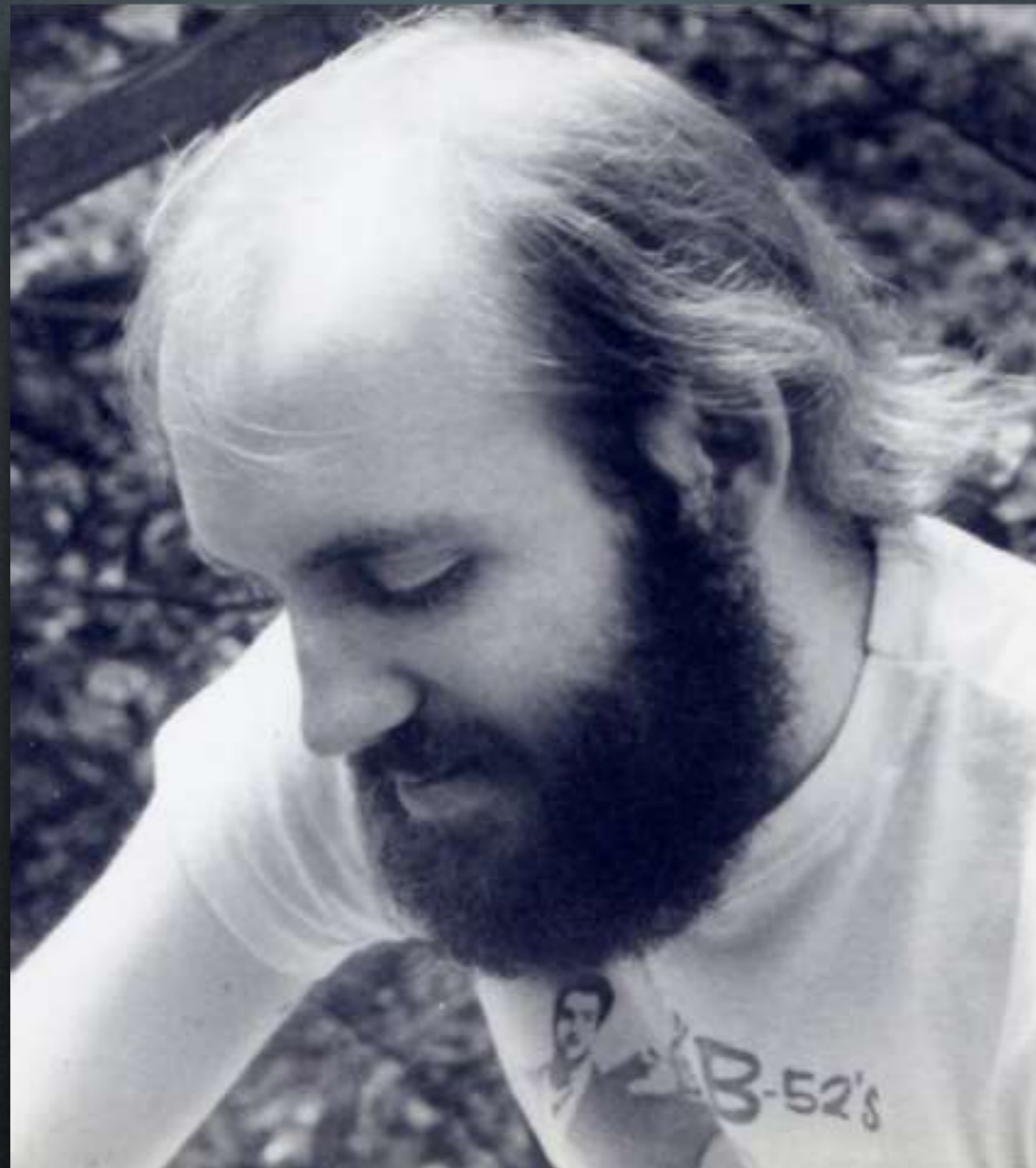


Things

that you can no longer say

Nobody Ever Told You

George W. Sherouse, PhD, DABR, FAAPM
Landauer Medical Physics

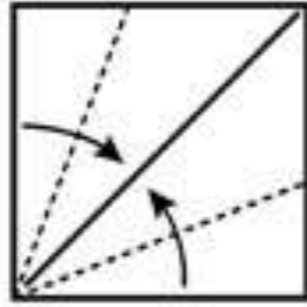


GWS c. 1980

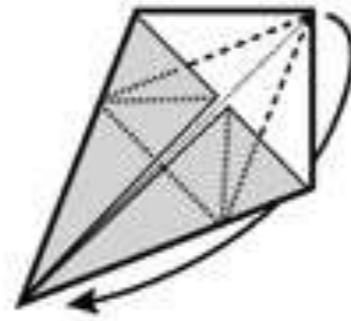


GWS

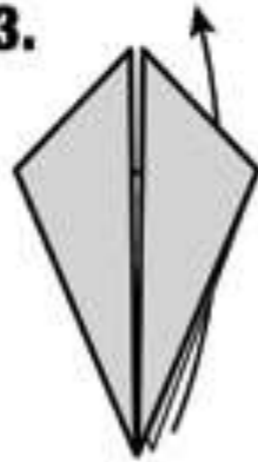
1.



