Three themes of VM 568:

1) Clinical Safety Awareness – Being safe
   • Biosafety – Strengthen procedures, practices, habits for reducing infection transmission
   • Restraint and behavior basics – Strengthen safe animal handling in the clinical environment
   • Introducing animal disaster rescue safety

2) Clinical Context Orientation – Thinking like a clinician
   • Introducing diagnostic reasoning process, illness scripts
   • Basic physical exam & recognizing normal
   • Introducing clinical problem solving

3) Professional Alignment – Developing your career pathway
   • Planning – Information to empower career decisions
   • Aiming at being a 90th percentile practitioner - (top 10%, 2021 cohort - 4,200)
   • Establishing networking and mentoring

Professional Alignment – Developing your career pathway

- Provide opportunity for developing your specific interest into an excellent career
- WSU isn’t a group tracking curriculum, it’s really an individual tracking curriculum
  - 22 of the 44 senior year credits are elective
  - Of the 991 days between now and May 8, 2021, when you begin your senior year, you are in class 480 (48%)
    - If you were working 5 days a week, with 2 weeks vacation per year, you’d work 675 days
- Distinguish avocations from vocations
- Start you toward your A-Game and being Future Ready
- Aim at becoming a 90th percentile (top 10%) new grad!
- Practice excellence is broader than as academic excellence

Your highest priority is building a professional knowledge base

Different components for stages, focus
All veterinarians must:
- Survive veterinary school!
  - Pass boards!
  - Fulfill social expectations
  - Achieve practice competence

Follow your dreams -- but know where your dreams will lead you!

(Objective: Improve career pathway understanding now to reduce future surprises and problems)

Important steps:
1. Consider your personal and family values and constraints now
   - Involve significant others now!
2. Start financial planning to identify potential financial constraints
3. Obtain missing but needed info on your career pathway by:
   - Networking with mentors doing what you want to do
   - Identifying resources available from professional organizations (AAHA, AVMA, AAVMC, . . .)
Questions to answer:
- What are they made up of and which are the biggies?
- What are reasonable estimates for planning purposes?
- How can positive flows be made bigger and negative ones smaller?

Personal financial flows comprising your planning target

Professional Income
- Living within one’s means
- Balanced budget

Obligatory Cost of Living
- Food, housing, "operating costs"

Debt Service Obligations
- Loans - Student, consumer, auto, house, . . .

For planning purposes, what is the current annual income of the typical DVM?

All DVM’s
- $43.47 / hr
- $90,420 / yr
(Median)
- 2,080 working hrs

US Bureau of Labor Statistics
http://www.bls.gov/oes/current/oes291131.htm

http://www.bls.gov/oes/current/oes_291131.htm

http://www.onetonline.org/find/o*net

http://www.bls.gov/oes/current/oes_nat.htm

Practice owners earn significantly more than employed practitioners

<table>
<thead>
<tr>
<th>Practice Type</th>
<th>Owner Net Income</th>
<th>Assoc. Net Income</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Animal excl</td>
<td>$127k</td>
<td>$71k</td>
<td>$56k (79%)</td>
</tr>
<tr>
<td>Food Animal pred</td>
<td>$100k</td>
<td>$71k</td>
<td>$29k (41%)</td>
</tr>
<tr>
<td>Mixed</td>
<td>$104k</td>
<td>$71k</td>
<td>$33k (39%)</td>
</tr>
<tr>
<td>Companion pred</td>
<td>$100k</td>
<td>$71k</td>
<td>$29k (41%)</td>
</tr>
<tr>
<td>Companion excl</td>
<td>$133k</td>
<td>$57k</td>
<td>$76k (59%)</td>
</tr>
<tr>
<td>Equine</td>
<td>$120k</td>
<td>$71k</td>
<td>$49k (69%)</td>
</tr>
<tr>
<td>50th percentile</td>
<td>$120k</td>
<td>$71k</td>
<td>$49k (69%)</td>
</tr>
</tbody>
</table>

