



**The Abdus Salam
International Centre for Theoretical Physics**



2335-5

**Workshop on Entrepreneurship for Physicists and Engineers from Developing
Countries**

23 - 27 April 2012

Scientists and Engineers as Entrepreneurs

Dawood Parker
Melys AFS Ltd.
UK

Scientists and Engineers as Entrepreneurs

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**Joint ICTP-TWAS Workshop on Entrepreneurship
for Physicists and Engineers from Developing Countries
Trieste, Italy**



Entrepreneurship Workshop
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D. Parker: Scientists and
Engineers as Entrepreneurs

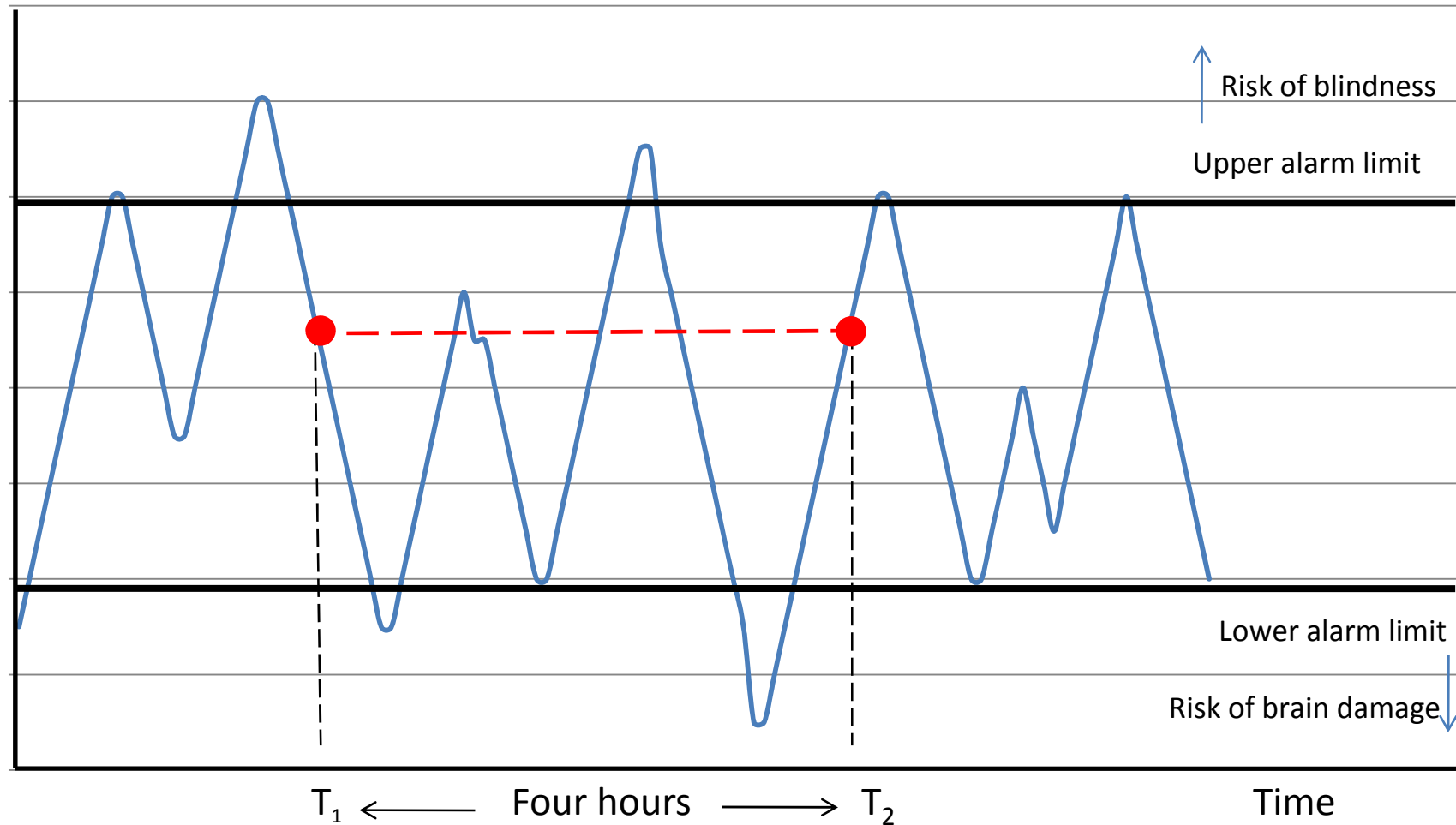


- Incomplete Data
- Personality
- Great Business Opportunity
- Technology Push versus Market Pull
- Technology Creep
- Your Solution: Is it commercially viable?
- Team Player
- Part Time or Full Time?
- What is Your Invention Worth?