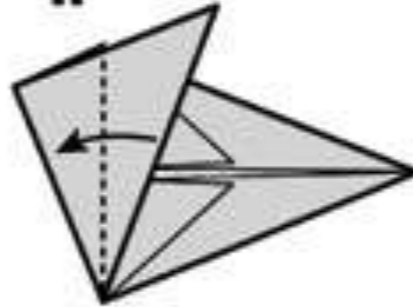
2.



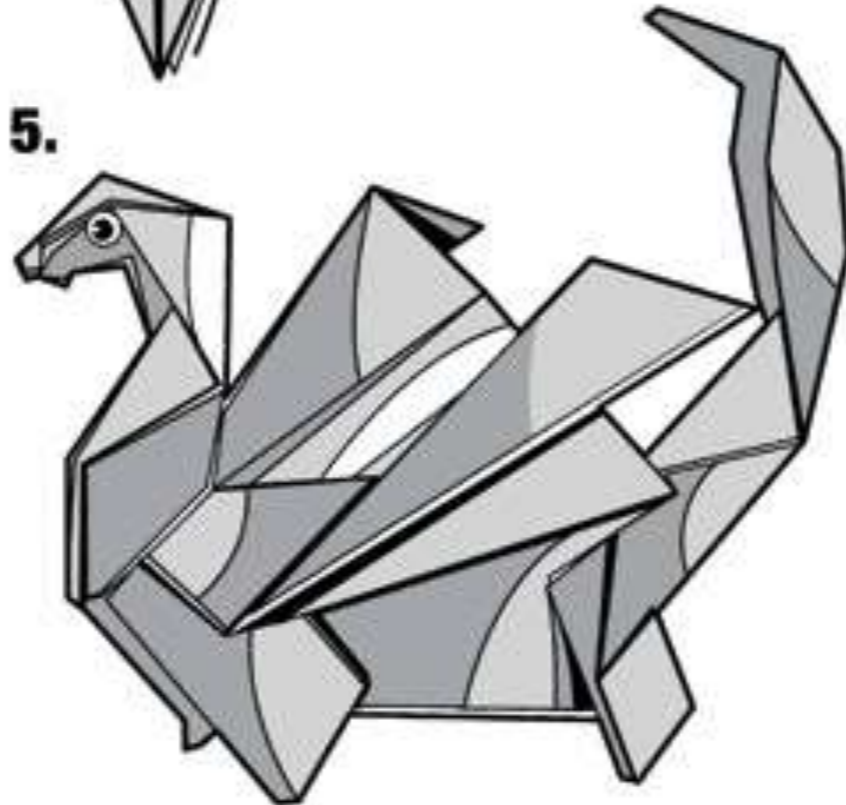
3.



4.



5.



Thing 1:
Clinical Medical
Physics is a
Medical Specialty.

Medical Specialties




- There is an American Board of Medical Specialties.
- It is an umbrella organization for 24 medical specialty boards that certify physicians in the US.
- The American Board of Radiology is a member of ABMS

Medical Specialties

- There are two ABMS boards that certify non-physicians – *in all of Medicine*.
- One of those considers PhD, OD and MD equivalent (subspecialties of Medical Genetics).
- ABR Medical Physics subspecialties are the only exclusively non-physician medical specialty certificates.

Thing 2:
Nobody Knows What
You Do.

That's Good Except
When It's Bad.

A photograph of a platypus in a naturalistic enclosure. The platypus is the central focus, shown in profile facing right. It has a brown, furry body and a large, dark, flat bill. The enclosure features a large, textured rock formation in the foreground and background, with some green ferns and other foliage visible. The text "What is your professional identity?" is overlaid in white, sans-serif font across the middle of the image.

What is your
professional identity?

Platypus

(Ornithorhynchus anatinus)

- Genetic sequencing reveals both reptilian and mammalian elements, as well as two genes found previously only in birds, amphibians and fish
- Bill like a duck but rubbery, broad flat tail like a beaver, webbed feet like an otter
- Mammal, lays eggs mid-gestation, has no teats
- Semi-aquatic
- Senses electric fields generated by prey's muscles
- Venomous spurs on ankles, not fatal but debilitating
- Emits a low growl when disturbed
- Stores fat in its tail
- No agreement as to plural of "platypus"

Being a Medical Specialist

- Your job is to render care to people. Rule One is, “Do no harm.”
- Your degree did not prepare you. All medical specialty boards require formal clinical residency. You cannot self-train.
- Many of you will work solo. You will be the local authority in your specialty.
- Physicians are your peers. Others look to you for guidance.

