COOPERATION.
TWO GOOD PEOPLE WORKING TOGETHER CAN EASILY TURN OUT
agree with you.
WORK WITH, OR AT LEAST COMMUNICATE WITH, SOMEONE OUT-
FOUR TIMES THE PAPERS THAT COULD BE DONE WITHOUT SUCH
limit, and carefully define, your research interests.
NIZED AUTHORITY ON ANY SUBJECT; therefore it behooves you to
WHO IS OUTSIDE YOUR IMMEDIATE ENVIRONS.
THROUGH COMMUNICATION WITH ANYONE WHO WILL LISTEN AND
and/or your work, your boss is also likely to like you and/or your work.
Recognition for worthwhile achievements is usually slowly acquired
COUNTS
If everyone out there likes you
(NEXT TO MONEY, THAT IS).
LIFE IS NOT NECESSARILY FAIR. If you expect it to be so, then you will
be sorely disappointed, disillusioned, and will, ultimately, become bitter.
Recognition
ACCEPTANCE OUTSIDE YOUR IMMEDIATE ENVIRONS IS WHAT
COUNTS (NEXT TO MONEY, THAT IS). If everyone out there likes you
and/or your work, your boss is also likely to like you and/or your work.
Recognition for worthwhile achievements is usually slowly acquired
THROUGH COMMUNICATION WITH ANYONE WHO WILL LISTEN AND
WHO IS OUTSIDE YOUR IMMEDIATE ENVIRONS.
To achieve recognition, YOU HAVE TO OFFER SOMETHING THAT
OTHER PEOPLE WANT OR NEED.
PUBLISH, ATTEND AND PARTICIPATE IN MEETINGS, TALK TO ANY-
ONE WHO WILL LISTEN, CREATE CONTROVERSY.
IT USUALLY TAKES 5-10 YEARS (OR LONGER) TO BECOME A RECOG-
IZED AUTHORITY ON ANY SUBJECT; therefore it behooves you to
limit, and carefully define, your research interests.
Work Habits
WORK WITH, OR AT LEAST COMMUNICATE WITH, SOMEONE OUT-
SIDE YOUR LABORATORY - preferably someone who doesn’t always
agree with you.
TWO GOOD PEOPLE WORKING TOGETHER CAN EASILY TURN OUT
FOUR TIMES THE PAPERS THAT COULD BE DONE WITHOUT SUCH
COOPERATION.
YOU MUST BE AWARE OF WHAT OTHERS ARE DOING TO PUT YOUR
OWN WORK INTO PROPER PERSPECTIVE.
As Watson (1993) points out, always ASSOCIATE, AND WORK WITH, SOME-
ONE WHO IS SMARTER THAN YOU ARE. This is to your advantage as you
will learn and grow immensely because of it.
If possible, ALWAYS HAVE AT LEAST THREE GOALS THAT MAY BE
CONTINUOUSLY AND SIMULTANEOUSLY PURSUED: (1) Something you
enjoy doing and that, if successful, might win you the Nobel prize. (2) Something
that may be a little risky but that will allow you to advance at a rate that is better
than average. (3) Something that is sure to work; i.e., a bread-and-butter
project.
DO NOT KEEP RESEARCH SECRETS UNLESS YOUR EMPLOYER RE-
QUIRES IT. You will almost always gain more by sharing with others than by
keeping secrets.
Administrators
MOST ADMINISTRATORS HAVE MORE PROBLEMS THAN YOU DO.
ADMINISTRATORS ARE EMPLOYEES JUST LIKE YOU ARE.
BE LOYAL TO YOUR EMPLOYER AND ASSOCIATES. All people (including
you) will tend to move to, and support, those they like. After all, do you invite
people you do not like to dinner? However, this does not mean you have to be
subservient to your boss - just respect him/her and his/her problems and be
helpful to your boss when you can.
ADMINISTRATORS NEED INFORMATION to help them see the overall picture
of which you may be only a small part. Do what you can to help them put your
work in perspective. Show how your work helps the organization that is
supporting it.
YOU MUST LEARN, AND EFFECTIVELY APPLY, THE RULES THAT GOV-
ERN YOUR ORGANIZATION if you are to advance.
Miscellaneous
BECOME FAMILIAR WITH THE CONCEPTS OF FAILURE. For example, some
form of failure is almost always necessary for maximum productivity and
personal advancement (e.g., Putt, 1978).
Similarly, UNDERSTAND WHEN YOU SHOULD AND SHOULD NOT BE COOP-
ERATIVE WITH YOUR ASSOCIATES. Cooperation with an associate is
usually, but not always, the best way to achieve one’s goals. KNOW WHEN TO
START AND WHEN TO STOP COOPERATING (e.g., Beardsley 1993, Braman,
To be fundable, ALMOST ALL WORK NEEDS TO BE RELEVANT TO SOME-
THING, preferably something that those who manage the funding agencies can
understand and feel is important.
Conversely, ALMOST ANYTHING CAN BE MADE TO APPEAR RELEVANT IF
YOU VIEW IT IN THE PROPER PERSPECTIVE.
WHO YOU KNOW, AND WHO YOU CAN EFFECTIVELY REACT WITH, ARE
LIKELY TO BE MORE IMPORTANT THAN WHAT YOU KNOW.
Publication
ALMOST ANYTHING IS PUBLISHABLE.
AS SOON AS DATA INDICATE A TREND, START TO WRITE THE PAPER.
This will tell you what you still need to do to finish the work. Even more
important, it will let you know when the work is finished.
Better yet, WRITE THE PAPER BEFORE YOU START THE WORK. This may
sound facetious, but it really does work and is probably the best way to increase
productivity.
DON’T START A PROJECT UNLESS YOU HAVE A CLEAR GOAL. In the case
of most academic research, this means a title for the paper that will result from
the work.
IF SOMETHING DOES NOT SOUND GOOD AS WRITTEN, REWRITE IT
BACKWARDS. This may be applied literally or figuratively depending on context.
This is not a facetious idea, it really does work (W. Gordon Whaley,
personnel communication).
Doing research is easy. Getting data is easy. Writing a publishable paper can be easy - but usually is not. WRITING A PUBLISHABLE PAPER IS THE STEP WHERE MOST RESEARCHERS FAIL.

