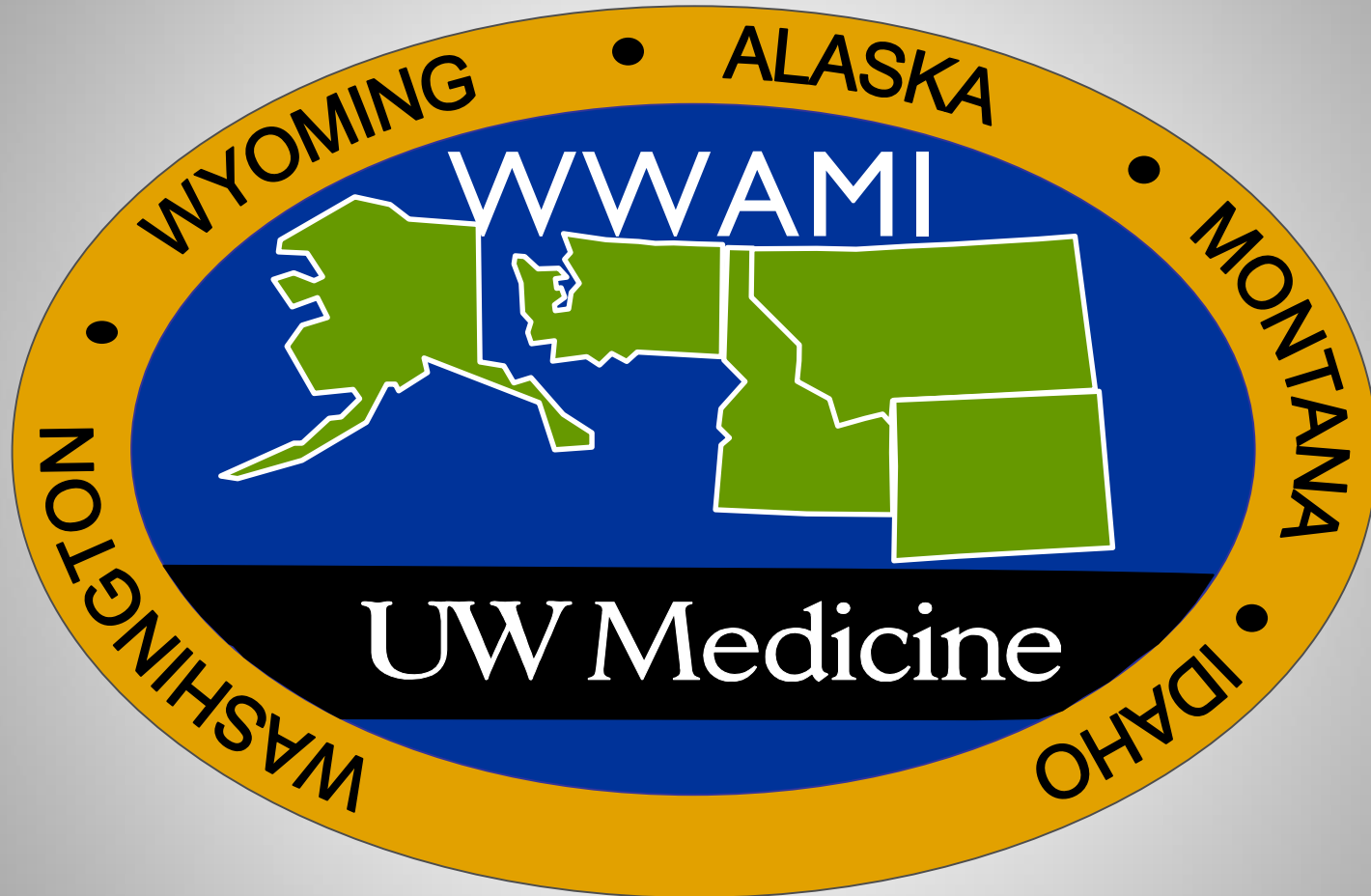


WWAMI in Montana



Jay S. Erickson M.D.
Assistant Dean-WWAMI Clinical Phase/Montana

Physician Pipeline

K-12



```
graph TD; A[K-12] --> B[College (4 years)]; B --> C[Medical School (4 years)]; C --> D[Residency/Fellowship (3-7 years)]; D --> E[Practicing Physician];
```

The diagram illustrates the physician pipeline as a vertical sequence of five stages. Each stage is contained within a dark grey rectangular box with a white border. The stages are connected by downward-pointing white arrows. The stages are: K-12, College (4 years), Medical School (4 years), Residency/Fellowship (3-7 years), and Practicing Physician.