A complication...

- MDs are explicitly paid per “patient encounter,” so-called “professional” reimbursement. They are seen as revenue centers.
- Medical physics reimbursement is buried in the “technical” reimbursement. The facility owner gets to divvy up the revenue. You are seen as a cost center.
- I recommend you know all you can about the reimbursement system.

Oh, and BTW...

- The medical physics gravy train left in 2003.
- A change in reimbursement policy created a large bubble of demand for warm bodies. A lot of overpaid, unqualified folks came in through that gap. They are now “senior.”
- And now we have residents...
- The demand for QMPs remains steady if “soft,” but the demand for six-figure trained seals is gone.

Please go into the Hyperterm
and type the following
diag AutoDynalogs 2j1
the upper and lower cases and
there is a space between
e s in Dynalogs and the 2j1
then press enter. This
will record the MLCs position
for the day
-thx Bryant

**YOU TRAIN PEOPLE HOW
TO TREAT YOU!**

**MAKE SURE TO DOCUMENT
SSD ON PORT FILM DAY
IN ARIA**

How you act sets the tone.

- Know your trade. Don't bluff. Stay within your competence.
- If you are a doormat, people will wipe their feet on you. Whoever replaces you will suffer.
- If you never leave your office, people will be sure they don't need you.
- If you are a tyrant, you will be overthrown. Respect cannot be demanded.
- "Following orders" is never an excuse for unethical or unsafe practices.

People skills matter.

- Most people, including patients and administrators, don't know what your job is. Tell them. Show them. Often.
- Show people what you know and how it matters. Be present, responsive and visible.
- Make a personal connection to patients, and to everyone in the workplace. Remember you are professional leadership, not one of the guys.
- Project the confident air of a professional medical specialist.

What do you do when you disagree?

- If you never disagree then they didn't need you.
- Do not compromise ethics, quality or safety.
- Express your opinion, accept acceptable decisions.
- Respect the prerogatives of ownership.
- Sometimes it's just the wrong job.

How much should you get paid?

- The Professional Survey is useful but not prescriptive.
- Remember it gives statistics on what those who chose to participate decided to report.
- A “boards bump” is not a given.
- The quality of jobs and of employers varies widely.

Thing 4:
You Are Empowered to
Cause Great Harm.

News Release

For immediate release
Feb. 24, 2010

CoxHealth announces some BrainLAB stereotactic radiation therapy patients received increased radiation dose

Springfield, MO - CoxHealth today announced that it has discovered that 76 patients who had received a very specific type of treatment for brain tumors and other difficult-to-treat conditions using its BrainLAB stereotactic radiation therapy system, were accidentally exposed to radiation in amounts that exceeded the intended, therapeutic dose. The average variation of all the treatments of the 76 patients exceeded the prescribed dose by approximately 50 percent. A variation on the delivered dose of up to 10 percent is not significantly different than the prescribed dose and is considered no more risky than the prescribed treatment.

"In the simplest of terms, when the BrainLAB stereotactic system was put into service in 2004, we believe that the CoxHealth chief physicist responsible for initially measuring the strength of the radiation beam and gathering the data used to calibrate the equipment, chose the wrong measurement device - called a chamber," said John Duff, MD, senior vice president of hospital operations. "The area radiated is called the field size. For these small tumors, the area radiated is referred to as a

"This is a very complex process, and unfortunately in spite of this physicist's experience and training, an error was made," said Duff.

"We are deeply sorry for our error and how it has affected these patients and their families. CoxHealth takes full responsibility and is doing all we can to care for and support our patients and their families," said Robert Bezanson, president and CEO of CoxHealth.

The chief physicist who made the initial calibration error is no longer working for CoxHealth.

