



A Model for AYA Oncology Fellowships

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Should you do a fellowship?



1. Are you passionate about a narrower focus?
2. Do you know enough about the specialty?
3. Does the lifestyle suit you?
4. Does it make sense financially?
5. Will additional training help you reach your goals?

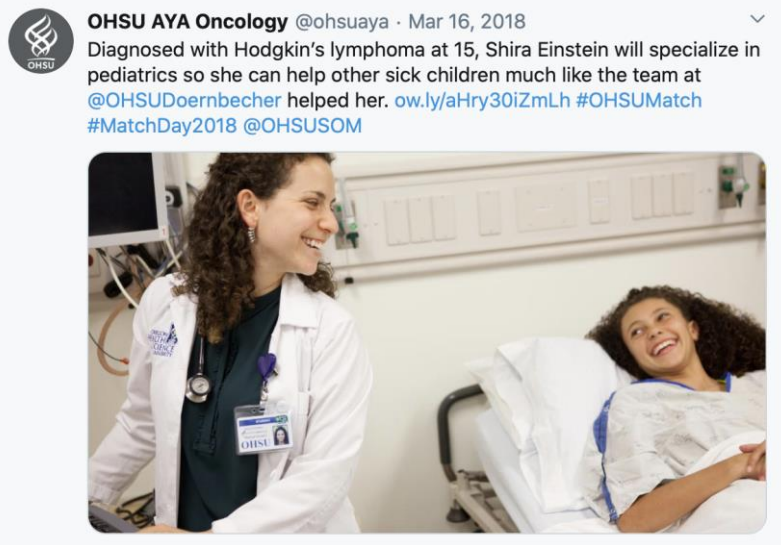
Ashley Altus, AOA



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1. Passion



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2. Knowledge

- Medical Knowledge
- Care Delivery
- Application

JOURNAL OF CLINICAL ONCOLOGY

REVIEW ARTICLE

Adolescent and Young Adult Oncology Training for Health Professionals: A Position Statement

Brandon Hayes-Lattin, Beth Mathews-Bradshaw, and Stuart Siegel



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Knowledge: Medicine

- Epidemiology
- Biology and genetics
- AYA treatment regimens
- Physiology/Host biology
- Psychosocial/Neurocognitive development
- Biomedical consequences
- Fertility preservation options
- Secondary prevention
- Knowledge of research
- Bioethical and legal issues



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Knowledge: Care Delivery

- Delays in diagnosis
- Physical impacts
- Practical issues
- Emotional issues
- Substance use/abuse
- Health disparities
- Patient engagement
- Tailored survivorship plan and transitions
- Complementary/Alternative medicines
- Palliative care and end-of-life



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Knowledge: Application

- Developing and evaluating models of care
- Age and culturally appropriate communication skills
- Management of multiple disciplines within care team
- Relationships with advocates



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3. Lifestyle

- Accreditation Council for Graduate Medical Education (ACGME)
- Residency
 - **General Pediatrics (ABP 3 years)**
 - **Internal Medicine (ABIM 3 years)**
 - Medicine-Pediatrics (ABP/ABIM 4 years)
- Fellowship
 - **Pediatric Hematology-Oncology (ABP 3 years, 70 programs)**
 - Hematology (ABIM 2 years, 2 programs)
 - Medical Oncology (ABIM 2 years, 7 programs)
 - **Dual Hematology and Medical Oncology (ABIM 3 years, 146 programs)**



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4. Finances

Pediatric

- 2100-2300 active Hem/Onc
- 1.0 clinical FTE
 - 3200 wRVU
 - 15-20 new cancer patients
- Median \$212,000

Adult

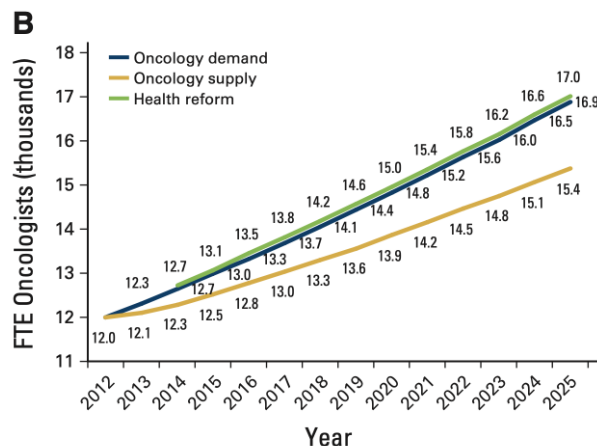
- 10,000-11,000 active Hem/Onc
- 1.0 clinical FTE
 - 5100 wRVU
 - 155 new cancer patients
- Median \$320,000

Hord et al. *Pediatr Blood Cancer*. 2018;65:e26780. Barr et al. *JOP* 2016;12:69-77.



