

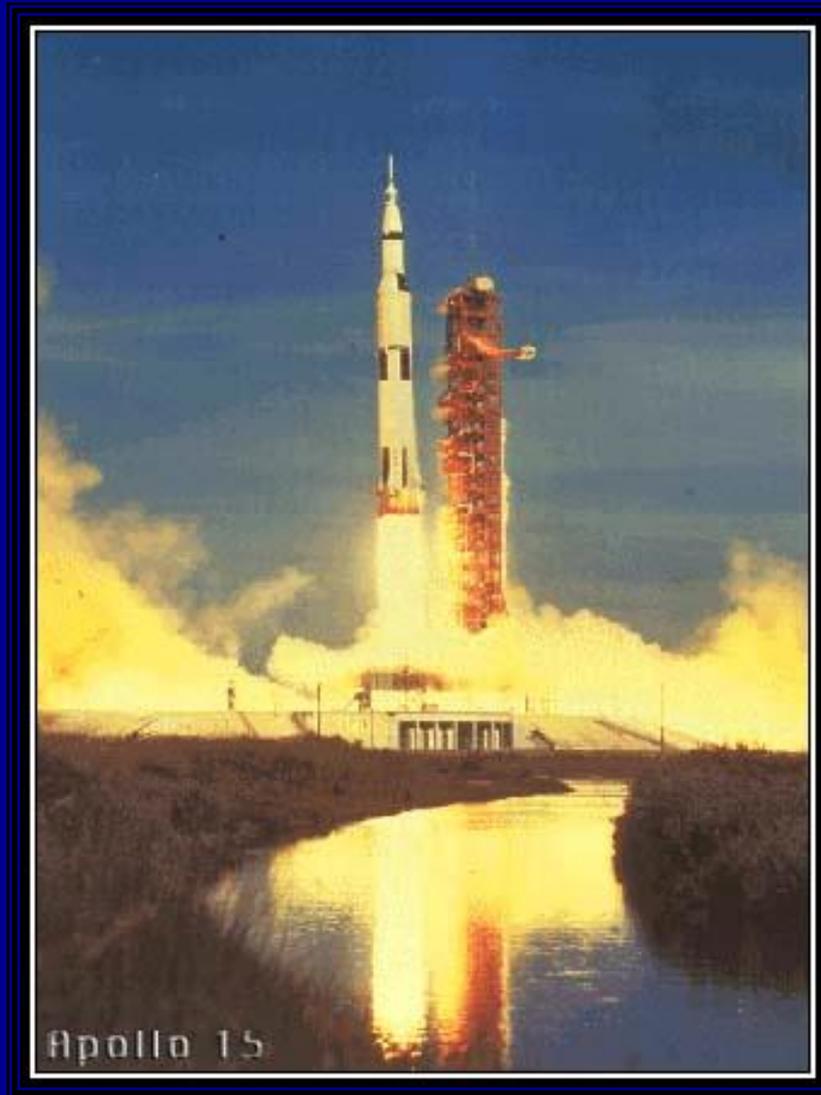
HOW TO BUILD A SUPER NEONATOLOGIST

MISSION; TO HEAL, TO TEACH
AND TO DISCOVER





***CHARLES
DARWIN
“IT’S A JUNGLE
OUT THERE”***



**Remember procrastination is the thief of time
and to set your sights high.**



“The sky is no longer the limit,
your imagination is.”

*“BE PERSISTENT AND
RESILIENT”*

KEY ELEMENTS OF ACADEMIA

- Research
- Education –self, students, residents, fellows, peers
- Service-
 - Clinical service
 - Committees – hospital, University. Local, regional and National **BE READY TO VOLUNTEER**
 - Community
- Leadership
- Mentoring

CLINICAL NEONATOLOGY

- ***Spend as much time as possible in the nursery.***
- ***Examine all the babies you can so you can distinguish well from ill***
- ***Be present and review with consultants all their findings and considerations***

CLINICAL NEONATOLOGY

- ***Study all the imaging modalities and be familiar with all the laboratory tests***
- ***Utilize simulation to hone your procedures***
- ***Read up each night on your patient's problems***
- ***Scour the literature to ensure you are practicing evidence based or even precision medicine.***

PRECISION MEDICINE

- *The use of precision medicine will improve a clinician's ability to predict treatments that will work best for specific patients and help to understand the underlying mechanisms of disease.*
- ***E.G.** Quantitative pharmacology & machine learning are applied to provide an individualized understanding of a patient's pharmacology*

PRECISION MEDICINE

- *In this rapidly developing field, new technologies are continually emerging and, as this individualized approach to medicine becomes part of routine healthcare, medical professionals **will need increasing knowledge of molecular genetics, biochemistry and cell biology** to interpret test results, develop treatment plans and communicate these with patients.*

- ***Take every opportunity to teach***
- *“ Teaching is an extraordinarily rewarding experience. You live your life in the lives of your students.”*

Harold Harrison M.D.