College (4 years)

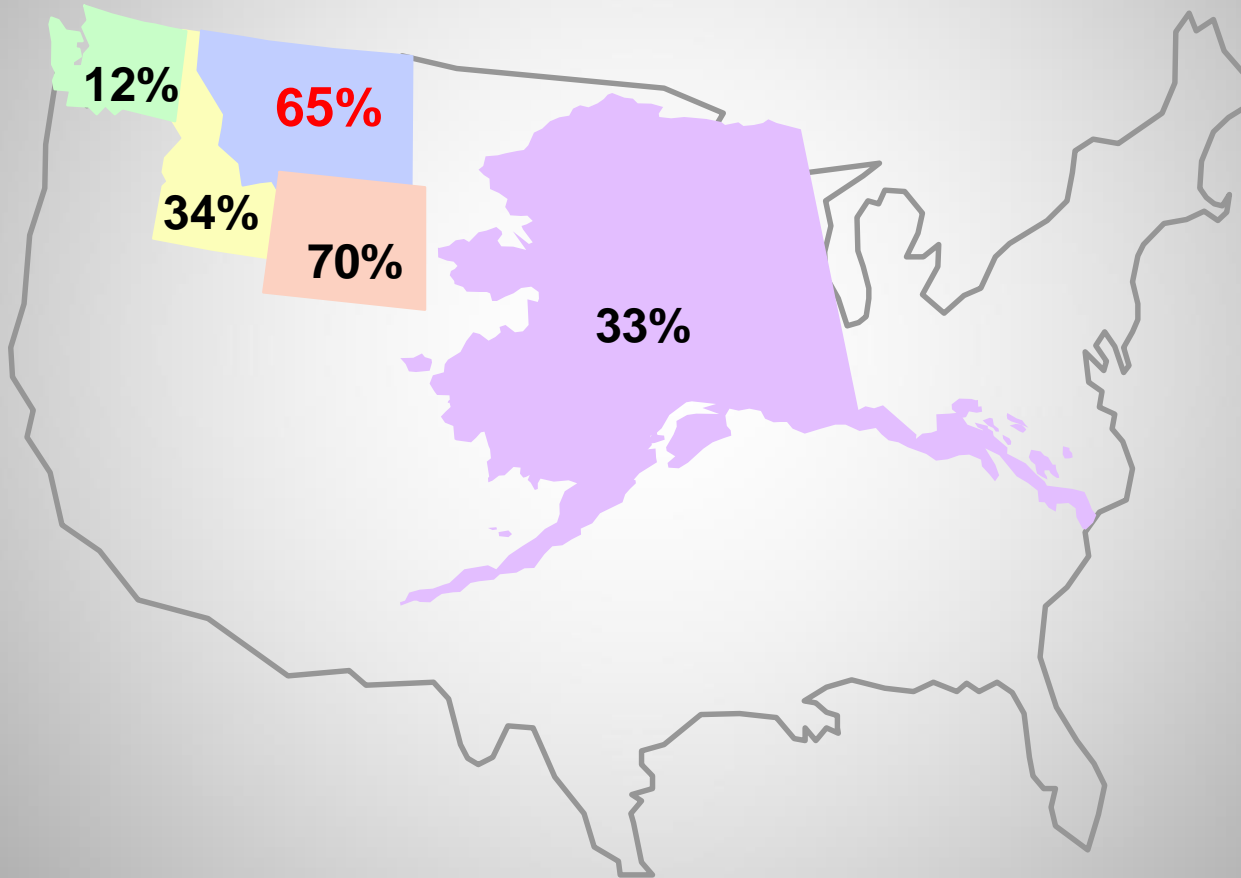
Medical School (4 years)