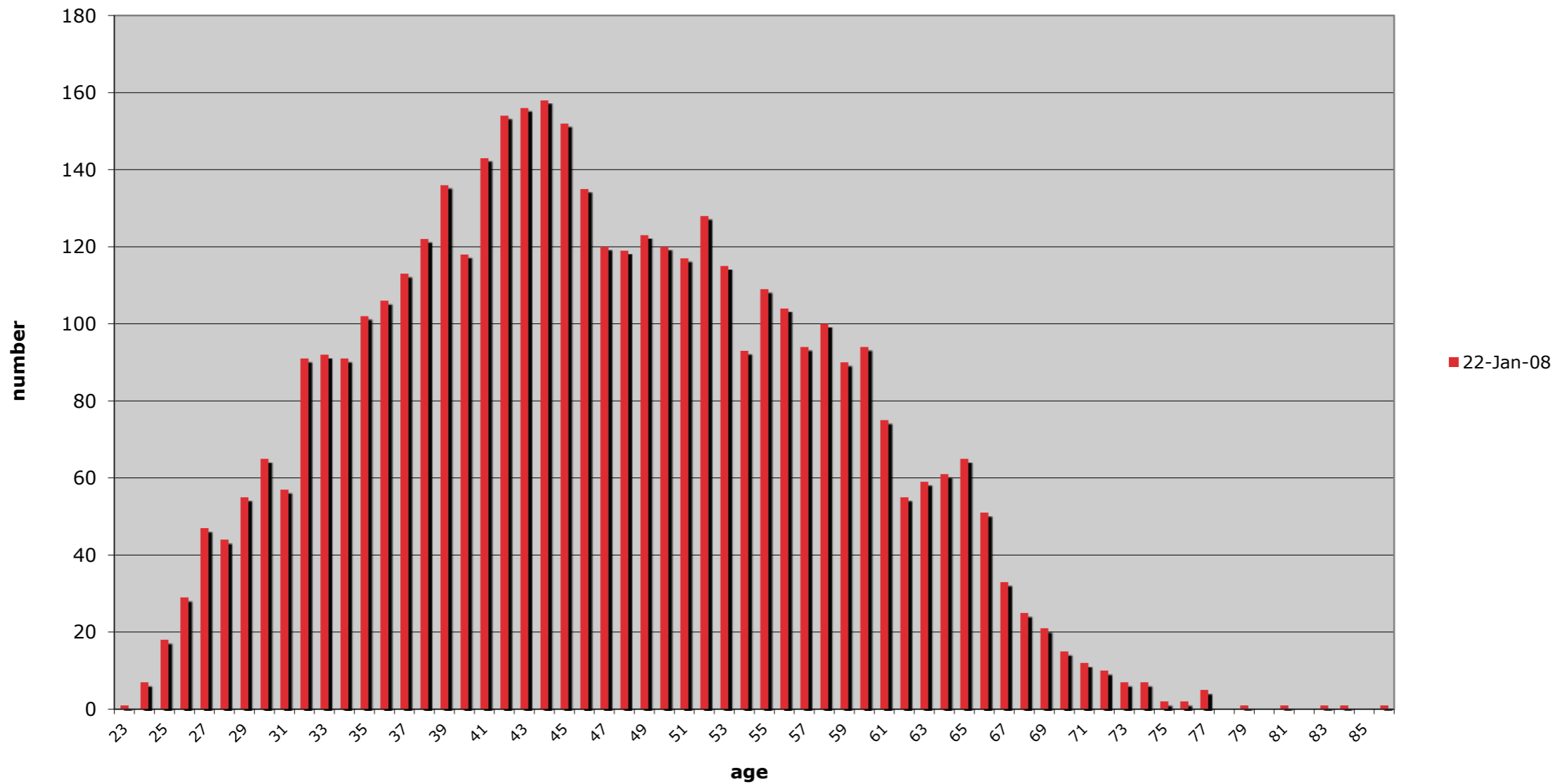
Thing 5:
The AAPM is Your
Professional Society.
(There is no Plan B.)

Some AAPM demographics...

- 50% MS, 50% PhD
- 78% male
- 77% therapy
- 80% clinical, 30% academic employer
- 18% solo

More demographics

AAPM Full Members by Age



AAPM and the profession

- AAPM has been the scientific and educational organization for medical physics for over 55 years.
- ACMP was spun off as the professional society but failed to thrive. It is now folded back into AAPM.
- Administrative Council is the locus of regulatory affairs.
- Professional Council is the locus of clinical practice-related work for the profession.

We are a very small village.

- There are something like 3200 clinical medical physics jobs in the country, 3:1 therapy.
- There are probably churches in your hometown with that many members.
- You are no more than 2 degrees separated from anyone.
- Being a respectful colleague is a good idea. And it is in your interest.

Some helpful resources...

- AAPM Professional Council
 - New Professionals Subcommittee
 - Women's Professional Subcommittee
 - Ethics Committee
 - Placement Service
 - Annual Professional Survey
- Virtual Library
- AAPM Forums - Don't air laundry on MEDPHYS

Thing 6:
You Are The AAPM.

“The AAPM should do X
about Y.”

- Above is a magical incantation that causes lightning bolts to shoot from my finger tips directly out of your computer display.
- Correct formulation is, “I see an underserved problem and I’d like to organize and chair a small group to address it in a thoughtful, definitive and timely manner.”

Welcome to
Medical Physics
and the AAPM



Brain which has been thinking
the same shit over and over begins
to generate unpleasant radiation

DReeder '91