Johns Hopkins, Baltimore, Maryland

TEACHING AND LEARNING

- *“As always in life, when one teaches one learns, and when one gives, one receives. And one learns when one teaches because the student asks questions which the teacher no longer considers, because they have become part of the nearly automatic thought process which each of us develop.*
- *Suddenly it is the question about something that forces us to rethink the origin, the essence of the problem...”*

– Daniel Barenboim La Nacion Argentina Oct 2004 –
translated from Spanish

Retain humility

Most of us ask for advice when we know the answer but we want a different one.

Ivern Ball

Whenever man comes up with a better mousetrap, nature immediately comes up with a better mouse

James Carswell

INTELLECTUAL INTEGRITY

- *There is a condition worse than blindness, and that is, seeing something that isn't there.*

~ *L. Ron Hubbard*

MENTORING

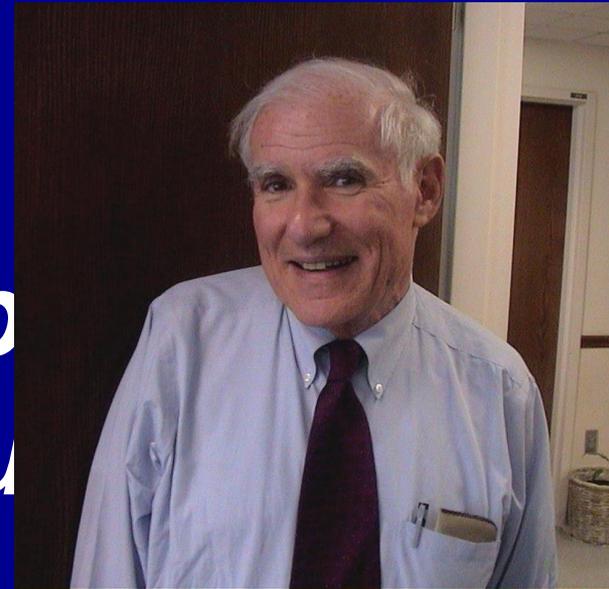
- ***“To become a super neonatologist requires a mentor, an important project, perseverance and patience.***
- ***Fame does not come overnight.***
- ***As an unidentified sage has stated.
“All things cometh to him who waiteth if he worketh like hell while he waiteth.”***

MENTORING

Select your preceptors carefully.

They may be senior or junior faculty, but keep them up to date on your plans and progress

Be a good listener!



MENTORING

- ***They are your sounding board, your conscience, your critics and your sources of encouragement.***
- ***Above all they should become your life long friend and colleague***

MENTORING

- *Your goal should be to develop your knowledge and expertise so that you exceed the knowledge of your preceptors.*
- *The ultimate goal is focused research planning and execution together with independence.*
- *You must establish yourself as the “independent investigator”. You become the expert*

MENTORING

- *“I hear and I forget
I see and I remember
I do and I understand.”*

Old Chinese Proverb

MENTORING

- “Work with a person you admire.”
Frank Oski M.D.– Johns Hopkins,
Baltimore, Maryland
- “It is a sad student who cannot exceed his
preceptor.”
William Balistreri M.D. Childrens
Hospital, Cincinnati, Ohio

- *“The accomplishments and recognition achieved by his/her students are the true metric of a successful academician.*
- *A good academician will have personally contributed to the advancement of knowledge, published numerous papers and perhaps achieved some personal recognition; but a great academician will have produced students who have become creative and successful in their own fields **as a result of the stimulus they received to think independently and creatively, to recognize problems, and to develop their own solutions for them.**”*

– Jack Metcalf M.S. MD., MPH University of Oklahoma, Oklahoma City, Oklahoma

- *“ To be a successful academician takes a number of unique attributes. These include, but are not limited to the tenacity of a bulldog, the diplomacy of a career politician, and the skin of a pachyderm. Patience remains a virtue, time management is critical, and a good sense of humor is essential. ”*

Avroy A Fanaroff M.D.

