How can vascular surgeon scientists survive in today’s unfriendly DRG/RVU climate?

Peter Henke MD
Section of Vascular Surgery
Department of Surgery
University of Michigan
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Overview

• State of the State
• Barriers and challenges to vascular surgeons
• Pipeline and trainees
• Successful paradigms
• Ways to maintain successful vascular surgeon scientists

The Future of Basic Science in Academic Surgery
Identifying Barriers to Success for Surgeon-scientists

Of 213 successfully funded basic science surgeons:

D. What are the main reasons why it may be unrealistic to pursue basic science?
E. What are the main barriers for successful funded research?

Barriers

• Vascular-specific issues
  – Emergencies/urgencies
  – ‘putting out fires’
• Training paradigms are primarily clinical – most integrated residencies have no research time
• Traditional fellowship now are without research time
• Expansion of skill sets clinically
• Vascular biology has many fields that compete in basic and clinical
• Documentation!
Increase the pipeline

- Increase 2 yr resident research time slots in the integrated residencies
  - Aim for ~ 30%
  - Basic and clinical HSR and trialists
- Use the NIH T32 mechanism, or F32
- Encourage non traditional routes
  - Education
  - Bioengineering
  - Innovation

Junior Faculty

- Pick a collegial group where the academic mission is primary and with a track record to prove it
- Chair of Surgery sets tone, commitment to academics, and $$$
- Within discipline and non discipline collaborators available
  - Generally a research university
- Lab resources and start up
  - Space in mentor's lab
  - $$ for tech/analyst

Junior Faculty

- Consider the VA!
- Lower acuity and slower paced most of the time
- Research time available as 8ths
- VA MERIT and CSP grant opportunities

Junior Faculty

- Mentor
  - Choose wisely
  - Win – win
  - Mentor’s training record and level
- K-08/K23
  - Education plan
  - Classes
  - Letters of support
  - Research idea and outline

The vascular surgeon-scientist: A 15-year report of the Society for Vascular Surgery Foundation/National Heart, Lung, and Blood Institute-mentored Career Development Award Program

Table V. Promotion and tenure of K awardees

<table>
<thead>
<tr>
<th>Promotion</th>
<th>K08, No. (%)</th>
<th>K23, No. (%)</th>
<th>Total, No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant</td>
<td>22 (81)</td>
<td>6 (24)</td>
<td>32 (77)</td>
</tr>
<tr>
<td>Instructor</td>
<td>4 (80)</td>
<td>0 (0)</td>
<td>4 (80)</td>
</tr>
<tr>
<td>Assistant professor</td>
<td>6.1 (58)</td>
<td>0 (0)</td>
<td>6.1 (58)</td>
</tr>
<tr>
<td>Associate professor</td>
<td>9 (29)</td>
<td>1 (17)</td>
<td>10 (24)</td>
</tr>
<tr>
<td>Full professor</td>
<td>12 (91)</td>
<td>1 (17)</td>
<td>13 (92)</td>
</tr>
</tbody>
</table>

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Table VI. Leadership positions obtained by K awardees

<table>
<thead>
<tr>
<th>Position</th>
<th>K08, No. (%)</th>
<th>K23, No. (%)</th>
<th>Total, No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant, No.</td>
<td>23 (67)</td>
<td>6 (25)</td>
<td>30 (66)</td>
</tr>
<tr>
<td>Division chief</td>
<td>10 (76)</td>
<td>2 (33)</td>
<td>12 (76)</td>
</tr>
<tr>
<td>Director</td>
<td>2 (16)</td>
<td>0 (0)</td>
<td>2 (16)</td>
</tr>
<tr>
<td>Chair of surgery at VA</td>
<td>1 (8)</td>
<td>0 (0)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Chairman</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Program director</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>President of a national/regional society</td>
<td>6 (51)</td>
<td>2 (33)</td>
<td>8 (51)</td>
</tr>
<tr>
<td>Served on an NIH study section</td>
<td>9 (88)</td>
<td>1 (17)</td>
<td>10 (88)</td>
</tr>
</tbody>
</table>

NIH, National Institutes of Health, VAM, Veterans Affairs.
Mid-Senior level faculty

• Multiple mentoring roles - balance
• Collaborators, intra and extramural
• Lab manager for consistency
• Post docs, PhD, residents, students in flux
• Grant applications are now more competitive
• Grant renewals

Rejections and resubmissions

• Part of academic life
  – ~ 15% funded R-01
  – ~ 30% K’s
• Not personal
• Same with papers, grants and abstracts
• Respond, resubmit, resubmit, resubmit
  – But get feedback

A Roadmap for Aspiring Surgeon-Scientists in Today’s Healthcare Environment

Success as a Surgeon-Scientist

Supportive Environment

- Efficient and effective workflow
- Collaborative and open atmosphere
- Mentoring and support
- Access to resources
- Mentorship

Financial Support

- Competitive salaries
- Research grants
- Travel support
- Publications

Social Support

- Personal well-being
- Family support
- Professional network

The Grant Cycle

- Proposal development
- Review process
- Funding decisions

Thank you

GREAT SUCCESS!