Residency/Fellowship (3-7 years)

Practicing Physician

WWAMI

Non-metro percent of population by state



The WWAMI Program: Founding Goals (1971)



- 1) Access to Publicly Supported Medical Education**
- 2) Avoid excessive capital costs by using existing educational infrastructure**
- 3) Create Community-Based Medical Education**
- 4) Expand GME and CME across WWAMI**
- 5) Increase the number of primary care providers (MD) /address maldistribution of physicians**

MONTANA

WWAMI Program Site Map

2015-2016



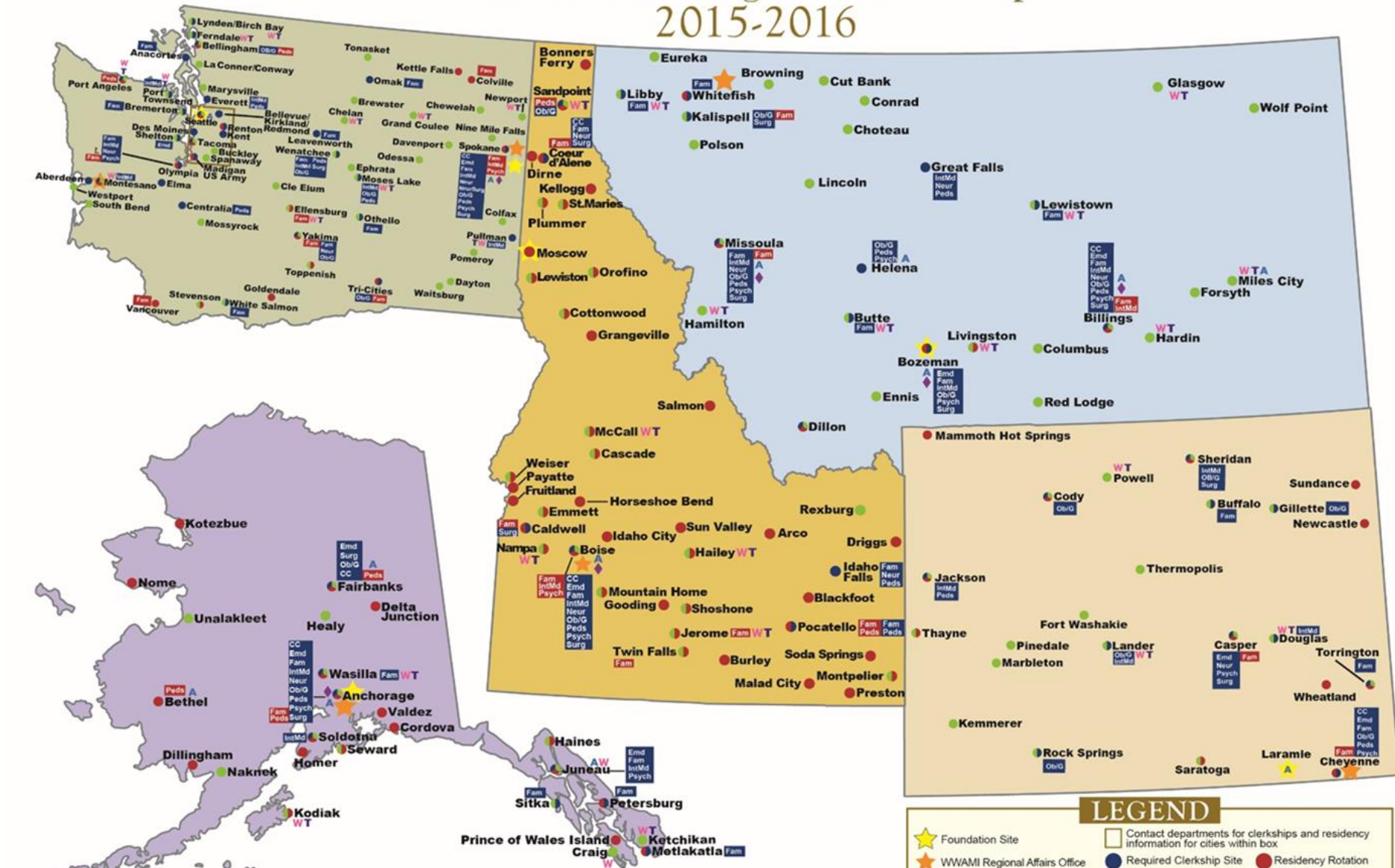
UW Medicine
UW SCHOOL OF MEDICINE



LEGEND

- ★ Foundation Site
 - ★ WWAMI Regional Affairs Office
 - ◆ WWAMI TRACK
 - A Areal Health Education Center (AHEC)
 - W WWAMI Rural Integrated Training Experience (WRITE)
 - T Targeted Rural and Underserved Track (TRUST)
 - Rural/Underserved Opportunities Program (RUOP)
 - Required Clerkship Site
 - Residency Rotation
 - Residency Program
- Required Clerkship Sites**
- CC - Chronic Care
 - Emd - Emerg Medicine
 - Fam - Family Medicine
 - IntMd - Internal Medicine
 - Neur - Neurology
 - Ob/G - Ob/Gyn
 - Peds - Pediatrics
 - Psych - Psychiatry
 - Surg - Surgery
- Residency Programs**
- Fam - Family Medicine
 - IntMd - Internal Medicine

WWAMI Program Site Map 2015-2016



*Alaska not to scale.