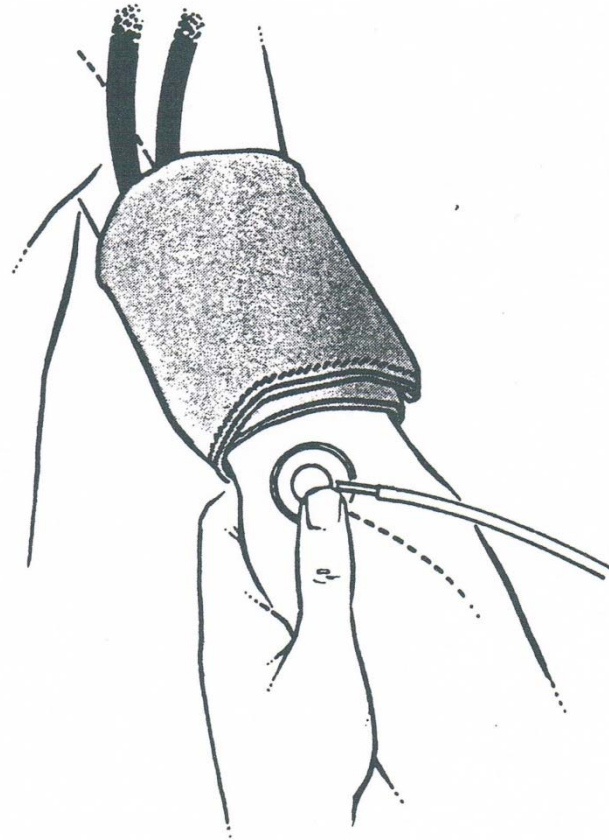
INCOMPLETE DATA

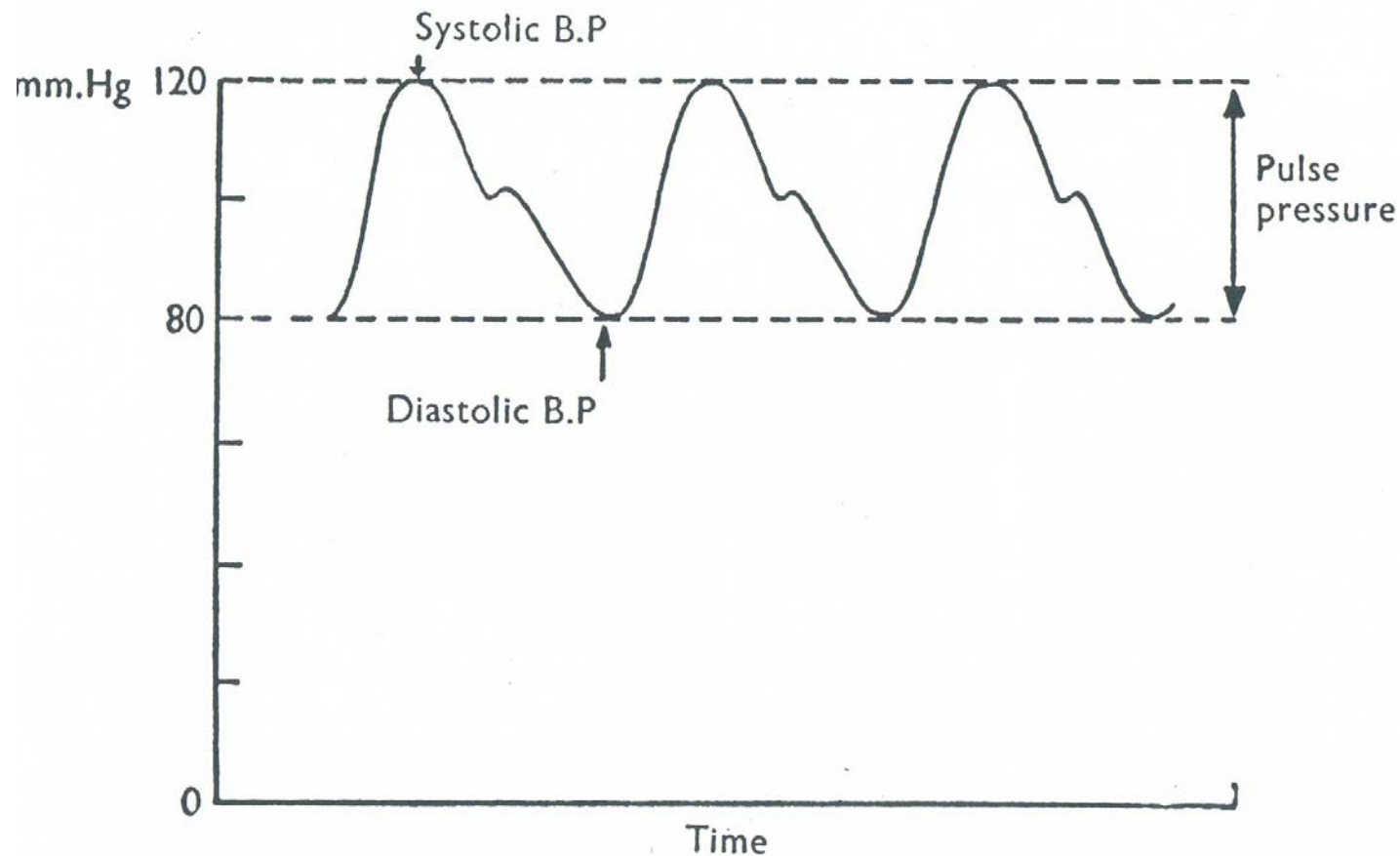
- Scientists and engineers are used to making decisions based on complete data.
- An entrepreneur has the ability to make the decision to start a company on incomplete data – takes a risk.