Rainbow Babies and
Childrens' Hospital, Cleveland, Ohio 1975

WORDS OF WISDOM

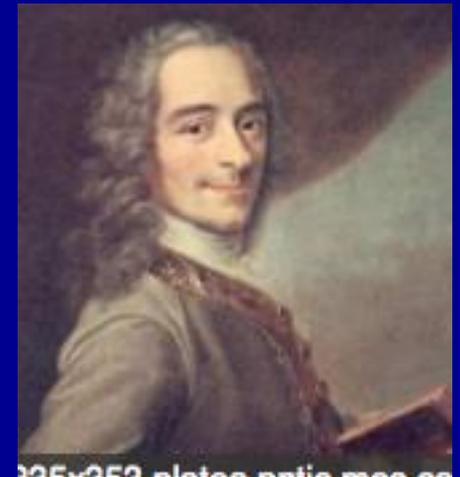
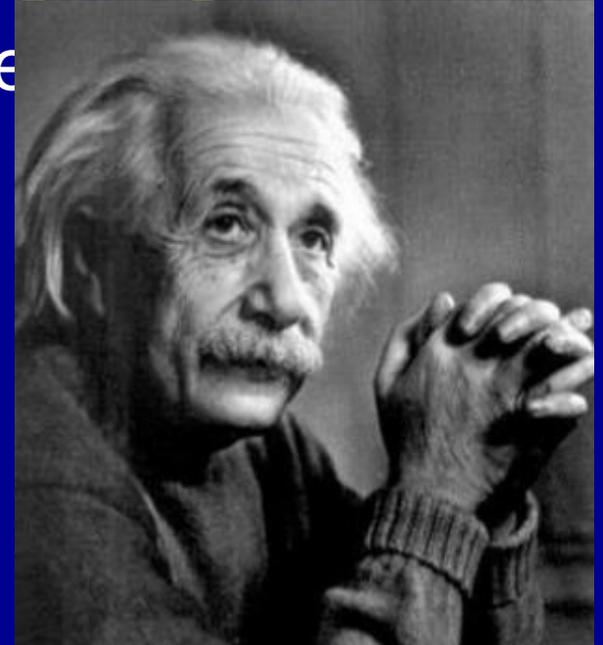
- If you can't describe what you are doing as a process, you don't know what you're doing.

- **W. Edwards Deming**

- The important thing is never to stop questioning. **Albert Einstein**

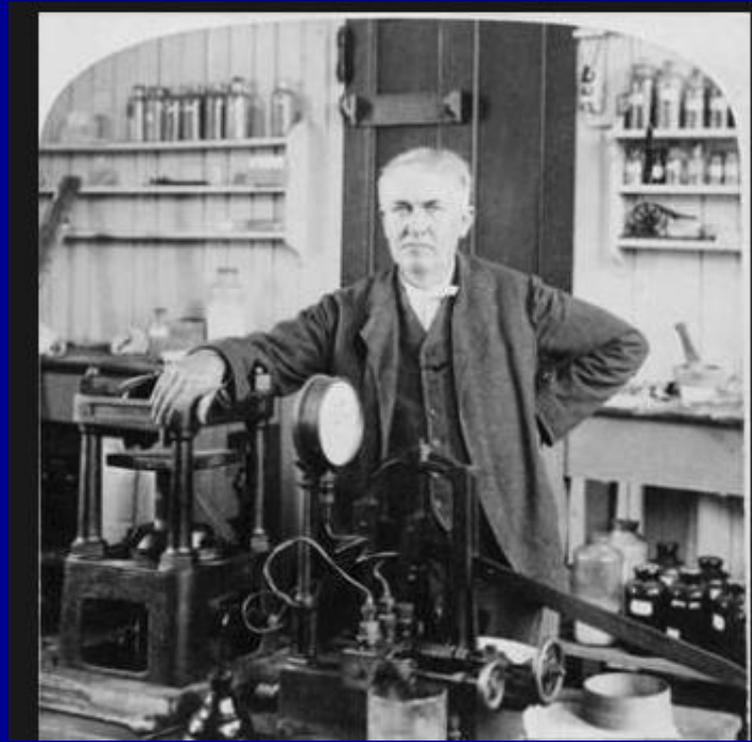
- Doubt is not a pleasant condition, but certainty is absurd.

**Voltaire [François Marie Arouet]
(1694-1778)**



GUIDANCE FROM THE TOP

- *The man/woman who can drive themselves further once the effort gets painful is the one who will win.*
- ~ *Dr. Roger Bannister ~first sub 4 minute miler*



“Success is nothing but going from failure to failure with enthusiasm”

Sir Winston Churchill

I haven't failed, I've found 10,000 ways that don't work.

Thomas Edison (1847-1931)

THE ACADEMIC FAILED MISSION

- ***TO MISMANAGE TIME,***
- ***TO WASTE POTENTIAL;***
- ***NOT TO RECOGNIZE AND SEIZE AN OPPORTUNITY;***
- ***TO BE EASILY DISTRACTED AND LOSE FOCUS***
- ***TO NOT TURN ALL YOUR ABSTRACT OR POSTER PRESENTATIONS INTO PEER REVIEWED PUBLICATIONS***

WRITTEN COMMUNICATION

- *“ Writing is an adventure. To begin with, it is a toy and an amusement. Then it becomes a mistress, then it becomes a master, then it becomes a tyrant. The last phase is that just as you are about to be reconciled to your servitude you kill the monster and fling him to the public.”*

» SIR WINSTON CHURCHILL

- This report, by its very length, defends itself against the risk of being read.

Winston Churchill (1874-1965)

ADVICE FROM WONSTON CHURCHILL

- *“It’s not enough to do our best ;Sometimes we have to do what’s required.”*
- *“Men occasionally stumble over the truth but most of them quickly pick themselves up and hurry off as if nothing had happened.”*



HOW HIGH TO SET THE BAR

- The more original a discovery, the more obvious it seems afterwards.
- ~ Arthur Koestler ~
- **M**ake a technical contribution; innovate, don't emulate.
- ~ David Packer ~
- **B**e smart, be intelligent and be informed.
- ~ Tony Alesandra ~