A RESEARCH PROJECT IS NOT COMPLETE UNTIL THE RESULTS ARE DISSEMINATED TO THOSE WHO MAY HAVE A USE FOR THEM.

MOST IDEAS HAVE TO BE REPEATED MANY TIMES IF THEY ARE TO BECOME A RECOGNIZED PART OF THE SCIENTIFIC LITERATURE.

CONVERSELY, A PERSON WHO SAYS SOMETHING ONLY ONCE SELDOM GETS CREDIT FOR THE IDEA.

IT IS OK TO CITE YOURSELF, the ultimate goal being to write a review paper in which only your publications are needed.

If your data do not support your original hypotheses, don't throw the data away. Practically all data are useful if you can be flexible enough to understand what they tell you. WHATEVER DATA YOU GET, USE IT TO YOUR ADVANTAGE.

THE MORE INNOVATIVE AND BRILLIANT AN IDEA, THE GREATER THE CHANCE THAT IT WILL BE REJECTED.

Conversely, A VERY POOR PAPER WILL BE REJECTED but, then, this is obvious.

PERSONAL

PEOPLE ARE NOT CREATED EQUAL. It is important to accept this and learn to live with it.

GOOD PEOPLE WILL BE PRODUCTIVE IRRESPECTIVE OF THE EQUIPMENT OR ENVIRONMENT WITH WHICH THEY ARE ASSOCIATED. These people will make do with what is available, and prosper in spite of the difficulties.

PEOPLE NEVER DO ANYTHING WITHOUT A REASON - although the real reason for doing something is often obscured or never expressed.

MOST ADVERSE HAPPENINGS THAT B EFAIL YOU ARE SELDOM TOTALLY SOMEONE ELSE'S FAULT. It just may be possible that you had a part in bringing the happening to fruition.

ONE PERSON CAN OFTEN MAKE A DIFFERENCE if he/she really works at trying to do so. Almost all countries, businesses, charitable causes, and on down to the lowest units of organization, prosper or die because of one or two individuals. Just look at a bit of history to see that this is so.

The quality of an organization is recognized in part by the achievements of its personnel. Therefore, SOME DEGREE OF SELFISHNESS TOWARD ACHIEVING ONE'S PERSONAL RESEARCH GOALS MAY BE OF BENEFIT TO BOTH THE SCIENTIST AND THE ORGANIZATION WHICH HE/ SHE REPRESENTS.

When the opportunity presents itself, YOU MUST GIVE THE IMPRESSION THAT YOU ARE WHAT IS NEEDED AND, hopefully, this will be true.

NOT EVERYONE CAN HANDLE FREEDOM OF CHOICE IN DOING RESEARCH, nor should they be allowed to do so.

RECOGNIZE AND ACCEPT YOUR CAPABILITIES AND LIMITATIONS.

VERY FEW PEOPLE (even close friends) WILL HELP YOU IF, BY SO DOING, THEIR OWN WELFARE MAY BE ADVERSELY AFFECTED. This is essentially a restatement of Watson's third rule. Believe it.

References