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Supply & Demand



Yang et al. *JOP* 2014



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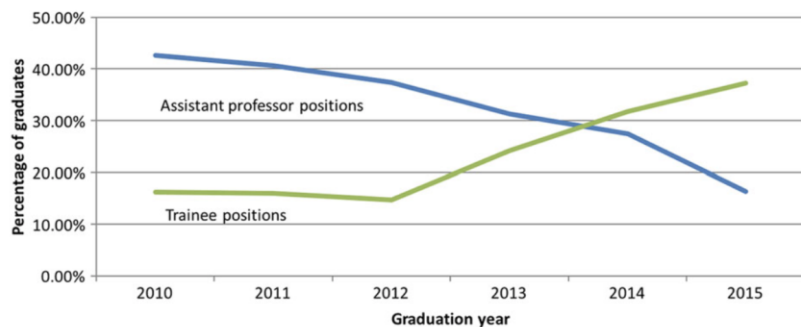
5. Will additional training help you reach your goals?

- ...
- What is the model for that training?

AYA Oncologist Models



American Society of Pediatric Hematology/Oncology Workforce Assessment



Leavey et al. *Pediatr Blood Cancer*. 2018;65:e26765



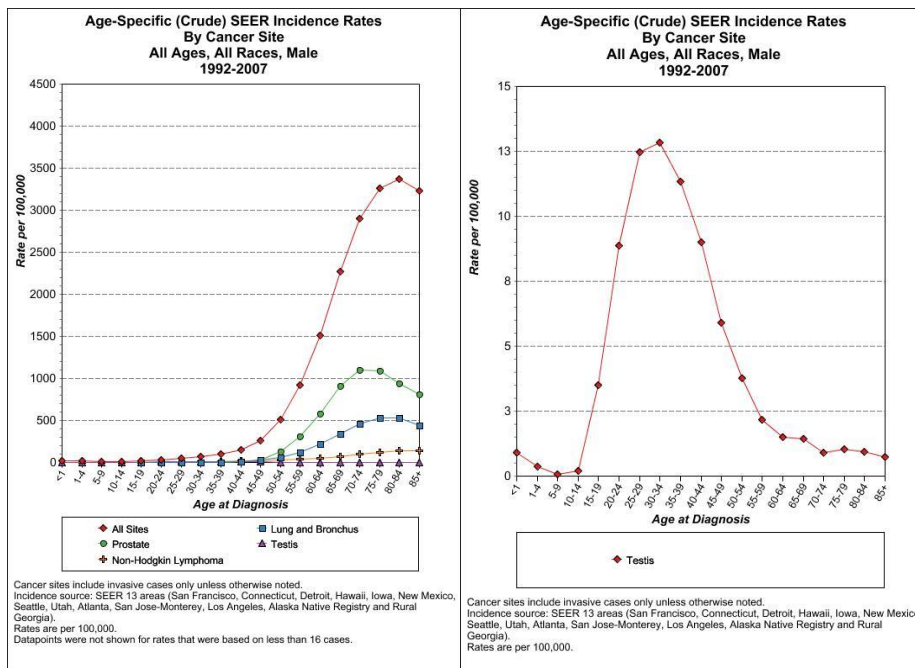
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AYA Oncologist Models



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AYA Oncology

BEING A Unicorn WAS HARD

SO I DECIDED TO BECOME A Doctor

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ABP: Pediatric Hematology-Oncology Certification

- General
 - Certification in **General Pediatrics**
 - Unrestricted medical license
 - Complete an ACGME-accredited training program
 - Complete a scholarly activity
 - Core curriculum
 - Scholarly project with work product
 - Pass ABP certifying exam
- Hem-Onc
 - Complete **3 year** ACGME training program



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ABIM: Hematology or Medical Oncology

- General
 - Certification in **Internal Medicine**
 - Unrestricted medical license
 - Complete an ACGME-accredited training program
 - Demonstrate clinical competence, procedural skills, and moral and ethical behavior in the clinical setting
 - Pass ABIM certifying exam
- Hematology **or** Medical Oncology
 - Complete **2 year** ACGME training program (including **½ day continuity clinic**)
 - Clinical Training: 1 year



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ABIM: Dual certification in Hematology and Medical Oncology

- Complete **3 year** ACGME training program (including **½ day continuity clinic**)
 - Clinical Training: **18 months**
 - At least 12 months are in the diagnosis and management of a broad spectrum of neoplastic diseases including hematological malignancies
 - Six months are in the diagnosis and management of a broad spectrum of non-neoplastic hematological disorders



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ABP and ABIM Combined Training Programs

- **1 year less** than full training in both subspecialties (double counting 1 year of research/scholarly activity under dual supervision)
 - Peds Hem/Onc (3) + Hematology (2) = 4
 - Peds Hem/Onc (3) + Medical Oncology (2) = 4
 - Peds Hem/Onc (3) + Hematology and Medical Oncology (3) = 5
- **Same clinical training time** requirements (continuity clinics)
 - Peds Hem/Onc (1) + Hematology (1) = 2
 - Peds Hem/Onc (1) + Medical Oncology (1) = 2
 - Peds Hem/Onc (1) + Hematology and Medical Oncology (1.5) = 2.5
- **Prospective** proposal for training of an **individual (not program)**



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Create a Combined Pediatric & Adult Hem/Onc Fellowship?

