LANDAUER MEDICAL PHYSICS
POWERFUL PARTNERSHIPS ADVANCING IMAGING AND THERAPY

Beyond Clinical Medical Physics: Entrepreneurship and Opportunities in Industry

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Learning Objectives

- Understand how an entrepreneurial role differs from an employee role
- Explore different types of entrepreneurial roles
- Understand how to prepare to be an entrepreneur
- Be aware of key steps to success as an entrepreneur

Disclosures

- Founder and President, Upstate Medical Physics
- Sr. VP, Landauer Medical Physics
- Co-Founder, MedImage Video

Who is an entrepreneur?

en·tre·pre·neur *noun* \ˌän-trə-p(r)ə-ˈnər, -ˈn(y)ur\

: a person who starts a business and is willing to risk loss in order to make money

- Practical, working definition
- **Salaried employees** work for a company or organization, lower risk, predictable results (?)
- **Entrepreneurs** invest personal assets (time, money, etc.) and take risks beyond those of an employee – in exchange for potentially greater autonomy, flexibility and financial rewards

http://www.merriam-webster.com/adfiles/III-Pop.html

Outline

- Who is an entrepreneur?
- Bob's history
- How to succeed (entrepreneur vs. other roles)
- Building for a future entrepreneurial role
- Business aspects
- Communication Skills
- Personal Assessment
- Q&A

America's 12 Million Amateur Innovators

April 23, 2012 12:39 PM ET

Russell E. Oakes, an amateur American inventor wearing his problem solving inventions.

http://www.npr.org/blogs/money/2012/04/23/151204136/america-s-12-million-amateur-innovators

Traditional Medical Physics Employment Model

- FTE, University
- FTE, Hospital
- FTE, Government Agency

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Alternative Medical Physics Employment Models

- **Entrepreneur (Owner or partner)**
  - **Service: Private practice MP group**
    - **Astarita, Carey, Goff, Barnes, Simmons, Bushong, Dixon…**
  - **Product: Business owner**
    - **John Cameron, RMI**
    - **Lescrenier, Gammex**
    - **Mackie (TomoTherapy)**
    - **Ning (Koning Breast CBCT)**
- **Industry**
  - **Balter (Philips)**
  - **Kalender (Siemens)**
  - **Sternick (NOMOS)**
  - **Gray (Lorad, Landauer, RMI mini SBB Phantom)**

Looking back…

- Father was engineer, became sales rep
- DABR Therapy, 1983 – consulting?
- Taught Diagnostic Radiology residents
- Began consulting in Imaging 1982 during vacations/weekends
  - Invested, incorporated, spaghetti squash
- 1989: after 10 years at hospital, took the leap
- Practice grew by word of mouth
  - Personal line of credit for payroll
- Never looked back, not once!
- 2009 National MP opportunity - LMP

Pathways to be an entrepreneur

- **FTE (academic organization or other employer)**
  - **Create a solution to a common problem**
  - **Partner with employer to turn into a product (spin off)**
  - **Create something on your own time**
  - **Beware of employment restrictions on ownership**
- **FTE (Corporate employer, w bonus, $incentives)**
- **Start a business, become your own boss**
  - **Find a niche, solve a problem (product or service)**
  - **Develop a business plan**
  - **Take a risk**

Looking back…what helped?

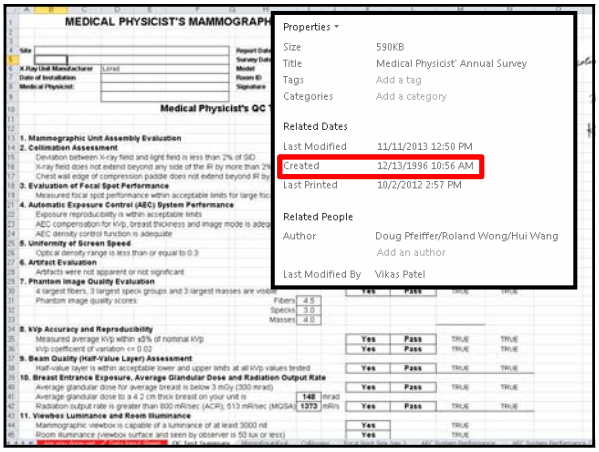
- Commitment to professional quality, integrity
  - "How many CT's are they doing over there?"
- Finding, building and *trusting* the team
  - Listen, *especially* when we didn't agree
- Creating the right culture (C. Lescrenier)
  - Fairness, integrity, help others, work ethic
- Mentors through AAPM, ACMP
  - Far too many to mention
- Commitment to financial fairness
  - Employees, clients, vendors
- Timing (NYSDOH QC Requirements)

Looking back…what helped?