Differences:
- Ownership is worth $36k ($28k to $55k)
- $33k between ownership of top and bottom practice types vs. $16k between associates

Owners compensated for:
- Undertaking business risk
- Management headaches

Practice Type Focus: While “Mixed Practices” are common, “Mixed Practitioners” are not

<table>
<thead>
<tr>
<th>State Practitioner Category</th>
<th>MT</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companion Exclusive</td>
<td>39%</td>
<td>72%</td>
</tr>
<tr>
<td>Companion Predominant</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td>Equine Exclusive</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Equine Predominant</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Food Animal Exclusive</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>Food Animal Predominant</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Mixed</td>
<td>158%</td>
<td>1,279%</td>
</tr>
</tbody>
</table>

Total AVMA member private practitioners

Implication: Prepare for ownership now, participate in the VBMA

Implication: You would probably be well served to have a practice type focus

Public or corporate employment is another option

Conclusions:
- Industry is $63k higher than average practice ownership
- State compensation is low (but likely has a pension)

<table>
<thead>
<tr>
<th>Employer Type</th>
<th>2013 Mean Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>$181k</td>
</tr>
<tr>
<td>Other (?)</td>
<td>$135k</td>
</tr>
<tr>
<td>Federal Government</td>
<td>$120k</td>
</tr>
<tr>
<td>Academic</td>
<td>$113k</td>
</tr>
<tr>
<td>Military</td>
<td>$109k</td>
</tr>
<tr>
<td>State Government</td>
<td>$87k</td>
</tr>
<tr>
<td>Overall</td>
<td>$129k</td>
</tr>
</tbody>
</table>

What are new DVM’s paid?

Average 2018 starting salaries, high to low, rounded

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>% of New Graduates</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Animal excl</td>
<td>2%</td>
<td>$78k</td>
</tr>
<tr>
<td>Companion excl</td>
<td>30%</td>
<td>$77k</td>
</tr>
<tr>
<td>Uniformed Services</td>
<td>2%</td>
<td>$77k</td>
</tr>
<tr>
<td>Companion pred</td>
<td>7%</td>
<td>$76k</td>
</tr>
<tr>
<td>Food Animal pred</td>
<td>3%</td>
<td>$74k</td>
</tr>
<tr>
<td>Mixed</td>
<td>9%</td>
<td>$73k</td>
</tr>
<tr>
<td>Equine</td>
<td>2%</td>
<td>$58k</td>
</tr>
<tr>
<td>Advanced Study</td>
<td>44%</td>
<td>$42k</td>
</tr>
</tbody>
</table>

Google ‘AVMA New Graduate Salary Worksheet’ pdf
DVM Student Debt: The Elephant in the Room!

2017 AAVMC New Graduate Debt:
- $163K AAVMC median debt
- 7% owed > $300K
- 20% graduate debt free

2017 WSU New Grad with Debt:
- $132K WSU mean total debt
- $124K DVM debt
- $12K undergrad


Applying some ‘thumb rules’:
- Employees net ~75% of their gross salary
  - $77,000 salary => $57,750 net take home
- If student debt = first year salary (1:1 ratio) as commonly recommended, at 6.8% interest, 10 year payback, 3% annual salary increase, loan payments are:
  - 13% of salary
  - 17% of net take home

Why don’t employers pay more?
- First, employees cost employer ~25% more than their gross salary (benefit contributions, taxes)
  - $77,000 salary => $96,250 employer cost

Why is student debt such a big deal?