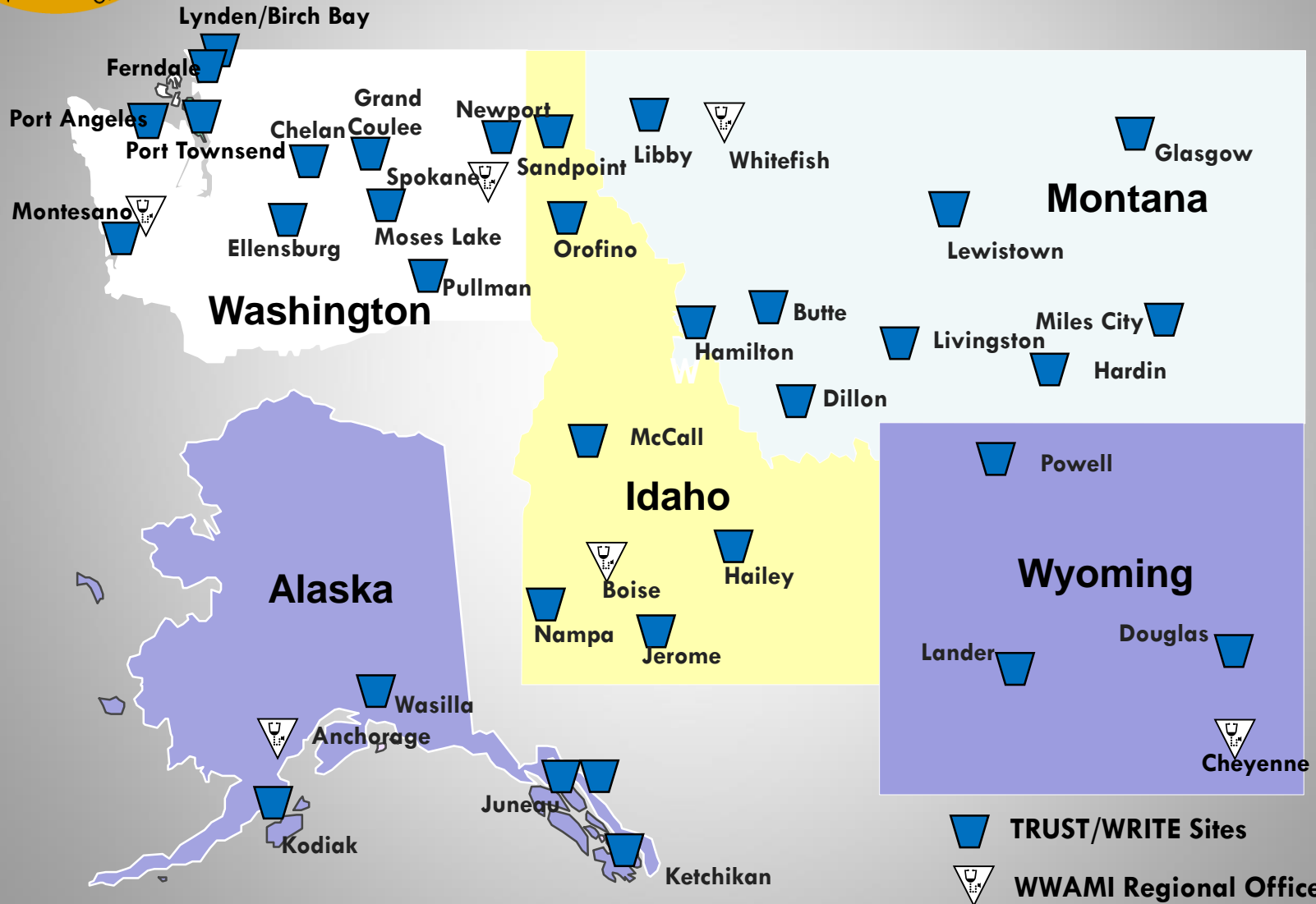
LEGEND

- ★ Foundation Site
 - ★ WWAMI Regional Affairs Office
 - ◆ WWAMI TRACK
 - A Areal Health Education Center (AHEC)
 - W WWAMI Rural Integrated Training Experience (WRITE)
 - T Targeted Rural and Underserved Track (TRUST)
 - L Longitudinal Integrated Clerkship (LIC)
 - Rural Underserved Opportunities Program (RUOP)
 - Contact departments for clerkships and residency information for cities within box
 - Required Clerkship Site
 - Residency Rotation
 - Residency Program
- Required Clerkship Sites**
- CC - Chronic Care
 - Emd - Emerg Medicine
 - Fam - Family Medicine
 - IntMd - Internal Medicine
 - Neur - Neurology
 - NeuroSurg - Neurosurgery
 - Ob/G - Ob/Gyn
 - Peds - Pediatrics
 - Psych - Psychiatry
 - Surg - Surgery
- Residency Programs**
- Fam - Family Medicine
 - IntMd - Internal Medicine
 - Peds - Pediatrics
 - Psych - Psychiatry



UWSOM TRUST/WRITE

2015-2016 ~ 34 sites





Entering 2015 TRUST/WRITE students Hometowns & Community Placements



**MONTANA
WWAMI**

Montana Physician Workforce Data

Per 100K population, Montana ranks:

- **29th in nation for total active patient care physicians**
- **24th for active patient care primary care physicians**
- **11th for active patient care general surgeons**

Montana's physicians are aging:

- **32.7% of Montana physicians are over age sixty**
(National average is 29.4%)