Variation of the Partial Pressure of Oxygen in the Aorta of a Pre-Term Infant.



Apply the diaphragm of the stethoscope to the brachial artery.



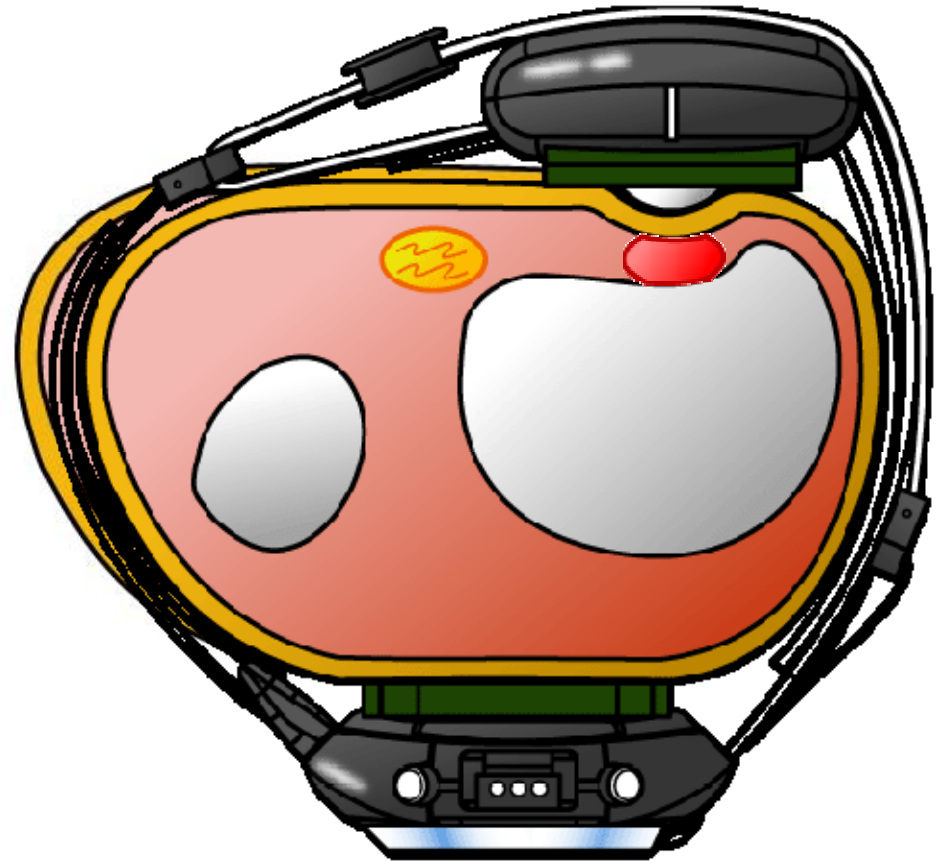


The arterial blood pressure fluctuates between a maximum (or systolic blood pressure) and a minimum (or diastolic blood pressure). The difference between these two pressures is the pulse pressure. A second peak is seen on the down-stroke. This is termed the 'dicrotic notch'.

Blood Pressure – Changing Trends

- New method for blood pressure measurement based on **radial pulse wave**;
- Suitable for convenient **24 hr ambulatory blood pressure measurement** , ABPM (BPro);
- New method for accurate **aortic blood pressure measurement** from the radial pulse wave – the next paradigm shift.

Convenient Capture of the Radial Artery Wave form



PERSONALITY

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Ask yourself:

- Do I initiate projects and carry them through successfully?
- Have I managed projects well without supervision?
- Have I enjoyed being in charge?
- Can I hire and fire others when necessary?
- Can I delegate work?
- Can I criticise other's work and get what I need from them?
- Can I negotiate and compromise without feeling that I am selling out?
- Do I have abundant energy?
- Can I delay gratification to attain a goal?

GREAT BUSINESS OPPORTUNITY?

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TECHNOLOGY PUSH VERSUS MARKET PULL

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TECHNOLOGY CREEP

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YOUR SOLUTION: IS IT COMMERCIALLY VIABLE?

The solution to measuring glucose concentration non-invasively?

Problems to be Solved:

- Reliability of glucose concentration measurements
- Interference from other analytes in tissue
- Very small signal-to-noise ratio
- Penetration through the top skin layer
- Low cost monitor

TEAM PLAYER

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PART TIME OR FULL TIME?

WHAT IS YOUR INVENTION WORTH?

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