- Developed AYA curriculum
- Joint pediatric and adult leadership commitment
- Faculty engagement (fellow will question routine practices)
- Meet ACGME accreditation
- Secure approvals for individual
 - American Board of Pediatrics (ABP)
 - American Board of Internal Medicine (ABIM)
- Funding
- Integration with existing fellowships (slot, call, continuity clinic, conferences)
- Tailored mentorship plan
- Relevant scholarly activity plan



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Lara Davis, MD: Pre-Fellowship



- 1996-2000 BA: Wellesley College
- 2001-2005 MD: Oregon Health and Science University
- 2005-2009: Harvard Combined Internal Medicine-Pediatrics Residency



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Lara Davis, MD: AYA Fellowship

- 2009-2013 OHSU AYA Oncology Fellowship
 - Clinical care and trials: Sarcoma
 - Translational research: Osteosarcoma
 - 2011-2013 Human Investigations Program
 - 2012 AACR/ASCO Molecular Biology in Clinical Oncology Workshop
- Grants
 - Adolescent & Young Adult Subspecialty Fellowship
 - St. Baldrick's Foundation
 - Osteosarcoma as a Proof-of-Concept Model for Personalized Cancer Therapy
 - Damon Runyon-Sohn Pediatric Cancer Fellowship Award
 - Translating ex vivo osteosarcoma targeted drug sensitivity into improved survival
 - Thrasher Research Fund Early Career Award



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Lara Davis, MD: Post-Fellowship

- 2013-2015 Instructor of Medicine and Pediatrics (OHSU, Dual appointment)
 - 2013 American Board of Internal Medicine: Medical Oncology
 - 2015 American Board of Pediatrics: Pediatric Hematology/Oncology
- 2015-present Assistant Professor of Medicine and Pediatrics (OHSU, Dual appointment)
 - 2016 AACR/ASCO Methods in Clinical Cancer Research Workshop



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Lara Davis, MD

- Grants, completed
 - CDK4 inhibition in a molecularly-selected population of sarcomas, NCI / Sarcoma Alliance for Research through Collaboration (SARC)
 - CDK4 inhibition in a molecularly-selected population of pediatric sarcomas, Hyundai Hope on Wheels Pediatric Cancer Research Young Investigator
 - Sarcoma Survivorship, The Hope Foundation for Cancer Research
- Grants, current
 - Cancer Clinical Investigator Team Leadership Award, Cancer Center Support Grant, NCI
 - Defining mechanisms and biomarkers of immunotherapy response and resistance to inform rational clinical trial development in osteosarcoma, St. Baldrick's Foundation Scholar (Career Development) Award
 - 6 other local grants



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Lara Davis, MD

- | | |
|---|--|
| <ul style="list-style-type: none">• Clinical Trials<ul style="list-style-type: none">• 4 Investigator Initiated Trials (PI)• 4 Cooperative Group Trials (site PI)<ul style="list-style-type: none">• SARC024 Osteosarcoma Cohort PI• 3 Industry Sponsored Trials (site PI)• Publications<ul style="list-style-type: none">• 19 peer-reviewed original research• 5 peer-reviewed reviews | <ul style="list-style-type: none">• Professional Societies<ul style="list-style-type: none">• Children's Oncology Group• SWOG• American Society of Clinical Oncology• American Association for Cancer Research• Sarcoma Alliance for Research through Collaboration• Connective Tissue Oncology Society |
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Adam DuVall, MD: Pre-Fellowship



- 2002-2006 BS: University of Notre Dame
- 2007-2012 MD and MPH: Case Western Reserve University
- 2012-2016: Combined Internal Medicine-Pediatrics Residency, University of Michigan



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Adam DuVall, MD: AYA Fellowship

- 2016-present: OHSU AYA Oncology Fellowship
 - Clinical care and trials: Leukemia and BMT/Immune Effector Cell therapies
 - Site Co-Investigator: 2 NCI cooperative group trials
 - Translational research: Leukemia predisposition
 - Grant: The role of inflammatory microenvironment in the clonal evolution of familial platelet disorder to acute myelogenous leukemia, Tartar Trust
 - 5 peer-reviewed publications
 - 4 book chapters
- 2020 Board Eligible
 - American Board of Internal Medicine: Hematology
 - American Board of Pediatrics: Pediatric Hematology/Oncology



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OHSU Knight Cancer AYA Program



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5. Will additional training help you reach your goals?

Cons

- Delay in launching career
- Lack of ABP/ABIM certification
- Record of successful AYA physicians without dual track

Pros

- Personalization of fellowship
- Early identity as an AYA oncologist
- Marketable skill set
- Full breadth and depth of AYA training



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Mind: Will additional training help you reach your goals?
Heart: Does the environment match your passion?



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Follow Your Passion

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