2015 AAMC State Physician Workforce Data Book

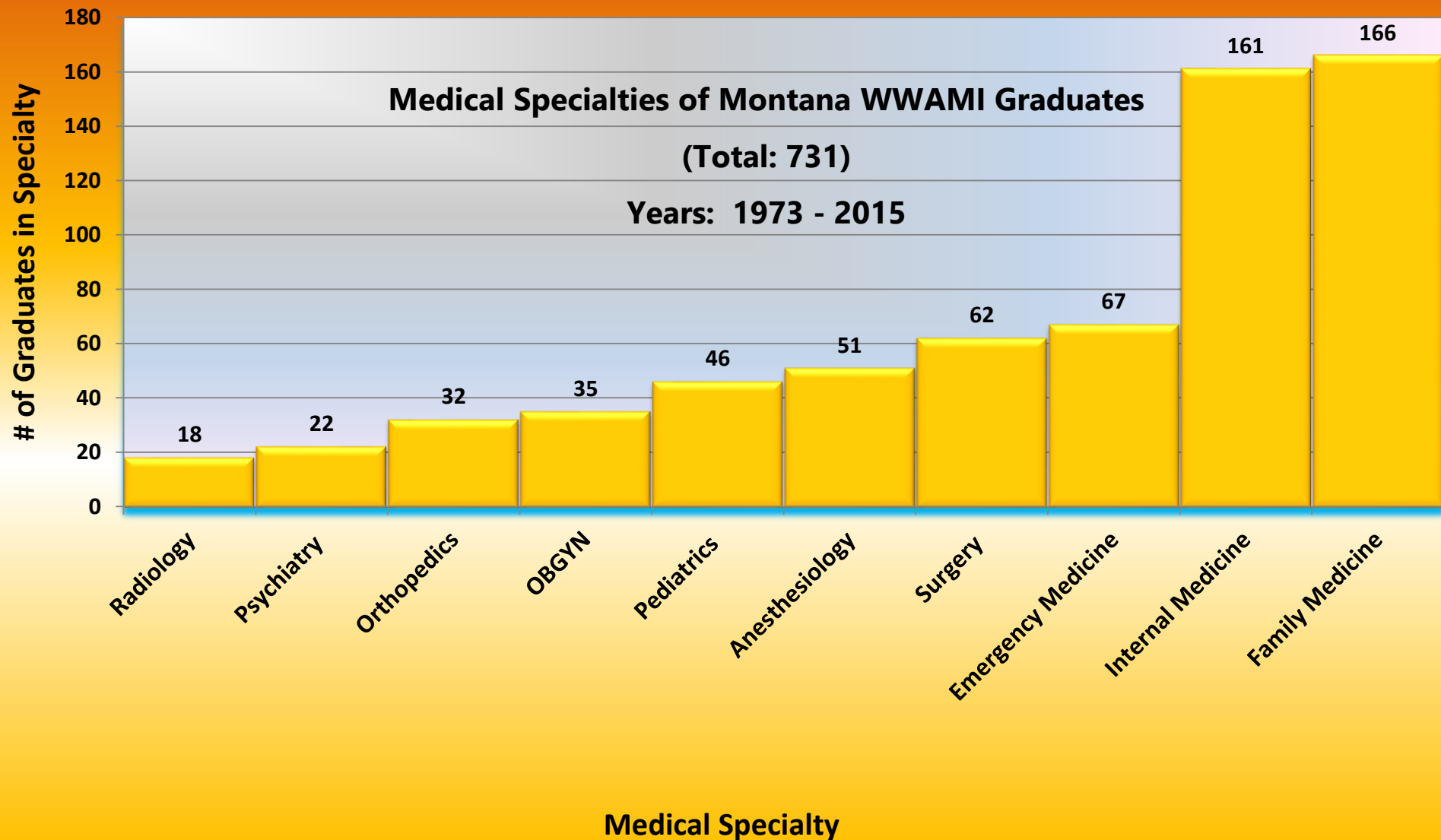
How many Montana students attend medical or osteopathic schools, past 7 years?

- 54 MT residents per year attend medical school in the US
 - MT WWAMI-30
 - WICHE medical school-6
- 19 MT residents per year attend osteopathic school in the US
 - WICHE osteopathic school-2

Workforce Progress-Montana WWAMI since inception in 1973

- **Rate of return: 40%**
(MT WWAMI grads that practice in MT)
- **Return on Investment for MT: 56%**
(all WWAMI grads that practice in MT)