Wells Fargo Student Loan Debt Calculator
https://www.wellsfargo.com/student/planning/calculators/debt

What do you have to charge to earn your $77,000 salary (Or why do vets charge so much)

"Fee setting: A look at margins" (ML Heinke, DVM Newsmagazine 2/1/10)

- 8 hrs / d * 5 d / wk * 52 wks / yr = 2,000 work hrs / yr + 2 wk vacation
- Small animal practice revenue needed per DVM for their services:
  - 4 x salary to cover salary plus overhead (overhead = 75% of gross practice income)
  - Need to generate $308k gross revenue for $77k annual salary
  - Since ~50% of time is billable => $308 per hr professional fee (not including lab fees, pharmaceuticals, …)
- Ambulatory-only LA practice: gross revenue = 2 x salary to cover salary plus overhead, no clinic (overhead = 50% of gross practice income)
  - 2 x salary = $144,000, if 50% time is billable => $144 per hr professional fee

This is the fundamental relationship between the business charges for your services and your salary in professional service businesses

Vet Med is not unique: These ratios are similar to those of other professional service businesses

<table>
<thead>
<tr>
<th>Profession</th>
<th>Billing to Salary Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attorney</td>
<td>5 To 7</td>
</tr>
<tr>
<td>Accountant</td>
<td>4 To 5</td>
</tr>
<tr>
<td>Business Consultant</td>
<td>4 To 5</td>
</tr>
<tr>
<td>Clinic-based veterinarian</td>
<td>4 To 5</td>
</tr>
<tr>
<td>Industrial Designer</td>
<td>3.5 to 4</td>
</tr>
<tr>
<td>Consulting Engineer</td>
<td>3 To 10</td>
</tr>
<tr>
<td>Architect</td>
<td>2.5 to 3.5</td>
</tr>
<tr>
<td>Interior Designer</td>
<td>2.5 to 3.5</td>
</tr>
<tr>
<td>Ambulatory-only veterinarian</td>
<td>2</td>
</tr>
</tbody>
</table>


Take home:
- Staffing and operating a physical facility is expensive
- In a service business you have to charge a lot more than you make to be worth what you make

Revisiting starting salaries in light of student debt

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>% of New Graduates</th>
<th>Average Salary</th>
<th>$132K ave debt</th>
<th>$18,240 / yr @10 yr payback, 6.8% interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Animal excl</td>
<td>2%</td>
<td>$78k</td>
<td></td>
<td>24% of gross salary</td>
</tr>
<tr>
<td>Companion excl</td>
<td>30%</td>
<td>$77k</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Uniformed Services</td>
<td>2%</td>
<td>$77k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companion pred</td>
<td>7%</td>
<td>$74k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Animal pred</td>
<td>3%</td>
<td>$74k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td>9%</td>
<td>$73k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equine</td>
<td>2%</td>
<td>$58k</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Advanced Study</td>
<td>44%</td>
<td>$42k</td>
<td>3.1</td>
<td>44%</td>
</tr>
</tbody>
</table>

Wells Fargo Student Loan Debt Calculator
https://www.wellsfargo.com/student/planning/calculators/debt

Can you make this work?

One of the First Things: Establishing a baseline cost of living for your family

- How the heck does one estimate a minimum cost of living?
- How do you need to modify it for your situation?

Professional Income
Living within one’s means
Balanced budget

Obligatory Cost of Living
- Food, housing, "operating costs"

Debt Service Obligations
- Loans, Student, consumer, auto, house, …

Investing for Retirement
Preparing for 30 years of living on passive income

Having a Life
The Rest

Estimate a minimum cost of living for your family

Two online apps for estimating living expenses:
- MIT Living Wage Calculator
  [http://livingwage.mit.edu/]
- EPI Family Budget Calculator
  [https://www.epi.org/resources/budget/]

Inputs:
- Geographic location – county or urban area
- Family situation – no. children, adults working or not

Example: 2 Adults (1 Working) 1 Child, Whitman County gross income
- $42,662 - MIT Living Wage Calculator
- $60,092 - EPI's Family Budget Calculator

Use both:
- Establish how and why expenses differ between the two
- Adjust expenses to fit your family situation and preferences

Basic Underlying Question:
Can you service your debt and still have a life?

What is the opportunity on the input side?

