more than you dear students, and similar or even less, than that of some of the much-respected academic giants, who are present here today. Among whom I feel truly humbled.

I am also human and fallible like you, prone to mistakes and simply 'Trying hard to walk my Talk'. My candid statements are from experiences collected during the very adventurous journey of my life, now in its 72nd revolution round the Sun. These thoughts are sincerely meant, to enrich your journeys of research and enquiry, which you the students are presently on.

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Ladies and gentlemen, bringing this address to a close, and before I fade away, I would like to thank Prof. Vasanthi Pinto the Dean and the organizers once again, for giving me this opportunity to share a few of my personal thoughts with you at this conference.

It is my fervent wish that this academic event, through its free deliberations and candid exchanges of thoughts, ideas, and constructive contributions, will achieve its objectives in the practice of medicine in this country.

May the fire of enquiry and innovation be kindled in the students of research, who in the years ahead, will hopefully open new vistas in the field of research in our dear motherland - Sri Lanka. May the organizational and networking skills the students acquired today, hold them in good stead in their bright futures. In conclusion I wish, that all of you and your dear families will be blessed with an abundance of peace and contentment. Thank you.

Vidya Jyothi Emeritus Prof. Rohan Jayasekara

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