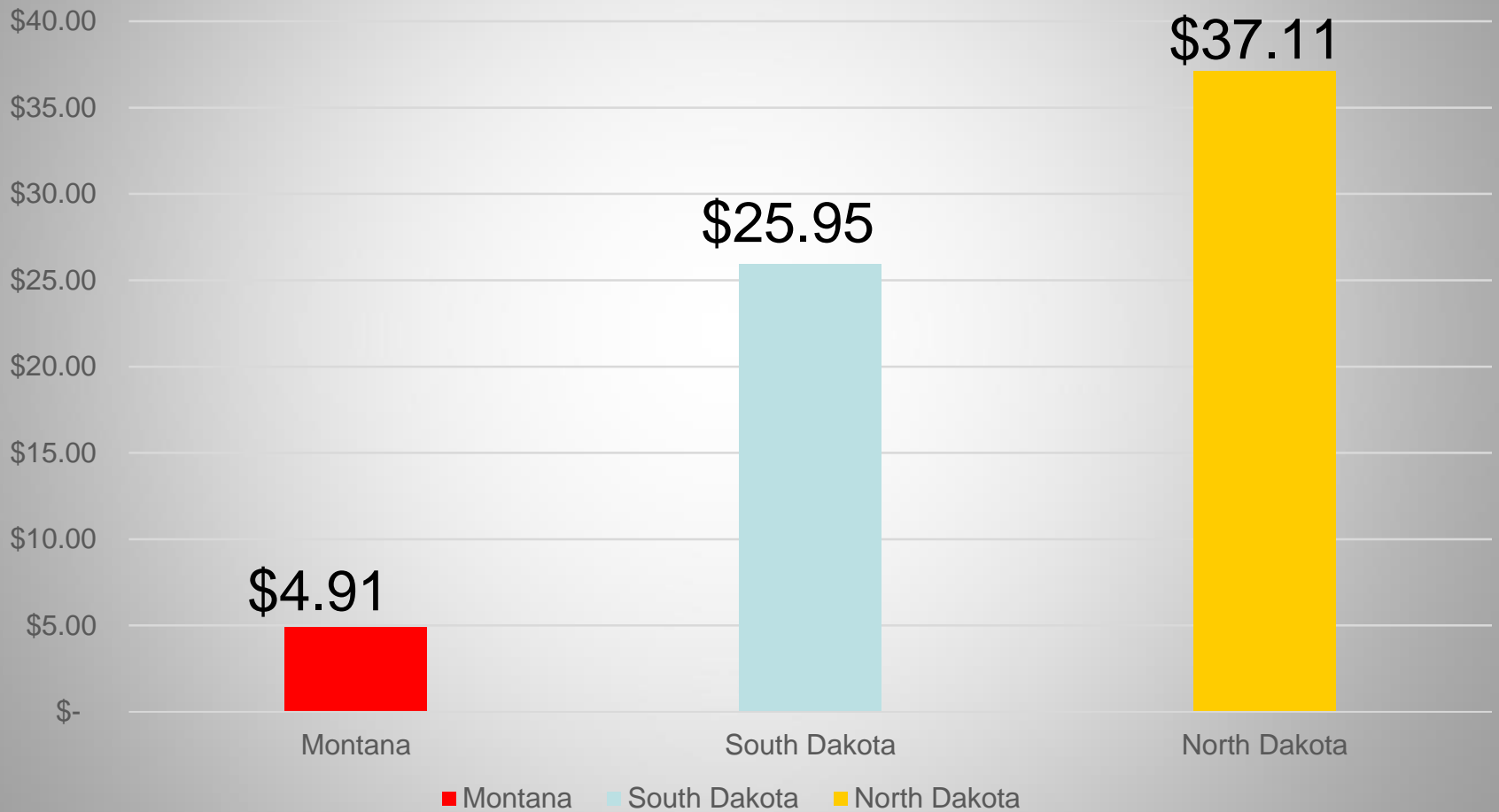
Specialty Choice of WWAMI Graduates 1973-2015 (top ten)