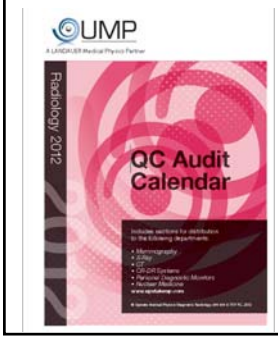
- Investment (best practices, relationships)
  - Excel for Mammo QC
  - Professional, regulatory involvement
    - NYSDOH, AAPM, MQSA, ACR, FDA
- Helping technologists (customers)
  - QC Forms, manuals, speaking at meetings
- Vendors as partners (remain objective)
  - Nuclear Assoc, RadCal, GE, Lorad, Kodak, MITA,
- Recognizing strengths and market (above)
- Thinking outside the box, being nimble, ACT!
- Not afraid to fail (just try again!) like a 1 yr-old

Regulatory Guidance for RT's and Radiology Directors

The precursor was The HCFA Manual!



A good form really helped technologist w QC



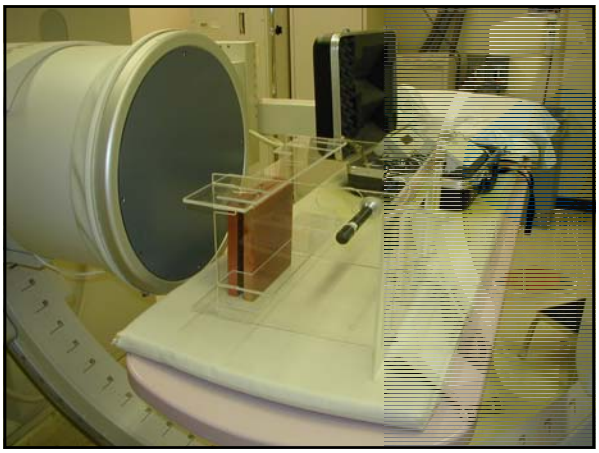
MedImage Video, Inc. (MIV)

- Physics/QC Lectures to Mammo techs
- What about those who can't travel?
- Created MIV with 5 expert Mammo techs
- Produced "How To" video, 11 QC tests
- 18 months later

Lessons:

- Know your strengths
- Partner with experts
- Timing
- Nothing lasts forever (ROI)

RF test tool: Efficiency and standardization



What's different about an entrepreneur?
Perhaps less than you thought…

- Basic professionalism
- Communication
- Hard work, Focus
- Partnership to fulfill a need
- Differentiation in the market
- Personal risk

SF Mammo AEC test tool
(13 exposures, 1 SFM cassette)

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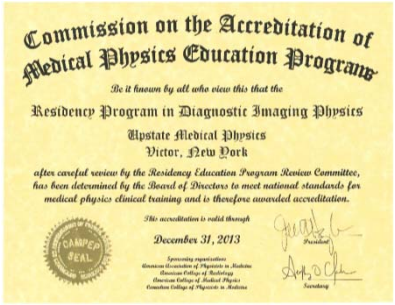
Residency in a private practice?



Commission on the Accreditation of Medical Physics Education Programs

Be it known by all who view this that the

Residency Program in Diagnostic Imaging Physics

Upstate Medical Physics

Victor, New York

after careful review by the Residency Education Program Review Committee, has been determined by the Board of Directors to meet national standards for medical physics clinical training and is therefore awarded accreditation.

This accreditation is valid through

December 31, 2013

CAMPEP SEAL

Building for a future as an entrepreneur

- Solid understanding of Medical Physics
- Recognize, assess SWOT
- Fresh ideas
- Freedom from impediments
- Financial flexibility
  - Not paycheck to paycheck
  - Health Insurance
- Business understanding

Basic Business

- Define your goals, mission
- Income exceeds expenses (long run)
- Return on investment
- Find a good accountant
- Identify your market, competition
- Choose your partners
- Compensation models
- Cash flow (Dental inspections)
- Legal

Communication Skills

- Written and Oral
- Approach as you do ABR process
- Find a mentor; assess, goals, practice
- Professionally "sell" yourself, idea
  - Family, friends, AAPM chapter
  - Colleagues, potential clients, investors
- Effectively communicate *Value*
  - Elevator speech (15 seconds)
  - What makes this different?

Possible Goals

- Professional creative freedom
- Build a better mousetrap
- Geographic choice (lakes and small hospitals)
- Reduced organizational politics
- Diverse clientele
- Make a difference
- Get outside in fresh air!
- Build a top notch team
- Build a reputation
- Financial goals
- Exit strategy

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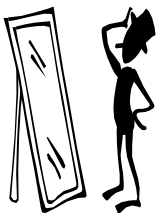
Compensation Models

- *Cost* vs. *Value Based*
- *Cost based* pricing (cost + profit)
  - Salary (FTE) or Hourly (consultant)
  - Include *all* expenses, including downtime
- *Value based* pricing of services
  - What would it cost to do it another way?
  - What additional benefits add value?
- FTE, salary + bonus (achieve goals)
- Royalty or percentage

Personal Assessment

Ask yourself these tough questions



1. Entrepreneur vs. FTE…
2. Willingness to
   - Take risks
   - Invest time and resources
3. What is my motivation?
4. What do I have to offer?
5. Is the timing right?
6. Do I have the right resources?
7. Am I ready to take the plunge?

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Thank you!