Major questions:
- What is the evidence that professional income can be increased and by how much?
- If so, how do you do that?

1 in 10 owners and 1 in 10 associates have these incomes:

<table>
<thead>
<tr>
<th>Practice Type</th>
<th>90% Owner Net Income</th>
<th>90% Associate Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Animal excl</td>
<td>$400k</td>
<td>$105k</td>
</tr>
<tr>
<td>Food Animal pred</td>
<td>$255k</td>
<td>$111k</td>
</tr>
<tr>
<td>Mixed</td>
<td>$240k</td>
<td>$105k</td>
</tr>
<tr>
<td>Companion pred</td>
<td>$293k</td>
<td>$110k</td>
</tr>
<tr>
<td>Companion excl</td>
<td>$311k</td>
<td>$150k</td>
</tr>
<tr>
<td>Equine</td>
<td>$275k</td>
<td>$150k</td>
</tr>
<tr>
<td>90th percentile Overall</td>
<td>$300k</td>
<td>$136k</td>
</tr>
<tr>
<td>50th percentile comparison</td>
<td>$120k</td>
<td>$84k</td>
</tr>
</tbody>
</table>

Top 10%: Owner + 250% Employed + 162%

How big is the 90th percentile effect for starting salaries?

Median and 90th percentile 2008-13 practice starting salaries
highest to lowest by AVMA practice type

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>Median Salary</th>
<th>90th Percentile Increase</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Animal excl</td>
<td>$71k</td>
<td>+ $16k</td>
<td>23%</td>
</tr>
<tr>
<td>Companion excl</td>
<td>$68k</td>
<td>+ $17k</td>
<td>25%</td>
</tr>
<tr>
<td>Companion pred</td>
<td>$64k</td>
<td>+ $21k</td>
<td>32%</td>
</tr>
<tr>
<td>Food Animal pred</td>
<td>$63k</td>
<td>+ $14k</td>
<td>22%</td>
</tr>
<tr>
<td>Mixed</td>
<td>$61k</td>
<td>+ $15k</td>
<td>24%</td>
</tr>
<tr>
<td>Equine</td>
<td>$34k</td>
<td>+ $31k</td>
<td>91%</td>
</tr>
</tbody>
</table>

For comparison, $132k loan has $18,240 annual cost @10 yr payback, 6.8% interest or $22,800 before taxes

Implication: Figure out what it takes to get into the 90th percentile!

See online AVMA reports for current market information (80 – 100 pages each)

PDF’s free to AVMA and SCAVMA members
Google “AVMA Veterinary Economic Report Subscription”
[https://www.avma.org/PracticeManagement/BusinessIssues/Pages/AVMA-Economic-Report-Subscription.aspx]
“Prediction is very difficult, especially about the future.”

Who said the above?

a) Lawrence Peter “Yogi” Berra?

b) Niels Bohr, Danish physicist?

c) None of the above?

None of the above. As best you can, always verify your sources!

Veterinary supply grew 55% in 10 years

Veterinary supply likely growing much faster than demand for services

What are the implications of this?

KACES - The formula for professional success

Professional Success = KACES

Knowledge x Attitude x Communication x Experiences x Skills

(By Carl Osborne, U Minn)

- This is a multiplicative equation, not additive
- Thus a deficiency cannot be compensated by a surplus of another => Balance!
- AC - ‘Clients don’t care how much you know until they know how much you care’
- K - Grade point and professional success correlation < 0.27


Take Home: Grades are just one of five components in this equation

How to get to the 90th percentile in your pathway

Maximize your value to your future employers and clients in that pathway

- Join relevant professional organizations as a student member
  - Read their proceedings, go to their national meetings, scan their list serves
- Pay attention to “Practitioners of the Year” selected by the practitioner organizations
  - Their peers have identified them as outstanding
- Identify progressive practitioners doing what you want to do well and approach them for mentoring
  - Go see what they do for at least a week and “pick their brain” for advice
- Practice “environmental surveillance” to identify trends in your practice segment
  - Scan the trade journals and websites relevant to the clients in your pathway
- If you have questions, ask faculty clinicians but don’t stop there