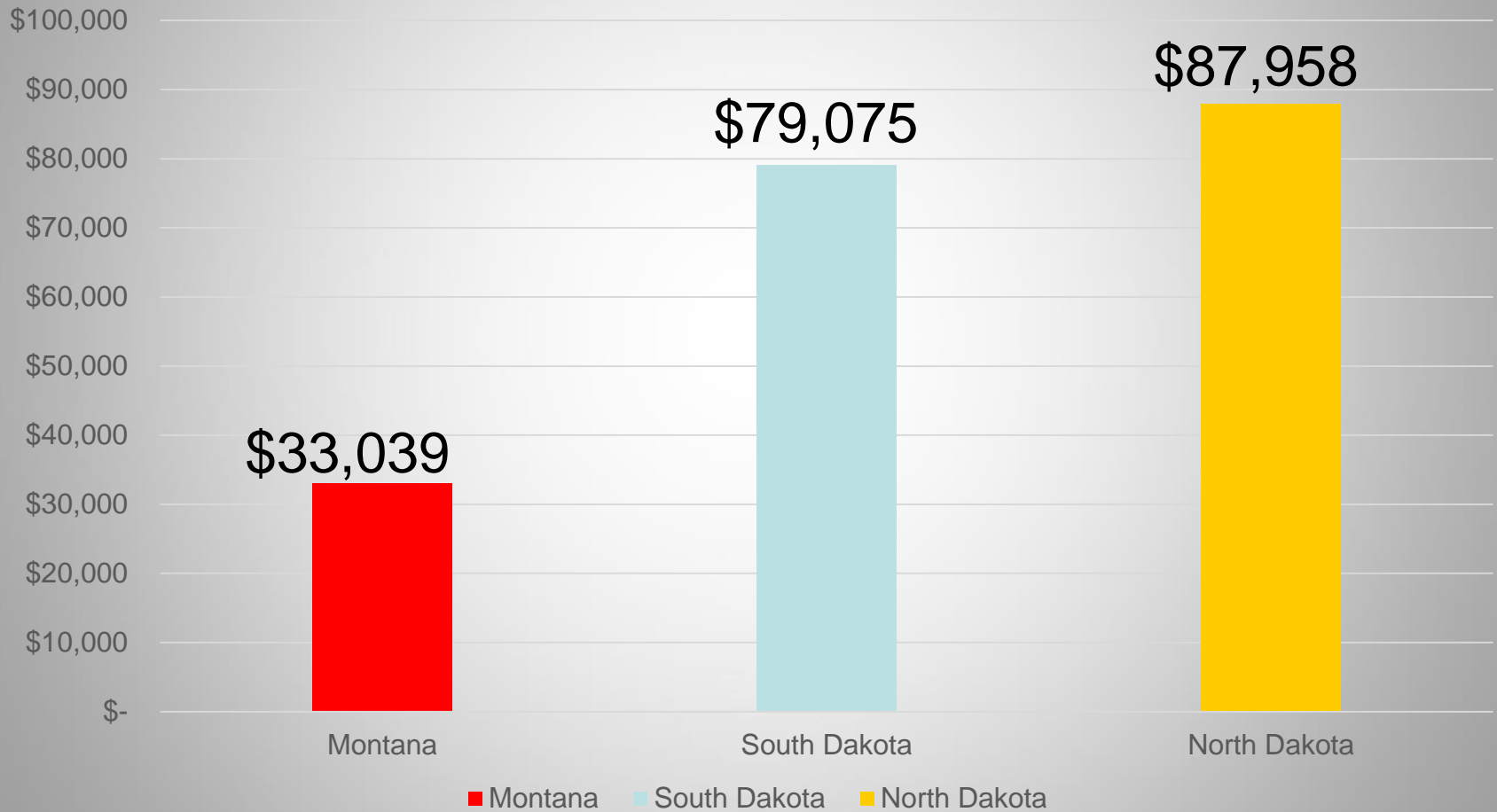
WWAMI is cost-effective

- **State support per student for medical education in Montana is \$33,039**
- **Montana FY 16 state appropriation for WWAMI is \$4,124,480**
- **60% of Montana state appropriations for WWAMI are spent in Montana**
- **A 2010 study showed that for every state dollar invested in WWAMI , Montana gets back 5.14 dollars into our economy**

Medical Education-Cost per Capita



Medical Education-Cost per Student



Key Questions

- Do we have the appropriate physician workforce data?
- What are our goals based on the best available data?
- How can we best meet those goals, attending to the *entire* medical education pipeline?
 - Improve STEM efforts in K-12 education-grow pipeline
 - Scalable medical student increase
 - Focused residency increase
- How can we assist rural/underserved Montana in recruiting and retaining physicians beyond simply increasing the physician supply?
- How can we improve the diversity in our physician workforce especially for our Native American populations?

MRPIP 20 years

January 2016

Montana Communities Served by MRPIP (Over Past 20 Years)

