




## Innovative Programs

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## Objectives

- Describe an innovative structure for combining residency and fellowship or research time.
- Identify barriers to administration and completion of the program.
- Describe outcomes of the program over the past 10 years.



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## What is an Innovative Fellowship Program?

- The ACGME has developed a process for programs in all specialties to develop innovations in graduate medical education
- Programs need to apply for ACGME approval prior to beginning the program:  
[http://www.acgme.org/acWebsite/navpages/nav\\_program\\_experimentalation.asp](http://www.acgme.org/acWebsite/navpages/nav_program_experimentalation.asp)



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## Why Innovate?

- Continued growth and relevance of specialty
- Maintain our leadership in patient safety and outcomes
- Practice changes, health care reform, reimbursements, non-physician providers



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## Fellowships and Anesthesiology

- Educate the next generation of core anesthesiologists and subspecialists
- Provide the academic/researchers of the next generation



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## CCM Fellowships

- In 2017, anesthesiology residency programs graduated 1587 residents from 149 approved programs
- 171 anesthesiology graduates completed fellowship training in 58 approved anesthesiology programs in critical care medicine (CCM)
- This compares to 655 internal medicine graduates completing CCM training (or combined Pulmonary medicine CCM) in 189 approved programs, and 239 general surgery CCM graduates in 121 approved programs, and 167 pediatric CCM graduates from 66 programs\*

\* American Medical Association. FREIDA Online. <https://freida.ama-assn.org/freida/>. Accessed Sept 24, 2018



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## Research

- Call to action in multiple publications and forums in 2006-7 to increase research productivity in anesthesiology
- Anesthesiology with second lowest NIH funding/faculty at that time



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## Oregon Scholars Program

- Proposed method of increasing anesthesiology research included increasing opportunity for research in residency
- Most of our applicants listed CCM as a career interest in their ERAS application
- Many OHSU residents that had this interest decided to enter practice rather than a fellowship citing 2 reasons
  - Financial
  - Rigor of 12 straight months doing CCM



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## Oregon Scholars Program

- In 2005 we assessed our strengths and decided to develop an innovative program combining our core residency program with a research fellowship or CCM fellowship
- Our department had strength in these areas and would be able to offer this program without impacting our core residency program
- Approved by the ACGME and ABA in 2006, first class entered in July of 2006



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## Oregon Scholars Program

- The OSP is a focused, educational approach to develop researchers and intensivists in anesthesiology
- The OSP has 2 tracks: research or CCM



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## Oregon Scholars Program Resident Selection

- Residents selected for OSP positions are evaluated using the same academic criteria as for our core program
- In addition, we look for evidence of commitment to fellowship training in research or CCM by reviewing their personal statements, letters of recommendation, personal interviews, and curriculum vitae



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## Oregon Scholars Program Resident Selection

- 2 CCM and 1 Research position/year
- Residents are chosen through the NRMP
- Applicants who match to the OSP positions are in distinct programs in our department and are unable to transfer to the traditional program unless there is an unexpected opening



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## Research Rotation Organization

- Residents find mentors in CA1 year and come up with projects during CA2 year.
- 12 months of research in CA3 year.
- Up to additional 6 months of research in CA4 year.



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## Research Didactics

- Residents are relieved from the OR to participate in the weekly departmental research conference highlighting basic and clinical research within the department
- FAER scholar to ASA CA1 year
- IARS meeting CA2 year
- Optional WARC meeting CA1-3



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## CCM Rotation Organization, Early

- **Initial structure:** "Add on" the fellow rotations to CA-3 and CA-4 years
- **Feedback:** Too big a gap between resident ICU rotations in CA-1 year and fellow ICU rotations in CA-3&4 year
- **Solution:** Add additional resident rotations in the ICU for OSP  
 CBY: 2 ICU rotations  
 CA-1: 2 ICU rotations  
 CA-2: 2 ICU rotations



## CCM Rotation Organization, Later

- **Problem:** CA-4 year looked like a fellowship
  - 6 blocks core ICU + 2-3 blocks fellow elective
  - Only 3-4 blocks of general anesthesia
- **RRC Requirement:** 6 fellow level ICU rotations in the final year of training
- **Solution:** Move 3 months ICU electives to CA-3 year
  - CA-3 year: 6 months Anes + 3 months CC elective + 3 months core ICU
  - CA-4 year: 6 months Anes + 6 months core ICU



## CCM Didactics

- Residents are relieved from the OR to participate in the multidisciplinary CCM daily didactics for July, and then weekly didactics and monthly journal club.
- POCUS bootcamp to prepare for US Certification
- Fosters professional identity formation
- SOCCA in CA2 year



## Oregon Scholars Program/CCM

Year	Months of General Anesthesia Training	Months of Critical Care Training
CA1 (PGY 2)	12	2 (as resident)
CA2 (PGY 3)	12	2 (as resident)
CA3 (PGY 4)	9	3 (as CCM fellow)
CA4 (PGY 5)	6	6 (as CCM fellow)
<b>Totals</b>	<b>39 (includes 3 months of electives as CCM fellow)</b>	<b>12 (9 as CCM Fellow)</b>

Clinical base year rotations will satisfy all requirements including two months of critical care rotations as PGY 1 (CB). Residents who did not have two months of critical care medicine in the CB year will receive 1-2 additional months as needed to provide a total of six months of CCM experience as residents prior to the CA3 year. The three months of critical care electives that are part of the CCM fellow-ship training are included in the months of general anesthesia training column and will be distributed over the CA3 and CA4 years of the program.



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## OSP Experience to Date

- We have averaged more than 200 applicants from US medical schools per year for the 3 OSP positions.
- Since the OSP began in 2006, we have filled all available positions except 1 research position
- We currently have 11 scholars in the anesthesiology/CCM track and 2 in the anesthesiology/research track at the PGY-2-PGY-5 levels. Accepted one transfer in to CCM.
- Three scholars have left the program and moved to a traditional residency position. This was accomplished by a lateral transfer by a classmate who desired to enter the CCM program each time



## OSP Outcomes

- We have not seen any resistance from our traditional residents or fellows to accepting the scholars as fellows in the critical care units
- There have been increasing requests to transfer into the OSP program
- There has been no differences in overall academic performance as determined by our RECC or ITE scores compared with traditional residents



## OSP CCM graduates 2010-2018

- 20 CCM graduates (of 25 OSP graduates)
- 9 are practicing CCM as part of their current positions (8 academic, 1 community practice)
- 4 completed a cardiac anesthesia, and one completed a pediatric fellowship after completing the OSP CCM program



## OSP Research graduates

- 4 FAER grants in residency
- Graduate 1 & 2 – Community practice
- Graduate 3 – Academic practice (initial 50% research)
- Graduate 4 – Academic practice (50% research)
- Graduate 5 – Academic practice (40% research)



## Issues: Variability in program

- Initially residents entered into the OSP and then decided after CA1 year which track
- Variability in resident numbers made it hard to establish a consistent culture for either the CCM or the research track
- Change to set program match numbers with reversion to traditional program if unmatched



## Issues: Fellow recognition

- Non-anesthesia critical care faculty perceptions
  - Education
  - More distinction between resident rotation vs fellow rotation
  - Addition of name badge holders with fellow title
  - Addition of fellow title on white coat and name badge



## Issues: Program Identity

- CCM OSP residents did not feel like they had an ability to address problems unique to their program
- Chief resident for each OSP track was added, and they serve on the program evaluation committee



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Thank You