The more advice from more sources closer to what you want to do, the better
Actively pursue "practice readiness" in your pathway's key skills

- Know the key skill sets that will make you the most "practice ready" in your pathway
  - Prioritized lists in "Expected New Graduate Competencies" handout in VM 568 Notes & Resources
  - Ask your network contacts and mentors what skills they value most in new graduates
- Insufficient hours to achieve entry competency in curriculum alone for most!
  - Entry level competency requires ~40 hours of deliberate practice
  - Deliberately practice the high priority ones on your own outside of class, vacations, riding along, summers, ...

Deliberate Practice and Acquisition of Expert Performance

Remember: "Core" is the biggest common denominator!

Debt and Investing: Good decision making up front is critical to your long term financial health

- Understand who the transaction agent has fiduciary responsibility to; it is usually not you!
- Have all aspects of all alternatives fully calculated for comparison!
- Understand how to do due diligence
- Know the typical traps and pitfalls

The narrow margin makes personal financial literacy paramount

Reading several inexpensive paperbacks is a good starting point:

Personal Finance
https://rayordstrom.github.io/text/personal-finance/

Millionaire Teacher
R Siegel, C Yacht

Personal Finance
Eric Tyson

Millionaire Teacher
Andrew Hallam

Understand common thumb rules: JD Roth's 18 Favorite Financial Rules of Thumb

To compare the effects of different loan parameters, generate and read full amortization schedules

Apply the ‘Rule of 72’ to start understanding compounding

Doubling Time = \[\frac{72}{\text{Interest Rate} \%}\]

Calculate, don’t assume: Intuition is misleading when making decisions involving exponentials


Know interest rate components, common values of each and trends
Nominal Interest = Expected Inflation Rate + Return to Capital + Return to Risk

- Historical inflation rate
  - ~3% - Consumer Price Index (-0.7% to 18% annual variation – ‘CPI Inflation Calculator’)
- Return to capital, minimal risk between financial institutions, . . .
  - ~3% - Federal Funds Rate, LIBOR
- Return to risk – varies depending on likelihood of loss
  - ~5% - Historical stock market return (~37% to +33% total annual variation)
- Approximate current rates:
  - Low risk – Prime Rate (currently 5.25%)
  - Non-collateralized consumer loans (credit cards) – 14% excellent credit to 26% store credit

To avoid being scammed, know these. If it looks too good to be true, it most likely is. If it was true, why would they offer it to you?
10 yr amortization of $100k loan at 6.8% interest

overwrite with content from image

Extending payback from 10 to 30 years has major financial impact

Due to differential effect of compounding:
• Monthly payment is reduced 44%
BUT
• Total interest expense increased by 354%
• ~$100k you don’t have to invest elsewhere, such as in retirement or in a house

Be aware of loan forbearance (deferments) effects

Due to interest compounding during 3 yr deferment:
• Beginning loan balance increased to $120,400
• Monthly payment is increased 20%
• Total interest expense increased by $7,771 plus $20,400 in principal
This does not include effect of additional fees

Learn now the In’s and Out’s of accumulating what you’ll need for your retirement

Delay and ‘little’ mistakes are costly so start by reading about it now
Many ‘rules of thumb’ provide something of a starting point for developing your understanding
Examples:
• You can withdraw 4% annually
• Retirement fund amount = 25 x desired retirement income (assumes 4% withdrawal, no other income)
• Invest at least 15% of your gross (pretax) income for 40 years; waiting to start increases the percentage
• Have invested 1x of your current salary by 30, 3x by 40, 6x by 50, 8x by 60, and 10x by 67

Smart retirement investing strategy is reasonably straightforward and can be fairly automatic

Inflation risk is hidden but several fold greater than widely-recognized stock market risk
Manage stock market risk by investing in low cost instruments representing different asset classes
Process:
• Read to gain an understanding of investment strategy for managing market risk
• Establish your long term financial goal and the automatic monthly investment needed to meet it
• Begin investing early to obtain maximum advantage from compounding, which makes the cost of delay high
• Maximize returns by minimizing investment costs
• Invest for the long run, rebalancing regularly
Understanding wealth may be useful; it isn’t what most think

- FIRE (Financial Independence, Retire Early)
  - Mr. Money Mustache
  - Google ‘Financial blogs for medical professionals’
  - Physician on FIRE
  - Crispy Doc
  - Docs Outside the Box
  - The White Coat Investor

In summary, to maximize “The Rest”:
- Compounding makes delaying investing costly
- ‘Little’ differences and mistakes cost big time
- Compare all aspects of alternatives
- If it looks too good to be true, it probably is
- Know the common traps and pitfalls and avoid the bunco artists

Acquiring personal financial literacy is important to your future

You can gain it by disciplined reading

- Online Personal Finance Book
  - R Siegel, C Yacht
  - https://saylordotorg.github.io/text_personal-finance/

Understand:
- JD Roth’s 15 Favorite Financial Rules of Thumb
- Eric Tyson’s Keys to Personal Financial Success

To pursue your own path, you have to maintain your motivation

Achieve and maintain intrinsic (internal) motivation by establishing your:
- Autonomy (chart your course)
- Mastery (competence, flow)
- Purpose (service, making difference)
- Relatedness (engagement)

Above all:
Addendum – Fiduciary duty

https://definitions.uslegal.com/b/breach-of-fiduciary-duty/

• A fiduciary duty is an obligation to act in the best interest of another party. For instance, a corporation’s board member has a fiduciary duty to the shareholders, a trustee has a fiduciary duty to the trust’s beneficiaries, and an attorney has a fiduciary duty to a client.

• A fiduciary obligation exists whenever the relationship with the client involves a special trust, confidence, and reliance on the fiduciary to exercise his discretion or expertise in acting for the client. The fiduciary must knowingly accept that trust and confidence to exercise his expertise and discretion to act on the client’s behalf.

• When one person does agree to act for another in a fiduciary relationship, the law forbids the fiduciary from acting in any manner adverse or contrary to the interests of the client, or from acting for his own benefit in relation to the subject matter. The client is entitled to the best efforts of the fiduciary on his behalf and the fiduciary must exercise all of the skill, care and diligence at his disposal when acting on behalf of the client. A person acting in a fiduciary capacity is held to a high standard of honesty and full disclosure in regard to the client and must not obtain a personal benefit at the expense of the client.

Addendum – Recent press on fiduciary duty

• The Brokers’ War Against Fiduciary Duties
  14 MAR 2018 TAMAR FRANKEL
  https://verdict.justia.com/2018/03/14/brokers-war-fiduciary-duties

• IS MY FINANCIAL ADVISOR A FIDUCIARY OR A STOCKBROKER? (March, 2018)
  http://www.highbossasset.com/blog/28-is-my-financial-advisor-a-fiduciary-or-a-stockbroker.html

• New SEC Advice Rule Abandons Fiduciary Standard For Brokers (May, 2018)
  David John Marotta I write on the small changes that can yield enormous gains over time

• Does Your Broker Love You? Brokers, astonishingly, have no fiduciary duty to their clients. Maybe they should.
  By TIMOTHY NOAH JAN 24, 2011
  https://slate.com/business/2011/01/brokers-astonishingly-have-no-fiduciary-duty-to-their-clients-maybe-they-should.html

Addendum – Associated handouts

• Assessing Career Pathway Feasibility

• Pro Forma Assessment Spreadsheet

• Some Things (Really) Worth Knowing

• Expected New Graduate Competencies

• Career Pathway Brainstorming

• Capital Management and Investment Decisions

• Practitioner Competency Input